

High Wycombe Office:

Chiltern House, Stocking Lane, High Wycombe, HP14 4ND, United Kingdom

T: +44 (0)1494 569750 W: www.warringtonfire.com

Title:

Field of Application for:

Falcon Strebord® 44 and Strebord® 54 Door Assemblies

For 30 Minutes Fire Resistance

Report No:

Chilt/A02066 Revision O

Issue Date:

1st October 2021

Valid Until:

1st October 2026

Job Reference:

WF505794

Prepared for:

Falcon Panel Products Ltd.
Clock House,
Station Approach,
Shepperton,
Middlesex,
TW17 8AN

Temains the properties and products the evidence within is fit for our pose.

Johnsteen and the evidence within is fit for our pose. * remains the property of eader to easure that that any of WFT-QU-FT-XXX (Issue 1 – 05.06.20)

The version/revision stated on the front of this Field of Application supersedes all previous versions/revisions and must be used to manufacture toorsets from the stated validity date on this front cover. Previous revisions of the Field of Application cannot be used once an updated Field of application has been issued under a new revision.

gistered Office:
ringtonlife Testing and Certification Limited, 10 Lower Grosvenor Place, London, United Min.

Contents

Page No.

1	Foreword5				
2	Prop	osal	6		
3	Test	Data	6		
	3.1	Primary tests for timber envelopes	7		
	3.2	Primary tests for steel envelopes	56		
	3.3	Primary tests for Mill fabricators	70		
	3.4	Supplementary test evidence	94		
	3.5	Summary of Test Report BMT/FEP/F14029 (Doorset A)	130		
	3.6	Summary of Test Report WF505552 (Doorset A) DRAFT	132		
4	Tech	nnical specification			
	4.1	General	134		
	4.2	Intended Use	134		
	4.3	Door Leaf	134		
	4.4	Door Frames	135		
	4.5	Doorset Configurations & Maximum Leaf Sizes	154		
5	Gen	eral Description of Leaf Construction			
	5.1	Leaf 1 – Strebord 44			
	5.2	Leaf 2 – Strebord 54	343		
	5.3	Leaf 3 – Strebord 44 or 54 PVC encapsulated/clad	344		
	5.4	Leaf 4 – Strebord 44 or 54 Over-rebated			
	5.5	Lippings			
	5.6	Facings and Decorative mouldings			
	5.7				
	5.8	Hardwood Blocking for Pivots – Leaf 1 and 2	356°		
	5.9	Hardwood Blocking for Pivots – Leaf 1 and 2 Meeting Stile Astragals – Leaf 1 and 2	356		
	5.10	Leaf Size Adjustment Prior to Machining	357		
	5.11	Cableways – Leaf 1 and 2	357		
6	Glaz	zing zalog z	358		
	6.1	Permitted aperture in leaf	358		
	6.2	Glass & Glazing Systems	358		
7	Doo	r Frame Construction	394		
-	7.1	Frame Specification	394		
	7.2	Hardwood Blocking for Pivots – Leaf 1 and 2 Meeting Stile Astragals – Leaf 1 and 2 Leaf Size Adjustment Prior to Machining Cableways – Leaf 1 and 2 Zing Permitted aperture in leaf Glass & Glazing Systems r Frame Construction Frame Specification Frame Thresholds Frame Joints rpanels, Fanlights and Sidelights	394		
	7.3	Frame Joints	395		
8	Ove	rpanels. Fanlights and Sidelights	396		
_	O V O	realists, i as majorito and statement and the st	300		

8.1	General	.396
8.2	Overpanels	.396
8.3	Fanlights & Sidelights	.401
9 Intu	mescent	.414
9.1	Door Perimeter Intumescent	.414
9.2	Essential Hardware Protection	.417
10 Adh	esives	.425
11 Hard	dware	.426
11.1	General	.426
11.2	Essential Hardware	.427
11.3	Locks & Latches	.428
11.4	Hinges and Pivots	.433
11.5	Automatic Closing	.439
11.6	Additional Items of Hardware	.442
12 Insta	allation	.448
12.1	Door Frame Installation: Frame 1, 2, 3, 4, 5, 6, 11	.449
12.2	Door Frame Installation: Frame 7 TBA	.454
12.3	Door Frame Installation: Frame 8 studco	.454
12.4	Door Frame Installation: Frame 9 TBA	.454
12.5	Door Frame Installation: Frame 10	.454
12.6	Packers	.455
12.7	Wall Types	.455
12.8	Onsite Leaf Size Adjustment	.456
12.9	Door Gaps	.456
	Structural Opening	()
12.11	Fixings	.457
13 Insu	ılation	.457 .457
14 Smo	oke Control	.458
14.1	General	.458
15 Con	clusion	.459
16 Dec	laration by the Applicant	.460
17 Limi	tationstations	.461
18 Vali	dity	4625
19 App	endix A: Revisions	.463 _c
20 App	endix B: Performance Data	.466
20.1	Primary Data	.466
20.2	Fixings Ilation Oke Control General Iclusion Ilaration by the Applicant Idations Idity India A: Revisions India B: Performance Data Primary Data Hinges	.469

20.3	Closers	.480
20.4	Locks & Latches	.491
20.5	Bolts	.509
20.6	Door Viewers	.511
20.7	Letter Plates	.514
20.8	Pivots & Floor Springs	.516
20.9	Cableways	.517
20.10	Cable Loops	.518
20.11	Security Chains	519

This document remains the property of Falcon Panel that any product

This document remains the property of the evidence within is fit for purpose.

manufactured using the evidence within a funder lange of products.

This document detains a subset of evidence from an extensive of products.

tuther documentation and evange of products ite at the string of p

Foreword

This Field of application report has been commissioned by Falcon Panel Products Limited and relates to the fire resistance of 30 minute fire resisting doorset designs.

The report is for National Application and has been written in accordance with the general principles outlined in BS EN 15725: 2010; Extended application reports on the fire performance of construction products and building elements.

This field of application (scope) uses established empirical methods of extrapolation and experience of fire testing similar doorsets, in order to extend the scope of application by determining the limits for the designs based on the tested constructions and performances obtained. The scope is an evaluation of the potential fire resistance performance, if the variations specified herein were to be tested in accordance with BS 476: Part 22: 1987.

This field of application has been written using appropriate test evidence generated at UKAS accredited laboratories¹, to the relevant test standard. The supporting test evidence has been deemed appropriate to support the manufacturers stated door design and is summarised in section 3 with specific evidence for hardware listed in Appendix B.

The scope presented in this report relates to the behaviour of the proposed door design variations under the particular conditions of the test; they are not intended to be the sole criterion for considering the potential fire hazard of the door assembly in use.

This field of application has been prepared and checked by product assessors with the necessary competence, who subscribe to the principles outlined in the Passive Fire Protection Forum (PFPF) guidelines to undertaking assessments. The aim of the PFPF guidelines is to give confidence to end-users that assessments that exist in the UK are of a satisfactory standard to be used for building control and other purposes.

The PFPF guidelines are produced by the UK Fire Test Study Group (FTSG) an association of the major fire testing laboratories in the UK and are published by the PFPF, the representative body for the passive fire protection industry in the UK.

¹ Test evidence from overseas laboratories has also been considered as supporting evidence for the designs in this assessment report. The test evidence is from a laboratory that has been accredited by a national accreditation body that is a signatory of the International Laboratories Accreditation Co-operation (ILAC).

2 Proposal

It is proposed to consider the fire resistance performance of the specified doorset designs based on Strebord® 44 and Strebord® 54 door leaves fitted into timber, metal or PVC clad/encapsulated frames for 30 minutes fire resistance integrity, if the doorset designs were to be tested to the requirements of BS 476: Part 22: 1987, Fire tests on building materials and structures - Part 22: Method for determination of the fire resistance of non-load bearing elements of construction.

The field of application defined in this report is based on the fire resistance test evidence for the doorset design, which is summarised in section 3. Analysis of specific construction details that require assessment are given within this report against the relevant element of construction, as appropriate.

Test Data

The test data used to support this doorset design has been gathered over 24 years. Over which time the basic core composition has remained unchanged, so the older data is still relevant but this has been supported and supplemented over time, with other tests to support the scope detailed herein.

The evidence has been generated to BS 476: Part 22: 1987 and EN 1634-1. The EN 1634-1 test standard is known to be more onerous than the BS 476: Part 22: 1987 standard, primarily due to the use of plate thermocouples within the furnace to record the furnace temperature. The EN 1634-1 tests have been undertaken at a number of British and European laboratories.

The same time temperature curve is used to control the temperature within the furnace for both test methods (the heating curve given within ISO 834-1). However, the plate thermocouple used to record the temperature within the furnace for the EN test method, requires a higher thermal inertia to read the same temperature as the probe thermocouple that is used for the BS 476: Part 22: 1987 test, particularly during the early stages of the test. This results in more onerous test conditions for door assemblies tested to the EN 1634-1test standard compared with the BS 476: Part 22: 1987 test standard, which has been demonstrated by testing the same products to both standards.

It is therefore the opinion of Warringtonfire that the fire resistance performance of the Strebord® 44 and Strebord® 54 doorset design can be assessed to provide at least 30. minutes fire resistance integrity performance, if the doorset design, constructed in accordance with the specifications documented in this field of application, were to be tested in accordance

The test evidence tabulated briefly below and then a summary for each test has been generated to support the fire resistance performance of the door designs that are the summary for each test has been generated to support the fire resistance performance of the door designs that are the summary for each test has been generated to support the fire resistance performance of the door designs that are the summary for each test has been generated to support the fire resistance performance of the door designs that are the summary for each test has been generated to support the fire resistance performance of the door designs that are the summary for each test has been generated to support the fire resistance performance of the door designs that are the summary for each test has been generated to support the fire resistance performance of the door designs that are the summary for each test has been generated to support the fire resistance performance of the door designs that the summary for each test has the summary for Manufactured using teging covering a mide range of products.

This document details a subset of a wide range of products. ne responsibility of the reader to ensure that this fit for po Abbreviations: (h) = height; (w) = width; (d) = depth; (t) = thickness.

Latches fitted but disengaged for the test, are reported as "unlatched".

Latches fitted but disengaged for the test, are reported as "unlatched".

Latches fitted but disengaged for the test, are reported as "unlatched".

Latches fitted but disengaged for the test, are reported as "unlatched". Luther documentation and found in the feeting and for the feeting and feeting and for the feeting and feeting and

3.1 Primary tests for timber envelopes

The following tests have been used to establish the the maximum leaf size envelopes for the different configurations when used in conjunction with a timber based timber frame given in section 4 with other relevant details on hardware and glazing etc are used as appropriate.

3.1.1 Summary of Test Report Chilt/RF09170

	HARDWARE PROTECTION:
	Under hinge blade: 1mm thick BASF Wolman Interdens® Type 15 Under latch forend: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 36 minutes

3.1.2 Summary of Test Report Chilt/RF07109

Date of Test:	10.AUG.2007
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting, double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2100mm(h) x 902(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (650kg/m³), 10mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 15mm(w) x 12mm(d) planted (pinned) European redwood stop. Fire stopping: Mann McGowan Ltd Pyromas intumescent mastic ~5-10mm(w) x ~10-15mm(d) Threshold: Non-combustible. INTUMESCENT: Frame Reveal: 1no 10x4mm Lorient Polyproducts Ltd LP1004 Palusol fitted centrally within the frame reveal. Meeting stile (left leaf only): 2no 10x4mm Lorient Polyproducts Ltd LP1004 Palusol fitted 12mm apart, central within the edge of the leaf. HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150mm, 980mm and 1800mm from the head of each leaf. Closer: Dormakaba TS 73V surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 225mm(w) x 60mm(h) x 40mm(d) Latch: E*S Tubular steel mortice latch fitted 1002mm from the threshold of the left leaf. Forend size: 57mm(h) x 26mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 38mm(d) HARDWARE PROTECTION: Under latch forend: 1mm thick Lorient Polyproducts Ltd MAP Under latch forend: 1mm thick Lorient Polyproducts Ltd MAP Under latch forend: 1mm thick Lorient Polyproducts Ltd MAP
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 36 minutes
	Under latch forend: 1mm thick Lorient Polyproducts Ltd MAP Encasing latch body: 1mm thick Lorient Polyproducts Ltd MAP BS 476: Part 22: 1987 Integrity: 36 minutes

3.1.3 **Summary of Test Report BMT/FEP/F16035**

Date of Test:	19.FEB.2016
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2135mm(h) x 932(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 8mm thick to vertical edges only.
	FRAME: Head & Jambs: Softwood (510kg/m³), 70mm(d) x 32mm(w), with 20mm(w) x 12mm(d) planted (pinned) softwood stop.
_	Fire stopping: Rockwool mineral fibre capped with intumescent mastic ~10-15mm(w)
	Threshold: Non-combustible.
70.70	
	INTUMESCENT: From Payorly 1 no 10v4mm Dyronlov 20160 fin and fitted 17mm
	Frame Reveal: 1no 10x4mm Pyroplex 30160 fin seal fitted 17mm from the exposed face within the frame reveal.
	Meeting stile (left leaf only):
	 1no 10x4mm Pyroplex FO8500 fitted 7mm from the exposed face.
	1no 10x4 Pyroplex 30160 fin seal fitted 27mm from the exposed face.
	SMOKE/ACOUSTIC SEALS:
	Frame Reveal: 1no 10x4mm Pyroplex 30160 fin seal fitted 17mm from the exposed face within the frame reveal.
	Meeting stile (left leaf only): 1no 10x4 Pyroplex 30160 fin seal fitted 27mm from the exposed face.
	SMOKE/ACOUSTIC SEALS: Frame Reveal: 1no 10x4mm Pyroplex 30160 fin seal fitted 17mm from the exposed face within the frame reveal. Meeting stile (left leaf only): 1no 10x4 Pyroplex 30160 fin seal fitted: 27mm from the exposed face.

	HADDWADE:
	HARDWARE:
	Hinges: 3no Royde & Tucker H101 lift-off type hinge fitted 180mm, 1015mm and 1850mm from the threshold of each leaf.
	Closer: Hoppe Arrone AR1500 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d)
	Latch: Zoo ZDL0060LP fitted 1030mm from the threshold of the right leaf. Forend size: 235mm(h) x 22mm(w)
	Lock/Latch Status: Disengaged for test
	Handle: Assa Abloy Union lever type handle fitted appropriate to the latch. Size: 110mm(w) x 55mm(d)
	HARDWARE PROTECTION:
	Under latch forend: 1mm thick graphite
	Encasing latch body: 1mm thick graphite
	Under latch keep: 1mm thick graphite
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 47 minutes

Falcon Panel Products lide and maintenance of fine door as semblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

3.1.4 Summary of Test Report WF 384630 Rev A

Date of Test:	15.JUN.2017
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A latched, single acting double doorset - LSADD
Tested Orientation:	Hung opening in towards heating condition
	Hung opening in towards heating condition LEAF: Overall Size: Left-hand leaf: 2440mm(h) x 1050(w) x 44mm(t) Right-hand leaf: 2440mm(h) x 400(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 including: 1. AØ10mm hole drilled through the left-hand leaf horizontally 1154mm from the bottom of the leaf across the width at mid-leaf thickness. 2. A 10mm(w) x 42mm(d) channel routed out centrally in the left-hand leaf edge around the bottom half perimeter to accept a cable. Routed channel was capped with a 10mm(w) x 30mm(d) hardwood insert installed with PU adhesive and pre-applied 10mm x 1mm graphite. Lipping: Sapele (640kg/m³), 8mm thick to all edges. FRAME: Head & Jambs: Streframe®E (510kg/m³), 80mm(d) x 32mm(w), with 35mm(w) x 12mm(d) planted (pinned) European redwood stop. Fire stopping: Rockwool mineral fibre capped with Sealed Tight Solutions Ltd ST88 intumescent mastic ~10-15mm(w) Threshold: Non-combustible. INTUMESCENT: Frame Reveal: 1no 15x4mm Sealed Tight Solutions Ltd ST1504FO seal fitted 15mm from the exposed face within the frame reveal. Meeting stile (left leaf only): 2no 10x4 Sealed Tight Solutions Ltd ST1504FO seal fitted 11mm apart, central within the leaf edge. HARDWARE: Hinges: 4no Royde & Tucker H101 lift-off type hinge fitted 150mm,
	closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 297mm(w) x
	820mm, 1490mm and 2160mm from the top of each leaf. Closer: • Left leaf: Rutland TS.5204 surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 297mm(w) x 68mm(h) x 45mm(d)

Test Standard: Performance:	BS 476: Part 22: 1987 Integrity: 43 minutes
775.75	Lining wireway through centre of leaf core: 10mm x 1mm thick Sealed Tight Solutions Ltd graphite fitted within a Ø10mm hole, nominally 50% of the cable circumference.
	Lining wireway channel in leaf edge: 10mm x 1mm thick Sealed Tight Solutions Ltd graphite fitted lining the base of the wireway channel
· /^\	graphite Lining strike plate: 2mm thick Sealed Tight Solutions Ltd graphite
	Encasing latch body: 1mm thick Sealed Tight Solutions Ltd graphite Encasing latch keep body: 1mm thick Sealed Tight Solutions Ltd
	Under latch forend: 1mm thick Sealed Tight Solutions Ltd graphite
_	HARDWARE PROTECTION:
	Handle: Lever type handle fitted appropriate to the latch. Size: 90mm(w) x 44mm(d)
	Lock/Latch Status: Engaged for test
	Strike: Gem GK700 Electric strike fitted appropriate to the latch in the right leaf. Body size: 175mm(h) x 44mm(w) x 27mm(d)
	Latch: Laidlaw 13861 DIN latch fitted 1030mm from the bottom of the left leaf. Forend size: 235mm(h) x 20mm(w) Case size: 165mm(h) x 90mm(d) x 16mm(w)
	Right leaf: Hoppe Arrone AR1500 surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d)

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

3.1.5 Summary of Test Report Chilt/RF02109 (Doorset B)

The essential details of the referenced test report are summarised below.

ne essential details of the referenced test report are summarised below.	
Date of Test:	15.NOV.2002
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A latched, single acting single doorset - LSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2700mm(h) x 1072(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (650kg/m³), 10mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 25mm(w) x 13mm(d) planted (pinned) European redwood stop. Threshold: Non-combustible. INTUMESCENT: Frame Reveal: 1no 15x4mm Lorient Polyproducts Ltd LP1504 seal fitted centrally within the frame reveal. HARDWARE: Hinges: 4no Royde & Tucker H101 lift-off type hinge fitted 150mm, 895mm, 1645mm and 2390mm from the top of the leaf. Closer: Dormakaba TS 73V surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 225mm(w) x 60mm(h) x 40mm(d) Latch: Tubular mortice fitted 1000mm from the base of the leaf. Forend size: 57mm(h) x 26mm(w) Lock/Latch Status: Engaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 50mm(d) HARDWARE PROTECTION: Under hinge blade: 1mm thick BASF Wolman Interdens® Type 15 Encasing latch body: 1mm thick BASF Wolman Interdens® Type 15 Encasing latch body: 1mm thick BASF Wolman Interdens® Type 15
Toot Standard	Under latch keep: 1mm thick BASF Wolman Interdens® Type 15
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 35 minutes

on resigne

3.1.6 Summary of Test Report CFR1812121

Date of Test:	12.DEC.2018
Identification of Test Body:	Cambridge Fire Research UKAS No. 4319
Sponsor:	Dixon International Group Limited
Tested Product:	A glazed, single-acting, double doorset - ULSADD
Tested Orientation:	Opening in towards heating condition
Tested Orientation: Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2751mm(h) x 931(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (470kg/m³), 101mm(d) x 32mm(w), with 30mm(w) x 13mm(d) planted (pinned) European redwood stop. Fire stopping: Unifrax Insulfrax S blanket capped with intumescent acrylic mastic. Threshold: Non-combustible. INTUMESCENT: Frame Reveal: 1no 15x4mm Intumescent Seals Ltd Therm-A-Seal graphite-based seal fitted 13mm from the exposed face within the frame reveal. Meeting Stiles: 2no 15x4mm Intumescent Seals Ltd Therm-A-Seal graphite-based seals fitted 7.5mm and 27mm from the exposed face within the left-hand leaf only. HARDWARE: Hinges: 4no Eurospec HIN1433P bearing butt type hinge fitted 151mm, 924mm, 1596mm and 2472mm from the top of each leaf. Closer: Rutland TS.5204 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 297mm(w) x 68mm(h) x 45mm(d) Latch: Eurospec tubular mortice fitted 953mm from the base of the leaf. Forend size: 60mm(h) x 25mm(w) Lock/Latch Status: Disengaged for test Handle: Zoo Architectural Stanza ZPZ090SC aluminium lever type
	Trancie fitted appropriate to the laterity size of formation of the laterity o
	Handle: Zoo Architectural Stanza ZPZ090SC aluminium lever type handle fitted appropriate to the latch. Size: 110mm(w) x 60mm(d)

	HARDWARE PROTECTION:
	Under hinge blade: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	Encasing latch body: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	Under latch keep: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	GLAZING (Both leaves):
	Glass: Pyroguard UK El30 15mm thick
	Aperture Size: 1507mm(h) x 305mm(w)
	• Glass Size: 1501mm(h) x 299mm(w)
	 Sight Size: 1470mm(h) x 270mm(w) Beading: Sapele bead 26mm(h) x 18mm(d) including 6x6mm
	bolection and a 20° chamfer
1/2	Bead Fixing: Steel screws, Ø5mm x 50mm(I), fitted 50mm from corners at 150mm centres
4.3	GLAZING SYSTEM (Both Leaves):
	Glazing Perimeter: Sealmaster GB15 intumescent foam glazing tape 20mm(w) x 5mm(t)
70.00	
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 36 minutes

Falcon Panel Products lide and maintenance of five door as semblies.

This document, repaint of the property of the reader to ensure that the transition of the reader to ensure that the property of the reader to ensure that the property of the reader to ensure that the tenant of the reader to ensure the transition of the reader to ensure that the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

3.1.7 Summary of Test Report Chilt/RF08088

Date of Test:	4.JUL.2008
Identification of	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Test Body:	
Sponsor:	Pyroplex Ltd
Tested Product:	An unlatched, single acting double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (Both Leaves): 2440mm(h) x 915(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 25mm(w) x 12mm(d) planted (pinned) European redwood stop. Fire stopping: Pyroplex intumescent acrylic mastic ~5-10mm(w) x ~10-15mm(d) Threshold: Non-combustible. INTUMESCENT: Frame Reveal: 1no 15x4mm Pyroplex Ltd FO8700 seal fitted centrally within the frame reveal. Meeting stile (left leaf only): 2no 10x4mm Pyroplex Ltd FO8500 seal fitted 10mm apart, central within the leaf edge. HARDWARE: Hinges: 4no Royde & Tucker H105 lift-off type hinge fitted 150mm, 834mm and 1473mm and 2160mm from the top of each leaf. Closer: Dormakaba TS 71 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 232mm(w) x 68mm(h) x 45mm(d) Latch: Tubular mortice fitted 1000mm from the base of the leaf. Forend size: 56mm(h) x 26mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 102mm(w) x 41mm(d) HARDWARE PROTECTION: Under latch forend: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15
Test Standard:	BS 4/6: Part 22: 198/
Performance:	Integrity: 44 minutes
	Under latch forend: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 BS 476: Part 22: 1987 Integrity: 44 minutes

3.1.8 Summary of Test Report SF013-5A (Doorset A)

The essential details of the referenced test report are summarised below.

Date of Test:	13.MAR.2019
Identification of Test Body:	Thomas Bell-Wright International Consultants UKAS No. 4439
Sponsor:	Ramkor International Ltd
Tested Product:	A latched, single acting single doorset - LSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2200mm(h) x 926(w) x 45mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Meranti (392kg/m³), 10mm thick to all edges. FRAME: Head & Jambs: Softwood (392kg/m³), 95mm(d) x 32mm(w), with 39mm(w) x 12mm(d) planted (pinned) softwood stop. Fire stopping: Wurth polyurethane expanding foam capped with Kilargo intumescent acrylic mastic Threshold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4mm Dormakaba Kilargo KP1504 fitted 15mm from the exposed face. Meeting stile (left leaf only): 2no 10x4mm Mann McGowan Pyrostrip P100 fitted 10mm apart, central within the edge of the leaf HARDWARE: Hinges: 3no Dormakaba 3090f butt type hinge fitted 170mm, 1049mm and 2030mm from the head of each leaf. Closer: Dormakaba TS 68 RA surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 53.5mm(h) x 45mm(d) Latch: Dormakaba 281 steel mortice fitted 1100mm from the threshold of the left leaf. Forend size: 235mm(h) x 24mm(w) Body size: 165mm(h) x 15.5mm(w) x 80mm(d) Lock/Latch Status: Engaged for test Handle: Dormakaba TH120 lever type handle fitted appropriate to the latch. Size: 155mm(w) x 50mm(d) Drop seal: Dormakaba Kilargo IS8010si Size: 35mm(h) x 14mm(w) HARDWARE PROTECTION: Under hinge blade: 1mm thick Dormakaba Kilargo IH1HFG44
	Encasing latch body: 1mm thick Dormakaba Kilargo IH1LOCK16590
	Encasing dropseal: 1mm thick Dormakaba Kilargo IH1DB-8520-1070
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 46 minutes

ordings

3.1.9 Summary of Test Report BMT/FEP/F14265 Rev A

Date of Test:	6.JAN.2015
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Astroflame (Fireseals) Ltd
Tested Product:	Doorset A: An unlatched, single acting single doorset – ULSASD Doorset B: An unlatched, single acting double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: Doorset A: 2040mm(h) x 926(w) x 44mm(t) Leaf A: 2040mm(h) x 926mm(w) x 44mm(t) Leaf B: 2040mm(h) x 300mm(w) x 44mm(t) Leaf B: 2040mm(h) x 300mm(w) x 44mm(t) Core (Both Doorsets): Falcon Panel Products Strebord® 44 Lipping (Both Doorsets): Sapele (640kg/m³), 6mm thick to vertical edges only. FRAME (Both Doorsets): Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 20mm(w) x 12mm(d) planted (pinned) European redwood stop. Fire stopping: Mineral fibre capped with Astroflame acoustic acrylic mastic ~10-15mm Threshold: Non-combustible. INTUMESCENT: Frame Reveal (Both doorsets): 1no 15x4mm Astroflame Astro Strip AF1504FSX combined fire and smoke seal fitted 14.5mm from the exposed face within the frame reveal. Meeting stile (left leaf of Doorset B only): 2no 10x4mm Astroflame Astro Strip AF1504FSX combined fire and smoke seal fitted 14.5mm from the exposed face within the frame reveal. SMOKE/ACOUSTIC SEALS: Frame Reveal (Both doorsets): 1no 15x4mm Astroflame Astro Strip AF1504FSX combined fire and smoke seal fitted 14.5mm from the exposed face within the frame reveal. Meeting stile (left leaf of Doorset B only): 2no 10x4mm Astroflame Astroflame As
	Meeting stile (left leaf of Doorset B only): 2no 10x4mm Astroflame Astro Strip AF1004FSX combined fire and smoke seal

Report No: Chilt/A02066 Rev O Page 20 of 519

This document remains the property of the leader to ensure that the day of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the reader to en This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document details a subset of evidence tange of products.

overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d) Latch: • Doorset A: Hoppe Arrone 3 Lever 65mm Mortice Sashloof fitted 1000mm from the threshold. Forend size: 155mm(h 22mm(w) Body size: 102mm(h) x 13mm(w) x 65mm(d) • Doorset B: As doorset A, fitted to left-hand leaf. Lock/Latch Status (Both Doorsets): Disengaged for test Handle (Both Doorsets): Aluminium lever type handle fitted appropriate to the latch.	Test Standard:	BS 476: Part 22: 1987		
overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d) Latch: • Doorset A: Hoppe Arrone 3 Lever 65mm Mortice Sashlod fitted 1000mm from the threshold. Forend size: 155mm(h 22mm(w) Body size: 102mm(h) x 13mm(w) x 65mm(d) • Doorset B: As doorset A, fitted to left-hand leaf. Lock/Latch Status (Both Doorsets): Disengaged for test Handle (Both Doorsets): Aluminium lever type handle fitted appropriate to the latch. Shoot bolt (Doorset B): Steel shoot bolts surface-fixed to the hea and threshold of the unexposed face of the right-hand leaf (disengaged for test). Body size: 200mm(h) x 38mm(d)		Encasing latch body: 0.5m	m thick Astro Lock Sheet AFLS	
overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d) Latch: • Doorset A: Hoppe Arrone 3 Lever 65mm Mortice Sashloof fitted 1000mm from the threshold. Forend size: 155mm(h 22mm(w) Body size: 102mm(h) x 13mm(w) x 65mm(d) • Doorset B: As doorset A, fitted to left-hand leaf. Lock/Latch Status (Both Doorsets): Disengaged for test Handle (Both Doorsets): Aluminium lever type handle fitted appropriate to the latch. Shoot bolt (Doorset B): Steel shoot bolts surface-fixed to the head and threshold of the unexposed face of the right-hand leaf				
overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d) Latch: • Doorset A: Hoppe Arrone 3 Lever 65mm Mortice Sashloof fitted 1000mm from the threshold. Forend size: 155mm(h 22mm(w) Body size: 102mm(h) x 13mm(w) x 65mm(d) • Doorset B: As doorset A, fitted to left-hand leaf. Lock/Latch Status (Both Doorsets): Disengaged for test	2.4	appropriate to the latch. Shoot bolt (Doorset B): Steam and threshold of the unexp	appropriate to the latch. Shoot bolt (Doorset B): Steel shoot bolts surface-fixed to the head and threshold of the unexposed face of the right-hand leaf	
overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d) Latch: Doorset A: Hoppe Arrone 3 Lever 65mm Mortice Sashlow fitted 1000mm from the threshold. Forend size: 155mm(h)		Lock/Latch Status (Both De	oorsets): Disengaged for test	
overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 67mm(h) x 57mm(d) Latch:		fitted 1000mm from	the threshold. Forend size: 155mm(h) x	
overhead closer fitted on the exposed face of each leaf as per		57mm(d) Latch:		
fitted 150mm, 755mm and 1760mm from the head of each leaf.		fitted 150mm, 755mm and Closer (Both Doorsets): Ho overhead closer fitted on the	Closer (Both Doorsets): Hoppe Arrone AR1500 surface-mounted overhead closer fitted on the exposed face of each leaf as per	

3.1.10 Summary of Test Report CFR1811071 (Doorset A)

Date of Test:	7.NOV.2018
Identification of Test Body:	Cambridge Fire Research UKAS No. 4319
Sponsor:	Dixon International Group Limited
Tested Product:	A glazed, single-acting, single doorset - ULSASD
Tested Orientation:	Opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2745mm(h) x 1012(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (650kg/m³), 8mm thick to vertical edges only. FRAME:
	Head & Jambs: Softwood (460kg/m³), 105mm(d) x 32mm(w), with 32mm(w) x 12mm(d) planted (pinned) softwood stop. Fire stopping: Unifrax Insulfrax LTX blanked capped with Firewise Intumescent & acoustic acrylic sealant.
	Threshold: Non-combustible.
	INTUMESCENT: Frame Reveal: 1no 20x4mm Intumescent Seals Ltd Therm-A-Seal graphite-based seal fitted 12mm from the exposed face within the frame reveal.
	HARDWARE: Hinges: 4no Eurospec Enduro bearing butt type hinge fitted 150mm, 922mm, 1524mm and 2471mm from the top of each leaf. Closer: Dormakaba TS 68 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 53.5mm(h) x 45mm(d)
	Latch: ERA tubular latch fitted 950mm from the base of the leaf. Forend size: 55mm(h) x 24mm(w) Lock/Latch Status: Disengaged for test Handle: Glutz Zurich 5088 stainless steel lever type handle fitted appropriate to the latch. Size: 120mm(w) x 55mm(d)
	on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 53.5mm(h) x 45mm(d) Latch: ERA tubular latch fitted 950mm from the base of the leaf. Forend size: 55mm(h) x 24mm(w) Lock/Latch Status: Disengaged for test Handle: Glutz Zurich 5088 stainless steel lever type handle fitted appropriate to the latch. Size: 120mm(w) x 55mm(d)

Report No: Chilt/A02066 Rev O Page 22 of 519

	HARDWARE PROTECTION:
	Under hinge blade: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	Encasing latch body: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	Under latch keep: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	Under strike: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	GLAZING (Both leaves):
	Glass: Pyroguard UK El30 15mm thick
	Aperture Size: 1513mm(h) x 310mm(w)
_	Glass Size: 1500mm(h) x 300mm(w)
	Sight Size: 1468mm(h) x 273mm(w)
	Beading: Sapele bead 27.5mm(h) x 17mm(d) including 6x6mm bolection and a 21° chamfer
	Bead Fixing: 50mm(I) steel screws at 150mm centres
	GLAZING SYSTEM (Both Leaves):
PANE	Glazing Perimeter: Sealmaster GB15 intumescent foam glazing tape 20mm(w) x 5mm(t)
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 39 minutes

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document remains the property of the leader to ensure that the day of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the reader to en This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document details a subset of evidence tange of products.

3.1.11 Summary of Test Report CFR1812111

	of the referenced test report are summarised below.
Date of Test:	11.DEC.2018
Identification of Test Body:	Cambridge Fire Research UKAS No. 4319
Sponsor:	Dixon International Group Limited
Tested Product:	A glazed, unlatched, single-acting, double doorset - ULSADD
Tested Orientation:	Opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: Leaf A: 2039mm(h) x 926mm(w) x 45mm(t) Leaf B: 2039mm(h) x 925mm(w) x 45mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 7mm thick to vertical edges only. FRAME: Head & Jambs: Softwood (450kg/m³), 102mm(d) x 32mm(w), with 40mm(w) x 14mm(d) planted (pinned) softwood stop. Fire stopping: Unifrax Insulfrax S blanked capped with Firewise intumescent & acoustic acrylic sealant. Threshold: Non-combustible. INTUMESCENT: Frame Reveal: 1no 9x6mm Sealmaster N30 ammonium phosphate based seal fitted 16mm from the exposed face within the frame reveal. Meeting Stile: 1no 9x6mm Sealmaster N30 ammonium phosphate based seal, centrally fitted to both leaves. HARDWARE: Hinges: 3no Eurospec Enduro bearing butt type hinge fitted 152mm, 947mm and 1738mm from the top of each leaf. Closer: Rutland TS.9205 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 235mm(w) x 55mm(h) x 39mm(d) Latch: ERA tubular latch fitted 1038mm from the base of the leaf. Forend size: 56mm(h) x 24mm(w) Body size: 19mm(h) x 13mm(w) x 65mm(d) Lock/Latch Status: Disengaged for test
	Lock/Latch Status: Disengaged for test. Handle: Zoo Architectural Ltd aluminium lever type handle fitted appropriate to the latch. Size: 124mm(w) x 50mm(d)

Report No: Chilt/A02066 Rev O Page 24 of 519

	HARDWARE PROTECTION: Under hinge blade: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	Encasing latch body: 1mm thick Intumescent Seals Ltd Therm-A-Strip ammonium phosphate based intumescent pad.
	GLAZING (Both leaves): Glass: Pyroguard UK El30 15mm thick • Aperture Size: 1504mm(h) x 302m(w) • Glass Size: 1500mm(h) x 300mm(w) • Sight Size: 1463mm(h) x 262mm(w) Beading: Sapele bead 26mm(h) x 18mm(d) including 6x6mm bolection and a 20° chamfer
iΑ	Bead Fixing: 5x40mm steel screws at 150mm centres GLAZING SYSTEM (Both Leaves): Glazing Perimeter: Sealmaster GTR graphite-based intumescent foam glazing tape 20mm(w) x 5mm(t)
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 36 minutes

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document responsibility of the the evidence within is the product of the treatment of the distinguished using the evidence within is the product of the treatment of the treatment of the read of the read of the evidence within is the product of the read of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the evidence within its product

This document detains a subset of evidence from an extensive

3.1.12 Summary of Test Report Chilt/RF10011 (Doorset A)

Date of Test:	24.FEB.2010
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single-acting, single doorset - ULSASD
Tested Orientation:	Opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2740mm(h) x 926mm(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Oak (720kg/m³), 8mm thick to all edges. FRAME: Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 25mm(w) x 12mm(d) planted (pinned) European Redwood stop. Fire stopping: Intumescent acrylic mastic ~5-10mm(w) x ~10-15mm(d) Threshold: Non-combustible. INTUMESCENT: Frame Reveal: 1no 9x1mm Norseal raw graphite seal butted up to the smoke seal within the frame reveal. SMOKE SEALS: Frame Reveal: 1no 12x12mm Norsound Ltd Norfast "Fire, smoke, acoustic, Total Seal" fitted against the upstand of the stop HARDWARE: Hinges: 4no Royde & Tucker H101 lift-off type hinge fitted 200mm, 400mm, 1318mm and 2440 mm from the top of each leaf. Closer: Dormakaba TS 71 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 232mm(w) x 68mm(h) x 45mm(d) Latch: E*S Tubular steel mortice latch fitted 1000mm from the base of the left leaf. Forend size: 63mm(h) x 26mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch, Size: 100mm(w) x 38mm(d)
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 51 minutes

3.1.13 Summary of Test Report BMT/FER/F13263 (Doorset A)

This test report is summarised in section 3.3.9.

3.1.14 Summary of Test Report Chilt/RF08094 Revision A

Date of Test:	04.JUL.2008
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting, double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both Leaves): 2100mm(h) x 901(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 10mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 25mm(w) x 12mm(d) planted (pinned) European redwood stop. Fire stopping: Mann McGowan Pyromas intumescent acrylic mastic
	~5-10mm(w) x ~10-15mm(d) Threshold: Non-combustible INTUMESCENT: Frame Reveal: • Head: 1no 20x4mm Mann McGowan Pyrostrip P100 fitted 12mm from the exposed face. • Jambs: 1no 10x4mm Mann McGowan Pyrostrip P100 fitted 17mm from the exposed face. Meeting stile (left leaf only): 2no 10x4mm Mann McGowan Pyrostrip P100 fitted 10mm apart, with the first seal 7mm from the exposed face of the leaf.
	exposed face of the leaf. Part P

Report No: Chilt/A02066 Rev O Page 27 of 519

Performance:	Integrity: 33 minutes
Test Standard:	BS 476: Part 22: 1987
	Under latch keep: 1mm thick BASF Wolman Interdens® Type 15
	Under latch forend: 1mm thick BASF Wolman Interdens® Type 15
	Under hinge blade: 1mm thick BASF Wolman Interdens® Type 15
	HARDWARE PROTECTION:
	Size: 102mm(w) x 41mm(d)
	Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch.
	threshold of the left leaf. Forend size: 57mm(h) x 26mm(w)
	Latch: Standard tubular steel mortice latch fitted 1095mm from the
	Closer: Dormakaba TS 71 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 232mm(w) x 68mm(h) x 45mm(d)
	Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150mm, 980mm and 1800mm from the head of each leaf.
	HARDWARE:

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tanks of products.

3.1.15 Summary of Test Report WFRC 141445

The essential details	of the referenced test report are summarised below.
Date of Test:	15.SEP.2004
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Millennium Door Systems
Tested Product:	An unlatched, single acting double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (Both leaves): 2100mm(h) x 902(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (630kg/m³), 10mm thick to vertical edges only. FRAME: Head & Jambs: Softwood, 70mm(d) x 32mm(w), with a 24mm(w) x 13.5mm(d) planted (pinned) softwood stop. Threshold: Non-combustible INTUMESCENT: Frame Reveal: • Head: 1no 20x4mm Lorient Polyproducts Ltd. LP2004 fitted 12mm from the exposed face. • Jambs: 1no 10x4mm Lorient Polyproducts Ltd. LP1004 fitted 17mm from the exposed face. Meeting stile (left leaf only): 2no 10x4mm Lorient Polyproducts Ltd. LP1004 fitted 8mm apart, central within the edge of the leaf. HARDWARE: Hinges: 3no Royde & Tucker H102 lift-off type hinge fitted 175mm, 970mm and 1775mm from the head of each leaf. Closer: Dormakaba TS 73V surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 225mm(w) x 60mm(h) x 40mm(d) Latch: Standard 63mm tubular steel mortice latch fitted 1095mm from the threshold of the left leaf. Forend size: 58mm(h) x 25mm(w)
	Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 38mm(d) HARDWARE PROTECTION: Under hinge blade: 1mm thick BASF Wolman Interdens® Type 15 Under latch forend: 1mm thick BASF Wolman Interdens® Type 15 Under latch body: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 BS 476: Part 22: 1987
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 40 minutes
	Under latch body: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 BS 476: Part 22: 1987 Integrity: 40 minutes

3.1.16 Summary of Test Report Chilt/RF05134 (Doorset B)

The essential details	of the referenced test report are summarised below.
Date of Test:	17.FEB.2006
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Millennium Door Systems
Tested Product:	An unlatched, single acting, single doorset - ULSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (Both leaves): 2800mm(h) x 915(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Oak, 10mm thick to all edges. FRAME: Head & Jambs: European redwood, 70mm(d) x 32mm(w), with a 12mm(d) planted (pinned) European redwood stop. Fire stopping: Mineral fibre ~5-10mm(t)
	INTUMESCENT: Frame Reveal: • Head: 1no 20x4mm Lorient Polyproducts Ltd. LP2004 fitted centrally within the frame reveal. • Jambs: 1no 15x4mm Lorient Polyproducts Ltd. LP1504 fitted centrally within the frame reveal.
	HARDWARE: Hinges: 4no Royde & Tucker H101 lift-off type hinge fitted 150mm, 935mm, 1730mm and 2520mm from the head of the leaf. Closer: Dormakaba TS 73V surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 225mm(w) x 60mm(h) x 40mm(d) Latch: Standard tubular steel mortice latch fitted 1000mm from the threshold of the leaf. Forend size: 57mm(h) x 26mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 38mm(d) HARDWARE PROTECTION: Under hinge blade: 1mm thick Dufaylite Interdens. BS 476: Part 22: 1987 Integrity: 38 minutes
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 38 minutes
	Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 38mm(d) HARDWARE PROTECTION: Under hinge blade: 1mm thick Dufaylite Interdens BS 476: Part 22: 1987 Integrity: 38 minutes

3.1.17 Summary of Test Report RF00136

The essential details	of the referenced test report are summarised below.
Date of Test:	10.OCT.2000
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting, double doorset with overpanel - ULSADD+OP
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (Both leaves): 2100mm(h) x 900(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: • Vertical edges: Sapele (680kg/m³), 10mm(t) • Top edge: Sapele (680kg/m³), 22mm thick, with a 22mm(w) x 11mm(d) rebate. OVERPANEL: Overall Size: 500mm(h) x 1808mm(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping; 22mm thick, with a 22mm(w) x 11mm(d) rebate. Applied to the bottom edge of the overpanel only. FRAME: Head & Jambs: European redwood (510kg/m³), 70mm(d) x 32mm(w), with a 13.5mm(d) planted (pinned) European redwood stop. Threshold: Non-combustible INTUMESCENT: • Frame Reveal: • Head & Jambs: 1no 10x4mm Lorient Polyproducts Ltd. LP1004 fitted centrally within the frame reveal. • Door edges: • Head: 1no 15x4mm Lorient Polyproducts Ltd. LP1504 fitted centrally within the rebate of the lipping. • Meeting stiles (left leaf only): 2no 10x4mm Lorient Polyproducts Ltd. LP1504 fitted centrally within the rebate of the lipping.

Performance:	Integrity: 37 minutes
Test Standard:	BS 476: Part 22: 1987
20.00	intumescent gasket.
	Under latch keep: 1mm thick Lorient Polyproducts Ltd Interdens
7. 3	Under latch forend: 1mm thick Lorient Polyproducts Ltd Interdens intumescent gasket.
	Encasing latch body: 1mm thick Lorient Polyproducts Ltd Interdens intumescent gasket.
2.0	Under hinge blade: 1mm thick Lorient Polyproducts Ltd Interdens intumescent gasket.
	HARDWARE PROTECTION:
	Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 113mm(w) x 41mm(d)
	Lock/Latch Status: Disengaged for test
	Latch: Henderson Hardware 63mm tubular mortice latch fitted 1100mm from the threshold of the leaf. Forend size: 58mm(h) x 26mm(w)
	Closer: Dormakaba TS 73V surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 225mm(w) x 60mm(h) x 40mm(d)
`	Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150mm, 1000mm and 1770mm from the head of the leaf.
	HARDWARE:

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

3.1.18 Summary of Test Report WF 401039 (Doorset A)

Date of Test: Identification of Test Body: Sponsor: Tested Product:	22.JUN.2018 Warringtonfire Testing and Certification Ltd. UKAS No. 1762 Falcon Panel Products Ltd
Test Body: Sponsor:	
•	Falcon Panel Products Ltd
Tested Product:	
	A latched, single acting, single doorset - LSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	Hung opening in towards heating condition LEAF: Overall Size: 2408mm(h) x 1048(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Decorative insert: Ash (565kg/m³) 10mm x 10mm with a 5mm deep V-groove 2 vertical and 2 horizontal forming a picture frame detail around door leaf about 75mm from door edge. Lipping: Sapele (640kg/m³), 6mm thick to all edges FRAME: Head & Jambs: Engineered, finger-jointed European redwood (488kg/m³), 90mm(d) x 44mm(w), with an 11mm(d) x 44mm(w) integral stop. Fire stopping: Rockwool mineral fibre capped with Mann McGowan Pyromas A intumescent acrylic mastic ~4-16mm(w) x 10mm(d) Threshold: Non-combustible INTUMESCENT: Frame Reveal: Head & Jambs: 2no 10x4mm Lorient Polyproducts Ltd. LP1004 fitted centrally within the frame reveal. SMOKE SEALS: Drop seal: Lorient Polyproducts Ltd LAS8001si fitted centrally within the bottom of the leaf. Size: 35mm(h) x 14mm(w) HARDWARE: Hinges: 3no Zoo Architectural Hardware ZHSS243RS stainless steel bearing but type hinge fitted 155mm, 1135mm and 2120mm from the head of the leaf. Closer: Rutland TS.9205 surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 236mm(w) x 55mm(h) x 38mm(d) Latch: Glutz 1893 MINT steel multipoint latch, with nib fitted 1045mm from the threshold of the leaf. • Forend size: 1788mm(h) x 20mm(w) x 2.5mm(t) • Centre lock body: 205mm(h) x 16.5mm(w) x 80mm(d) • Centre keep: 210mm(h) x 25mm(d) x 2mm(t) including tongue of 68mm x 14mm

	Top & bottom lock body: 110mm(h) x 16.5mm(w) x 40mm(d) Top & bottom keeps: 110mm(h) x 25mm(d) x 2mm(t) including tongue of 47mm x 14mm Cylinder: Glutz GC9991 eurocylinder fitted appropriate to the latch. Lock/Latch Status: Engaged for test Handle: Glutz Zurich 5088 steel lever type handle and Glutz 5380C escutcheon fitted appropriate to the latch. Size: 130mm(w) x 55mm(d) Eye viewer: Glutz GY3504 fitted 892mm from the head and 190mm from the edge of the leaf. Size: Ø26mm HARDWARE PROTECTION: Under hinge blade: 1mm thick Lorient Polyproducts Ltd mono ammonium phosphate based intumescent pad. Latch: 1mm thick Lorient Polyproducts Ltd intumescent kit for Glutz 1893 MINT lock, fitted encasing centre latch body, top & bottom latch bodies, under the latch forend and behind keeps as per manufacturers' instructions. Encasing eye viewer: 0.5mm thick Lorient Polyproducts Ltd graphite based intumescent
	based intumescent
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 36 minutes

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tanks of products.

3.1.19 Summary of Test Report WF 402305

The essential details	or the referenced test report are summansed below.
Date of Test:	2.AUG.2018
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Aynsley Doors
Tested Product:	A glazed, latched, single acting, single doorset - LSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2405mm(h) x 1046(w) x 43mm(t) Core: Falcon Panel Products Strebord® 44 Decorative grooves: 10mm x 10mm grooves to both faces of the leaf with Sapele (640kg/m³) inlays, each with a 5mm x 4mm deep, square groove central within the inlay. • 2no vertical grooves running the full length of the leaf. • 10no horizontal grooves running the full width of the leaf, of which 6no are interrupted by the glazing aperture. Lipping: Sapele (640kg/m³), 8mm thick to all edges FRAME: Head & Jambs: European redwood (510kg/m³), 90mm(d) x 44mm(w), with an 15mm(d) x 43mm(w) integral stop. Fire Stopping: Rockwool mineral fibre capped with intumescent acrylic mastic ~9-13mm()w) x 10mm(d) Threshold: Non-combustible
	INTUMESCENT: Frame Reveal: • 1no 10x4mm Pyroplex 104FS fitted 9mm from the exposed face of the frame reveal. • 1no 10x4mm Pyroplex 104FO fitted 29mm from the exposed face of the frame reveal.
	 1no 10x4mm Pyroplex 104FO fitted 29mm from the exposed face of the frame reveal. SMOKE/ACOUSTIC SEALS Frame Reveal: 1no 10x4mm Pyroplex 104FS fitted 9mm from the exposed face of the frame reveal. 1no 10x11mm NOR710s smoke/acoustic seal fitted to the upstand of the stop. 1no 20x12mm NOR810s drop seal, fitted centrally within a rebate at the base of the leaf.
	1no 10x11mm NOR710s smoke/acoustic seal fitted to the upstand of the stop. 1no 20x12mm NOR810s drop seal, fitted centrally within a rebate at the base of the leaf. **The stop of the leaf.** **The stop of the stop of the leaf.** **The stop of the stop of t

HARDWARE:

Hinges: 3no Royde & Tucker H102 stainless steel bearing butt type hinge fitted 150mm, 1125mm and 2105mm from the head of the leaf.

Closer: Astra 4000 series jamb-mounted concealed closer fitted within the leaf edge 970mm from the leaf head as per manufacturer's instructions.

- Forend size: 106mm(h) x 32mm(w)
- Body size: 216mm(I) x Ø20mm

Latch: Winkhaus Standard STV AV2 multi-point door-lock system, with nib fitted 1050mm from the threshold of the leaf.

- Forend size: 1770mm(h) x 20mm(w) x 3mm(t)
- Centre lock body: 185mm(h) x 16mm(w) x 70mm(d)
- Centre keep: 235mm(h) x 24mm(d)
- Top & bottom lock body: 113mm(h) x 16mm(w) x 45mm(d)
- Top & bottom keeps: 159mm(h) x 24mm(d)

Cylinder: Eurocylinder fitted appropriate to the latch.

Lock/Latch Status: Engaged for test

Handle: Zoo Architectural Hardware ZAA030SA lever type handle and lock escutcheon plate fitted appropriate to the latch. Size: 128.5mm(w)

Eve viewer: Norseal DV160/C fitted 905mm from the head of the leaf. Size: Ø27mm

Drop seal: 1no 20x12mm NOR810s drop seal, fitted centrally within a rebate at the base of the leaf.

HARDWARE PROTECTION:

Under hinge blade: 1mm Norseal NOR910 graphite type intumescent.

Latch: 1mm Norseal NOR910 graphite type intumescent fitted encasing centre latch body, top & bottom latch bodies, under the latch forend and behind keeps.

Encasing eye viewer: 0.5mm thick Norseal NOR905 graphite based intumescent fitted lining the aperture of the eye viewer. This document responsibility of the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the responsibility of the reader to ensure the reader to e Ranal Products It desupportes third pathy certification for the open assernit This document remains the property of Falcon Panel Products that any problem.

This document remains the property of the evidence within is fit for purpose.

Ealcon Panel Products that supports third pathy certification for the about the installation and maintenance of fire door a support of the about the installation and maintenance of fire door a support of the about the installation and maintenance of fire about the installation and maintenance of the installation an

This document detains a subset of a wide range of products.

*esting regime covering and erange of products are as the country of the covering and erange of products are as the covering and even are as the covering are as the covering and even are as the covering and even are as the covering are as the covering and even are as the covering are as the covering and even are as the covering ar

	GLAZING: Glass: Pilkington Pyrodur 30.203 11mm thick
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 51 minutes

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

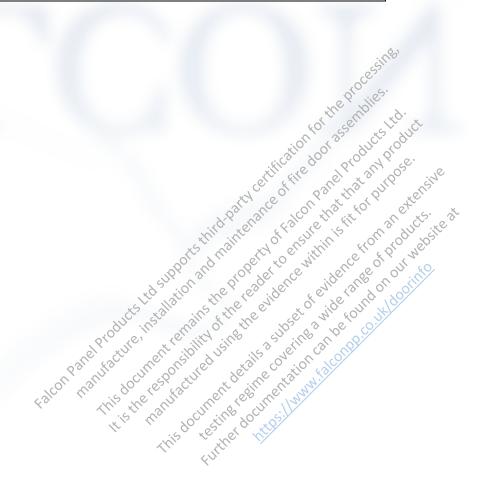
This document details a subset of evidence tange of products.

3.1.20 Summary of Test Report WF 391843 (Doorset A)

	or the referenced test report are summansed below.
Date of Test:	11.NOV.2017
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed, latched, single acting, single doorset - LSASD
Tested Orientation:	Hung opening in towards heating condition
Tested Orientation: Summary of Test Specimen:	Hung opening in towards heating condition LEAF: Overall Size: 2235mm(h) x 1050(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: • Closing edge: Sapele (640kg/m³), 18mm thick. • Hanging, top and bottom edges: Sapele (640kg/m³), 6mm thick. FRAME: Head & Jambs: European redwood (510kg/m³), 100mm(d) x 44mm(w), with an 15mm(d) x 52mm(w) integral stop. Fire stopping: Sealed Tight Solutions Ltd ST88 intumescent acrylic mastic 12.5mm(w) x ~10-15mm(d) Threshold: Non-combustible INTUMESCENT: Frame Reveal: 2no 10x4mm Sealed Tight Solutions Ltd STS104FO fitted 8mm apart, 8mm from the exposed face of the frame reveal. HARDWARE: Hinges: 3no Royde & Tucker H101 stainless steel bearing butt type hinge fitted 140mm, 1050mm and 1956mm from the head of the leaf. Closer: Astra 4000 series jamb-mounted concealed closer fitted within the leaf edge 1175mm from the leaf head as per manufacturer's instructions. • Forend size: 106mm(h) x 32mm(w) • Body size: 216mm(l) x Ø20mm Latch: ERA Surefire Classic DLSF-45-609-85 multi-point door-lock system, with nib fitted 1035mm from the threshold of the leaf. • Forend size: 1630mm(h) x 20mm(w) x 3mm(t) • Centre keep: 190mm(h) x 24mm(w) • Centre keep: 190mm(h) x 24mm(w) • Centre keep: 190mm(h) x 24mm(w)
	appropriate to the latch.
	Top & bottom lock body: 150mm(h) x 16mm(w) x 45mm(d) Top & bottom keeps: 150mm(h) x 24mm(d) Cylinder: ERA 3* Fortress 70mm BS-FOR-3535-DC-1 fitted appropriate to the latch. Lock/Latch Status: Engaged for test

Report No: Chilt/A02066 Rev O Page 38 of 519

	Handle: Fab & Fix Balmoral inline lever type handle fitted appropriate to the latch and cylinder. Baseplate: 243mm(h) x 32mm(w) x 11mm(d) handle: 120mm(w) x 67mm(d)
	HARDWARE PROTECTION:
	Centre latch body: 1mm Sealed Tight Solutions Ltd raw graphite covering the cheeks of the centre latch body.
	Top & bottom latch bodies: 1.8mm European redwood laminated to the cheeks of the hook bolt body.
	Under latch keeps: 1mm Sealed Tight Solutions Ltd raw graphite fitted under the top, bottom and centre latch keeps.
	GLAZING:
	Glass: AGC Pyrobelite 12mm thick
_	Aperture Size: 784mm(h) x 234mm(w)
	Glass Size: 778mm(h) x 228mm(w)
	Sight Size: 775mm(h) x206mm(w)
	Aperture liner: Sapele (640kg/m³), 6mm thick.
7.3	Beading: Sapele (640kg/m³) 22mm(h) x 21mm(d) including 8x7mm bolection and a 16° chamfer
	Bead Fixing: Steel pins, 40mm(I), fitted 7mm from corners at 150mm centres.
	GLAZING SYSTEM (Both Leaves):
	Glazing Perimeter: 10mm(w) x 3mm(t) Sealed Tight Solutions Ltd STS105GT-3
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 51 minutes



3.1.21 Summary of Test Report Chilt/RF08125 AR1

Date of Test:	16.OCT.2008
Identification of	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Test Body:	Waltingtoning Tooling and Contineation Etc. Of Cont. 1702
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting, double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2442mm(h) x 915(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 8mm thick to all edges FRAME: Head & Jambs: MDF (750kg/m³), 70mm(d) x 30mm(w), with 15mm(d) x 52mm(w) planted (pinned) MDF (750kg/m³) stops. Fire stopping: Mann McGowan Pyromas intumescent acrylic mastic ~5-10mm(w) x ~10-15mm(d) Threshold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4mm Pyroplex Ltd FO8700 seal fitted 15mm from the exposed face. Meeting Edge: 2no 15x4mm Pyroplex Ltd FO8700 seal fitted 10mm apart, central within the closing edge of the left leaf only. HARDWARE: Hinges: 4no Royde & Tucker H105 stainless steel lift-off type hinge fitted 150mm, 835mm, 1475mm and 2160mm from the head of both leaves. Closer (both leaves): Dormakaba TS 71 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 232mm(w) x 68mm(h) x 45mm(d) Latch: Eurospec tubular mortice fitted 1445mm from the base of the leaf. Forend size: 57mm(h) x 26mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch and cylinder. Footprint: 103mm(w) x 40mm(d) HARDWARE PROTECTION: Under latch forend: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 49 minutes
	Under latch forend: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 Under latch keep: 1mm thick BASF Wolman Interdens® Type 15 BS 476: Part 22: 1987 Integrity: 49 minutes

3.1.22 Summary of Test Report WF 388638

Date of Test:	7.SEP.2017
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed, unlatched, single acting, double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2205mm(h) x 1005(w) x 48mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 8mm thick to all edges Facing: 2mm thick uPVC fully encasing each leaf
	FRAME: Head & Jambs: European redwood (510kg/m³), 85mm(d) x 32mm(w) clad in uPVC to 3 sides (rear of frame unclad), with an 18mm(d) x 28mm(w) planted (pinned) European redwood stop clad in uPVC to 3 sides (rear of stop unclad). Fire stopping: Rockwool mineral fibre capped with intumescent mastic ~5-10mm(w) x 15mm(d) Threshold: Non-combustible INTUMESCENT: Leaf edge: 1no 15x4mm Sealed Tight Solutions Ltd STS154FO
	fitted centrally within the head and vertical edges of both leaves. HARDWARE: Hinges: 3no Royde & Tucker H101 stainless steel bearing butt type hinge fitted 150mm, 450mm and 1840mm from the head of the leaf
	Closer: Rutland ITS.11204 concealed overhead type closer rebated within the head of each leaf and within the frame as per manufacturer's instructions. • Body size: 256mm(l) x 55(h)mm x 32(w)mm • Arm size: 461mm(l) x 30mm(w) Latch: Yale 5-lever stainless steel mortice latch fitted 1065mm from the threshold of the left-hand leaf. • Forend size: 162mm(h) x 26mm(w) • Body size: 110mm(h) x 76mm(d) x 15mm(w) • Keep size: 168mm(h) x 29mm(w) HARDWARE (Contd.) Lock/Latch Status: Disengaged for test Handle: Stainless steel lever type handle fitted appropriate to the latch.
	HARDWARE (Contd.) Lock/Latch Status: Disengaged for test Handle: Stainless steel lever type handle fitted appropriate to the latch.

Report No: Chilt/A02066 Rev O Page 41 of 519

Drop seal: 35mm(h) x 14mm(t) Sealed Tight Solutions Ltd STS422GT fitted centrally within the bottom edge of both leaves.

HARDWARE PROTECTION:

Under hinge blades: 1mm Sealed Tight Solutions Ltd ST100X25 graphite.

On top of closer body: 1mm Sealed Tight Solutions Ltd raw graphite. Under closer arm guide: 1mm Sealed Tight Solutions Ltd raw graphite.

Under latch forend: 1mm Sealed Tight Solutions Ltd raw graphite.

GLAZING:

Left Leaf:

- Glass: Pyroguard EW30 IMPACT 7.2mm thick
 - Aperture Size: 1615mm(h) x 265mm(w)
 - o Glass Size: 1600mm(h) x 250mm(w)
 - Sight Size: 1565mm(h) x215mm(w)
- Beading: uPVC wrapped profiled sapele (640kg/m³) 32mm(h) x 27mm(d) including 7x7mm bolection
- Bead Fixing: Steel pins, 60mm(I), fitted 30mm from corners at 150mm centres.

Right Leaf:

- Glass:
 - Inner: Pyroguard EW30 MAXI 11.4mm thick
 - Aperture Size: 1606mm(h) x 256mm(w)
 - Glass Size: 1600mm(h) x 250mm(w)
 - Sight Size: 1545mm(h) x 195mm(w)
 - Outer (both faces): Palsun Polycarb 5mm thick reducing to 2mm at the perimeter for 15mm to allow for interlock with the leaf facing.
 - Polycarb size: 1576mm(h) x 225mm(w)
 - Beading: uPVC wrapped profiled sapele (640kg/m³) 30mm(h) x 16.3mm(d) including a 5mm(d) x 15mm(w) rebate to accept the Palsun Polycarb and a 3mm(d) x 15mm(w) rebate to accept the glazing intumescent.

July the documentation

Bead Fixing: Steel screws, 50mm(I), fitted 30mm from corners at 150mm centres.

GLAZING SYSTEM:

Glazing Perimeter 1 (both leaves): 10mm(w) x 3mm(t) Sealed Tight Solutions Ltd STS105GT-3 fitted between the glass and bead on both faces.

Glazing Perimeter 2 (right leaf only): Nominal Ø6mm Geocel Firex 321FR Intumescent & Acoustic acrylic fitted at the edge of the glass between the bead and glass on both faces.

Test Standard:

BS 476: Part 22: 1987

Performance:

Integrity: 39 minutes

3.1.23 Summary of Test Report BMT/FEP/F15034

Date of Test:	9.FEB.2015
Identification of	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Test Body:	Warningtonine resting and Certification Etd. ONAS No. 1702
Sponsor:	Sealed Tight Solutions Ltd
Tested Product:	A glazed, unlatched, single acting double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test	LEAF:
Specimen:	Overall Size (both leaves): 2900mm(h) x 1000(w) x 44mm(t)
	Core: Falcon Panel Products Strebord® 44
	Lipping: Sapele (640kg/m³), 6mm thick to all edges.
	FRAME:
4	Head & Jambs: European Redwood (450kg/m³), 70mm(d) x 32mm(w), with 20mm(w) x 12mm(d) planted (pinned) European redwood stop.
PANCE	Fire stopping: Rockwool mineral fibre capped with intumescent mastic, ~10-15mm wide.
	Threshold: Non-combustible.
	INTUMESCENT:
	Frame Reveal: 1no 15x4mm Sealed Tight Solutions Ltd ST1504FO seal fitted centrally within the frame reveal.
	Meeting stile (right leaf only): 2no 10x4 Sealed Tight Solutions Ltd ST1004FO fitted 7mm and 27mm from the exposed face of the leaf.
	SMOKE/ACOUSTIC SEALS:
	Frame Reveal: 1no 10x3mm Sealed Tight Solutions ST1009 fitted to the upstand of the stop on the right jamb and across the head of the right-hand leaf. HARDWARE: Hinges (Both Doorsets): 4no Intelligent Hardware HST.100.BZP butt
	HARDWARE:
	Hinges (Both Doorsets): 4no Intelligent Hardware HST.100.BZP butt type hinge fitted 150mm, 965mm and 1780mm and 2600mm from the head of each leaf.
	Closer (Both Doorsets): Rutland TS.3204 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 59mm(h) x 42mm(d)
	Latch: Union JL2C22R-PS55 sashlock with spindle fitted 950mm from the base of the right-hand leaf.
	 Forend size: 235mm(h) x 25mm(w) Body size: 175mm(h) x 18mm(w) x 85mm(d)
	instructions. Body size: 220mm(w) x 59mm(h) x 42mm(d) Latch: Union JL2C22R-PS55 sashlock with spindle fitted 950mm from the base of the right-hand leaf. • Forend size: 235mm(h) x 25mm(w) • Body size: 175mm(h) x 18mm(w) x 85mm(d)
	thi, Frithe

	Keep size: 235mm(h) x 25mm(w)
	Lock/Latch Status: Disengaged for test
	Handle: Aluminium lever type handle fitted appropriate to the latch.
	Flush bolts:
	Head: Zoo Architectural Hardware Ltd ZAS1355 fitted at the threshold of the left leaf. Footprint size: 609mm(h) x 20mm(w)
	Threshold: Zoo Architectural Hardware Ltd ZAS03 fitted at the threshold of the left leaf. Footprint size: 205mm(h) x 20mm(w)
	HARDWARE PROTECTION:
	Under hinge blades: 1mm Sealed Tight Solutions Ltd raw graphite.
	Under latch forend: 1mm Sealed Tight Solutions Ltd raw graphite.
	Under latch keep: 1mm Sealed Tight Solutions Ltd raw graphite.
$\epsilon \Delta$	Lining flush bolt rebate: 1mm Sealed Tight Solutions Ltd raw graphite.
	CLAZINC (both looves):
	GLAZING (both leaves):
	 Glass: Promat Securiglass Pyrobelite 7mm thick Aperture Size: 1150m(h) x 600mm(w)
	 Glass Size: 1145mm(h) x 595mm(w)
	○ Sight Size: 1125mm(h) x 570mm(w)
	Beading: Sapele
	 Left leaf: 15mm(h) x 14mm(d) including a 3x3mm
	quirk.
	 Right leaf: 20mm(h) x 19mm(d) including a 5x5mm bolection and a 19° chamfer.
	Bead Fixing: Steel pins 1.6g x 38mm fitted 50mm from
	corners and at 150mm centres.
	GLAZING SYSTEM:
	Glazing perimeter: 10v5mm Sealed Tight Solutions ST105GT fitted
	GLAZING SYSTEM: Glazing perimeter: 10x5mm Sealed Tight Solutions ST105GT fitted between the glass and glazing bead on both faces.
Test Standard:	Glazing perimeter: 10x5mm Sealed Tight Solutions ST105GT fitted between the glass and glazing bead on both faces. BS 476: Part 22: 1987 Integrity: 33 minutes Integrity: 33 minutes
	Luta militar 00 minutas
Performance:	Integrity: 33 minutes
	Certify the representation of the
	THE COO LEGITIME TO THE THE PARTY OF THE PAR
	A TO WARE COLOR THE STATE OF TH
	this like of suring com collability
	ofte of the central contiet, central of by the
	Supply our of of del nee identification in the
	Tro latio the creation of ender of the round of 800
	Lucks 25 toll sains kither Sex and for ith
	Propries Rey Rey High Supply Sensitive Sensitive Sensitive Supply Sensitive
	The rotal relationship of my right of the or of the
	or be sun rocal secondaria x de rue xaita n'a
	fold the the captor the the take
	This has doch tills 90cm 25:11
	0/ vo / vo
	1/1/2 × 1/1/2 × 1/1/2
	Integrity: 33 minutes (a) Integrity: 33 minutes (b) Integrity: 33 minutes (c) Integrity: 34 minutes

3.1.24 Summary of Test Report WF 430460 (Dooorset A)

The essential details of	the referenced test report are summarised below.
Date of Test:	09.JUL.2019
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed unlatched, single acting, double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size Leaf A: 2397mm(h) x 500mm(w) x 44mm(t) Leaf B: 2397mm(h) x 925mm(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (630kg/m³), 25mm thick T-Shaped lippings including a 10x21mm wide tongue, applied to all edges. FRAME: Head & Jambs: European redwood (510kg/m³), 99mm(d) x 32mm(w), with a 12mm(d) x 30mm(w) planted (pinned) stop.
	Fire stopping: Rockwool mineral fibre capped with intumescent mastic, ~9-17mm wide. Threshold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4 Lorient Polyproducts Ltd LP1504 fitted central to the leaf edge within the frame reveal. Meeting stile (right leaf only): 2no 10x4 Lorient Polyproducts Ltd LP1004 fitted 6mm and 27mm from the exposed face of the leaf.
	HARDWARE: Hinges: 3no Rutland HD grade 13 stainless steel bearing butt type hinge fitted 150mm, 1150mm and 2120mm from the head of the leaf. Closer: Rutland TS.11205 overhead type closer mounted to the head of each leaf as per manufacturer's instructions. Body size: 257mm(w) x 68mm(h) x 43mm(d) Latch: Hoppe Arrone AR8100 • Forend size: 235mm(h) x 24mm(w) • Body size: 165mm(h) x 16mm(w) x 88mm(d) • Keep size: 145mm(h) x 20mm(w) Lock/Latch Status: Disengaged for test Handle: Hoppe Paris E138Z steel lever type handle Flush Bolts: Hoppe Arrone AR326B stainless steel flush bolt: Forend size: 200mm(h) x 20mm(w) HARDWARE PROTECTION:

Performance:	Integrity: 35 minutes
Test Standard:	BS 476: Part 22
ijΑ	GLAZING SYSTEM: Glazing Perimeter: Sealmaster IMDGTR20X5FM Intumescent foam glazing tape 20mm(w) x 5mm(t) trimmed to suit the height of the upstand of the bead
	GLAZING (left leaf only): • Glass: Pyroguard El30, 15mm thick • Aperture Size: 1510mm(h) x 307mm(w) • Glass Size: 1475mm(h) x 272mm(w) • Sight Size: 1481mm(h) x 278mm(w) • Beading: Sapele (640kg/m³) 18mm(h) x 24mm(d) including 6x6mm bolection and a 15° chamfer • Bead Fixing: 16g 63mm steel pins, 50mm from the corners and at 150mm intervals.
	Under hinge blades: 1mm Sealed Tight Solutions Ltd raw graphite Under latch forend: 1mm Sealed Tight Solutions Ltd raw graphite Around latch body: 1mm Sealed Tight Solutions Ltd raw graphite Lining flush bolt rebate: 0.5mm thick intumescent sheet

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tange of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

Report No:

Page 46 of 519

3.1.25 Summary of Test Report RF11170

The details for this test are summarised in section 3.3.3

3.1.26 Summary of Test Report Chilt/RF09060 (Doorset B)

The essential details of the referenced test report are summarised below. This test is being used to support leaf size envelopes but also the option for recessing the face of the door leaf.

Date of Test:	26.MAY.2009
Identification of	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Test Body:	Warningtonine resting and Sertinoation Eta. STV to No. 1702
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: Leaf A: 2135mm(h) x 468(w) x 44mm(t) Leaf B: 2135mm(h) x 932(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 reduced to 24mm at 2no 10mm deep mock panels, routered into both faces of each leaf. Panel facings: 3mm thick hardboard (900kg/m³), applied to the base of mock panels on both faces of the leaf. Panel beading (left leaf only): 7mm(h) x 10mm(d) European redwood (510kg/m³) fixed with 30mm long steel pins 50mm from the corners and at 150mm centres. Lipping: Sapele (640kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 20mm(w) x 12mm(d) planted (pinned) European redwood stop. Fire stopping: Mann McGowan Ltd Pyromas intumescent mastic ~5-10mm(w) x ~10-15mm(d) - to both faces. Threshold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4mm Pyroplex Ltd FO8700 seal fitted centrally within the frame reveal. Meeting stile (right leaf only): 1no 15x4mm Pyroplex Ltd FO8700.
	Intershold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4mm Pyroplex Ltd FO8700 seal fitted centrally within the frame reveal. Meeting stile (right leaf only): 1no 15x4mm Pyroplex Ltd FO8700 seal fitted centrally within the leaf edge.

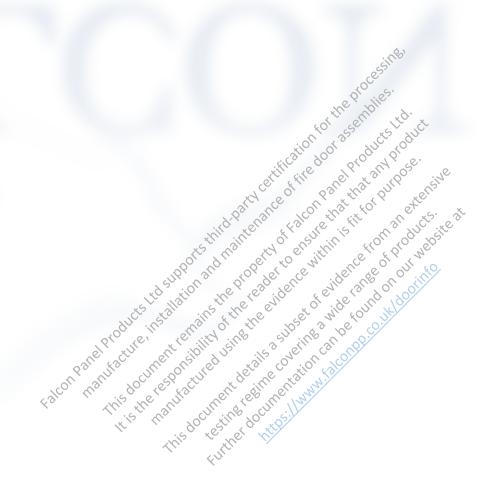
	HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150mm, 1002mm and 1855mm from the head of each leaf. Closer: Dormakaba TS 68 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 53.5mm(h) x 45mm(d)
Test Standard:	BS 476: Part 22
Performance:	Integrity: 43 minutes

3.1.27 Summary of Test Report RF98048

Date of Test:	15.JUN.1998
Identification of	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Test Body:	Warringtonine resting and certification Etc. 017 to 146. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting, double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (Both leaves): 2100mm(h) x 902(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³) 10mm thick to vertical edges only. FRAME:
7.7	Head & Jambs: European redwood (510kg/m³), 70mm(d) x 32mm(w), with a 24mm(w) x 13.5mm(d) planted (pinned) European redwood stop. Threshold: Non-combustible
	INTUMESCENT: Frame Reveal: • Head: 1no 20x4mm Lorient Polyproducts Ltd. LP2004 fitted centrally.
	 Jambs: 1no 10x4mm Lorient Polyproducts Ltd. LP1004 fitted centrally. Meeting stile (left leaf only): 2no 10x4mm Lorient Polyproducts Ltd. LP1004 fitted 12mm apart, central within the edge of the leaf.
	HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150mm, 1000mm and 1770mm from the head of each leaf. Closer: Dormakaba TS 73V surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 225mm(w) x 60mm(h) x 40mm(d) Latch: Henderson Hardware 63mm tubular mortice latch fitted
	Latch: Henderson Hardware 63mm tubular mortice latch fitted 1048mm from the threshold of the leaf. Forend size: 58mm(h) x 25mm(w)
	Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 38mm(d)
	Body size: 225mm(w) x 60mm(h) x 40mm(d) Latch: Henderson Hardware 63mm tubular mortice latch fitted 1048mm from the threshold of the leaf. Forend size: 58mm(h) x 25mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 38mm(d)

Report No: Chilt/A02066 Rev O Page 49 of 519

	HARDWARE PROTECTION:
	Under hinge blade: 1mm thick Lorient Polyproducts Ltd Interdens intumescent gasket.
	Encasing latch body: 1mm thick Lorient Polyproducts Ltd Interdens intumescent gasket.
	Under latch forend: 1mm thick Lorient Polyproducts Ltd Interdens intumescent gasket.
	Under latch keep: 1mm thick Lorient Polyproducts Ltd Interdens intumescent gasket.
	GLAZING (left leaf only):
	Glass: Pilkington Pyroshield, 6mm thick
	Aperture Size: 600mm(h) x 600mm(w)
	 Glass Size: 595mm(h) x 595mm(w)
	 Sight Size: 570mm(h) x 570mm(w)
ι /Δ.	Beading: Sapele (640kg/m³) 13mm(h) x 21mm(d) including 6x6mm bolection and a 10° chamfer
-/~	Bead Fixing: Steel pins, 40mm(I), fitted at 150mm centres.
_	GLAZING SYSTEM (Both Leaves):
PANE	Glazing Perimeter: Lorient Polyproducts Ltd System 36/6 glazing gasket 15mm(w) x 12mm(d)
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 42 minutes



*Esting regime covering a wide range of products the at

3.1.28 Summary of Test Report CFR1403122

HARDWARE:

Hinges: 3no Royde & Tucker H101 lift-off type hinge fitted 150mm. 1145mm and 2140mm from the head of each leaf.

Closer: Dormakaba TS 68 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 53.5mm(h) x 45mm(d)

Latch: Legge Life (Allegion(UK) Ltd.) H810F-B010 steel cylinder mortice fitted 1000mm from the base of the leaf.

- Forend size: 57mm(h) x 26mm(w) x 1.6mm(d)
- Body size: 23mm(h) x 16mm(w) x 64mm(d)
- Strike size: 57mm(h) x 34mm(w) x 1.2mm(d) including a 27mm(h) x 15mm(w) tongue

Lock/Latch Status: Disengaged for test

Handle: Excel 32405 aluminium lever type handle fitted appropriate to the latch. Size: 103mm(h) x 41mm(w) x 11mm(d)

Bolts: Face-fixed aluminium backplate and keep with steel bolt affixed to the head and bottom of the left hand leaf, 50mm from the meeting stile.

- Backplate: 98mm(I) x 23mm(w) x 0.8mm(t)
- Keep: 25mm(l) x 14mm(w) x 1.2mm(t)

HARDWARE PROTECTION:

Under hinge blade: 1mm thick Intumescent Seals Ltd Therm-A-Strip monoammonium phosphate based intumescent pad.

Encasing latch body: 1mm thick Intumescent Seals Ltd Therm-A-Strip monoammonium phosphate based intumescent pad.

Under latch forend: 1mm thick Intumescent Seals Ltd Therm-A-Strip monoammonium phosphate based intumescent pad.

Under latch strike: 1mm thick Intumescent Seals Ltd Therm-A-Strip monoammonium phosphate based intumescent pad.

Under latch keep: 1mm thick Intumescent Seals Ltd Therm-A-Strip monoammonium phosphate based intumescent pad.

Glass (Both leaves): Promat Pyrosec EW 30/7, 7.3mm thick Top pane: 1325mm(h) x 335mm(w) Size:

Top pane: 1316mm(h) x 335mm(w)

Bottom pane: 341
t Size: of Edicon Panel Products

- Aperture Size:
- Glass Size:
- Manufactured using the regime contains a subset of a wide reared to the things of the regime of the suide reared to the suide reared to the suide reared to the subset of the subset Schrent de anchrencht strong and be found on the string of the string of
- Sight Size:
 - 0

Eurther documentation

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tange of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

	Right Leaf:
	 Aperture Size: 870mm(h) x 631mm(w)
	Glass Size: 861mm(h) x 641mm(w)
	Sight Size: 840mm(h) x 620mm(w)
	Beading: Sapele (~710kg/m³) 20mm(h) x 19.5mm(d) including 5x5mm bolection and a 15° chamfer.
	Bead Fixing: Steel pins, 50mm(I), 125mm-150mm centres.
	GLAZING SYSTEM (Both Leaves):
	Setting blocks: 25mm(l) x 7mm(w) x 3mm(t) Intumescent Seals Limited Therm-A-Line fitted:
	Left leaf: 50mm from the corners
	Right leaf: 100mm from the corners
7 A	Glazing perimeter: 15x4mm Intumescent Seals Limited Therm-A-Bead monoammonium phosphate based intumescent fitted between the glass and the glazing bead.
Test Standard:	BS EN 1634-1:2014
Performance:	Integrity: 34 minutes
	Insulation: 7 minutes

3.1.29 Summary of Test Report TA087-9&10

Date of Test:	16.JAN.2020	
Identification of Test	Thomas Bell-Wright International Consultants UKAS No. 4439	
Body:	Themas Bon Tring. A third manifest a constitution of the constitut	
Sponsor:	Mann McGowan Group	
Tested Product:	Doorset A: A latched, single acting single doorset with two similarly sized air transfer grilles – LSASD	
	Doorset B: A latched, single acting single doorset with two	
	differently sized air transfer grilles - LSASD	
Tested Orientation:	Both doorsets: Hung opening in towards heating condition	
Summary of Test	LEAF:	
Specimen:	Doorset A:	
	Overall Size: 2200mm(h) x 926(w) x 45mm(t)	
	Core: Falcon Panel Products Strebord® 44	
	Lipping: Sapele (640kg/m³), 8mm thick to closing edge and 6mm thick to all other edges.	
	Doorset B:	
	Overall Size: 2400mm(h) x 926(w) x 54mm(t)	
	Core: Falcon Panel Products Strebord® 54	
	Lipping: Sapele (640kg/m³), 8mm thick to all edges.	
	FRAME:	
	Doorset A:	
	Head & Jambs: European Redwood (510kg/m³), 140mm(d) x	
	32mm(w), with 33mm(w) x 15mm(d) planted stops, fixed with	
	30mm x Ø3.8mm screws and manufactured from European	
	Redwood (510kg/m³) to jambs and sapele (640kg/m³) to head.	
	Fire stopping: Ceramic fibre blanket capped with Mann McGowan Pyromas A intumescent acrylic sealant.	
	Doorset B:	
	Head & Jambs: Sapele (640kg/m³), 145mm(d) x 32mm(w),	,
	with 30mm(w) x 15mm(d) planted sapele (640kg/m³) stops,	
	Fire stopping: Ceramic fibre blanket capped with Mann	Sive
	Doorset B: Head & Jambs: Sapele (640kg/m³), 145mm(d) x 32mm(w), with 30mm(w) x 15mm(d) planted sapele (640kg/m³) stops, fixed with 30mm x Ø3.8mm screws. Fire stopping: Ceramic fibre blanket capped with Mann McGowan Pyromas A intumescent acrylic sealant. Threshold: Non-combustible	<i>د</i> ٠
	Threshold: Non-combustible	Site
	OKS I Mail EKH O ENSITHIN EFFE PRE NE	<i>></i>
	STUDY SHIP SHOP SHIP SHOP SHIPE S	.59
	"slid liking sine escipte " of est of out of of	
	and instead the the see of the to come	
	el Pre the office ships is a seline can had.	
	Loughly chule out they design constituted	
	alcoli kight is doc stess house beit seith rentitudi	
	Fire stopping: Ceramic fibre blanket capped with Mann McGowan Pyromas A intumescent acrylic sealant. Threshold: Non-combustible	
	Threshold: Non-combustible Doorset B: Head & Jambs: Sapele (640kg/m³), 145mm(d) x 32mm(w), with 30mm(w) x 15mm(d) planted sapele (640kg/m³) stops, fixed with 30mm x Ø3.8mm screws. Fire stopping: Ceramic fibre blanket capped with Mann McGowan Pyromas A intumescent acrylic sealant. Threshold: Non-combustible	
	with 30mm(w) x 15mm(d) planted sapele (640kg/m³) stops, fixed with 30mm x Ø3.8mm screws. Fire stopping: Ceramic fibre blanket capped with Mann McGowan Pyromas A intumescent acrylic sealant. Threshold: Non-combustible	

INTUMESCENT:

Doorset A:

Frame Reveal: 1no 15x4mm Mann McGowan Pyrostrip 500PSA fitted 14.5mm from the exposed face.

Doorset B:

Frame Reveal: 2no 15x4mm Mann McGowan Pyrostrip 500PSA fitted 7mm and 32mm from the exposed face.

AIR TRANSFER GRILLES:

Doorset A:

- Top grille: Mann McGowan Pyrogrille 25 298mm(h) x 298mm(w) x 25mm(t) comprising Palusol 104 inside a uPVC sleeve. Aperture fitted centrally within the width and 446mm down from the head of the leaf. Both sides covered by a Gilberts Ltd pressed steel cover grille 345mm(h) x 345mm(w) x 7mm(d) x 1mm(t)
- Bottom grille: Mann McGowan Pyrogrille 25 298mm(h) x 298mm(w) x 25mm(t) comprising Palusol 104 inside a uPVC sleeve. Aperture fitted centrally within the width and 300mm up from the bottom of the leaf. Both sides covered by a Gilberts Ltd pressed steel cover grille 345mm(h) x 345mm(w) x 7mm(d) x 1mm(t)

Doorset B:

- Top grille: Mann McGowan Pyrogrille 25 298mm(h) x 298mm(w) x 25mm(t) comprising Palusol 104 inside a uPVC sleeve. Aperture fitted centrally within the width and 446mm down from the head of the leaf. Both sides covered by a Gilberts Ltd pressed steel cover grille 345mm(h) x 345mm(w) x 7mm(d) x
- Bottom grille: Mann McGowan Pyrogrille 100 602mm(h) x 602mm(w) x 38mm(t) comprising centrally within the width and 200mm up from the bottom of the leaf. Both sides covers anutacture installation and fine property of the reader to ensure that the property of the pro bottom of the leaf. Both sides covered by a Gilberts A Panal products line tallation and maintenance of fire door ne responsibility of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within is the party of the reader to ensure within its party of the reader to e Ltd pressed steel cover grille 650mm(h) x 650mm(w) This document detains a subset of a wide range of products. x 7mm(d) x 1mm(t)

Falcon Panel Products Ltd supports third Poor

this document remains the property of Falcon Pane this document remains the property education within is the fire the evidence within is the fire the evidence within is the time the evidence within is the evidence within is the evidence within is the evidence within is the evidence within its time the evidence within the evidence

*esting regime covering and erange of products ite at

Test Standard:

Performance:

HARDWARE: Hinges: Doorset A: 3no Royde & Tucker H102 butt type hinge fitted 150mm, 1025mm and 2000mm from the head of each leaf. Doorset B: 4no Royde & Tucker H207 butt type hinge fitted 150mm, 850mm, 1500mm and 2200mm from the head of each leaf. Closer (Both doorsets): Rutland ITS.11204 concealed overhead type closer rebated within the head of each leaf and within the frame as per manufacturer's instructions. Body size: 256mm(l) x 55(h)mm x 32(w)mm Arm size: 461mm(I) x 30mm(w) Latch (Both doorsets): Laidlaw 51.01.65.NP tubular latch fitted 1000mm from the threshold of the leaf. Lock/Latch Status (Both doorsets): Engaged for test Handle (Both doorsets): Euroart Architectural Hardware LRS202 127mm(w) x 65mm(d) with EES001(2) escutcheon Dropseal: Dormakaba Kilargo IS8010si Size: 35mm(h) x 14mm(w) HARDWARE PROTECTION: Doorset A: Under hinge blade: 1mm thick Mann McGowan Interdens Under latch keep: 1mm thick Mann McGowan Interdens Under latch forend: 1mm thick Mann McGowan Interdens Doorset B: Under hinge blade: 2mm thick Mann McGowan Interdens Under latch keep: 2mm thick Mann McGowan Under latch forend: 2mm thick Mann McGowan Interdens This document details a subset of evide range of products.

EN 1634-1:2014

Integrity: 46 minutes

Insulation: 43 minutes

ne responsibility of the reader to ensure thin is the

This document remains the property of talence mithing the reader to ensure their of the reader to ensure the reader to ensure their of the reader to ensure the reader to ensure their of the reader to ensure the reader the reader to ensure the reader to ensure the reader to ensure the reader the reader to ensure the reader that the reader the reader to ensure the reader to ensure the reader the

This doundent remains the property of Francisco received the this way the state of the state of

Arangartacture, installation and mainte

Falcon Panel Products Ltd Supports this

testing tegine covering a mide range of products site?

3.2 Primary tests for steel envelopes

The following tests have been used to establish the the maximum leaf size envelopes for the different configurations when used in conjunction with a steel frame.

3.2.1 Summary of Test Report WF 435986 (Doorset A) DRAFT

The essential details of the referenced test report are summarised below. Scope from test to be included within the assessment when test report is finalised.

from test to be includ	led within the assessment when test report is finalised.
Date of Test:	07.DEC.2020
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed unlatched, single acting, double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size Leaf A: 2150mm(h) x 926mm(w) x 44mm(t) Leaf B: 2150mm(h) x 310mm(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (630kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: Simplis Soleco 1.5mm(t) 2-part galvanised steel flush fitting concealed frame. Section: 180mm(d) x 75mm(w) Fire stopping: Rockwool packed behind the frame side. Both sides capped with Fire and Acoustic Seals Intumescent Acrylic Mastic Threshold: Non-combustible INTUMESCENT: Head (both leaves), hanging edge (both leaves) and meeting stile (left leaf only): • 1no 10x4mm Lorient Polyproducts Ltd LP1004 above 1no 10x2mm MAP fitted 7mm from the exposed face of the leaf. • 1no 10x4mm Lorient Polyproducts Ltd LP1004 above 1no 10x2mm MAP fitted 27mm from the exposed face of the leaf. Frame: 1no 10x2mm MAP fitted to the inside surface of the frame from the exposed face, butted up to the inside surface of the frame frame facing the leaf edge. HARDWARE: Hinges: 3no Hoppe Arrone AR8180 stainless steel bearing butt type hinge fitted 250mm, 1019mm and 1788mm from the head of each
	Hinges: 3no Hoppe Arrone AR8180 stainless steel bearing butt type hinge fitted 250mm, 1019mm and 1788mm from the head of each leaf.

Report No: Chilt/A02066 Rev O Page 57 of 519

testing tegine covering a wide range of products ite?

Closer: Rutland TS.24 Ezykam surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions.

- Body size: 269mm(I) x 69(h)mm x 40(w)mm
- Arm size: 461mm(l) x 30mm(w)

Latch: Allegion G2NENTTS Legge G50PD C6 NEP SCP Entry Lock 45-60mm Door P142168

- Body size: 70mm(h) x 22mm(w) x 22mm(d)
- Keep size: 70mm(h) x 45mm(w) Lock/Latch Status: Disengaged for test

Handle: Integral with lockset Flush bolts: Zoo ZAS03R

Drop seal: 35mm(h) x 14mm(t) Lorient Polyproducts Ltd LAS8001si

fitted centrally within the bottom edge of both leaves.

HARDWARE PROTECTION:

Under hinge blades: 1mm thick MAP Encasing lock body: 2mm Interdens

Behind keep: 2mm Interdens

Lining flush bolt mortice: 1mm thick MAP

GLAZING (left leaf only):

- Glass: Fireglass Pyrobelite 7mm thick
 - Aperture Size: 1000mm(h) x 625mm(w)
 - Glass Size: 994mm(h) x 624mm(w) Sight Size: 970mm(h) x 596mm(w)
- Beading: Sapele (640kg/m³) 21mm(h) x 20mm(d) including 5x5mm bolection
- Bead Fixing: Steel pins 1.6g x 63mm fitted 50mm from corners and at 150mm centres.

GLAZING SYSTEM:

Glazing Perimeter: Lorient Polyproducts Ltd Flexible Figure 1 (FF1) 3.5 x 13.5mm graphite based intumescent strip fitted between the glass and the glazing bead. ne responsibility of the reader to ensure that that and hose. this document remains the property of talcon panel that and the property of the end of the first the forther than the property of the end of the first the first the end of the first the end of the first the end of the end of the first the end of the first the end of the first the first the first the first the first the end of the first the firs Panel Produces Ltd supports third part year fire of fire and maintenance of fi This document responsibility of the reader to ensure that the This document detains a subset of a wide range of products.

Test Standard:

Falcon Panel Products Ltd supports third party certification and maintenance of BS 476: Part 22: 1987

Performance:

Integrity: 36 minutes

3.2.2 Summary of Test Report WF 435986 (Doorset B) DRAFT

The essential details of the referenced test report are summarised below. Scope from test to be included within the assessment when test report is finalised.

Date of Test:	07.DEC.2020
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed unlatched, single acting, double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size Leaf A: 2150mm(h) x 926mm(w) x 54mm(t) Leaf B: 2150mm(h) x 310mm(w) x 54mm(t) Core: Falcon Panel Products Strebord® 54 Lipping: Sapele (630kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: Simplis Soleco 1.5mm (t) 2-part galvanised steel flush fitting concealed frame. Section: 180mm(d) x 75mm(w) Fire stopping: Rockwool packed behind the frame side. Both sides capped with Fire and Acoustic Seals Intumescent Acrylic Mastic Threshold: Non-combustible INTUMESCENT: Head (both leaves), hanging edge (both leaves) and meeting stile (left leaf only): • 1no 20x4mm Lorient Polyproducts Ltd LP2004 above 1no 20x2mm MAP fitted 7mm from the exposed face of the leaf. • 1no 20x4mm Lorient Polyproducts Ltd LP2004 above 1no 20x2mm MAP fitted 27mm from the exposed face of the leaf. Frame: 1no 10x2mm MAP fitted to the inside surface of the frame from the exposed face, butted up to the inside surface of the frame facing the leaf edge. HARDWARE: Hinges: 3no Hoppe Arrone AR8180 stainless steel bearing butt type hinge fitted 250mm, 1019mm and 1788mm from the head of the leaf. Closer: Rutland TS.24 Ezykam surface mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. • Body size: 269mm(l) x 69(h)mm x 40(w)mm • Arm size: 461mm(l) x 30mm(w)

Report No: Chilt/A02066 Rev O Page 59 of 519

Latch: Assa Abloy EL160 steel mortice latch with spindle fitted 950mm from the base of the leaf. Forend size: 235mm(h) x 24mm(w) x 3mm(t) Body size: 168.5mm(h) x 98mm(d) x 16.5mm(w) Keep size: 232mm(h) x 24mm(w) 3mm(t) Lock/Latch Status: Disengaged for test Handle: Beslag Design 8600119 stainless steel lever type handle Flush bolts: Zoo ZAS03R Drop seal: 35mm(h) x 14mm(t) Lorient Polyproducts Ltd LAS8001si fitted centrally within the bottom edge of both leaves. HARDWARE PROTECTION: Under hinge blades: Under latch forend: GLAZING (left leaf only): Glass: Fireglass Pyrobel 16mm thick Aperture Size: 1000mm(h) x 626mm(w) Glass Size: 990mm(h) x 616mm(w) Sight Size: 956mm(h) x 572mm(w) Beading: Sapele (640kg/m³) 32mm(h) x 21.5mm(d) including 5x7mm bolection Bead Fixing: **GLAZING SYSTEM:** Glazing Perimeter: 6.5 x 24mm Lorient Polyproducts Ltd Rigid Figure 1 (RF1) sodium silicate based intumescent strip fitted

between the glass and the glazing bead.

Aperture Liner: 54x2mm B25402 sodium silicate based intumescent strip fitted between the aperture and the glazing bead.

anutacture. Installation and maintenance of the good assembles that that any product this the reader to ensure that that any product this the reader to ensure that the any product this the responsibility of the reader to ensure that the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader the reader to ensure the reader to ensure

This document remains the property of Falcon Panel Products that any problem.

This document remains the property of the evidence within is fit for purpose.

This document details a subset of a wide range of products.

*esting regime covering a mide range of products ite at further documentation can be range of products.

Test Standard: BS 476: Part 22: 1987 A Panel Products Lideshoots third party certification for the Products Lideshoots and maintenance of fire door assemblies. Eaton Panal Products Ltd Supports third partie and maintenance of fire door asser

Performance: Integrity: 61 minutes

3.2.3 Summary of Test Report WF 396978 AR1

The essential details of the referenced test report are summarised below and the associated scope will be included when test report WF 435986 has been finalised.

associated scope will	be included when test report WF 435986 has been finalised.
Date of Test:	14.MAR.2018
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	The Access Panel Company Ltd
Tested Product:	An unlatched, single acting, double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: Leaf A: 2155mm(h) x 923(w) x 54mm(t) Leaf B: 2155mm(h) x 546mm(w) x 54mm(t) Core: Falcon Panel Products Strebord® 54 Lipping: Sapele (640kg/m³), 8mm thick to vertical edges only.
	FRAME: Head & Jambs: Simplis 0.9mm(t) Zintec mild steel concealed frame. Section: 161mm(d) x 60mm(w) including a 16mm(h) x 104mm(w) integral stop. Fire stopping: Plaster skim over frame mounting Threshold: Non-combustible
	INTUMESCENT:
	 Head and hanging jambs (both leaves): 2no 20x4mm Lorient Polyproducts Ltd LP2004 fitted 5mm and 30mm from the exposed face. Meeting stile (right leaf only): 2no 20x4mm Lorient Polyproducts Ltd LP2004 fitted 5mm and 30mm from the exposed face. Frame (head and jambs): 1no 15x16mm Advanced materials FR70SB2 die 7439 Silicone Extrusion fitted within the formed
	channel of the frame.
	HARDWARE: Hinges: 3no BaSys DX101 3D type steel hinge fitted 160mm. 985mm and 1812mm from the head of each leaf.
	exposed face. Frame (head and jambs): 1no 15x16mm Advanced materials FR70SB2 die 7439 Silicone Extrusion fitted within the formed channel of the frame. HARDWARE: Hinges: 3no BaSys DX101 3D type steel hinge fitted 160mm, 985mm and 1812mm from the head of each leaf. Closer: Dormakaba TS 83 surface-mounted overhead closer fitted on the exposed face of the right-hand leaf as per manufacturer's instructions. Body size: 245mm(w) x 60mm(h) x 46mm(d)
	on the exposed face of the right-hand leaf as per manufacturer's instructions. Body size: 245mm(w) x 60mm(h) x 46mm(d)

Kalcon Pane Itiis do Lune Ponstured Calcumentation for This do Lune Radio Legime Collaboration for This do Lunther do Lun

	Latch: Steel mortice latch fitted 1030mm from the bottom of the left-hand leaf.
	 Forend size: 235mm(h) x 25mm(w) Keep size: 195mm(h) x 25mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Flush bolts: Generic stainless steel flush bolt fitted at the head and
	threshold of the right-hand leaf. Footprint: 155mm(h) x 20mm(w) HARDWARE PROTECTION:
	Under hinge blades: 2mm thick BASF Wolman Interdens® Type 36 Under latch forend: 2mm thick BASF Wolman Interdens® Type 36 Encasing latch body: 2mm thick BASF Wolman Interdens® Type 36
7 A	Under latch keep: 2mm thick BASF Wolman Interdens® Type 36 Lining flush bolt rebates: 2mm thick BASF Wolman Interdens® Type 36
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 65 minutes

Eaton Panel Products the Installation and maintenance of five door assemblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

3.2.4 Summary of Test Report WF 415618 (Doorset B)

The essential details of the referenced test report are summarised below.

The essential details of	of the referenced test report are summarised below.
Date of Test:	11.JUL.2019
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting, double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size Leaf A: 2200mm(h) x 300mm(w) x 54mm(t) Leaf B: 2200mm(h) x 927mm(w) x 54mm(t) Core: Falcon Panel Products Strebord® 54
	Lipping: Sapele (640kg/m³), 8mm thick to all edges. FRAME: Studco EzyJamb EZC 0.8mm(t) (20ga) 2-part split type frame – flush on one side of the door and rebated on the other. Section: 99mm(d) x 47mm(w) including a 12mm(h) x 41mm(w) integral stop and a 35mm wide integral architrave. Subframe: 4"x 2" whitewood (510kg/m³) Fire stopping Rockwool mineral fibre for full depth of subframe, capped with intumescent mastic – nominally 8-18mm(w) x 10mm(d) - to both faces. Threshold: Integral – 4-sided frame.
	INTUMESCENT: Head (both leaves), hanging edge (both leaves) and meeting stile (left leaf only): 2no 20x4mm Lorient Polyproducts Ltd fitted 5mm apart, centrally within the leaf edge. SMOKE SEALS: 1no Lorient Polyproducts Ltd LAS1010 batwing seal fitted to the upstand of the stop in the frame reveal. HARDWARE: Hinges: 3no Atomika Karakter steel concealed hinge fitted 165mm, 1015mm and 1865mm from the head of the leaf. Closer: Rutland TS.5204 surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 297mm(w) x 68mm(h) x 45mm(d) Latch: Zoo Architectural Hardware Ltd ZDL7260RSS mortice sashlock with nib fitted 950mm from the bottom of the leaf.

this docume on sured the resime continuity

Performance:	Integrity: 65 minutes
Test Standard:	BS 476: Part 22: 1987
	Lining flush bolt rebate: 1mm thick Lorient Polyproducts Ltd. MAP
	Under latch keep: 1mm thick Lorient Polyproducts Ltd. MAP
	Under latch forend: 1mm thick Lorient Polyproducts Ltd. MAP
	Encasing latch body: 1mm thick Lorient Polyproducts Ltd. MAP
	Under hinge blades: 1mm thick Lorient Polyproducts Ltd. MAP
	HARDWARE PROTECTION:
	Flush bolt status: Engaged for test.
	head and threshold of the left leaf.
	Flush bolts: Zoo Architectural Hardware Ltd ZAS03RSS fitted at the
	Handle: Zoo Architectural Hardware Ltd ZCS030SS lever type handle fitted appropriate to the latch.
	Lock/Latch Status: Disengaged for test
	Cylinder: Zoo Architectural Hardware Ltd V5EP80CTPBE Eurocylinder with thumbturn, fitted appropriate to the latch.
	• Keep size: 180mm(h) x 40mm(w)
	 Body size: 165mm(h) x 90mm(d) x 19mm(w)
	 Forend size: 235mm(h) x 22mm(w) x 3mm(d)

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tange of products.

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

3.2.5 Summary of Test Report WF 391940 (Doorset B)

Date of Test:	14.NOV.2017
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Studco Building Systems Ltd
Tested Product:	A latched, single acting, double doorset – LSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size Leaf A: 2255mm(h) x 925mm(w) x 54mm(t) Leaf B: 2255mm(h) x 680mm(w) x 54mm(t)
_	Core: 54mm(t) Graduated Density Chipboard
	Lipping: Sapele (640kg/m³), 10mm thick to all edges.
	FRAME:
	Head & Jambs (both leaves): Studco EzyJamb SRC single rebate profiled steel 0.8mm(t) (20ga) Section: 105mm(d) x 60mm(w) including a 17mm(h) x 48mm(w) integral stop and a 35mm wide integral architrave.
	Fire stopping: Plaster skim over integral architrave
	Threshold: Non-combustible
	INTUMESCENT:
	Head (both leaves), hanging edge (both leaves) and meeting stile (left leaf only): 1no 40x6mm Sealed Tight Solutions Ltd STS-P406 fitted 7mm from the exposed face of the leaf.
	Frame: Envirograf intumescent paint Bollom Brosteel Ultra 60 applied to the inside surface of the frame ~0.1mm thickness.
	HARDWARE: Hinges: 3no Rocyork RY80/60 concealed hinge fitted 175mm, 1060mm and 1940mm from the head of the leaf.
	Closer: Astra jamb-mounted concealed closer fitted within the leaf edge as per manufacturer's instructions. Forend size: 106mm(h) x 32mm(w) Latch: Zoo Architectural Hardware steel mortice • Forend size: 235mm(h) x 23mm(w) • Body size: 165mm(h) x 82mm(d) x 15mm(w) Lock/Latch Status: Engaged for test Handle: Stainless steel lever type handle fitted appropriate to the latch. Flush bolts: Zoo Architectural Hardware ZAS02SS
	Latch: Zoo Architectural Hardware steel mortice
	 Forend size: 235mm(h) x 23mm(w) Body size: 165mm(h) x 82mm(d) x 15mm(w)
	Lock/Latch Status: Engaged for test of a fine getty to eligible age of the status of t
	Handle: Stainless steel lever type handle fitted appropriate to the latch.
	Flush bolts: Zoo Architectural Hardware ZAS02SS
	Propulse, " Key littly the genting July of

	HARDWARE PROTECTION: Under hinge blades: 1mm Sealed Tight Solutions Ltd raw graphite. Encasing latch body: 1mm Sealed Tight Solutions Ltd raw graphite. Lining flush bolt rebate: 1mm Sealed Tight Solutions Ltd raw graphite.
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 61 minutes

3.2.6 Summary of Test Report WF 419868 DRAFT

The essential details of the referenced test report are summarised below. Scope from test to be included within the assessment when test report is finalised.

Date of Test:	19.DEC.2019
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed unlatched, single acting, double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2500mm(h) x 1011mm(w) x 54mm(t) Core: Falcon Panel Products Strebord® 54 Lipping: Sapele (640kg/m³), 8mm thick to all edges.
	FRAME: Head & Jambs: Assa Abloy Nordform 1.5mm(t) 2-part galvanised steel frame. Section: 114mm(d) x 61.8mm(w) including a 12mm(h) x 60mm(w) integral stop and a 50mm(w) integral architrave. Fire stopping: TBA Threshold: Non-combustible
	INTUMESCENT: Head (both leaves), hanging edge (both leaves) and meeting stile (right leaf only): 2no 20x4mm Pyroplex FO8600 fitted centrally within the leaf edge, 5mm apart.
	Frame:
	 Reveal: 1no Lorient Polyproducts Ltd MAP fitted under the frame gasket. Reverse: 4mm thick (2x2mm) Lorient Polyproducts Ltd sodium silicate based glazing liner affixed to the inner exposed/unexposed faces.
	HARDWARE:
	HARDWARE: Hinges: 4no Assa Abloy 207-242 steel butt type hinge fitted 182mm, 483mm 1352mm and 2220mm from the head of the leaf.
	483mm 1352mm and 2220mm from the head of the leaf. Closer: Assa Abloy DC500 overhead type closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size:TBA
	Latch: Assa Abloy 765 mortice sashlock with latch nib fitted at 950mm from the bottom of the leaf
	size:TBA Latch: Assa Abloy 765 mortice sashlock with latch nib fitted at 950mm from the bottom of the leaf • Forend size: 225mm(h) x 22mm(w) • Body size: 150mm(h) x 18.5mm(w) x 74mm(d) • Keep size: Cylinder: Assa Abloy R501 Scandinavian Oval fitted appropriate to the latch.
	Cylinder: Assa Abloy R501 Scandinavian Oval fitted appropriate to the latch.

Falcon Prantis document good use the street define at a training to the street document define at a st

Report No: Chilt/A02066 Rev O Page 67 of 519

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

	Lock/Latch Status: Disponaged for test
	Lock/Latch Status: Disengaged for test
	Handle: Assa Abloy Nordic lever type handle fitted appropriate to the latch.
	Flush Bolts: Newstar FBR450 & FBR200 fitted to the top and bottom edge of the right-hand leaf.
	HARDWARE PROTECTION:
	Under hinge blades: 2mm thick Lorient Polyproducts Ltd MAP
	Under latch forend: 2mm thick Lorient Polyproducts Ltd MAP
	Encasing latch body: 2mm thick Lorient Polyproducts Ltd MAP
	Under latch keep: 2mm thick Lorient Polyproducts Ltd MAP
	Lining flush bolt rebate: 2mm thick Lorient Polyproducts Ltd MAP
	GLAZING (both leaves):
	Glass: Fireglass Pyrobelite 12mm thick
	o Aperture Size: 2000m(h) x 250mm(w)
	Glass Size:Sight Size: 1944mm(h) x 194mm(w)
	Beading: Sapele (640kg/m³) 33mm(h) x 25mm(d) including
	a 6x8mm bolection and a 15° chamfer
	Bead Fixing: Steel pins (Dims TBA)
	CLAZING SYSTEM:
	GLAZING SYSTEM: Glazing Perimeter: Lorient Polyproducts Ltd Rigid Figure 1 (RF1)
	glazing system comprising 2x54mm Lorient Polyproducts Ltd B25402 lining the aperture and Lorient Polyproducts Ltd RG2704 fitted between the glass and glazing bead on both faces.
Test Standard:	BS 476: Part 22: 1987
Test Standard: Performance:	
	Integrity: 47 minutes

3.2.7 Summary of Test Report Chilt/RF04002

Date of Test:	27.FEB.2004					
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762					
Sponsor:	McTavish Ramsay & Co Ltd					
Tested Product:	Doorset A: An unlatched, single acting double doorset – ULSADD Doorset B: An unlatched, single acting single doorset – ULSASD					
Tested Orientation:	Hung opening in towards heating condition					
Summary of Test	LEAF:					
Specimen:	Overall Size:					
	 Doorset A: Leaf A: 2200mm(h) x 896mm(w) x 55mm(t) Leaf B: 2200mm(h) x 401mm(w) x 55mm(t) Doorset B: 2218mm(h) x 1078(w) x 55mm(t) 					
	Core (Both Doorsets): Ramkor 60, 54mm(t)					
	Lipping (Both Doorsets): Dark red meranti (710kg/m³), 6-8mm thick to all edges.					
	to all edges.					
	FRAME (Both Doorsets):					
	Head & Jambs (both leaves): 1.5mm(t) profiled steel, 171mm(w)) x					
	58mm(t) including a 20mm(d) x 51mm(w) integral stop. Threshold: None fitted					
	Threshold. None filled					
	INTUMESCENT:					
	Frame reveal (both doorsets): None fitted.					
	Door edges:					
	Doorset A: Head & hanging edges: 25x4 Intumescent Seals Ltd Therm-A-Seal fitted centrally within the leaf edge. 2No 10x2 Intumescent Seals Ltd Therm-A-Flex behind the lipping, 7.5mm either side of the central point. Bottom: 20x2 Intumescent Seals Ltd Therm-A-Flex fitted centrally within the leaf edge Meeting stile (left leaf only): 25x4 Intumescent Seals Ltd Therm-A-Seal fitted centrally within the leaf edge 2No 10x2 Intumescent Seals Ltd Therm-A-Flex behind the lipping, 7.5mm either side of the central point. Doorset B: Head & vertical edges:					
	Edfor Hat, it's doc less the try hely of the hely of the hand,					
	This things document documents					
	the Fritze					

		escent Seals Ltd Therm-A-Seal Illy within the leaf edge.					
	 25x2 graphite behind the Therm-A-Seal strip Bottom: 20x2 Intumescent Seals Ltd Therm-A-Flex 						
	fitted centrally within the leaf edge						
	HARDWARE (Both Doorsets):						
	Hinges: 4no Eclipse Gatcliff bearing butt type hinge fitted 198mm, 447mm, 1183mm and 1917mm from the head of each leaf.						
	Closer: SS Bower surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 255mm(w) x 40mm(d)						
	HARDWARE PROTECTION:						
	Under hinge blade: 2mm thick Intumescent Seals Ltd Therm-A-Strip						
Test Standard:	BS 476: Part 22: 1987						
Performance:	Doorset A:	Doorset B:					
Performance:	Integrity: 69 minutes	Integrity: 73 minutes					

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tange of products.

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

This document details a subset of evidence range of products.

*esting regine covering and example of products ite at

3.3 **Primary tests for Mill fabricators**

This test data has been undertaken to BSEN 1634 -1 and has been presented differently in that the test description and test results have been presented in different tables.

3.3.1 Summary of Test Report Chilt/RF11121

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 and used a blank from mill F3.

Date of Test:	18 th August 2011				
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 170				
Sponsor:	Falcon Panel Products Ltd				
1No. Unlatched, single-acting, double-leaf doorsets viglazing - ULSADD					
Tested Orientation:	Door leaves hung to open in towards heating condition.				
Summary of Test Specimen:	Overall Size (both leaves): 2055mm (h) x 927mm (w) x 44mm (t). Core: • Falcon Panel Products Strebord 44mm (t). • Lab measured density- 591kg/m³ Manufacturers stated Strebord mill reference: F3 Lipping (both leaves): Sapele (640kg/m³), 6mm thick to vertical edges only FRAME Head & Jambs: European Redwood (570kg/m³),70mm (w)				
	Frame Fixing: 4No. Ø80 x 100mm (I) steel woodscrews per jamb. Threshold: Non-combustible. Architrave: European Redwood 45mm (w) x 18mm (t).				

Report No: Chilt/A02066 Rev O Page 71 of 519

Summary of Test Specimen continued:

INTUMESCENT:

Frame Reveal: 1No. 15x4mm Pyroplex Rigid Box Seals FO8700.

Leaf Edges (meeting edge of right leaf only): 1No. 15x4mm Pyroplex Rigid Box Seals FO8700.

HARDWARE:

Hinges: 3No. Royde & Tucker H105 lift off type hinges. Closer: Dorma (UK) Ltd TS71 overhead type closer.

Lock/Latch: Eurospec steel mortice latch.

Lock/Latch Size:

Forend: 235x24mm

Lock/Latch Status: Disengaged for test.

Furniture: Aluminium lever type handle & Flush bolts

HARDWARE PROTECTION:

Under Hinge: 1mm Interdens.

Under Forend & Keep: 1mm Interdens Encasing latch body: 1mm Interdens.

Under flush bolts keep and lining flush bolts cut out: 1mm Interdens.

GLAZING

Glass: Pilkington Pyrodur, 10mm (t).

Sight Size:

- Left Leaf-660mm (h) x 490mm (w)
- Right Leaf-490mm (h) x 291mm (w)

Aperture Size:

- Left Leaf-701mm (h) x 526mm (w)

Expansion Allowance:

• 5mm all round

Beading: Sapele (MC 9.3%), 20mm (h) x 20mm (w), chamfered & bolected.

Beading fixings: 50mm (l) cf.

Beading fixings: 50mm (I) steel pins, at 30-45° 150mm Centres.

GLAZING SYSTEM:

Glazing perimeter: Pyroplex 30049 glazing system

Test Standard:

BS EN 1634-1:2008 + BS EN 1363-1:1999 Enther documentation OCHINETIL VERIME CON

3.3.2 Test Chilt/RF11121 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test conditions.

Doorset	Result (minutes)				Category of	Distortion ²	
Reference	Integrity	Insulation		Radiation	performance ¹ (A or B)	(Low, Med, High)	
		(I ₁) ³	(I ₂) ⁴		(**************************************		
Doorset	38	N/A	19 ⁵	26 ⁵	В	Low	

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2008
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I₁) in accordance with 11.2.5 in BS EN 1634-1: 2008
- 4. Normal procedure for maximum temperature rise (I₂) in accordance with 11.2.4 in BS EN 1634-1: 2008
- 5. The radiation and insulation performance recorded above is related to the glass type used in the testing

3.3.3 Test Chilt/RF11170

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 door design and used a blank from mill F5.

Date of Test:	29 th November 2011				
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762				
Sponsor:	Falcon Panel Products Ltd				
Tested Product:	1No. Unlatched, single-acting, double-leaf doorsets with glazing - ULSADD				
Tested Orientation:	Door leaves hung to open in towards heating condition.				
Summary of Test	LEAVES:				
Specimen:	Overall Size (both leaves): 2135mm (h) x 915mm (w) x 44mm (t). Core:				
	 Falcon Panel Products Strebord 44mm (t). Lab measured density -(520kg/m³) 				
	Manufacturers stated Strebord mill reference: F5				
	Lipping (both leaves): Sapele (640kg/m³), 8mm thick to vertical edges only				
	FRAME Head & Jambs: European Redwood (480kg/m³),70mm (w) x 32mm (t) with 20mm (w) x 12mm (t) planted stops.				
	Frame Fixing: 4No. 80mm (I) steel woodscrews per jamb.				
	Threshold: Non-combustible.				
	Architrave: European Redwood 45mm (w) x 18mm (t).				
	INTUMESCENT:				
	Frame Reveal: 1No. 15x4mm Lorient Polyproducts Ltd LP1504 type 617				
	Leaf Edges (closing edge of left leaf only): 1No. 15x4mm Lorient Polyproducts Ltd LP1504 type 617				
	Smoke Seal: 1No. 12x12mm Lorient Polyproducts Ltd IS1212 batwing seal.				
	Drop Down Seal: 1No. 60x22mm Corient Polyproducts Ltd IS8010 seal.				
	Frame Reveal: 1No. 15x4mm Lorient Polyproducts Ltd LP1504 type 617 Leaf Edges (closing edge of left leaf only): 1No. 15x4mm Lorient Polyproducts Ltd LP1504 type 617. Smoke Seal: 1No. 12x12mm Lorient Polyproducts Ltd IS1212 batwing seal. Drop Down Seal: 1No. 60x22mm Lorient Polyproducts Ltd IS8010 seal.				
	Falcon Prainti documestine residente estatunu fer This street document de little illumunte				
	<u> </u>				

Summary of Test Specimen continued:

HARDWARE:

Hinges: 3No. Royde & Tucker H105 lift off type hinges.

Closer: Rutland TS3204 overhead type closer.

Lock/Latch: Simplex steel mortice latch with Eurocylinder.

Lock/Latch Size:

Forend: 235x24mm

Centre Keep: 185x24mm

Lock/Latch Status: Disengaged for test.

Furniture: Steel lever type handle, Lock Escutcheon, Flush

bolts.

HARDWARE PROTECTION:

Under Hinge: 1mm Lorient Polyproducts Ltd MAP.

Under Forend & Keep: 1mm Lorient Polyproducts Ltd MAP. Lining flush bolts cut out: 1mm Lorient Polyproducts Ltd MAP.

Under drop down seal: 1mm Lorient Polyproducts Ltd MAP.

GLAZING

Glass: CGI International Ltd Pyroguard El30, 15mm (t).

Sight Size:

- Left Leaf-627mm (h) x 450mm (w).
- Right Leaf-450mm (h) x 260mm (w).

Glass Size:

- Left Leaf-647mm (h) x 473mm (w).
- Right Leaf-472mm (h) x 280mm (w).

Expansion Allowance:

5mm all round.

Beading: Sapele (MC 10.5%), 20mm (h) x 18mm (w), chamfered & bolected.

Beading fixings: 50mm (I) steel pins, at 30-45°

centres and 50mm from corners.

GLAZING SYSTEM:

Glazing perimeter: Lorient Polyproducts Ltd Glazing gasket, nominally 3.5mm (w) x 13mm (h).

Test Standard:

Individual Charlet details as LE LESPONSOLITE DE LES TORES BS EN 1634-1:2008 + BS EN 1363-1:1999 Julieting legime coverin Enther do the historial

3.3.4 Chilt/RF11170 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test.

Doorset	Result (m	inutes)			Category of	Distortion ²
Reference	Integrity	Insu	lation	Radiation	performance ¹ (A or B)	(Low, Med, High)
		(I ₁) ³	(I ₂) ⁴		(**************************************	9,
Doorset	38	N/A	38	38	В	Low

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2008
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I₁) in accordance with 11.2.5 in BS EN 1634-1: 2008
- 4. Normal procedure for maximum temperature rise (I₂) in accordance with 11.2.4 in BS EN 1634-1: 2008

3.3.5 Test Chilt/RF13132

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 door design and used a blank from mill F3.

Date of Test:	12 th September 2013
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Pyroplex
Tested Product:	1No. Unlatched, single-acting, double-leaf doorset with glazing - ULSADD
Tested Orientation:	Door leaves hung to open in towards heating condition.
Summary of Test Specimen:	LEAVES: Overall Size (both leaves): 2150mm (h) x 928mm (w) x 44mm (t). Core: • Falcon Panel Products Strebord 44mm (t) • Manufacturers stated density-630kg/m³
	Manufacturers stated Strebord mill reference: F3
	Lipping (both leaves): Sapele (640kg/m³), 6mm thick to all four edges.
	FRAME Head & Jambs: European Redwood (570kg/m³),70mm (w) x 32mm (t) with 20mm (w) x 12mm (t) planted stops. Frame Fixing: 4No. Ø80 x 100mm (l) steel woodscrews per jamb. Threshold: Non-combustible. Architrave: MDF 45mm (w) x 18mm (t). INTUMESCENT: Frame Reveal: Right Jamb & Right half of frame head 15x4mm Pyroplex Pile Rigid Box Seals PO8712 Left Jamb & Left half of frame head 15x4mm Pyroplex Rigid Box Seals FO8700. Left leaf closing edge only: 10x4mm Pyroplex Pile Rigid Box Seals PO8512 & 10x4mm Pyroplex Rigid Box Seals FO8500.
	INTUMESCENT: Frame Reveal: Right Jamb & Right half of frame head 15x4mm Pyroplex Pile Rigid Box Seals PO8712 Left Jamb & Left half of frame head 15x4mm Pyroplex Rigid Box Seals FO8700. Left leaf closing edge only: 10x4mm Pyroplex Pile Rigid Box Seals PO8512 &10x4mm Pyroplex Rigid Box Seals FO8500.

Summary of Test Specimen continued:

HARDWARE:

Hinges: 3No. Royde & Tucker H101 lift off type hinges.

Closer: Rutland TS3204 overhead type closer.

Lock/Latch: Easi-T steel mortice latch and Eurospec

Eurocylinder lock. Lock/Latch Size:

Forend: 235x24mm

Centre keep: 175x22mm Centre case: 150x85mm

Lock/Latch Status: Disengaged for test.

Furniture: Stainless steel lever type handle. Ref. Ovation, Stainless steel escutcheon plate. Ref. Ovation (Ø52 Rose size).

HARDWARE PROTECTION:

Under Hinge: 1mm Interdens.

Under Forend & Keep: 1mm Interdens Encasing latch body: 1mm Interdens.

GLAZING:

Glass: CGI International Pyroguard El30, 15mm (t).

Sight Size:

- Left Leaf-170mm (h) x 170mm (w)
- Right Leaf-770mm (h) x 520mm (w)

Glass Size:

- Left Leaf-200mm (h) x 200mm (w)
- Right Leaf-800mm (h) x 550mm (w)

Expansion Allowance:

5mm all round

Beading: Sapele (MC 10.3-10.6%), 18mm (h) x 18mm (w), chamfered & bolected.

Beading fixings: 50mm (I) steel pins, at 45°, 140mm centres, Glazing perimeter: Pyroplex FG30 Ref. 30049, 12x7mm.

Test Standard:

BS EN 1634-1:2008 + BS EN 1363-1:1999 Enther documentation

3.3.6 Test Chilt/RF13132 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test conditions

Doorset Result (minutes)				Category of	Distortion ²	
Reference	Integrity	Insul	ation	Radiation	performance ¹ (A or B)	(Low, Med, High)
		(I ₁) ³	(l ₂) ⁴		(**************************************	
Doorset	36	36	36	36	В	Low

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2008
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I₁) in accordance with 11.2.5 in BS EN 1634-1: 2008
- 4. Normal procedure for maximum temperature rise (I₂) in accordance with 11.2.4 in BS EN 1634-1: 2008

This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document details a subset of evidence range of products.

*esting regine covering a wide range of products, ite at further documentation can be range of products.

3.3.7 Test Chilt/RF13176

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 door design and used a blank from mill F3.

Date of Test:	13 th September 2013
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Pyroplex
Tested Product:	1No. latched, single-acting, single-leaf doorset- LSASD
Tested Orientation:	Door leaf hung opening in towards heating condition.
Tested Orientation: Summary of Test Specimen:	LEAVES: Overall Size: 2148mm (h) x 928mm (w) x 44mm (t). Doorset Core: • Falcon Panel Products Strebord 44mm (t) • Manufacturers stated density- 630kg/m³ Manufacturers stated Strebord mill reference: F3 Lipping: Sapele (640kg/m³), 6mm thick to all four edges. FRAME Head & Jambs: European Redwood (570kg/m³),70mm (w) x 32mm (t) with 20mm (w) x 12mm (t) planted stops. Frame Fixing: 4No. Ø80 x 100mm (l) steel woodscrews per jamb. Threshold: Non-combustible. Architrave: European Redwood 45mm (w) x 18mm (t).
	Architrave: European Redwood 45mm (w) x 18mm (t).

Summary of Test	INTUMESCENT:					
Specimen continued:	Frame Reveal: 15x4mm Pyroplex Rigid Box Seals FO8700.					
	HARDWARE:					
	Hinges: 3No. Royde & Tucker H101 lift off type hinges. Closer: Rutland TS3204 overhead type closer.					
	Lock/Latch: Easi-T steel mortice latch and Eurospec Eurocylinder lock.					
	Lock/Latch Size:					
	 Forend: 235x24mm Centre keep: 175x22mm Centre case: 150x85mm 					
	Lock/Latch Status: Disengaged for test.					
A 7	Furniture: Stainless steel lever type handle, Stainless steel escutcheon plate. (Ø52 Rose size).					
_	HARDWARE PROTECTION: Under Hinge: 1mm Interdens.					
	Under Forend & Keep: 1mm Interdens					
Test Standard:	BS EN 1634-1:2008 + BS EN 1363-1:1999					

Falcon Panel Products lide and maintenance of fine door as semblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document details a subset of evidence tanks of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

3.3.8 Test RF13176 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test conditions

Doorset	Result (m	inutes)			Category of	Distortion ²
Reference	Integrity	Insul	ation	Radiation	performance ¹ (A or B)	(Low, Med, High)
		(I ₁) ³	(l ₂) ⁴			
Doorset	32	32	32	32	А	Medium

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2008
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I₁) in accordance with 11.2.5 in BS EN 1634-1: 2008
- 4. Normal procedure for maximum temperature rise (I₂) in accordance with 11.2.4 in BS EN 1634-1: 2008

Facor Paral Products the data the product the product

3.3.9 Test BMT/FER/F13263

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 door design and used a blank from mill F5.

Summary of Test Specimen continued:

FRAME (Doorset B):

Head & Jambs: MDF (700kg/m³),90mm (w) x 30mm (t) with 32mm (w) x 12mm (t) planted stops.

Frame Fixing: 4No. Ø80 x 100mm (I) steel woodscrews per

jamb.

Threshold: Non-combustible.

Architrave: MDF 45mm (w) x 18mm (t).

INTUMESCENT (Both Doorsets):

Frame Reveal: 2no 10x4mm Pyroplex Rigid Box Seals FO8500 5.5mm apart, 4mm from the unexposed face.

SMOKE/ACOUSTIC SEALS (Both Doorsets):

Head and Jambs: 1no 14x35mm Norsound 710 fitted in the frame reveal up to the upstand of the stop.

Leaf bottom edge: 14x35mm Norsound 810 Dropdown seal centrally rebated into the bottom edge of the leaf.

HARDWARE (Both Doorsets):

Hinges: 2No. Eclipse cranked bearing butt hinges. Closer: Turentek TSS225 overhead type closer.

Lock/Latch: Union/ASSA Abloy steel mortice latch door lock with Eurocylinder lock with thumbturn on exposed face.

Lock/Latch Size:

Forend: 235x25mmCentre keep: 175x37mmCentre case: 153x90mm

Lock/Latch Status: Disengaged for test.

HARDWARE PROTECTION:

Under Hinge: 1mm Interdens.

Furniture: Stainless steel lever type handle. Ref. Ovation, Stainless steel escutcheon plate. Ref. Ovation (Ø52 Rose size).

Test Standard:

BS EN 1634-1:2008 + BS EN 1363-1999 Production of the product of t

3.3.10 Test BMT/FER/F13263 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test conditions

Doorset	Result (minutes)				Category of	Distortion ²	
Reference			ation	Radiation	performance ¹ (A or B)	(Low, Med, High)	
		(I ₁) ³	(I ₂) ⁴		(**************************************	9,	
Doorset A	41	38	41	41	В	Low	
Doorset B	32	32	32	32	А	Low	

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2008
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I_1) in accordance with 11.2.5 in BS EN 1634-1: 2008
- 4. Normal procedure for maximum temperature rise (I₂) in accordance with 11.2.4 in BS EN 1634-1: 2008

3.3.11 Test WF 416689

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 door design and used a blank from mill F3.

Summary of Test Specimen continued:

INTUMESCENT (Both Doorsets):

Frame Reveal: 2no 10x4mm Pyroplex Rigid Box Seals FO8500 10mm apart, 8.5mm from the opening face in the frame reveal.

SMOKE/ACOUSTIC SEALS (Both Doorsets):

Leaf bottom edge: 13x20mm Norsound NOR810S Dropdown seal centrally rebated into the bottom edge of the leaf.

Weather/acoustic seal: Raven Seals product ref RP120, 12x12mm.

HARDWARE (Both Doorsets):

Hinges: 3No. Arrone bearing butt hinges AR8182. Closer: Arrow overhead type closer Ref. 324BP.

Lock/Latch: Winkhaus AV2-3Point lock fitted with a ERA Fortress Eurocylinder

Lock/Latch Size:

Forend: 1770x20mm

Centre keep: 255x24mm

Centre case: 185x78x16.5mm Top and bottom case:113x48mm

Top and bottom keep: 155x24mm

Lock/Latch Status: Engaged

Furniture: Eurospec lever type handle Ref.CSL-1194* and

Eurospec escutcheon ref. CSE1006.

Eye viewer: D&E Architectural Hardware Ltd ref D & E 3850

Ultra scope-brass. Ø42 (footprint).

HARDWARE PROTECTION:

Under Hinge: Sealed Tight Solutions Graphite 1mm (t).

Under Forend: Exitex Exi-Fire graphite pad 0.8mm (t).

Under Latch Keep: Lorient Polyproducts Ltd AV2 Kit 1mm

Encasing latch body: Lorient Polyproducts Ltd AV2 Kit 1mm

Eye Viewer: Sealed Tight Solutions Graphite 1mm (t). This document details a subset of a wide range of products.

Test Standard:

ne responsibility of the reader to ensure that the first reader to ensure within is fit. testine regime covering a mide range of products like of the continuous like of the continu BS EN 1634-1:2014+A1:2018 + BS EN 1363-1:2012 This document remains the property of taken or withing the document of the property of the devidence within the land of the reader to ensure the little the reader to ensure the land of the reader to ensure the land of the reader to ensure the land of the lan This document remains the property of Fall

, vanel products Lid supports triuding

Falcon Panel Products Ltd supports the

3.3.12 Test WF 416689 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test conditions

Doorset	Result (m	inutes)			Category of	Distortion ²
Reference	Integrity	Insul	ation	Radiation	performance ¹ (A or B)	(Low, Med, High)
		(I ₁) ³	(l ₂) ⁴			
Doorset A	46	N/A	46	47	В	Low
Doorset B	47	N/A	47	47	В	Low

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2014 + A1: 2018
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I₁) in accordance with 11.2.5 in BS EN 1634-1: 2014 + A1: 2018
- 4. Normal procedure for maximum temperature rise (I_2) in accordance with 11.2.4 in BS EN 1634-1: 2014 + A1: 2018

3.3.13 Test WF 421795

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 door design and used a blank from mill F3.

Date of Test:	21 st November 2019	
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762	
Sponsor:	Falcon Panel Products Ltd	
Tested Product:	2No. latched, single-leaf, single acting doorsets - LSASD	
Tested Orientation:	Doorset A: leaf hung opening in towards heating condition Doorset B: leaf hung opening out away from heating condition	
Summary of Test Specimen:	LEAF: Overall Size: 2100mm(h) x 950(w) x 44mm(t) Core: • Falcon Panel Products Strebord 44mm • manufacturers stated density 590kg/m³	
	Manufacturers stated Strebord mill reference: F3	
	Lipping: Sapele (640kg/m³), 8mm thick to all four edges	
	FRAME: Head & Jambs: Poplar (510kg/m³), 100mm(d) x 47mm(w), with 53mm(w) x 15mm(d) integral stop. Frame Fixing: 4No. Ø5 x 100 steel woodscrews, 600mm centres Threshold: Non-combustible	
	INTUMESCENT: Frame Reveal/Leaf Edges: 2no 10x4mm Sealed Tight Solutions Limited STS 104FO fitted 10mm apart and 7mm from the exposed face.	
	SMOKE/ACOUSTIC SEALS: Head and Jambs: 1no 11x5mm Sealed Tight Solutions Limited ST1009 acoustic/smoke seal self-adhered to the upstand of the stop. Leaf bottom edge: 12x20mm Sealed Tight Solutions Limited ST422 drop seal fitted centrally rebated into the bottom edge of the leaf.	ine .
	ST422 drop seal fitted centrally rebated into the bottom edge of the leaf.	
	ST1009 acoustic/smoke seal self-adhered to the upstand of the stop. Leaf bottom edge: 12x20mm Sealed Tight Solutions Limited ST422 drop seal fitted centrally rebated into the bottom edge of the leaf.	

Summary of Test Specimen continued:

HARDWARE:

Hinges: 3no. Consort bearing butt hinge Ref CF5511

Closer: Dormakaba TS93 overhead closer

Lock/Latch: Winkhaus AV3 3-point lock/latch fitted with a 70mm

ERA fortress 3* thumbturn cylinder

Lock/Latch Size:

Forend: 1770x20mm

Top/bottom keep: 160x22mm Top/bottom case: 113x44mm Centre keep: 245x22mm Centre case: 185x63mm

Lock/Latch Status: Engaged for test

Handle: Consort CH100/G4 lever type handle and Consort

CH311/8/316 escutcheon.

Eye viewer: DESWLAF El30 Barrel: Ø14mm, Footprint: Ø27mm

fitted 1500mm from the bottom of the leaf

Letterplate: Royde & Tucker LP08 letterplate with TS008 cowell

fitted 900mm from the bottom of the leaf.

HARDWARE PROTECTION:

Under Hinge: Sealed Tight Solutions Limited 1mm thick graphite

based intumescent

Encasing latch bodies: 1mm interdens supplied as kit with lock

Under keeps: 1mm interdens supplied as kit with lock

Eye viewer: Sealed Tight Solutions Limited 1mm thick raw graphite

Falcon Panel Products lide supports third partie prace of fire door assemblies.

anutacture, instaliation and maintenance of the ensure that that any products the property of the reader to ensure that that any product this the responsibility of the reader to ensure that that any product this the responsibility of the reader to ensure that that the responsibility of the reader to ensure the re This document remains the property of Falcon Panel Products that any problem.

This document remains the property of the evidence within is fit for purpose.

This document details a subset of evidence from an extensive

*esting regine documentation can be range of products ite at a section of the state of the country of the section of the secti

Test Standard:

BS EN 1634-1:2014+A1:2018

3.3.14 Test WF 421795 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test conditions

Doorset	Result (m	inutes)			Category of	Distortion ²
Reference	Integrity	Insul	ation	Radiation	performance ¹ (A or B)	(Low, Med, High)
		(I ₁) ³	(l ₂) ⁴			
Doorset A	35	28	35	38	А	Low
Doorset B	38	38	38	38	В	Low

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2014 + A1: 2018
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I₁) in accordance with 11.2.5 in BS EN 1634-1: 2014 + A1: 2018
- 4. Normal procedure for maximum temperature rise (I₂) in accordance with 11.2.4 in BS EN 1634-1: 2014 + A1: 2018

3.3.15 Test WF421964

The referenced test report, the essential details of which are summarised below, is primary data for the Strebord 44 door design and used a blank from mill F1.

Date of Test:	27 th November 2019
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	2No. latched, single-acting, single-leaf doorsets - LSASD
Tested Orientation:	Doorset A: door leaf hung opening out away from heating condition. Doorset B: door leaf hung opening in towards heating condition.
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2042mm (h) x 926mm (w) x 44mm (t). Core: • Falcon Panel Products Strebord- 44mm • Manufacturers stated density -Nominally 570kg/m³
	Manufacturers stated Strebord mill reference: F1 Lipping (both leaves): Sapele (640kg/m³), 8mm thick to all
	four edges. FRAME: Head & Jambs: CND Beech (720kg/m³), 78mm (d) x 44.5mm (w) with 31mm (w) x 12.5mm (h) integral stop. Frame Fixing: 4No. 5Ø x 100mm (l) steel woodscrews per jamb. Threshold: Sapele (640kg/m³) 15mm (h) x 78mm (w)
	Threshold: Sapele (640kg/m³) 15mm (h) x 78mm (w). Architrave: MDF 45mm (w) x 18mm (t). Architrave: MDF 45mm (w) x 18mm (t).

Summary of Test Specimen continued:

INTUMESCENT (Both Doorsets):

Frame Reveal: 1no 15x4mm Pyroplex Rigid Box Seals FO8700 15mm from the opening face in the frame reveal.

SMOKE/ACOUSTIC SEALS (Both Doorsets):

Leaf bottom edge: 12x20mm Fire and Acoustic Seals FAS45 drop down seal centrally rebated into the bottom edge of the leaf.

Weather/acoustic seal: 11.7x5mm Fire and Acoustic Seals FAS35.

HARDWARE (Both Doorsets):

Hinges: 3No. Nico Load Pro Security lift off type hinges.

Closer: Rutland TS3704 overhead type closer.

Lock/Latch: NSP Security SMF 614 Digital Lockset with NSP brass lock cylinder.

Lock/Latch Size:

Forend: 203.5x29mm Centre keep: 130x45mm Centre case: 153x103mm Lock/Latch Status: Engaged for test.

Furniture: NSP Security SMF 613/614 Mifare Card Lockset-Lever type handle and card reader including associated batteries.

Eye viewer: UAP CVPLCH polished chrome eye viewer.

HARDWARE PROTECTION:

Under Hinge: 1mm (t) Interdens.

Under Forend & Keep: 2mm (t) Interdens.

Encasing latch body: 2mm (t) Interdens.

Eye Viewer: Fire and Acoustic Seal fire rated acrylic. sealant.

This document remains the property of Falcon Panel that any problem to ensure that the purpose.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose. Drop Seal: Fire and Acoustic Seal fire rated acrylic sealant. This document remains the property of the reader to ensure that that any

This document details a subset of evide range of products.

*esting regine documentation can be range of products ite at a section of the state of the country of the section of the secti

Test Standard:

Panel Products It'd supports third partite nance of the door, Falcon Panel Products It de supportes third pathy certification and mainte name of fire BS EN 1634-1:2014+A1:2018

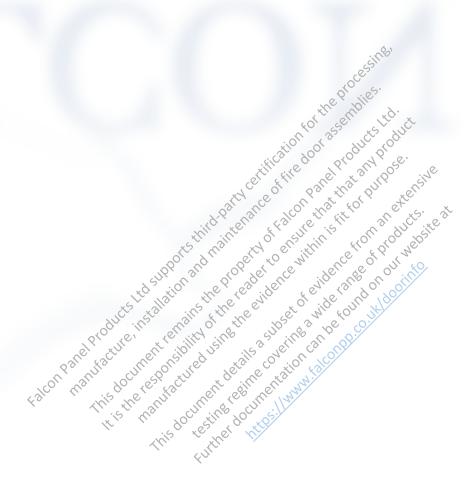
3.3.16 Test WF 421964 Summary of Results

The following table summarises the results of the test and provides information on the performance of the doorsets in fire test conditions

Doorset	Result (minutes)				Category of	Distortion ²
Reference	Integrity	Insul	ation	Radiation	performance ¹ (A or B)	(Low, Med, High)
		(I ₁) ³	(l ₂) ⁴			
Doorset A	35	35	35	35	А	Low
Doorset B	33	33	33	33	А	Med

- 1. In accordance with clause 13.3.2 of BS EN 1634-1: 2014 + A1: 2018
- 2. In accordance with Annex A of BS EN 15269-3: 2012
- 3. Supplementary procedure for maximum temperature rise (I_1) in accordance with 11.2.5 in BS EN 1634-1: 2014 + A1: 2018
- 4. Normal procedure for maximum temperature rise (I₂) in accordance with 11.2.4 in BS EN 1634-1: 2014 + A1: 2018

NB: The insulation performance recorded above is related to the glazed areas

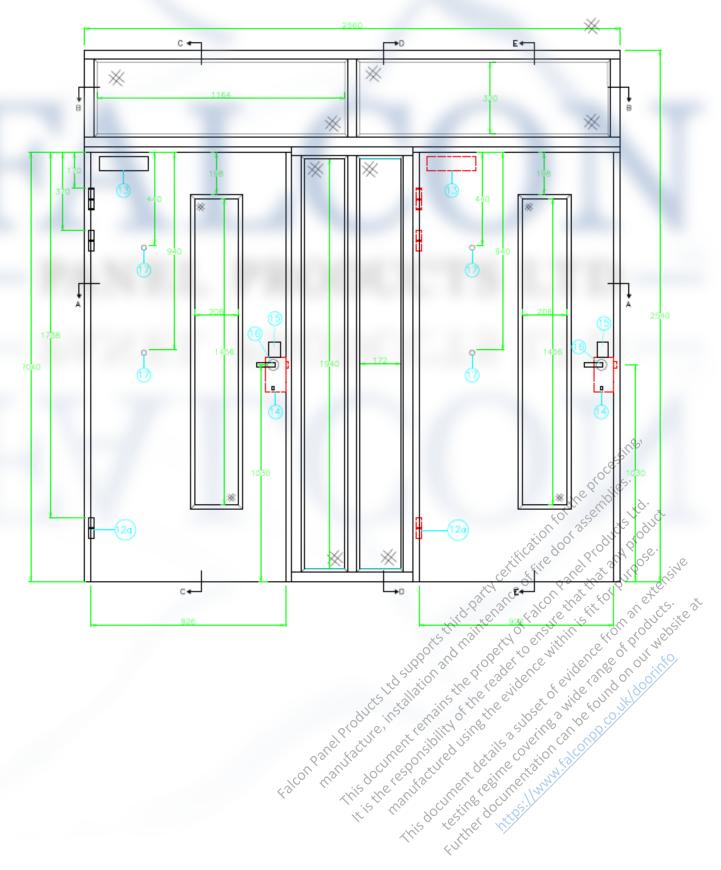


3.4 Supplementary test evidence

3.4.1 Evidence for Fanlights & Sidelights

3.4.1.1 Summary of test report WF 411193 Falcon test evidence

The referenced test report, the essential details of which are summarised below, is used to support sidelights and fanlights with the Strebord door design where the a 4 sided frame construction is utilised around the fanlights and sidelights:



Date of Test: 28.February.2019 Warringtonfire Testing and Certification Ltd. UKAS No. 1762		
Test Body: Falcon Panel Products Ltd Tested Product: 2 latched, single acting, single doorset – LSASD with glazed overpanel and glazed sidelights Tested Orientation: A - Hung opening away from heating condition B- Hung opening in towards heating condition Summary of Test Specimen: LEAF A and B: Overall Size: 2040mm(h) x 926(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:	Date of Test:	28.February.2019
Tested Product: 2 latched, single acting, single doorset – LSASD with glazed overpanel and glazed sidelights A - Hung opening away from heating condition B- Hung opening in towards heating condition LEAF A and B: Overall Size: 2040mm(h) x 926(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:		Warringtonfire Testing and Certification Ltd. UKAS No. 1762
overpanel and glazed sidelights A - Hung opening away from heating condition B- Hung opening in towards heating condition Summary of Test Specimen: LEAF A and B: Overall Size: 2040mm(h) x 926(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:	Sponsor:	Falcon Panel Products Ltd
B- Hung opening in towards heating condition LEAF A and B: Overall Size: 2040mm(h) x 926(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:	Tested Product:	
Summary of Test Specimen: LEAF A and B: Overall Size: 2040mm(h) x 926(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:	Tested Orientation:	A - Hung opening away from heating condition
Overall Size: 2040mm(h) x 926(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:		B- Hung opening in towards heating condition
Core: Falcon Panel Products Strebord® 44 Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:		
Lipping: LVL mixed hardwoods (580kg/m³), 8mm thick to all edges FRAME A and B: Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:		
Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:		
Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an 32mm(d) x 12mm(w) planted (pinned) MDF (700kg/m³) stop. Fire stopping: Fire and Acoustic Fire foam with plastic packers visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:		FRAME A and B:
visible on fire side – gaps 18 to 23mm Threshold: Non-combustible INTUMESCENT:		Head & Jambs: MDF (700kg/m³), 100mm(d) x 30mm(w) with an
INTUMESCENT:		· · · · · · · · · · · · · · · · · · ·
		Threshold: Non-combustible
Frame Reveal: • 1no 15x4mm Pyroplex FO8700 fitted 14.5m from the exposed face. SMOKE/ACOUSTIC SEALS: Frame Reveal: • FAS 35 11.7 x 5 fitted to the upstand of stop. • FAS 45 30 x 12.5 fitted centrally to bottom of leaf GLAZING: Glass (Both leaves): Pyrobelite 7. Left Leaf: • Aperture Size: 1486mm(h) x 236mm(w) • Glass size 1481mm(h) x 231mm(w) • Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m²) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(f), 125mm-150mm centres.		
1no 15x4mm Pyroplex FO8700 fitted 14.5m from the exposed face. SMOKE/ACOUSTIC SEALS: Frame Reveal: FAS 35 11.7 x 5 fitted to the upstand of stop. FAS 45 30 x 12.5 fitted centrally to bottom of leaf GLAZING: Glass (Both leaves): Pyrobelite 7. Left Leaf: Aperture Size: 1486mm(h) x 236mm(w) Glass size 1481mm(h) x 231mm(w) Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(l), 125mm 150mm centres.		Frame Reveal:
SMOKE/ACOUSTIC SEALS: Frame Reveal: • FAS 35 11.7 x 5 fitted to the upstand of stop. • FAS 45 30 x 12.5 fitted centrally to bottom of leaf GLAZING: Glass (Both leaves): Pyrobelite 7. Left Leaf: • Aperture Size: 1486mm(h) x 236mm(w) • Glass size 1481mm(h) x 231mm(w) • Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(l), 125mm-150mm centres.		1no 15x4mm Pyroplex FO8700 fitted 14.5m from the exposed face.
Frame Reveal: • FAS 35 11.7 x 5 fitted to the upstand of stop. • FAS 45 30 x 12.5 fitted centrally to bottom of leaf GLAZING: Glass (Both leaves): Pyrobelite 7. Left Leaf: • Aperture Size: 1486mm(h) x 236mm(w) • Glass size 1481mm(h) x 231mm(w) • Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m²) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(f), 125mm; 150mm centres.		SMOKE/ACOUSTIC SEALS:
FAS 35 11.7 x 5 fitted to the upstand of stop. FAS 45 30 x 12.5 fitted centrally to bottom of leaf GLAZING: Glass (Both leaves): Pyrobelite 7. Left Leaf: Aperture Size: 1486mm(h) x 236mm(w) Glass size 1481mm(h) x 231mm(w) Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(l), 125mm-150mm centres:		Frame Reveal:
GLAZING: Glass (Both leaves): Pyrobelite 7. Left Leaf: • Aperture Size: 1486mm(h) x 236mm(w) • Glass size 1481mm(h) x 206mm(w) • Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(f), 125mm-150mm centres.		 FAS 35 11.7 x 5 fitted to the upstand of stop. FAS 45 30 x 12.5 fitted centrally to bottom of leaf
Glass (Both leaves): Pyrobelite 7. Left Leaf: • Aperture Size: 1486mm(h) x 236mm(w) • Glass size 1481mm(h) x 231mm(w) • Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m²) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(l), 125mm-150mm centres.		GLAZING:
Left Leaf: • Aperture Size: 1486mm(h) x 236mm(w) • Glass size 1481mm(h) x 231mm(w) • Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(f), 125mm-150mm centres.		Glass (Both leaves): Pyrobelite 7.
Aperture Size: 1486mm(h) x 236mm(w) Glass size 1481mm(h) x 231mm(w) Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(l), 125mm-150mm centres.		Left Leaf:
• Sight size: 1456mm(h) x 206mm(w) Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(f), 125mm-150mm centres.		 Aperture Size: 1486mm(h) x 236mm(w) Glass size 1481mm(h) x 231mm(w)
Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer. Bead Fixing: Steel pins 18g, 40mm(l), 125mm-150mm centres.		Sight size: 1456mm(h) x 206mm(w)
Bead Fixing: Steel pins 18g, 40mm(l), 125mm-150mm centres.		Beading: MDF (Oak foil wrapped) (~750kg/m³) 22mm(h) x21mm(d) including 5x7mm bolection and a 18° chamfer.
Falcon Panel Produkte installating the production of the productio		Bead Fixing: Steel pins 18g, 40mm(I), 125mm-150mm centres.
Eaton Parel Produte instruction of the production of the productio		restration to the state of the
The Eurith		kalcon Panel Produce institute institute de la line de la schola de la
		The Kulth

GLAZING SYSTEM (Both Leaves):

Glazing perimeter: 15x3mm FAS Close cell foam fitted between glass and bead with FAS filling remaining glazing void.

Hinges: 3no Vier Zoo lift off butt hinges VLHL243RS 102 x 76 x 3 fitted 170mm, 370mm and 1737mm from the head of the leaf.

Closer: Rutland TS11205 overhead face fixed closer

Latch: Salto Element mortice latch Ref LE7E3765COIMSLH with half cylinder and thumb turn with nib fitted 1030mm from the threshold of the leaf.

Forend size: 235mm(h) x 20mm(w) x 3mm(t)

Keep: 170mm(h) x 25mm(d)

Card reader: Salto Element Euro card reader Battery pack 116mm x 65mm and card reader 45mm x 67 mm fitted above door handle

Lock/Latch Status: Engaged for test

Handle: Salto stainless steel lever Ref R1SURIM080

Eye viewer:2No UAP Nanocoast ref CVPLSSS barrel 12mm dia fitted 440 and 940 down from the head of the leaf.

HARDWARE PROTECTION:

Under hinge blade: 1mm thick FAS Spartan hardware protection Encasing latch body and under latch forend: 1mm thick FAS Spartan hardware protection

Under latch keep: 1mm thick FAS Spartan Hardware protection Surrounding eye viewers 1mm thick FAS Intumescent acrylic mastic

Fanlight

A 4 sided framed modular fanlight with 2 apertures covering both doorsets and sidelights, with a shared mullion.

Overall size 2560mm (w) by 460mm (h)

Sidelight

An 4 sided framed modular sidelight with 2 apertures between both doorsets, with a shared mullion. This stile responsibility of the reader to ensure that that a ne responsibility of the treater to ensure that that any production of the tree wide nee within it fit for purpose. n Panal Products Ltd supports third part the nance of fire doe this document responsibility of the evidence within is fit for purpose the street of the evidence within is fit for purpose the street of the evidence within is fit for purpose the evidence within it is fit for purpose the evidence

Falcon Panel Products tides upports third pathy certification and maintenance of fit

This document detains covering a wide range of products.

*esting regime documentation can be range of products ite at

	SIDELIGHTS AND FANLIGHTS
	Framing
	<u>Timber Pinus Sylvestris 520 kg/m3</u>
	Dimensions 44mm (w) x 100mm (d)
	Glazing
	Glass Pyrobelite 7
	• <u>Fanlights</u>
	Aperture Size: 370mm(h) x 1214mm(w) Sidelights
	SidelightsAperture Size: 1990mm(h) x 222mm(w)
	Beading:Sapele (640kg/m³) 25mm(h) x 30mm(d) including and a 17° chamfer.
	Bead Fixing: Steel pins 18g, 38mm(l), 100mm from corners and 200 centres.
. A	Glazing perimeter: 15x3mm FAS Ceramic fibre fitted between glass and bead with FAS filling remaining glazing void.
1/1	
	BS 476: Part 22: 1987
Performance:	Integrity: 37 minutes
	Insulation 0 minutes in accordance with Section 8.6.1

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tanks of products.

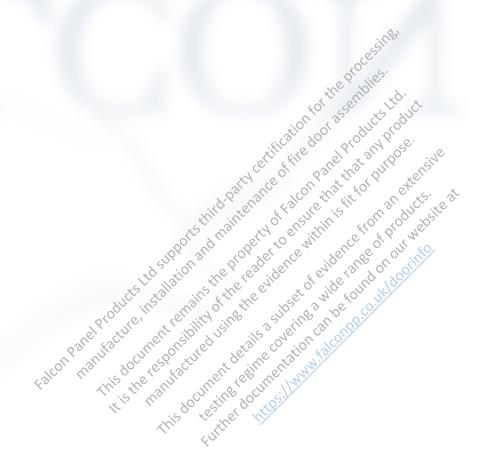
testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

3.4.1.2 Third Party Evidence for Fanlights and Sidelights

The following test evidence has been incorporated to support the use of particular glass types and glazing systems, when used as sidelights or fanlights. From the sizes tested it is possible to establish the maximum pane size for the particular glass type in either landscape or portrait orientation.

The performance column indicates the result obtained by the screen and doorset. In some cases the doorset result is below 30 minutes. The only aspect of the test being considered in this assessment is the glazed screen component, and therefore the doorset result is not relevant.

	Evidence for Fanlights & Sidelights					
Report Reference (Glass Type)	Pane Size & Glazing System (mm)	Test Standard	Performance (minutes)			
RF09134 (EW30 Pyroguard)	Portrait: 2510 high x 810 wide Landscape: 816 high x 921 wide Glazing system: 15x3 K ceramic	BS EN 1634-	Doorset: 29			
(21100 r yrogadia)	tape	·	Screen: 34			
RF09201	Portrait: 1415 high x 320 wide Landscape: 816 high x 2510	BS EN 1634-	Doorset: 33			
(EW30 Pyroguard)	wide Glazing system: 10 x 2 Interdens	1	Screen: 33			
RF10070	Portrait: 1415 high x 310 wide Landscape: 816 high x 2510	BS EN 1634-	Doorset: 29			
(EW30 Pyroguard)	wide Glazing system: 10 x 2 Interdens	1	Screen: 32			
RF10081	Portrait: 2510 high x 1010 wide Landscape: 816 high x 921 wide	BS EN 1634-	Doorset: 29			
(EW30 Pyroguard)	and 320 high x 1010 wided Glazing system: 10 x 2 Interdens	1	Screen: 32			



	Evidence for Fanlights & Sidelights					
Report Reference (Glass Type)	Report Reference (Glass Type)	Report Reference (Glass Type)	Report Reference (Glass Type)			
RF10120	Portrait: 2510 high x 1010 wide Landscape: 816 high x 921 wide and 320 high x 1010	BS EN 1634-1	Doorset: 32			
(EW30 Pyroguard)	wided Glazing system: 10 x 2 Interdens	BO EN 1034-1	Screen: 32			
RF10163	Portrait: 1415 high x 320 wide and 987 high x 749 wide Landscape: 816 high x 2510	BS EN 1634-1	Doorset: 38			
(EW30 Maxi Pyroguard)	wide Glazing system: 10 x 2 Interdens	DO 2.11 100 1 1	Screen: 38			
IFT 27128098	Portrait: 2520 high x 225 wide and 1141 high x 1100 wide Landscape: 350 high x 2890	BS EN 1634-1	Doorset: 34			
(El30 Pyroguard)	wide Glazing system: 7 x 2 Egopren glazing tape	DO EN 1004 1	Screen: 34			
IFT 27129622 Revision 1	Portrait 2264 high x 350 wide Landscape 425 high x 2280 wide	BS EN 1634-1	Doorset: 35			
(15mm Pyranova)	Glazing system 8 x 3 close cell foam	BO LIV 1004-1	Screen: 35			
RF00138	Portrait: 2016 high x 515 wide Landscape: 720 high by 1670	BS EN 1634-1	Doorset: 40			
(7 Pyrodur)	wide Glazing system: 20 x 2 Interdens	DS EN 1034-1	Screen: 32			

Locol bard kodites firstalities and the brokestine for the state of the bold of the brokestine at the brokestine for the state of the brokestine at the brok

Evidence for Fanlights & Sidelights					
Report Reference (Glass Type)	Report Reference (Glass Type)	Report Reference (Glass Type)	Report Reference (Glass Type)		
RF01024 Rev. A (10 Pyrodur)	Portrait: 2000 x 1400 Landscape: 720 high by 1670 wide	BS 476: Part	Doorset: 60		
	Glazing system: 20 x 2 Interdens	22: 1987	Screen: 57		
RF03068 (7 Pyrodur)	Portrait: 2057 high x 917 wide Landscape: 720 high by 1670 wide	BS EN 1634-1	Doorset: 37		
	Glazing system: 20 x 2 Interdens		Screen: 37		
RF05037 (15 Pyrostop)	Portrait: 2910 x 1406 wide Landscape: 720 high by 1670 wide	BS EN 1634-1	Doorset: 43		
	Glazing system: 13 x 3 Hodgesons Firestrip 30	BS EN 1034-1	Screen: 59		
RF10028 (Pyroshield 2)	Portrait: 2040 high x 485 wide Landscape: 810 high x 1830 wide	BS 476: Part	Doorset: 39		
	Glazing system: 10 x 2 Interdens	22: 1987	Screen: 39		



3.4.2 Morland frame evidence

3.4.2.1 **Summary of Test Report WF393450**

The essential details of the referenced test report are summarised below.

Date of test:	03.Jan.2018
Identification of test body:	Warringtonfire Testing and Certificaiton Ltd
Sponsor:	Newmor Group Ltd. trading as Morland Profiles
Tested Product:	2no. Insulated, single acting single doorsets - ULSASD
Summary of test	Door A & B
specimen:	Leaf (Door A):
	Overall Size: 2040 (h) x 924 (w) x 44mm (t)
	Core: Vicaima, Flaxboard (350-400kg/m3), 37mm thick.
	Stile & Rails: European Whitewood (420-470kg/m3), 44 x 38mm deep rails & 44 x 33mm deep stiles
	Lipping: 5mm thick Oak (500kg/m3) to all edges.
	Facing: Oak foil (620kg/m3).
	Leaf (Door B):
	Overall Size: 2040 (h) x 924 (w) x 44mm (t)
	Core: Egger, GDC (540kg/m3), 44mm thick.
	Lipping: 2mm thick ABS (1150kg/m3) to all edges.
	Facing: Paper, Melamine, Laminate facing.
	Frame:
	Head & Jambs: Morland, Forever Firecheck frame – MDF (680kg/m3) with laminate facing, 90 x 30mm thick with 30 x 12mm thick planted stop
	Frame Fixing: 4no 80 x 5mm diameter screw fixings with plastic plugs along latched jambs, 6no along hinged jambs.
	Intumescent:
	Frame Head & Jambs: 1no 15x4 Mann McGowan CF 356 in frame grooves concealed under decorative finish. Interrupted at hinges & latch keep.
	Frame Head & Jambs: 1no 15x4 Mann McGowan CF 356 in frame grooves concealed under decorative finish. Interrupted at hinges & latch keep.
	Falcon Panel Products Linds and particular the product that the found in an extension of the products that the products the products the products the product the

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tanks of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

Summary of test specimen (continued):	Hardware: Hinges: 3no Zoo ZHSS243RS hinges Closer: 1no Briton 1120B.SES Lock/Latch: 1no Zoo ZDL0055RSS. Hardware Protection:
	Under Hinges: 1mm thick Therm-A-Strip.
	Around Lockase, Under Forend & Keep: 1mm thick interdens.
	Glazing:
	Not tested
	Specific Feature Being Tested:
	Forever Firecheck Frame
	Doorset Orientation:
	Opening towards heating conditions.
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 39 minutes (DOOR A) 43 minutes (DOOR B) Insulation: 39 minutes (DOOR A) 43 minutes (DOOR B)

3.4.2.2 Summary of Test Report WF393430

The essential details of the referenced test report are summarised below.

Date of test:	03.Jan.2018
Identification of test body:	Warringtonfire Testing and Certificaiton Ltd
Sponsor:	Newmor Group Ltd. trading as Morland Profiles
Tested Product:	2no. Insulated, single acting single doorsets – ULSASD
Summary of test specimen:	Door A & B Leaf: Overall Size: 2040 (h) x 924 (w) x 44mm (t) Core: Egger GDC (540kg/m3), 44mm thick. Lipping: 2mm thick ABS (1150kg/m3) to all edges. Facing: Paper, Melamine, Laminate facing. Frame: Head & Jambs: Morland, Forever Firecheck frame — MDF (680kg/m3) with laminate facing, 90 x 30mm thick with 30 x 12mm thick planted stop Frame Fixing: 4no 80 x 5mm diameter screw fixings with plastic plugs along latched jambs, 6no along hinged jambs. Intumescent: Frame Head & Jambs: 1no 15x4 Mann McGowan CF 356 in frame grooves concealed under decorative finish. Interrupted at hinges & latch keep.



Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

Summary of test specimen (continued):	Hardware: Hinges: 3no Zoo ZHSS243RS hinges
(commutation).	Closer: 1no Briton 1120B.SES
	Lock/Latch: 1no Zoo ZDL0055RSS.
	Hardware Protection:
	Under Hinges: 1mm thick Therm-A-Strip.
	Around Lockase, Under Forend & Keep: 1mm thick interdens.
	Glazing:
	Not tested
	Specific Feature Being Tested:
	Forever Firecheck Frame
	Doorset Orientation:
	Opening towards heating conditions.
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 46 minutes (DOOR A) 43 minutes (DOOR B)
	Insulation: 46 minutes (DOOR A) 43 minutes (DOOR B)

3.4.3 **Miscellaneous Supplementary Evidence**

Summary of Test Report Chilt/RF02110 3.4.3.1

The essential details of the referenced test report are summarised below.

Date of test	14.Nov.2002
Identification of test body:	Chiltern International Fire (now trading as: Warringtonfire Testing & Certification Ltd)
Sponsor:	Vetrotech Saint-Gobain International AG
Tested Product:	2no. Insulated, glazed single leaf, single acting, timber doorsets
Summary of test	Door A & B
specimen:	<u>Leaf:</u>
	Overall Size: 2044mm (h) x 825mm (w) x 44mm (t)
	Core: European softwood vertical lamels (450 kg/m3), 22 x 27mm thick
	Rails (top & bottom): European softwood horizontal lamel (450 kg/m3), 22 x 27mm thick.
	Facing: 9mm thick chipboard (680 kg/m3)
PAN	Lipping: 8mm thick Sapale (640 kg/m3)
	Intumescent:
	Head & Jambs: 1no 15x4 Lorient LP1504
	Frame:
	Head & Jambs: Sapele (640 kg/m3), 90 x 40mm thick with 45 x 13mm deep planted stop.
	Architrave: Sapele (640kg/m3), 18mm thick.
	Frame Fixing: No.10 x 80mm long wood screws.
	Hardware:
	Hinges: 3no. Royde & Tucker H101 hinges.
	Closer: Dorma TS83 overhead closers.
	Lock/Latches: 63mm tubular latches
	Lock/Latch Status: Engaged
	Handle: Aluminium lever handles.
	Cext. Refer of all raids
	Ostal use Coll hazir told
	"third interior of Fall year is fill and
	orts that cett of within cetto
	Supply and Propager indentifies
	xs. It allottle stille received x of ende out of
	Oduc instruction of the instruction of the instruction of the contraction of the instruction of the instruct
	nel Protures entre ibility usine ils as weithe can oned
	Closer: Dorma TS83 overhead closers. Lock/Latches: 63mm tubular latches Lock/Latch Status: Engaged Handle: Aluminium lever handles.
	tale the this the contract the the the the
	This, Was Poch, Alle Agentaling
	This "to the to
	$\stackrel{\leftarrow}{\leftarrow}_{\mathcal{O}}$.

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

Summary of test	Hardware Protection:
specimen (continued):	Under Hinges: 2mm thick interdens
,	Under Latch Forend & Keep: 2mm thick interdens
	Encasing Latch Body: 2mm thick interdens
	Glazing (Door A & B):
	Glass: Pyroswiss 'Classic' glass, 6mm thick.
	Aperture Size (Door A): 526 x 1640mm
	Aperture Size (Top) (Door B): 526 x 940mm
	Aperture Size (Bottom) (Door B): 526 x 490mm
	Beading: Sapele (640 kg/m3), 21 x 25mm high, 5x5mm bolection and 25° chamfer.
	Bead Fixing: 50mm long Steel screws. Fitted at 30° and 50mm from corners, 150mm centres vertical, and 130 centres horizontal.
	Expansion Allowance: 12mm on all edges.
	Glazing System:
	Perimeter: 15x3 Hodgsons sealant between beads and glass
	Specific Feature Being Tested:
	Opening toward heating conditions.
Test Standard:	BS EN 1634-1: 2000 & BS EN 1363-1: 1999
Performance:	Integrity:
Performance:	Door A: 24 minutes; Door B: 23 minutes
	Insulation:
	Door A: 4 minutes; Door B: 4 minutes
Reason for use (if test failed)	for use as evidence for 6mm thick pyroswiss glass and hodgesons sealant
Mode of Failure (if test failed)	Initial Failure: Cotton pad failure at 24 minutes (Door A) and 23 minutes (Door B)
	Further Failure:
	Initial Failure: Cotton pad failure at 24 minutes (Door A) and 23 minutes (Door B) Further Failure: Lacon Partin Reduction of Partin Reduction o

3.4.3.2 **Summary of Test Report WF146520**

The essential details of the referenced test report are summarised below

Date of test:	08.Jun.2005
Identification of test body:	Warringtonfire Testing and Certification Ltd
Sponsor:	Pyroplex Ltd.
Tested Product:	Indicative test of 4no. air transfer grilles within timber door leaf constructions
Summary of test specimen:	<u>Leaf:</u>
	Overall Size: 990mm (h) x 900mm (w) x 44/54mm (t)
	Core: Halspan Prima 44mm thick (containing Grilles C & D) and 54mm thick (containing Grilles A & B) with 6mm hardwood lining
	Hardware:
	All grilles 0.6mm galvanised steel assembled in a modular format with a clip system to connect the grille facings
	Grille A: 225mm x 112mm x 40mm in top half of door leaf
	Grille B: 300mm x 300mm x 40mm in bottom half of door leaf
	Grille C: 225mm x 112mm x 40mm in top half of door leaf
200.000	Grille D: 300mm x 300mm x 40mm in bottom half of door leaf
	Hardware Protection:
	Grille A: 4no layers, 40mm (w) x 3.5mm (t) and 224mm (l) of Pyroplex intumescent
	Grille B: 5no layers, 40mm (w) x 3.5mm (t) and 148mm (l) of Pyroplex intumescent
	Grille C: 4no layers, 40mm (w) x 3.5mm (t) and 224mm (l) of Pyroplex intumescent
	Grille D: 5no layers, 40mm (w) x 3.5mm (t) and 148mm (l) of Pyroplex intumescent
	Specific Feature Being Tested:
	Pyroplex Air Transfer Grilles
Test Standard:	Specific Feature Being Tested: Pyroplex Air Transfer Grilles BS 476: Part 22: 1987 Integrity: Grille A 41 minutes Grille B 55 minutes Grille C 46 minutes Grille D 45 minutes
Performance:	Integrity: Grille A 41 minutes Grille B 55 minutes Grille C 46 minutes Grille D 45 minutes Grille D 45 minutes
	Grille A 41 minutes
	Grille B 55 minutes
	Grille C 46 minutes Grille D 45 minutes Grille D 45 minutes Franch Panel Products interest and
	Grille D 45 minutes

*Esting regime covering a wide range of products ite at the regime documentation and performent ation and the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of

3.4.3.3 **Summary of Test Report Chilt/RF08169**

The essential details of the referenced test report are summarised below.

Date of test	22.Nov.2008
Identification of test body:	Chiltern International Fire Ltd (now trading a: Warringtonfire Testing & Certification Ltd)
Sponsor:	Essex Safety Glass
Tested Product:	uninsulated, glazed single leaf, single acting, timber doorset in a glazed screen
Summary of test specimen:	Leaf: Overall Size: 2040 (h) x 923 (w) x 44mm (t) Stiles & Rails: Sapele (640kg/m3), 100 x 44mm thick Screen Sizes: Aperture A: 873mm (h) x 954mm (w) Aperture B: 873mm (h) x 446mm (w) Aperture C: 873mm (h) x 1440mm (w) Aperture D: 2007mm (h) x 954mm (w) Aperture F: 2007mm (h) x 954mm (w) Intumescent: Leaf Edges: Therm-A-Seal 15 x 4mm in leaf edges Frame: Head & Jambs: Sapele (640kg/m3), 90 x 40mm thick, with 12mm thick stop Frame Fixing: not detailed Hardware: Hinges: 3no. Royde & Tucker H105 lift of hinges Closer: Dorma TS71 overhead door closer

Falcon Panel Products Linds albiton and maintenance of fire door asset This document remains the property of the leader to ensure that the any product of the state of the leader to ensure that the document remains the property of the leader to ensure that the leader to ensure the latter of This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose. This document details a subset of a wide range of products.

Summary of test	Hardware Protection:
specimen (continued):	Under Hinges: 1mm thk Interdens under hinge blades
,	Glazing:
	Glass: ESG Pyrotech 630 6mm thk
	Glass Size: 1711mm x 703mm
	Glazing System:
	Glazing Perimeter: 1mm thick interdens around perimeter
	Glass & Bead: 1mm thick Kerflex ceramic tape 15 x 3mm between glass and beads
	Specific Feature Being Tested:
	Pyrotech glass
_	Doorset Orientation:
	Opening towards heating conditions.
Test Standard:	BS EN 1634-1
Performance:	Integrity: 16 minutes
Reason for use (if test failed)	Supplementary evidence for the use of Essex Safety Glass Pyrotech in 44mm thick timber doors.
Mode of failure (if test failed)	Initial Failure: Cotton pad test on glass at 16 minutes, which has to be applied to uninsulated glasses, but this is not a failure mode for BS 476 Part 22. Further Failure: 34 minutes



3.4.3.4 Summary of Test Report Chilt/IF09145

The essential details of the referenced test report are summarised below.

Date of Test:	30.SEP.2009	
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762	
Sponsor:	Falcon Panel Products Ltd	
Tested Product:	Doorset A: An unlatched, single acting single doorset – LSADD	
	Doorset C: An unlatched, single acting single doorset – LSADD	
Tested Orientation:	Both doorsets hung opening in towards heating condition	
Summary of Test	LEAF:	
Specimen:	Overall Size (both doorsets): 1010mm(h) x 926(w) x 44mm(t) Core (both doorsets): Falcon Panel Products Strebord® 44 • Doorset A: 8no vertical grooves, 5mm(d) x 10mm(w) at	
'/^\	nominally 100mm centres and to both faces of the leaf. • Doorset C: 8no vertical grooves, 5mm(d) x 10mm(w) at nominally 110mm centres and to both faces of the leaf.	
	Lipping (both doorsets): Sapele (640kg/m³), 6mm thick to vertical edges only.	
70.76	FRAME:	
	Head & Jambs (both doorsets): European Redwood (510kg/m³), 70mm(d) x 32mm(w), with 15mm(w) x 12mm(d) planted (pinned) European redwood stop.	
	Frame Fixing (both doorsets): 3No. 80mm steel woodscrews.	
	Threshold (both doorsets): Non-combustible	
	INTUMESCENT: Frame Reveal (both doorsets): 1no 15x4mm Pyroplex FO8700 fitted centrally within the frame reveal.	
	HARDWARE: Hinges: 2no Royde & Tucker H105 lift-off type hinge fitted 150mm,	×
	No further ironmongery fitted to either doorset - both wired shut, to simulate the fitting of an engaged lock.	. Cosive
Test Standard:	BS 476: Part 22: 1987	×2.
D(Doorset A: Doorset C:	ico ite
Performance:	Integrity: 40 minutes Integrity: 43 minutes	Ner
	HARDWARE: Hinges: 2no Royde & Tucker H105 lift-off type hinge fitted 150mm, 790mm from the head of each leaf. No further ironmongery fitted to either doorset - both wired shut, to simulate the fitting of an engaged lock. BS 476: Part 22: 1987 Doorset A: Integrity: 40 minutes Doorset C: Integrity: 43 minutes	

3.4.3.5 Summary of Test Report WF414882

The referenced test report, the essential details of which are summarised below, is supporting data for the use of Fire and Acoustic Seals Ltd Fire Door Foam in timber door frames.

Date of Test:	11.JUN.2019
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel products Ltd
Tested Product:	A glazed, unlatched, single acting double doorset – ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2040mm(h) x 926(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Falcon Panel Products Ltd Streframe® (450kg/m³), 8mm thick to all edges. FRAME:
	Head & Jambs: European Redwood (510kg/m³), 102mm(d) x 32mm(w), with 32mm(w) x 12mm(d) planted (pinned) MDF stop. Fire stopping: Fire and Acoustic Seals Ltd Fire Door Foam with softwood timber packers, 2.5 – 13.8mm wide x full depth of frame. Threshold: Non-combustible.
	INTUMESCENT: Leaf edge – right leaf meeting edge: Lorient Polyproducts Ltd. LP1004DS 10x4mm & Pyroplex Rigid Box Seal 8700 10x4mm. Frame Reveal, head and jambs: Pyroplex Rigid Box Seal 8700 15x4mm Leaf edge – bottom edge only: Fire and Acoustic Seals Ltd FAS45 drop seal 28mm (h) x 12mm (w)
	Leaf edge – bottom edge only: Fire and Acoustic Seals Ltd FAS45 drop seal 28mm (h) x 12mm (w) SMOKE/ACOUSTIC SEALS: Frame Reveal & Upstand of the stop: Fire and Acoustic Seals Ltd FAS35 self-adhesive seal 12mm (w) x 5mm (h). HARDWARE: Hinges: 3no Vier (Zoo Hardware) stainless steel lift off type hinge Ref. VLHL243RS and VLHR243RS fitted 170mm, 370mm and 1740mm from the head of each leaf. Closer: Rutland Aluminium and Steel composition overhead surface mounted door closer reference TS:9205, 55 high x 236 wide x 40 thick (body size)

Latch: Vier (Zoo Hardware) stainless steel latch with UAP 70mm key/thumbturn cylinder Ref. ZL30T/30CAS, latch nib fitted 865mm from the bottom of the leaf.

Forend size: 235mm(h) x 22mm(w)

Body size: 165mm(h) x 15mm(w) x 90mm(d)

Keep size: 180mm(h) x 40mm(w) Lock/Latch Status: Disengaged for test

Handle: Hoppe Amsterdam Stainless steel inline lever type handle 51mmØ fitted appropriate to the latch.

Letter plate: Fab and Fix letterplate and letterplate security shield Letterplate ref. 3C018, Security shield ref. 3F005. 75 high x 310mm wide (face plate footprint).

Flush bolts: ZOO Hardware Steel Lever action flush bolt reference ZAS03RSS 20mm (w) x 203mm (h).

HARDWARE PROTECTION:

Under hinge blades: 1mm (t) Fire and Acoustic Seals Ltd intumescent sheet.

Encasing latch and lock bodies: 1mm (t) Fire and Acoustic Seals Ltd intumescent sheet.

Under latch forend: 1mm (t) Fire and Acoustic Seals Ltd intumescent sheet.

Under latch keep: 1mm (t) Fire and Acoustic Seals Ltd intumescent sheet.

Lining flush bolt rebate: 1mm (t) Fire and Acoustic Seals Ltd intumescent sheet.

Lining drop seal rebate: 1mm (t) Fire and Acoustic Seals Ltd intumescent sheet.

GLAZING (both leaves):

- Glass: Fireglass UK Pyrobelite 7 EW30 -(B)3-34dB 7mm thick
- o Sight Size: 155mm wide x 1430mm high
 beading: MDF (700kg/m³) 22mm high x 21mm deep including a 7mm high x 5mm deep bolection refuse

 18° chamfer
 Bead Fixing: P=
- testing regime documentation can be found on our website Bead Fixing: Pneumatically fired rectangular steel brad nails, 18G x 50mm long, fitted 50mm from corners at This document details a subset of evidence to inder and Octiment details a subseting a mide found on o ne responsibility of the the evidence wi 155mm centres, This document remains the prope Inis document remains the propered rantature installation and

Report No:

	GLAZING Intumescent: Closed cell foam, 3mm thick, fitted between the glass and bead on both faces and Fire and Acoustic Seals Ltd Intumescent Acoustic Acrylic Sealant, continuous bead fitted around the glazing perimeter.
Test Standard:	BS EN 1634-1:2014 +A1:2018 and BS EN 1363-1: 2012
Performance:	Integrity: 32 minutes Insulation: 13 minutes

3.4.3.6 Summary of Test Report WF386959

The referenced test report, the essential details of which are summarised below, is supporting data for the use of ST88 mastic capping ST99 Fire Foam in timber door frames.

Identification of test body: Exova Warringtonfire, now trading as Warringtonfire Testing and Certification Ltd. UKAS Notified Body 1762.	Date of test	18 th August 2017		
Sponsor: Falcon Panel Products Ltd Summary of test specimens (mm): Specimen A comprised: a single leaf Strebord 44 particleboard core with integral facings. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 950(w) x 44t(t). Leaf Edge Intumescent Seals: 1No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs. Door frame: European Redwood of nominal density 510kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland ITS11024 concealed head mounted closer with a Porta DIN sashlock with a 230mm high forend (disengaged for the test) and an Abloy EA280 cable loop in the hangingedge. Specimen B comprised: a double leaf Strebord FD60 particleboard core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 1050/400(w) x 54(t). Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland T552014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorset were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were.			as Warringtonfire Testing and	
Specimens (mm): Leaf Size: 2438(h) x 950(w) x 44(t). Leaf Edge Inturnescent Seals: 1No STS STS154FO perimeter inturnescent seals were centrally fitted in the frame reveals of the head and jambs. Door frame: European Redwood of nominal density 510kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland ITS11024 concealed head mounted closer with a Porta DIN sashlock with a 230mm high forend (disengaged for the test) and an Abloy EA280 cable loop in the hanging edge. Specimen B comprised: a double leaf Strebord FD60 particleboard core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 1050/400(w) x54(t). Leaf Edge Inturnescent Seals: 2No STS STS154FO perimeter inturnescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces apping a full depth of ST99 Fire Foam. Broadfix plastic packers were				
core with integral facings. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 950(w) x 44(t). Leaf Edge Intumescent Seals: 1No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs. Door frame: European Redwood of nominal density 510kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland ITS11024 concealed head mounted closer with a Porta DIN sashlock with a 230mm high forend (disengaged for the test) and an Abloy EA280 cable loop in the hanging edge. Specimen B comprised: a double leaf Strebord FD60 particleboard core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(n) x 1050/400(w) x54(t). Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were	Sponsor:	Falcon Panel Products Ltd		
Leaf Edge Intumescent Seals: 1No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs. Door frame: European Redwood of nominal density 510kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland ITS11024 concealed head mounted closer with a Porta DIN sashlock with a 230mm high forend (disengaged for the test) and an Abloy EA280 cable loop in the hanging edge. Specimen B comprised: a double leaf Strebord FD60 particleboard core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 1050/400(w) x 54(t). Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces, capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		core with integral facings. All leaf e		
intumescent seals were centrally fitted in the frame reveals of the head and jambs. Door frame: European Redwood of nominal density 510kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland ITS11024 concealed head mounted closer with a Porta DIN sashlock with a 230mm high forend (disengaged for the test) and an Abloy EA280 cable loop in the hangingedge. Specimen B comprised: a double leaf Strebord FD60 particleboard core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 1050/400(w) x54(t). Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were				
31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland ITS11024 concealed head mounted closer with a Porta DIN sashlock with a 230mm high forend (disengaged for the test) and an Abloy EA280 cable loop in the hanging edge. Specimen B comprised: a double leaf Strebord FD60 particleboard core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 1050/400(w) x 54(t). Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces, capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		intumescent seals were centrally f		
The doorset was hung on 4No H101 lift of type steel hinges; a Rutland ITS11024 concealed head mounted closer with a Porta DIN sashlock with a 230mm high forend (disengaged for the test) and an Abloy EA280 cable loop in the hanging edge. Specimen B comprised: a double leaf Strebord FD60 particleboard core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 1050/400(w) x 54(t). Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		31mm wide with 15 thick MDF arc		
core with integral facings, a 10mm diameter hole was drilled horizontally across the full width of the core. All leaf edges were lipped with 8(t) Sapele of nominal density 640kg/m³. Leaf Size: 2438(h) x 1050/400(w) x 54(t). Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		The doorset was hung on 4No H1 Rutland ITS11024 concealed head sashlock with a 230mm high foren	d mounted closer with a Porta DIN d (disengaged for the test) and an	
Leaf Edge Intumescent Seals: 2No STS STS154FO perimeter intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		core with integral facings, a 10mm horizontally across the full width o lipped with 8(t) Sapele of nominal	n diameter hole was drilled If the core. All leaf edges were density 640kg/m³.	
intumescent seals were centrally fitted in the frame reveals of the head and jambs and one meeting edge. Door frame: Sapele of nominal density 640kg/m³ 31mm wide with 15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		` '	• *	
15 thick MDF architraves on both faces. Hardware: The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		intumescent seals were centrally f	itted in the frame reveals of the	
The doorset was hung on 4No H101 lift of type steel hinges; a Rutland TS52014 surface mounted closer with a Winkhaus mortice latch with a 310mm high forend (disengaged for the test) and GEM electric strike and an Abloy EA280 cable loop in the hanging edge. Installation A & B: The doorsets were oriented to open in towards the furnace, installed within a plasterboard clad, timber stud partition. A bead of ST88 mastic 15 deep and 12.5mm wide was installed to both faces capping a full depth of ST99 Fire Foam. Broadfix plastic packers were		15 thick MDF architraves on both		
a full depth of ST99 Fire Foam. Broadfix plastic packers were		The doorset was hung on 4No H1 Rutland TS52014 surface mounte latch with a 310mm high forend (c	01 lift of type steel hinges; a d closer with a Winkhaus mortice disengaged for the test) and GEM cable loop in the hanging edge.	ortocessings'
a full depth of ST99 Fire Foam. Broadfix plastic packers were		Installation A & B:		
Performance Specimen A Integrity: 32 minutes Insulation: 32 minutes Insulation: 61 minute		The doorsets were oriented to ope within a plasterboard clad, timber mastic 15 deep and 12.5mm wide a full depth of ST99 Fire Foam. B installed at all frame fixing points mastic.	roadfix plastic packers were	8, 31,0026 in
Performance Specimen A Specimen B Integrity: 32 minutes Integrity: 61 minutes Insulation: 61 minutes Insulat	Test Standard:	BS 476: Part 22: 1987	ing to state the state of the	fit is an elicie.
Integrity: 32 minutes Insulation: 32 minutes Insulation: 61 minutes	Performance	Specimen A	Specimen B and and are will	Kou, Logs Gpst
Insulation: 32 minutes Insulation: 61 minutes Insula		Integrity: 32 minutes	Integrity: 61 minutes	Le Colynamic
Falcon Panel Products line and the first of the end of the condition of the found and the found of the condition of the factor		Insulation: 32 minutes	Insulation: 61 minutes	ans on other
		Insulation: 32 minutes Falcon Panel Product Falcon Panel Product Falcon Panel Product Figure 1 Figure 1 Figure 1 Figure 2 Figure 2 Figure 2 Figure 3 Figure 4 Figure 3 Figure 4 Figure	Insulation: 61 minutes one wild in the control of t	Tange on opini
The Court of the C		*,	This do restrict of his to	

3.4.3.7 Summary of Test Report Chilt/RF06083

The essential details of the referenced test report are summarised below and has been included to support lower density lippings.

been included to sup	port lower density lippings.
Date of Test:	02.AUG.2006
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting single doorset – ULSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	Overall Size: 2770mm(h) x 900(w) x 45mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Limba (Afara) (510-560kg/m³), 6mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (510kg/m³), 70mm(d) x 32mm(w), with a 13mm(d) planted (pinned) European redwood stop. Supporting Construction: Mineral fibre ~15mm(t) Threshold: Non-combustible INTUMESCENT: Frame Reveal: • Head: 1no 20x4mm Lorient Polyproducts Ltd LP2004 fitted centrally. • Jambs: 1no 15x4mm Lorient Polyproducts Ltd LP2004 fitted centrally. HARDWARE: Hinges: 4no Royde & Tucker H101 lift-off type hinge fitted 150mm, 955mm, 1730mm and 2520mm from the head of each leaf. Closer: Dormakaba TS 73V surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 225mm(w) x 60mm(h) x 40mm(d) Latch: Latch: E*S Tubular steel mortice latch fitted 1770mm from the head of the leaf. Forend size: 57mm(h) x 26mm(w) Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 103mm(w) x 40mm(d)
	Under hinge blade: 1mm thick Interdens
Test Standard:	HARDWARE PROTECTION: Under hinge blade: 1mm thick Interdens BS 476: Part 22: 1987 Integrity: 34 minutes
Performance:	Integrity: 34 minutes
renormance:	integrity. 34 minutes of the second s

Falcon Parturace Clime Porsitive of the Editive Constitution for This document define to hits illumination for the Further document and the Further document and the Further document and the fall of the Further document and the fall of the fall of

3.4.3.8 Summary of Test Report Chilt/RF11161

The essential details of the referenced test report are summarised below. The test has been used for supporting recessed areas within the leaf

Date of Test: 21.NOV.2011 Identification of Test Body: Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Test Body: Falcon Panel Products Ltd Tested Product: A glazed unlatched, single acting double doorset - ULSADD Tested Orientation: Hung opening in towards heating condition LEAF: Overall Size (both leaves): 2135mm(h) x 915(w) x 35mm(t) Core: Falcon Panel Products Strebord® 35 Lipping: Sapele (770kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (465kg/m³), 70mm(d) x 25mm(w), with 20mm(w) x 12mm(d) planted (pinned) Europear redwood stop. Fire stopping: Mineral fibre, capped with intumescent mastic ~ 10mm(w) x ~10-15mm(d) - to both faces. Threshold: Non-combustible INTUMESCENT: Frame: 1no 15x4 Pyroplex FO8700 fitted centrally within the fraveval. Meeting stile (left leaf only): 1no 15x4 Pyroplex FO8700 fitted centrally within the leaf edge. HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150m
Tested Product: A glazed unlatched, single acting double doorset - ULSADD Hung opening in towards heating condition LEAF: Overall Size (both leaves): 2135mm(h) x 915(w) x 35mm(t) Core: Falcon Panel Products Strebord® 35 Lipping: Sapele (770kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (465kg/m³), 70mm(d) x 25mm(w), with 20mm(w) x 12mm(d) planted (pinned) Europear redwood stop. Fire stopping: Mineral fibre, capped with intumescent mastic ~ 10mm(w) x ~10-15mm(d) - to both faces. Threshold: Non-combustible INTUMESCENT: Frame: 1no 15x4 Pyroplex FO8700 fitted centrally within the fraveal. Meeting stile (left leaf only): 1no 15x4 Pyroplex FO8700 fitted centrally within the leaf edge. HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150m
Tested Orientation: Hung opening in towards heating condition LEAF: Overall Size (both leaves): 2135mm(h) x 915(w) x 35mm(t) Core: Falcon Panel Products Strebord® 35 Lipping: Sapele (770kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (465kg/m³), 70mm(d) x 25mm(w), with 20mm(w) x 12mm(d) planted (pinned) Europearedwood stop. Fire stopping: Mineral fibre, capped with intumescent mastic ~ 10mm(w) x ~10-15mm(d) - to both faces. Threshold: Non-combustible INTUMESCENT: Frame: 1no 15x4 Pyroplex FO8700 fitted centrally within the freeval. Meeting stile (left leaf only): 1no 15x4 Pyroplex FO8700 fitted centrally within the leaf edge. HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150m
Summary of Test Specimen: Description: LEAF: Overall Size (both leaves): 2135mm(h) x 915(w) x 35mm(t) Core: Falcon Panel Products Strebord® 35 Lipping: Sapele (770kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (465kg/m³), 70mm(d) x 25mm(w), with 20mm(w) x 12mm(d) planted (pinned) Europearedwood stop. Fire stopping: Mineral fibre, capped with intumescent mastic ~ 10mm(w) x ~10-15mm(d) - to both faces. Threshold: Non-combustible INTUMESCENT: Frame: 1no 15x4 Pyroplex FO8700 fitted centrally within the fraveveal. Meeting stile (left leaf only): 1no 15x4 Pyroplex FO8700 fitted centrally within the leaf edge. HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150m
Overall Size (both leaves): 2135mm(h) x 915(w) x 35mm(t) Core: Falcon Panel Products Strebord® 35 Lipping: Sapele (770kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (465kg/m³), 70mm(d) x 25mm(w), with 20mm(w) x 12mm(d) planted (pinned) Europea redwood stop. Fire stopping: Mineral fibre, capped with intumescent mastic ~ 10mm(w) x ~10-15mm(d) - to both faces. Threshold: Non-combustible INTUMESCENT: Frame: 1no 15x4 Pyroplex FO8700 fitted centrally within the fraveval. Meeting stile (left leaf only): 1no 15x4 Pyroplex FO8700 fitted centrally within the leaf edge. HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150m
1005mm and 1855mm from the head of each leaf. Closer: Rutland TS.3204 surface-mounted overhead closer fitte the exposed face of each leaf as per manufacturer's instruction Body size: 220mm(w) x 59mm(h) x 42mm(d) Latch: Eurospec steel tubular mortice latch fitted 1000mm from threshold of the left leaf. • Forend size: 57mm(h) x 26mm(w) • Keep size: 57mm(h) x 26mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the late GLAZING: Glass: Pilkington Pyroshield 2, 7mm thick • Aperture Size: 685mm(h) x 685mm(w)

Eaton Panel Products the Installation and maintenance of five door assemblies.

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document details a subset of evidence tanks of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

	Glass Size: 680mm(h) x 680mm(w)Sight Size: 656mm(h) x 656mm(w)
	Beading: Sapele, 20mm(h) x 20mm(d) including 5x5mm bolection and a 20° chamfer.
	Bead Fixing (both leaves): Steel pins, 40mm(I), fitted 50mm from corners at 150mm centres.
	GLAZING SYSTEM: Glazing Perimeter: Intumescent Seals Ltd Therm-A-Glaze 45 10x2mm intumescent fitted between the glass and the glazing bead on both faces
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 32 minutes Insulation: 32 minutes

3.4.3.9 Summary of Test Report RF11172

The essential details of the referenced test report are summarised below. The test has been used to support recessed patterns (based on thinner leaf) and the use of MDF frames.

Date of Test:	28.NOV.2011
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed, unlatched, single acting double doorset - ULSADD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size (both leaves): 2135mm(h) x 915(w) x 43mm(t) Core: Falcon Panel Products Strebord® 35 Facings: MDF (750kg/m³) 4mm thick to both faces. Lipping: Sapele (640kg/m³), 8mm thick to vertical edges only. • Left leaf: 35mm(w) – under MDF faces • Right leaf: 43mm(w) – full thickness of leaf
	FRAME:
PANT	Head & Jambs: MDF (750kg/m³), 70mm(d) x 25mm(w), with 20mm(w) x 12mm(d) planted (pinned) MDF stop. Fire stopping: Rockwool mineral fibre, capped with intumescent mastic ~10-15mm(w) to both faces.
	Threshold: Non-combustible
	INTUMESCENT: Frame: 1no 15x4 Pyroplex FO8700 fitted centrally within the frame reveal. Meeting stile (left leaf only): 1no 15x4 Pyroplex FO8700 fitted centrally within the leaf edge.
	HARDWARE: Hinges: 3no Royde & Tucker H105 lift-off type hinge fitted 150mm, 1000mm and 1855mm from the head of each leaf.
	Closer: Rutland TS.3204 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 59mm(h) x 42mm(d)
	Latch: Eurospec steel tubular mortice latch fitted 1000mm from the threshold of the left leaf.
	 Forend size: 57mm(h) x 26mm(w) Keep size: 57mm(h) x 26mm(w)
	Handle: Aluminium lever type handle fitted appropriate to the latch.
	Closer: Rutland TS.3204 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 59mm(h) x 42mm(d) Latch: Eurospec steel tubular mortice latch fitted 1000mm from the threshold of the left leaf. • Forend size: 57mm(h) x 26mm(w) • Keep size: 57mm(h) x 26mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. GLAZING: Glass: Pilkington Pyroshield 2, 7mm thick • Aperture Size: 685mm(h) x 685mm(w) • Glass Size: 680mm(h) x 680mm(w) • Sight Size: 650mm(h) x 650mm(w)

	Beading: Sapele, 20mm(h) x 20mm(d) including 5x5mm bolection and a 19° chamfer. Bead Fixing (both leaves): Steel pins, 40mm(l), fitted 50mm from corners at 150mm centres. GLAZING SYSTEM: Glazing Perimeter: Intumescent Seals Ltd Therm-A-Glaze 45 10x2mm intumescent fitted between the glass and the glazing bead on both faces
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 39 minutes Insulation: 39 minutes

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document details a subset of evidence tanks of products.

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

3.4.3.10 Summary of Test Report BMT/FEP/F15027A

The essential details of the referenced test report are summarised below. The test has been used to support recessed areas within the leaf

	port recessed areas within the leaf
Date of Test:	14.JAN.2015
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Sealed Tight Solutions Ltd
Tested Product:	A glazed, latched, single acting single doorset – LSASD
Tested Orientation:	Hung opening in towards heating condition
	Hung opening in towards heating condition LEAF: Overall Size: 2007mm(h) x 806(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44, calibrated to 40mm(t) and further reduced to 16mm(t) at fielded areas of unexposed face only. Stiles: Sapele (640kg/m³), 80mm(w) x 40mm(t) Rails: Sapele (640kg/m³), 95mm(w) x 40mm(t) Facings: 2mm(t) PVA Lipping: None FRAME: Head & Jambs: Sapele (640kg/m³), 80mm(d) x 58mm(w), with a 30mm(w) x 18mm(d) integral stop. Fire Stopping: Rockwool mineral fibre capped with intumescent acrylic mastic ~5-10mm(w) x 10-15mm(d) Threshold: Lowthresh Trimline 47mm(w) x 23mm(h) INTUMESCENT: Frame Reveal: 1no 20x4mm Sealed Tight Solutions Ltd STS204FO fitted 12mm from the exposed face of the frame reveal. SMOKE/ACOUSTIC SEALS: Frame Reveal: 1no 6x8mm Schlegel Q-Lon 21 smoke seal grooved into the upstand of the stop. HARDWARE: Hinges: 3no Nico Load Pro lift-off type hinge fitted 145mm, 915mm, and 1688mm from the head of leaf.
	Latch: ERA Trulock multi-point door-lock system, with nib fitted 990mm from the threshold of the leaf. • Forend size: 1635mm(h) x 20mm(w) • Centre keep: 250mm(h) x 35mm(d)
	Closer: Rutland 15.3204 surface-mounted overnead closer titled on the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 59mm(h) x 42mm(d) Latch: ERA Trulock multi-point door-lock system, with nib fitted 990mm from the threshold of the leaf. • Forend size: 1635mm(h) x 20mm(w) • Centre keep: 250mm(h) x 35mm(d) • Top & bottom keeps: 175mm(h) x 35mm(d)

This document remains the property of the leader to ensure that the day of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the reader to en This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

	Lock/Latch Status: Engaged for test
	Handle: Hoppe lever type handle fitted appropriate to the latch.
	HARDWARE PROTECTION:
	Under hinge blade: 1mm Sealed Tight Solutions Ltd ST100X25 graphite
	Encasing centre latch body: 1mm Sealed Tight Solutions Ltd ST140X50 graphite.
	GLAZING:
	 Double-glazed unit comprising: 7mm thick Pilkington Pyroshield 2 fitted on the unexposed face of the doorset
	 10mm thick stainless steel spacer 6.4mm thick laminate glass
	With dimensions:
	Aperture Size: 900mm(h) x 548mm(w) Oliver Size: 900mm(h) x 548mm(w)
	Glass Size: 890mm(h) x 542mm(w)Sight Size: 885mm(h) x 532mm(w)
	Beading: ODL Tri-Sys glazing cassette
	Bead Fixing: Steel screws, 40mm(I), fitted through the manufacturer's pre-drilled positions of the unexposed bead and into the exposed face bead.
	GLAZING SYSTEM (Both Leaves):
	Glazing Perimeter: 10mm(w) x 5mm(t) Sealed Tight Solutions Ltd ST105GT
Test Standard:	Glazing liner: 30mm(w) x 2.5mm(t) Sealed Tight Solutions Ltd ST302 BS 476: Part 22: 1987
Performance:	Integrity: 38 minutes
	on for the process
	A certification door brought and
	thid part and of talon that it for the
	upoks advis operation in the leave of continue of the of t
	Tid 20 the by confidence to his suite of
	ducts with the property of the control of the contr
	Del Protue, Chiciplity Rue 18 22 Thing Can halls
	On Panel Produce, Letted they be station to the character of the contraction of the contr
	Eglou bushing or this define the solution of the state of
	Integrity: 38 minutes Integrity: 38 minutes Integrity: 38 minutes

3.4.3.11 Summary of Test Report Chilt/RF11160

The essential details of the referenced test report are summarised below. The test has been used to support recessed areas within the leaf

has been used to su	pport recessed areas within the leaf
Date of Test:	25.OCT.2011
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	An unlatched, single acting single doorset - ULSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2131mm(h) x 928(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44, reduced to 24mm(t) within mock panelled area. Mock panel facing: 3mm MDF (750kg/m³) to both sides Lipping: Sapele (640kg/m³), 8mm thick to vertical edges only. FRAME: Head & Jambs: European Redwood (572kg/m³), 70mm(d) x 32mm(w), with 20mm(w) x 12mm(d) planted (pinned) European redwood stop. Fire stopping: Intumescent acrylic mastic ~5-10mm(w) x ~10-15mm(d) Threshold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4mm Pyroplex Ltd FO8700 seal fitted 14.5mm from the exposed face.
	HARDWARE: Hinges: 3no Royde & Tucker H101 lift-off type hinge fitted 150mm, 1000mm and 1851mm from the head of the leaf. Closer: Rutland TS.3204 surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 220mm(w) x 59mm(h) x 42mm(d) Latch: Arrone steel mortice latch fitted 1000mm from the threshold of the leaf. Forend size: 155mm(h) x 22 mm(w) Lock/Latch Status: Disengaged for test Handle: Aluminium lever type handle fitted appropriate to the latch. Size: 100mm(w) x 38mm(d) HARDWARE PROTECTION: Under latch forend: 1mm thick BASE Wolman Interdens® Type 15
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 33 minutes
i citorillance.	integrity. 33 minutes at the new part of the n



3.4.3.12 Summary of Test Report BMT/FEP/F15178 Rev A (Doorsets B & C)

The essential details of the referenced test report are summarised below.

The essential details	of the referenced test report are summarised below.
Date of Test:	6.OCT.2015
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	Doorset B: A latched, single acting single doorset – LSASD Doorset C: A latched, single acting single doorset – LSASD
Tested Orientation:	Hung opening in towards heating condition
Tested Orientation: Summary of Test Specimen:	LEAF: Overall Size (both leaves): 1982mm(h) x 686(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 with 6mm(w) x 4mm(d) grooves to both faces – 2 full height vertical grooves and 6 diagonal grooves between the vertical grooves Lipping: Kembang Semangkok (KSK) (740kg/m³), 10mm thick to vertical edges only. FRAME: Head & Jambs: • Doorset B: European Redwood (510kg/m³), 78mm(d) x 36mm(w), with 32mm(w) x 18mm(d) integral stop. • Doorset C: MDF (700kg/m³), 88mm(d) x 26mm(w), with an MDF (700kg/m³) 40mm(w) x 12mm(d) planted (pinned) stop. Fire stopping (both doorsets): Rockwool mineral fibre capped with intumescent mastic, nominally ~10-15mm wide. Threshold (both doorsets): Non-combustible. INTUMESCENT: Frame Reveal (Doorset B): 1no 15x4mm Intumescent Seals Ltd Therm-A-Seal fitted 15mm from the exposed face. Frame Reveal (Doorset C): 1no 15x4mm Intumescent Seals Ltd Therm-A-Seal fitted 25mm from the exposed face. HARDWARE (both doorsets): Hinges: 3no Zoo butt type hinge fitted 140mm, 935mm and 1730mm from the head of each leaf.
	the exposed face of each leaf as per manufacturer's instructions. Body size: 220mm(w) x 59mm(h) x 42mm(d)

This docume fon street de tail containing

	Latch: Yale Snapkeep 3 from the threshold of leaf.	9-CH mortice latch fitted 1000mm
	 Forend size: 75mm(h) x 24 Body size: 65mm(h) x 25m Keep size: 56mm(h) 25mm 	m(d) x 16mm(w)
	Lock/Latch Status: Engaged for te	st
	Handle: Steel lever type handle fitt	ed appropriate to the latch.
Test Standard:	BS 476: Part 22: 1987	
Performance:	Doorset B: Integrity: 38 minutes	Doorset C: Integrity: 45 minutes

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document details a subset of evidence tanks of products.

testing tegine covering a mide range of products like at the covering a mide range of products like at the covering a mide range of products like at the covering a mide range of products.

3.4.3.13 Summary of Test Report WF 405305 (Doorset A)

The essential details of the referenced test report are summarised below.

The essential details	of the referenced test report are summarised below.
Date of Test:	25.OCT.2018
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed, unlatched, single acting, single doorset – ULSASD
Tested Orientation:	Hung opening in towards heating condition
Tested Orientation: Summary of Test Specimen:	Hung opening in towards heating condition LEAF: Overall Size: 2040mm(h) x 930(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Decorative insert: Sapele (640kg/m³) 10mm x 10mm with a 6mm(w) x 6mm(d) V-groove – 2 horizontal and 4 vertical perimeter grooves located 130mm from door edge Lipping: Sapele (640kg/m³), 9mm thick to all edges FRAME: Head & Jambs: European redwood (510kg/m³), 91mm(d) x 32mm(w) with an 39mm(d) x 14mm(w) planted (pinned) European redwood (510kg/m³) stop. Fire stopping: Rockwool mineral fibre capped with intumescent acrylic mastic on the fire side only ~7.3-20mm(w) x 10mm(d) Threshold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4 Lorient Polyproducts Ltd LP1504 fitted 14mm from the exposed face. HARDWARE: Hinges: 3no Eurospec Enduromax stainless steel bearing butt type hinge fitted 150mm, 944mm and 1732mm from the head of the leaf. Closer: Rutland TS.9205 surface-mounted overhead closer fitted on the exposed face of the leaf as per manufacturer's instructions. Body size: 236mm(w) x 55mm(h) x 38mm(d) Latch: ERA tubular latch fitted 1007mm from the bottom of the leaf. Forend size: 55mm(h) x 20mm(w) x 60mm(d) Lock// latch Status: Dispagaged for toot.
	HADDWADE DOOTECTION TO STATE OF THE PERSON WE FOUND
	Under hinge blade: 1mm thick Lorient Polyproducts Ltd MAP
	Handle: Zoo Architectural Stanza ZPZ090SC aluminium lever type handle fitted appropriate to the latch. Size: 110mm(w) x 60mm(d) HARDWARE PROTECTION: Under hinge blade: 1mm thick Lorient Polyproducts Ltd MAP

	Under latch forend: 1mm thick Lorient Polyproducts Ltd MAP Under latch keep: 1mm thick Lorient Polyproducts Ltd MAP
	Chach later resp. Than anon Zonera Coppressed Ltd III is
	GLAZING:
	Glass: Pyroguard EW30 7.2mm thick
	Aperture Size: 732mm(h) x 156mm(w)
	Glass Size: 726mm(h) x 150mm(w)
	Sight Size: 702mm(h) x 126mm(w)
	Beading: Sapele (640kg/m³) 21mm(h) x 25mm(d) including 6x6mm bolection and a 15° chamfer
	Bead Fixing: Steel pins, 50mm(I), fitted 50mm from corners and at 130mm centres thereafter.
2 A	GLAZING SYSTEM:
	Glazing perimeter: Lorient Polyproducts Ltd System 36/7 PLUS LG1513 Plus glazing gasket 15mm(w) x 13mm(d)
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 40 minutes

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

3.4.3.14 Summary of Test Report WF 414162 (Doorset A)

The essential details of the referenced test report are summarised below.

Date of Test:
Tested Product: Falcon Panel Products Ltd Tested Product: A latched, single acting, single doorset – LSASD Hung opening in towards heating condition Summary of Test Specimen: LEAF: Overall Size: 2045mm(h) x 925(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Decorative insert: Ash (710kg/m³) 10mm x 10mm with a 3 3mm(d) groove. 11 full width horizontal grooves Lipping: Ash (710kg/m³), 10mm thick to all edges FRAME: Head & Jambs: Ash (710kg/m³), 143mm(d) x 32mm(w) w 48mm(d) x 15mm(w) planted (pinned) Ash (710kg/m³) stores fire stopping: Rockwool mineral fibre capped with Mann Pyromas A intumescent acrylic mastic ~8-12mm(w) x 10m the exposed face.
Tested Product: A latched, single acting, single doorset – LSASD Hung opening in towards heating condition LEAF: Overall Size: 2045mm(h) x 925(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Decorative insert: Ash (710kg/m³) 10mm x 10mm with a 3 3mm(d) groove. 11 full width horizontal grooves Lipping: Ash (710kg/m³), 10mm thick to all edges FRAME: Head & Jambs: Ash (710kg/m³), 143mm(d) x 32mm(w) w 48mm(d) x 15mm(w) planted (pinned) Ash (710kg/m³) sto Fire stopping: Rockwool mineral fibre capped with Mann Pyromas A intumescent acrylic mastic ~8-12mm(w) x 10 the exposed face.
Tested Orientation: Hung opening in towards heating condition Summary of Test Specimen: LEAF: Overall Size: 2045mm(h) x 925(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Decorative insert: Ash (710kg/m³) 10mm x 10mm with a 3 3mm(d) groove. 11 full width horizontal grooves Lipping: Ash (710kg/m³), 10mm thick to all edges FRAME: Head & Jambs: Ash (710kg/m³), 143mm(d) x 32mm(w) w 48mm(d) x 15mm(w) planted (pinned) Ash (710kg/m³) sto Fire stopping: Rockwool mineral fibre capped with Mann Pyromas A intumescent acrylic mastic ~8-12mm(w) x 10 the exposed face.
Summary of Test Specimen: Decorative insert: Ash (710kg/m³) 10mm x 10mm with a 3 3mm(d) groove. 11 full width horizontal grooves Lipping: Ash (710kg/m³), 10mm thick to all edges FRAME: Head & Jambs: Ash (710kg/m³), 143mm(d) x 32mm(w) w 48mm(d) x 15mm(w) planted (pinned) Ash (710kg/m³) storestopping: Rockwool mineral fibre capped with Mann Pyromas A intumescent acrylic mastic ~8-12mm(w) x 10mm thick exposed face.
Overall Size: 2045mm(h) x 925(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Decorative insert: Ash (710kg/m³) 10mm x 10mm with a 3 3mm(d) groove. 11 full width horizontal grooves Lipping: Ash (710kg/m³), 10mm thick to all edges FRAME: Head & Jambs: Ash (710kg/m³), 143mm(d) x 32mm(w) w 48mm(d) x 15mm(w) planted (pinned) Ash (710kg/m³) storestopping: Rockwool mineral fibre capped with Mann Pyromas A intumescent acrylic mastic ~8-12mm(w) x 10mm the exposed face.
INTUMESCENT: Frame Reveal: 1 no 10x4mm Pyroplex FO8500 fitted 8mm from the exposed face. 1 no 10x4mm Pyroplex 30150 fin seal fitted 28mm exposed face. SMOKE/ACOUSTIC SEALS: Frame Reveal: 1 no 10x4mm Pyroplex 30160 fin seal fitted 28mm exposed face. 1 no 14mm(w) Lorient Polyproducts Ltd LAS1206 the upstand of the stop HARDWARE: Hinges: 3no Royde & Tucker H207 stainless steel bearing hinge fitted 145mm, 955mm and 1765mm from the head of Closer: Arrone AR7383 concealed overhead closer fitted vhead of the leaf as per manufacturer's instructions. Body size: 430mm(w) x 32mm(fi) x 49mm(d) Arm channel: 464mm(w) x 15mm(h) x 23mm(d)

	Latch: Winkhaus STV-AV3 multi-point door-lock system, with nib fitted 1000mm from the threshold of the leaf.
	 Forend size: 1770mm(h) x 20mm(w) x 3mm(t) Centre lock body: 210mm(h) x 16mm(w) x 45mm(d) Centre keep: 250mm(h) x 24mm(d) Top & bottom lock body: 112mm(h) x 16mm(w) x 45mm(d) Top & bottom keeps: 155mm(h) x 24mm(d) Lock/Latch Status: Engaged for test Handle: Serozzetta Plaza steel lever type handle fitted appropriate to the latch.
	Eye viewer: Jedo JV942 (Ø5mm) fitted 735mm down from the head of the leaf.
	Letter plate: Royde & Tucker LP008 fitted 1183mm down from the head of the leaf.
2 A	Drop seal: 1no 20x12mm NOR810s drop seal, fitted centrally within a rebate at the base of the leaf.
	HARDWARE PROTECTION:
	Under hinge blade: 1mm thick Sealmaster graphite intumescent
_	Encasing latch body: 1mm thick BASF Wolman Interdens® Type 15
	Under latch keep: 1mm thick BASF Wolman Interdens® Type 15
	Surrounding closer and closer arm channel: Arrone intumescent kit
	Surrounding eye viewer: Jedo JV942 1mm thick graphite intumescent kit
	Surrounding letter plate: Royde & Tucker LP008 intumescent kit
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 36 minutes

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

3.4.3.15 Summary of Test Report WF 144699

The essential details of the referenced test report are summarised below. This test has been used to support rebated meeting stiles

ide been deed te eap	port rebated meeting stiles
Date of Test:	9.March.2005
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Millebbium Door Systems
Tested Product:	A unlatched, single acting, double doorset – ULSADD rebated m/s
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2100mm(h) x 900(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 – density stated at 630kg/m3 Lipping: Sapele (640kg/m³ stated), on vertical Hanging edges 10 (t) And m/s 20 (t) including a 24mm wide by 12mm deep rebate Lipping bonded with PU adhesive FRAME: Head & Jambs: White Spruce (442kg/m³ measured), 70mm(d) x 32mm(w) with a 24m m(d) x 13.5mm(w) planted (pinned) White Spruce (442kg/m³) stop. Threshold: Non-combustible
	INTUMESCENT: Frame Reveal: • Head 1no 20x4mm Lorient LP2004SS fitted centrally in frame reveal. • Jamb 1no 10x4mm Lorient LP1004 fitted centrally in frame reveal. Meeting stile • 1no 15x4mm Lorient LP1504SS fitted centrally in the rebate of each leaf HARDWARE:
	hinges: 3no Royde & Tucker Hi-Load 102 steel bearing butt type hinge Closer:Dorma Door Controls TS73V overhead closer fitted within the head of the leaf as per manufacturer's instructions.
	Under hinge blade: 1mm thick Interdens beneath all hinge blades.
Test Standard:	BS 476: Part 22: 1987
Performance:	Integrity: 38 minutes
	HARDWARE PROTECTION: Under hinge blade: 1mm thick Interdens beneath all hinge blades. BS 476: Part 22: 1987 Integrity: 38 minutes

3.5 Summary of Test Report BMT/FEP/F14029 (Doorset A)

The referenced test report, the essential details of which are summarised below, is the primary data for the Streframe glazing beads in 54mm thick Strebord:

Date of Test:	24.JUN.2021
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:	Falcon Panel Products Ltd
Tested Product:	A glazed unlatched, single acting, single doorset – ULSASD
Tested Orientation:	Hung opening in towards heating condition
Summary of Test Specimen:	LEAF: Overall Size: 2040mm(h) x 926mm(w) x 56mm(t) Core: Falcon Panel Products Strebord® 44 with 40mm(w) x 44mm(t) Streframe® stiles and rails. Facings: MDF (700kg/m³), 6mm thick applied to both faces. Lipping: Streframe® (500kg/m³), 10mm thick applied to all edges.
	FRAME: Head & Jambs: Streframe® (500kg/m³), 100mm(d) x 32mm(w), with a 12mm(d) x 32mm(w) planted (pinned) stop. Fire stopping: Rockwool mineral fibre capped with intumescent mastic, ~10-15mm wide. Threshold: Non-combustible
	INTUMESCENT: Frame Reveal: 1no 15x4mm Pyroplex Ltd FO8700 seal fitted centrally within the frame reveal.
	HARDWARE: Hinges: 3no Hanson and Beards bearing butt type hinge fitted 148mm, 966mm and 1740mm from the head of the leaf. Closer: Dormakaba TS 71 surface-mounted overhead closer fitted on the exposed face of each leaf as per manufacturer's instructions. Body size: 232mm(w) x 68mm(h) x 45mm(d) Latch: Assa Abloy steel mortice • Forend size: 230mm(h) x 24mm(w) • Keep size: 180mm(h) x 25mm(w) Handle: Aluminium lever type handle Ø52mm Lock/Latch Status: Disengaged for test Drop seal: 1no 20x12mm NOR810s drop seal, fitted centrally within a rebate at the base of the leaf.

Falcon Ranuti documestative resonate documentative resting te simple documentative resting te simple documentative resting to sure resting to the resting to

	HARDWARE PROTECTION:
	Under hinge blades: 1mm graphite
	Under latch forend: 1mm graphite
	Under keeps: 1mm graphite
	Around latch body: 1mm graphite
ZA.	GLAZING: • Glass: Pyroguard EW30 7mm thick • Aperture Size: 759mm(h) x 164mm(w) • Glass Size: 753mm(h) x 158mm(w) x 7mm(t) • Sight Size: 735mm(h) x 140mm(w) • Beading: Streframe® 37mm(h) x 26mm(d) with a 7x13mm bolection and a 25° chamfer. • Bead Fixing: 16g, 60mm steel pins fitted 25-50mm from the corners and at 120mm intervals. GLAZING SYSTEM: Glazing Perimeter: 25x4mm Intumescent Seals Limited Therm-A-Bead monoammonium phosphate based intumescent fitted between the glass and the glazing bead. Lining Aperture: 54x2mm Therm-A-Line
Test Standard:	BS 476: Part 22
Performance:	Integrity: 53 minutes
Reason for Use	Demonstration of the integrity of Streframe® beading
	Initial Failure: Cotton pad at 53:57 – Latch position.
Failure Mode:	Further Failure: Continuous flaming at 55:23 – Latch position.

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of talcon panel products that the property of the reader to ensure that the tall the property of the prope This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

3.6 Summary of Test Report WF505552 (Doorset A) DRAFT

The referenced test report, the essential details of which are summarised below, is currently in draft but was conducted to test the limits of scope given within the assessment, specifically the maximum glazed area in the Strebord 44 design. The information recorded during the test has been deemed suitable to support the maximum glazed area stated:

nas been deemed	suita	ble to support the maximum glazed area stated:
Date of Test:		24.JUN.2021
Identification of Body:	Test	Warringtonfire Testing and Certification Ltd. UKAS No. 1762
Sponsor:		Falcon Panel Products Ltd
Tested Product:		A glazed unlatched, single acting, single doorset – ULSASD
Tested Orientation	:	Hung opening in towards heating condition
	Test	LEAF: Overall Size: 2744mm(h) x 918mm(w) x 44mm(t) Core: Falcon Panel Products Strebord® 44 Lipping: Sapele (640kg/m³), 8mm thick applied to all edges. FRAME: Head & Jambs: Caberwood Trade MDF (593kg/m³), 70mm(d) x 25mm(w), with a 12mm(d) x 20mm(w) planted (screwed) stop. Fire stopping: Rockwool mineral fibre capped with Mann McGowan Pyromas A, ~4.6-15mm wide. Threshold: Non-combustible INTUMESCENT: Frame Reveal: 1no 15x4 Sealed Tight Solutions STS154FO fitted 14.5mm from the opening face of the frame reveal. HARDWARE: Hinges: 4no Rutland RH.BB.43R.SS stainless steel bearing butt type hinge fitted 150mm, 450mm, 1456mm and 2461mm from the head of the leaf. Closer: Rutland ITS.11204 concealed overhead type closer rebated within the head of each leaf and within the frame as per manufacturer's instructions. Body size: 256mm(l) x 55(h)mm x 32(w)mm Arm size: 461mm(l) x 30mm(w) Latch: Rutland RDL.L.55 DIN Latch Forend size: 234mm(h) x 22mm(w) x 3mm(t)
		Escutcheon: Altro E-1 steel escutcheon Ø52mm x 8mm
		 Arm size: 461mm(l) x 30mm(w) Latch: Rutland RDL.L.55 DIN Latch Forend size: 234mm(h) x 22mm(w) x 3mm(t) Body size: 166mm(h) x 14mm(w) x 81mm(d) Keep size: 180mm(h) x 24/41mm(w) x 1mm(t) Cylinder: UAP Kinetica 3* KIN30T/30CAS-HELIX-K4 Escutcheon: Altro E-1 steel escutcheon Ø52mm x 8mm Lock/Latch Status: Disengaged for test

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

Resting regimentation and the found of products ite at the state documentation and the found of the continue o

	Drop seal: 20mm(h) x 12mm(t) Sealed Tight Solutions Ltd STS422 fitted centrally within the bottom edge of the leaf.
	HARDWARE PROTECTION:
	Under hinge blades: 1mm Sealed Tight Solutions Ltd raw graphite
	Under latch forend: 1mm Sealed Tight Solutions Ltd raw graphite
	Under keeps: 1mm Sealed Tight Solutions Ltd raw graphite
	Around latch body: 1mm Sealed Tight Solutions Ltd raw graphite
	GLAZING:
	Glass: Pyrobelite 7mm thick
	o Aperture Size: 2546mm(h) x 720mm(w)
	o Glass Size: 2538mm(h) x 712mm(w) x 7mm(t)
	 Sight Size: 2500mm(h) x 685mm(w)
	 Beading: Sapele (640kg/m³) 15mm(h) x 13.5mm(d) Bead Fixing: 16g steel pins, 50mm from the corners and at
	150mm intervals.
	GLAZING SYSTEM:
	Glazing Perimeter: Sealed Tight Solutions Ltd ST104 2x13.5mm PVC-
	encased graphite based intumescent strip fitted between the glass and the glazing bead.
	Setting blocks: Calcium silicate 7mm(w) x 25mm(d) x 3mm(t) set 80 mm
	from corners on the horizontal edges, 80 mm from corners on vertical edges – with 4 blocks on each vertical edge and 2 blocks on bottom edge, none on head
Fest Standard:	
Test Standard: Performance:	edges – with 4 blocks on each vertical edge and 2 blocks on bottom edge, none on head. BS EN 1634-1
	edges – with 4 blocks on each vertical edge and 2 blocks on bottom edge, none on head. BS EN 1634-1

This document detains a subset of a mide range of products.

*Esting regime covering a wide range of products site is

Technical specification

General

The technical specification for the proposed doorset is given in the following sections and is based on the test evidence for the doorset design, summarised in section 3.

Intended Use

The intended use of the proposed door assembly is summarised below:

A pedestrian doorset including any frame, door leaf or leaves which is provided to give a fire resisting capability when used for the closing of permanent openings in fire resisting separating elements, which together with the building hardware and any seals (whether provided for the purpose of fire resistance or smoke control or for other purposes such as draught or acoustics) form the assembly.

Door Leaf

Leaf 1 - Strebord 44

The primary construction for door leaves of this design comprises the following:

A solid sheet of 44mm thick Strebord® 44 three layered particleboard (density range 510kg/m³ – 6 50kg/m³). Where specified, the leaves are lipped with hardwood.

4.3.2 Leaf 2 - Strebord 54

The primary construction for door leaves of this design comprises the following:

A solid sheet of 54mm thick Strebord® 54 three layered particleboard (density range 510kg/m³ - 650kg/m³). Where specified, the leaves are lipped with hardwood.

4.3.3 Leaf 3 – Strebord 44 or 54 PVC encapsulated

The primary construction for door leaves of this design comprises the following:

- A solid sheet of 44mm thick Strebord® 44 or 54mm thick Strebord® 54 three layered particleboard (density range 510kg/m³ - 650kg/m³). Where specified, the leaves are lipped with hardwood.
- The leaf is to be clad with a maximum of 2mm thick PVC facing which fully encapsulates the leaf faces and edges and includes rounded corners to enable antischure installation ain stree property of the reader to ensure that that any product street of the reader to ensure that that any product street of the reader to ensure that that any product street of the reader to ensure that that any product street of the reader to ensure that that any product street of the reader to ensure that that any product street of the reader to ensure that the reader to ensure the reader to ensure that the reader to ensure the reader to ensur This document remains the property of the evidence within is fit for purpose.

 This document remains the property of the evidence within is fit for purpose. acin, the PVC to be formed around the leaf. The following is a list of PVC facing materials
 - Acrovyn
 - Gradus 0
 - Intastop 0
 - Kydex
 - Yeoman Shield
 - Bioclad \bigcirc
 - **BioArmis**
 - **Pawlings**
 - Altro Whiterock

4.3.4 Leaf 4 - Strebord 44 or 54 Over-rebated

The primary construction for door leaves of this design comprises the following:

- A solid sheet of 44mm thick Strebord® 44 three lavered particleboard (density range 510kg/m³ - 650kg/m³). Where specified, the leaves are lipped with hardwood.
- The lipping is to include a 34mm wide x 13mm deep rebate (44mm thick leaves) and a 44mm wide x 13mm deep rebate (54mm thick leaves) which will result in the leaf being rebated over the frame by 8-10mm

4.4 **Door Frames**

The following door frames have been assessed as acceptable for use with the proposed doorset design based on the test evidence cited in section 3 and are detailed in the following sections. The frames are constructed using the following materials:

- Timber based frames
- **PVC clad frames**

The frames are then grouped according to whether they are suitable for single action (SA) or double action (DA) configurations:

- SA are Single Action frames
- DA are Double Action frames

The following sections detail the minimum frame dimensions and the required materials for each of the frame types.

All dimensions are given in millimetres (mm)

The following table details the wall construction that each frame type can be installed into:

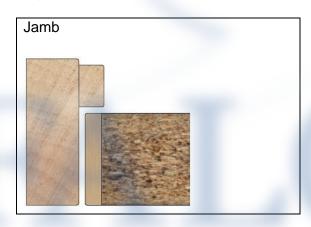
4.4.1 Frame 1 and 2 Group - SA

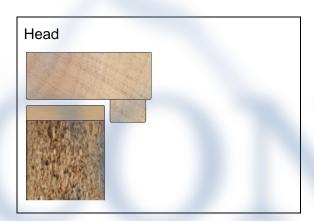
The construction of the Frame 1 and Frame 2 door frame types includes the following materials and profiles.

4.4.1.1 Frame 1.1 and 2.1 - Standard with planted stop - SA

Minimum dimensions

Frame 70 x 30 Stop 12 x 20





Permitted Materials for frame type 1.1	Minimum Density (kg/m³)
Softwood/Hardwood	450
MDF ¹	650
Streframe® Lightweight Hardwood¹	450
Streframe® E Engineered Softwood¹	500
Woodex® Engineered Timber ¹	500

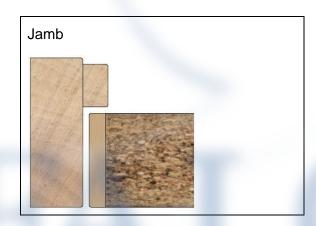
1 Transoms and mullions are not permitted using these material types.

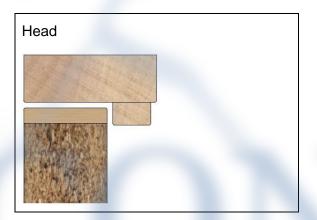
Permitted Materials for frame type 2.1	Minimum Density (kg/m³)
	(kg/m³) (1,000 0) 1000 00 1000 000 0000 0000 0000
Hardwood	(kg/m³) (10) (k
MDF ²	750 Ktal Hollistit a al Hilliste a
2 Transoms and mullions are not permitted using this material to the part of t	Pesset to continue to the state of the state

4.4.1.2 Frame 1.2 and 2.2 - Slimline with planted stop - SA

Minimum dimensions

Frame 70 x 25 20 x 12 Stop





Permitted materials for frame 1.2	Minimum Density (kg/m³)
Softwood/Hardwood	450
MDF ¹	650
Streframe® Lightweight Hardwood ¹	450
Streframe® E Engineered Softwood¹	500

1 Transoms and mullions are not permitted using these material types.

Permitted materials for frame 2.2	Minimum Density (kg/m³) (kg/m³) 650 750 xill (kg/m²) 750 xill (kg/m²)
Hardwood	(kg/m³) (kg/m³) (kg/m³) (kg/m³) (kg/m³)
MDF ²	750 till the of the of the the
2 Transoms and mullions are not permitted using this material ty And Parel Products the support and products the support of t	750 xiftic the desire that the production of the

4.4.1.3 Frame 1.3 and 2.3 - Standard with integral stop - SA

Minimum dimensions

Frame 70 x 30 20 x 12 Stop





Permitted materials for frame 1.3	Minimum Density (kg/m³)
Softwood/Hardwood	450
MDF ¹	650
Streframe® Lightweight Hardwood¹	450
Streframe® E Engineered Softwood ¹	500
Woodex® Engineered Timber ¹	500

1 Transoms and mullions are not permitted using these material types.

Permitted materials for frame 2.3	Minimum Density (kg/m³)
Hardwood	650 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MDF ²	7,50 (3/0) 21/0 (11/0) 3/0/1/25 30
2 Transoms and mullions are not permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using this material to a superior of the permitted using the pe	Minimum Density (kg/m³) 650 750 750 750 Minimum Density 650 750 Minimum Density 650 Minimum Density Minimum Density

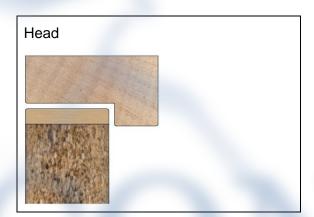
*Esting regimentation can be round on our medsite at further documentation can be round on our medsite at the restriction of the standard of t

4.4.1.4 Frame 1.4 and 2.4 – Slimline with integral stop – SA

Minimum dimensions

Frame 70 x 25 20 x 12 Stop





Permitted materials for frame 1.4	Minimum Density (kg/m³)
Softwood/Hardwood	450
MDF ¹	650
Streframe® Lightweight Hardwood¹	450
Streframe® E Engineered Softwood¹	500

1 Transoms and mullions are not permitted using these material types.

Permitted materials for frame 2.4	Minimum Density
	(kg/m³)
Hardwood	650 ₁₀ 000
MDF ²	750 the holie
Hardwood MDF ² 2 Transoms and mullions are not permitted using this material to the state of	750 750 The state of the stat

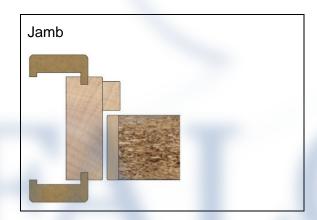
*esting regine covering and example of products the at further documentation and example found on Justine of the covering and example found on Justine of the covering and example found on Justine of the covering and example for the covering of the coveri

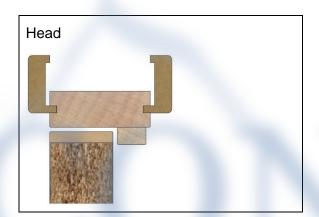
4.4.1.5 Frame 1.5 and 2.5 - Telescopic architrave with planted stop - SA

Minimum dimensions

Frame 70 x 32 20 x 12 Stop

Groove central in frame 6 x 6 max





Permitted materials for frame 1.5	Minimum Density (kg/m³)
Softwood	510
Hardwood	510

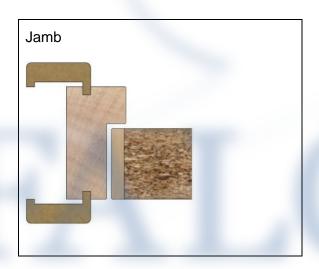
Permitted materials for frame 2.5	Minimum Density (kg/m³)
Hardwood	650 ¿ (^{\$6})
MDF ^{1, 2}	750 NOCE .
1 Transoms and mullions are not permitted us 2 MDF may be minimum 30mm thick section	sing this material types. at head and jambs, excluding stop, sometimes at head and jambs, excluding stop, sometimes and ja
	Souther the south of the state
	ity batty evalue of the fight to be staying
	ducts little in a little of the property of late of evidence from an extension of the property of the late of the
	The little of the protected entering the range of a little range o
Next.	duce institutionally of the the subset of motor of constitution of the subset of the s
South State of State	document of the description of the containing of
	tistle ranife documente documentum
	this terther to

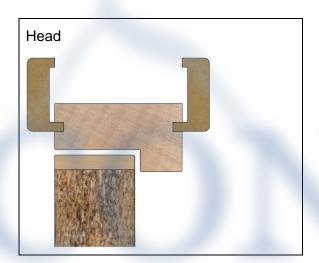
4.4.1.6 Frame 1.6 and 2.6 - Telescopic architrave with integral stop SA

Minimum dimensions

Frame 70 x 32 20 x 12 Stop

Groove central in frame 6 x 6 max





*esting resine covering a nide range of products the at fund on our who rinto

Permitted materials for frame 1.6	Minimum Density (kg/m³)
Softwood	510
Hardwood	510

Permitted materials for frame 2.6	Minimum Density (kg/m³)
Hardwood	650 750 4 ***********************************
MDF ^{1,2}	750 Ethe Philie Lid.
MDF ^{1,2} 1 Transoms and mullions are not permitted using this m 2 MDF may be minimum 30mm thick section at head an	750 aterial types. Indigates a school of the state of t

4.4.1.7 Frame 1.7 and 2.7 – Integral architrave with planted stop – SA

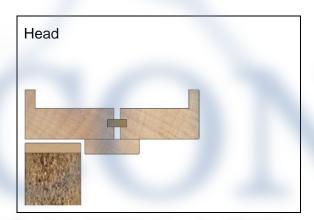
Minimum dimensions

Frame 70 x 32 Stop 20 x 12

Integral architrave around wall 25 x 12

Note – if the gap between frame and wall is between 5 and 10 and the fire stopping complies with section 12.1 then the Integral architrave can be reduced to 15 x 12.





Permitted materials for frame 1.7 and 2.7	Minimum Density
	(kg/m³)
Softwood	510
Hardwood	510

Falcon Panel Products Lind and Indian to the Products the Products Lind and Products

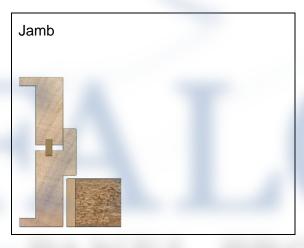
4.4.1.8 Frame 1.8 and 2.8 – Integral architrave with integral stop – SA

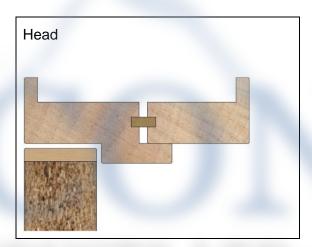
Minimum dimensions

Frame 70 x 32 20 x 12 Stop

Integral architrave around wall 25 x 12

Note – if the gap between frame and wall is between 5 and 10 and the fire stopping complies with section 12.1 then the Integral architrave can be reduced to 15 x 12.





Permitted frame materials for frame 1.8 and 2.8	Minimum Density (kg/m³)
Softwood	510
Hardwood	510

4.4.2 Frame 3 Group - SA

Frame type 3 is a single acting frame and consists of a solid softwood timber core encapsulated with 2mm PVC sheet or 2mm PVC bonded to the faces in strips. The timber requirements for the frame core are given below each set of drawings. Assessed PVC types for encapsulating the door frame are the same as that assessed for the door loof (200) 4.3.3)

ne responsibility of the leader to ensure that that and purpose. This document details a subset of evidence from an extensive covering a winder to the front of the first of the following a suite of the following sectic sections, s This document responsibility of the reader to ensure that the property of the tree to ensure that the property of the property Panal Products lind sulports third party certain of fine Jacon Panel Products Ltd supports third party of the state of the support of the state of the support of the su *esting resine covering and example of products the at further documentation and example found on the remains the covering and example found on the remains the covering and example found on the residence of the covering and example for the covering and example of products.

4.4.2.1 Frame 3.1 - Postformed - SA

Minimum dimensions of timber core

Frame 85 x 32 28 x 18 Stop

Maximum rounding of corners (closing and hanging edges only)



Head
Head detail TBA

Permitted materials for frame 3.1	Minimum Density (kg/m³)
Softwood & PVC	510
MDF & PVC ¹	650
Hardwood & PVC	510
Streframe® E Engineered Softwood & PVC ¹	500

¹ Transoms and mullions are not permitted using this material types.

Eaton Panel Products lid supports third party certification for the products lid supports third party certification for the products lid supports third party certification for the products lid supports lid supports the products lid supports lid support This document, responsibility of the reader to ensure that the property of the This document remains the properties and preceding the avidence within is the for durose.

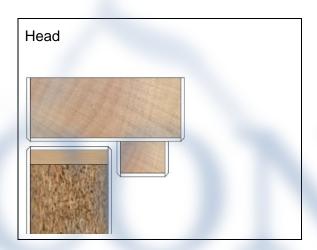
This document remains the properties and the avidence within is the reactive of the free avidence within is the form of the fire avidence within is the fire avidence within it av This document detains a subset of evidence from an extensive of products. *Esting regimentation can be round on our website at Further documentation can be round on our website at Further documentation can be recorded as the found of the contraction of the c

4.4.2.2 Frame 3.2 - Clad with planted stop - SA

Minimum dimensions of timber core

85 x 32 Frame 28 x 12 Stop





Permitted materials for frame 3.2	Minimum Density (kg/m³)
Softwood & PVC	510
MDF & PVC ¹	650
Hardwood & PVC	510
Streframe® E Engineered Softwood & PVC¹	500

1 Transoms and mullions are not permitted using this material types.

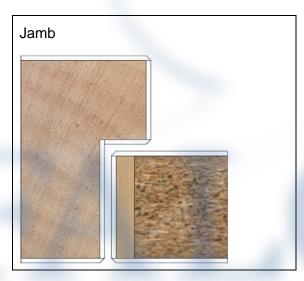
Falcon Panel Products Lid supports third party certification for the products the support and maintenance of fine door assemblies. This document repairs the property of the reader to ensure that that any product the repair of the reader to ensure that the repair of the reader to ensure that the reader to ensure the responsibility of the reader to ensure the reade This document remains the property of Falcon Panel Products that any problem.

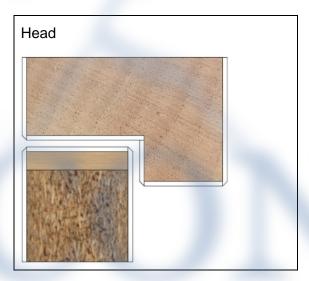
This document remains the property of the evidence within is fit for purpose. This document details a subset of evidence from an extensive *Esting regime covering a wide range of products ite at the regime documentation and performent ation and the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of

4.4.2.3 Frame 3.3 - Clad with integral stop - SA

Minimum dimensions of timber core

Frame 85 x 32 28 x 18 Stop





Permitted materials for frame 3.3	Minimum Density (kg/m³)
Softwood & PVC	510
MDF & PVC ¹	650
Hardwood & PVC	510
Streframe® E Engineered Softwood & PVC ¹	500

¹ Transoms and mullions are not permitted using this material types.

Eaton Panel Products lid supports third party certification for the products lid support to the products lid suppo This document repairs the property of the reader to ensure that that any product the repair of the reader to ensure that the repair of the reader to ensure that the reader to ensure the responsibility of the reader to ensure the reade This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose. This document detains a subset of evidence from an extensive *Esting regime covering a wide range of products ite at further documentation and performed in the found of t

4.4.3 Frame 4 and 5 Group - DA

The construction of the Frame 4 and Frame 5 door frame types includes the following materials and profiles.

4.4.3.1 Frame 4.1 and 5.1 – Standard double action

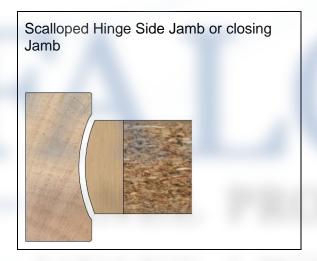
Minimum dimensions

Scalloped Frame 70 x 32 at thinnest part of scalloped section

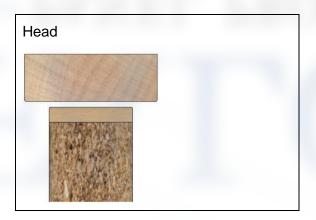
Square Frame (closing jamb) 70 x 32

Head 70 x 44 (to accommodate head pivot)

Radius in scalloped frame Depends on location of pivot point plus 3mm for door gap







Q.
S
ر دری
400
6, 163
"He To"
or con
255 15
101 of 0 100 10
31, 100, 00, 15,
Fig. 19 S. Jili.
estification to the product of
1/ 0/ /2/ //

Permitted materials for frame 4.1	Minimur	n Density
	(kg/m³)	all city stir.
Softwood/Hardwood	01t5 drie 450 10	suithin refue
MDF ¹	*927 *101 \$ 620 'Yel	ce enige, sugge
Streframe® Lightweight Hardwood¹	110 25 Stall 2 115 1 1 2 450 1	et of hide found
Streframe® E Engineered Softwood ¹	1910 10 1 10 11 11 500 0 5 11 1	ing an pedice

¹ Transoms and mullions are not permitted using these material types.

Permitted materials for frame 5.1	Minimum Density
	(kg/m³)
Hardwood	650
MDF ¹	750

1 Transoms and mullions are not permitted using this material types.

4.4.4 Frame 6 Group - DA

The construction of the Frame 6 door frame type includes the following materials and profiles.

Frame 6 is a single acting frame and consists of a solid softwood timber core encapsulated with 2mm PVC sheet. The timber requirements for the core are given below each set of drawings

4.4.4.1 Frame 6.1 – Postformed double action

Minimum dimensions of timber core

Frame 85 x 32

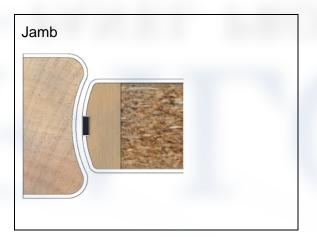
Scalloped Frame 85 x 32 at thinnest part of scalloped section

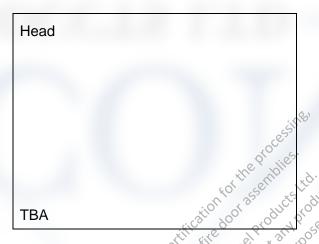
Square Frame 85 x 32

Head 85 x 44 to accommodate head pivot

Radius in scalloped frame Depends on location of pivot point plus 3mm for door gap

Maximum rounding of corners 8mm radius on the closing edge of the leaf only





Permitted Material for frame 6		Minimum Density
	hird	(kg/m³), 2 10 11 15 11 15 11 1
Softwood & PVC	orts drive	510 to en within cerc
MDF & PVC ¹	d supportant	650 Lence ideline
Hardwood & PVC	ins exp	510 in ex of ride to the
Streframe® E Engineered Softwood & PVC1	Blogge in Lewing	\$500 5 JUST 10 3 TO SO

Transoms are not permitted using these material types, sith a differential types and the second state of t

4.4.4.2 Frame 6.2 - Clad DA

Not Permitted

4.4.5 Frame 7 Group – TBA

4.4.6 Frame 8 Group – Studco EZ Jamb

The Studco EZ Jamb comprises a steel frame, which wraps around a timber stud and permits 2 fitting arrangements for the leaf. One fitting arrangement requires a flush lipping, the other arrangement requires the lipping to be rebated by 6mm (d) by 11mm (w) adjacent to the stop. It can only be used with leaf 2 (54 thick)

This means the frames are split further into

Frame 8(54) flush lipping, 2 Piece – 8.1

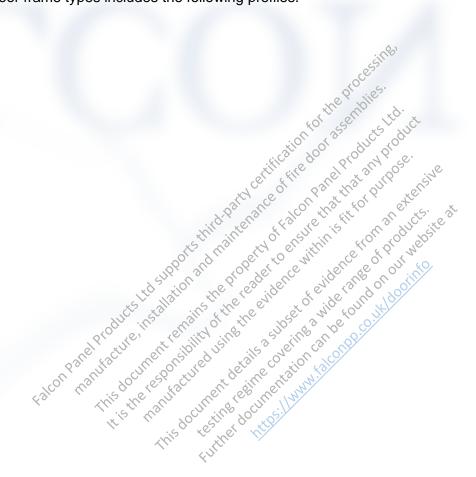
Frame 8(54) flush lipping, 1 Piece - 8.2

Frame 8(54) rebated lipping - 8.3

Notes:

- 1. The frame must be painted with the following materials:
 - 1 mm thick Dry Film Thickness Bollum intumescent paint ref Bollum Brosteel Ultra 60 at the following locations:
 - All internal faces of the frame adjacent to the wall
 - On the external face of the frame rebate section

The construction of the Frame 8 door frame types includes the following profiles.

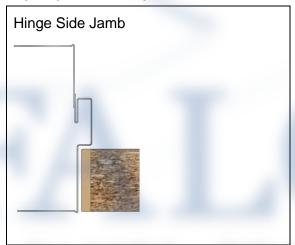


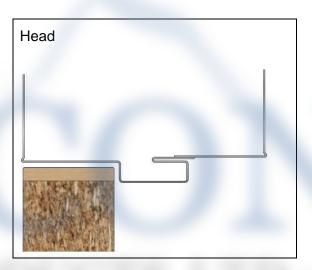
4.4.6.1 Frame 8(54) – Studco EZ Jamb 54 with flush lipping – 2 piece - SA – 8.1

This is a bespoke framing system and the dimensions are as tested with the exception that the second piece that forms the overall frame section can be extended to cover a wall up to 150mm thick

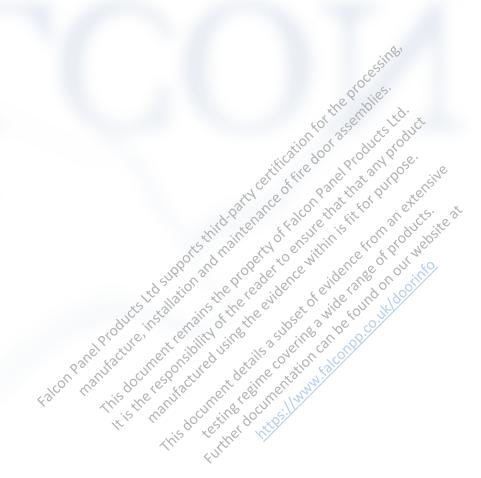
Material: steel – 1mm thick

Leg length oversailing wall 35 to 60mm





Material	Minimum Density (kg/m³)
Steel (as manufactured by Studco EZ Jamb)	N/A

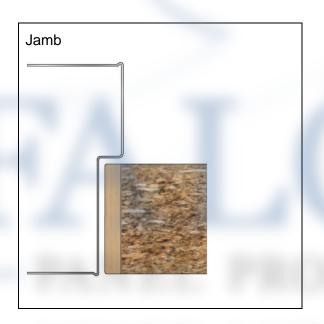


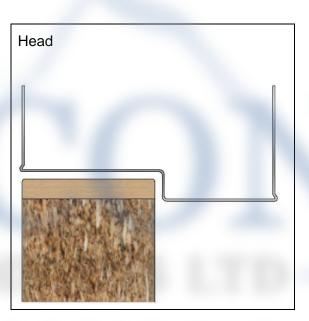
4.4.6.2 Frame 8(54) – Studco EZ Jamb 54 with flush lipping – 1 Piece - SA – 8.2

This is a bespoke framing system and the dimensions are as tested with the exception that the depth of frame can be extended to cover a wall up to 150mm thick

Material: steel – 1mm thick

Leg length oversailing wall 35 to 60mmm





This document repairs the property of a locure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that the reader to ensure that that any product of the reader to ensure that the reader to ensure that the reader to ensure the reader to ensure that the reader to ensure the reader This document remains the property of Falcon Panel Products that any problem.

This document remains the property of the evidence within is fit for purpose.

This document details a subset of evidence from an extensive

*Esting regimentation and continued in the found of the documentation and continued in the found of the found

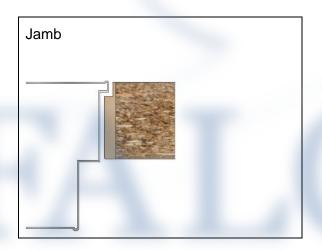
Material	Minimum Density (kg/m³)
Steel (as manufactured by Studco EZ Jamb)	N/A
Falon Panel Production from the first thick th	N/A N/A N/A N/A N/A N/A N/A N/A

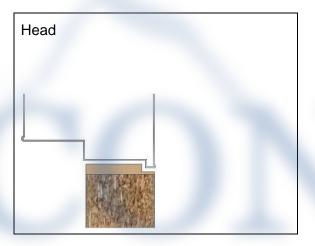
4.4.6.3 Frame 8(54) – Studco EZ Jamb 54 with rebated lipping SA – 8.3

This is a bespoke framing system and the dimensions are as tested with the exception that the depth of frame can be extended to cover a wall up to 150mm thick

Material: steel – 1mm thick

Leg length oversailing wall 35 to 60mm





Material	Minimum Density (kg/m³)
Steel (as manufactured by Studco EZ Jamb)	N/A

Taton Panel Products lide unports and mains the products like the

4.4.7 Frame 9 Group - TBA

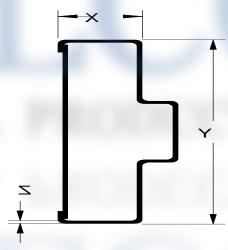
4.4.8 Frame 10 - One-Piece Steel Frame

The following one piece steel frame profile has been successfully tested with 54mm thick Strebord and is therefore assessed for use with leaf 2.

The tested frame specification comprised the following.

Material	Size (mm)	Min. Density (kg/m³)
1.5mm thick rolled mild steel	171mm wide x 58mm thick including a 20mm deep x 51mm wide integral stop	N/A

The door frames must be manufactured from mild steel as tested or alternatively stainless steel of the appropriate grade, e.g. 304 or 316 may be used. The frame dimensions may be varied within the following parameters:



X: 26 to 50 mm

Y: 90 to 250 mm (providing the frame reveal dimensions are maintained)

Z: 1.5 to 3.0 mm

The frame may be hollow or back filled with mortar or concrete. Plasterboard, mineral fibre, glass fibre and ceramic wool must not be used. See the data sheets at the end of this appendix for details of the required intumescent seal specification for steel frame constructions.

4.4.9 Frame 11 – Morland

The Morland, Forever Firecheck frame system is based on a 90 x 30mm – MDF (680kg/m3) core with laminate facing, and a 30 x 12mm thick MDFplanted stop also laminated. *Esting regimentation and confine of products ite of the state of the

4.5 Doorset Configurations & Maximum Leaf Sizes.

4.5.1 General

The evaluation of the leaf size for each door leaf option and doorset configuration is based on the tests listed in Section 3 and takes into account:

- the margin of over performance above 30 minutes integrity for the design
- the characteristics exhibited during test and
- the doorset configuration tested.

The evaluation of the permitted configuration included in this field of application is based on the configuration tested. The principle is that the more components i.e., door leaves and overpanel – the harder it becomes to pass a test. This is because the junction between two door leaves or door leaf and overpanel introduces a discontinuity into the doorset which can cause failures. This leads to the following statements:

- A test on a double doorset is more onerous than a test on a single doorset
- A test on a doorset with a flush overpanel is more onerous than a test on a doorset without an overpanel. A flush overpanel has the same thickness as the door leaf and is flush with the leaves.
- A test on an unlatched doorset is more onerous than a test on a latched doorset
- A test on an unlatched single acting doorset is considered to be equivalent to a double acting doorset – BUT this does not cover doorsets with flush overpanels
- A doorset with transomed overpanel is considered to perform as the same as a similar doorset without an overpanel. This is because the transom structurally separates the overpanel from the doorset.

The leaf size for each door leaf option and configuration is linked to the intumescent specification and frame option. The following section details the maximum leaf size for each door leaf option and configuration based on the intumescent, hardware and frame details tested.

Doorsets with reduced dimensions are deemed to be less onerous. Therefore, doors with dimensions that are less than given in the door leaf envelopes (for the relevant intumescent specification) in the following sections are covered and may be manufactured.

4.5.2 Orientation

The primary fire resistance tests for these designs were conducted with the doorset hung such that the door leaf opened towards the fire, which is considered the most onerous orientation in terms of fire resistance performance. This can be seen in the tests WF 416689, WF 421795 and WF 421964, where the following results for inward and outward opening doors were obtained for integrity.

Test Reference	Inward opening door	Outward opening door
	Integrity minutes	Integrity minutes
416689	46	47 drain ett to en nithin ce to
421795	35 _{x0} _{x1} 0	038 10 10 10 10 10 10 10 10 10 10 10 10 10
421964	33 Nucles Tallo	35 1 110 10 10 10 10 10 10 10 10 10 10 10

Based on this testing, assessment is made that the door assemblies to this design may be hung either away from or towards the fire risk side of the door assembly. This is supported in table 2 of clause 13.4.1 BS EN 1634-1:2014 +A1:2018.

4.5.3 Configuration

The table below shows a list of the different doorset configurations, their abbreviations and full description. The following sections detail the permitted leaf sizes for the listed configurations based on the intumescents and door frame.

Doorset Configurations			
Ref.	f. Abbreviation Description		
Α	LSASD	Latched Single Acting Single Doorset	
В	ULSASD	Unlatched Single Acting Single Doorset	
С	DASD	Double Acting Single Doorset	
D	LSASD+OP	Latched Single Acting Single Doorset + Overpanel	
E	ULSASD+OP	Unlatched Single Acting Single Doorset + Overpanel	
F	DASD + OP	Double Acting Single Doorset + Overpanel	
G	LSADD	Latched Single Acting Double Doorset	
Н	ULSADD	Unlatched Single Acting Double Doorset	
I	DADD	Double Acting Double Doorset	
J	LSADD+OP Latched Single Acting Double Doorset + Overpa		
K	ULSADD+OP	Unlatched Single Acting Double Doorset + Overpanel	
L	DADD + OP	Double Acting Double Doorset + Overpanel	

Notes:

- Unequal leaf double doorsets are covered by this Field of Application. The smaller door leaf must be no less than 300mm.

 For double doorsets both leaves must comply with the door leaf to the limit of the leaves must comply with the door leaf to the limit of the leaves must comply with the door leaf to the limit of the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaf to the leaves must comply with the door leaves must comply 1.
- For double doorsets both leaves must comply with the door leaf envelope size 2.
- A table of essential hardware is given for each doorset configuration, as a baseline for the doorset described. Changes to hardware can affect the interest of 3. specification and frame details which are subsequently considered in section 9 and
- Double leaf doorsets with square flush overpanel junction and square meeting edges must fit an astragal at the junction between the overpanel and square meeting. 4.

4.5.4 General Notes on Leaf Sizes & Intumescent

The following sections detail the door leaf size envelopes which indicates the permitted leaf sizes for the listed configurations based on the intumescents, door leaf option and door frame option.

For Double Doors:

- 1. When using these envelopes for double doorsets, the meeting stile intumescent detail must be adequate to contribute to the protection of any hardware present.
- 2. The requirements for intumescent strips when a lock is fitted are given in section 9.2 and 11.3 and supercede any single strip specification given in section 4.5.9 to 4.5.20.
- Unequal leaf double doorsets are covered by this Field of Application. The smaller 3. door leaf must be no less than 300mm.
- 4. For double doorsets both leaves must comply with the door leaf envelope size limitations.

For Leaf 1 & Leaf 2:

The leaf sizes and intumescent requirements specified for Leaf 1, are also applicable to Leaf

For Intumescent Seals:

- 1. Intumescent seals are considered to be fitted centrally (within the frame reveal or leaf edge) unless stated otherwise.
- 2. Intumescent seals are fully interrupted at hardware locations unless stated otherwise.

4.5.5 Rebated meeting stile: Leaf Size & Intumescent Specifications

Based on the test evidence WF 144699 incorporating rebated meeting edges, the following is permitted for Leaf 1 and 2 double doorsets with rebated meeting edges.

Configuration	Leaf Option	Max Leaf Size (mm)	Intumescent						
LSADD ULSADD	Leaf 1, 2	2380 max height with 900 width To 2100 height with 1020 max width	Frame Reveal: • Head 1no 20x4mm Lorient LP2004 fitted centrally in frame reveal. • Jamb 1no 10x4mm Lorient LP1004 or 20x4mm Lorient LP2004 fitted centrally in frame reveal. Meeting edges						
		And interpolation for max leaf size between these points is permitted	Jamb 1no 10x4mm Lorient LP1004 or 20x4mm Lorient LP2004 fitted centrally in frame reveal. Meeting edges 1no 15x4mm Lorient LP1504 fitted centrally in the rebate of each leaf (2No total) at the same time as a rebated flush overpand						
Note: Rehated m	4.								
junction	neeting ed	ges cannot be used	LP1004 or 20x4mm Lorient LP2004 fitted centrally in frame reveal. Meeting edges • 1no 15x4mm Lorient LP1504 fitted centrally in the rebate of each leaf (2No, total) at the same time as a rebated flush overpane						

4.5.6 Frame 11: Leaf Size & Intumescent Specifications

Based on the test evidence WF 393430 and WF 393450 for Frame 11 (Morland firecheck frame), the following is permitted for doorsets with Frame 11.

Configuration	Leaf Option	Max Leaf Size (mm)	Intumescent
LSASD ULSASD	Leaf 1, 2 & 3	2400 (h) x 926 (w)	1No 15x4mm Mann Mcgowan (Certifire Certificate of Approval: CF356-Pyrostrip 500P)
			Fitted centrally in frame reveal or leaf edges.

4.5.7 Grooves in leaf 1 and 2

There are associated limitations with size and configurations for the different leaf types with grooves and recesses, refer to section 5.7 for further details.

4.5.8 Explanation for the Following Sections

The performance of a doorset in terms of configuration and size is dependent on the leaf type. intumescent and frame type and are not automatically interchangeable. The following sections present the envelopes for the 4 leaf types and 11 frame types (frames 7 and 9 are not considered within this assessment but will be included once the supporting test evidence has been finalised). Each envelope is linked to a specific intumescent which is given a unique reference and is based directly on test evidence. The tables below indicate which configuration is covered for each of the 4 leaf types and 11 frame types.

The envelopes are presented as follows:

- for LSASD increasing in configuration complexity up to ULSADD+OP/DADD+OP
- the permitted configuration for each leaf type and frame type combination is considered separately
- and a unique envelope of permitted leaf sizes is presented based on the configuration, leaf type, frame type and intumescent and the envelope is directly linked to a unique test.

More envelopes are presented for single doorsets for two reasons

- velopes are presented for single doorsets for two reasons
 more single doorsets have been tested
 the performance from a more complicated configuration can be cascaded down to Manufactured using the edine covering a wide range of products.

The following tables refer to the opening face of the door in the table cells relating to intumescent location. this document remains the property of radence within is antiacture installation air little property of the engine ne responsibility of the reader to ensure this fit is and the state of t n.Panal Products Ltd supports Linux value and maintenan Luther documentation and eround on our mentation and eround our mentation and eround on our mentation and eround eround our mentation and eround erou

The opening face is the pull face.

The closing face is the push face i.e. the stop side.

The table below shows which leaf and frame combination is permitted.

Frame		Leaf					
No.	Material	1	2	3		4	
		44mm thick core	54mm thick core	PVC 44 Encap	PVC 54 Encap	44 Over rebated	54 Over rebated
1	SA - Softwood and Hardwood et al	Υ	Y	Υ	Y	Y	Y
2	SA - MDF and Hardwood only	Y	Y	Y	Y	Y	Y
3	SA - PVC Encap	Υ	Υ	Υ	Υ	N	N
4	DA - Softwood and Hardwood et al	Υ	Υ	Y	Y	N	N
5	DA –MDF and hardwood only	Y	Y	Y	Y	N	N
6	DA – PVC Encapsulated	Υ	Υ	Υ	Υ	N	N
7	TBA						, Q6)
8(54)	SA – STUDCO - Steel	N	Υ	N	N	N	N ine process
9	TBA						an to asser its library
10(54)	SA – ONE PIECE – Steel	N	Υ	N	N	N	Of the Sole brogg Store.
11	Morland	Υ	Υ	N	Ν	May Way	Mcol shares of stay
			Falcon	Panel Producte	Itd supports in a line in	drain ett. drainette en de	N Constitution of the production of the particular particular production of the prod

The following tables show the permitted doorset configurations with the various leaf frame combinations

Permitted Configuration for Leaf 1 + Frame 1- 11															
				figurat	ion										
	Fram	ne	LSASD	ULSASD	DASD	LSASDOP	ULSASDOP	DASDOP	LSADD	ULSADD	DADD	LSADDOP	ULSADDOP	DADDOP	
	1	SA - Softwood, MDF and Hardwood RF 00136 ULSADD+OP	Υ	Υ	N	Υ	Υ	N	Υ	Υ	N	Υ	Υ	N	
	2	SA -MDF and Hardwood RF08125 ULSADD	Υ	Υ	N	Υ	Y	N	Υ	Υ	N	Y	Υ	N	
	3	SA - PVC Encap	Υ	Υ	N	N	N	N	Υ	Υ	N	N	N	N	
	4	DA - Softwood and Hardwood et al	N	N	Υ	N	N	N	N	N	Y	N	N	N	
	5	DA – MDF and hardwood only	N	N	Υ	N	N	N	N	N	Υ	N	N	N	V.8.,
	6	DA – PVC Encapsulated	N	N	Υ	N	N	N	N	N	Y	N	N	N lie	۶. ٥.
	7	TBA											Not of	Sell X	170
	Only 6 DA – PVC Encapsulated N N N Y N N N N N N N N N N N N N N N														

Permitted Configuration for Leaf 1 + Frame 1- 11													
		Conf	igurat	ion									
Frame		LSASD	ULSASD	DASD	LSASDOP	ULSASDOP	DASDOP	LSADD	ULSADD	DADD	LSADDOP	ULSADDOP	DADDOP
8(54)	SA – STUDCO -Steel	N	N	N	N	N	N	N	N	N	N	N	N
9	TBA												
10(54)	SA – ONE PIECE – Steel	N	N	N	N	N	N	N	N	N	N	N	N
11	Morland Firecheck	Υ	Υ	N	N	N	N	N	N	N	N	N	N



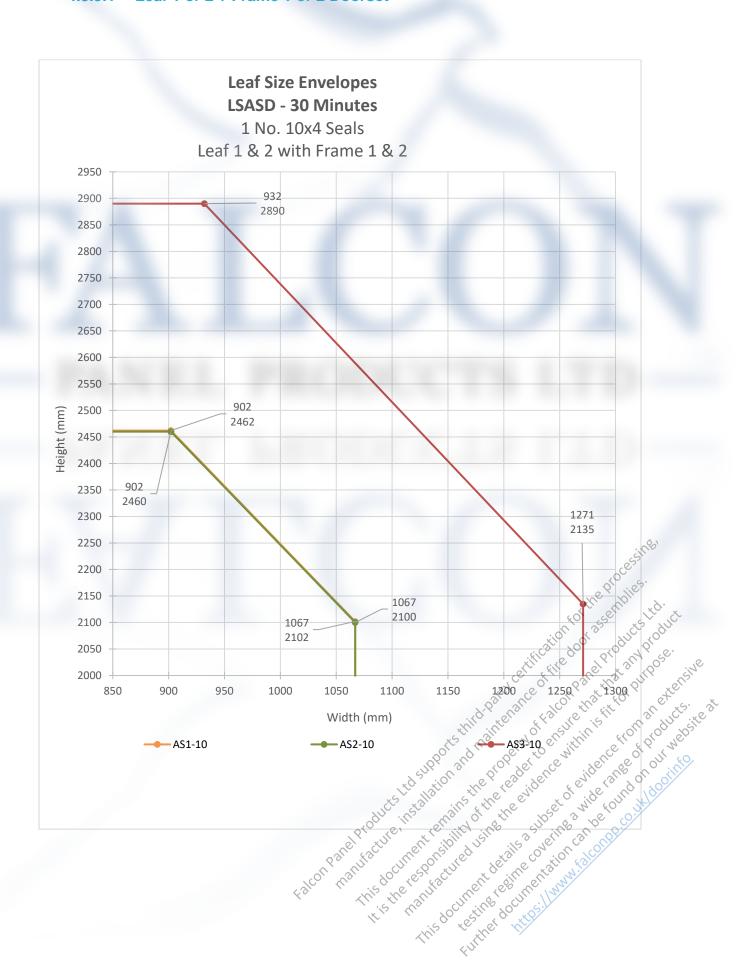
Permitted Configuration for Leaf 2 + Frame 1-11													
Loui L	T T T T T T T T T T T T T T T T T T T	Con	figura	tion									
Frame		LSASD	ULSASD	DASD	LSASDOP	ULSASDOP	DASDOP	LSADD	ULSADD	DADD	LSADDOP	ULSADDOP	DADDOP
1	SA - Softwood, MDF and Hardwood RF 00136 ULSADD+O P	Υ	Υ	N	Υ	Υ	N	Υ	Υ	N	Υ	Υ	N
2	SA -MDF and Hardwood RF08125 ULSADD	Υ	Y	N	Υ	Υ	N	Υ	Υ	N	Υ	Υ	N
3	SA - PVC Encap	Υ	Υ	N	N	N	N	Υ	Υ	N	N	N	N
4	DA - Softwood and Hardwood et al	N	N	Y	N	N	N	N	N	Υ	N	N	N
5	DA – MDF and Hardwood only	N	N	Υ	N	N	N	N	N	Y	N	Ν	N
6	DA – PVC Encapsulate d	N	N	Υ	N	N	N	N	N	Υ	N	100	on Cessi
7	ТВА											40,	S
8(54)	SA – STUDCO - Steel	Υ	Y	N	N	N	N	Υ	Υ	N ex	. Nelle	8 30 S	Non's
9	ТВА								:10.6	SUSIL	100	100	100
10(54)	SA – ONE PIECE – Steel	Υ	Y	N	N	N	N	York	S.K. Waj	Neigh		iN iKilin	(N o
11	Morland Firecheck	Υ	Υ	N	N	N	1,00	1130	SN 4 57	e Ne	N.ex.	Nige	M 3

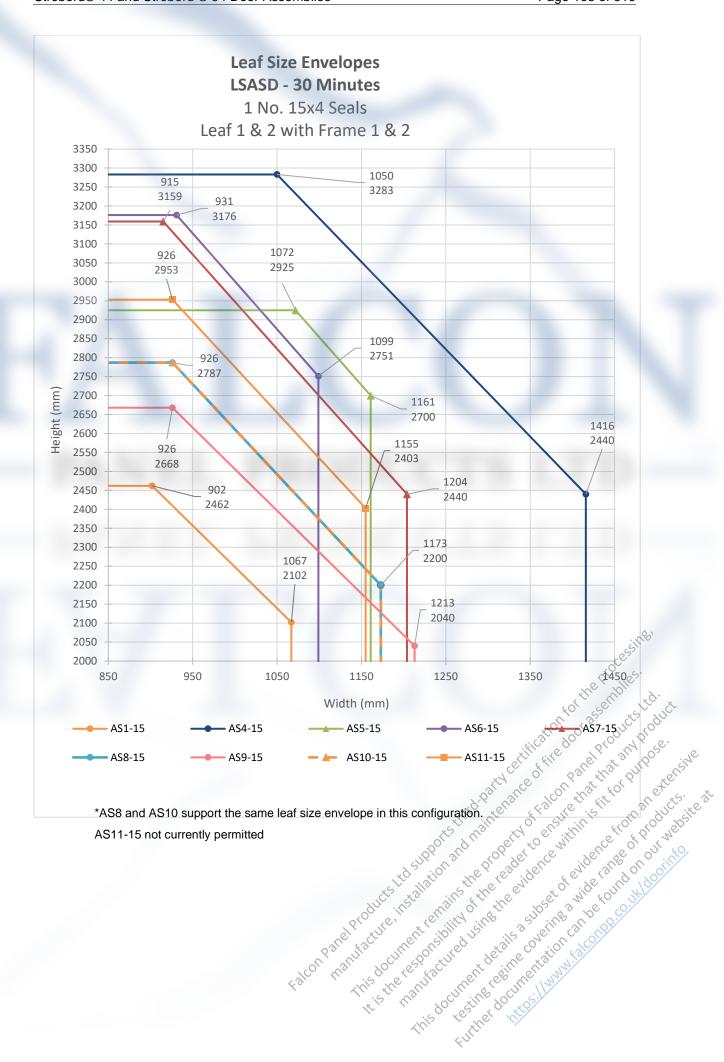
	Permitted Configuration for Leaf 3 + Frame 1-11												
Leaf 3	+ Frame 1-11		C:	(; _{= -} -									
		Con	figura	tion							Ī	I	
Frame		LSASD	ULSASD	DASD	LSASDOP	ULSASDOP	DASDOP	LSADD	ULSADD	DADD	LSADDOP	ULSADDOP	DADDOP
1	SA - Softwood, MDF and Hardwood RF 00136 ULSADD+O P	Υ	Υ	N	N	N	N	Υ	Υ	N	N	N	N
2	SA -MDF and Hardwood RF08125 ULSADD	Υ	Y	N	N	N	N	Υ	Υ	N	N	N	N
3	SA - PVC Encap	Υ	Υ	N	N	N	N	Υ	Υ	N	N	N	N
4	DA - Softwood and Hardwood et al	N	N	Υ	N	N	N	N	N	Υ	N	N	N
5	DA – MDF and hardwood only	N	N	Υ	N	N	N	N	N	Υ	N	N	N
6	DA – PVC Encapsulate d	N	N	Υ	N	N	N	N	N	Υ	N	N	on Cess
7	TBA										. ~	401 35	SO, SO
8(54)	SA – STUDCO - Steel	N	N	N	N	N	N	N	N	N eri	O S	Salls,	La (d) Nach
9	ТВА								1.67.6	Mal	13/0	Gills.	ir,
10(54	SA – ONE PIECE – Steel	N	N	N	N	N	N	North	N Mai		×N eve	ige N Skin	N O
11	Morland Firecheck	Υ	Υ	N	N	N	100	N a	SN S	0	N.ex.	Nige	(N)

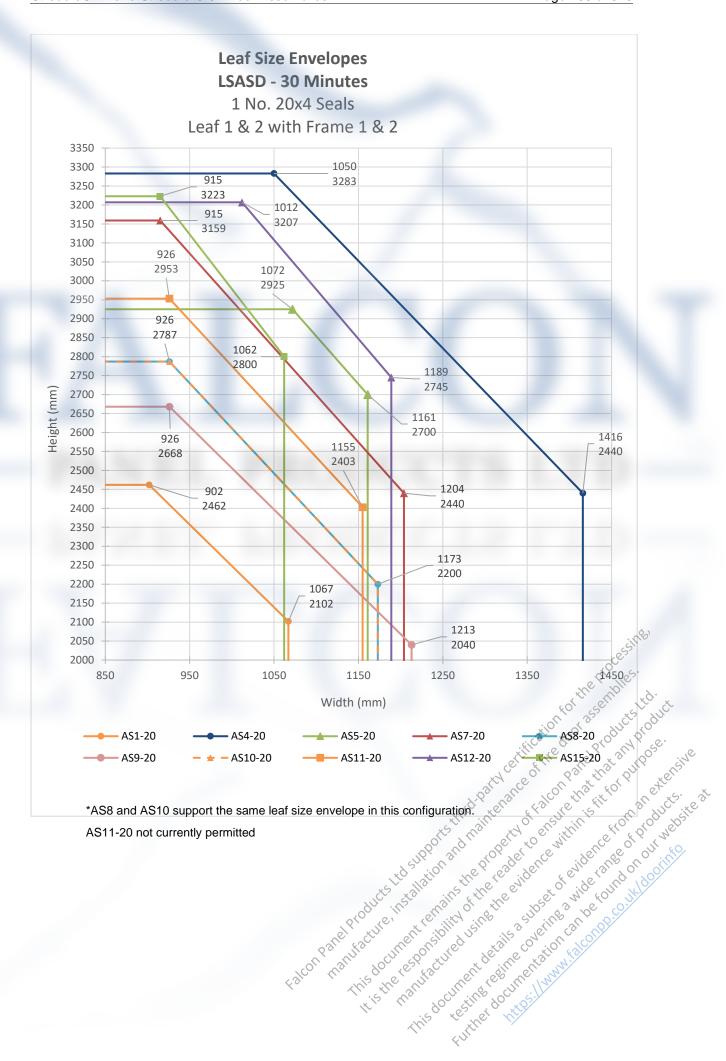
	Permitted Configuration for												
Leaf 4	+ Frame 1 - 11		c:	·									
		Con	figura	tion									
Frame		LSASD	ULSASD	DASD	LSASDOP	ULSASDOP	DASDOP	LSADD	ULSADD	DADD	LSADDOP	ULSADDOP	DADDOP
1	SA - Softwood, MDF and Hardwood RF 00136 ULSADD+O P	Υ	Υ	N	N	N	N	N	N	N	N	N	N
2	SA -MDF and Hardwood RF08125 ULSADD	Υ	Y	N	N	N	N	N	N	N	N	N	N
3	SA - PVC Encap	N	N	N	N	N	N	N	N	N	N	N	N
4	DA - Softwood and Hardwood et al	N	N	N	N	N	N	N	N	N	N	N	N
5	DA – MDF and Hardwood only	N	N	N	N	N	N	N	N	N	N	N	N
6	DA – PVC Encapsulate d	N	N	N	N	N	N	N	N	N	N	N	Wess.
7	ТВА										~	40, 5	5
8(54)	SA – STUDCO - Steel	N	N	N	N	N	N	N	N	N ex	Neile	N 6	[N & F
9	ТВА								7.67.	-69.	13/0	1/10	×XO
10(54	SA – ONE PIECE – Steel	N	N	N	N	N	N	North		Neigh	'xN' S	ige,	W _e o
11	Morland Firecheck	N	N	N	N	N	M, K	SN SUS	N N	e Ne e	N.ex	Nige	M in

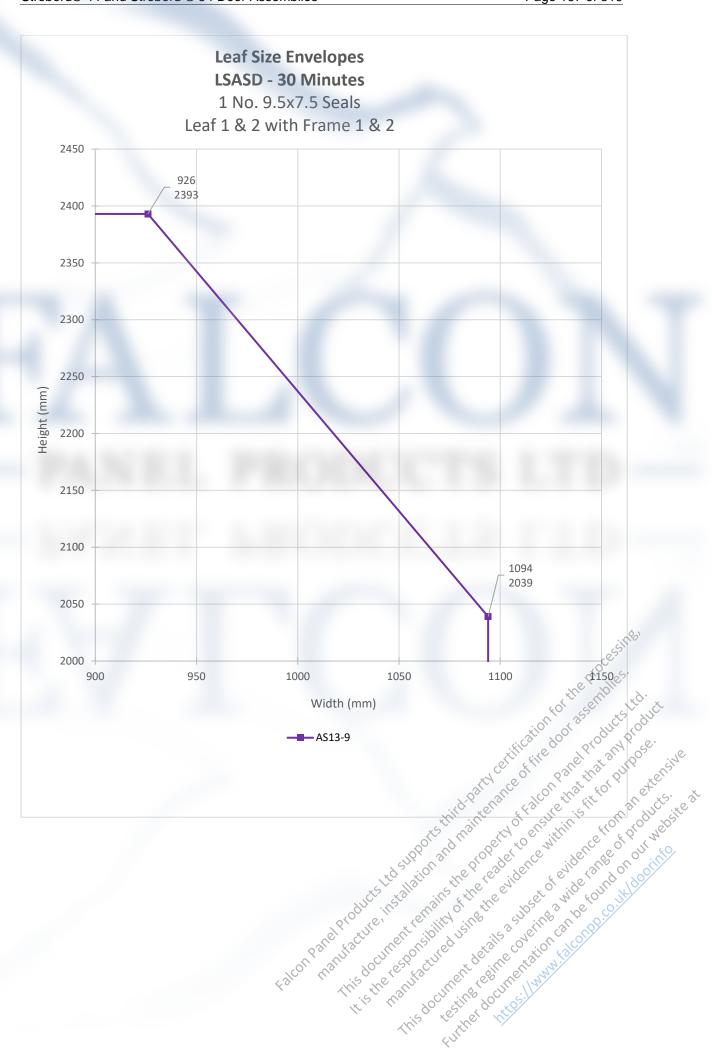
4.5.9 LSASD Configuration – Leaf Size Envelopes & Intumescent Specification

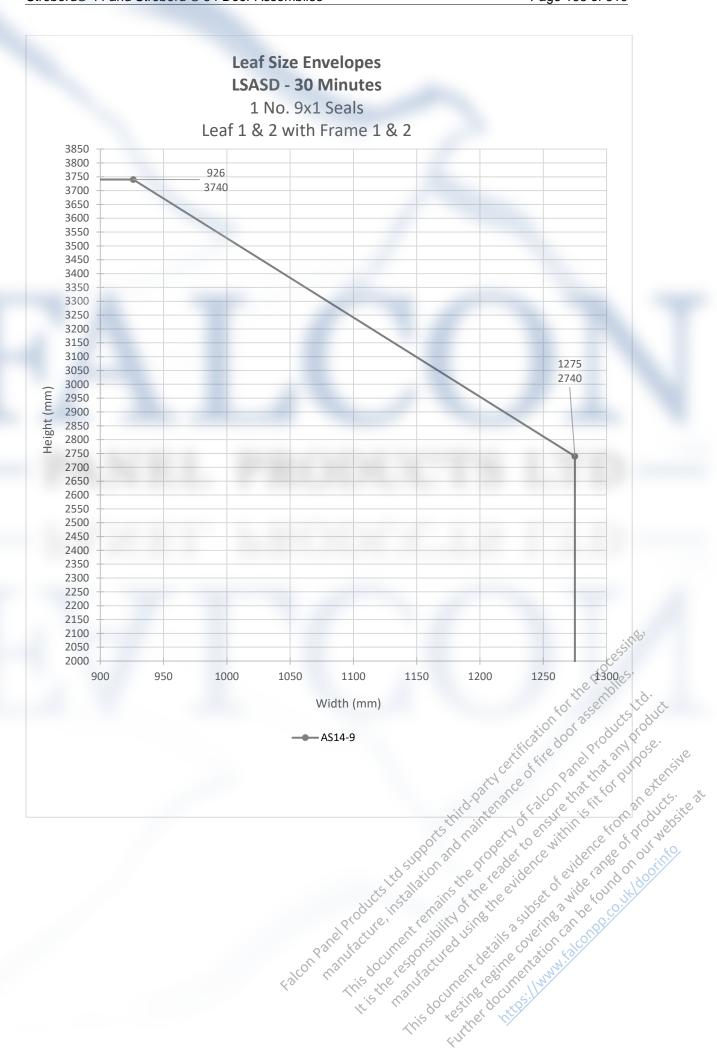
4.5.9.1 Leaf 1 or 2 + Frame 1 or 2 Doorset

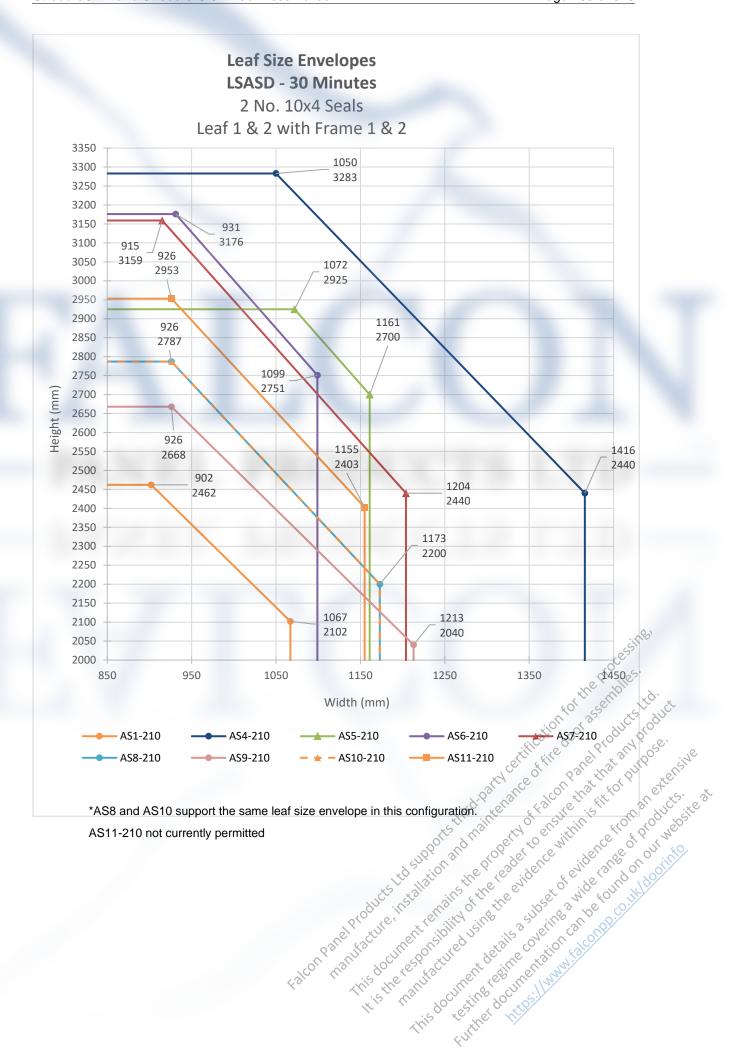


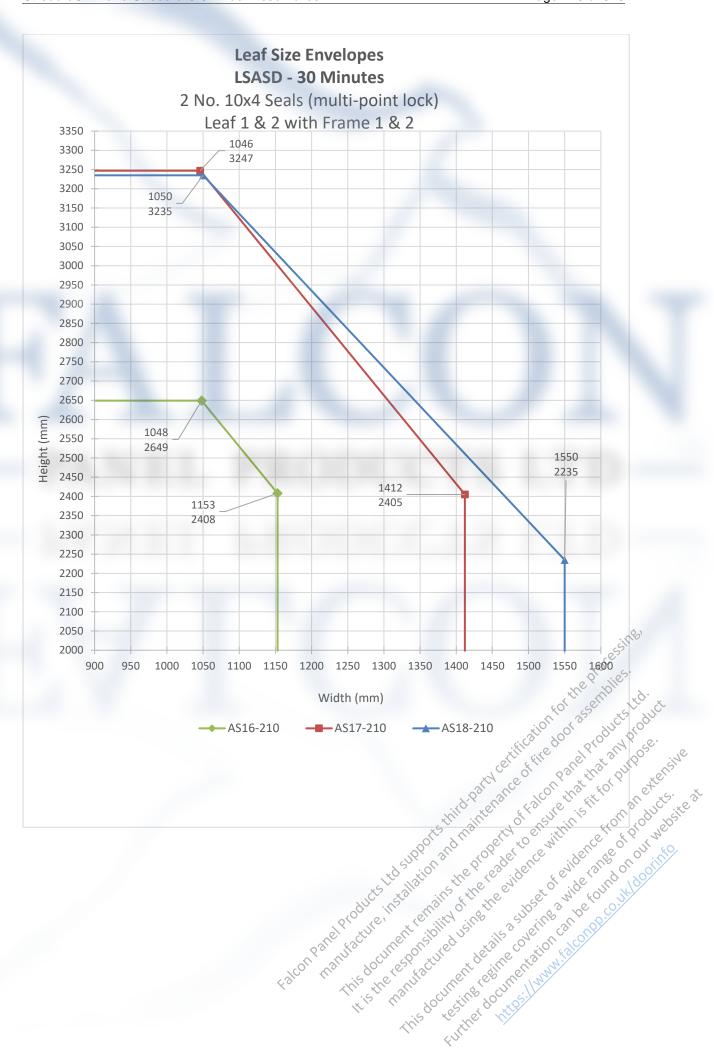












This document details a subset of evidence from an extensive

*Esting regime covering a wide range of products the at

Table 1.1.1 - Intumescent Specification for LSASD Incorporating intumescent seals from Mann McGowan Fabrications Ltd Leaf 1 and 2 with Frame 1 and 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
AS1-10 ———	Pyrostrip	Mann	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
(Chilt/RF09170)	100P	McGowan	
AS1-15 ———	Pyrostrip	Mann	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
(Chilt/RF09170)	100P	McGowan	
AS1-20 ———	Pyrostrip	Mann	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
(Chilt/RF09170)	100P	McGowan	
AS1-210 ———	Pyrostrip	Mann	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
(Chilt/RF09170)	100P	McGowan	
AS10-15 ———	Pyrostrip	Mann	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
(TA087-9&10)	500P	McGowan	
AS10-20 ———	Pyrostrip	Mann	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
(TA087-9&10)	500P	McGowan	
AS10-210 (TA087-9&10)	Pyrostrip 500P	Mann McGowan	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
		Falcon Panel Production	reveal or leaf edges, 10mm apart, no reveal edges, 10

This document details a subset of evidence from an extensive

*esting resine covering a mide range of products the at found on our wints

Table 1.1.2 - Intumescent Specification for LSASD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1 and 2 with Frame 1 and 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
AS2-10 (Chilt/RF07109)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
AS5-15 (Chilt/RF02109 (B))	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
AS5-20 (Chilt/RF02109 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
AS5-210 (Chilt/RF02109 (B))	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
AS15-20 (Chilt/RF05134 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
AS16-210——— (WF401039 (A))	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal*, 10mm apart.

nultinu Ing months and the state of the door assembly and maintenance of the door as a second of the door as a and a street of the responsibility of the reader to ensure that the any product this the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader to en *It is not permissible to fit intumescent seals into door leaf edges for doorsets containing multi-This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose. point locking systems for Intumescent specifications AS16, AS17 or AS18.

(WF402305)

Incorporating intum	Table 1.1.3 - Intumescent Specification for LSASD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 and 2 with Frame 1 and 2								
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size						
AS3-10 ————————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.						
AS7-15 (Chilt/RF08088)	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.						
AS7-20 (Chilt/RF08088)	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.						
AS7-210 (Chilt/RF08088)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.						
AS17-210-	FO8500	Pyroplex Ltd	Head & Jambs:						

^{*}It is not permissible to fit intumescent seals into door leaf edges for doorsets containing multi-Eaton Panel Products Lide installation and maintenance of fine door assemblies. point locking systems for Intumescent specifications AS16, AS17 or AS18.

2no 10x4. Fitted centrally in frame

This document remains the property of the reader to ensure that that any product the remains the reader to ensure that that any product the reader to ensure that the responsibility of the reader to ensure the This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

*Esting regime covering a wide range of products the at

reveal*, 10mm apart.

Table 1.1.4 - Intumescent Specification for LSASD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1 and 2 with Frame 1 and 2 Intumescent Spec. Make / Manufacturer **Location & Size** Reference **Type** / Supplier & (Test Reference) AS4-15 STS154FO Sealed Tight **Head & Jambs:** Solutions Ltd (WF384630) 1no 15x4. Fitted centrally in frame reveal or leaf edges. AS4-20 STS204FO Sealed Tight **Head & Jambs:** Solutions Ltd (WF384630) 1no 20x4. Fitted centrally in frame reveal or leaf edges. AS4-210 STS104FO Sealed Tight Head & Jambs: Solutions Ltd (WF384630) 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart. AS18-210 STS104FO Sealed Tight **Head & Jambs:** Solutions Ltd (WF391843 (A)) 2no 10x4. Fitted centrally in frame reveal*, 10mm apart

Falcon Panel Products lide supports third partie prace of fire door assemblies.

and street of the responsibility of the reader to ensure that that any product of this street on the street of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that the reader to ensure the reader to This document remains the property of Falcon Panel Products that any problem.

This document remains the property of the evidence within is fit for purpose.

This document detains covering a wide range of products.

*Esting regimentation can be range of products the at

^{*}It is not permissible to fit intumescent seals into door leaf edges for doorsets containing multipoint locking systems for Intumescent specifications AS16, AS17 or AS18.

Table 1.1.5 - Intumescent Specification for LSASD Incorporating intumescent seals from Dixon International Group Ltd Leaf 1 and 2 with Frame 1 and 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
AS6-15 ———	Therm-A-	Intumescent	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
(CFR1812121)	Seal	Seals Ltd	
AS6-210 ———	Therm-A-	Intumescent	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
(CFR1812121)	Seal	Seals Ltd	
AS12-20 ———	Therm-A-	Intumescent	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
(CFR1811071 (A))	Seal	Seals Ltd	
AS13-9 ——— (CFR1812111)	N30	Sealmaster Ltd	Head & Jambs: 1no 9.5x7.5 Fitted centrally in frame reveal or leaf edges.

Table 1.1.6 - Intumescent Specification for LSASD Incorporating intumescent seals from Kilargo UK Ltd Leaf 1 and 2 with Frame 1 and 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
AS8-15 ——— (SF013-5A)	KP1504	Kilargo	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
AS8-20 ————————————————————————————————————	KP2004	Kilargo	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
AS8-210 ——— (SF013-5A)	KP1004	Kilargo	Head & Jambs: 2no 10x4: Fitted centrally in frame reveal or leaf edges, 10mm apart.
		tagen usunitae	document of the desire of the control of the contro

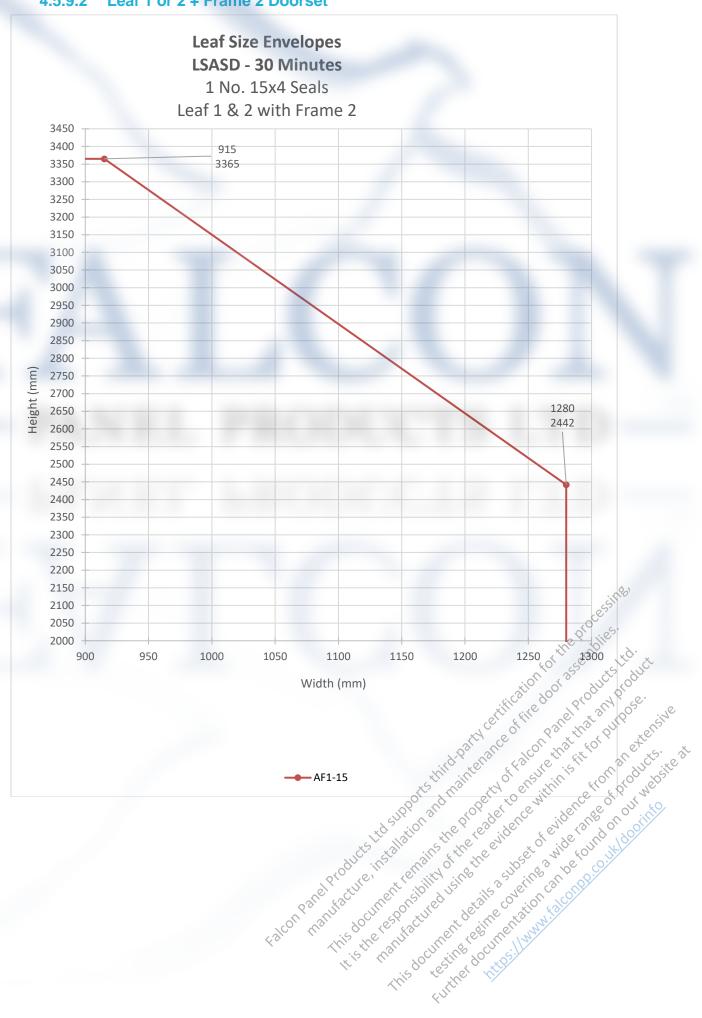
This document detains a subset of evidence from an extensive

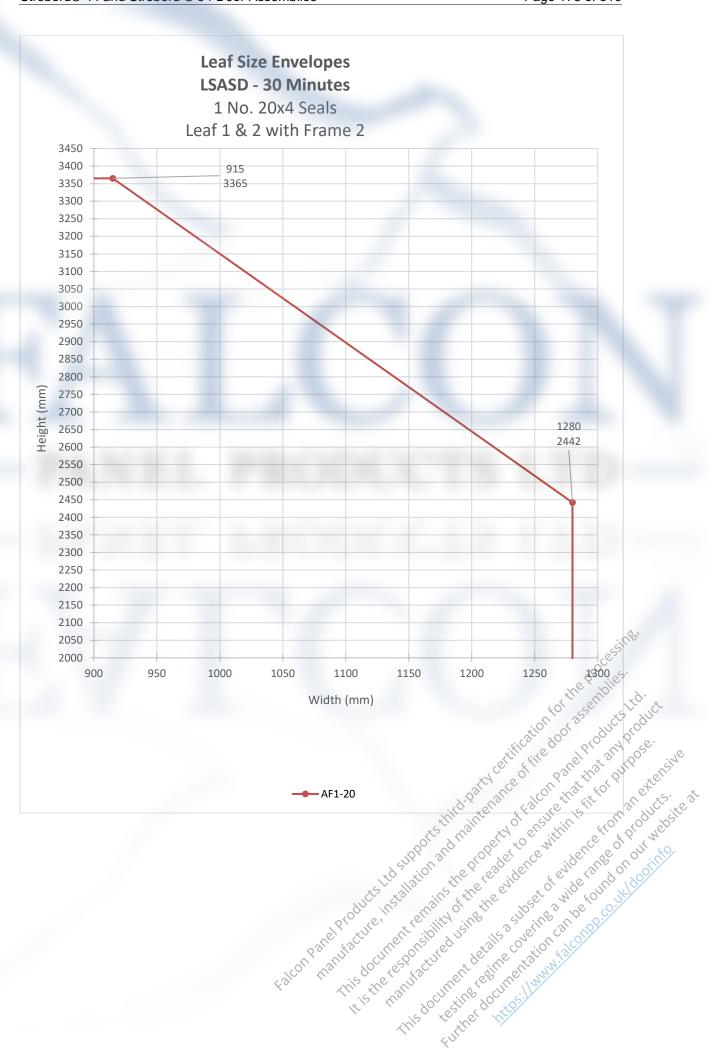
testing regime covering a wide range of products ite at the regime documentation and a recovering to the range of products it at the regime of the range of products it as the regime of the range of products it as the regime of the range of products it as the regime of the range of products in th

Table 1.1.7 Intumescent Specification for LSASD Incorporating intumescent seals from Astroflame (Fireseals) Ltd							
Leaf 1 and 2 with Frame 1 and 2							
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size				
AS9-15 ————————————————————————————————————	AF1504FSX	Astroflame	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.				
AS9-20 ————————————————————————————————————	AF2004FSX	Astroflame	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.				
AS9-210 ——— (BMT/FEP/F14265 (A))	AF1004FSX	Astroflame	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.				

AS14-9 ———(Chilt/RF10011 (A))	Norfast	Norseal Ltd	Head & Jambs: 1no 10x21 Smoke seal butted up to stop.
			ile Isa
			ification for assembly
			hild Path Lerance of Falon Panel trata
			1 no 10x21 Smoke seal butted up too stop. 1 no 10x21 Smoke seal but
		anel Production	te lietalit leiging of the the earliet of might of the sile of the supplied in the the factor of the supplied in the supplied
		Falcon Progrupo	ocurresponditure detine certation fair

4.5.9.2 Leaf 1 or 2 + Frame 2 Doorset





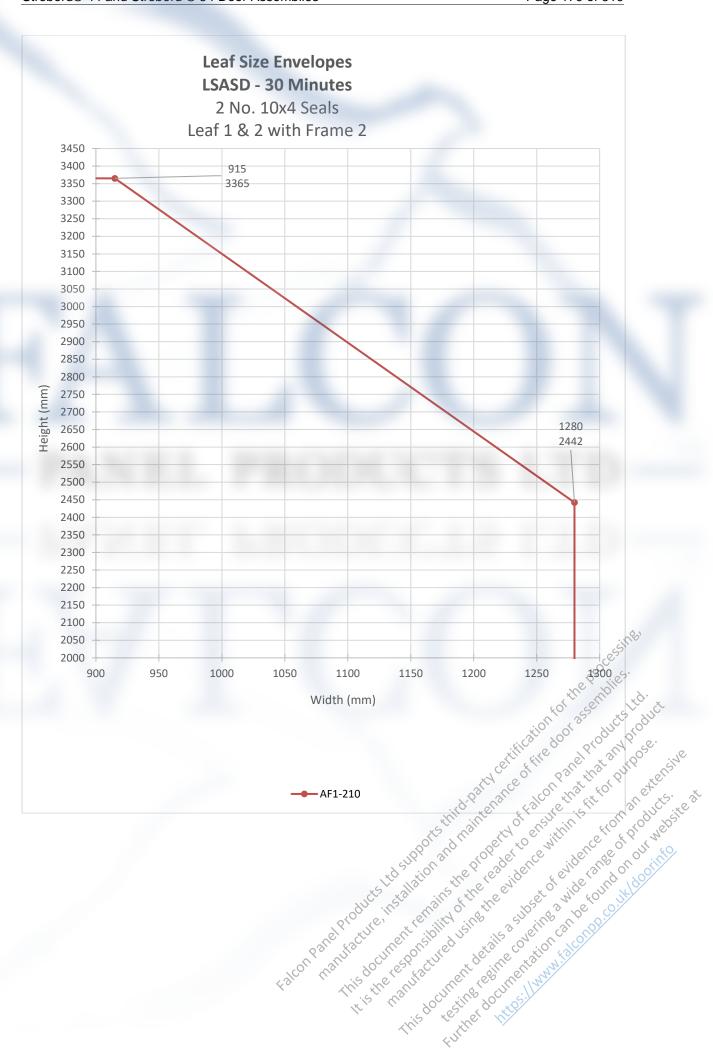
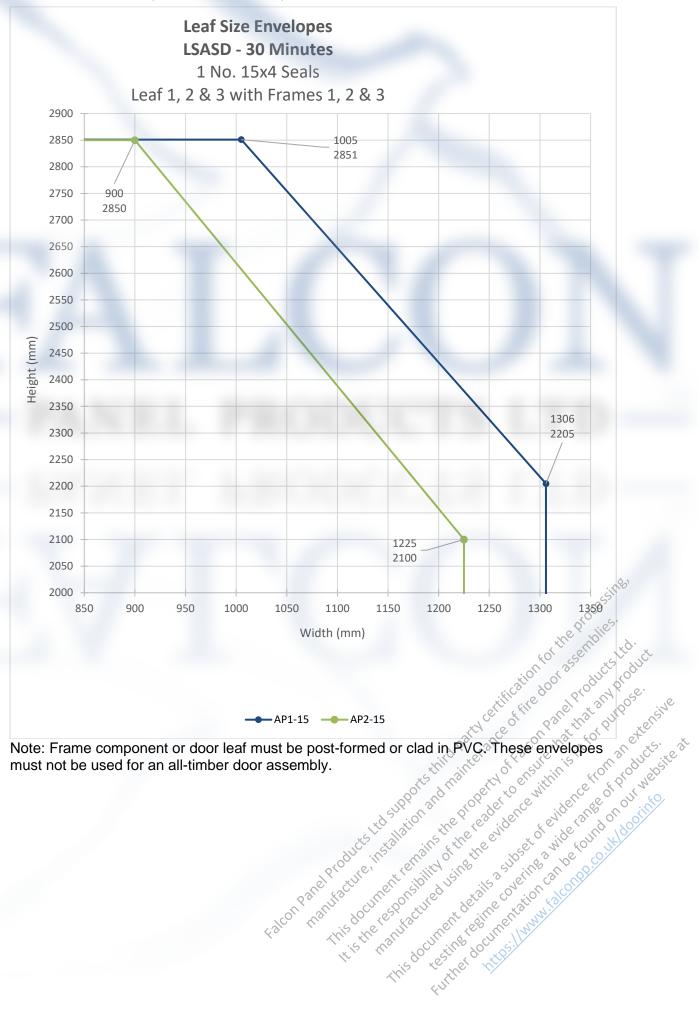
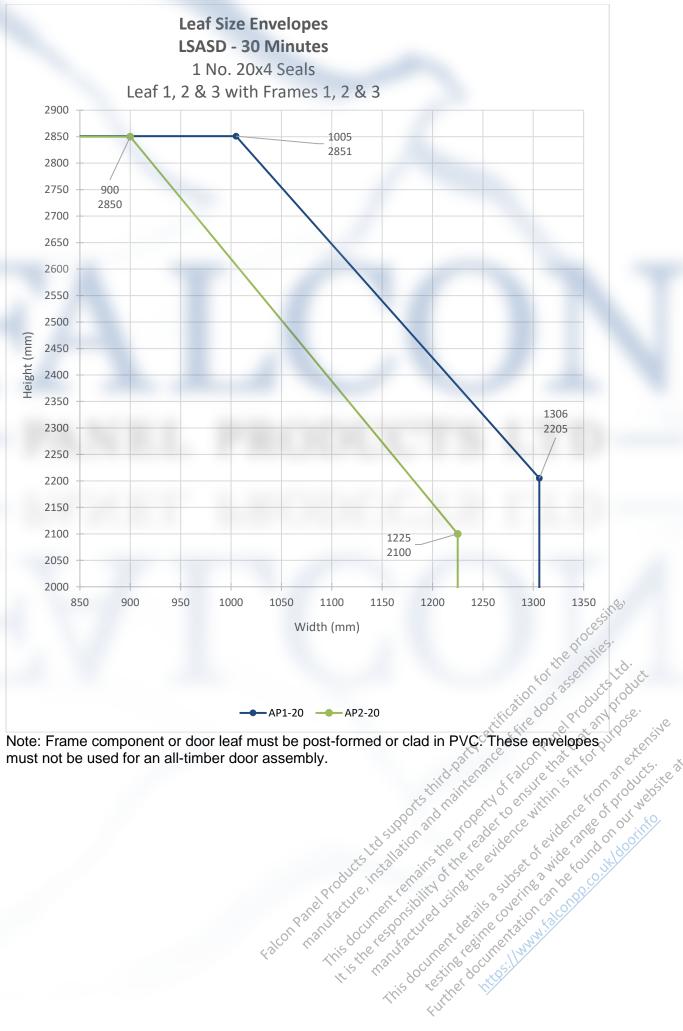


Table 1.2.1 - Intumescent Specification for LSASD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 2						
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size			
AF1-15 ———————————————————————————————————	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.			
AF1-20 ————————————————————————————————————	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.			
AF1-210 ——— (Chilt/RF08125 AR1)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame			

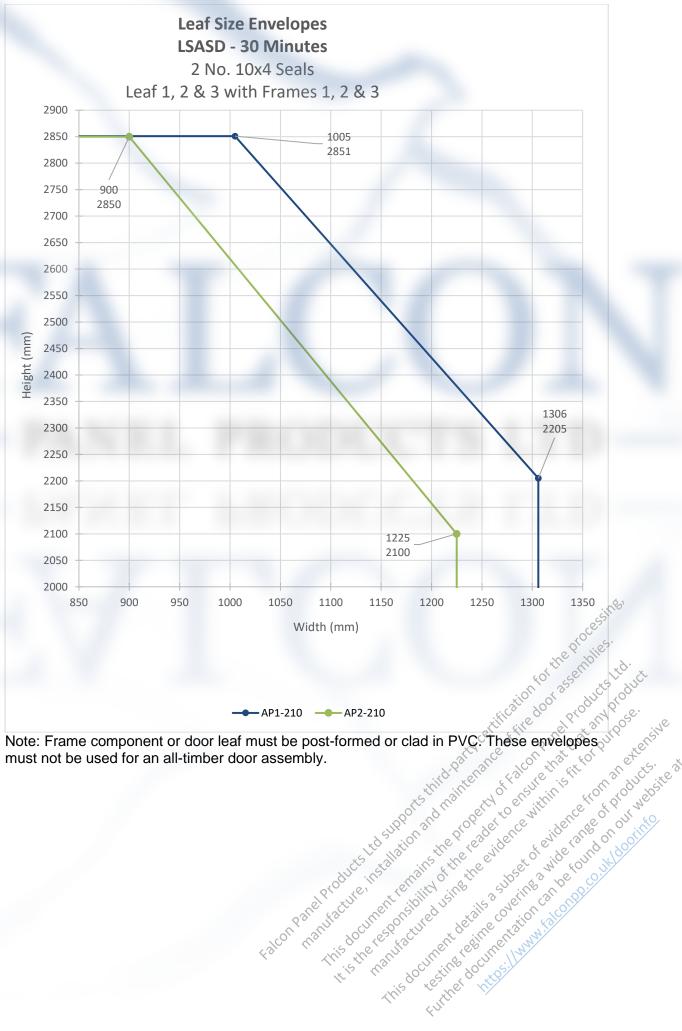
2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

4.5.9.3 Leaf 1, 2 or 3 + Frame 1, 2 & 3 Doorset





znvelo znvelo znvelo znikinistre zne propertive de properties de propert ne responsibility of the reader to ensure that the first for A Panel Products Ltd Supports third painter ance This document regarding the property of Falcone it. PVC. Police Products the supports third party and maintain the support of the sup *Esting regimentation can be range of products the at must not be used for an all-timber door assembly.



znvelc znvelc znvelc znie trainstre property of kalence within is the znie tre property of the evidence within is the znie tre property of the evidence within is the tree evidence within it is the evidence withi ne responsibility of the reader to ensure that the first for A Panel Products Ltd Supports throughter ance This document regarding the property of Falcone it. PVC. Police Products the supports third party and maintain the support of the sup *Esting regimentation can be range of products the at must not be used for an all-timber door assembly.

Table 1.3.1 - Intumescent Specification for LSASD
Incorporating intumescent seals from Sealed Tight Solutions Ltd
Leaf 1, 2 or 3 with Frame 1, 2 or 3

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
AP1-15 (WF388638)	STS154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
AP1-20 (WF388638)	STS204FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
AP1-210 ————————————————————————————————————	STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

Table 1.3.2 - Intumescent Specification for LSASD

Incorporating intumescent seals from Lorient Polyproducts Ltd

Leaf 1, 2 or 3 with Frame 1, 2 or 3

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
AP2-15 ——— (RF11059)	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
AP2-20 ——— (RF11059)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Head & Jambs:
AP2-210 ——— (RF11059)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
(RF11059) LP1004 Lorient Polyproducts Ltd Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.			

4.5.9.4 Leaf 4 + Frame 1 and 2 Doorset

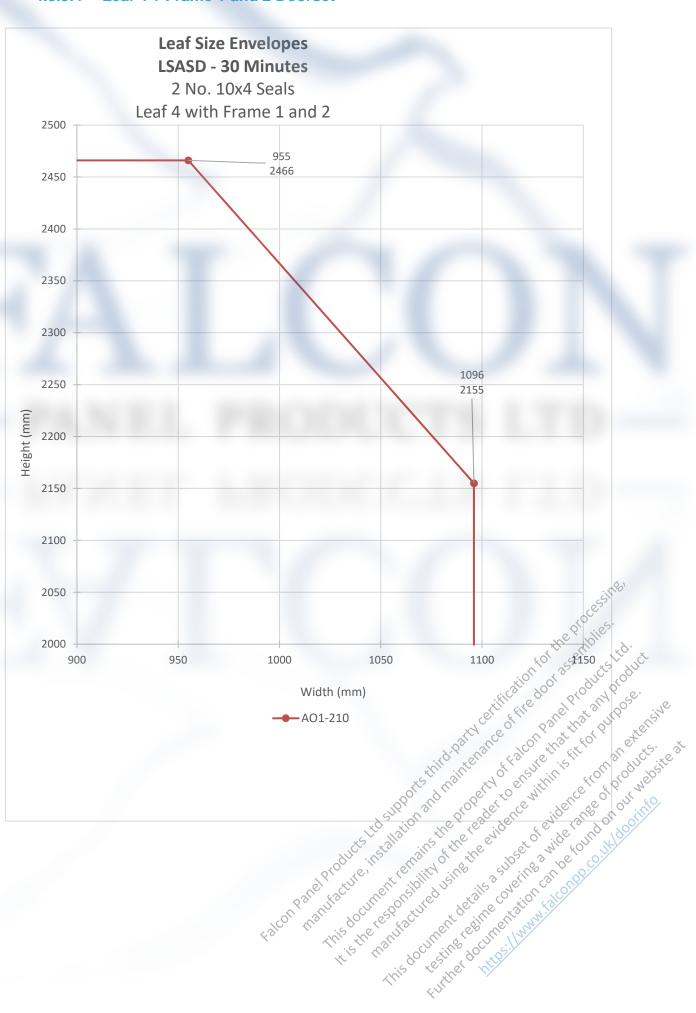
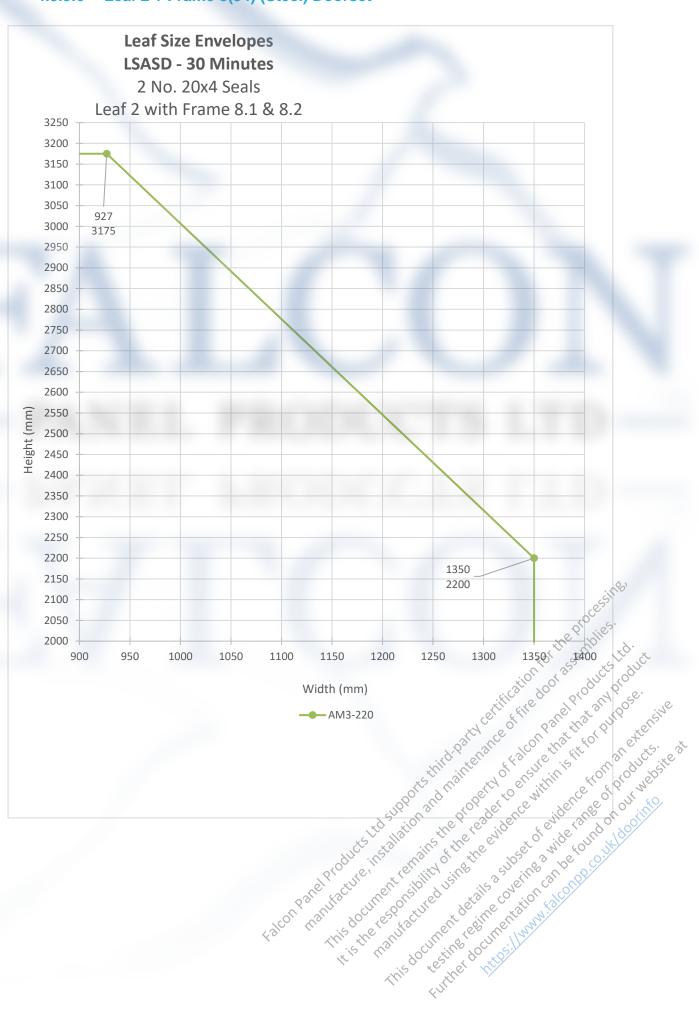


Table 1.9.1 - Intumescent Specification for LSASD Incorporating intumescent seals from Pyroplex Ltd Leaf 4 with Frame 1 and 2				
Intumescent Spec. Reference				
AO1-210 ————————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted 5-6mm apart, 4mm from the closing face.	

4.5.9.5 Frame 7 (Steel) Doorset _TBA

Falcon Panel Products Indicated and the product of the product of

4.5.9.6 Leaf 2 + Frame 8(54) (Steel) Doorset



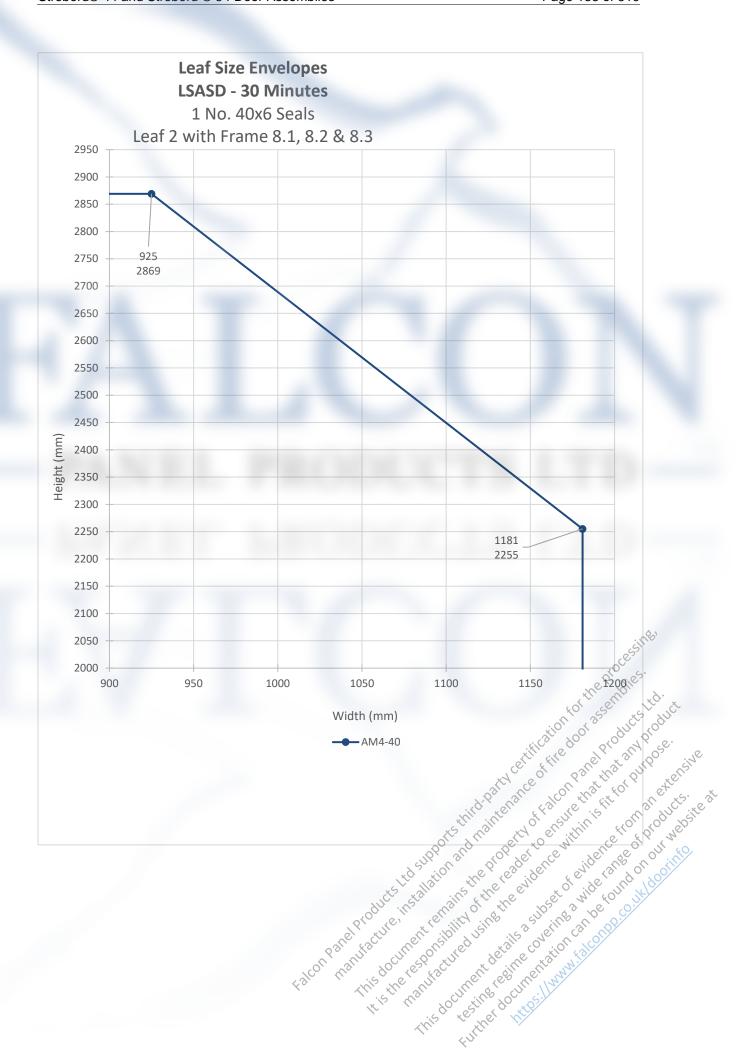


Table 1.6.1 - Intumescent Specification for LSASD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 2 with Frame 8.1 & 8.2				
Intumescent Spec. Reference & (Test Reference)	Type / Supplier			
AM3 (WF415618 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 2no 20x4. Fitted centrally in leaf edges, 5mm apart.	

Table 1.6.2 - Intumescent Specification for LSASD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 2 with Frame 8.1 & 8.2				
Intumescent Spec. Reference (Type & (Test Reference)				
AM4 ——— (WF391940 (B))	STS-P406	Sealed Tight Solutions Ltd	Head & Jambs: 1no 40x6. Fitted centrally in leaf edges.	

4.5.9.7 Frame 9 (Steel) Doorset – TBA 4.5.9 Frame 9 (Steel) Doorset – TBA 4.5.9 Frame 9 (Steel) Doorset – TBA 4.5.9 Frame 9 (Steel)

4.5.9.8 Leaf 2 + Frame 10(54) (Steel) Doorset

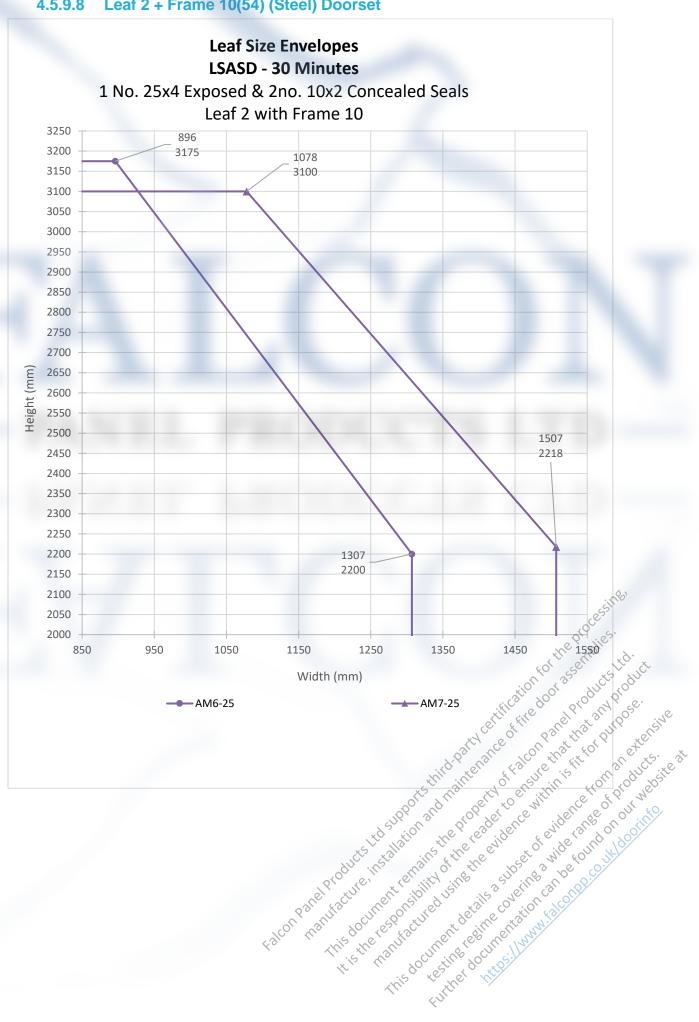
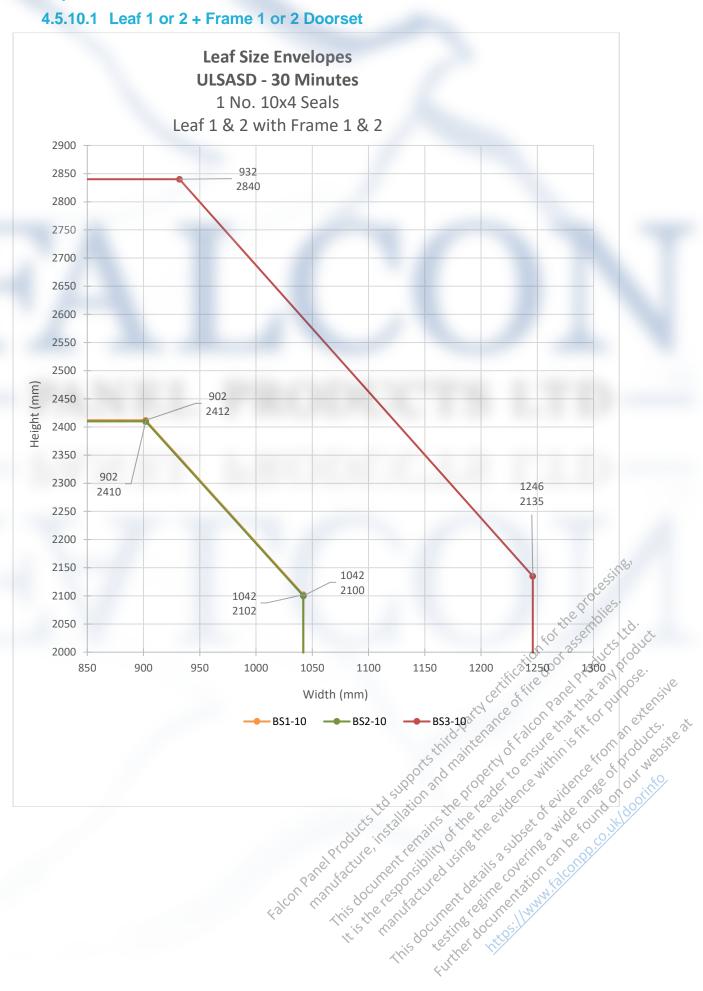
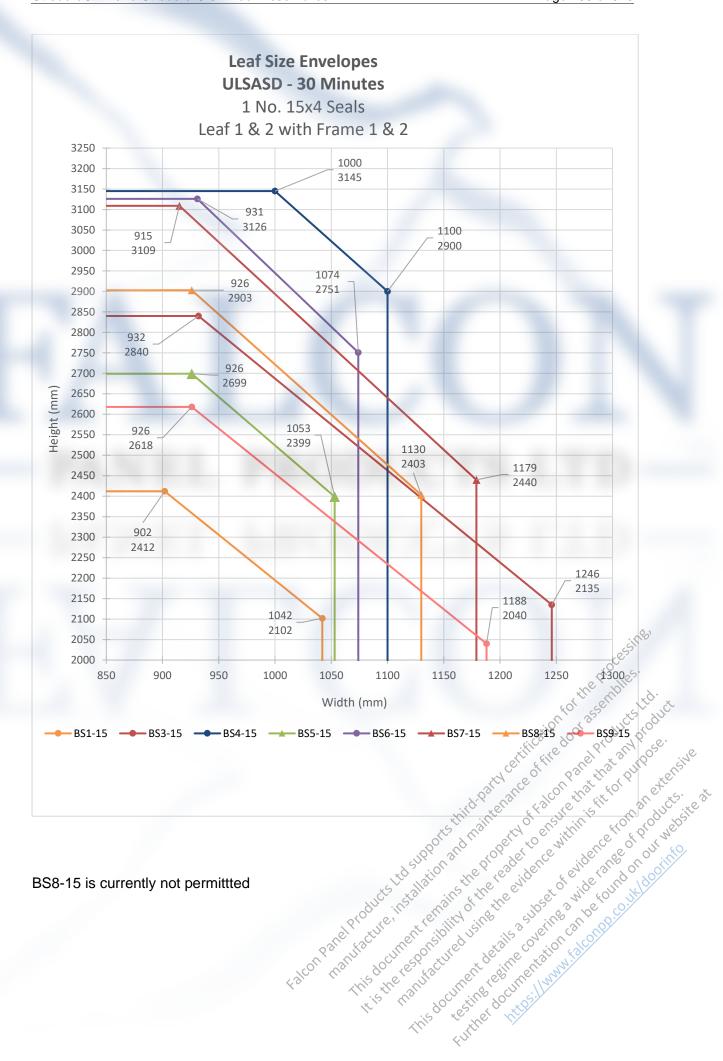


Table 1.8.1 - Intumescent Specification for LSASD Incorporating intumescent seals from DIG Ltd Leaf 2 with Frame 10				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
AM6-25 ——	Therm-A-	Intumescent	Head & Jambs:	
(Chilt/RF04002 (A))	Seal + Therm-A- Flex	Seals Ltd	1no 25x4 Therm-A-Seal. Fitted centrally in leaf edge	
			2no 10x2 Therm-A-Flex below the lipping. Fitted centrally, 15mm apart.	
			Bottom of leaf:	
			1no 20x2 Therm-A-Flex. Fitted centrally in the leaf edge.	
AM7-25 —	Therm-A-	Intumescent Seals Ltd	Head & Jambs:	
(Chilt/RF04002 (B))	Seal + Therm-A- Flex		1no 25x4 Therm-A-Seal. Fitted centrally in leaf edge	
PANI			2no 10x2 Therm-A-Flex below the lipping. Fitted centrally, 15mm apart.	
			Bottom of leaf:	
			1no 20x2 Therm-A-Flex. Fitted centrally in the leaf edge.	

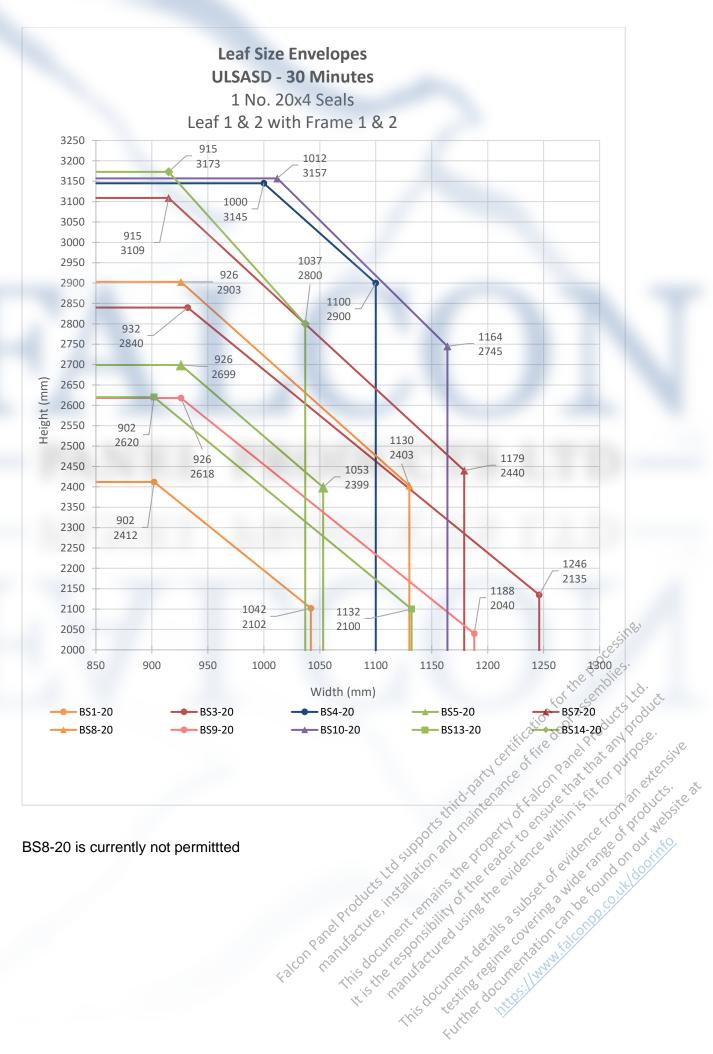


4.5.10 ULSASD Configuration – Leaf Size Envelopes & Intumescent Specification

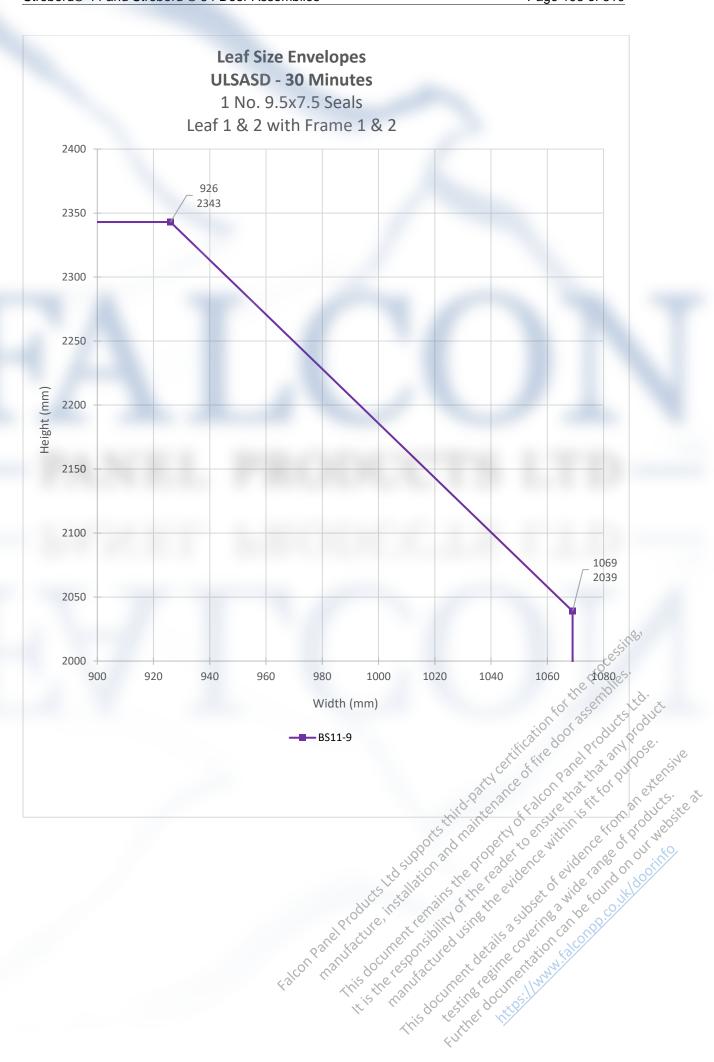


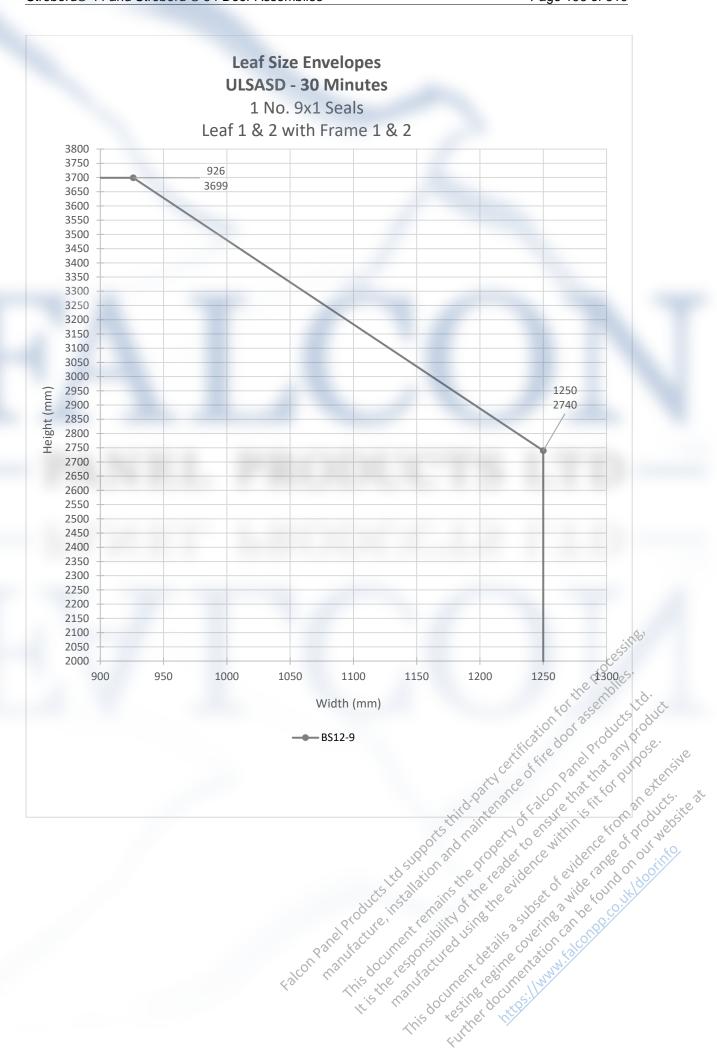


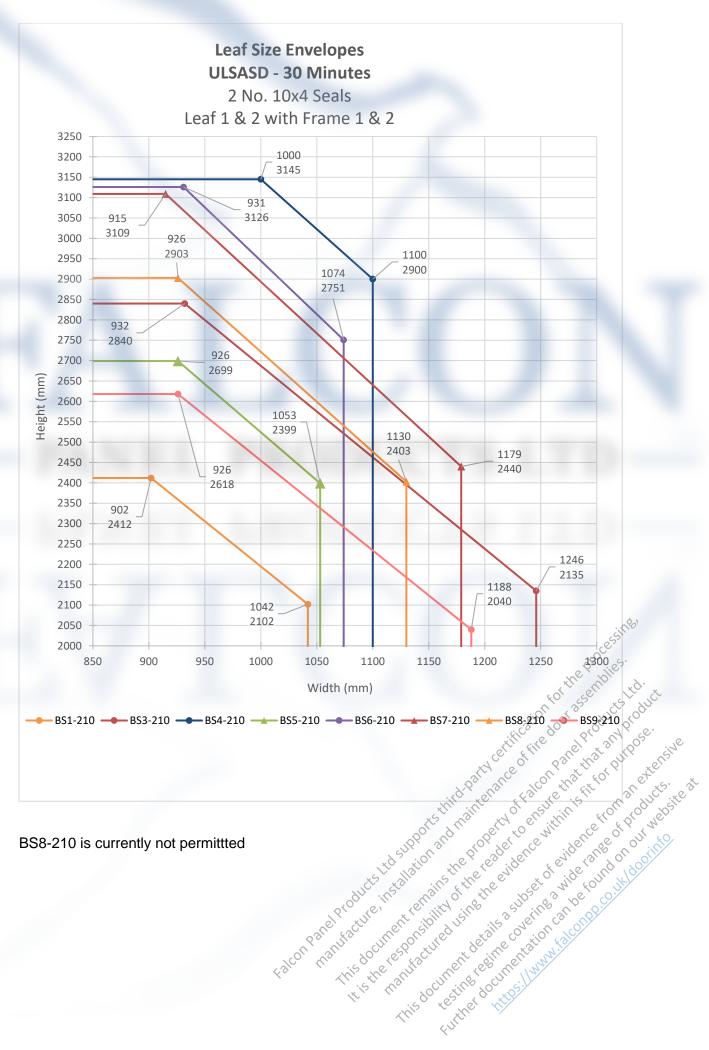
BS8-15 is currently not permittted



BS8-20 is currently not permittted







BS8-210 is currently not permittted

Table 2.1.1 - Intumescent Specification for ULSASD Incorporating intumescent seals from Mann McGowan Fabrications Ltd Leaf 1 or 2 with Frame 1 or 2				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
BS1-10 ———	Pyrostrip	Mann	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.	
(Chilt/RF09170)	100P	McGowan		
BS1-15 ———	Pyrostrip	Mann	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.	
(Chilt/RF09170)	100P	McGowan		
BS1-20 —— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.	
BS1-210 ———	Pyrostrip	Mann	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.	
(Chilt/RF09170)	100P	McGowan		

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document remains the property of the leader to ensure that the day of the reader to ensure the tribe the responsibility of the reader to ensure the the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure the r This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

This document, remains the property of a locure that that any product of the responsibility of the reader to ensure that the property of the resident of the resident of the reader to ensure that that any product of the resident of the reader to ensure that that any product of the resident of the reader to ensure that that the resident of the reader to ensure the resident of the resident of the reader to ensure the resident of the reader to ensure that the resident of the reader to ensure the resident of the resident of the resident of the reader to ensure the resident of the resident o This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document details a subset of evidence trange of products.

*Esting regimentation can be round on our website at Further documentation can be round on our website at Further documentation can be recorded as the found of the contraction of the c

Table 2.1.2 - Intumescent Specification for ULSASD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1 or 2 with Frame 1 or 2

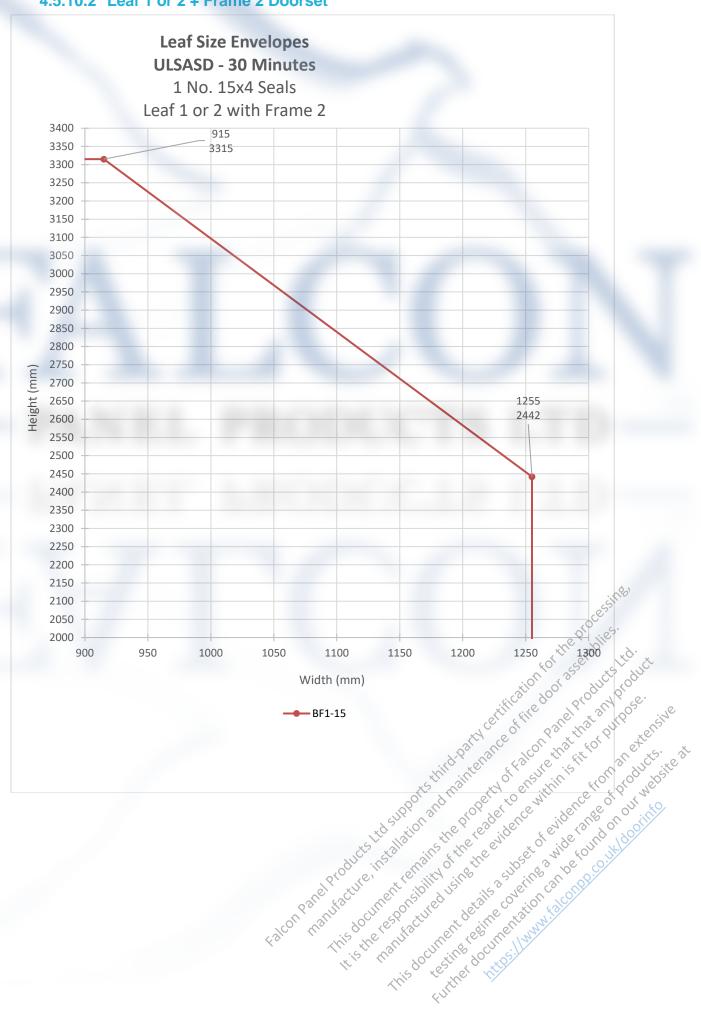
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
BS2-10 ——— (Chilt/RF07109)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
BS5-15 (WF430460 (A))	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
BS5-20 (WF430460 (A))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
BS5-210 (WF430460 (A))	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
BS13-20 ——— (WARRES 141445)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
BS14-20 (Chilt/RF05134 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		Falcon Panel Production	reveal or leaf edges. reveal or leaf edges. reveal or leaf edges.

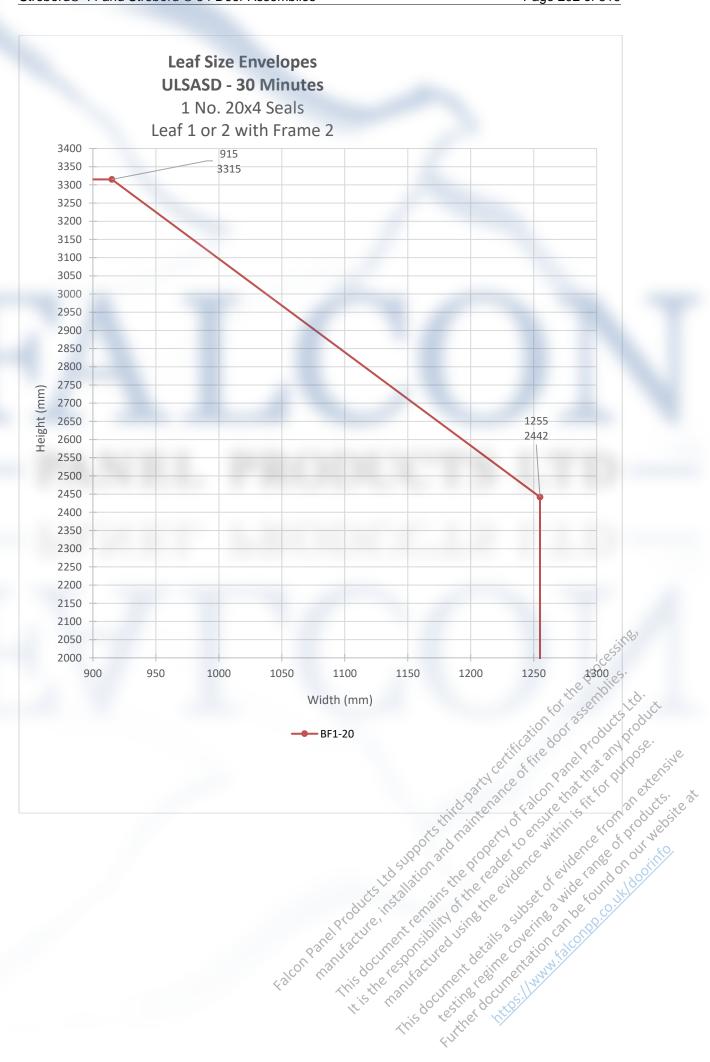
*Esting regime covering a wide range of products the at

Table 2.1.3 - Intumescent Specification for ULSASD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 1 or 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
BS3-10 ————————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
BS3-15 ——— (BMT/FEP/F16035)	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
BS3-20 ————————————————————————————————————	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
BS3-210 ————————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
BS7-15 (Chilt/RF08088)	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
BS7-20 (Chilt/RF08088)	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
BS7-210 (Chilt/RF08088)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
		Falcon Panel Production This of	reveal or leaf edges, 10mm apart, of reveal edges, 10mm apart, 10mm apart, 10mm apart, 10mm apart, 10mm ap

4.5.10.2 Leaf 1 or 2 + Frame 2 Doorset





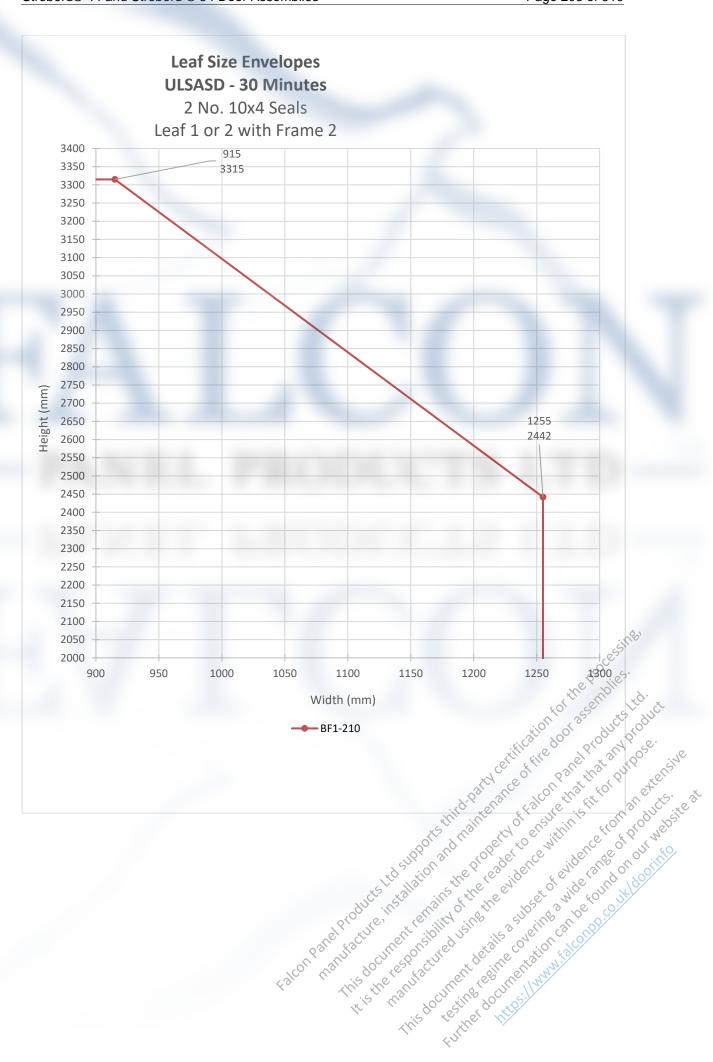
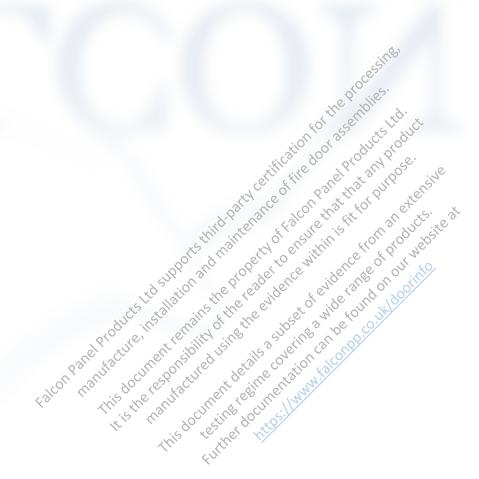


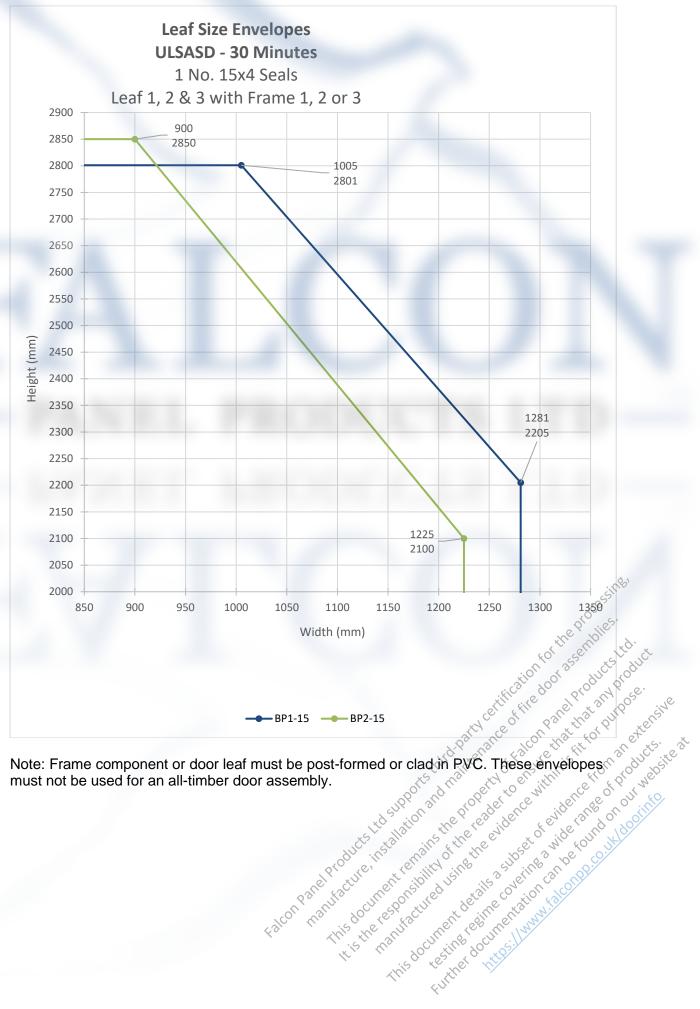
Table 2.2.1 - Intumescent Specification for ULSASD
Incorporating intumescent seals from Pyroplex Ltd

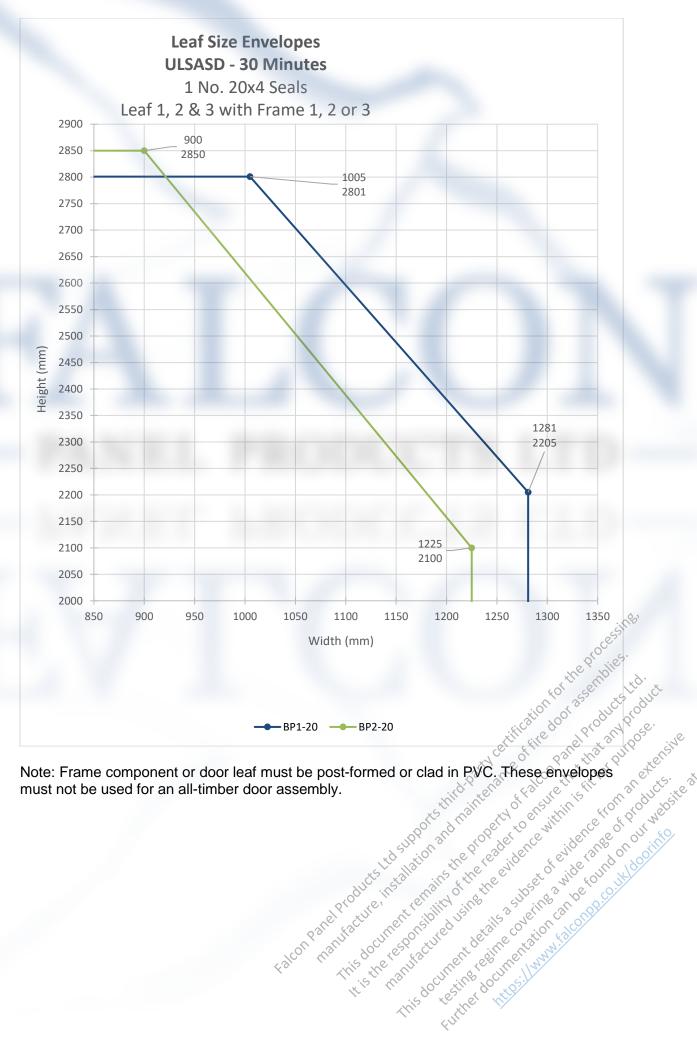
Leaf 1 or 2 with Frame 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
BF1-15 ———————————————————————————————————	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.	
BF1-20 ————————————————————————————————————	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.	
BF1-210 ————————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.	

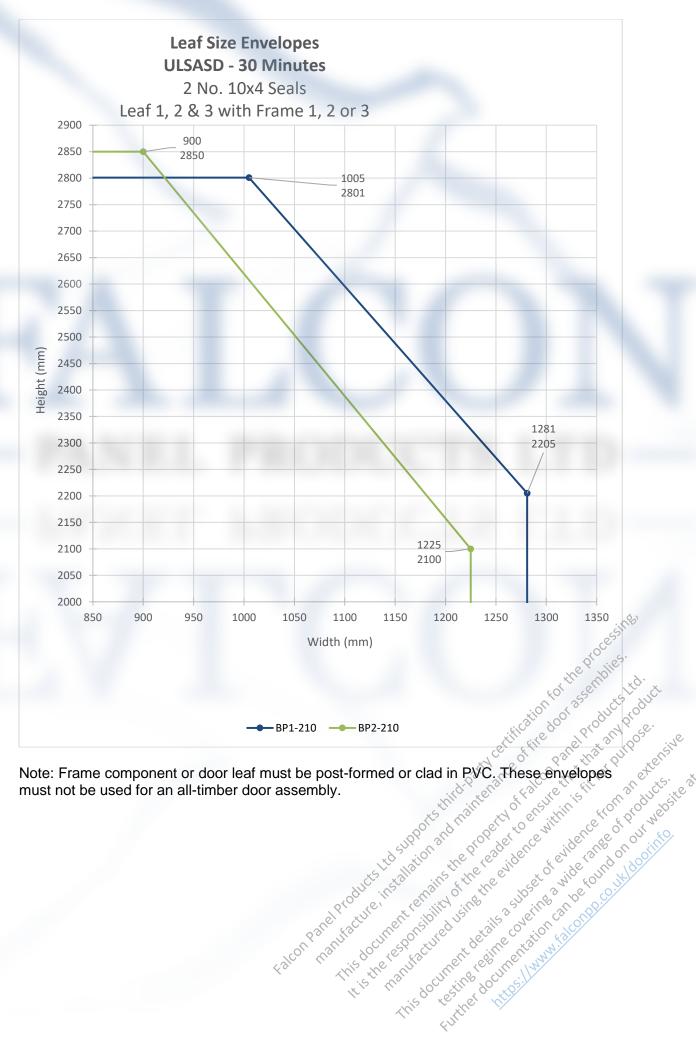


4.5.10.3 Leaf 1, 2 or 3 + Frame 1, 2 or 3 Doorset





*Esting regimentation can be range of products the at



*Esting regimentation can be range of products the at

Table 2.3.1 - Intumescent Specification for ULSASD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1, 2 or 3 with Frame 1, 2 or 3

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
BP1-15 (WF388638)	STS154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
BP1-20 (WF388638)	STS204FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
BP1-210 ————————————————————————————————————	STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

Table 2.3.2 - Intumescent Specification for ULSASD Incorporating intumescent seals from Lorient Polyproducts Ltd

Leaf 1, 2 or 3 with Frame 1, 2 or 3

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
BP2-15 ——— (RF11059)	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
BP2-20 ——— (RF11059)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Head & Jambs: 2no 10x4. Fitted centrally in frame
BP2-210 ——— (RF11059)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
		Falcon Panel Production This de This d	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

4.5.10.4 Leaf 4 + Frame 1 and 2 Doorset

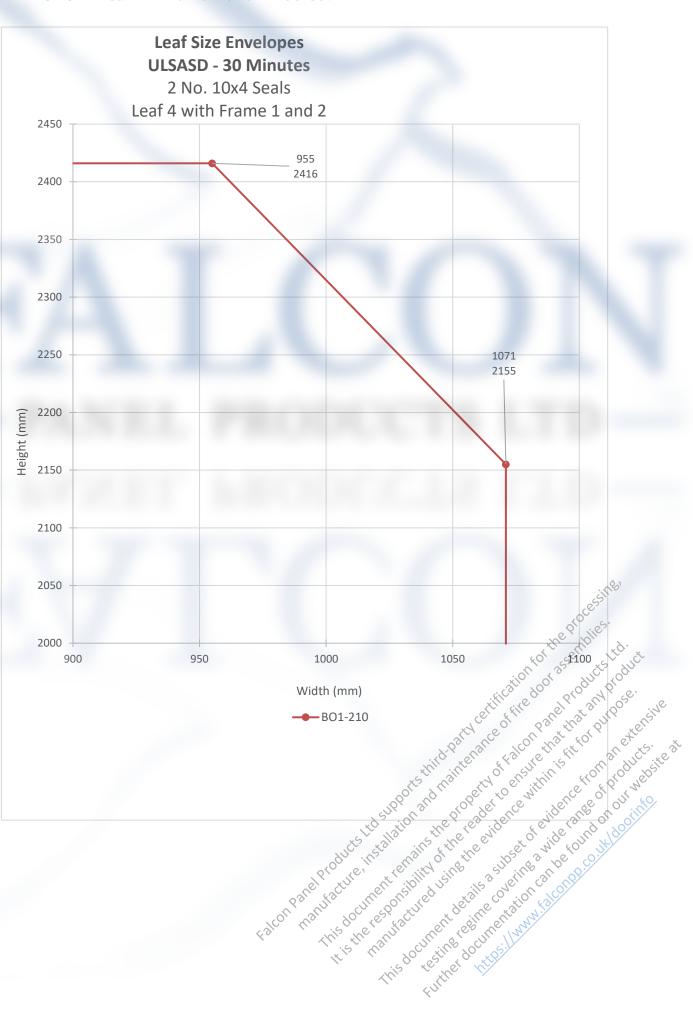
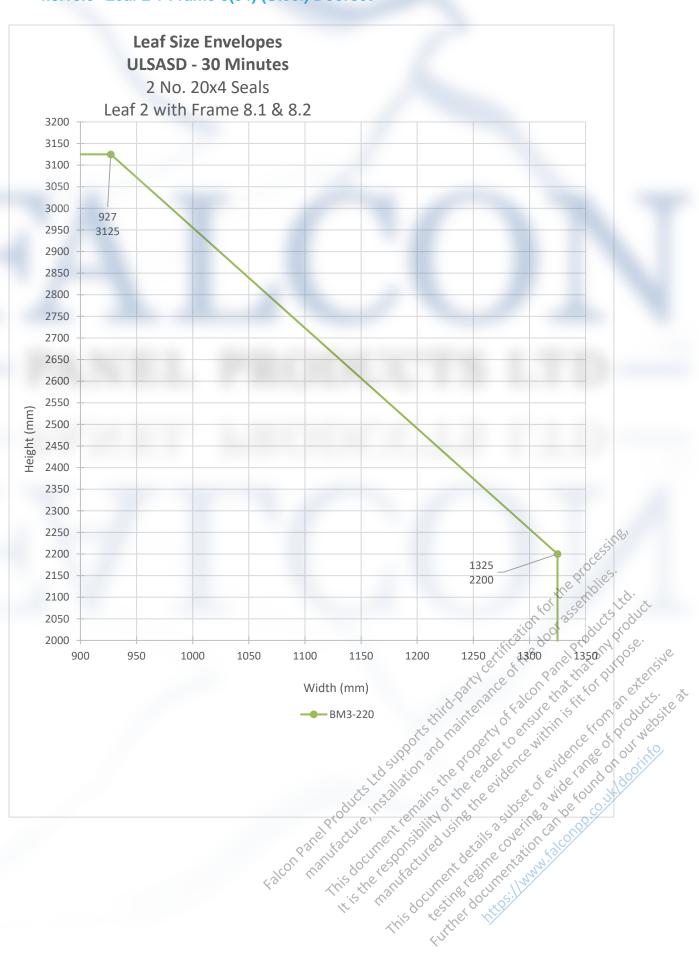
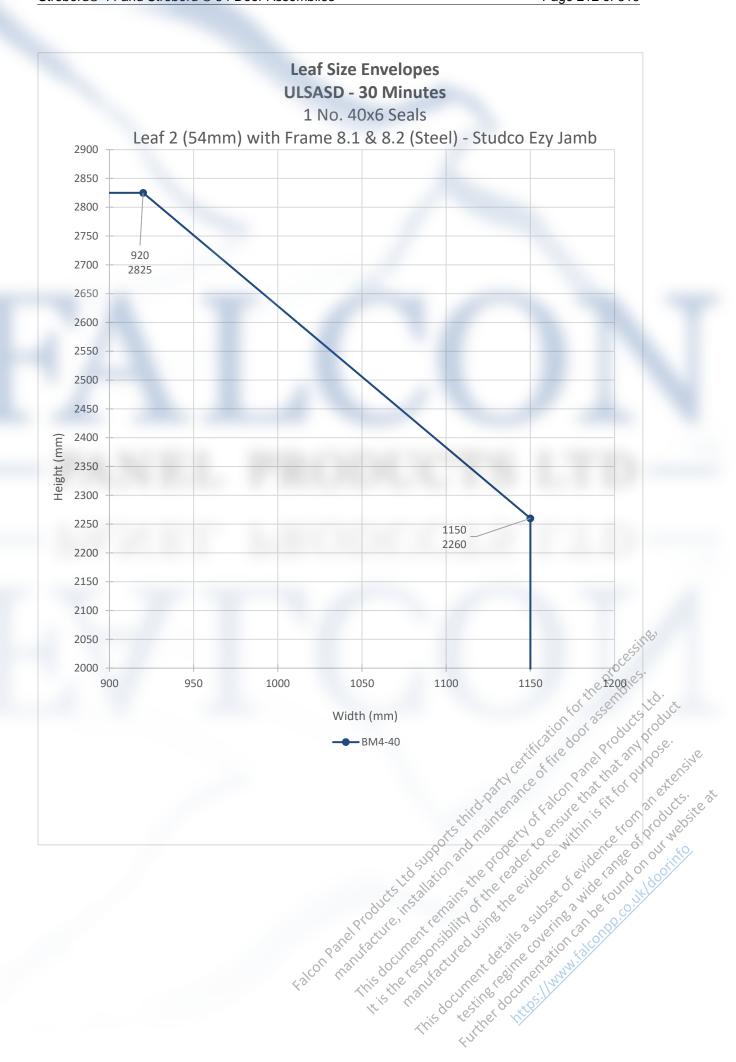


Table 2.9.1 - Intumescent Specification for ULSASD Incorporating intumescent seals from Pyroplex Ltd Leaf 4 with Frame 1 and 2			
Intumescent Spec. Reference	Make / Type	Manufacturer / Supplier	Location & Size
& (Test Reference)		, cappiloi	
BO1-210 —	FO8500	Pyroplex Ltd	Head & Jambs:
(BMT/FER/F13263)			2no 10x4. Fitted 5.5mm apart, 4mm from the unexposed face.

4.5.10.5 Frame 7 (Steel) Doorset TBA

4.5.10.6 Leaf 2 + Frame 8(54) (Steel) Doorset





This document, remains the property of a locure that that any product of the responsibility of the reader to ensure that the property of the resident of the resident of the reader to ensure that that any product of the resident of the reader to ensure that that any product of the resident of the reader to ensure that that the resident of the reader to ensure the resident of the resident of the reader to ensure that the resident of the reader to ensure the resident of the re This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence trange of products.

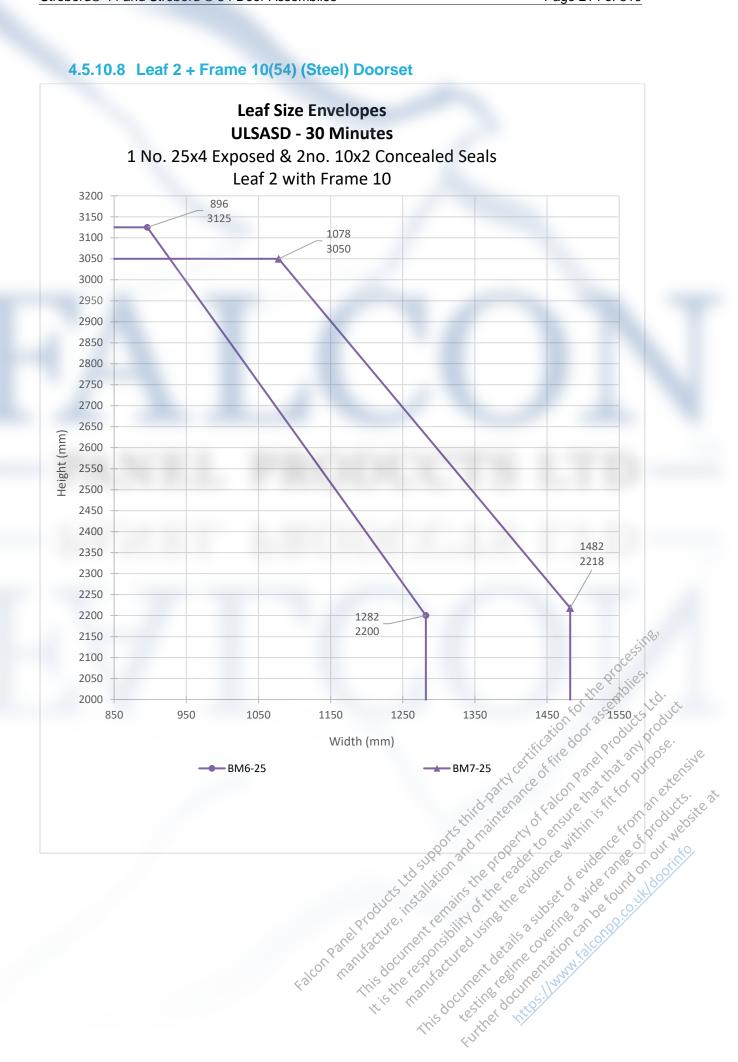
testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

Table 2.6.1 - Intumescent Specification for ULSASD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 2 with Frame 8.1 & 8.2			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
BM3-220 ——— (WF415618 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 2no 20x4. Fitted centrally in leaf edges, 5mm apart.

Table 2.6.2 - Intumescent Specification for ULSASD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 2 with Frame 8.1 & 8.2			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
BM4-40 ——— (WF391940 (A))	STS-P406	Sealed Tight Solutions Ltd	Head & Jambs: 1no 40x6. Fitted centrally in leaf edges.

Falcon Panel Products Lides Undon and maintenance of fine door assemblies. 4.5.10.7 Frame 9 (Steel) Doorset - TBA

Report No:



This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document responsibility of the tree evidence within is the for purpose.

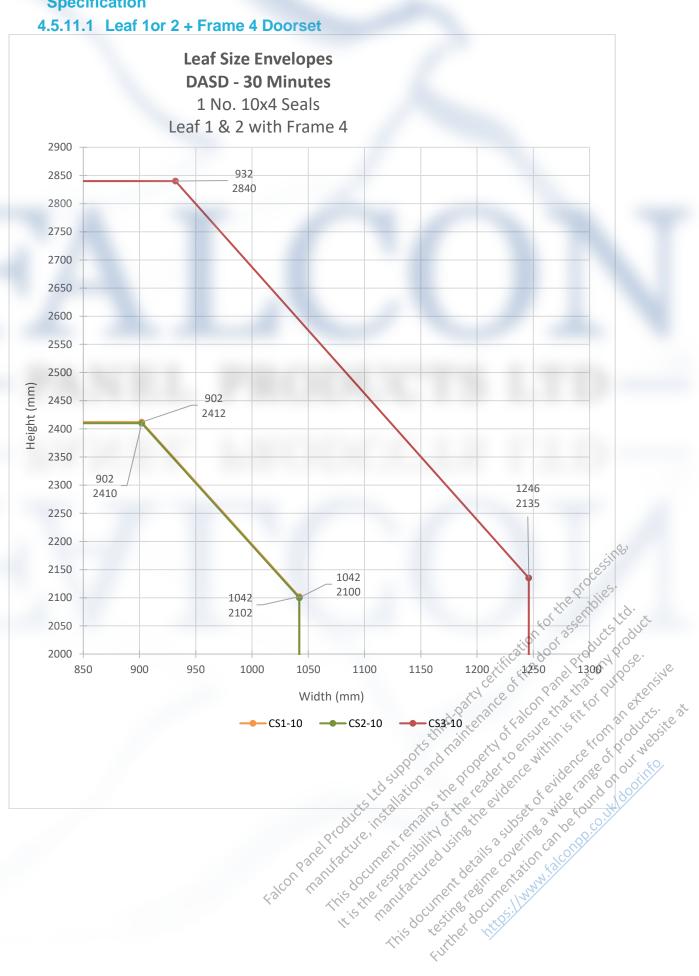
This document responsibility of the tree evidence within is the for purpose.

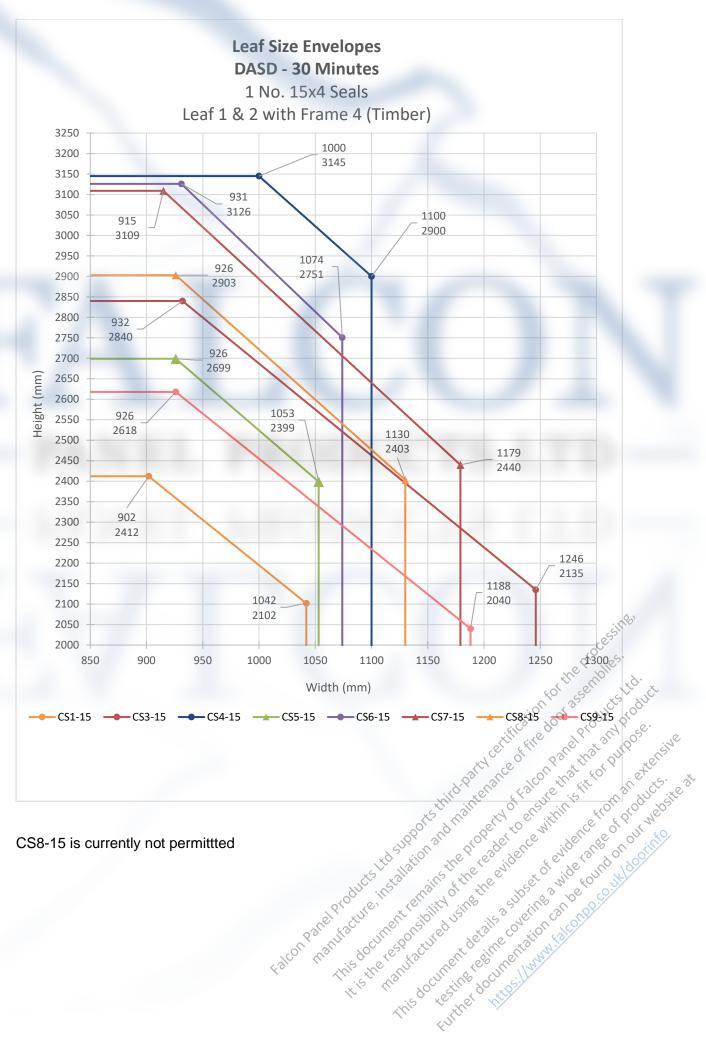
This document details a subset of evidence tange of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

Table 2.8.1 - Intumescent Specification for ULSASD Incorporating intumescent seals from DIG Ltd Leaf 2 with Frame 10			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
BM6-25 —— (Chilt/RF04002 (A))	Therm-A- Seal + Therm-A- Flex	Intumescent Seals Ltd	Head & Jambs: 1no 25x4 Therm-A-Seal. Fitted centrally in leaf edge 2no 10x2 Therm-A-Flex below the lipping. Fitted centrally, 15mm apart. Bottom of leaf: 1no 20x2 Therm-A-Flex. Fitted centrally in the leaf edge.
BM7-25 (Chilt/RF04002 (B))	Therm-A- Seal + Therm-A- Flex	Intumescent Seals Ltd	Head & Jambs: 1no 25x4 Therm-A-Seal. Fitted centrally in leaf edge 2no 10x2 Therm-A-Flex below the lipping. Fitted centrally, 15mm apart. Bottom of leaf: 1no 20x2 Therm-A-Flex. Fitted centrally in the leaf edge.
		Falcon Panel Production This distriction	the reality of the property of the end of th

4.5.11 DASD Configuration – Leaf Size Envelopes & Intumescent Specification

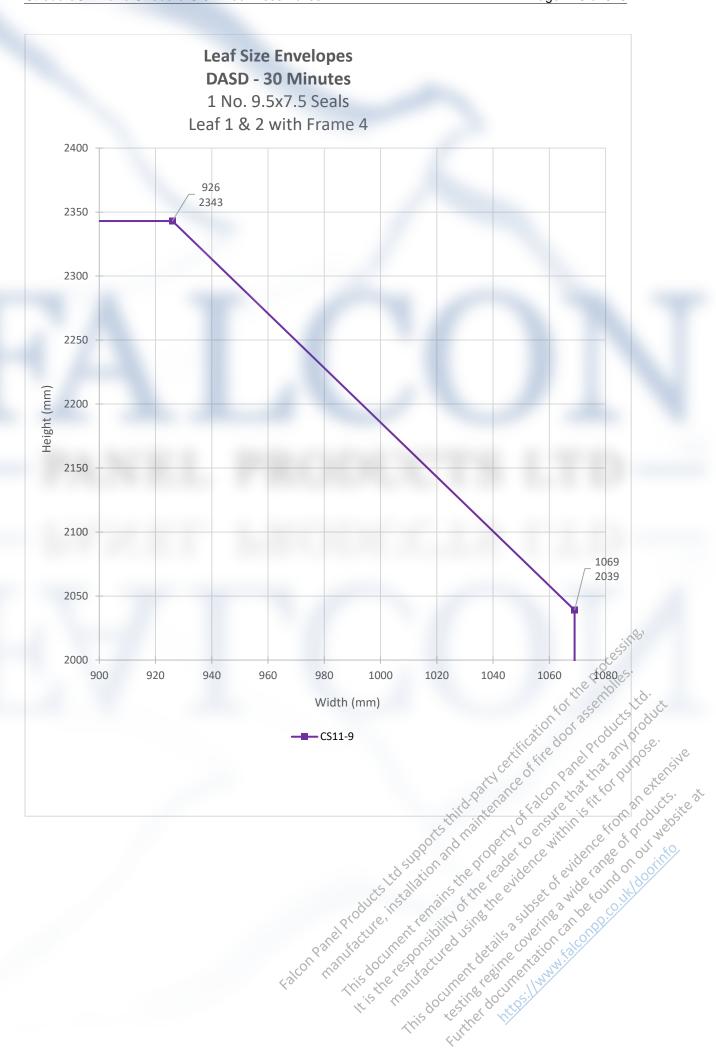


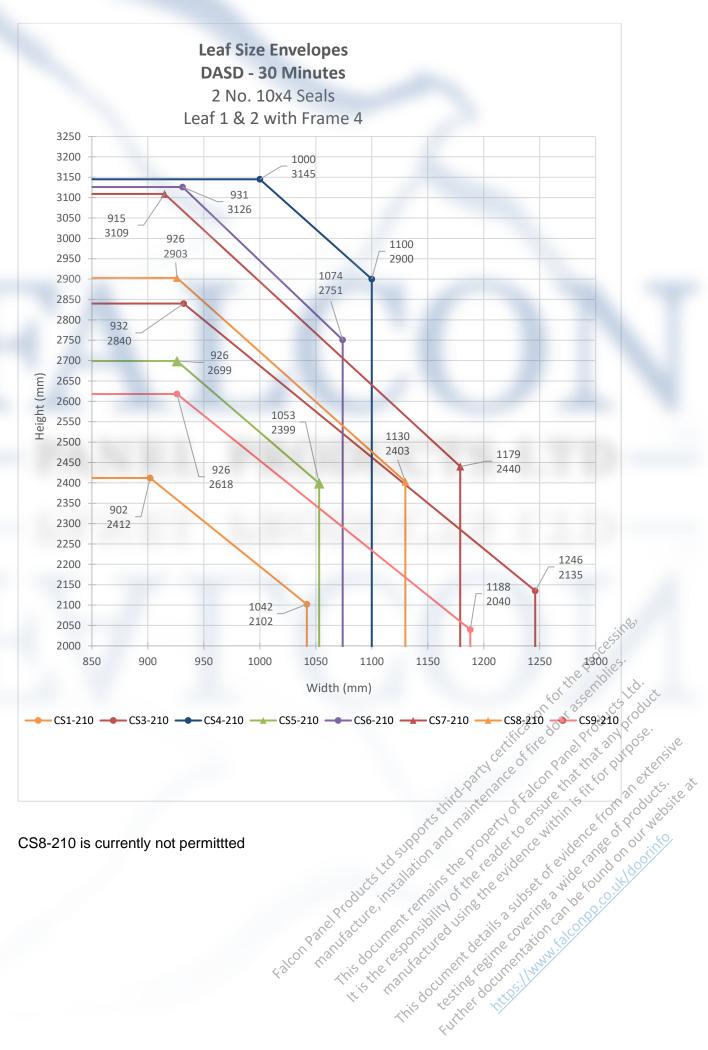


CS8-15 is currently not permittted



CS8-20 is currently not permittted





CS8-210 is currently not permittted

(Chilt/RF09170)

Table 2.1.1 - Intume Incorporating intum Leaf 1 or 2 with Fran	escent seals t		owan Fabrications Ltd	
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
CS1-10 ———————————————————————————————————	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.	
CS1-15 (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.	
CS1-20 ————————————————————————————————————	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.	
CS1-210 ————————————————————————————————————	Pyrostrip 100P	Mann McGowan	Head & Jambs:	

2no 10x4. Fitted centrally in frame

reveal or leaf edges, 10mm apart.

This document, remains the property of a locure that that any product of the responsibility of the reader to ensure that the property of the resident of the resident of the reader to ensure that that any product of the resident of the res This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document details a subset of evidence from an extensive

*Esting regime covering a wide range of products ite at the regime documentation and performent ation and the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of

Table 2.1.2 - Intumescent Specification for DASD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1 or 2 with Frame 4

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
CS2-10 ——— (Chilt/RF07109)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
CS5-15 (WF430460 (A))	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
CS5-20 (WF430460 (A))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
CS5-210 (WF430460 (A))	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
CS13-20 ——— (WARRES 141445)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
CS14-20 (Chilt/RF05134 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		A.V.	1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted centrally in frame reveal or leaf edges. 1no 20x4. Fitted edges. 2no 20x4. Fitted edges. 2n

*Esting regime covering a wide range of products ite at the regime documentation can be round on our with the ruther documentation can be recorded in the regime of the re

Table 2.1.3 - Intumescent Specification for DASD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 4

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
CS3-10 ————————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
CS3-15 ——— (BMT/FEP/F16035)	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
CS3-20 ————————————————————————————————————	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
CS3-210 ——— (BMT/FEP/F16035)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
CS7-15 (Chilt/RF08088)	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
CS7-20 (Chilt/RF08088)	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
CS7-210 (Chilt/RF08088)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
		kalcon Panal Production this distribution in the sale of the sale	reveal or leaf edges, 10mm apart, or reveal or reveal edges, 10mm apart, or reveal edges, 10mm apa

STS104FO

CS4-210 -

(BMT/FEP/F15034)

Table 2.1.4 - Intume Incorporating intum Leaf 1 or 2 with Fran	escent seals t		
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
CS4-15 (BMT/FEP/F15034)	STS154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
CS4-20 (BMT/FEP/F15034)	STS204FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.

Sealed Tight

Solutions Ltd

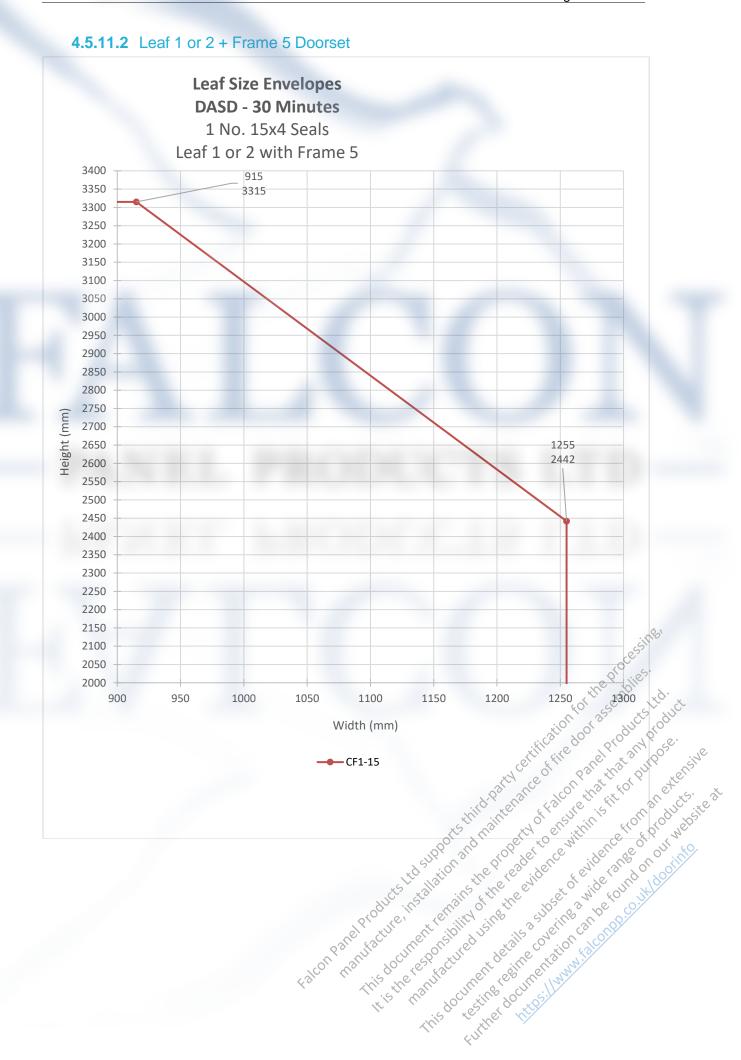
Head & Jambs:

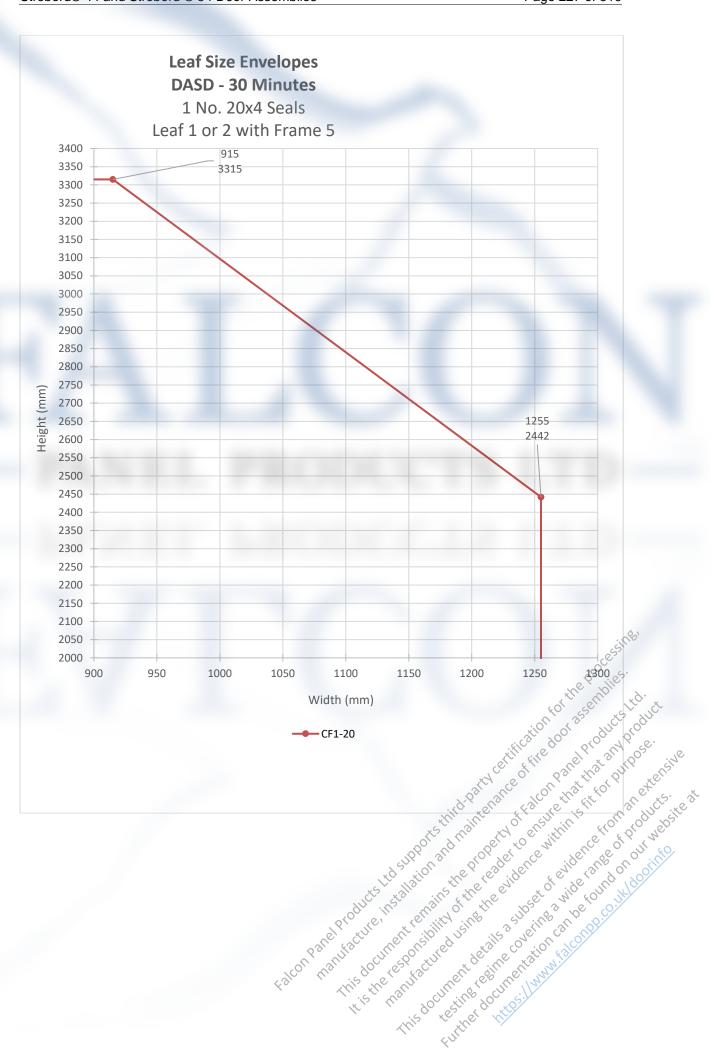
2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

Table 2.1.5 - Intumescent Specification for DASD Incorporating intumescent seals from DIG Ltd Leaf 1 or 2 with Frame 4 Intumescent Spec. Make / Manufacturer **Location & Size** Reference **Type** / Supplier & (Test Reference) CS6-15 — Therm-A-Intumescent **Head & Jambs:** Seal Seals Ltd 1no 15x4. Fitted centrally in frame (CFR1812121) reveal or leaf edges. CS6-210 ---Therm-A-Intumescent Head & Jambs: Seal Seals Ltd 2no 10x4. Fitted centrally in frame (CFR1812121) reveal or leaf edges, 10mm apart. CS10-20 -Therm-A-Intumescent Head & Jambs: & Seal Seals Ltd 1no 20x4. Fitted centrally in frame (CFR1811071 (A)) reveal or leaf edges. ad 1no 9.4 Produce in a remaining the production of the production CS11-9 N30 Sealmaster Head & Jambs: 1no 9.5x7.5 Fitted centrally in frame (CFR1812111) This document details a sub reveal or leaf edges. testing regime covering a more further documentation can be The document chief by ne responsibility of the fit DUITIETH LEEDING CONFRINGS

Table 2.1.5 - Intumescent Specification for LSASD
Incorporating intumescent seals from Astroflame (Fireseals) Ltd
Leaf 1 or 2 with Frame 4

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
CS9-15 —	AF1504FSX	Astroflame	Head & Jambs:
(BMT/FEP/F14265 (A))			1no 15x4. Fitted centrally in frame reveal or leaf edges.
CS9-20 —	AF2004FSX	Astroflame	Head & Jambs:
(BMT/FEP/F14265 (A))			1no 20x4. Fitted centrally in frame reveal or leaf edges.
CS9-210 —	AF1004FSX	Astroflame	Head & Jambs:
(BMT/FEP/F14265 (A))			2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.





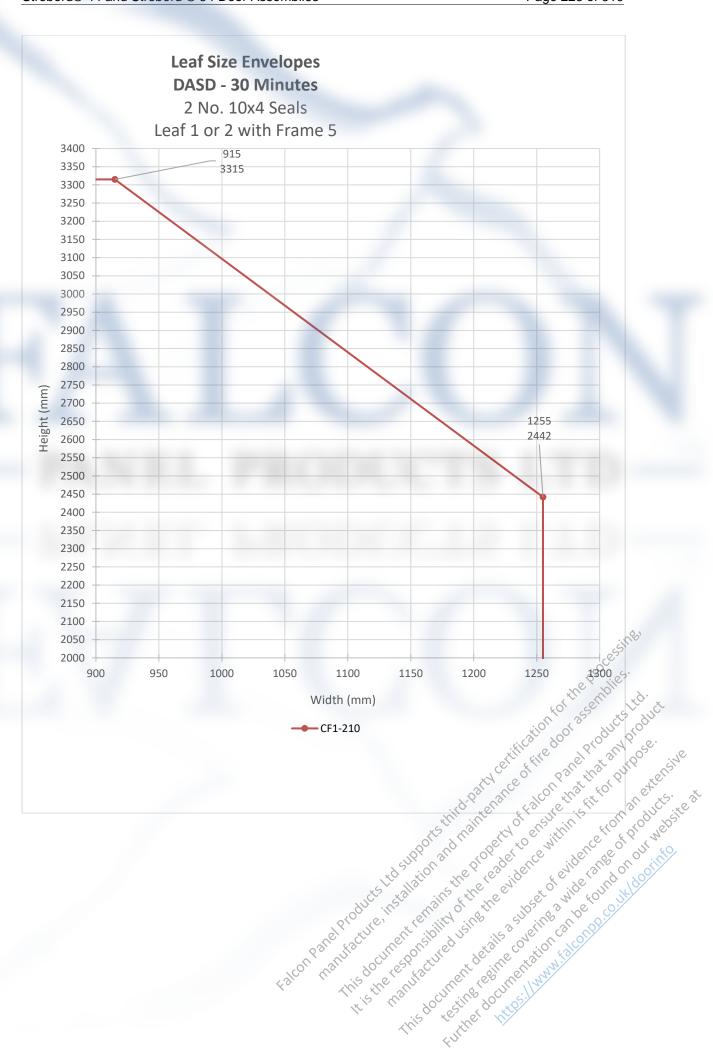


Table 2.2.1 - Intumes Incorporating intume Leaf 1 or 2 with Fran	escent seals		
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
CF1-15 ——— (Chilt/RF08125 AR1)	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
CF1-20 ——— (Chilt/RF08125 AR1)	FO8600	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
CF1-210 ——— (Chilt/RF08125 AR1)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

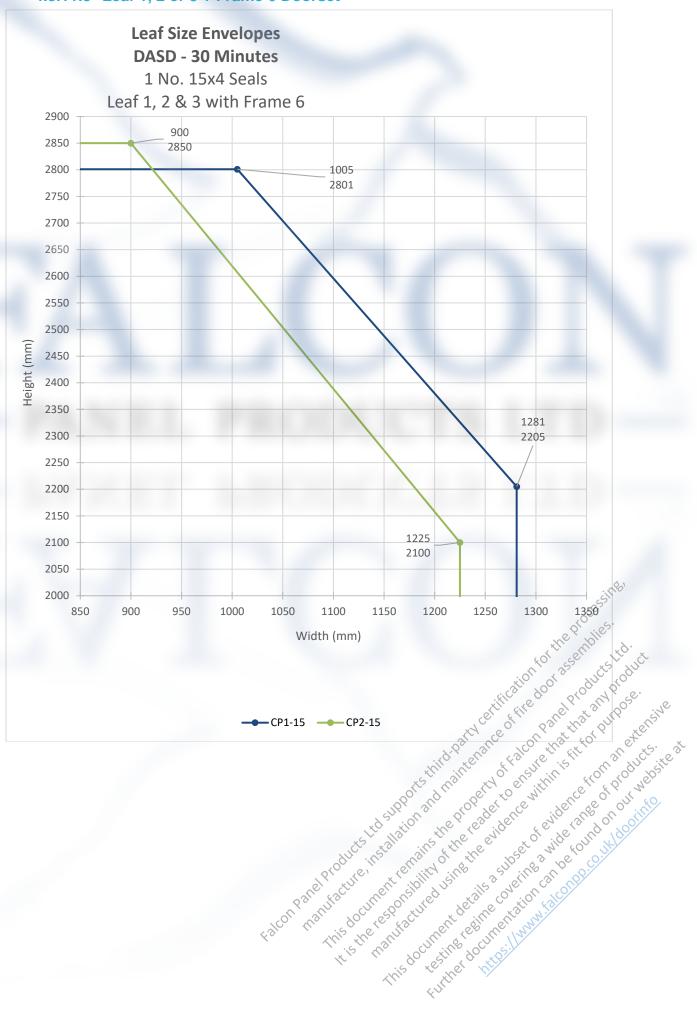
Eaton Panel Products Lid supports third party certification for the products lid supports lid supports the products lid supports the products lid supports lid sup

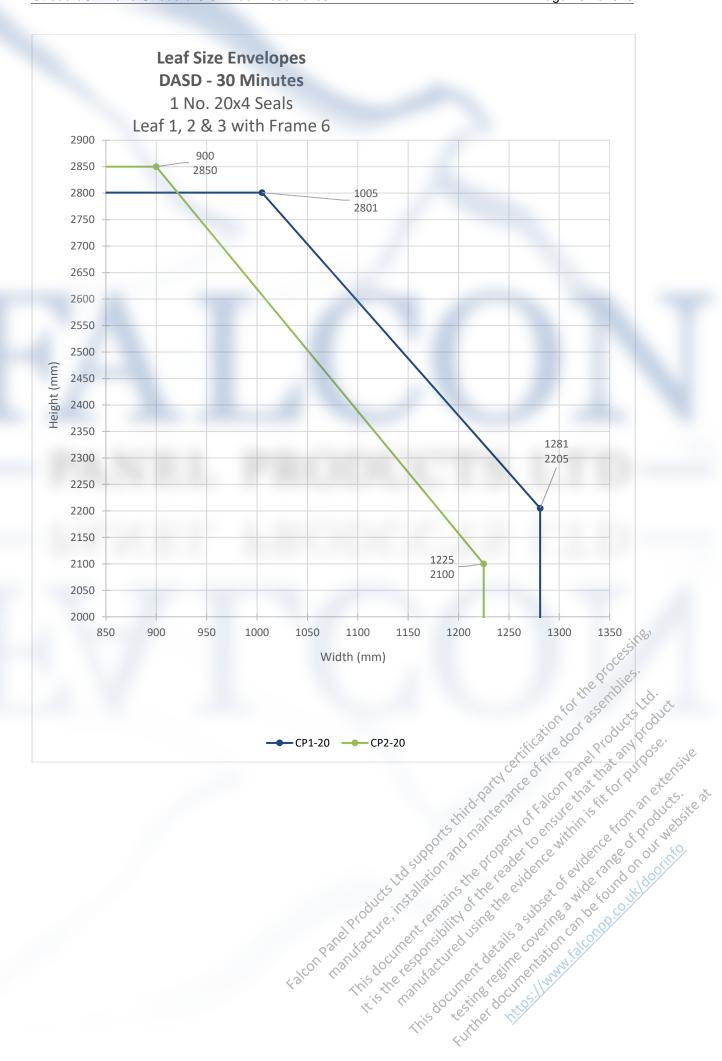
This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document responsibility of the the evidence within is the product of the treatment of the distinguished using the evidence within is the product of the treatment of the treatment of the read of the read of the evidence within is the product of the read of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the evidence within its product

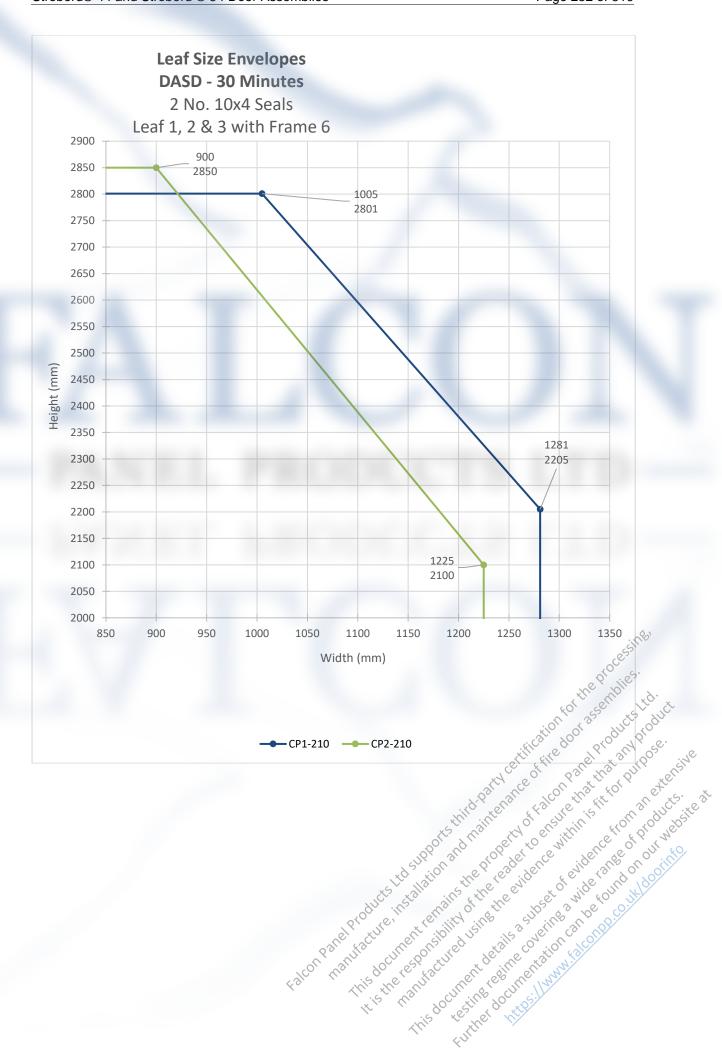
This document details a subset of evidence tange of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

4.5.11.3 Leaf 1, 2 or 3 + Frame 6 Doorset







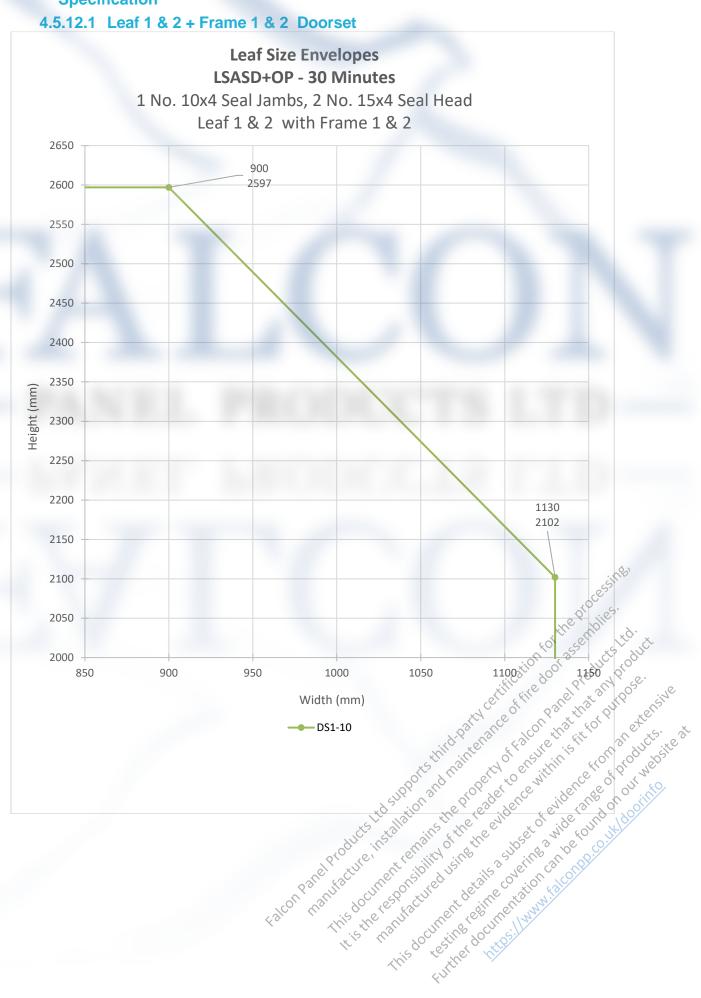
2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

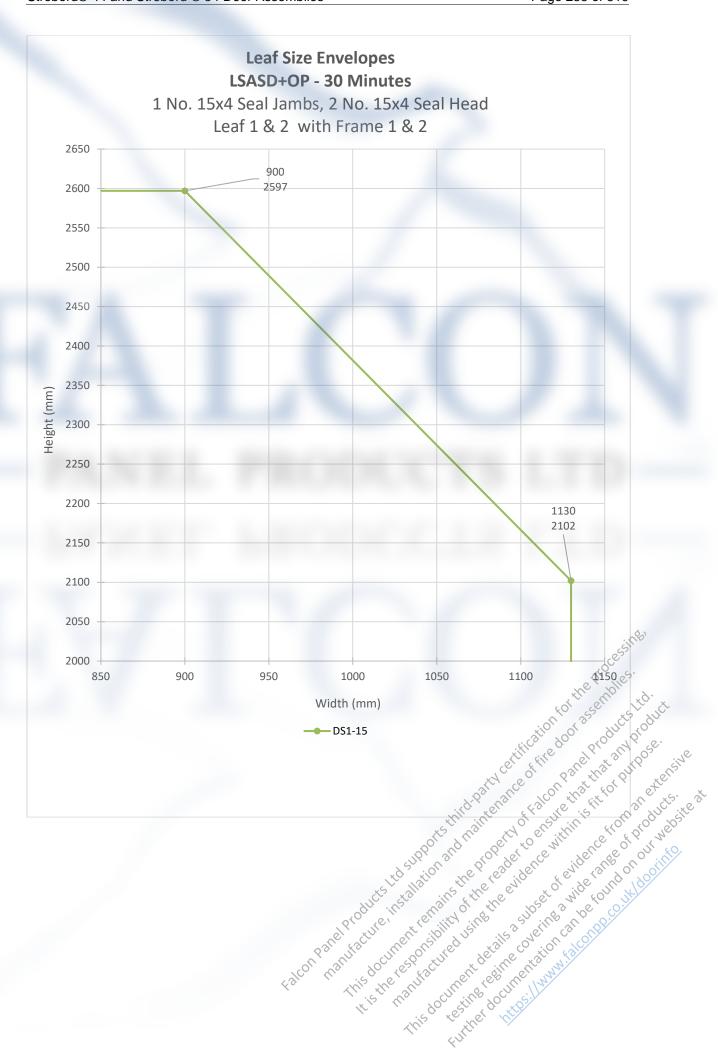
(WF388638)

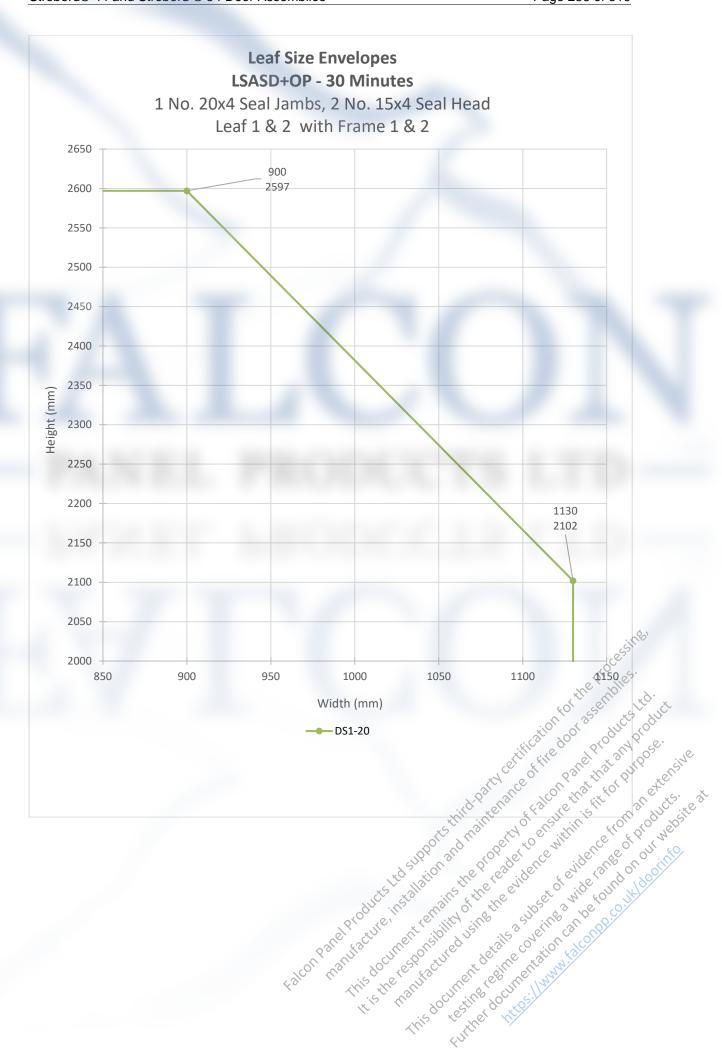
Table 2.3.1 - Intumescent Specification for DASD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1, 2 or 3 with Frame 6 Intumescent Spec. Make / Manufacturer **Location & Size** Reference Type / Supplier & (Test Reference) CP1-15 STS154FO Sealed Tight Head & Jambs: Solutions Ltd (WF388638) 1no 15x4. Fitted centrally in frame reveal or leaf edges. CP1-20 STS204FO Sealed Tight Head & Jambs: Solutions Ltd (WF388638) 1no 20x4. Fitted centrally in frame reveal or leaf edges. CP1-210 -STS104FO Sealed Tight **Head & Jambs:** Solutions Ltd

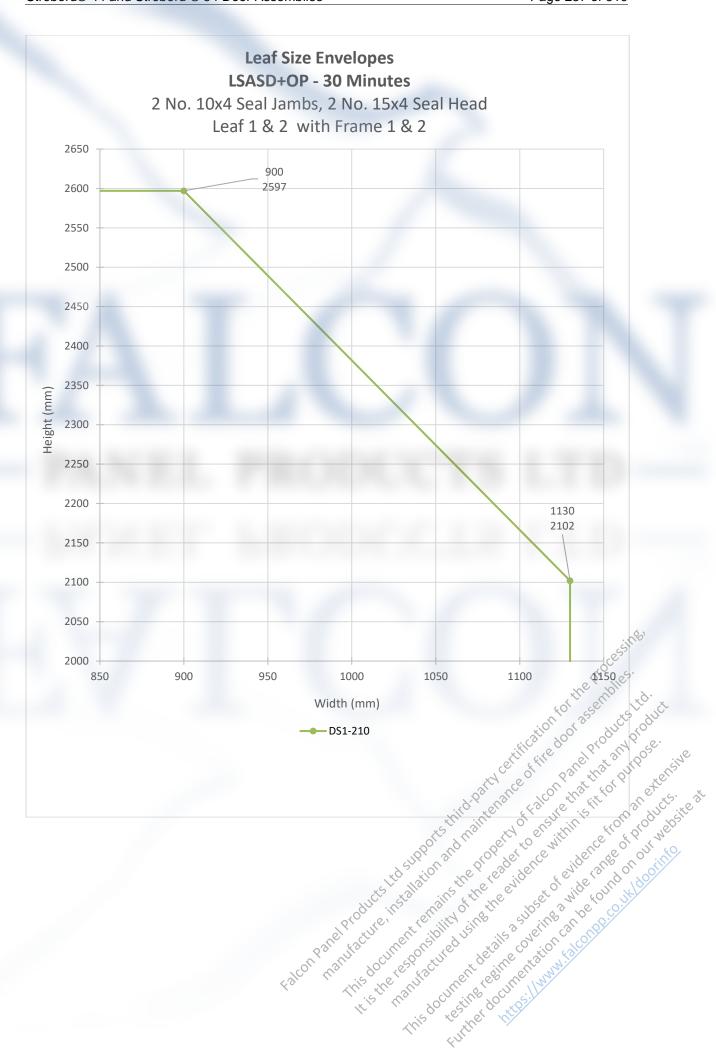
Table 2.3.2 - Intumescent Specification for DASD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1, 2 or 3 with Frame 6			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
CP2-15 ————————————————————————————————————	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
CP2-20 ——— (RF11059)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges.
CP2-210 ——— (RF11059)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
		Falcon Panel Production I this de l'Article Panel Production Panel Production	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

4.5.12 LSASD+OP Configuration – Leaf Size Envelopes & Intumescent Specification









1no 15x4 Fitted centrally in frame reveal

or leaf edges.

Laten Panel Products lid supports third Party certification for the Products lid supports third Party certification for the Products lid supports third Party certification and maintenance of fine door assemblies.

This document, remains the property of the leader to ensure that that any product the tribe document of the property of the product of the property of the property of the product This document remains the property of Falcon Panel Products lited any product.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

This document detains a subset of evidence trange of products.

Resting regimentation and the found of products ite at the state documentation and the found of the continue o

Table 4.1.1 - Intun Incorporating intu Leaf 1 or 2 with F	imescent s	eals from Lorie	SASD+OP nt Polyproducts Ltd
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
DS1-10 ———————————————————————————————————	LP1504 & LP1004	Lorient Polyproducts Ltd	Head: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart. Jambs: 1no 10x4 Fitted centrally in frame reveal or leaf edges.
DS1-15 ———————————————————————————————————	LP1504	Lorient Polyproducts Ltd	Head: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart. Jambs:

Report No:

LP1504 &

LP1004

DS1-210

(RF00136)

Table 4.1.1 - Intumescent Specification for LSASD+OP Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1 or 2 with Frame 1 or 2 Intumescent Intumescent Intumescent Intumescent Spec. Reference Spec. Spec. Spec. & (Test Reference) Reference Reference Reference & (Test & (Test & (Test Reference) Reference) Reference) LP2004 & DS1-20 Lorient Head: Polyproducts LP1504 (RF00136) 2no 15x4. One seal fitted centrally in Ltd the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart.

Lorient

Polyproducts

reveal or leaf edges. Head:

Jambs:

2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart.

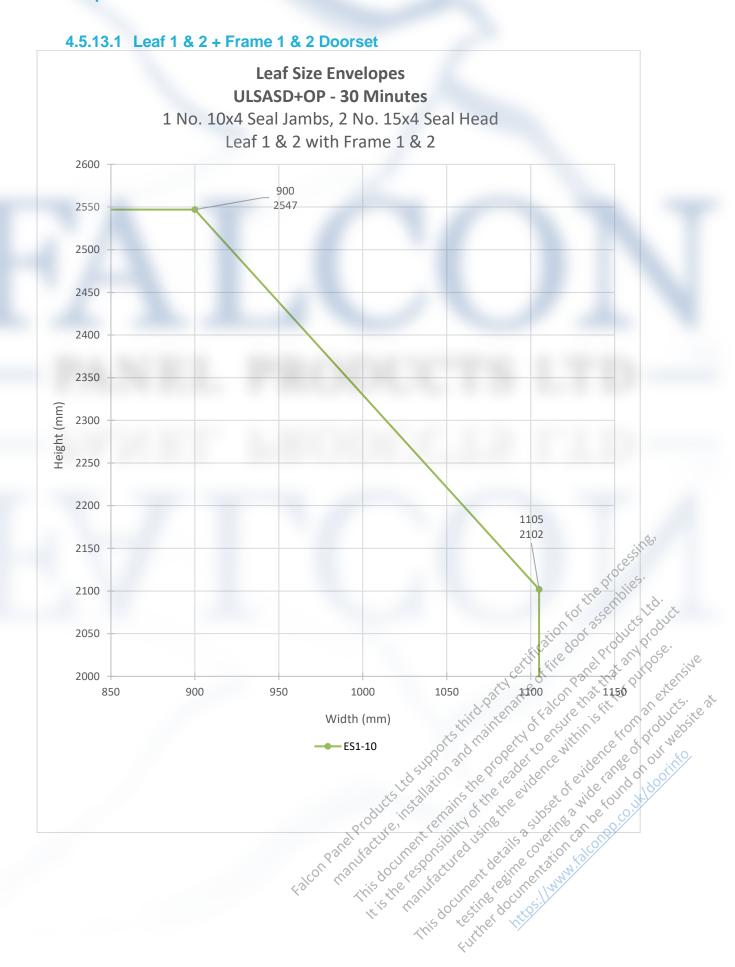
1no 20x4 Fitted centrally in frame

Jambs:

2no 10x4 Fitted centrally in frame reveal or leaf edges, 10mm apart

Eaten Panel Products Ltd supports third pathtenance of fire door assemblie Panel Products Ltd supports third partite reference to the products and in ainternance of the products Ltd supports third partite reference to the products and in ainternance to the products are an ainternal to the products and in ainternance to the products and in ainternance to the products and in ainternance to the products are an ainternal to the products and in ainternance to the products and in ainternal to the products are an ainternal to the products and in ainternance to the products are an ainternal to the products and in ainternal to the products are an ainternal to the products and the products are an ainternal to the products and the products are an ainternal to the products and the products are an ainternal to the products and the products are an ainternal to the products are an ainternal to the products and the products are an ainternal to the products and the products are an ainternal to the products and the products are an ainternal to the products are an ainternal to the products and the products are an ainternal to the products and the products are an ainternal to the products are an ainternal to the products are an ainternal to the product anutacture, installation and maintenance of three door assembles, that any product this the reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure the re This document remains the property of Facon Panel Froducts Lind In Product to ensure that the first the purpose of the Education of the Educat This document details a subset of evidence from an extensive *esting resine covering a mide range of products the at found on our wints

4.5.13 ULSASD+OP Configuration – Leaf Size Envelopes & Intumescent Specification









This document remains the property of the leader to ensure that the day of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the this the responsibility of the reader to ensure the reader to en This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document detains a subset of a wide range of products.

testing regime covering a wide range of products ite at the regime documentation and a recovering to the range of products in the range of product

Table 5.1.1 - Intumes			
Incorporating intume Leaf 1, 2 with Frame		from Lorient Po	lyproducts Ltd
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
ES1-10 — (RF00136)	LP1504 & LP1004	Lorient Polyproducts Ltd	Head: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart. Jambs: 1no 10x4 Fitted centrally in frame
ES1-15 ———————————————————————————————————	LP1504	Lorient Polyproducts Ltd	reveal or leaf edges. Head: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart.
			Jambs: 1no 10x4 Fitted centrally in frame reveal or leaf edges.
		Falcon Panel Production This distriction	reveal or leaf edges. reveal or leaf edges. reveal or leaf edges.

*Esting regime covering a wide range of products ite at the regime documentation and performent ation and the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of

Table 5.1.1 - Intumescent Specification for ULSASD+OP
Incorporating intumescent seals from Lorient Polyproducts Ltd
Leaf 1. 2 with Frame 1

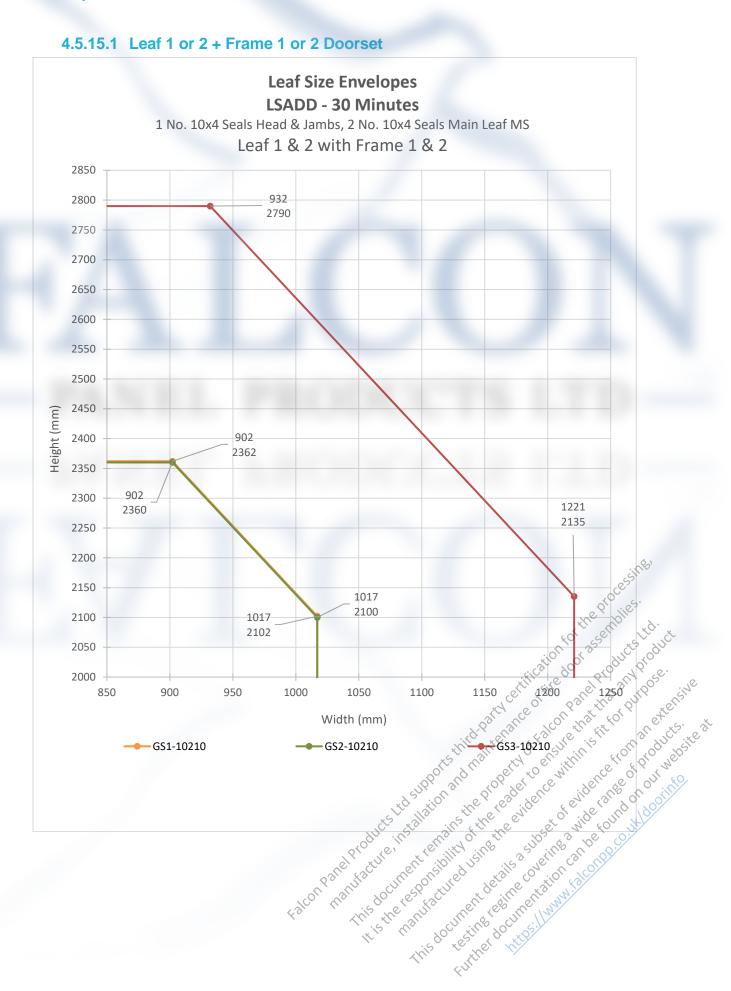
& (Test Reference)	Reference & (Test Reference)	Reference & (Test Reference)	
ES1-20 ——— (RF00136)	LP2004 & LP1504	Lorient Polyproducts Ltd	Head: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart.
			Jambs:
			1no 10x4 Fitted centrally in frame reveal or leaf edges.
ES1-210 ——— (RF00136)	LP1504 & LP1004	Lorient Polyproducts Ltd	Head: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart.
			Jambs: 2no 10x4 Fitted centrally in frame reveal or leaf edges, 10mm apart.
4.5.14 DASD+OF	² Configuration	n – Not permitto	2no 10x4 Fitted centrally in frame reveal or leaf edges, 10mm apart. ed ed ed ed ed ed ed ed ed e

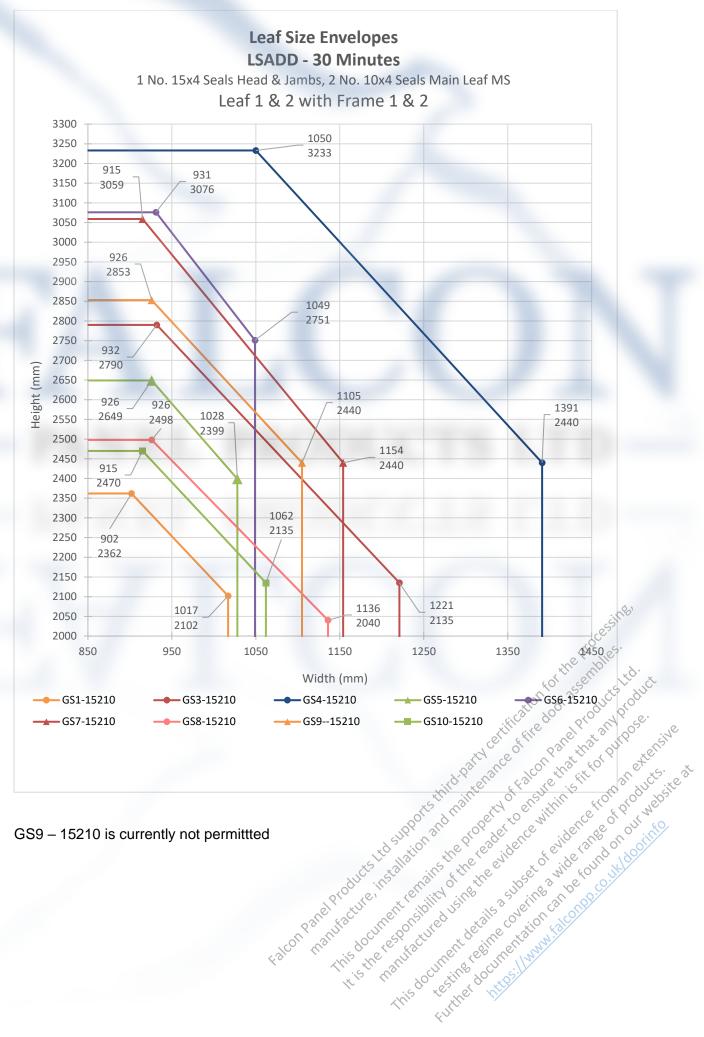
This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

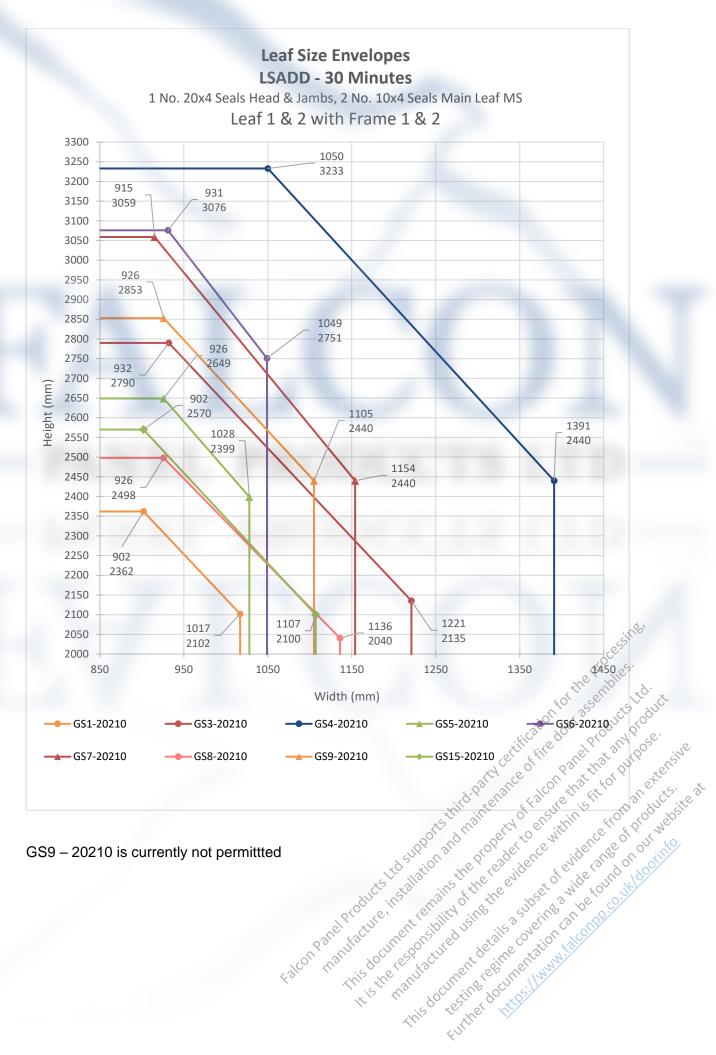
This document remains the distributed using the evidence within is fit for purpose. This document details a subset of evidence from an extensive 4.5.14 DASD+OP Configuration – Not permitted

4.5.15 LSADD Configuration – Leaf Size Envelopes & Intumescent Specification

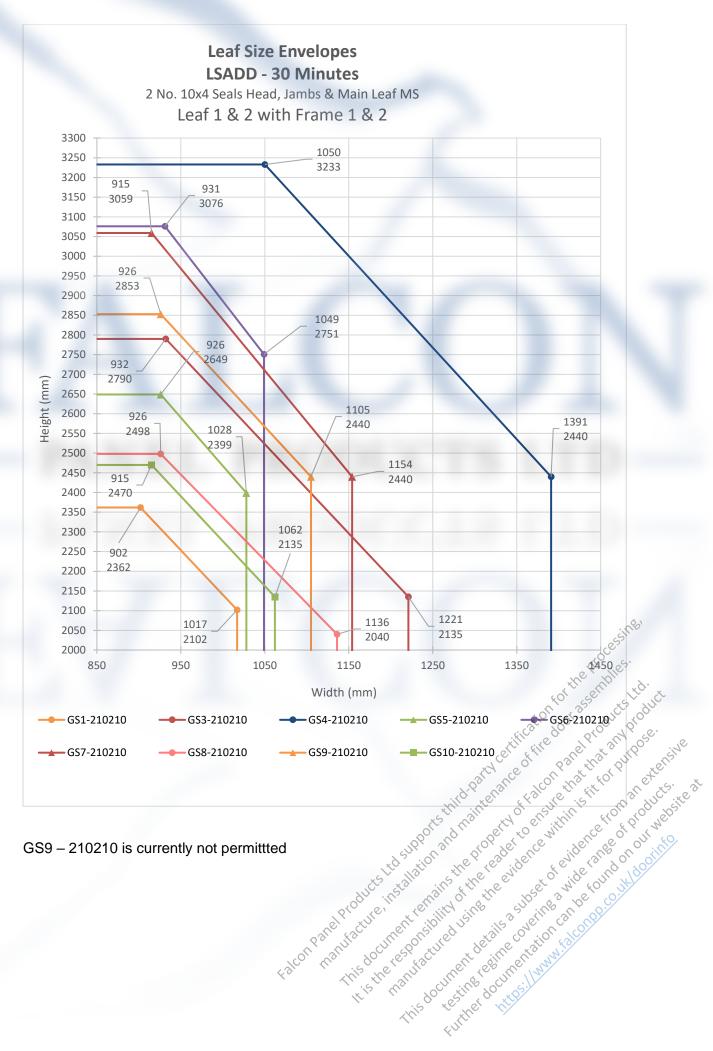




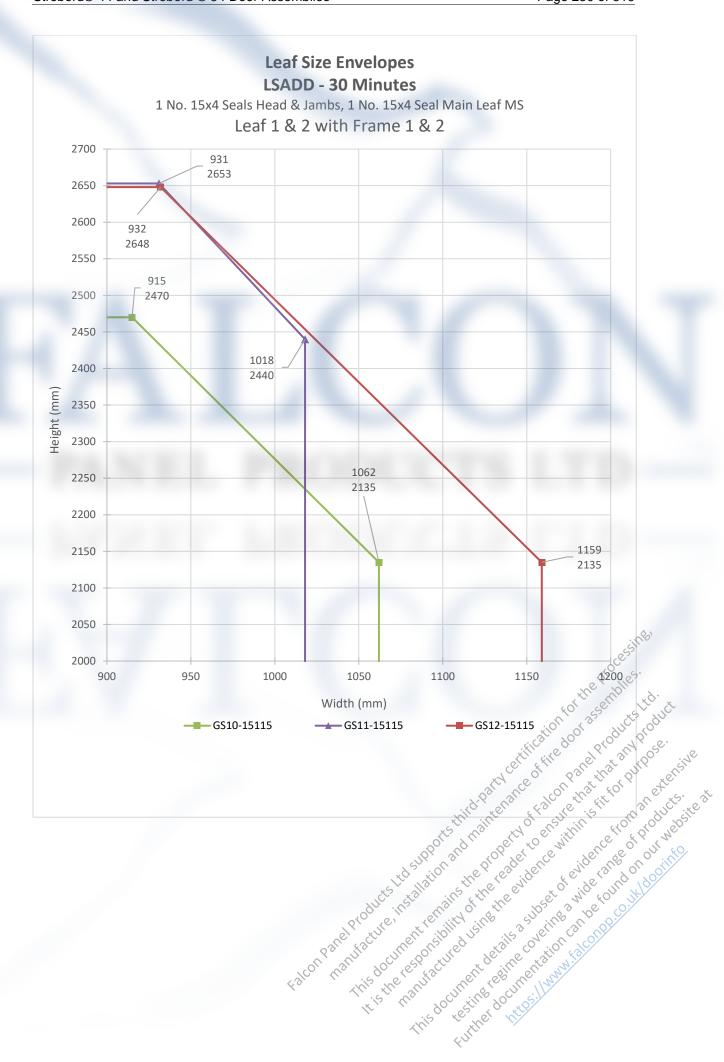
GS9 - 15210 is currently not permittted



GS9 - 20210 is currently not permitted



GS9 - 210210 is currently not permittted





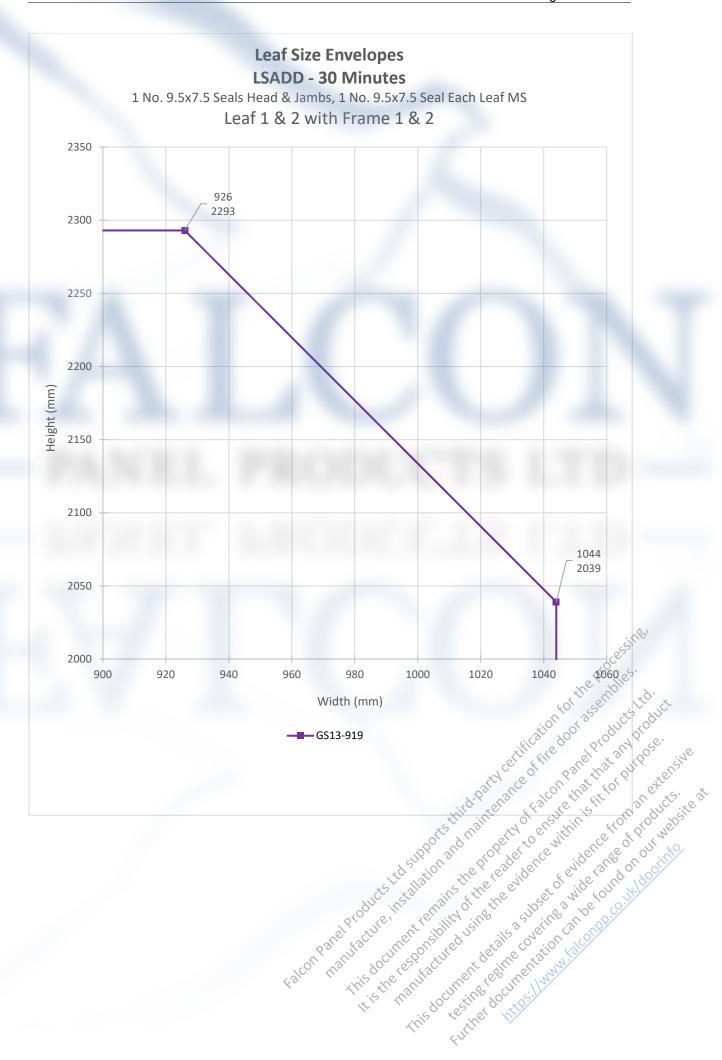


Table 6.1.1 - Intumescent Specification for LSADD

Incorporating intumescent seals from Mann McGowan Fabrications Ltd Leaf 1 or 2 with Frame 1 or 2			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
GS1-10210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS1-15210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
	. 7	100	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS1-20210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		1	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS1-210210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges.
			Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Falcon Panel Production	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Table 6.1.2 - Intumescent Specification for LSADD

mescent seals nme 1 or 2	from Lorient Po	olyproducts Ltd
Make / Type	Manufacturer / Supplier	Location & Size
LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
LP1004 LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
- 1		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
LP1004 LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge 10mm apart.
		reveal or leaf edges. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
	kalon Panel Produ	2no 10x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
	Make / Type LP1004 LP1004 LP1004 LP1004 LP2004	Make / Type

Table 6.1.2 (continued) Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1 or 2 with Frame 1 or 2			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
GS10-15210 ——— (Chilt/RF11170)	LP1004 LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
7Α.	Т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS10-15115——— (Chilt/RF11170)	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge.
GS10-20120 ——— (Chilt/RF11170)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge.
GS10-210120——— (Chilt/RF11170)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges.
			weeting Stiles:
		Falcon Panel Production This of	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart. **The primary leaf edge and the primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge and the primary leaf edge. The primary leaf edge and the primary leaf edge an

Table 6.1.2 (continued) Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1 or 2 with Frame 1 or 2				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
GS15-20210 (Chilt/RF98048)	LP1004 LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.	
7 A			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.	

Colon band kodules installation and make the leader to be sufficiently and the state of the duty of the state of the state

Table 6.1.3 - Intumescent Specification for LSADD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 1 or 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
SS3-10210 ——————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
S3-15210 ——— MT/FEP/F16035)	FO8700 FO8500	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
	. 7		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
S3-20210 ——————————————————————————————————	FO8600 FO8500	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
S3-210210——— MT/FEP/F16035)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Ealcon Panel Production	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart. And

This document, remains the property of a locure that that any product of the responsibility of the reader to ensure that the property of the resident of the resident of the reader to ensure that that any product of the resident of the reader to ensure that that any product of the resident of the reader to ensure that that the reader to ensure the resident of the reader to ensure that the resident of the reader to ensure the resident of the reader to ensure the resident of the resident of the reader to ensure that the reader to ensure the resident of the reader to ensure the resident of the reader to ensure the reader to ensure the reader to ensure the resident of the reader to ensure the reade This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence trange of products.

testing regime covering a wide range of products ite at the regime documentation and a second or our metaline covering a wide range of products it at the range of products in the range of produc

Table 6.1.3 – (cor	ntinued)
--------------------	----------

Incorporating intumescent seals from Pyroplex Ltd

Leaf 1 or 2 with Frame 1 or 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
GS7-15210 (Chilt/RF08088)	FO8700 FO8500	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS7-20210 ——— (Chilt/RF08088)	FO8600 FO8500	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
	. 7	100	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS7-210210 ——— (Chilt/RF08088)	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
			is lid supports third partite property of a strength of the property of the supering the property of the supering the property of the supering the following the property of the supering to the supering to the supering the supe

Table 6.1.3 – (continued)				
Incorporating intumescent seals from Pyroplex Ltd				
Leaf 1 or 2 with Frame 1 or 2				
Intumescent Spec. Reference	Make / Type	Manufacturer / Supplier	Location & Size	
& (Test Reference)				
GS12-15115 —	FO8700	Pyroplex Ltd	Head & Jambs:	
(Chilt/RF09060(B))			1no 15x4. Fitted centrally in frame reveal or leaf edges.	
			Meeting Stiles:	
3 A	т		Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge.	
GS12-20120 —	FO8600	Pyroplex Ltd	1no 15x4. Fitted centrally in the	
GS12-20120 ——— (Chilt/RF09060(B))	FO8600	Pyroplex Ltd	1no 15x4. Fitted centrally in the primary leaf edge.	
	FO8600	Pyroplex Ltd	1no 15x4. Fitted centrally in the primary leaf edge. Head & Jambs: 1no 20x4. Fitted centrally in frame	

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence tanks of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

This document, remains the property of a locure that that any product of the responsibility of the reader to ensure that the property of the restored to the r This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document details a subset of evidence from an extensive

*Esting regimentation can be round on our website at Further documentation can be round on our website at Further documentation can be recorded as the found of the contraction of the c

Table 6.1.4 - Intumescent Specification for LSADD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1 or 2 with Frame 1 or 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
GS4-15210 ——— (WF384630)	STS154FO STS105FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
7 A	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS4-20210 ——— (WF384630)	STS204FO STS105FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS4-210210——— (WF384630)	STS105FO Sealed Tight Solutions Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.	
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Falcon Panel Production	primary leaf edge, 10mm apart. primary leaf edge, 10mm apart.

Table 6.1.5 - Intume Incorporating intum Leaf 1 or 2 with Fran	escent seals		D
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
GS6-15210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
3 A			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS6-20210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
PANT			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS6-210210—— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles:
			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS11-15115 (CFR1403122)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
			1no 15x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge. Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges
GS11-20120 ——— (CFR1403122)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1 no 20x4. Fitted centrally in frame reveal or leaf edges.
		, Produč	Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge.
		Ealcon Panel Production	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge.

Table 6.1.5 – (continued) Incorporating intumescent seals from DIG Ltd Leaf 1 or 2 with Frame 1 or 2				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
GS13-919 ——— (CFR1812111)	N30	Sealmaster Ltd	Head & Jambs: 1no 9.5x7.5. Fitted centrally in frame reveal or leaf edges.	
3 A	7		Meeting Stiles: 1no 9.5x7.5. Fitted centrally in both primary and secondary leaf edges.	

This document, remains the property of a locure that that any product of the responsibility of the reader to ensure that the property of the restored to the r This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence from an extensive

*Esting regime covering a wide range of products ite at the regime documentation and performent ation and the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of products ite at the regime of the range of

Table 6.1.6 - Intumescent Specification for LSADD Incorporating intumescent seals from Astroflame (Fireseals) Ltd Leaf 1 or 2 with Frame 1 or 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
GS8-15210 ————————————————————————————————————	AF1504FSX AF1004FSX	Astroflame	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
Z A	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS8-20210 ——— (BMT/FEP/F14265 (B))	AF2004FSX AF1004FSX	Astroflame	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
PANT			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
GS8-210210—— (BMT/FEP/F14265 (B))	AF1004FSX	Astroflame	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Falcon Panel Production	primary leaf edge, 10mm apart. Primary leaf edge, 10mm apart.

4.5.15.2 Leaf 1 or 2 + Frame 2 Doorset







Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
GF1-15210 ——— (Chilt/RF08125 AR1)	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.
GF1-20210 ——— (Chilt/RF08125 AR1)	FO8600 & FO8500	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		100	Meeting Stiles: 2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.
GF1-210210 ——— (Chilt/RF08125 AR1)	FO8700 &FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
		1	Meeting Stiles: 2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.
		Leon Panel Production	2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.

This document responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to e This document remains the property of Falcon Panel Products that any probe.

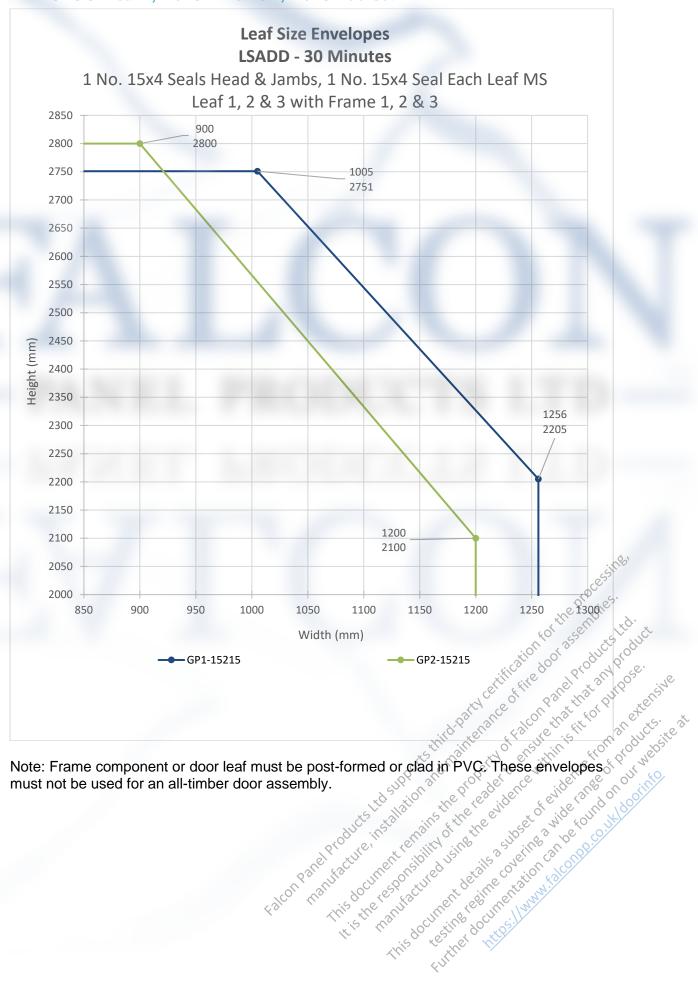
This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence transper of products.

testing regime covering a wide range of products ite at the regime documentation and a second or our metaline covering a wide range of products it at the range of products in the range of produc

4.5.15.3 Leaf 1, 2 or 3 + Frame 1, 2 or 3 Doorset



Instactinent remains the property ne lestonsituit di the treater dence Ivele Independent details a subset of enider of anide of the suite of anide of the suite of the This document, remains the profes Octument details a subset of amide fained of the found of the string of the found of the string of t Falcon Panel Products Ltd Supp Ranufacture, installation and

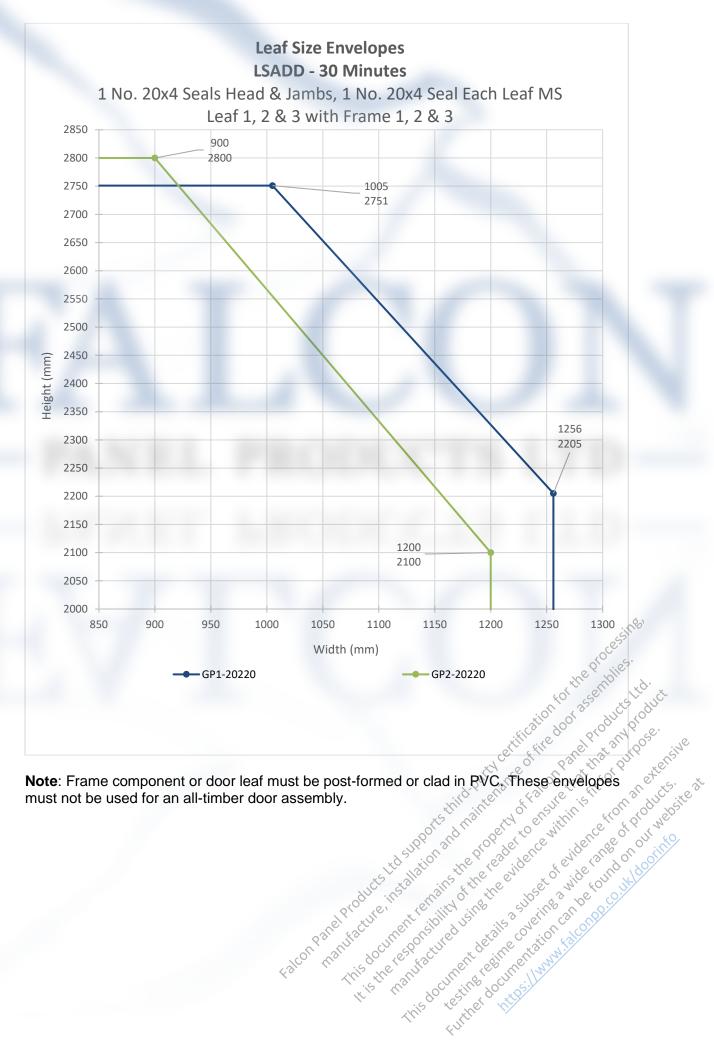


Table 6.3.1 - Intumescent Specification for LSADD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1, 2 or 3 with Frame 1, 2 or 3				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
GP1-15215 ——————————————————————————————————	STS154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.	
Z A	т		Meeting Stiles: 1no 15x4. Fitted centrally in both primary and secondary leaf edges.	
GP1-20220 (WF388638)	STS204FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.	
PANE		800	Meeting Stiles: 1no 20x4. Fitted centrally in both primary and secondary leaf edges.	

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

Table 6.3.2 - Intumescent Specification for LSADD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1, 2 or 3 with Frame 1, 2 or 3				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
GP2-15215 ——— (RF11059)	LP1504	Lorient Polyproducts Ltd	Meeting Stiles: 1no 15x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 15x4. Fitted centrally in both primary and secondary leaf edges.	
GP2-15220 ——— (RF11059)	LP2004	Lorient Polyproducts Ltd	Meeting Stiles: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 20x4. Fitted centrally in both primary and secondary leaf edges.	

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

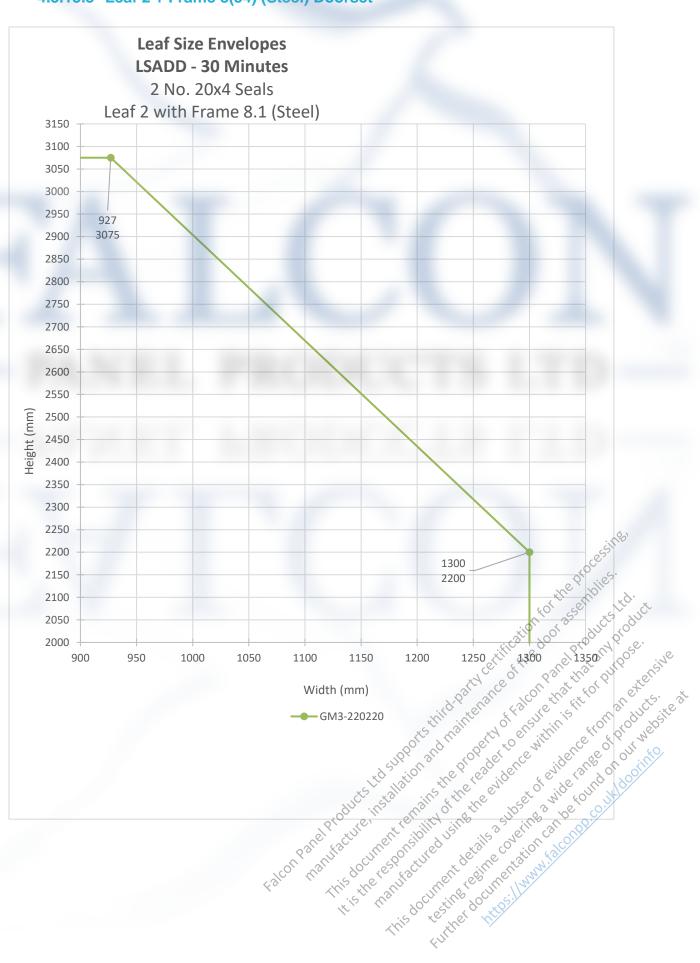
This document remains the distributed using the evidence within is fit for purpose.

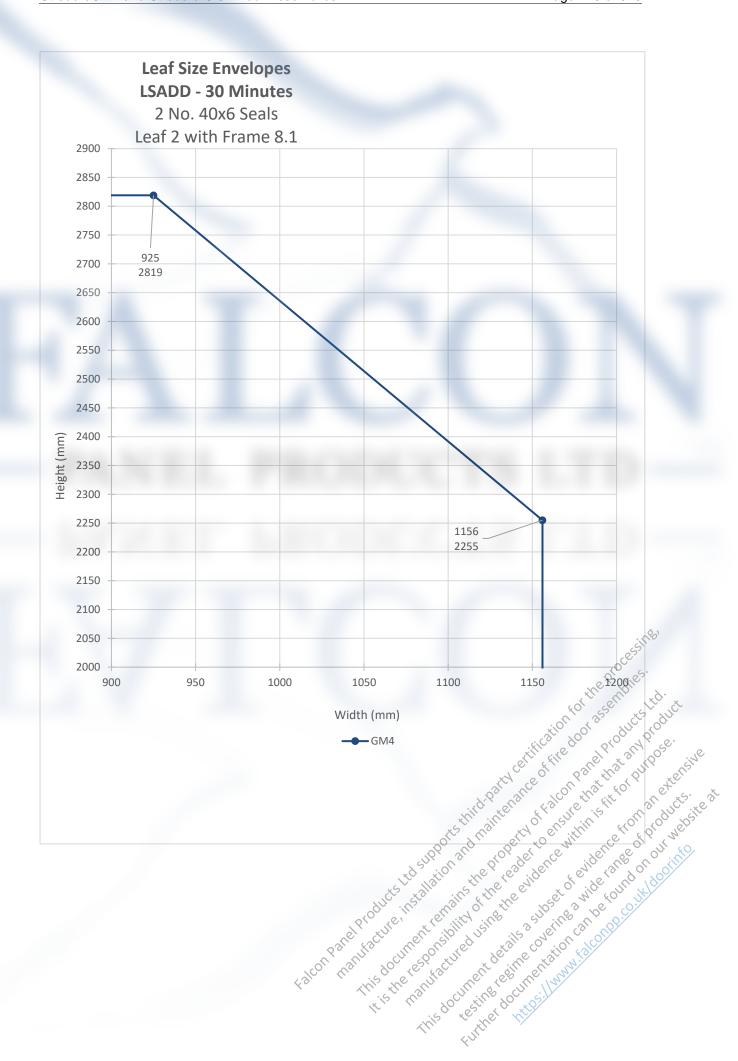
This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

4.5.15.4 Frame 7 (Steel) Doorset – TBA

4.5.15.5 Leaf 2 + Frame 8(54) (Steel) Doorset





This document details a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and a second or our metaline covering a wide range of products it at the range of products in the range of produc

Table 6.6.1 - Intumescent Specification for LSADD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 2 with Frame 8.1				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
GM3-220220 ——— (WF415618 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 2no 20x4. Fitted centrally in leaf edges, 5mm apart.	
3 A			Meeting Stiles: 2no 20x4. Fitted centrally in the primary leaf edge, 5mm apart.	

eference (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
M4-220220 — ● — VF391940 (B))	STS-P406	Sealed Tight Solutions Ltd	Head & Jambs: 1no 40x6. Fitted centrally in leaf edges.
			Meeting Stiles: 1no 40x6. Fitted in the primary leafedge.
			edge. This document, learning to the primary learning learning to the primary

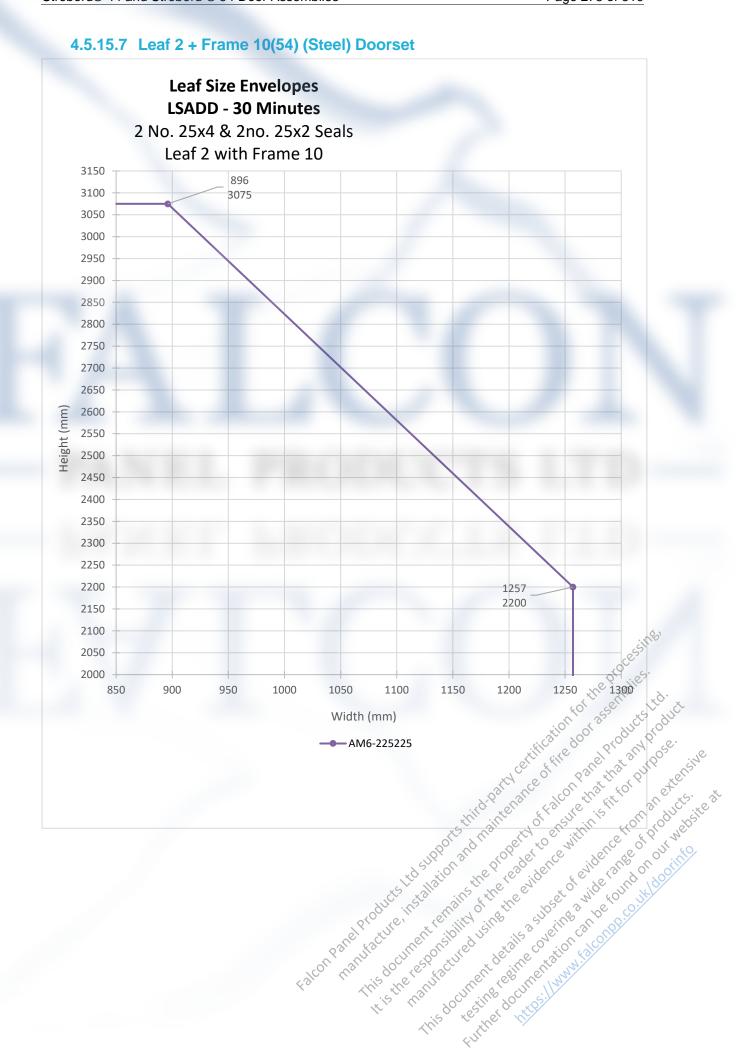


Table 6.8.1 - Intumescent Specification for LSADD Incorporating intumescent seals from DIG Ltd Leaf 2 with Frame 10				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
GM6-225225 —	Therm-A-	Intumescent	Head & Jambs:	
(Chilt/RF04002 (A))	Seal + Therm-A- Flex	erm-A-	1no 25x4 Therm-A-Seal. Fitted centrally in leaf edge	
			2no 10x2 Therm-A-Flex below the lipping. Fitted centrally, 15mm apart.	
			Bottom of leaf:	
t /A			1no 20x2 Therm-A-Flex. Fitted centrally in the leaf edge.	
4 3			Meeting Stiles:	
			1no 25x4 Therm-A-Seal. Fitted centrally in the primary leaf edge.	
73.31			2no 10x2 Therm-A-Flex below the lipping of both leaves. Fitted centrally, 15mm apart.	

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

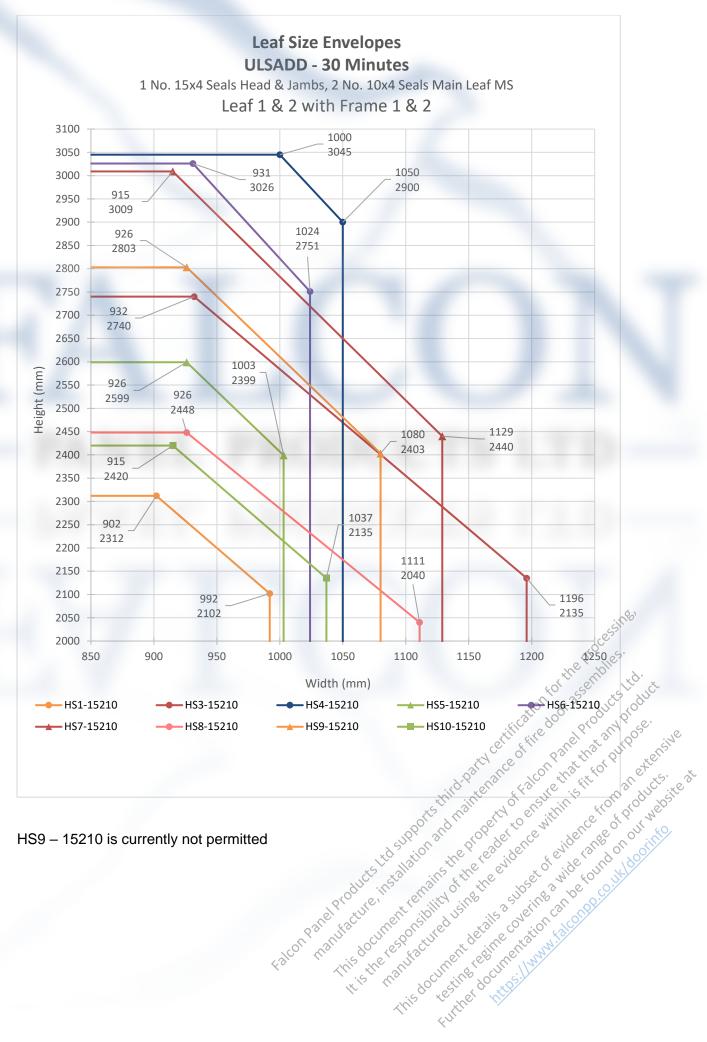
This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

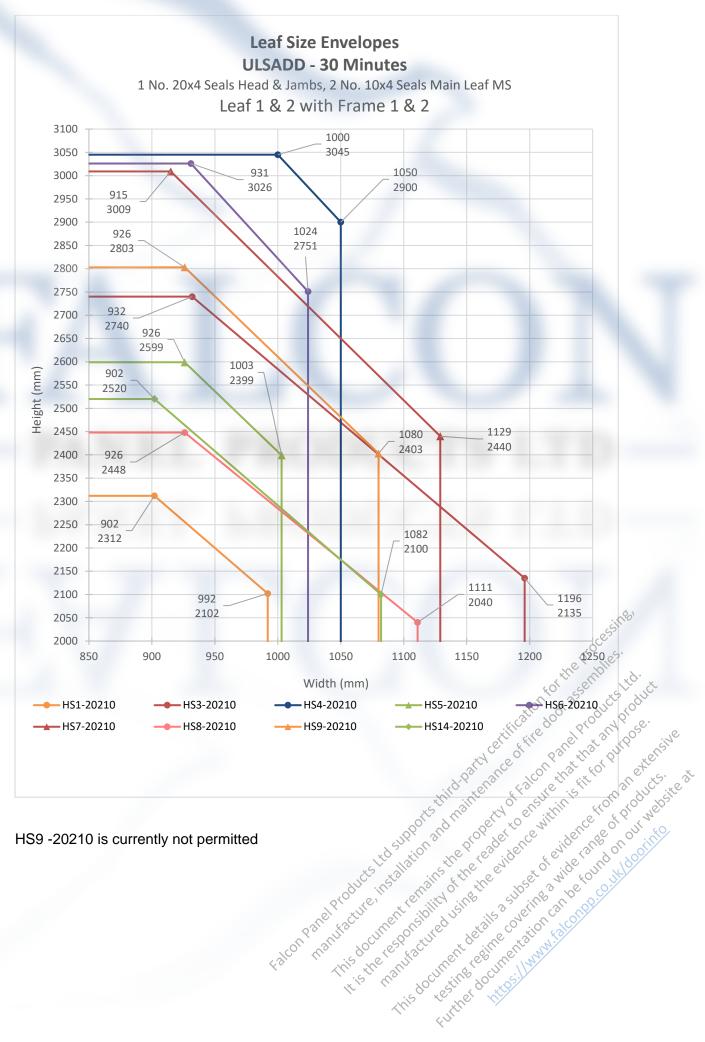
testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

4.5.16 ULSADD Configuration – Leaf Size Envelopes & Intumescent Specification

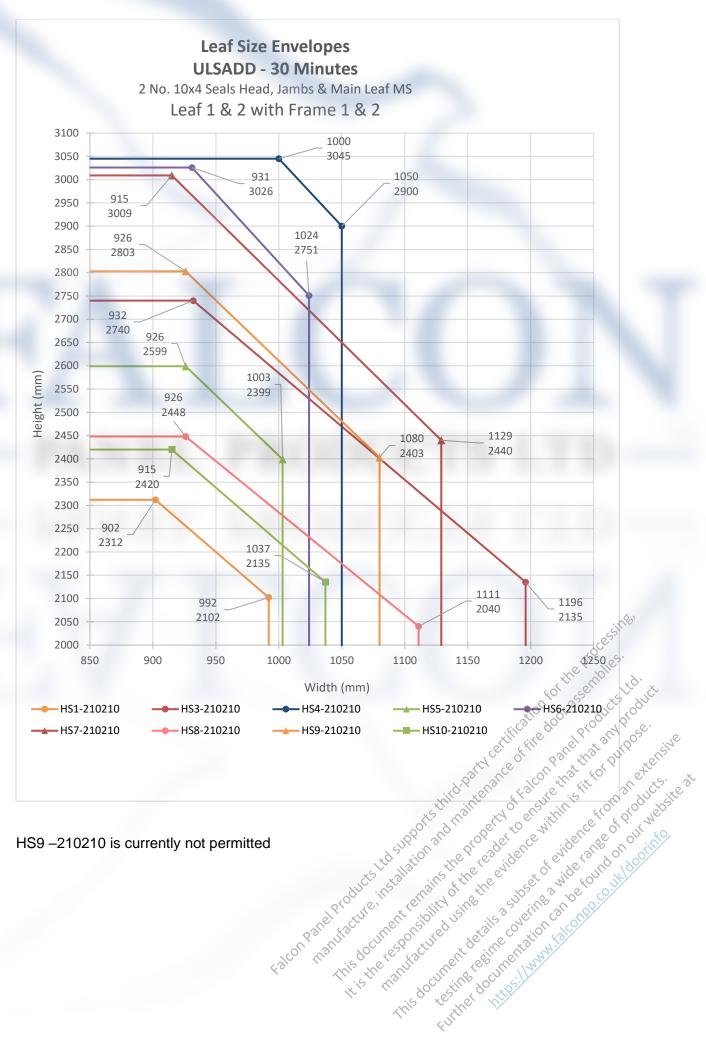




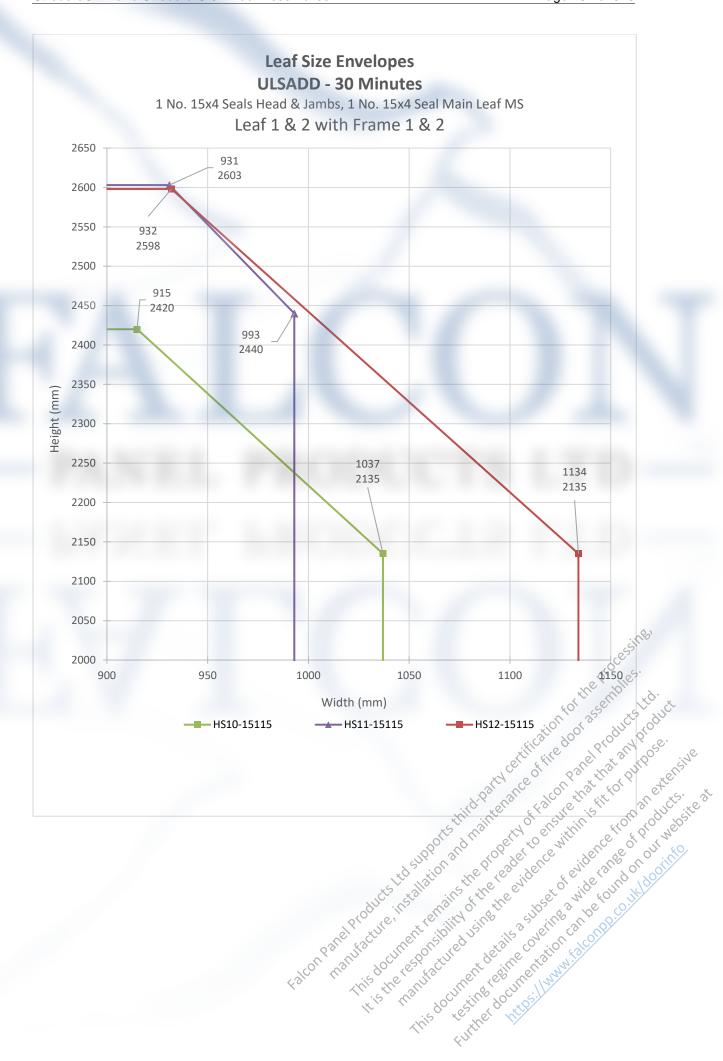
HS9 - 15210 is currently not permitted

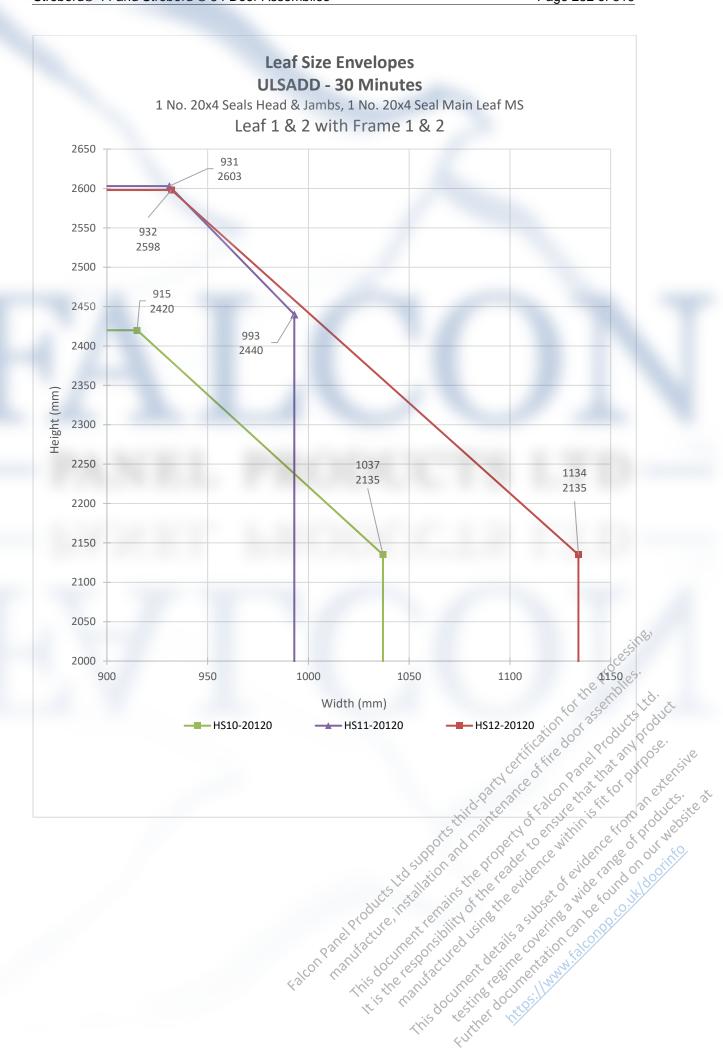


HS9 -20210 is currently not permitted



HS9 -210210 is currently not permitted





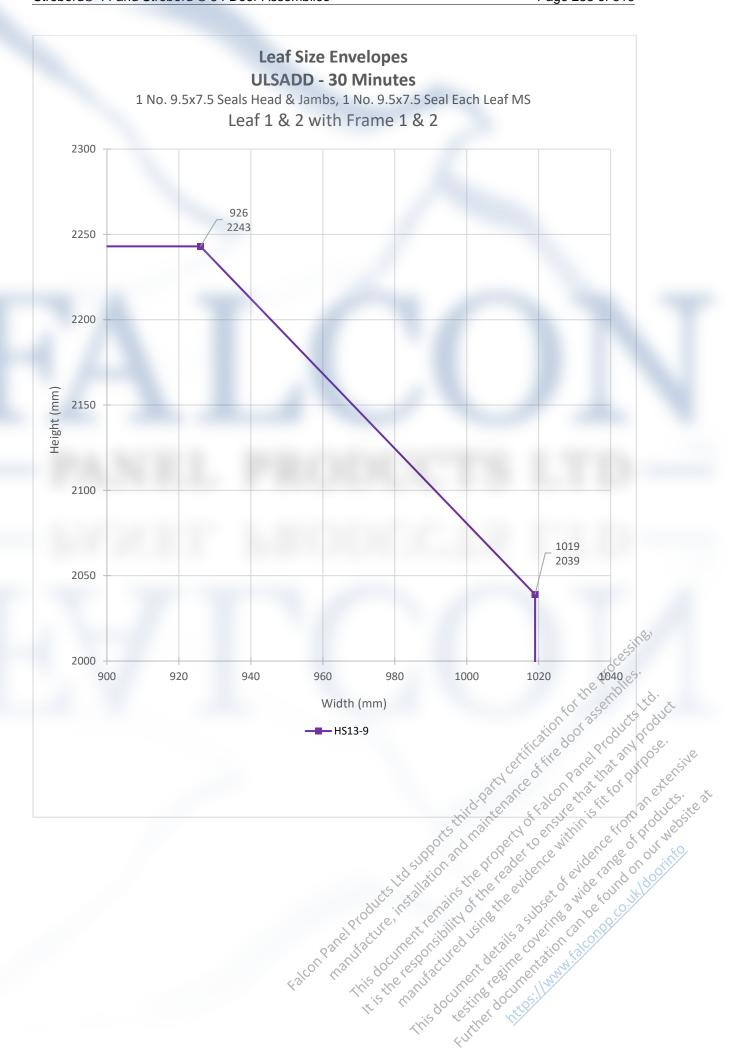


Table 7.1.1 - Intumescent Specification for ULSADD Incorporating intumescent seals from Mann McGowan Fabrications Ltd Leaf 1 or 2 with Frame 1 or 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HS1-10210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS1-15210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
		100	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS1-20210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS1-210210——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Falcon Panel Production	2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart. Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HS2-10210 ——— (Chilt/RF07109)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
Δ.	Т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS5-15210 ——— (WF430460 (A))	LP1504 & LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
		0.00	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS5-20210 ——— (WF430460 (A))	LP2004 & LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		4	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS5-20210 ——— (WF430460 (A))	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			weeting stiles: A A A A A A A A
		Falcon Panel Produced This diving	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Table 7.1.2 (continued) Incorporating intumescent seals from Lorient Polyproducts Ltd							
Leaf 1 or 2 with Frame 1 or 2							
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size				
HS10-15210 ——— (Chilt/RF11170)	LP1504 & LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.				
			Meeting Stiles:				
7 A	•		2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.				
HS10-15115 ——— (Chilt/RF11170)	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.				
			Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge.				
HS10-20120 ——— (Chilt/RF11170)	LP1504 & LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.				
			Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge.				
HS10-210120 ——— (Chilt/RF11170)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.				
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.				
HS14-20210 ——————————————————————————————————	LP2004 & LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame				
		T Produc	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.				

Kalcon Panel History Responsibilities of the Sold Resident of the Sold R

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HS3-10210 ——— (BMT/FEP/F16035)	FO8500	Pyroplex Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS3-15210 ——— (BMT/FEP/F16035)	FO8700 & FO8500	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
74.51			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS3-20210 —	FO8600 &	Pyroplex Ltd	Head & Jambs:
(BMT/FEP/F16035)	FO8500		1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS3-210210 —	FO8500	Pyroplex Ltd	Head & Jambs:
(BMT/FEP/F16035)			Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
			Meeting Stiles:
			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Falcon Panel Produkatus	2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Table 7.1.3 (continued) Incorporating intumescent seals from Pyroplex Ltd							
	Leaf 1 or 2 with Frame 1 or 2						
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size				
HS7-15210 —	FO8700 &	Pyroplex Ltd	Head & Jambs:				
(RF08088)	FO8500		1no 15x4. Fitted centrally in frame reveal or leaf edges.				
			Meeting Stiles:				
7 A			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.				
HS7-20210 —	FO8600 &	Pyroplex Ltd	Head & Jambs:				
(RF08088)	FO8500	^	1no 20x4. Fitted centrally in frame reveal or leaf edges.				
			Meeting Stiles:				
200			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.				
HS7-210210 —	FO8500	Pyroplex Ltd	Head & Jambs:				
(RF08088)			2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.				
			Meeting Stiles:				
			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.				
HS12-15115 -	FO8700	Pyroplex Ltd	Head & Jambs:				
(Chilt/RF09060 (B))			1no 15x4. Fitted centrally in frame reveal or leaf edges.				
			Meeting Stiles:				
			1no 15x4. Fitted centrally in the primary leaf edge				
HS12-20120 -	FO8600	Pyroplex Ltd	Head & Jambs: The State of the				
(Chilt/RF09060 (B))			1no 20x4. Fitted centrally in frame reveal or leaf edges.				
			Meeting Stiles: Alexander of the still sti				
		ar _{odlu} č	1no 20x4. Fitted centrally in the primary leaf edge				
		Falcon Panel Produc	1no 15x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge				

This document, repaint of the property of the reader to ensure that the transition of the reader to ensure that the property of the reader to ensure that the property of the reader to ensure that the tenant of the reader to ensure the transition of the reader to ensure that the responsibility of the reader to ensure This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document detains a subset of a wide range of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

Table 7.1.4 - Intumescent Specification for ULSADD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1 or 2 with Frame 1 or 2			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HS4-15210 ————————————————————————————————————	STS154FO & STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
3 A			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS4-20210 ——————————————————————————————————	STS204FO & STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
74.50			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS4-210210 —————————————————————————————————	STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		kalcon Panal Production This de l'is	2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Table 7.1.5 - Intumescent Specification for ULSADD Incorporating intumescent seals from DIG Ltd Leaf 1 or 2 with Frame 1 or 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HS6-15210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS6-20210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
74.51		100	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS6-20210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS11-15115 ——— (CFR1403122)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge
HS11-20120 ——— (CFR1403122)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles:
		Produc	Meeting Stiles: 1 no 20x4. Fitted centrally in the primary leaf edge
		Falcon Parel Habitation	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge

Table 7.1.5 (continued) Incorporating intumescent seals from DIG Ltd Leaf 1 or 2 with Frame 1 or 2				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
HS13-9 (CFR1812111)	N30	Sealmaster	Head & Jambs: 1no 9x7. Fitted centrally in frame reveal or leaf edges.	
3 A	т		Meeting Stiles: 1no 9x7. Fitted centrally in the edge of each leaf.	

Eaton Panel Products the Installation and maintenance of five door assemblies.

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Facour Parel Products Lind out to see a vidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document remains the property of the evidence within 15 first for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

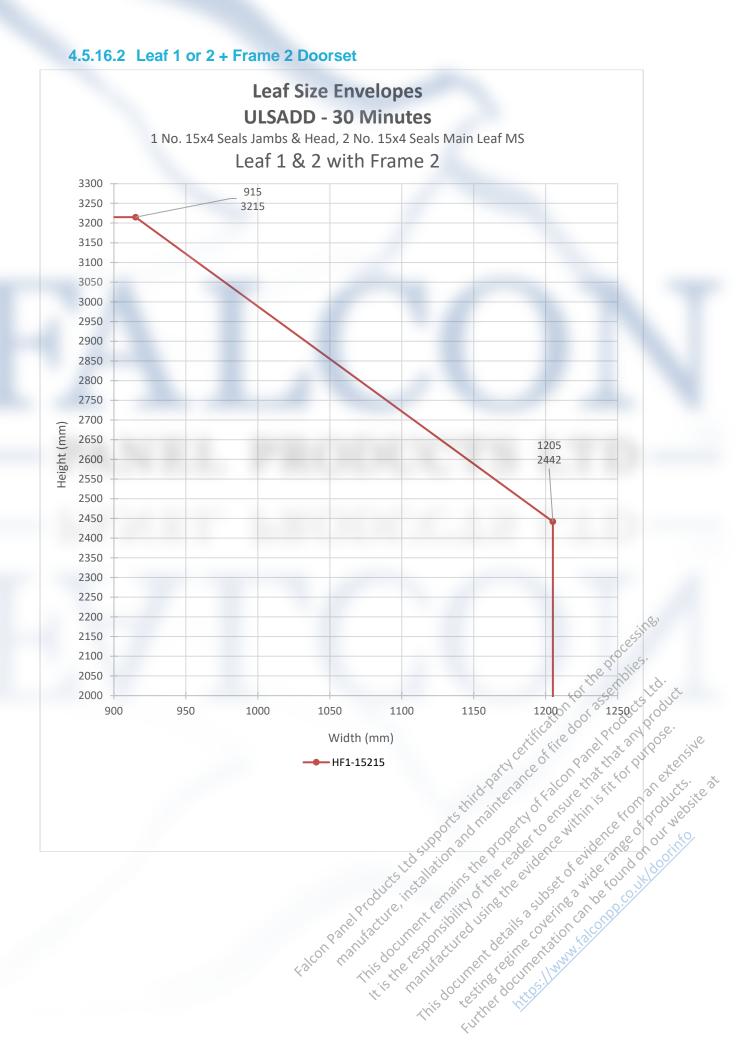
This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and a recovering a wide range of products ite at the regime regime of products in the range of products ite at the regime of products in the range of products in the

Report No: Chilt/A02066 Rev O Page 292 of 519

Table 7.1.6 - Intumescent Specification for ULSADD		
Incorporating intumescent seals from Astroflame (Fireseals) Ltd		
Leaf 1 or 2 with Frame 1 or 2		

Reference & (Test Reference) HS8-15210 ————————————————————————————————————	AF1504FSX	/ Supplier Astroflame	Head & Jambs: 1no 15x4. Fitted centrally in frame
(B))	AF1004FSX		reveal or leaf edges.
2 A			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS8-20210 ——— (BMT/FEP/F14265 (B))	AF2004FSX & AF1004FSX	Astroflame	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
PA.N.1			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
HS8-210210——— (BMT/FEP/F14265 (B))	AF1004FSX	Astroflame	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Production	primary leaf edge, 10mm apart. primary leaf edge, 10mm apart.



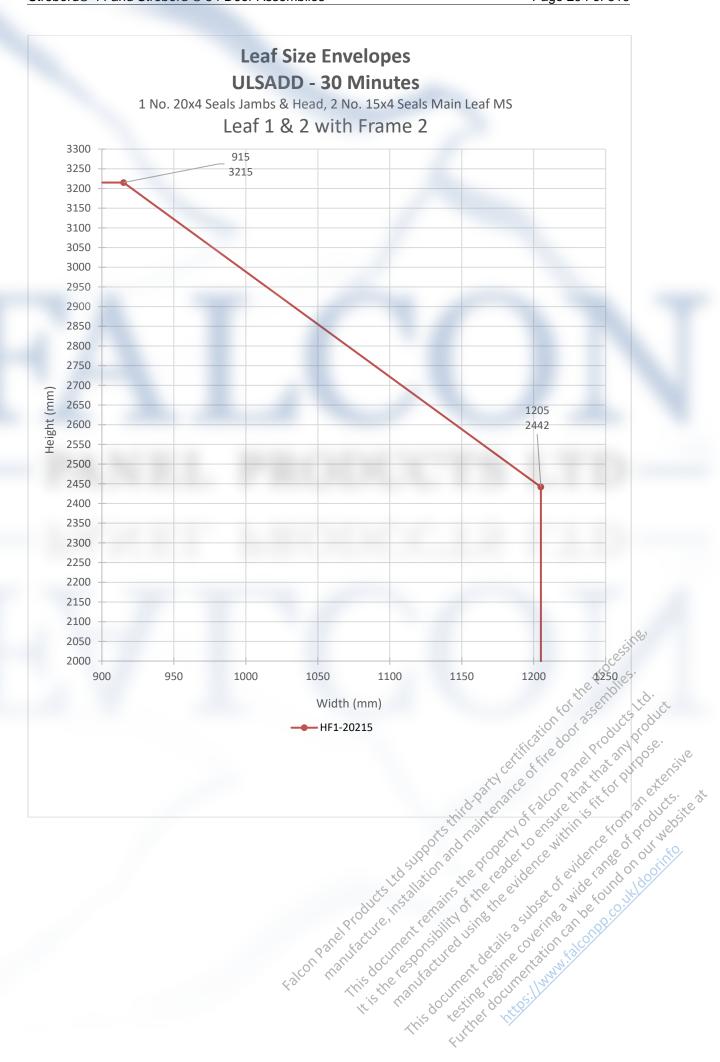
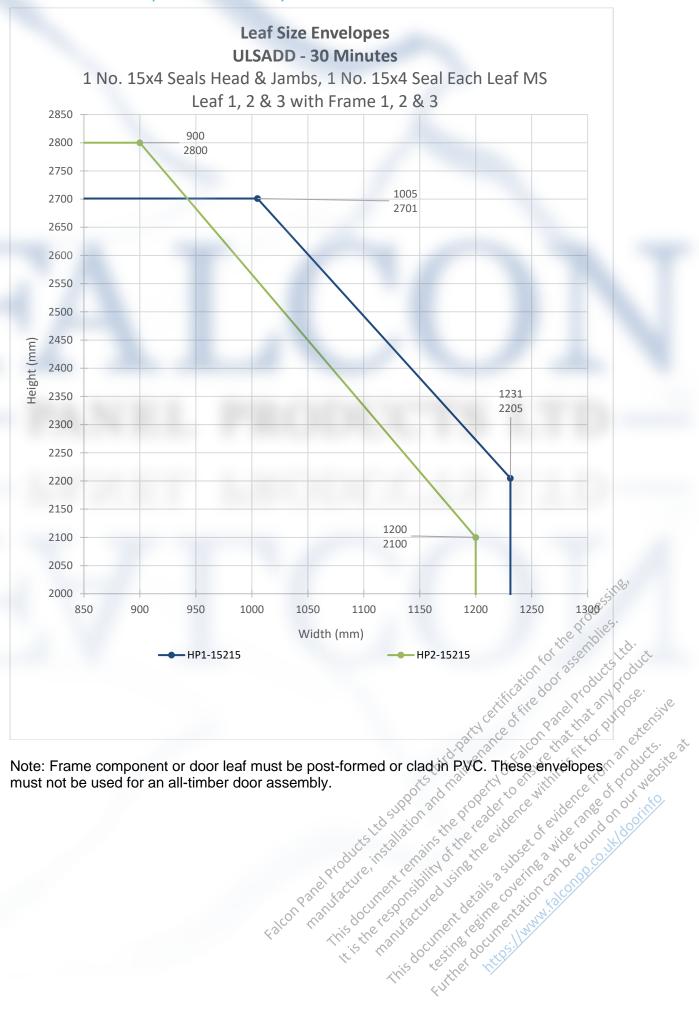


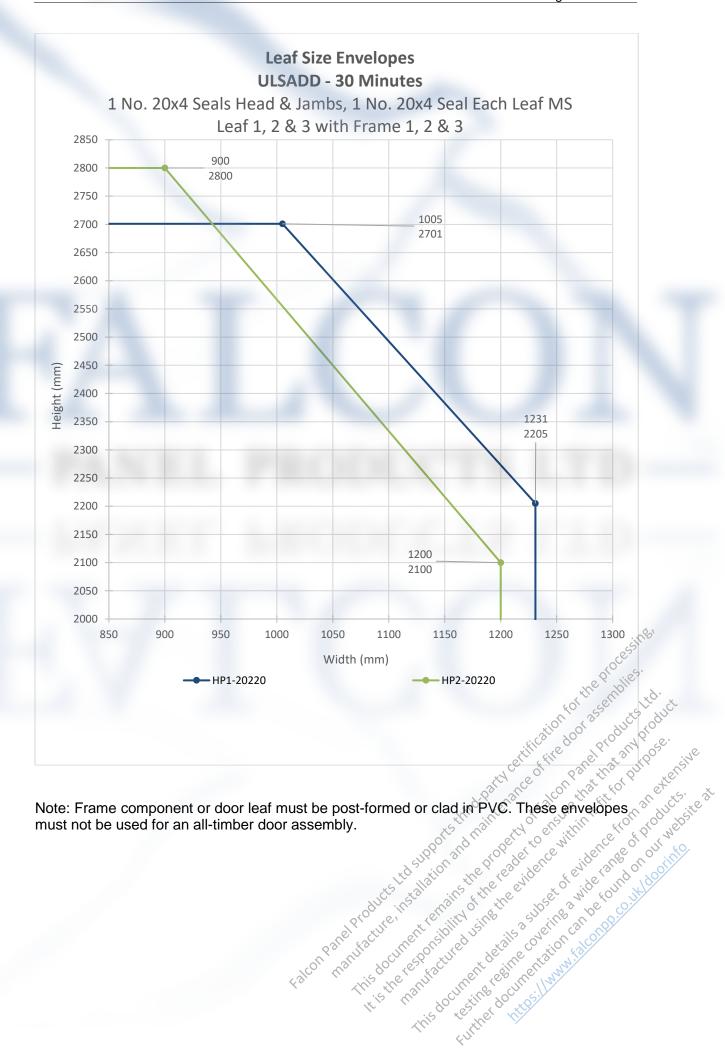


Table 7.2.1 - Intumescent Specification for ULSADD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 2

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HF1-15215 —	FO8700	Pyroplex Ltd	Head & Jambs:
(Chilt/RF08125 AR1)			1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
			2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.
HF1-20215 —	FO8700 &	Pyroplex Ltd	Head & Jambs:
(Chilt/RF08125 AR1)	FO8600	л.	1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
74.51			2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.
HF1-210215——	FO8700 &	Pyroplex Ltd	Head & Jambs:
(Chilt/RF08125 AR1)	FO8500		2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles:
			2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.

4.5.16.3 Leaf 1, 2 or 3 + Frame 1, 2 or 3 Doorset





This document remains the property to ensure Jpes property of a suite of a suite range of a suite range of the suite of the s Aranufacture installation and main This document remains the property of Falcon Panel Products the supports the

Table 7.3.1 - Intumescent Specification for ULSADD
Incorporating intumescent seals from Sealed Tight Solutions Ltd
Leaf 1, 2 or 3 with Frame 1, 2 or 3

,	, , , , , , , , , , , , , , , , , , , ,				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size		
HP1-15215 (WF388638)	STS154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.		
-			Meeting Stiles: 1no 15x4. Fitted centrally in both		
			primary and secondary leaf edges.		
HP1-20220 (WF388638)	STS204FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.		
			Meeting Stiles:		
71.30			1no 20x4. Fitted centrally in both primary and secondary leaf edges.		

Table 7.3.2 - Intumescent Specification for ULSADD				
Incorporating intumescent seals from Lorient Polyproducts Ltd				
Leaf 1 2 or 3 with Frame 1 2 or 3				

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HP2-15215 ——————————————————————————————————	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
3 A	-		Meeting Stiles: 1no 15x4. Fitted centrally in both primary and secondary leaf edges.
HP2-20220 (RF11059)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 1no 20x4. Fitted centrally in both primary and secondary leaf edges.

4.5.16.4 Frame 7 (Steel) Doorset – TBA

4.5.16.5 Leaf 2 + Frame 8(54) (Steel) Doorset

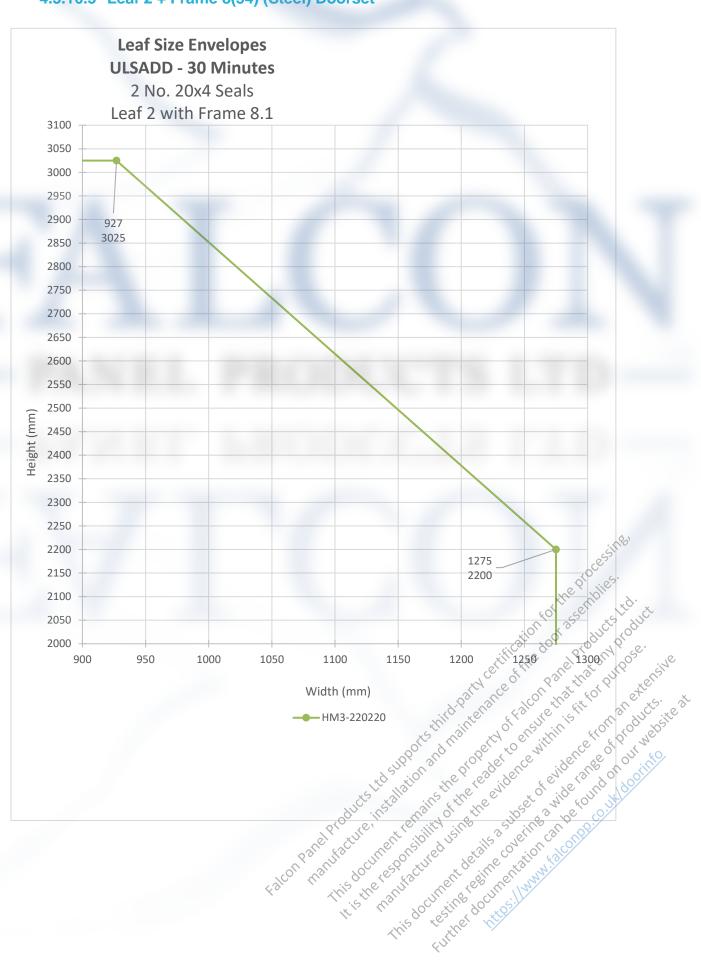


Table 7.6.1 - Intumescent Specification for ULSADD Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 2 with Frame 8.1			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
HM3-220220 ——— (WF415618 (B))	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 2no 20x4. Fitted centrally in leaf edges.
7.7		ζ.	Meeting Stiles: 2no 20x4. Fitted centrally in the primary leaf edge, 5mm apart.

Falcon Panel Products Lide Justialiation and maintenance of fine door assemblies.

This document remains the property of the leader to ensure that the day of the reader to ensure the tribe the responsibility of the reader to ensure the the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure the r This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of a wide range of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

4.5.16.6 Frame 9 (Steel) Doorset - TBA



Table 7.8.1 - Intumescent Specification for ULSADD Incorporating intumescent seals from DIG Ltd Leaf 2 with Frame 10				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
HM6-25125 —— (Chilt/RF04002 (A))	Therm-A- Seal + Therm-A- Flex	Intumescent Seals Ltd	Head & Jambs: 1no 25x4 Therm-A-Seal. Fitted centrally in leaf edge 2no 10x2 Therm-A-Flex below the lipping. Fitted centrally, 15mm apart.	
ťΔ			Bottom of leaf: 1no 20x2 Therm-A-Flex. Fitted centrally in the leaf edge.	
			Meeting Stiles:	
			1no 25x4 Therm-A-Seal. Fitted centrally in the primary leaf edge.	
			2no 10x2 Therm-A-Flex below the lipping of both leaves. Fitted centrally, 15mm apart.	

Falcon Panel Products Ltd supports third Party Certification for the Products Ltd supports third Party Certification for the Around Panel Products Ltd supports third Panel Products Ltd supports the Around Panel Pa

This document remains the property of the leader to ensure that the day of the reader to ensure the tribe the responsibility of the reader to ensure the the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure the r This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

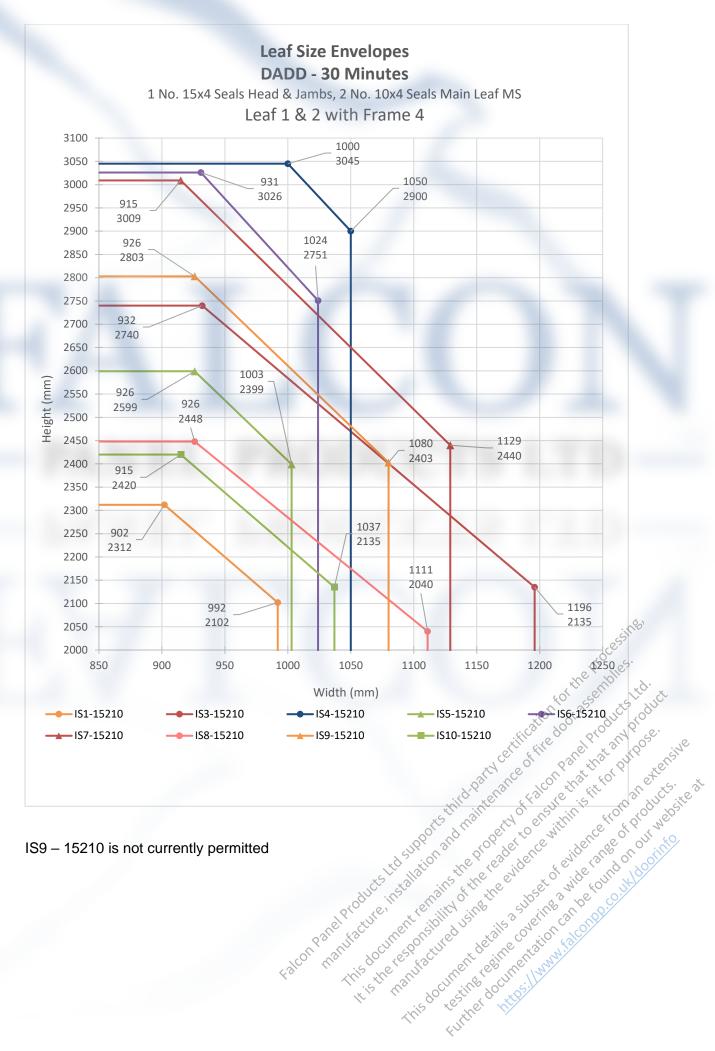
This document remains the distributed using the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

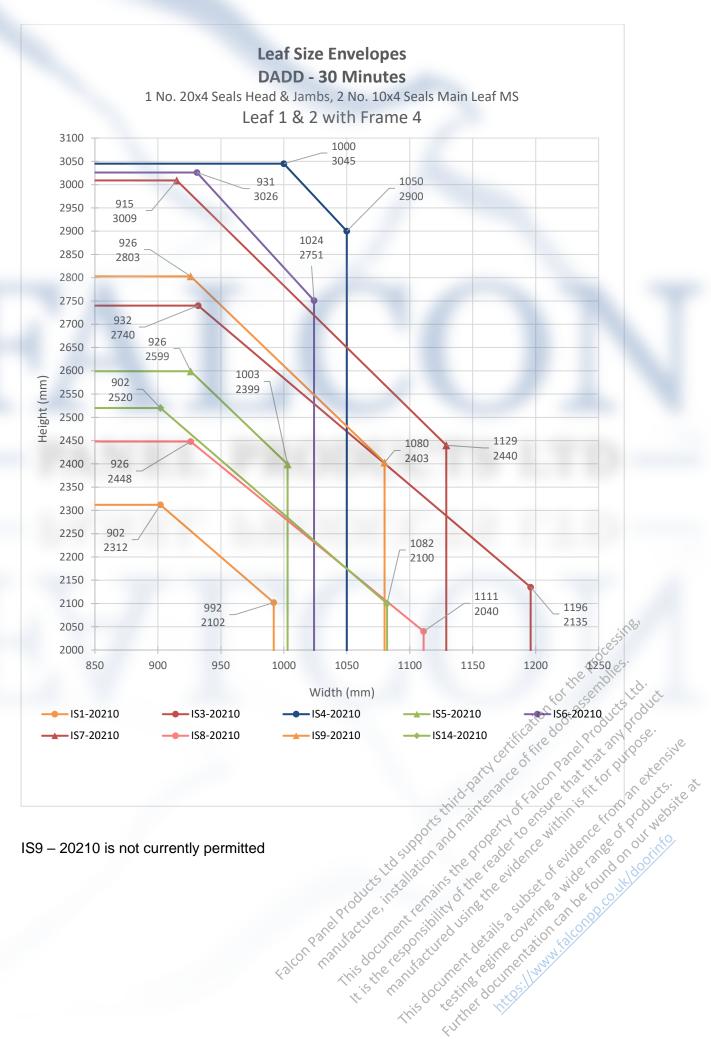
testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

4.5.17 DADD Configuration – Leaf Size Envelopes & Intumescent Specification **4.5.17.1** Leaf 1 or 2 + Frame 4 Doorset

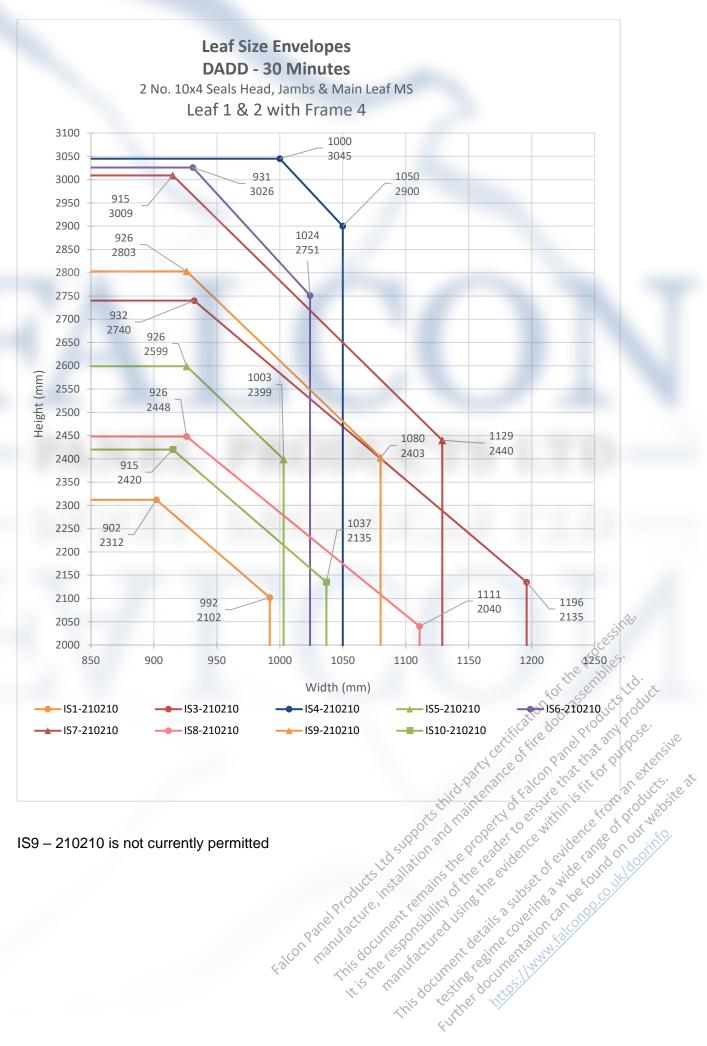




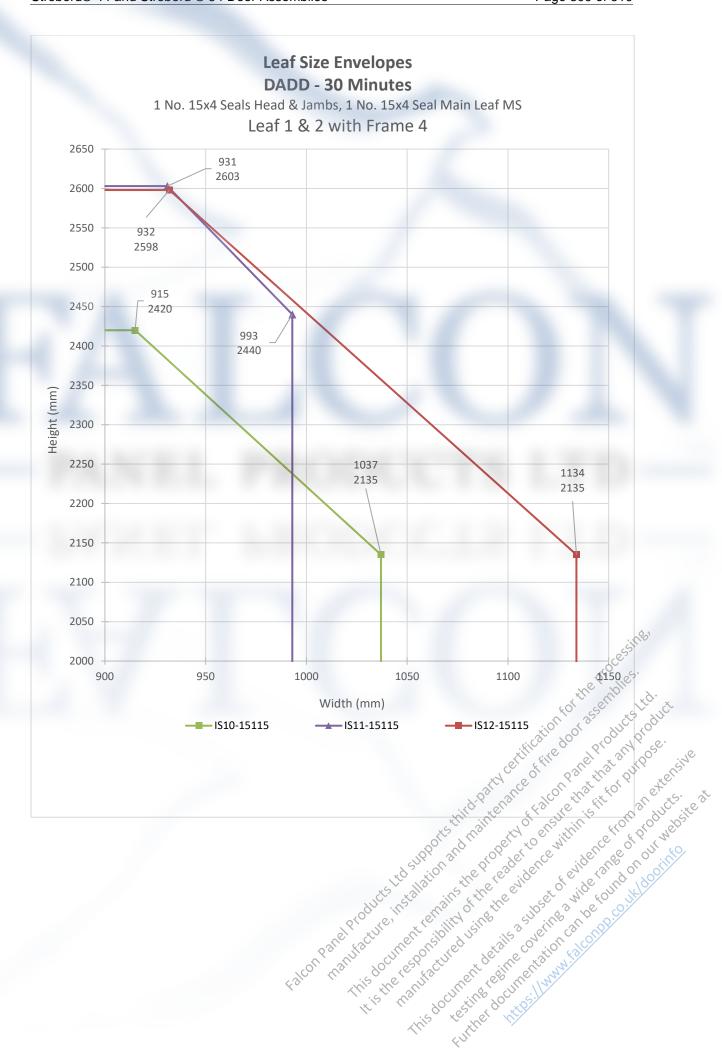
IS9 - 15210 is not currently permitted

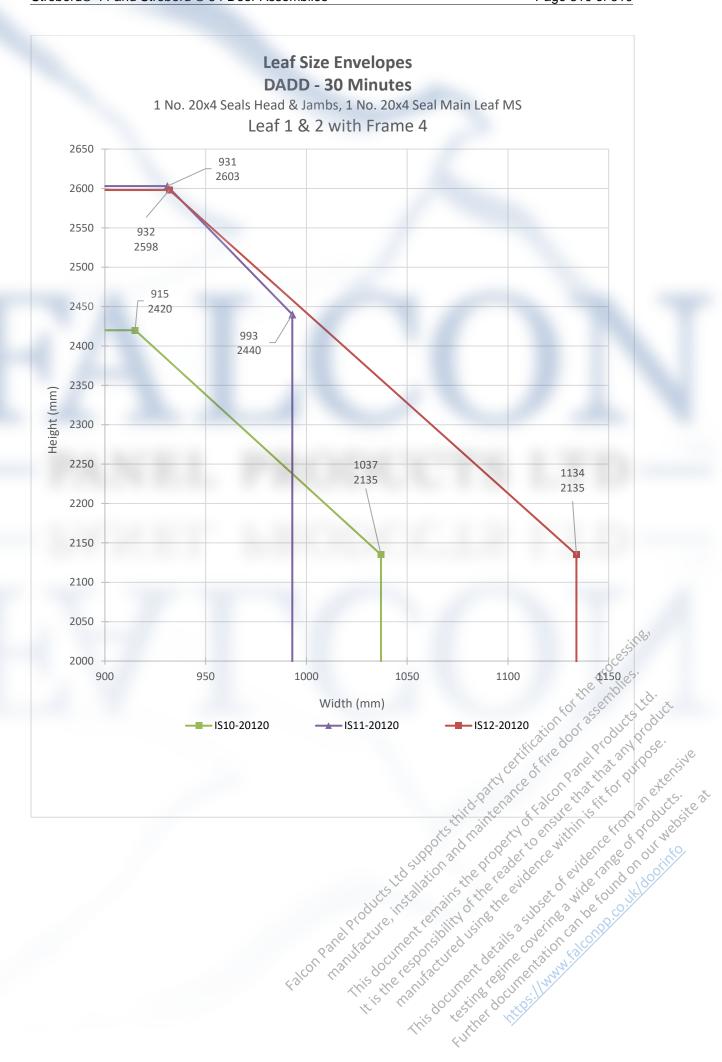


IS9 - 20210 is not currently permitted



IS9 - 210210 is not currently permitted





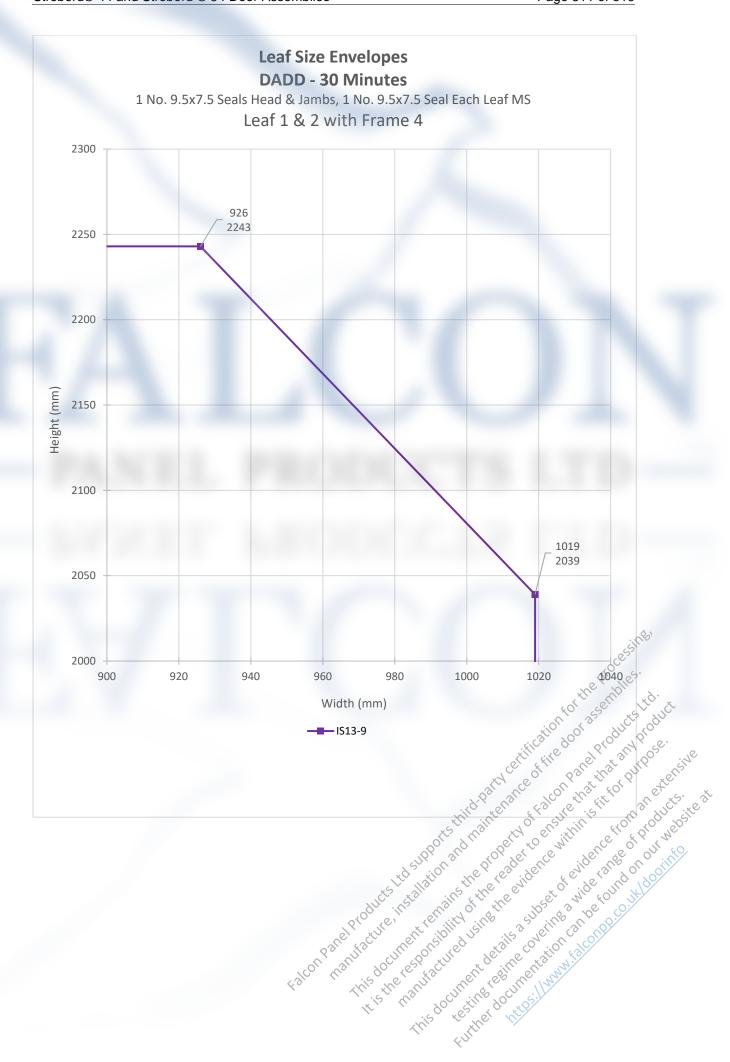


Table 8.1.1 - Intumescent Specification for DADD Incorporating intumescent seals from Mann McGowan Fabrications Ltd Leaf 1 or 2 with Frame 4

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS1-10210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS1-15210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS1-20210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS1-210210 ——— (Chilt/RF09170)	Pyrostrip 100P	Mann McGowan	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Ealcon Panel Production	2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart. Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS2-10210 ——— (Chilt/RF07109)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
	Т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
S5-15210 ——— (WF430460 (A))	LP1504 & LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS5-20210 ——— (WF430460 (A))	LP2004 & LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		· /	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS5-20210 ——— (WF430460 (A))	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		kalcon Panel Produce	2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart. Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Table 8.1.2 (continued) Incorporating intumescent seals from Lorient Polyproducts Ltd Leaf 1 or 2 with Frame 4			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS10-15210 ——— (Chilt/RF11170)	LP1504 & LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
3.4			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS10-15115 (Chilt/RF11170)	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
PANT		100	Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge.
IS10-20120 (Chilt/RF11170)	LP1504 & LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge.
IS10-210120 ——— (Chilt/RF11170)	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS14-20210 ——————————————————————————————————	LP2004 & LP1004	Lorient Polyproducts Ltd	Head & Jamps:
		. Produč	primary loaf odgo 10mm apart
Primary leaf edge, 10mm apart.			

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products the at the regime of products the at the range of products th

Meeting Stiles:

2no 10x4. Fitted centrally in the primary leaf edge

ne responsibility of the reader to ensure that it fit for

This document remains the property of talcon that in is it is the reader to ensure that it is the tree evidence within is it is the reader to ensure that it is the reader to ensure this in the tree evidence within is it is the read of the reader to ensure that it is the read of the reader to ensure the reader to ensure that it is the read of the reader to ensure the reader to ensure that it is the read of the reader to ensure that it is the read of the reader to ensure that it is the read of the reader to ensure that it is the read of the reader to ensure that it is the read of the reader to ensure that it is the read of the reader to ensure that it is the read of the reader to ensure that it is the reader to ensure the reader to ensure the reader to ensure that it is the reader to ensure the rea

I his document responsibility of the reader to ensure

A Panel Products Lid supports third paintenance

-dy

Table 8.1.3 - Intumescent Specification for DADD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 4			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS3-10210 ——————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 1no 10x4. Fitted centrally in frame reveal or leaf edges.
3 A	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS3-15210 ————————————————————————————————————	FO8700 & FO8500	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
74.51			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS3-20210 ——————————————————————————————————	FO8600 & FO8500	Pyroplex Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS3-210210 —————————————————————————————————	FO8500	Pyroplex Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.

Table 8.1.3 (continued) Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 4			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS7-15210 —	FO8700 &	Pyroplex Ltd	Head & Jambs:
(RF08088)	FO8500		1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
3 A			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS7-20210 —	FO8600 &	Pyroplex Ltd	Head & Jambs:
(RF08088)	FO8500		1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
71.51			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS7-210210 —	FO8500	Pyroplex Ltd	Head & Jambs:
(RF08088)			2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles:
			2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS12-15115 —	FO8700	Pyroplex Ltd	Head & Jambs:
(Chilt/RF09060 (B))			1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
			1no 15x4. Fitted centrally in the primary leaf edge
IS12-20120 —	FO8600	Pyroplex Ltd	Head & Jambs: More Month of the Aller
(Chilt/RF09060 (B))			1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles: Store Stiles
		groduč	1no 20x4. Fitted centrally in the primary leaf edge
		kalcon Panel Produc	1no 15x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges: Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of talcon Panel Products that the for purpose.

This document responsibility of the treather evidence within is fit for purpose.

This document responsibility of the deal of the evidence within is fit for purpose.

This document detains a subset of a wide range of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

Table 8.1.4 - Intumescent Specification for DADD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1 or 2 with Frame 4			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS4-15210 ————————————————————————————————————	STS154FO & STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
J A	7		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS4-20210 ——————————————————————————————————	STS204FO & STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
PANT			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS4-210210 ——— (BMT/FEP/F15034)	STS104FO	Sealed Tight Solutions Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
7			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Falcon Panel Production This distribution of the Production of the	2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart. Primary leaf edge, 10mm apart. 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.

Table 8.1.5 - Intumescent Specification for DADD Incorporating intumescent seals from DIG Ltd Leaf 1 or 2 with Frame 4			
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS6-15210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
3 A			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS6-20210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
PANT		100	Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS6-20210 ——— (CFR1812121)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS11-15115 ——— (CFR1403122)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
			1no 15x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 15x4. Fitted centrally in the primary leaf edge Head & Jambs:
IS11-20120 ——— (CFR1403122)	Therm-A- Seal	Intumescent Seals Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
		Produc	Meeting Stiles: 1 no 20x4. Fitted centrally in the primary leaf edge
(CFR1403122) Therm-A-Seal Intumescent Seals Ltd Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 20x4. Fitted centrally in the primary leaf edge			

Table 8.1.5 (continued) Incorporating intumescent seals from DIG Ltd Leaf 1 or 2 with Frame 4				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
IS13-9 ——— (CFR1812111)	N30	Sealmaster	Head & Jambs: 1no 9x8. Fitted centrally in frame reveal or leaf edges.	
3 A	т		Meeting Stiles: 1no 9x8. Fitted centrally in the edge of each leaf.	

Taked Radilets Indicated the properties of the p

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document responsibility of the tree evidence within is the for purpose.

This document responsibility of the tree evidence within is the for purpose.

This document detains a subset of evidence from an extensive

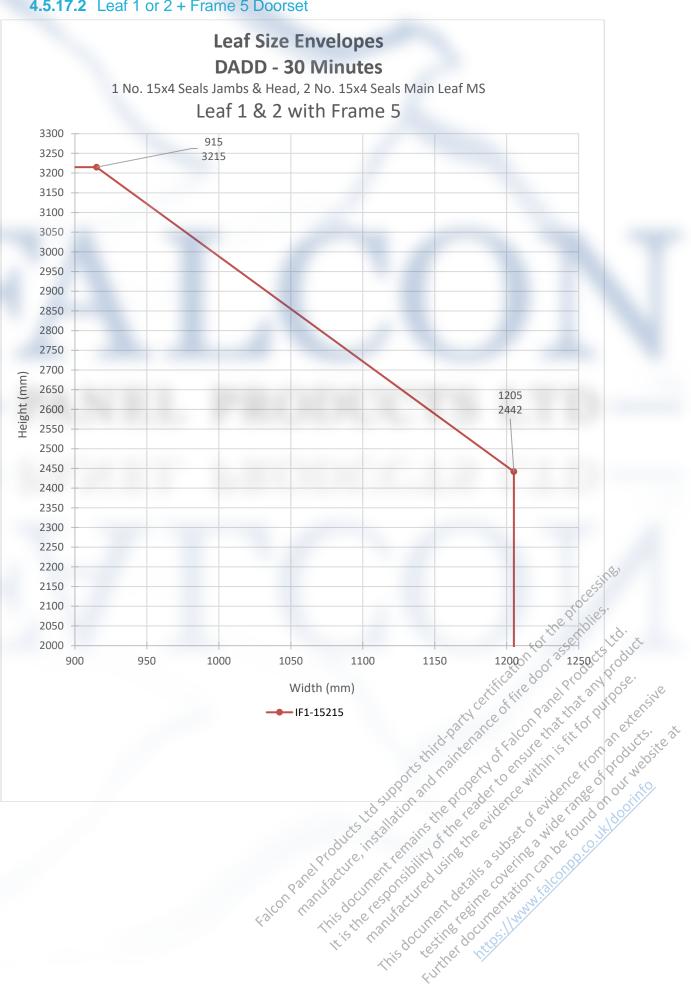
testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

Report No: Chilt/A02066 Rev O Page 320 of 519

Table 8.1.6 - Intumescent Specification for DADD
Incorporating intumescent seals from Astroflame (Fireseals) Ltd
Leaf 1 or 2 with Frame 4

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IS8-15210 ————————————————————————————————————	AF1504FSX & AF1004FSX	Astroflame	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.
Z A	т		Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS8-20210 ——— (BMT/FEP/F14265 (B))	AF2004FSX & AF1004FSX	Astroflame	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.
PANT			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
IS8-210210 ——— (BMT/FEP/F14265 (B))	AF1004FSX	Astroflame	Head & Jambs: 2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles: 2no 10x4. Fitted centrally in the primary leaf edge, 10mm apart.
		Panel Produc	primary leaf edge, 10mm apart. primary leaf edge, 10mm apart.

4.5.17.2 Leaf 1 or 2 + Frame 5 Doorset





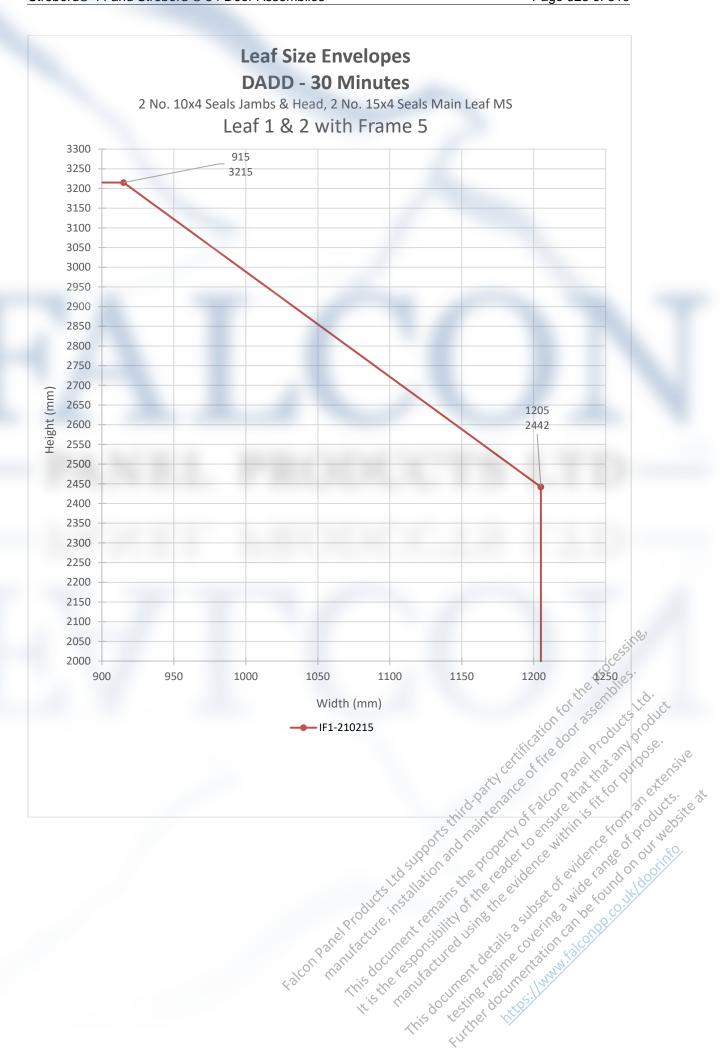


Table 8.2.1 - Intumescent Specification for DADD Incorporating intumescent seals from Pyroplex Ltd Leaf 1 or 2 with Frame 5

Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
IF1-15215 —	FO8700	Pyroplex Ltd	Head & Jambs:
(Chilt/RF08125 AR1)			1no 15x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
			2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.
IF1-20215 —	FO8700 &	Pyroplex Ltd	Head & Jambs:
(Chilt/RF08125 AR1)	FO8600	л.	1no 20x4. Fitted centrally in frame reveal or leaf edges.
			Meeting Stiles:
71.1			2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.
IF1-210215 —	FO8700 &	Pyroplex Ltd	Head & Jambs:
(Chilt/RF08125 AR1)	FO8500		2no 10x4. Fitted centrally in frame reveal or leaf edges, 10mm apart.
			Meeting Stiles:
			2no 15x4. Fitted centrally in the primary leaf edge, 5mm apart.

4.5.17.3 Leaf 1, 2 or 3 + Frame 6 Doorset





Table 8.3.1 - Intumescent Specification for DADD Incorporating intumescent seals from Sealed Tight Solutions Ltd Leaf 1, 2 or 3 with Frame 6					
Intumescent Spec. Reference & (Test Reference) Make / Type / Supplier Location & Size					
IP1-15215 (WF388638)	STS154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 15x4. Fitted centrally in both primary and secondary leaf edges.		
IP1-20220 (WF388638)	STS204FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges. Meeting Stiles: 1no 20x4. Fitted centrally in both		

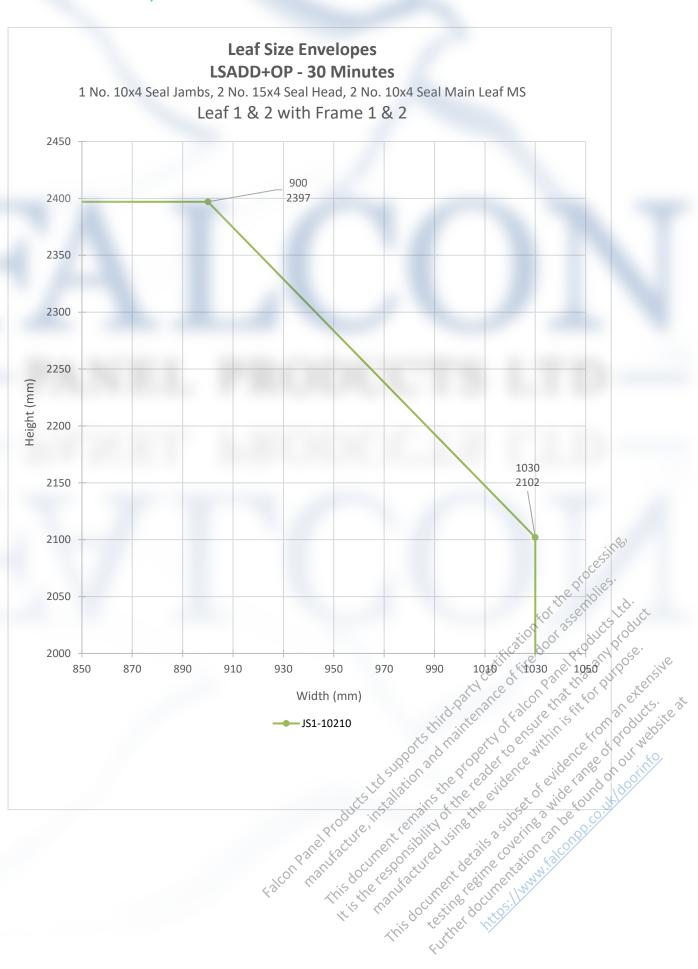
primary and secondary leaf edges.

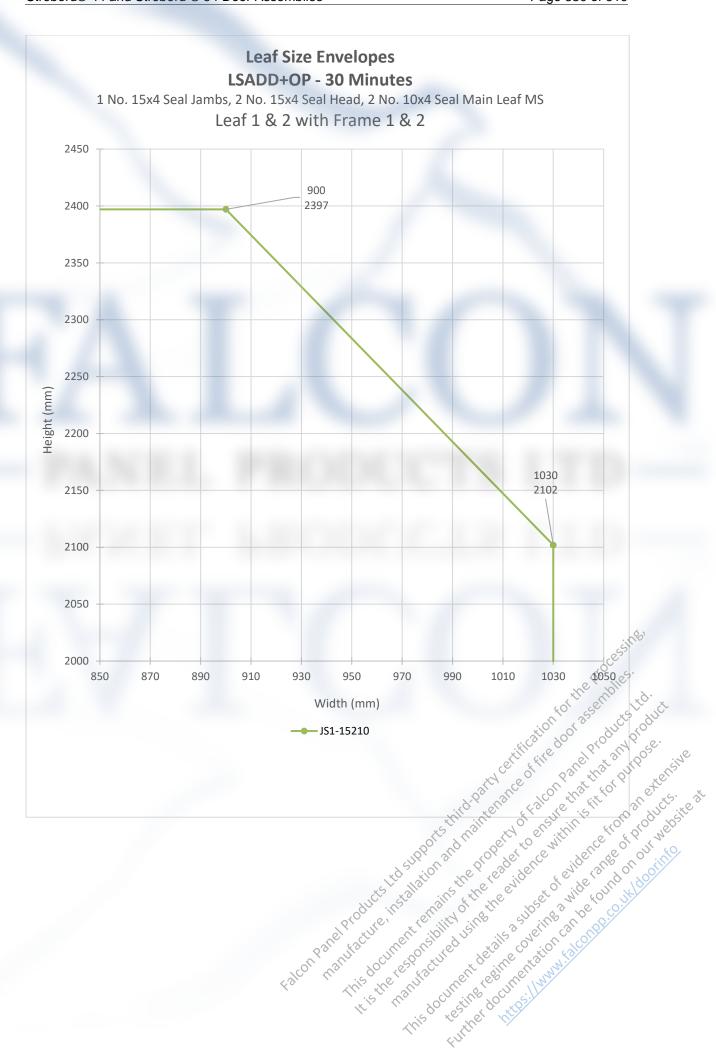
Table 8.3.2 - Intumescent Specification for DADD			
Incorporating intumescent seals from Lorient Polyproducts Ltd			
Leaf 1, 2 or 3 with Frame 6			

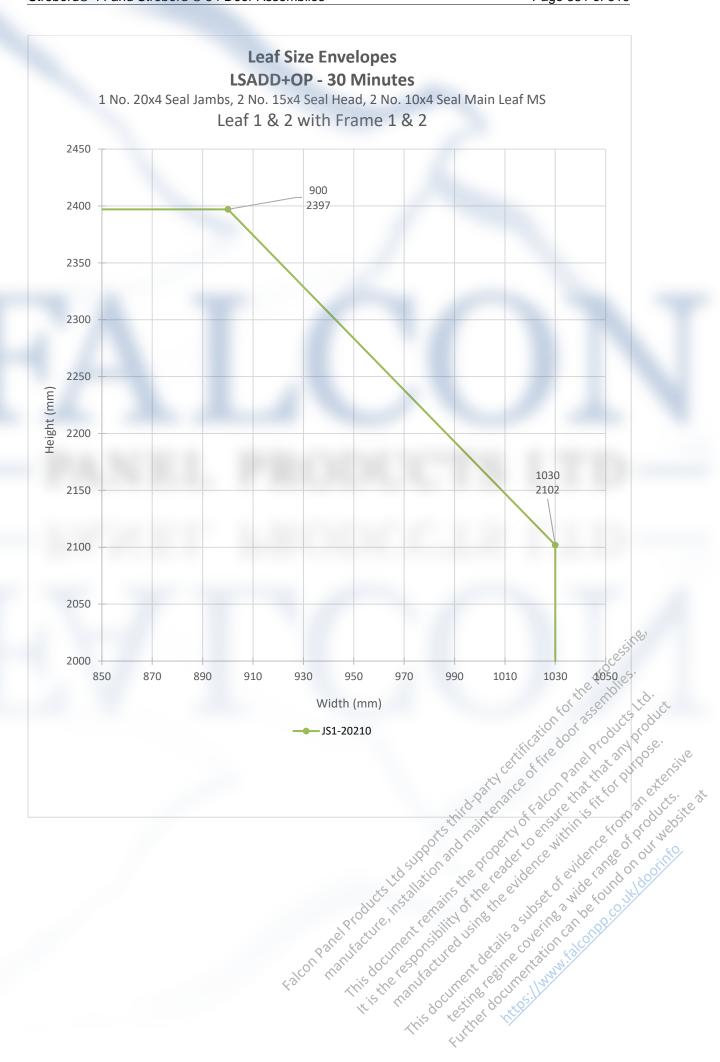
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
IP2-15215 (RF11059)	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted centrally in frame reveal or leaf edges.	
			Meeting Stiles: 1no 15x4. Fitted centrally in both	
			primary and secondary leaf edges.	
IP2-20220 (RF11059)	LP2004	Lorient Polyproducts Ltd	Head & Jambs: 1no 20x4. Fitted centrally in frame reveal or leaf edges.	
			Meeting Stiles:	
24.5(1)			1no 20x4. Fitted centrally in both primary and secondary leaf edges.	

4.5.18 LSADD+OP Configuration – Leaf Size Envelopes & Intumescent Specification

4.5.18.1 Leaf 1, 2 + Frame 1 or 2 Doorset







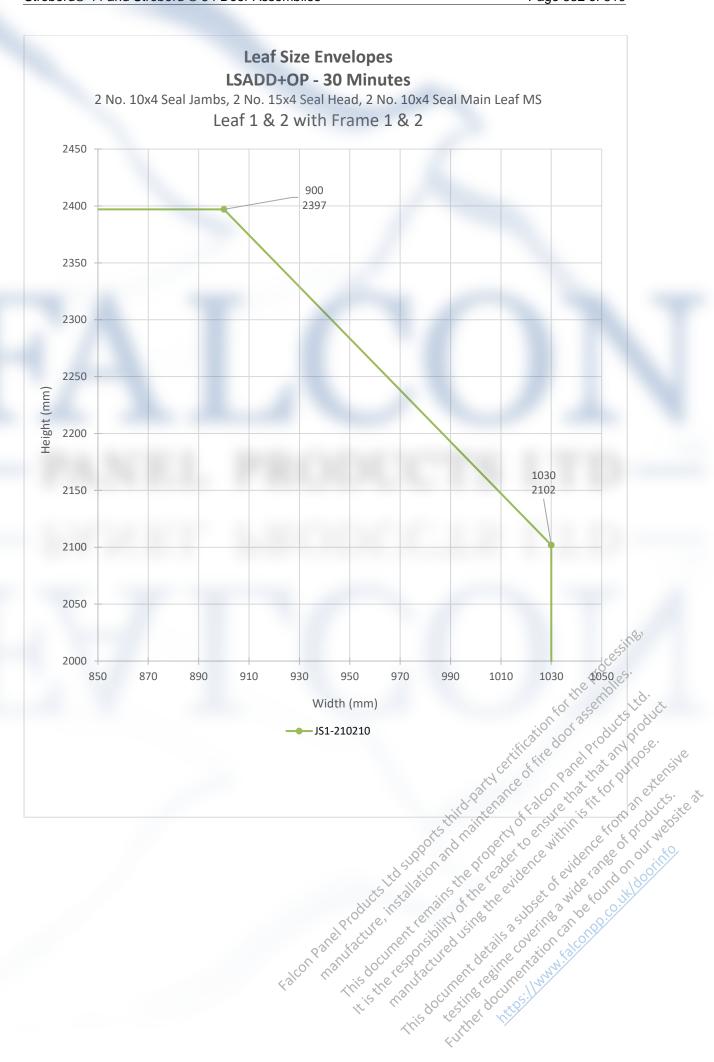


Table 9.1.1 - Intumescent Specification for LSADD+OP

Incorporating seals from Lorient Polyproducts Ltd. Leaf 1 or 2 with Frame 1 or 2				
Intumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size	
JS1-10210 (RF00136)	LP1004 & LP1504	Lorient Polyproducts Ltd	Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart Jambs: 1no 10x4 Fitted centrally in frame reveal or leaf edges	
74.50			Meeting Stiles: 2no 10x4 Fitted centrally in main leaf edge, 10mm apart.	
	LP1004 & LP1504		Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart	
			Jambs: 1no 15x4 Fitted centrally in frame reveal or leaf edges Meeting Stiles: 2no 10x4 Fitted centrally in main leaf edge, 10mm apart.	
		Falcon Panel Production This de l'international l'internationa	Tho 15x4 Fitted centrally in frame reveal or leaf edges Meeting Stiles: 2no 10x4 Fitted centrally in main leaf edge, 10mm apart. In the still	

2no 10x4 Fitted centrally in main

leaf edge, 10mm apart.

Falcon Panel Products Lide Justialiation and maintenance of fine door assemblies.

This document, remains the property of the leader to ensure that that any product the tribe the reader to ensure that the tribality of the reader to ensure that the tribe the reader to ensure that the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the tribe the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader t This document remains the property of Falcon Panel Products lited any product.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

This document detains a subset of evidence from an extensive

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

Table 9.1.1 - Intumescent Specification for LSADD+OP Incorporating seals from Lorient Polyproducts Ltd. Leaf 1 or 2 with Frame 1 or 2					
Intumescent Spec. Reference & (Test Reference) **Test Reference** **Test Reference**					
JS1-20210 ——————————————————————————————————	LP1004 & LP1504 & LP2004	Lorient Polyproducts Ltd	Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart Jambs: 1no 15x4 Fitted centrally in frame reveal or leaf edges		

Table 9.1.1 (continued) Incorporating seals from Lorient Polyproducts Ltd.					
Leaf 1 or 2 with Fran		r oryproducts E			
Intumescent Spec. Reference					
JS1-210210——— (RF00136)	I P1504 & Polyprodu	Polyproducts	Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart		
YA		_	Jambs: 2no 10x4 Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles: 2no 10x4 Fitted centrally in main leaf edge, 10mm apart.		

Falcon Panel Products lide and maintenance of five door as semblies.

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

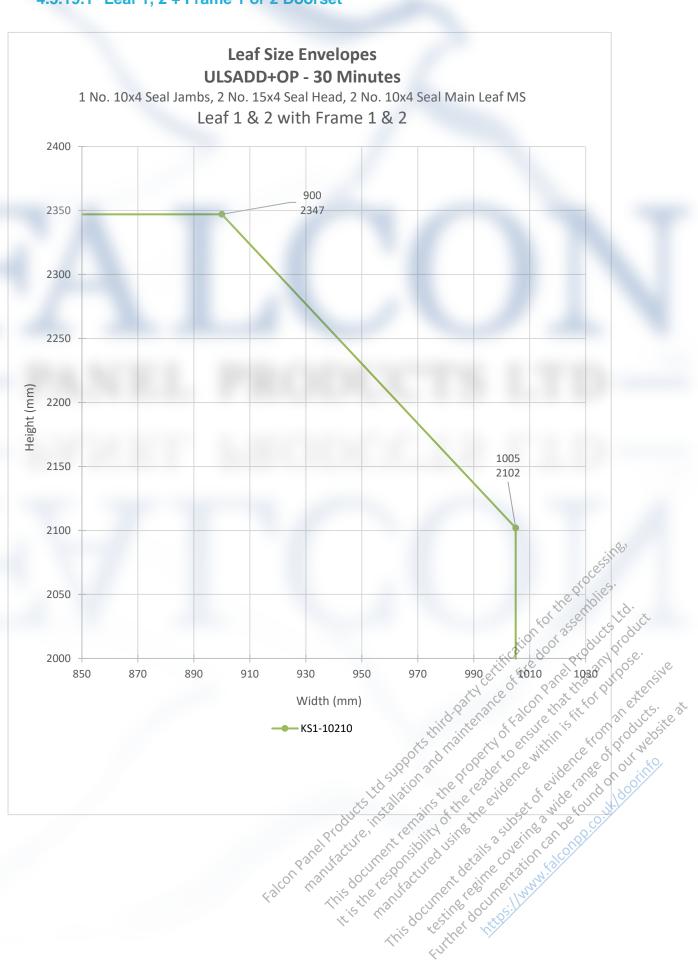
This document remains the distributed using the evidence within is fit for purpose.

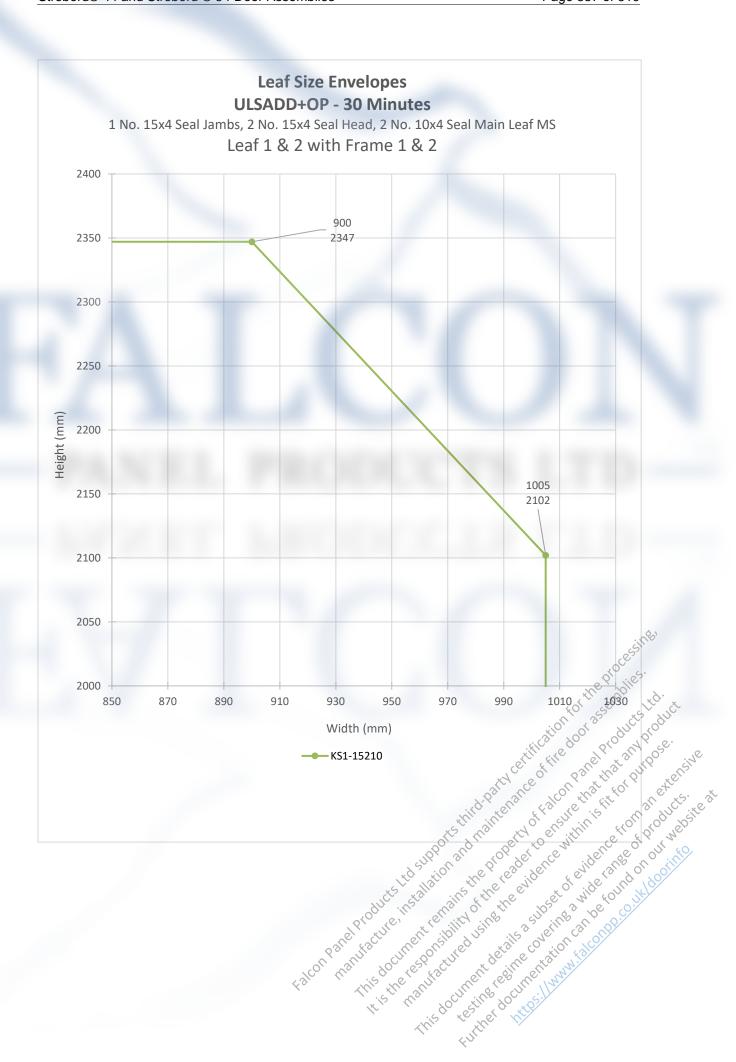
This document details a subset of evidence tange of products.

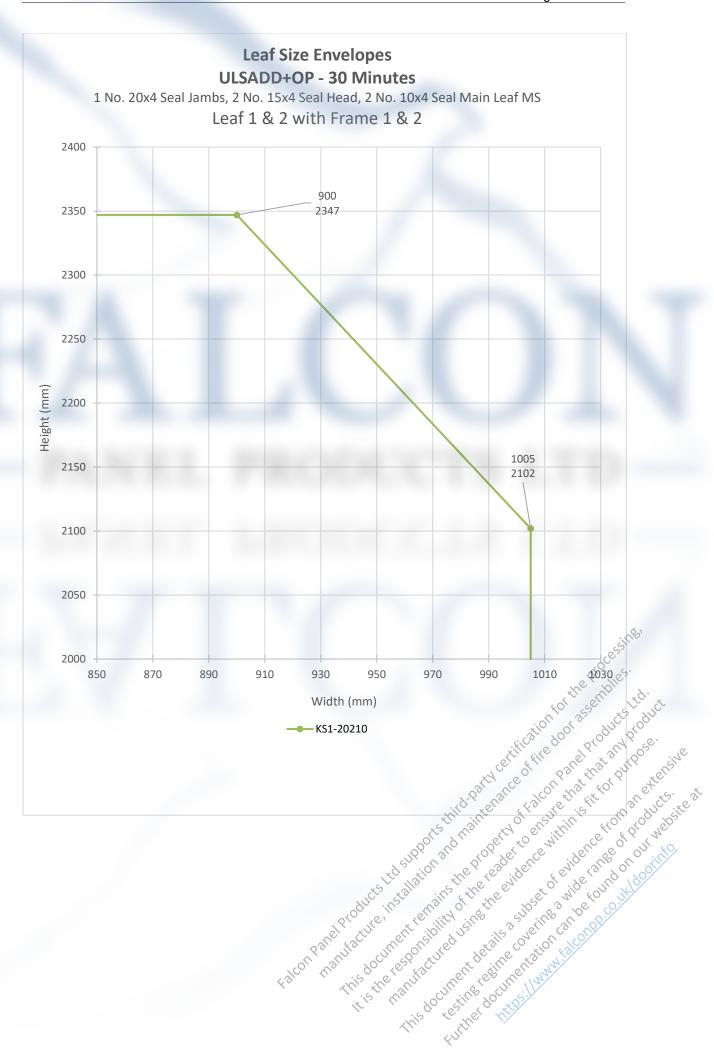
testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

4.5.19 ULSADD+OP Configuration – Leaf Size Envelopes & Intumescent Specification

4.5.19.1 Leaf 1, 2 + Frame 1 or 2 Doorset







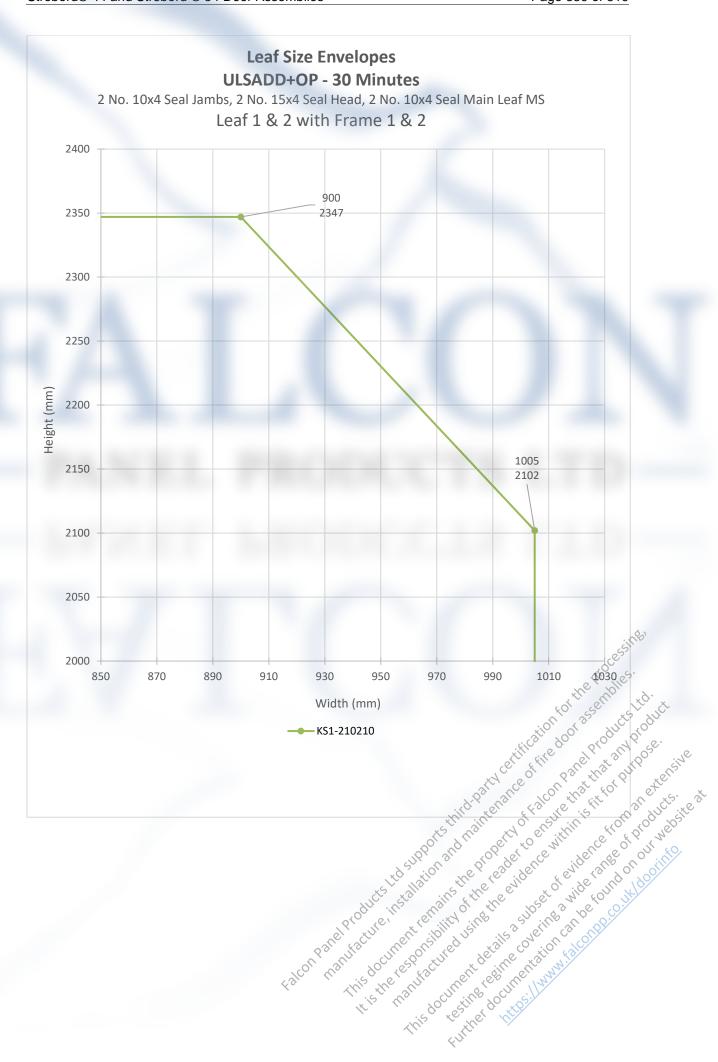


Table 9.1.1 - Intumes	scent Specific	cation for ULSA	DD+OP
Incorporating seals	from Lorient	Polyproducts Li	td.
Leaf 1 or 2 with Fran	ne 1 or 2 (Tim	ber/Timber Sub	strate)
Intumescent Spec. Reference	Make / Type	Manufacturer	Location

ntumescent Spec. Reference & (Test Reference)	Make / Type	Manufacturer / Supplier	Location & Size
(S1-10210 ——— RF00136)	LP1004 & LP1504	Lorient Polyproducts Ltd	Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart
	L	Λ.	Jambs: 1no 10x4 Fitted centrally in frame reveal or leaf edges
			Meeting Stiles:
10,000			2no 10x4 Fitted centrally in main leaf edge, 10mm apart.
(S1-15210 ——— RF00136)	LP1004 & LP1504	Lorient Polyproducts Ltd	Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart
			Jambs: 1no 15x4 Fitted centrally in frame reveal or leaf edges
			Meeting Stiles: 2no 10x4 Fitted centrally in main leaf edge, 10mm apart.
		on Panel Produc	overpanel (square head junction) spaced 5mm apart Jambs: 1no 15x4 Fitted centrally in frame reveal or leaf edges Meeting Stiles: 2no 10x4 Fitted centrally in main leaf edge, 10mm apart.

Table 9.1.1 - Intumescent Specification for ULSADD+OP
Incorporating seals from Lorient Polyproducts Ltd.

Lear 1 or 2 with Fran	Lear 1 or 2 with Frame 1 or 2 (11mber/11mber Substrate)						
Intumescent Spec. Reference & (Test Reference)	Intumescent Spec. Reference & (Test Reference)	Intumescent Spec. Reference & (Test Reference)	Intumescent Spec. Reference & (Test Reference)				
KS1-20210 ——— (RF00136)	LP1004 & LP1504 & LP2004	Lorient Polyproducts Ltd	Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart				

Jambs:

reveal or leaf edges

leaf edge, 10mm apart.

Meeting Stiles:

1no 15x4 Fitted centrally in frame

2no 10x4 Fitted centrally in main



Table 10.1.1 (continued)						
Incorporating seals from Lorient Polyproducts Ltd.						
Leaf 1 or 2 with Fram	ne 1 or 2 (Tim	ber/Timber Sub	estrate)			
Intumescent Spec. Reference & (Test Reference) Make / Type / Supplier Location & Size / Supplier						
KS1-210210 (RF00136)	LP1004 & LP1504 & LP2004	Lorient Polyproducts Ltd	Head to Overpanel: 2no 15x4. One seal fitted centrally in the bottom of each rebate (rebated head junction) or 2no 15x4 fitted centrally in bottom edge of overpanel (square head junction) spaced 5mm apart			
'A			Jambs: 2no 10x4 Fitted centrally in frame reveal or leaf edges, 10mm apart. Meeting Stiles: 2no 10x4 Fitted centrally in main leaf edge, 10mm apart.			

Falcon Panel Products Lides Undon and maintenance of fine door assemblies.

This document repairs the property of the reader to ensure that that any product the repair of the reader to ensure that the repair of the reader to ensure that the reader to ensure the responsibility of the reader to ensure the rea This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence transper of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

4.5.20 DADD+OP Configuration – Not permitted

testing tegine covering a mide range of products like of the continuous like of the continu

5 General Description of Leaf Construction

Leaf 1 - Strebord 44

The primary construction for door leaves of this design comprises the following:

A solid sheet of 44mm thick Strebord® 44 three layered particleboard (density range 510kg/m³ – 650kg/m³). Where specified, the leaves are lipped with hardwood.

Minimum Door Leaf Thickness:

With permitted decorative facing/finishes 43.4mm

Minimum Door Blank Thickness:

Without decorative facings/finishes 42.4mm.

The door designs can include:

- Lippings
- Glazing
- Grooves
- **Decorative facings**
- Additional facings up to 9mm

The Field of Application presented in this report is relevant to Strebord 44 doorsets constructed using the Strebord door blanks tested and referenced in section 3 of this FoA report (particleboard to be supplied by Falcon Panel Products from mills specifically referenced in these test summaries as F1, F3, F5. NB: the address of each mill is held in confidence by Falcon Panel Products Ltd and Warringtonfire (file ref: WF 431343). According to rule A.4.11 in BS EN 15269-3: 2012 it is possible to change the manufacturer of the core if the composition remains as tested otherwise a further test is to be conducted on the specific manufacturer of core material. There are variances in composition between the particleboard produced by the three different mills (Falcon ref: F1, F3 and F5), however, each of the board types have been tested as documented in the evidence in section 3. The scope is presented on the basis that the composition of each of the particleboard cores remains the same as originally tested.

5.2 Leaf 2 - Strebord 54

The primary construction for door leaves of this design comprises the following:

antisture installation and maintenance or interview that that any product the reader to ensure that that any product in this document remains the people the reader to ensure that that any product in this document remains the reader to ensure that that any product in this document remains the reader to ensure that that any product in this document remains the reader to ensure that that any product in the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader to ensure the reader to ensure the reader to ens This document remains the property of Falcon Panel Products It de purpose.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose. Panel Products its allation and maintenance of the Drawn brown. A solid sheet of 54mm thick Strebord® 54 three layered particleboard (density Lacon Panel Products Lind supports third party certification do range 510kg/m³ - 650kg/m³). Where specified, the leaves are lipped with hardwood. This document detains a subset of a mide range of products.

Minimum Door Leaf Thickness:

With permitted decorative facing/finishes 53.4mm

Minimum Door Blank Thickness:

Without decorative facings/finishes 52.4mm.

The door designs can include:

- Lippings
- Glazing
- Grooves
- Decorative facings
- Additional facings up to 9mm

5.3 Leaf 3 – Strebord 44 or 54 PVC encapsulated/clad

The primary construction for door leaves of this design comprises the following:

- A solid sheet of 44mm thick Strebord® 44 or 54mm thick Strebord® 54 three layered particleboard (density range 510kg/m³ - 650kg/m³). Where specified, the leaves are lipped with hardwood.
- The leaf is to be encapsulated using one of the following methods:
 - 1. Post forming the leaf with a maximum of 2mm thick PVC facing which fully encapsulates the leaf faces and vertical edges. The leaf is to include rounded corners at the vertical edges to enable the PVC to be formed around the leaf

or

- 2. Cladding the leaf with strips/sheets of 2mm PVC which can cover the faces and edges of the door leaf.
- PVC specification is to be as follows:
 - The assessed PVC types are given in 4.3.3
- Gluelines See section 10 for approved adhesives

Minimum Door Leaf Thickness:

 With permitted decorative facing/finishes 47.4mm (Strebord® 44) or 57.4mm (Strebord® 54)

The door designs can include:

- Lippings
- Glazing
- 1. The vertical edge detail prior to post-forming must either be lipped with 8mm thick hardwood as detailed in this assessment (see section 5.5.)
- 2. The horizontal edge detail prior to post-forming does not require lipping but may be lipped with 8mm thick hardwood as detailed in this assessment (see section 5.5.)
- 3. The maximum radius of the lipping at the corners of the vertical edges before postforming must be 9mm, which provides for 11mm external radius after the PVC has
 been applied

5.4 Leaf 4 – Strebord 44 or 54 Over-rebated

The primary construction for door leaves of this design comprises the following:

- A solid sheet of 44mm thick Strebord® 44 or 54mm thick Strebord® 54 three layered particleboard (density range 510kg/m³ 650kg/m³). Where specified, the leaves are lipped with a specific rebated hardwood lipping
- The lipping is to include a 34mm wide x 13mm deep rebate (44mm thick leaves) and a 44mm wide x 13mm deep rebate (54mm thick leaves) which will result in the leaf being rebated over the frame by 8-10mm (depending on the leaf to frame gap)

Minimum Door Leaf Thickness:

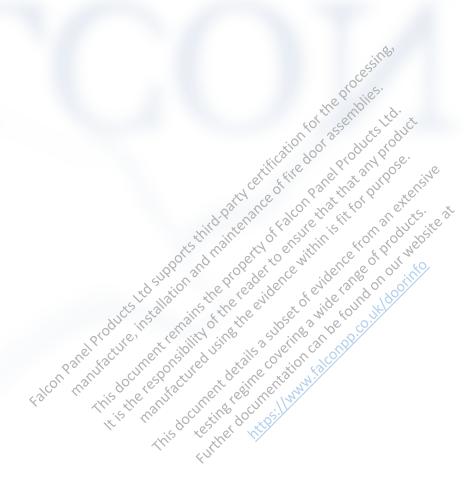
• With permitted decorative facing/finishes 43.4mm (Strebord® 44) or 53.4mm (Strebord® 54)

Minimum Door Blank Thickness:

 Without decorative facings/finishes 42.4mm (Strebord® 44) or 52.4mm (Strebord® 54)

The door designs can include:

- Glazing
- Decorative facings



5.5 Lippings

The requirements for lipping Leaf types 1 to 4 are given in the following sections.

Leaf 1 and 2 5.5.1

Leaves must be lipped on vertical edges. Lippings to horizontal edges are optional unless doorset configuration or hardware type requires otherwise. All lippings must comply with the following specification:

Lipping Specification				
Material	rerial Size (mm)			
3.4	Flat Lipping = 6–13 thick with a maximum of 2mm profiling permitted at corners of lipping ²	(kg/m³)		
1 (2)	Rounded Lipping = 8–13 thick with a radius matching the distance between leaf edge and floor pivot ³	530		
Hardwood ¹	Flat Lipping = 6–19 thick with a maximum of 2mm profiling permitted at corners of lipping ²	640		
	Rounded Lipping = 8–19 thick with a radius matching the distance between leaf edge and floor pivot ³			
	Rebated Lipping (equal) = 20-25 thick with a 12-13mm deep equal rebate ^{4,5}			
	T Shape Lipping Head And base only = 16-25 thick including an 18-24x10 tongue ⁵			
Strelip® Engineered Hardwood¹	Flat Lipping = 7–10 thick with a maximum of 2mm profiling permitted at corners of lipping ²	650		
Streframe® Lightweight Hardwood¹	Flat Lipping = 6-10 thick with a maximum of 2mm profiling permitted at corners of lipping ²	450 oces		

Note:

- All door lipping timber must meet or exceed class J30 as specified in BS EN 942: 2007 1. (subject to adequate repair of any defects)
- 2.
- Rounded lippings must only be applied to the hanging edges of door leaves where the door frame jamb has also been profiled to ensure door gans meet the section 12.9 Examples of door frame jamb has also been profiled to ensure door gaps meet the requirements of section 12.9. Examples of permissible rounded edges are detailed in Section 5.5. 3.
- Examples of permissible rebated edges are detailed in Section 5,5.4.2 NOTE Rebated 4. edges are permitted between head of leaves and flush overpanel or at the meeting edges of double doorsets without flush overpanel.

- 5. It is not permitted to fit hardware in the head of the leaves when using a rebated junction with overpanel, including flushbolts (facemounted flush bolt would need to be used if required)
- 6. Examples of permissible "T Shaped" edges are detailed in Section 5.5.4.2
- 7. Lippings must not conceal intumescent materials.
- 8. A 2.5° chamfer (leading edge detail) is permitted to the lipping at the leading edge of leaves providing the door gaps meet the requirements of section 12.9. Examples of permissible chamfered lippings are detailed in Section 5.5.4.4

5.5.2 Leaf 3

Leaves must be lipped on all vertical edges. All lippings must comply with the following specification:

Lipping Specification					
Material	Size (mm)	Minimum Density (kg/m³)			
Hardwood	Flat Lipping = 8 – 10 thick with a maximum of 8mm profiling permitted at corners of lipping as required by the encapsulation process	640			

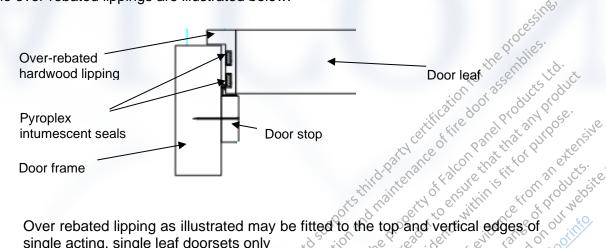
Note:

All door lipping timber must meet or exceed class J30 as specified in BS EN 942: 2007 (subject to adequate repair of any defects)

5.5.3

For leaf 4, the over-rebated hardwood lippings to the leaf head and vertical edges must meet the following specification.

The over-rebated lippings are illustrated below.



- 1. single acting, single leaf doorsets only
- Lippings must be 20mm thick hardwood of minimum density 640kg/m³, including 2. Esting to the butter to the first on con a 34mm wide by 13mm high rebate for leaf 1 and 44mm by 13mm rebate for leaf

- 3. The leaf may be installed opening in either direction, i.e. opening away from or in towards the direction of fire-risk. The door design was tested opening towards the furnace which is considered to be the most onerous in terms of exposure, as the door leaf beings to dehydrate and char and move away from the door stop. Furthermore the lipping rebate that returns around the face of the frame would have been exposed to fire test conditions on more than one face, which would have resulted in an increase in the char rate at the lipping location. Timber exposed on more than once face is known to char quicker in fire test conditions, which further supports the performance of the over rebated design opening away from the fire conditions.
- 4. The lipping must be adhered to the core using a PU adhesive
- 5. 2No. 10 x 4mm Pyroplex Rigid Box Seals must be fitted 5.5mm apart and 4mm from the closing face in the leaf head and vertical edges (as shown above) for leaf 1 and must be fitted 5.5mm apart and 9mm from the closing face in the leaf head and vertical edges (as shown above) for leaf 2
- The leaf must be fitted with a minimum of 2No. Eclipse cranked bearing butt type hinges. The top hinge must be fitted 200mm from the top of the hinge blade to the top of the leaf, and the bottom hinge must be fitted 203mm from the bottom of the hinge blade to the bottom of the door leaf. The hinges must be fixed with 4No. M5 x 30mm long wood screws per blade.

Falcon Panel Products the installation and maintenance of fine door assemblies.

nanthacture installation and maintenance of fine door assemblies.

This document remains the property of the reader to ensure that the responsibility of the reader to ensure the transfer of the responsibility of the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the This document remains the property of Falcon Panel Products It de purpose.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

Manufactured using the evidence within a funde range of products.

This document detains a subset of evidence from an extensive

*esting regime covering ander ander our documentation can be range of products ite at

5.5.4 Lipping examples

The following lipping specifications details are split into 3 sub – sections:

- Standard lipping based on timber
- Standard "T" Lippings
- Standard lipping based on Falcon Panel Products bespoke timber products

Section 5.5.4.4 gives details on the permitted adjustments to lipping to aid closing

Standard lipping based on timber 5.5.4.1

Hardwood Lippings Min Density 530 kg/m³





Flat | 6-13mm

Rounded | 8-13mm

Hardwood Lippings Min Density 640 kg/m³





Flat | 6-19mm

Rounded | 8-19mm



Equal Rebated | 20-25mm overall with 12-13mm deep equal rebate to be used at junction between head of leaves and flush overpanel or at the meeting edges of double doorsets without overpanels

Unequal Over rebated | 20-25mm overall with \$4/44mm wide x 12-43mm deep unequal rebate for use with Door leaf type 4 only the land of the leaves and flush overpanel or at the meeting edges of double doorsets without overpanels

Unequal Over rebated | 20-25mm overall with \$4/44mm wide x 12-43mm deep unequal rebate for use with Door leaf type 4 only the land of the



5.5.4.2 Standard "T" Lippings



T Shape | 16-25mm overall with 18-24mm x 10mm tongue

5.5.4.3 Standard lipping based on Falcon Panel Products bespoke timber products

Strelip® Lippings Min Density 650 kg/m³



Flat | 7-10mm

Streframe® Lippings Min Density 450 kg/m³



Flat | 6-10mm

Colon band kodules installation and make the leader to be sufficiently and the products the products the products the products the product the product

5.5.4.4 Permitted adjustments to lipping to aid closing

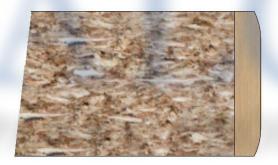
Permissable edge profiling to all lipping types & materials







Round over | max 3x3mm 45° chamfer | max 3x3mm



Feathered edge | max 2x8mm







A Panel Products Lind allation and maintenance of fire door assembles. This document repairs the property of the reader to ensure that that any product the repairs the reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to e This document tenants the property of talcon Panel Products the product of the evidence within is fit for our pose.

This document tenants third using the evidence within is fit for our pose. Ealcon Panel Products Ltd supports third paintenance of fine do This document detains a subset of a wide range of products. *Esting regime covering a wide range of products site at

5.6 **Facings and Decorative mouldings**

There are 2 types of facings:

- Additional MDF facings which are bonded to the Leaf 1 or Leaf 2 and are used to permit decorative features to be machined into the surfaces
- Decorative or Protective facings which are bonded directly to the leaf can be applied to leaves 1 and 2.

Decorative mouldings can be applied to the faces of leaf 1, 2 and 4.

The following sections give the limitations associated with the above.

5.6.1 **Additional MDF facings**

The materials below may be applied as an additional facing material to the Strebord® 44 and Strebord® 54 core using PVA/PU/UF adhesive. The additional material will protect the core underneath, by providing sacrificial material in the event of a fire, therefore increasing the stability to the leaf in fire test conditions.

Timber Facing Material Specification	
Facing Material	Permitted Thickness (mm)
MDF	9
MR MDF	9

Note:

- 2. Facings may be fixed to the core before or after edges/lippings are applied.
- 3. Intumescent materials specified in section 4 must be fitted in line with the core thickness whether located in the leaf edge or frame reveal (i.e. the grooves for the intumescent seals must not cut into the facing or be located in the area of the frame reveal that is in line with the facing)
- 4. Facings must be balanced (i.e., the same thickness and material applied to both faces).
- Decorative facings in section 5.6.2 and plant on mouldings in section 5.6.3 may be applied in addition to these MDF facings. 5.
- 6.
- The finished thickness of any leaf is 62mm or 72mm for Leaf 1 and 2 respectively.

 NOTE Doors of this thickness must still comply with the gap requirements of a still comply with the gap requirement a. Machining does not impact the core as described in section 5.7.2 or b. Any machining that breaches the core surface is in accordance. 7.
- MDF facings may be recessed or machined in any location provided it meets the 8. requirements of section 5.7.2
- b. Any machining that breaches the core surface is in accordance with section 5.7.1 This document details a subtesting regime covering a policy of the contract of the contra Juline in the Septine Covering of he lest whist the dusine the

5.6.2 **Decorative Facings**

The following additional facing materials specified below are also permitted on this door design since they would degrade rapidly under test conditions without significant effect.

Decorative Facing Material Specification	
Facing Material	Maximum Permitted Thickness (mm)
Paint/lacquer	0.5
Timber veneers	2
Plastic & resin laminates	2
PVC	2
Cellulosic foils/paper	0.5

Note:

- 1. Facings may be fixed to the core before or after edges/lippings are applied.
- 2. Facings may cover lippings if required
- 3. Metallic facings are not permitted except for push plates and kick plates.
- 4. The door leaf thickness may be reduced by a total maximum of 0.6mm to each face (a maximum of 1.2mm in total) for calibration purposes, only in order to accommodate one of the additional facings shown in the table above.
- 5. All decorative materials can be fitted to leaf edges but must not conceal intumescent strips.

Decorative Planted on Timber Mouldings

Decorative mouldings can be applied to the door leaves provided the following criteria is adhered to:

The mouldings:

- Are surface mounted to the door leaf
- Are no higher than 30mm, i.e. do not protrude more than 30mm from the surface of the door leaf
- Are no wider than 70mm
- Cover no more than 30% of the door leaf area
- Stop short of the leaf edge where the door stop is located, so that the full thickness of the door leaf is located within the frame reveal
- This document details a subset of a wide range of products. Are bonded into position with PVA/PU/UF adhesive. Small mechanical fixings (no thicker than 1.2mm and not penetrating the dear second thicker than 1.2mm and not penetrating the door core by more than 25mm) may be used in addition to bonding if required. ne responsibility of the reader to ensure that the fit for may may a state of the property of the think is the property of the property o mm)
 mm)
 allufature instance rainity of the reader to ensure Panel Products Ltd supports trind paintenance *esting regime covering a wide range of products ite of the standard of the st ESCON Panel Products Led supports this

This document detains a subset of a wide range of products.

Luther documentation and erange of products ite?

5.7 Feature Grooves and recessed features – Leaf 1 and 2 only

The door can either be grooved within the limits defines in Section 5.7.1 or recessed decorative features can be created as detailed in Section 5.7.2.

5.7.1 Grooves

The testing conducted on Falcon Panel Products Ltd. Strebord® door cores under test Chilt/RF09060. Chilt/RF11160, BMT/FEP/F15027A, references BMT/FEP/F15178. WF405305, WF401039, WF402305 and WF414162 demonstrated that material could be removed from both faces of the door leaf without negating the integrity performance.

Based on the test evidence referenced above door leaves may be grooved within the following parameters:

- For an unlined groove the maximum depth of the groove must not exceed 7mm in Leaf 1 or 13mm in Leaf 2.
- For a timber lined groove the maximum depth of the groove into the leaf must not exceed 10mm in Leaf 1 or 14mm in Leaf 2. Into this groove is placed a timber section which can be grooved such that a minimum thickness of 3mm of timber section remains at the bottom of the groove.
- The groove width must be no more than 10mm
- The permitted infill materials for the groove are MDF, HDF or hardwood which must be of 640kg/m3 minimum density and fully bonded using PVA/PU/UF adhesive.
- Grooves may run to the leaf edge
- Grooves must not not interfere with any edge mounted sealing system.
- Horizontal grooves must be no closer than 75mm to the top and bottom of the door leaf and vertical grooves must be no closer than 75mm to the sides of the leaf.
- Grooves must be no closer than 75mm to each other
- The groove must not coincide with any apertures (e.g., glazing, ATG, letter plates, etc.) and must stop short a minimum of 5mm from the aperture or be adequately infilled with one of the approved infill materials listed above, for the full depth of the groove
- Doors with cableways are not permitted with vertical grooves
- Cableways must be located at least 50mm from horizontal grooves
- Grooves must not conincide with recessed/morticed items of hardware
- Grooves can be included in Latched, Unlatched, single acting and double acting, single leaf and double leaf doorsets.
- Grooves can be included when a transom is present and the over panel may be grooved following the limitations above.
- and control of the state of the door as third party certification for the door as the door and maintenance of the door as the Panel Products line installation and maintenance of fire drop assembly installation and the fire drop assembly installation a Panufacture installation and maintenance of the door assemble and products lited by the reader to ensure that that any product and property of the reader to ensure that the first literature installation and maintenance of the reader to ensure that that any products literature installation and maintenance of the reader to ensure that that any products literature installation and maintenance of the reader to ensure that the reader to ensure the reader to ensure that the reader to ensure the reader to ensure that the reader to ensure the reader the reader to ensure the This document remains the property of Falcon Panel that any product

 This document remains the property of the evidence within is fit for purpose. The intumescent seal present must be a minimum of 15 by 4mm - head and Jambs and 2 Nos 10 by 4mm at meeting stile

5.7.2 Recessed features

Recessed features can be machined into the surface of Leaf 1 and 2 and the extent of the machining depends on the thickness of the leaf and the following limitations apply:

- The recessed area must not go within 100mm from the edge of the door leaf
- The recessed area must not exceed 30% total of leaf area
- Any shape of recess is permitted
- The depth of the recess cannot exceed 7mm for leaf 1 and 13mm for leaf 2.
- For a timber lined recess the maximum depth of the recess into the leaf must not exceed 10mm in Leaf 1 or 14mm in Leaf 2. Into this recess is placed a timber section which can be recessed such that a minimum thickness of 3mm of timber section remains at the bottom of the recessed area.
- The permitted infill materials for the recessed area are MDF, HDF or hardwood which must be of 640kg/m³ minimum density and fully bonded using PVA/PU/UF adhesive.
- Recessed areas must be no closer than 75mm to each other
- The recessed area must not be closer that 75mm to any apertures (e.g., glazing, ATG, letter plates, etc.)
- Cableways must not pass under a recessed area.
- Cableways must be located at least 50mm from a recessed area
- Recessed/morticed in items of hardware must not be located within 50mm of a recessed area.
- Recessed areas can be included in Latched, Unlatched, single acting and double acting, single leaf and double leaf doorsets.
- Recesses areas can be included when a transom is present and the over panel may contain recessed areas following the limitations above.
- The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm at meeting stile

5.7.2.1 Leaf 1 and 2 with 9mm MDF facings

When Leaf 1 or leaf 2 is faced with 9mm MDF the following limitations apply: In the following points when referring to leaf it means the total leaf thickness including the 9mm MDF facing.

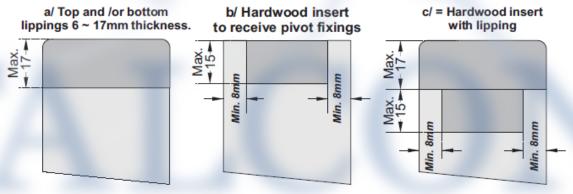
- The recessed area must not go within 100mm from the edge of the door leaf
- Any shape of recess is permitted
- The depth of the recess cannot exceed 9mm for leaf 1 and leaf 2 (i.e. cannot remove any material from the core underneath the 9mm MDF facing)
- It is permitted to line the bottom of the recess with MDF, HDF, plywood, softwood or hardwood which must be of 510kg/m³ minimum density and fully bonded using PVA/PU/UF adhesive. The liner can be up to 9mm thick and grooved or recessed providing the core remains intact.
- Recessed areas must be no closer than 75mm to each other
- The recessed area must not be closer that 75mm to any apertures (e.g., glazing, ATG, letter plates, etc.)
- Recessed areas can be included in Latched, Unlatched, single acting and double acting, single leaf and double leaf doorsets.
- Recesses areas can be included when a transom is present and the over panel may contain recessed areas following the limitations above.
- The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm at meeting stile

 | The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm at meeting stile
 | The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm at meeting stile
 | The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm at meeting stile
 | The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm at meeting stile
 | The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm at meeting stile
 | The intumescent seal present must be a minimum of 15 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and Jambs and 2 Nos 10 by 4mm head and 3 Nos 10 by 4mm he

Hardwood Blocking for Pivots - Leaf 1 and 2 5.8

The following leaf edge option is permitted for lipping the top and bottom of doors that are to receive pivot fixings and are to be used in severe duty locations.

The hardwood insert must be a size (length) suited to the particular item of hardware plus a maximum of 50mm (but not be full door width) and must be securely adhered to the door core. The hardwood insert should not be greater than 15mm in depth and when fitted should provide for a minimum margin of 8mm to either face of the leaf. The inserted blocks must be bonded on all contact faces using adhesives approved for the application of lippings (see section 10). The hardwood insert must have a minimum density of 640 kg/m3.



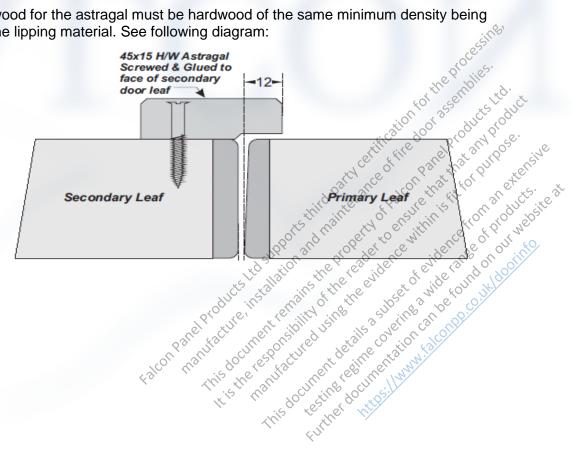
5.9 Meeting Stile Astragals - Leaf 1 and 2

Generally fire doors should be able to open simultaneously. However, where additional performances are required (e.g. acoustic performances) it may be necessary to provide for sequential opening.

An astragal detail may be used where these conditions apply, without adverse influence on existing fire test/assessment data.

Astragals can be applied to both door leaves provided a suitable door selector is fitted and may be profiled for aesthetic effect providing they meet the minimum specification given below.

The hardwood for the astragal must be hardwood of the same minimum density being used for the lipping material. See following diagram:



*esting regime covering a wide range of products ite of the standard of the st

5.10 **Leaf Size Adjustment Prior to Machining**

Door leaf 1 and 2 may be altered as follows prior to the machining for hardware.

Pre-Machining L	eaf Size Adjustment Specification
Element	Reduction
Leaf	The size of the leaf may be reduced in height or width without restriction for manufacturing purposes, providing the finished leaf is lipped (where necessary) in accordance with section 5.5
Timber lipping	Once applied to the core, flat timber lippings may be reduced in thickness provided the lipping is not reduced below the minimum requirements stated in section 5.5
	Horizontal timber lippings may be completely removed unless the door assembly configuration or hardware type requires otherwise

Door leaf types 3 and 4 can not be altered once constructed because leaf edge materials and/or profiles make it impractical to adjust.

5.11 Cableways - Leaf 1 and 2

The following cableway arrangements have been tested in WF384630 and WF WF386959 and are therefore assessed for use with the Strebord doorset design (leaves 1, 2 and 3):

The 2 cableway arrangements can be fitted into all configurations.

The cableway should be within 1200mm from the bottom of the door leaf.

The lipping should have a minimum density of 600 kg/m³

For limitations on the use of a cableway with grooves and recessed areas see section 5.7.

A cableway must not be closer that 90mm to any apertures (e.g., glazing, ATG, letter plates, etc.).

The hole for the cableway can be created by:

- Drilling a 10mm hole through the centre of the door
- Routing out a 10mm wide by 42mm deep channel along the vertical and horizontal. edges capping it off with a 640kg/m³ hardwood infill of dimensions 10mm by 30mm and bonded in position with a PU glue.

This document remains the property of the reader to ensure that that any product it is the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose. Read Products Ltd Supports third party certification for asset Sacon Panel Products Lind supports third paintenance of five do The hole must be lined with 10mm by 1mm wide Seal Tight Solutions Ltd, ST Cable Pro graphite strip This document details a subset of a mide range of products.

6 Glazing

This section considers the glazing permitted for each leaf type based on the test evidence in section 3 and the relevant Certifire certificate associated with each glass type and glazing system.

Section 6.1 details the maximum amount of glazing that the Strebord doorset design can tolerate based on the total number of apertures, the minimum distance from the edges of the apertures to the leaf edge and the minimum distances between glazed apertures.

Section 6.2 details the maximum area of a particular glass type and glazing system.

6.1 Permitted aperture in leaf

The Strebord 44 design has been tested with glazing on many occasssions as seen in section 3.

The largest glazed aperture tested was in test WF505552 where the aperture was 2550mm high by 725mm wide and achieved 30 mins (test stopped prior to failure). This test was conducted to confirm the largest permitted aperture size. Test CFR1403122 tested a double doorset with 2 apertures in each leaf of sizes 1325mm high by 335mm wide and 350mm high by 335mm wide and achieved 34 mins. WF388638 (Leaf 3) tested a doorset with a glazed aperture 1650mm high by 265mm wide and achieved 39 mins. These tests have demonstrated the ability of the Strebord 44 design to accommodate apertures and the following limitations have been set for all leaf types.

Leaf 1, 2, 3 and 4

Maximum area of glazing is 1.9m² (max tested aperture)

Minimum margins around glazing are:-

Top, bottom and sides = 100mm

Minimum distance between apertures is 80mm.

The maximum height of an aperture is 2550mm (max tested height)

The maximum width of an aperture is 870mm (max tested aperture width increased by 20%)

The testing detailed above demonstrates the performance of the glazed Strebord 44 doorset design and its' ability to accommodate apertures. It is the opinion of Warringtonfire that the influence of the frame on the doorset when glazed will be negligible and therefore the limits defined above for glazing can be used in frames 1 to 6, 8 and 11.

The following tables give the maximum aperture size for the Strebord doorset design:

Each glass and glazing combination has been individual aperture. Each glass and glazing combination has been has been given a maximum area for an individual aperture. The maximum dimensions must not exceed those given in section 6.1. More than 1 aperture can be included in the leaf providing the total glazed area of that leaf

The maximum area given is based on the appropriate Certificate or a Warrington fire assessment. If there is a specific test which improves that given by Certificate or by account then that test is referenced in the relevant and assessment. If there is a specific test which improves that given by Certificate or a Warrington fire then that test is referenced in the relevant cell. It is the opinion of Warrington fire maximum glass area detailed in Certifire can be also used. This document details a substitute of the substi Ochlitein dedine danstroren Enther documentation can

6.2.1 Non/Partially Insulating Glass

Glazing Systems by DIG			Glass & Glazing System Specification Max. Assessed Area (m ²)						
Ins	n/Partially ulating Glass oes	Glass Thickness (mm)	Therm-A- Bead 30 (CF 284)	Therm-A- Glaze 30 (<u>CF 284</u>)	Therm-A- Glaze 30 Plus (CF 284)	Therm-A- Glaze 45 Or Therm-A-Strip 10x2 (CF 284)*	Therm-A-Seal 10x4 (<u>CF 284</u>)		
1.	Pyroshield 2	6 or 7	N/A	0.54	1.63	1.72	0.21		
2.	Pyrostem	6 or 7	N/A	0.54	1.63	1.4	N/A		
3.	Pyran S	6	N/A	0.54	1.63	1.4	0.21		
4.	Pyroguard EW30	7	N/A	N/A	1.31	0.64	N/A		
5.	Pyrobelite 7	7	0.69	0.54	1.9	1.72	0.21		
6.	Pyrodur 30-104	7	0.69	0.525	1.63	0.66	0.21		
7.	Pyrodur 60-10	10	0.69	0.525	1.63	0.66	0.21		
8.	Pyrodur 30-203	11	0.69	0.525	1.63	0.66	0.21		
8.	Pyroguard EW Maxi	11	N/A	N/A	N/A	0.64	N/A		
9.	Pyranova 15-S2.0	11	N/A	N/A	N/A	N/A	N/A		
10.	Pyrobelite 9EG	12	0.69	0.54	1.63	1.72	0.21		
11	Pyrobelite 12	12	0.69	0.54	1.63	1.7	0.21 0.21 0.21 0.21 0.21 0.21 0.25 0.21		
12.	Pyrodur 60-20	13	0.69	0.525	1.63	0.66	0.21 2500 05		

Calcon Panel Products the probability of the free define and products the product of the products of the produ

Glazi	ng Systems b	У	Glass & G	lazing Svs	tem Specif	fication		
DIG		Glass & Glazing System Specification Max. Assessed Area (m²)						
Non/Partially Glass Insulating Glass Thickness Types (mm)		6	7	8	9	10	11	
		Thickness	Fireglaze Compound (<u>CF 221</u>)	Fireglaze G30 Or LP15 (<u>CF 221</u>)	Sealmaster Intumescent Closed Cell Foam Tape 10x3 (<u>CF 5645</u>)	Closed Cell Foam Tape		Sealmaster Intumescent Foam Glazing Tape (CF 5387)
1. Py	roshield 2	6 or 7	0.55	0.55	1.63	1.3	N/A	1.3
2. Py	rostem	6 or 7	0.55	0.55	1.63	1.3	N/A	1.3
3. Py	ran S	6	0.55	0.55	1.63	1.3	N/A	1.3
4. Py	roguard EW30	7	N/A	N/A	1.31	1.3	N/A	0.85
5. Py	robelite 7	7	0.55	0.55	1.9	1.3	N/A	1.44
6. Py	rodur 30-104	7	0.55	0.55	1.63	1.3	N/A	1.52
7. Py	rodur 60-10	10	0.55	1.9	1.63	1.3	N/A	1.52
3. Ру	rodur 30-203	11	0.55	0.55	1.63	1.3	N/A	1.52
3. Ру	roguard EW Maxi	11	N/A	N/A	N/A	N/A	N/A	N/A
9. Py	ranova 15-S2.0	11	N/A	N/A	N/A			N/A
10. Py	robelite 9EG	12	0.55	0.55	1.9	1.3	0.27 (WF416690)	1.44 rocesi
11 Py	robelite 12	12	0.55	0.55	1.9	1.3	0.27	1.445
12. Py	rodur 60-20	13	0.55	0.55	1.63	1.3	N/AKICALIE O	1.520 rods
			< ^c	alcon Panel Pro	dut's tid support to the support to	1.3 1.3 1.3 1.3 1.3 1.4 1.5 1.5 1.5 1.5 1.6 1.7 1.7 1.7 1.7 1.7 1.7 1.7	Parce of talcon, and the state of the state	ander of the following

Glazing Systems by STS		Glass & Glazing System Specification Max. Assessed Area (m ²)				
Non/Partially	Glass	12	13	14		
Insulating Glas Types		ST105-3GT CNA F15058 Rev C	ST105GT CAN F15058 Rev C	ST104GT		
1. Pyroshield 2	6 or 7	N/A	0.4	N/A		
2. Pyrostem	6 or 7	N/A	0.4	N/A		
3. Pyran S	6	N/A	0.4	N/A		
4. Pyroguard E	W30 7	0.68	1.24	N/A		
5. Pyrobelite 7	7	1.24	1.9	N/A		
6. Pyrodur 30-1	104 7	1.24	1.24	N/A		
7. Pyrodur 60-1	10 10	1.24	1.24	N/A		
8. Pyrodur 30-2	203 11	N/A	N/A	N/A		
B. Pyroguard E	W Maxi 11	1.24	1.24	N/A		
9. Pyranova 15	i-S2.0 11	1.24	1.24	N/A		
10. Pyrobelite 9B	EG 12	1.24	1.9	N/A		
11 Pyrobelite 12	2 12	1.24	1.9	N/A		
12. Pyrodur 60-2	20 13	1.24	1.24	N/A		
		alcon Panel Programme	Sdut's ltd supports third paint of the production of the productio	N/A N/A N/A N/A N/A N/A N/A N/A		

Glazing Systems by Mann McGowan		Glass & Glazing System Specification Max. Assessed Area (m ²)				
	ating Glass	Glass Thickness (mm)	15 Pyroglaze 30 (<u>CF 316</u>)	16 Pyroglaze Channel (CF 316)	17 Pyrostrip 300 (<u>CF 316</u>)	
1. P	yroshield 2	6 or 7	1.16	N/A	0.19	
2. P	yrostem	6 or 7	N/A	N/A	N/A	
3. P	yran S	6	N/A	N/A	N/A	
4. P	yroguard EW30	7	N/A	N/A	N/A	
5. P	Pyrobelite 7	7	N/A	N/A	N/A	
6. P	yrodur 30-104	7	0.29	0.29	N/A	
7. P	yrodur 60-10	10	0.29	0.29	N/A	
8. P	yrodur 30-203	11	0.29	0.29	N/A	
8. P	yroguard EW Maxi	11	N/A	N/A	N/A	
9. P	yranova 15-S2.0	11	N/A	N/A	N/A	
10. P	Pyrobelite 9EG	12	N/A	N/A	N/A	
11 P	Pyrobelite 12	12	N/A	N/A	N/A	
12. P	yrodur 60-20	13	0.29	0.29	N/A	
				N/A 0.29 0.29 O.29 O.29	the ender the control of asset to the control of th	

This document detains a subset of evidence from an extensive

Glazing Systems by			Glass & Glazing System Specification				
Lorient Polyproducts Ltd			Max. Assessed Area (m²)				
Ins	n/Partially ulating Glass pes	Glass Thickness (mm)	18 System 36 PLUS (<u>CF 5060</u>)	19 Flexible Figure 1 (CF 327)	20 TBA		
1.	Pyroshield 2	6 or 7	0.688	0.66	-		
2.	Pyrostem	6 or 7	0.688	0.66	-		
3.	Pyran S	6	0.688	0.66	-		
4.	Pyroguard EW30	7	0.66	0.71	-		
5.	Pyrobelite 7	7	1.08	0.66	-		
6.	Pyrodur 30-104	7	0.66	0.66	-		
7.	Pyrodur 60-10	10	1.08	0.66	-		
8.	Pyrodur 30-203	11	1.08	0.66			
8.	Pyroguard EW Maxi	11	0.95	0.71	-		
9.	Pyranova 15-S2.0	11	1.08	N/A	-		
10.	Pyrobelite 9EG	12	1.08	0.66	-		
11	Pyrobelite 12	12	1.08	0.66			
12.	Pyrodur 60-20	13	1.08	0.66	<u>-</u> ئے		
				s Lid supports third sine s	Asteronice of the door as the folder of the control		

Glazing Systems by Pyroplex Ltd			Glass & Glazing System Specification Max. Assessed Area (m²)				
Non/Partially Glass Insulating Glass Thickness Types (mm)		Thickness	21 8193 (<u>CF 348</u>)	22 8492 (<u>CF 348</u>)	23 30049 (CF 348)	24 30054 (CF 348)	
1.	Pyroshield 2	6 or 7	0.36	0.25	0.67	N/A	
2.	Pyrostem	6 or 7	0.36	0.25	0.45	N/A	
3.	Pyran S	6	N/A	N/A	N/A	N/A	
4.	Pyroguard EW30	7	0.36	0.25	0.56	0.56	
5.	Pyrobelite 7	7	N/A	N/A	0.45	N/A	
6.	Pyrodur 30-104	7	0.76	0.25	0.45	0.56	
7.	Pyrodur 60-10	10	0.76	0.25	0.45	0.56	
8.	Pyrodur 30-203	11	0.76	0.25	0.65 (WF402305 (B))	0.56	
8.	Pyroguard EW Maxi	11	0.36	0.25	0.56	0.56	
9.	Pyranova 15-S2.0	11	N/A	N/A	N/A	N/A	
10.	Pyrobelite 9EG	12	N/A	N/A	0.45	N/A	
11	Pyrobelite 12	12	N/A	N/A	0.45	N/A	
12.	Pyrodur 60-20	13	0.76	0.25	0.65	0.56	

- Acon Panel Produce: This document, testinity of the decimentation of the country of the state of the state

	Hodgson Sealants Non/Partially Glass		Glass & Glazing System Specification Max. Assessed Area (m²)
Ins			25 Firestrip 30 (CF 297)
1.	Pyroshield 2	6 or 7	0.57
2.	Pyrostem	6 or 7	0.57
3.	Pyran S	6	0.57
4.	Pyroguard EW30	7	0.57
5.	Pyrobelite 7	7	N/A
6.	Pyrodur 30-104	7	1.9
7.	Pyrodur 60-10	10	0.57
8.	Pyrodur 30-203	11	0.57
8.	Pyroguard EW Maxi	11	0.57
9.	Pyranova 15-S2.0	11	0.57
10.	Pyrobelite 9EG	12	N/A
11	Pyrobelite 12	12	N/A
12.	Pyrodur 60-20	13	0.57

	azing Systems b rseal	у	Glass & Glazing System Specification Max. Assessed Area (m²)
Ins	n/Partially ulating Glass bes	Glass Thickness (mm)	26 Norvision 30B (ChiltA12161 Rev B)
1.	Pyroshield 2	6 or 7	0.66
2.	Pyrostem	6 or 7	0.66
3.	Pyran S	6	0.66
4.	Pyroguard EW30	7	0.66
5.	Pyrobelite 7	7	0.66
6.	Pyrodur 30-104	7	0.66
7.	Pyrodur 60-10	10	0.66
8.	Pyrodur 30-203	11	0.66
8.	Pyroguard EW Maxi	11	0.66
9.	Pyranova 15-S2.0	11	0.66
10.	Pyrobelite 9EG	12	0.66
11	Pyrobelite 12	12	0.66
12.	Pyrodur 60-20	13	0.66
			0.66 Ration Page Products in the Republic Product in the Product Prod

		•	Glass & Glazing System Specification Max. Assessed Area (m²)
Ins	Insulating Glass Thickness		27 Fire & Acoustic Seals Ltd Closed Cell Foam Tape 15x3 with Intumescent Acrylic Mastic
1.	Pyroshield 2	6 or 7	N/A
2.	Pyrostem	6 or 7	N/A
3.	Pyran S	6	N/A
4.	Pyroguard EW30	7	0.1 (WF405307)
5.	Pyrobelite 7	7	0.41 (WF411193)
6.	Pyrodur 30-104	7	N/A
7.	Pyrodur 60-10	10	N/A
8.	Pyrodur 30-203	11	N/A
8.	Pyroguard EW Maxi	11	0.1
9.	Pyranova 15-S2.0	11	N/A
10.	Pyrobelite 9EG	12	0.41
11	Pyrobelite 12	12	0.41
12.	Pyrodur 60-20	13	N/A
			N/A Reproducts the supports the definite and supports the supports that the supports the support the supports the supports the supports the supports the support the supports the supports the supports the supports the support the supports the supports the supports the supports the support the supports t

6.2.2 **Fully Insulating Glass**

Gla	Glazing Systems by DIG		Glass & Glazing System Specification Max. Assessed Area (m²)					
			1	2	3	4	5	
Ins Typ	ulating Glass	Glass Thickness (mm)		Therm-A- Glaze 30 (<u>CF 284</u>)	Therm-A- Glaze 30 Plus (<u>CF 284</u>)	Therm-A-Glaze 45 Or Therm-A-Strip 10x2 (CF 284)*	Therm-A- Seal 10x4 (<u>CF 284</u>)	
13.	Pyroguard El30	15	N/A	N/A	N/A	N/A	N/A	
14.	Pyrostop 30-10	15	0.69	0.525	1.63	0.66	N/A	
15.	Pyrobel 16	16	0.69	0.54	1.63	1.72	N/A	

Glazing Systems	Glass & Glazing System Specification Max. Assessed Area (m²)						
		6	7	8	9	10	11
Insulating Glass Types	Glass Thickness (mm)	Fireglaze Compound (<u>CF 221</u>)	Fireglaze G30 Or LP15 (<u>CF 221</u>)	Sealmaster Intumescent Closed Cell Foam Tape 10x3 (<u>CF 5645</u>)	Intumescent Closed Cell Foam Tape 15x3	Glazing Tape 10x4	Sealmaster Intumescent Foam Glazing Tape (CF 5387)
13. Pyroguard El30	15	N/A	(0.0	N/A	1.08	N/A	1.08
14. Pyrostop 30-10	15	0.55	0.55	1.63	1.08	N/A	1.08 proces
15. Pyrobel 16	16	0.55	0.55	1.9	1.08	0.27	1.08 50 CT
		<	alcon Panal Pri	(CF 5645) N/A 1.63 1.9	ortstridgation of the following the followin	Acert of the Constitution	Parel Litator of Carlotte Condensation of Carl

This document responsibility of the reader to ensure that that that the responsibility of the reader to ensure the responsibility of the reader to ensure that the reader to ensure the reader that the reader t Panel Products linds allation and maintenance of fire door. Eacon Panel Products Ltd supports third paintenance of fine This document details a subset of evidence trange of products. testing regime covering a wide range of products ite at the regime documentation and the range of products ite at the regime o

Gla	Glazing Systems by STS		Glass & Glazing System Specification Max. Assessed Area (m²)				
	Glass		12	13	14		
Ins Typ	ulating Glass	Thickness (mm)		ST105-3GT CNA F15058 Rev C	ST104GT		
13.	Pyroguard El30	15	N/A	1.24	1.24		
14.	Pyrostop 30-10	15	1.24	1.24	1.24		
15.	Pyrobel 16	16	1.9	1.9	1.9		

	azing Systems I nn McGowan	•	Glass & Glazing System Specification Max. Assessed Area (m²)				
	I (' OI	Glass	15	16	17		
	ulating Glass pes		Pyroglaze 30 (<u>CF 316</u>)	Pyroglaze Channel (<u>CF 316</u>)	Pyrostrip 300 (<u>CF 316</u>)		
13.	Pyroguard El30	15	0.36 (Chilt/RF11170)	N/A	N/A		
14.	Pyrostop 30-10	15	0.29	0.29	N/A		
15.	Pyrobel 16	16	N/A	N/A	N/A		

			Glass & Glazing S Max. Assessed A		
		Glass	18	19	20
	ulating Glass bes	Thickness (mm)	System 36 PLUS (<u>CF 5060</u>)	Flexible Figure 1	TBA totale province
13.	Pyroguard El30	15	1.08	0.71	N/A cotion do a robust toda
14.	Pyrostop 30-10	15	1.11	0.66	NA of the bare hay a hope weight
15.	Pyrobel 16	16	1.08	0.66 _{hir} d	NA talonation of the street of such the street
			Falcon bang	Products lid supports and in the deline of the state of the support of the suppor	TBA N/A N/A N/A N/A N/A N/A N/A N

	azing Systems k roplex Ltd		Glass & Glazing System Specification Max. Assessed Area (m²)			
		Glass	21	22	23	24
Ins Typ	ulating Glass	Thickness		8492 (<u>CF 348</u>)	30049 (<u>CF 348</u>)	30054 (<u>CF 348</u>)
13.	Pyroguard El30	15	N/A	0.48	0.54 WF430460 (A)	0.48
14.	Pyrostop 30-10	15	N/A	0.48	0.48	0.48
15.	Pyrobel 16	16	N/A	0.48	0.48	0.48

			Glass & Glazing System Specification Max. Assessed Area (m²)
Insulating Glass		Glass Thickness	25 Firestrip 30 (CF297)
13.	Pyroguard El30	15	N/A
14.	Pyrostop 30-10	15	1.9
15.	Pyrobel 16	16	N/A

Gla	zing Systems	by	Glass & Glazing System Specification
No	rseal		Max. Assessed Area (m²)
	detie e Olese	Glass	26 Lifte Mahille
Typ	ulating Glass es	Thickness (mm)	Norvision 30B Chilt A12161 Rev B
13.	Pyroguard El30	15	0.66
14.	Pyrostop 30-10	15	0.66 hild he had been seen a superior of the string the
15.	Pyrobel 16	16	0.66 ROPE OF THE
			Glass & Glazing System Specification Max. Assessed Area (m²) 26 Norvision 30B Chilt A12161 Rev B 0.66 0.66 0.66 0.66 0.66

			Glass & Glazing System Specification Max. Assessed Area (m²)
Nor	modiating Glado Innotations		27
			Fire & Acoustic Seals Ltd Closed Cell Foam Tape 15x3 with Intumescent Acrylic Mastic
13.	Pyroguard El30	15	N/A
14.	Pyrostop 30-10	15	N/A
15.	Pyrobel 16	16	N/A

6.2.3 **Glazing systems**

The following sections detail the permitted bead details, fixing types and hardwood aperture liners that are to be used with the different glazing systems.

Section 6.2.3.1 details the permitted sizes and shapes of bead and which glass types they can be used with.

Section 6.2.3.2 shows the glazing system when installed.

6.2.3.1 **Bead requirements**

For the purpose of specifying different bead shapes the glass types detailed in section 6.2.1 and 6.2.2 are split into groups as follows:

Group 1 glasses 1 to 4 (integrity and radiation performance glass)

Group 2 glasses 5 to 15 (integrity and insulation performance)

General requirements

Hardwood beads: minimum density 640 Kg/m³ free from knots, splits and checks

Liner (if required): see section 6.2.6

For bead fixing requirements see section 6.2.5

The beads shown below are to be used with doors, glass and glazing systems which all have different thicknesses and therefore bead depth will need to be adjusted accordingly, while maintaining the essential requirements given below. The essential requirements for the different bead types are as follows:

Chamfered bolection - permitted with Group 1 and 2

Angle of bead chamfer to horizontal 15° +/- 5°

Note: for the Norseal 30 B system the chamfer is 10 deg

Height of bead adjacent to glass 15mm min

Bolection 5mm by 5mm

Height of bead above bolection 10mm min

ter terification for the processing, Depth of bead to be sized depending on glass, leaf and glazing system

Janum nation of bead above quirk 10mm min

Depth of bead to be sized depending on glass, leaf and glazing system of the size o This document responsibility of the reader to ensure that that any product in this the responsibility of the reader to ensure that that any product in this the responsibility of the reader to ensure that that the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to e This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose. This document detains a subset of a wide range of products. *Esting regime covering a wide range of products site of a products of the contraction can be round on our wife of the country Translitature installation and me

Square bolection - permitted with Group 2

Angle of bead to horizontal ZERO

Height of bead adjacent to glass 15mm min

Bolection 5mm by 5mm

Height of bead above bolection 15mm min

Depth of bead to be sized depending on glass, leaf and glazing system

Square flush - permitted with Group 2

Angle of bead to horizontal ZERO

Height of bead adjacent to glass 15mm min

Quirk 3mm by 3mm

Height of bead above quirk 12mm min

Depth of bead to be sized depending on glass, leaf and glazing system

The following drawings show the different bead types.

Hardwood aperture liners are optional. See section 6.2.6 for specification if required.

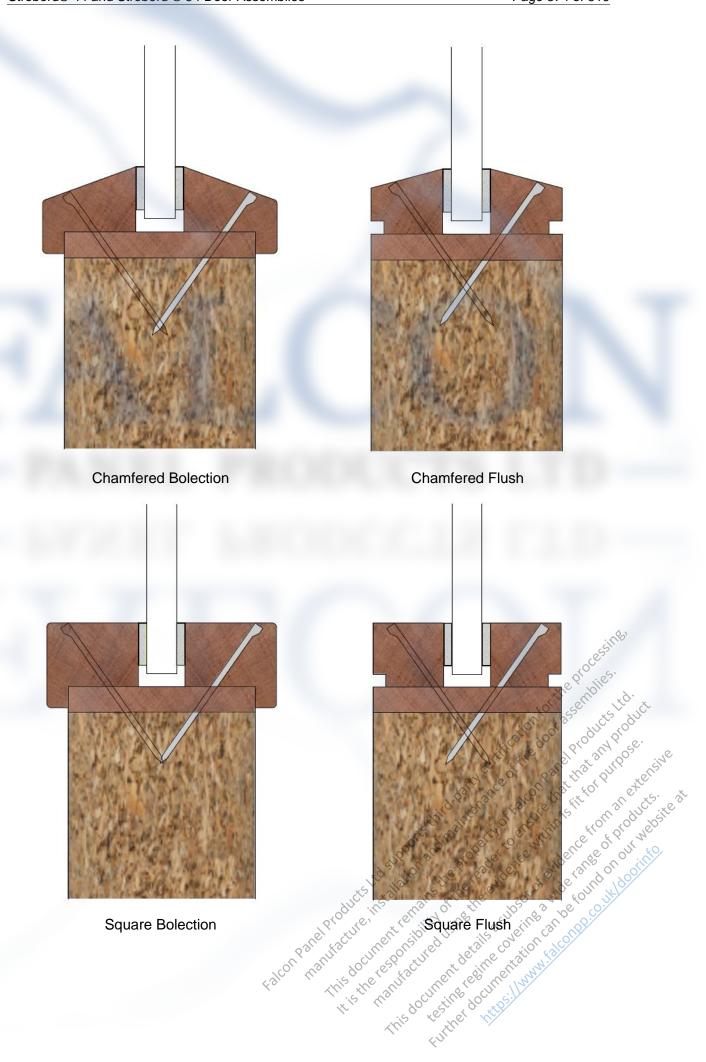
Falcon Panel Products Ltd supports third Party Earling and maintenance of fine book assemblies.

and a state to short the property of the reader to ensure that that any product the property of the reader to ensure that that any product the property of the reader to ensure that that any product the property of the reader to ensure that that any product the property of the reader to ensure that that any product the product that the product the product the product that the product the product that the product the prod This document tenants the property of talcon Panel Products the product of the evidence within is fit for our pose.

This document tenants third using the evidence within is fit for our pose.

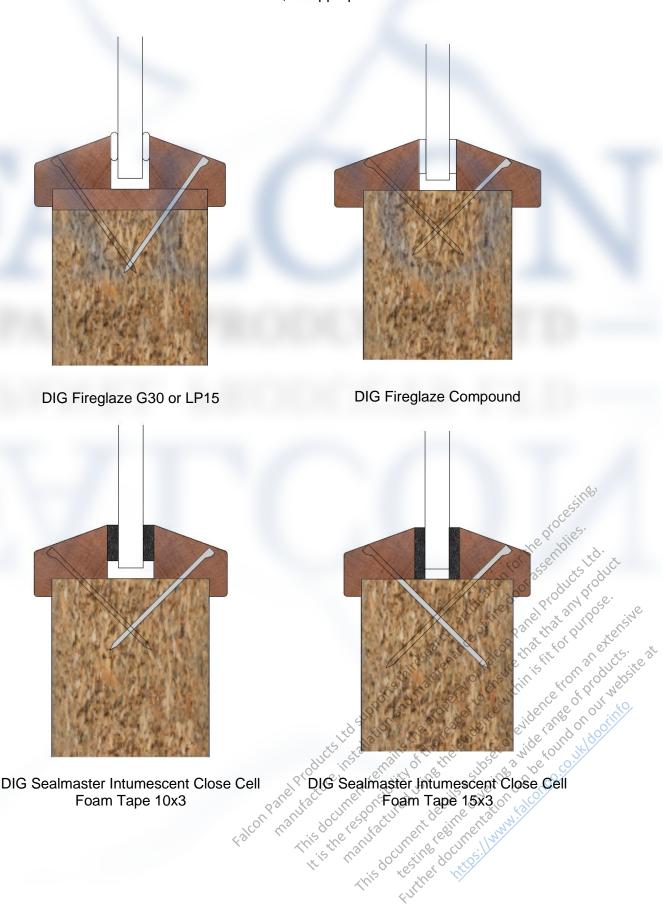
This document details a subset of evide range of products.

*Esting tegine covering a mide range of products. The at the restriction of the contraction of the contracti



6.2.3.2 Bead, Liner screw arrangements

The following drawings show the arrangement of each glazing system around the glass and between the beads. The drawings are illustrative and the systems can be used with or without hardwood aperture liners (see section 6.2.6) and the beads can be fixed in position using pin fixings or screws (see section 6.2.5). Each system must be used with the glass types as assessed and listed in sections 6.2.1 and 6.2.2, as appropriate.

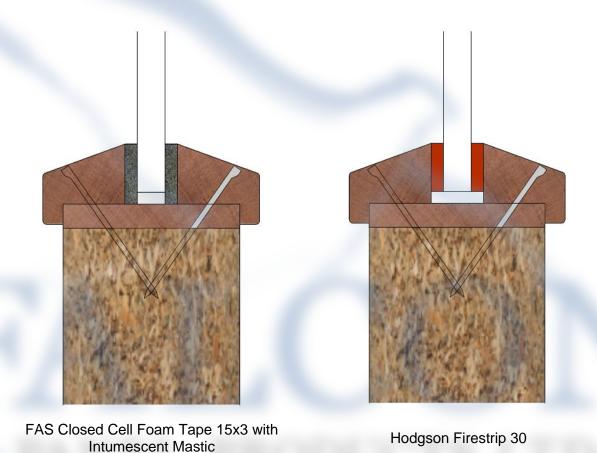




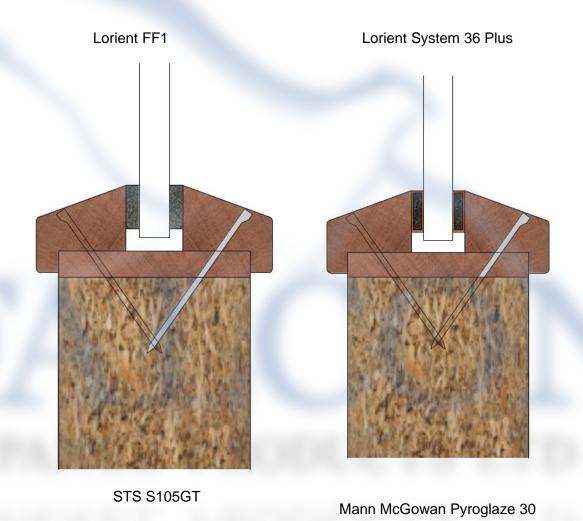
Eaton Page Products for the Earliest of the Page Front of the Products for the Earliest of the Page Products for the Page Produc











Tacon Panel Products Lide Line the profession and the profession and products the products the products the profession and pro





*Esting regime covering a wide range of products ite?

6.2.4 **False Beads**

False timber beads are designed to fall off from the glass when heated, in order to limit any potential influence of the false bead on the performance of the glass from the fire side. The false beads are used in conjunction with partially and fully insulating glasses in order to prevent the timber from getting hot enough to ignite from pilot ignition on the non-fire side.

False timber beads of similar density and species as the glazing beads may be bonded to the glass face with an intumescent mastic/silicon, or a 0.5 – 2mm thick self-adhesive intumescent tape/strip of the types shown below. Mechanical fixing of the false beads to the leaf framing is not permitted. Suitable glass for this application is restricted to glass types 5 to 15 in sections 6.2.1 and 6.2.2.

Su	Suitable Self-Adhesive Intumescent Tape							
Glazing System		Manufacturer	Minimum Size (mm)					
1.	Therm-A-Strip 30	Intumescent Seals Ltd.	10 wide x 0.5 – 3 thick.					
2.	Fireglaze 30	Sealmaster Ltd.						
3.	Firestrip 30	Hodgsons Sealants Ltd.						

Note:

Preformed strip systems 1 – 3 may be self-adhesive and grooved into the rear of the glazing bars.

6.2.5 Bead Fixings

Glazing beads must be retained in position with 40mm long steel pins meeting the specification in section 6.2.5.1 or 40mm long No. 6 - 8 screws, inserted at 35° +/- 5° to the vertical at no more than 50mm from each corner and at 150mm maximum centres.

Pneumatically fired pins are acceptable providing the pins meet the specification given below.

6.2.5.1 Gun (Pneumatically) Fired Pins

The following pin specification is permitted and has been considered suitable for gun (pneumatically) fired applications:

This document remains the property of the evidence within is fit for purpose. The following dimension of pin has been approved for round, oval and rectangular shaped pins: Panel Products Ltd supports third party certified of fire of manufacture, installation and maintenance of fire antiacture installationality of the property of Falcon Panel that the Later Panel Products tid supports third paintenance c This document details a subset of a wide range of products.

Minimum Standard Wire Gauge (SWG) 16.

Minimum cross section area of 2.03mm².

Minimum linear dimension of 1.6mm in any direction.

Figure 6.1 - Round, Oval & Rectangular pin detail - minimum dimension 1.6mm



Option 2: Rectangular Pins

The following dimension of rectangular pin has been deemed suitable for gun (pneumatically) fired applications, providing the 1.6mm dimension is predominately oriented perpendicular to the glass, where possible:

Minimum Standard Wire Gauge (SWG) 16.

Minimum cross section area of 2.24mm².

Minimum linear dimension of 1.4mm.

Figure 6.2 - Rectangular pin detail - minimum dimension 1.4mm



Note:

Pins with dimensions less than those stated above are not covered by this Field of Application.

6.2.6 **Glazing Liner**

Glazing liners are optional for the glass types listed in sections 6.2.1 and 6.2.2 and when used with the glazing systems depicted in 6.2.3. This document detains a subset of a wide range of products.

and with and with the property of Falcountering the endergo of the continue of the endergo of th *Esting regime documentation can be found on our who is the at the regime of products and a found on our who is the at the regime of products and a found on our who is the at the regime of products and a few our who is the at the regime of products and a few our who is the at the regime of the r ne responsibility of the reader to ensure thin is little and the evidence within is little and using the evidence within is little and any and a superior of the reader to ensure the evidence within is little and the evidence within its linduction within its little and the evidence within its little and This document, remains the property of Falcing Translature, installation and maintena Falcon Panel Products Ltd Supports the

6.2.7 **Alternative Glass Types**

The following sections detail alternative glass types to those given above, which include modified toughened glass types and therefore require specific glazing details in terms of edge cover and glazing system based direrctly on the test evidence.

Pyroswiss 7mm 6.2.7.1

This glass was successfully tested in RF02110 and the associated glazing system must be used which has been tested

Glass size – the following gives the sizes tested and smaller sizes are permitted

Glass-type¤	Pyroswiss·'Classic'· glass¤	502·wide·x·1616· high·x·6·thick¤
Sight·size¤	-¤	486·wide·x·1600·high
Overall-aperture-size	-¤	526·wide·x·1640·high
Expansion-allowance	-¤	12·on·all·edges¤

Glazing material

•			-	_
Glazing·perimeter¤	Hodgsons-sealant¤	15·x·3¤	Fitted·between·the·beads·and· glass¤	

Glazing bead and fixing

Beading¤	Sapele·-·density· 650kg/m³¤	21 wide x 25 high- including a 5 x 5 bolection return and a 25° chamfer¤	Around·the·perimeter·of·the·glass·¤
Beading·fixings¤	Steel·screws¤	50-long¤	Fitted·at·30°.·Verticals·at· 150·centres,·horizontals·at· 130·centres,·both·50·from· the·corners¤

The following details permitted variations to the above

Hardwood (minimum density 640kg/m³) glazing beads 25mm high x 21mm deep with a 25° chamfer and a 5mm x 5mm bolection return

Beads must be retained in position with 50mm long No. 6 - 8 steel screws, inserted at 45° to the vertical, at no more than 50mm from each corner and at 150mm maximum centres.

Aperture shape is not restricted, providing the glazing system and beads are compatible with

Timber for glazing beads must be hardwood, straight grained, joinery quality, free from knots, which is and check

Glazed openings must not be less than 100mm from any edge, with a minimum dimension of 80mm between apertures

The glazing aperature must be lined with 10mm hardwood minimum density 640kg/m³ Enther documentation co

6.2.7.2 ESG Pyrotech 630

This glass was successfully tested in RF08169 and the associated glazing system must be used which has been tested

Glass sizes - the following gives the sizes tested and smaller sizes are permitted

Glass·edge· protection¤	Aluminium·foil¤	12·high·on·each·face
Sight·size¤	-¤	1692·high·x·684·wide
Glass·size¤	-¤	1711·high·x·703¤
Overall-aperture-size	-¤	1734·high·x·726·wide

Glazing material

Glazing· intumescent¤	Dufaylite·Interdens¤	1-thick¤	Fitted· around· the· glazing· perimeter¤
	Kerafix ceramic tape¤	15·wide·x·3·thick¤	Fitted between the glass and bead on both faces

Glazing bead and fixings

· ·		_	
Expansion·allowanceedge·clearance· between·glass·and· frame¤	-¤	11.5· on· all· edges· with· 13mm· x· 9mm· wide· Supalux· glazing·packers¤	
Glazing·packers¤	Supalux¤	13·high·x·9·thick·¤	Fitted· at· 300mm· centres· along·bottom·edge·of·glass¤
Beading¤	Sapele¤	26-high·x·22-deep- including·a·5·x·5- bolection·return·and- a·15·0-chamfer¤	Fitted· around· the· perimeter· of·the·glass·on· both·faces· of· the·leaf¤
Beading·fixings¤	Steel·pins¤	Ø2·x·50·long·¤	Fitted 50 from the corners and at nominally 150 centres

The following details permitted variations to the above

Hardwood (minimum density 640kg/m³) glazing beads 26mm high x 22mm deep with a 15° chamfer and a 5mm x 5mm bolection return

Beads must be retained in position with 50mm long steel pins or 50mm long No. 6 - 8 steel screws, inserted at 45° to the vertical, at no more than 50mm from each corner and at 150mm maximum centres. Pneumatically fired pins are acceptable providing the pins meet the specification given in section 6.2.5 above

Aperture shape is not restricted, providing the glazing system and beads are compatible with that shape

Timber for glazing beads must be hardwood, straight grained, joinery quality, free from knots, splits and check

Glazed openings must not be less than 100mm from any edge, with a minimum dimension of 80mm between apertures

The glazing aperature must be lined with 10mm hardwood minimum density 640kg/m3

6.2.7.3 Pyrosec

This glass was successfully tested in CFR1403122 and the associated glazing system must be used which has been tested. Based on the test the following details must be followed

Aperture Size - Maximum:

1325mm(h) x 335mm(w) 870mm(h) x 631mm(w)

Glazing system

Beading: Sapele (~710kg/m³) 20mm(h) x 19.5mm(d) including 5x5mm bolection and a 15° chamfer.

Bead Fixing: Steel pins, 50mm(I), 50mm from corner then at 125mm-150mm centres.

Setting blocks: 25mm(I) x 7mm(w) x 3mm(t) Intumescent Seals Limited Therm-A-Line fitted:

Glazing material

Between glass and bead - 15x4mm Intumescent Seals Limited Therm-A-Bead monoammonium phosphate based intumescent.

Aperture Liner Intumescent Seals Limited Therm-A-Line fitted

6.2.7.4 Pilkington Pyroclear

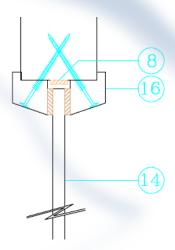
This glass was successfully test in RF11177 and the associated glazing system must be used which has been taken from the test.

Glasses sizes - the following gives the sizes tested and smaller sizes are permitted

	Overall aperture size (mm)	Glass size (mm)	Sight size (mm)
Door leaf - E	1770 high x 730 wide	1750 high x 710 wide	1730 high x 690 wide

Glazing material

			14 1 10 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Glazing intumescent	Dufaylite Interdens	10 x 2	Fitted lining the glazing aperture, glued to the frame Fitted between the glass 9 and bead on both faces	
	Fibrefrax ceramic tape	15 x 5	Fitted between the glass 9	
			and bead on both faces	
	ks/cou by	nel Products Lides	aperture, glued to the frame Fitted between the glass and bead on both faces.	



Glazing Bead

Expansion allowance - edge clearance between glazing and frame	10mm on all edges	
Glazing packers	. Supalux 6mm wide x 10mm high x 25mm long. Fitted at the bottom edge of the glass at nominally 300mm centres	15
Glazing bead – leaf and screen	Sapele (m.c. 7.4%, 640 kg/m³ nominal density)	-
Glazing bead size – leaf	25mm high x 22mm deep including a 5mm x 5mm bolection return and a 22° chamfer	16

Glazing bead fixing

Glazing bead fixing -	50mm long steel screws, fitted at nominally 50mm in from the	18
leaf and screen	corners, at 150mm (max) centres at 45° to the face of the glass	

The following details permitted variations to the above

Hardwood (minimum density 640kg/m³) glazing beads 25mm high x 22mm deep with a 22° chamfer and a 5mm x 5mm bolection return

inserted at 45° to the vertical, at no more than 50mm from each corner and at 150mm maximum centres. Pneumatically fired pins are acceptable providing the pins are acceptable providing the pins. Beads must be retained in position with 50mm long steel pins or 50mm long No. 6 - 8 steel screws, centres. Pneumatically fired pins are acceptable providing the pins meet the specification given in section 6.2.5 above

Aperture shape is not restricted, providing the glazing system and beads are compatible with that Timber for glazing beads must be hardwood, straight grained, joinery quality, free from knots, splits and check

density 640kg/m³d Glazed openings must not be less than 100mm from any edge, with a minimum dimension of 80mm between apertures

The glazing aperature must be lined with 10mm hardwood minimum density 640kg/m3

This document responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the responsib This document remains the property of Facon Panel Products that any problem to ensure that the purpose.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

This document detains a subset of anide range of products.

*esting resine covering and example of products the at further documentation and example found on the remains the covering and example found on the remains the covering and example found on the residence of the covering and example for the covering and example of products.

6.2.8 **Improved Security Bead**

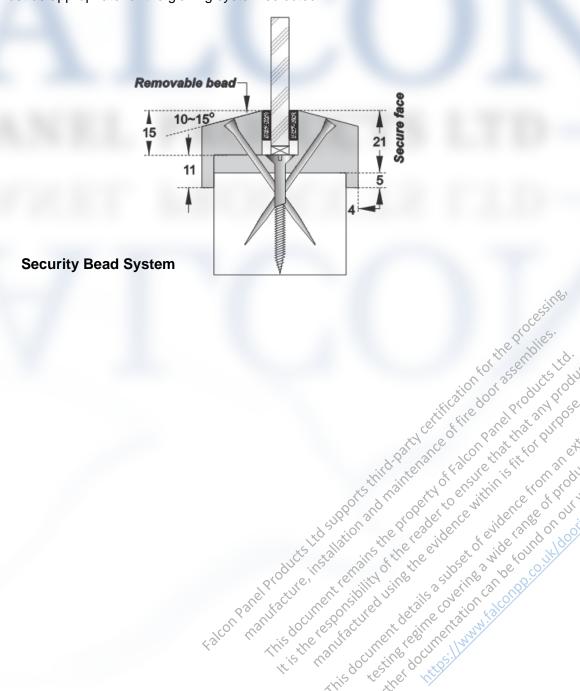
A combined bead and aperture lining can be used to deny access to fixings from one side of the door leaf to improve security.

All glazing details are to meet the specification given in sections 6.2.1, 6.2.2 and 6.2.3 unless otherwise stated below.

The aperture in the door must be lined using minimum 26mm thickness combined bead and lining in hardwood of minimum 640kg/m³ density.

The combined bead and lining is bonded to the aperture in the door using the adhesive types approved for lippings (see section 10) and reinforced using No. 6 - 8 50mm long screw fixings located centre thickness of the door at 200mm centres.

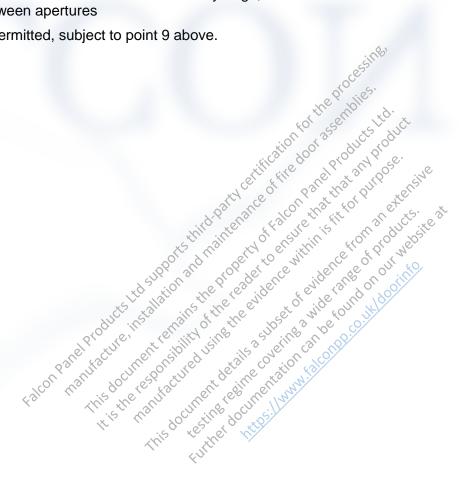
The beads must be retained in position with 50mm long steel pins or 50mm long No. 6 - 8 screws, inserted at 35 - 40° to the vertical. Fixings must be at 150mm maximum centres and no more than 50mm from each corner. Pneumatically fired pins are acceptable providing the pins meet the specification given in section 6.2.5 above. The bead profile must be appropriate for the glazing system selected.



6.2.9 **Streframe Glazing Beads System**

The Falcon Panel Products Ltd. Streframe glazing beads have the following scope of application based on the testing conducted in PF14029. The tested aperture size was 756mm high by 164mm wide in a leaf 2 doorset design.

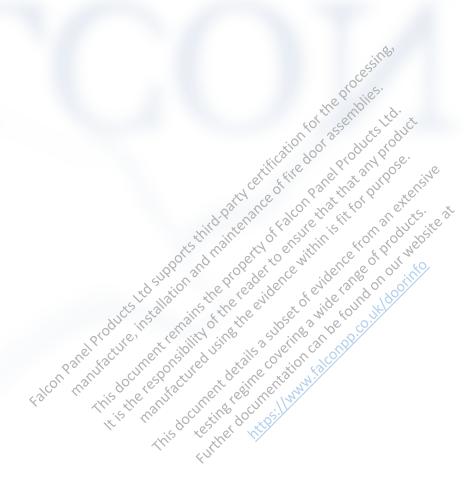
- Only permitted when installed in leaf 2.
- Streframe glazing beads must be a minimum of 37mm high by a depth to suit the glass thickness, including a 7mm x 13mm bolection return and a 25° chamfer
- Streframe glazing beads must be retained in position with 60mm long steel pins, inserted at 45° to the vertical, at no more than 50mm from each corner and at 120mm maximum centres. Pneumatically fired pins are acceptable providing the pins meet the specification given in section 6.2.5 above
- 25mm x 4mm Intumescent Seals Ltd. Therm-A-Bead is to be fitted between the bead and the glass on both faces
- 44mm x 2mm Intumescent Seals Ltd. Therm-A-Line must be fitted lining the glazing aperture
- 6. Permitted glass types for use with the Streframe glazing beads are restricted to glass types 5 - 15 given in the table in sections 6.2.1 and 6.2.2 above
- The maximum glazed aperture area when using Streframe glazing beads will be dictated by the maximum area permitted for the glass type in use and the size of bead tested.
- 8. All glass types must be fitted fully in accordance with the manufacturers' tested details/installation requirements, particularly with respect to edge cover and expansion clearance
- 9. Aperture shape is not restricted, providing the glazing system and beads are compatible with that shape
- 10. Glazed openings must not be less than 100mm from any edge, with a minimum dimension of 80mm between apertures
- 11. Multiple apertures are permitted, subject to point 9 above.



6.2.10 Morland Quickfix Glazing Beads

The Morland Quickfix MDF glazing beads have the following scope of application based on the testing conducted in WF341550 and WF342584.

- 1. The maximum glazed aperture area permitted when using the Morland Quickfix glazing beads is 0.48m² with a maximum linear dimension of bead of 1150mm high
- 2. Permitted glass types for use with the Morland Quickfix MDF glazing beads are glass types 1 15 given in the table in section 6.2.1 and 6.2.2 above
- 3. Morland Quickfix glazing bead are supplied direct from Morland. Details of the bead are held in confidence on file by Warringtonfire
- 4. Morland Quickfix MDF glazing beads must be retained in position with 50mm long steel pins, inserted at 30° to the vertical, at maximum 150mm centres on the vertical beads and maximum 230mm centres on the horizontal beads. Pneumatically fired pins are acceptable providing the pins meet the specification given in section 6.2.5.1 above
- 5. When using glass type 4 from the table in section 6.2.1 above, a 6mm deep bead of Lorient Polyproducts Ltd. 4 hour fire-rated intumescent mastic must be applied around the perimeter of the glass
- 6. All glass types must be fitted fully in accordance with the manufacturers' tested details/installation requirements, particularly with respect to edge cover and expansion clearance
- 7. Aperture shape is not restricted, providing the glazing system and beads are compatible with that shape
- 8. Glazed openings must not be less than 100mm from any edge, with a minimum dimension of 80mm between apertures.
- 9. Multiple apertures are permitted, subject to point 8 above.



Report No:

*Esting regime documentation can be found on who with a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products it at a few that the regime of products in the regime of products in the regime of products in the regime of the regim

Chilt/A02066 Rev O Strebord® 44 and Strebord ® 54 Door Assemblies Page 391 of 519

6.2.11 Vistamatic VS2 Secure Vision Panel

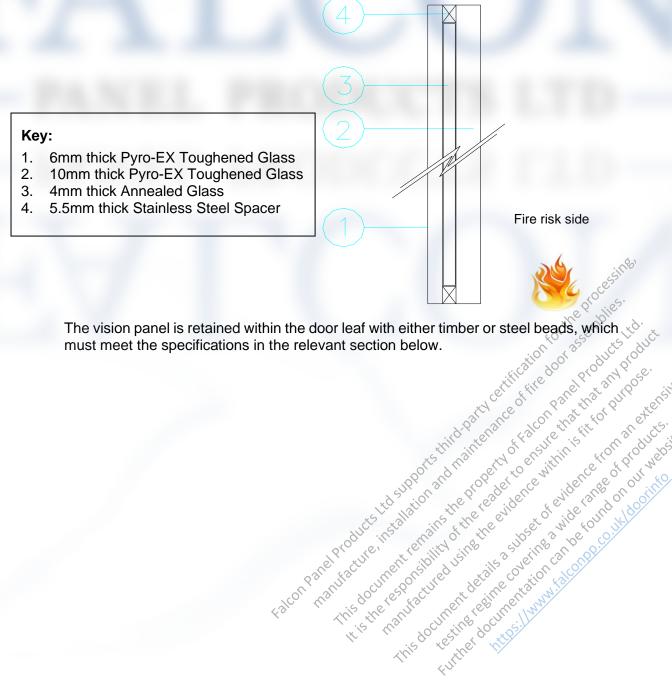
The following specification must be followed when using the Vistamatic VS2 secure vision panel tested in Chilt/RF12065 Revision B.

The Vistamatic VS2 vision panel comprises a double glazed unit with an additional, movable centre layer of obscure glass. The 10mm thick toughened glass must be oriented to the fire risk side of the doorset. The unit can only be considered fire resisting from one direction in terms of exposure to fire test conditions (i.e. when the toughened glass is oriented on the face exposed to fire test conditions)

The unit must be fitted in accordance with Vistamatics tested details/installation requirements, particularly with respect to edge cover and expansion allowance.

Aperture shape must be rectilinear. Glazed openings must not be less than 100mm from any edge, with a minimum of 80mm between apertures. Multiple apertures are permitted subject to the spacing requirements listed above, with individual panes not exceeding 0.6m² and total glazed area within a leaf not exceeding 1.9m².

The drawing below shows the essential elements of the double glazed unit.



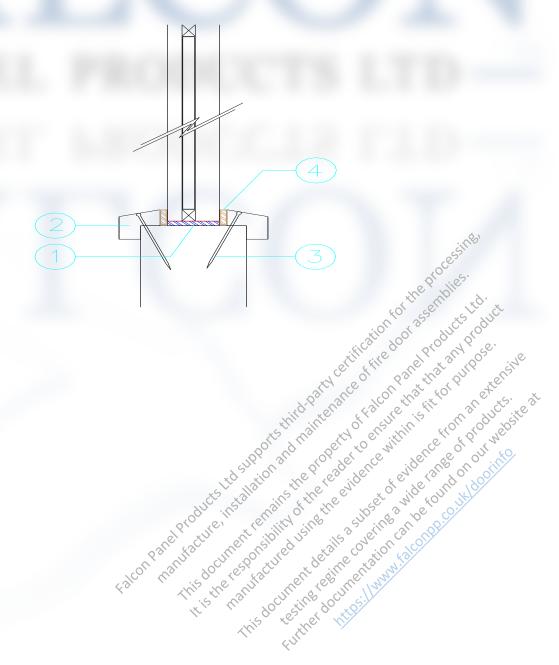
The vision panel is retained within the door leaf with either timber or steel beads, which must meet the specifications in the relevant section below.

The vision panel is retained within the door leaf with either timber or steel beads, which must meet the specifications in the relevant section below.

The vision panel is retained within the door leaf with either timber or steel beads, which with the part of th el be, el be, el products l'assallation and maintenance of fire do m This document detains a subset of a mide range of products.

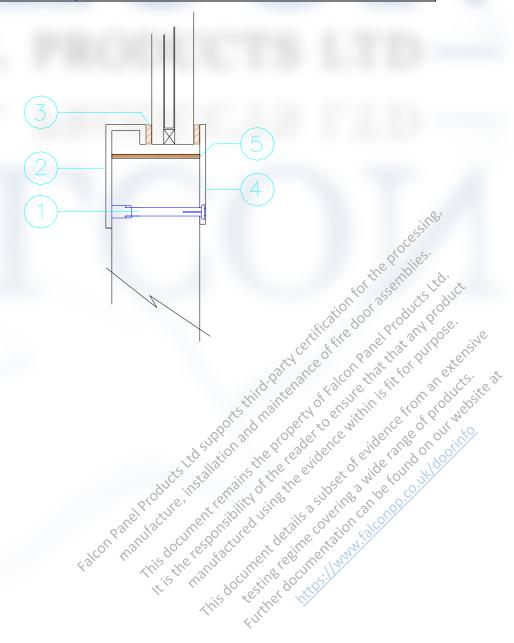
Timber Beads

Element	Specification	
2 - Timber bead material	Hardwood of minimum density 640kg/m ³	
4 - Glazing system	10mm high x 3mm thick Pyroglaze 30 – Mann McGowan Ltd.	
1 - Aperture liner	3mm thick Firewizard acrylic intumescent mastic – Norsound Ltd.	
Around centre glass actuator spindle	5mm thick graphite sheet; Ref: 2.5-390 x 10/SA – Norsound Ltd.	
3 - Bead fixings	40mm long No. 6 - 8 steel screws or 40mm long steel pins located at minimum 150mm centres and 50mm from each corner. Fixings must be inserted at 35 - 40° to the vertical and located to 'cradle' the vision panel.	
Minimum required bead size	20mm (h) x 17mm (w) including a 9mm x 9mm bolection return and a 15° chamfer.	
Maximum glazed area (m²)	0.6	



Steel Beads

Element Bead material 3 - Glazing system 5 - Aperture liner Around centre glass actuator spindle		Specification	
		2mm thick stainless steel	
		10mm high x 2.5mm thick Raw Graphite; Ref: 2.5-390 x 10/SA – Norsound Ltd.	
		Intumescent Liner; Ref: 1.8-408 x 53/SA – Norsound Ltd.	
		2No. 5mm thick (overall) graphite sheet; Ref: 2.5-390 x 10/SA – Norsound Ltd.	
1 - Bead fixings		40mm long M5 machine steel screws fixed from the exposed face to threaded studs welded to the unexposed face. Beads located at minimum 170mm centres and 20mm from each corner.	
Dood	4 - Exposed face	50mm high x 2mm thick	
Bead profile	2 - Unexposed face	50mm high x 20 mm deep x 2mm thick	
Maximum glazed area (m²)		0.6	



7 Door Frame Construction

7.1 Frame Specification

The frame specifications are given in Section 4.4

7.2 Frame Thresholds

The following timber threshold has been tested with the Strebord 44 doorset design covered by this field of application and are therefore acceptable with Leaf 1, 2 and 3.

The threshold must be fitted on to a non-combustible flooring with a minimum Reaction to Fire class A2,fl,s1 as tested.

The threshold can be rebated to overlap the door leaf by at least 9mm (additional to the minimum dimensions stated below). The bottom of the leaf must remain unrebated.

The gap between the bottom of the door and the threshold cannot exceed 4mm.

Element	Туре	Dimensions (mm)	Location
Threshold	Hardwood, minimum density 600kg/m ³	19 high x 78 deep (overall)	The threshold is to be screwed to the jambs using 2No. 4mmØ x 50mm long woodscrews

Facor Paral Products the data the product the product

7.3 Frame Joints

Frame joints may be mortice and tenoned, mitred, half lapped or butted and with no gaps (see diagram below).

All jointing methods require mechanical fixing with the appropriate size ring shank nails or screws.

Figure 6.3 – Frame jointing detail



8 Overpanels, Fanlights and Sidelights

8.1 General

Overpanels, fanlights and sidelights can be used in conjunction with the Strebord® doorset design. Overpanels are fitted with sections of door core and can either be flush with the leaf heads or separated by a transom. Fanlights and sidelights can either be fitted in combination frames with the doorset or can be installed as a modular system and both can be used to create a doorset within a glazed screen.

The following sections give the required construction details for the overpanels, fanlights and sidelights.

8.2 Overpanels

8.2.1 General

There are 2 types of overpanels.

- Transomed overpanels, where the overpanel is separated from the head of the door leaves with a horiztonal transom. It is possible to permit transomed overpanel by way of assessment as the overpanel is constructed from a section of the tested door leaf design and is fixed in position on all sides using mechanical fixings and the tested intumescent specification that is used at the perimeter of the door leaves is also included on all four edges of the overpanel. The overpanel section is therefore stable, has been proven as being able to maintain integrity and also includes the same sealing detail as that tested and proven for the swinging door leaves.
- Flush overpanels, where the overpanel is flush with the head of the door leaves i.e.no
 transom present. The head detail between a flush overpanel and the head of the
 doorset has to be tested, due to the potential movement between the base of the
 overpanel and the tops of the door leaves in fire test conditions

Table below specifies the maximum assessed solid overpanel dimensions.

Maximum Overpanel Dimension			
Configuration	Maximum Overpanel Height	Width	
	(mm)	(mm)	
Single Leaf doorsets	2000	Overall door width	
Double Leaf doorsets	1500	Overall door width	

Strebord44 has been tested with a 500mm high and 1800mm wide flush overpanel in RF00136, which provides confidence that the overpanel sizes permitted above will be acceptable. This is because as the overpanel gets higher the influence the increased height has on the bottom edge is minimal as the overpanel is spanning across the doorset. Additionally, the overpanel is fixed at the jambs and across the head using fixings at specified centres which will stabilise the overpanel as the height increases.

8.2.2 **Transom overpanels**

The overpanel is to be constructed to the same specification as the door leaf.

Transom overpanels can be supplied for:

- Leaf 1 and 2 and 3
- Frame 1.1, 1.3, 2.1 and 2.3 and 3.1, 3.2 and 3.3

The door frame and transom must meet all aspects of the door frame construction and specification given in this assessment for the materials listed above but with minimum dimensions no less than 70mm wide x 32mm thick (excluding stops) and with a minimum density of 510kg/m³.

Transom joints must utilise one of the following methods: mortice and tenon joints or butt joints (see section 7.5). Either method requires joints to be tight, with no gaps, and require mechanical fixing with the appropriate size ring shank nails or screws. Butt joints must be additionally bonded with urea formaldehyde.

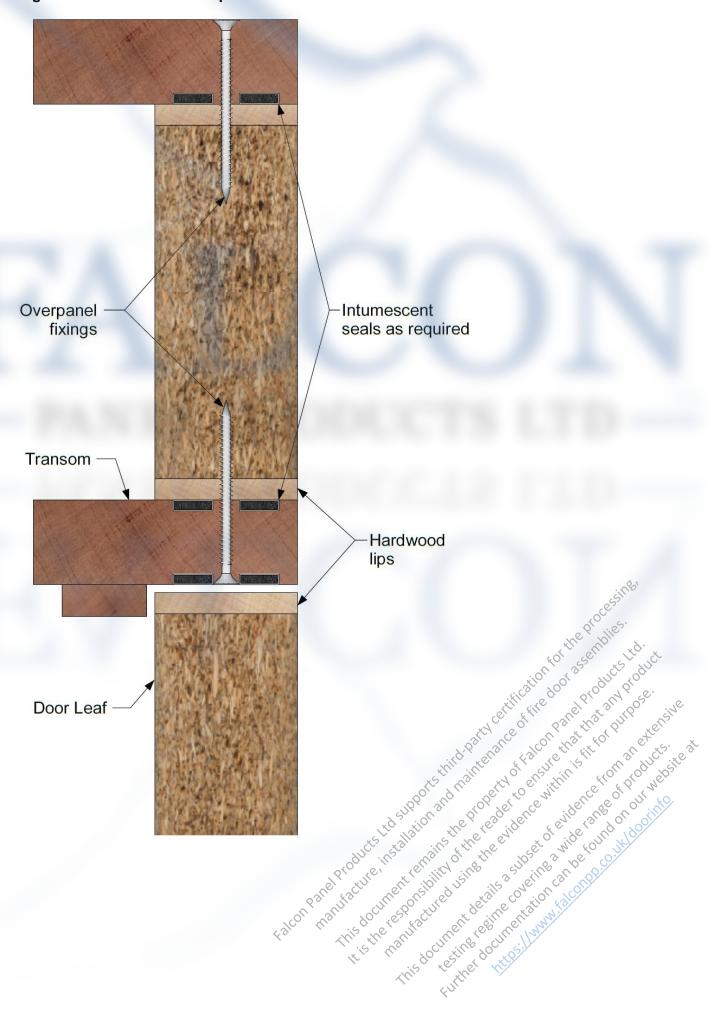
Overpanels must be fixed to the frame by using the following method:

Screwing through the rear of the frame with steel screws passing at least 30mm into the centre line of the overpanel. Fixings must be no more than 100mm from each corner and a maximum of 250mm centres in between

Overpanels of the same construction as the door leaves may be used, only when separated by a transom, and must comply with the following:

- Overpanels must be fully contained within the door frame (see diagram below).
- The gap between the edges of overpanel and frame reveal should be a tight fit.
- The intumescent specified for the jambs as given in the relevant envelopes and tables in section 4, must be fitted to all edges of the overpanel (either in the frame reveal or edge of the overpanel). The frame to overpanel junction is permitted to have a maximum 0.5mm gap tolerance
- The transom must be one of the frame types listed above but with minimum dimensions no less than 70mm wide x 32mm thick (excluding stops) and with a minimum density of 510kg/m³

Figure 8.1 – Transomed overpanel detail – cross section





8.2.3 Flush Overpanels

The flush overpanel is to be constructed to the same specification as the door leaf.

Flush overpanels can be supplied for:

- Leaf 1 and 2
- Frame (head and jambs) 1.1, 1.3, 2.1 and 2.3

The door frame and transom must meet all aspects of the door frame construction and specification given in this assessment for the materials listed above but with minimum dimensions no less than 70mm wide x 32mm thick (excluding stops) and with a minimum density of 510kg/m³.

Frame joints for the head of the frame and jambs must be as specified in section 7.

Overpanels must be fixed to the frame by using the following method:

Screwing through the rear of the frame with steel screws passing at least 30mm into the centre line of the overpanel. Fixings must be no more than 100mm from each corner and a maximum of 250mm centres in between

Overpanels of the same construction as the door leaves may be used, when fitted without a transom i.e. flush with the leaf heads, and must meet the following requirements:

- The over panel must be fully contained within the door frame (head and jambs)
- The gap between the edges of overpanel and frame reveal should be a tight fit.
- The bottom edge of the overpanel and the head of the leave(s) for single and double leaf doorsets may be fitted with an equally rebated lipping meeting the specification given in section 5.5
- It is permitted to use a square junction between the leaf heads and overpanel for single and double leaf doorsets providing the meeting edges of a double leaf doorset are not rebated. For double leaf doorsets with a square junction at the overpanel, an astragal is required to cover the junction between the overpanel and the leaf heads.
- It is not permitted to fit any hardware in the bottom edge of the overpanel or top edge of the leaves when using a rebated junction. It is only permitted to fit a flush bolt when using a square meeting edge and square junction between leaf heads and overpanel (in conjunction with an astragal)
- The intumescent specified for the jambs, as given in the relevant envelopes and tables for flush overpanelas in section 4, must be fitted to the jambs and head of the overpanel (either in the frame reveal or edge of the overpanel). The frame to overpanel
- The intumescent specification required in the rebated junction between the bottom of the overpanel and top fo the leaves is given in the relevant envelopes and tables in section 4 for doorsets with flush overpanels Manufactured using regime covering a wide range of products. testing tegine covering a mide range of products like of the continue of the c

8.3 **Fanlights & Sidelights**

8.3.1 **General**

Fanlights and sidelights can be used in conjunction with the following door leaf and door frame types:

- Leaf 1 and 2
- Frame 1.1, 1.3, 2.1 and 2.3

NOTE: Frames for fanlights and sidelights cannot be constructed using MDF or Woodex

There are 2 systems which could be used to create a fanlight or sidelight using 2 different construction methods.

Combination Frames:

This is where a single framing element has been used which separates 2 panes of glass or the glass and doorleaf. This type of construction has been tested as detailed in a number of test reports (see section 3.4 for further details) and developed by others which have tested doors and screens using this construction method. See section 8.3 for details and limitations associated with this design.

Jointed Door Frames & Fanlights/Sidelights:

This is where the door leaf has its own door frame and each pane of glass is surrounded by a frame, to create separate glazed modules. The individual modules are then fixed together to create a door and screen (described as a modular type system). The doorset has to comply with the requirements of this assessment and the individual framed glass panes and timber framing are based on test WF411193. See Section 8.3 for details and limitations.

8.3.2 **Combination Frames**

8.3.2.1 General

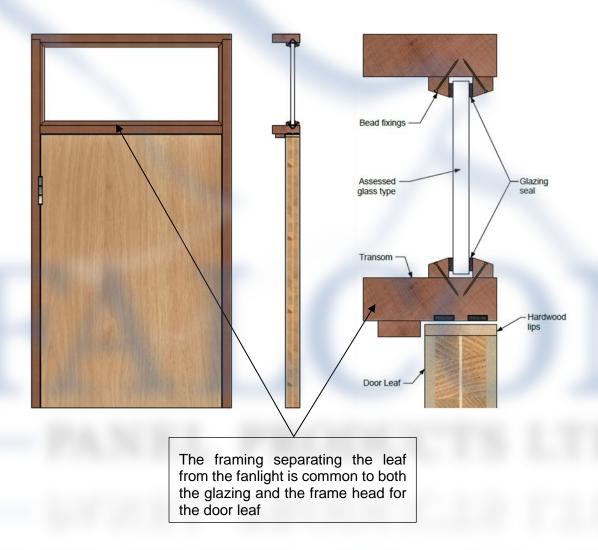
When constructing a doorset assembly using combination frames the following limitations apply:

- Frame sections, glass type and dimensions, beads and glazing seals must be as described in the following sections, as appropriate for the glass type listed
- The centreline of the glass must be aligned with the centreline of the timber frame.
- The maximum width and height of the overall assembly is 2950mm x 2950mm.
- The assembly may only contain either 1no single leaf doorset or 1no double leaf doorset.
- The common hanging jamb/screen mullion must run continuously for the full height of the door and fanlight.
- The sidelights and or fanlights can be glazed or consist of solid panels constructed and fitted as detailed for transomed overpanels.

een and een an This document details a subset of a wide range of products. ght free sport of the property of talente within is fit for the evidence within it is the evidence within it for the evidence within it is the evide ne responsibility of the tree endence within is fit for put in the tree endence within is fit for put in the tree endence within is fit for put in the tree endence within is fit for put in the tree endence within is fit for put in the tree endence within is fit for put in the tree endence within is fit for put in the tree endence within is fit for put in the tree endence within it is fit for put in the tree end endence within it is fit for put in the tree end endence within it is fit for put in the tree end endence within it is fit for put in the tree end endence within it is fit for put in the tree This method combines the door frame members with the side screen and fanlight frame members as illustrated in the example below: Janutacture installation airs the property of Falcon Ry Luther documentation and confine to the fitting members as illustrated in the example below:

This document details a subset of evidence trange of products.

*Esting regimentation can be round on our website at Further documentation can be round on our website at Further documentation can be recorded as the found of the contraction of the c



ngs for the products the supportes third party certification and mainternance of fine door as semblies. The following sections give the required specification for fanlights and sidelights when using the combination frame system. Each section gives information on:

- Timber framing requirements
- Permitted glass types
- Maximum panel size in either portrait or landscape orientation
- This document, repaints the property of the reader to ensure that that any product the reader to ensure that the property of the reader to ensure that that any product this the reader to ensure that that any product the reader to ensure that that the reader to ensure that the reader to ensure the responsibility of the reader to ensure th This document remains the property of Falcon Panel Products that any problem.

 This document remains the property of the evidence within is fit for purpose. Glazing details including: Glazing material, Bead type and size, Fixings

8.3.2.2 Fireswiss, Pyrostop 30-10, Pyrobel 16

Transom/mullion details:

The timber framing must be hardwood with a minimum density of 640kg/m³, and a minimum section of 80mm x 44mm.

Glazing details:

- System Thermaglaze 45
- Beading 25mm high and 30mm wide with 16 deg chamfer (minimum density 640kg/m³) fixed with 50mm screws at 150 centres and 50mm from corner inserted at 30° to the plane of the glass.

Maximum single pane dimensions:

Screen Element	Height (mm)	Width (mm)
Fanlight	866	1872
Side screen	2006	996

Pyroguard EW30 (7mm thick) - Pyroguard UK Ltd

Transom/mullion details:

Minimum 75mm deep x 40mm thick softwood or hardwood (minimum density 510kg/m³). This timber section can be used for both door jambs and transoms above doors included within screens and for the perimeter framing of the screen and the transoms and mullions separating individual panes of glass within the fanlights and side screens.

Glazing details:

- 15mm high x 32mm deep hardwood beads (minimum density 640kg/m³). The bead shape may be square or incorporate a 10 - 15° chamfer
- 50mm long size 6 8 steel wood screws at maximum of 70mm from corners and 200mm centres inserted at 30° to the plane of the glass
- 10mm x 2mm Interdens located between the glass and the beads
- 5mm high x 7mm wide x 40mm long hardwood or non-combustible setting blocks with 5mm expansion allowance to all edges.

Maximum single pane dimensions:

Screen Ele	ment	Height (mm)	Width (mm) 2000 Reality of 2000	
Fanlight	From:	1074	E808 of the Asilian State Ticky	
	To:	808	1116 1 2600 (10 10 10 11 1 1 1 1 1 1 1 1 1 1 1 1	
Side scre	en	2500	otes I hall 1000 of hithin cetto do neo	
The pane dimensions given above represent the maximum permitted width against maximum permitted height. Panes with smaller dimensions are acceptable Transoms supporting single panes above 900mm wide must be centrally supported by at least one vertical multipper.				

- Transoms supporting single panes above 900mm wide must be centrally supported by at least one vertical mullion.

Pyroguard EW30 MAXI (11mm thick) – Pyroguard UK Ltd. 8.3.2.4

Transom/mullion details:

Minimum 75mm deep x 40mm thick hardwood (minimum density 640kg/m³). This timber section can be used for both door jambs and transoms above doors included within screens and for the perimeter framing of the screen and the transoms and mullions separating individual panes of glass within the fanlights and side screens.

Glazing details:

- 20mm high x 30mm deep hardwood beads (minimum density 640kg/m³). The bead shape may be square or incorporate a 10 - 15° chamfer
- 50mm long size 6 8 steel wood screws at maximum of 70mm from corners and 200mm centres inserted at 30° to the plane of the glass
- 10mm x 2mm Interdens located between the glass and the beads
- 5mm high x 11mm wide x 40mm long hardwood or non-combustible setting blocks with 5mm expansion allowance to all edges.

Maximum single pane dimensions:

Screen Ele	ment	Height (mm)	Width (mm)
Fanlight	From:	967	2525
	То:	808	3000
Side scre	en	2700	1500

The pane dimensions given above represent the maximum width against maximum height. Panes with smaller dimensions are acceptable.

8.3.2.5 Pyroguard El30 (15mm thick) – Pyroguard UK Ltd.

Transom/mullion details:

Minimum 80mm deep x 40mm thick hardwood (minimum density 640kg/m³). This timber section can be used for both door jambs and transoms above doors included within screens and for the perimeter framing of the screen and the transoms and mullions separating individual panes of glass within the fanlights and side screens.

Glazing details:

- 20mm high x 23mm deep hardwood beads (minimum density 640kg/m³). The bead shape may be square or incorporate a 10 - 15° chamfer;
- 50mm long size 6 8 steel wood screws at maximum of 70mm from corners and 200mm centres inserted at 30° to the plane of the glass;
- 7mm x 2mm Egopren glazing tape located between the glass and the beads;
- 3mm high x 15mm wide x 80mm long hardwood or non-combustible setting blocks with 5mm expansion allowance to all edges

Maximum single pane dimensions:

Screen Eler	ment	Height (mm)	Width (mm)
Fanlight	t	350	10 10 10 10 10 28 20 10 10 10 10 10 10 10 10 10 10 10 10 10
Side screen	From:	2520 goding	115t email of the 225 10 feb 2 10 feb 200
	To:	1141 pare 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Well using of the state of the
		tylou kylu go	ne respiration of the resting regime of the restinguistic of the resting regime of the restinguistic of the restin

- The pane dimensions given above represent the maximum width against maximum height. Panes with smaller dimensions are acceptable;
- Transoms supporting single panes above 1100mm wide must be centrally supported by at least one vertical mullion.

8.3.2.6 Pyranova (15mm thick) - Schott Ltd.

Transom/mullion details:

- Minimum 68mm deep x 80mm thick softwood or hardwood (minimum density 400kg/m³). This section must be used for door jambs and transom above head of door leaves:
- Minimum 68mm deep x 40mm thick softwood or hardwood (minimum density 400kg/m³) can be used for the perimeter framing of the screen and the transoms and mullions separating individual panes of glass within the fanlights and side screens.

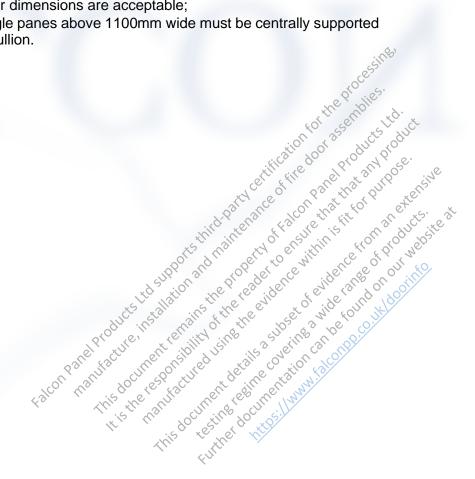
Glazing details:

- 20mm high x 23.5mm deep hardwood beads (minimum density 640kg/m³). The bead shape may be square or incorporate a 10 - 15° chamfer
- 40mm long size 6 8 steel wood screws at maximum of 70mm from corners and 200mm centres inserted at 30° to the plane of the glass
- 8mm x 3mm closed cell foam glazing tape located between the glass and the beads
- 3mm high x 15mm wide x 80mm long hardwood or non-combustible setting blocks.

Maximum single pane dimensions:

Screen Element	Height (mm)	Width (mm)
Fanlight	425	2280
Side screen	2264	350

- The pane dimensions given above represent the maximum width against maximum height. Panes with smaller dimensions are acceptable;
- Transoms supporting single panes above 1100mm wide must be centrally supported by at least one vertical mullion.



8.3.2.7 Pyroshield 2 (6mm thick) – Pilkington Ltd.

Transom/mullion details:

Minimum 80mm deep x 44mm thick softwood or hardwood (minimum density 510kg/m³). This timber section can be used for both door jambs and transoms above doors included within screens and for the perimeter framing of the screen and the transoms and mullions separating individual panes of glass within the fanlights and side screens.

Glazing details:

- 15mm high x 20mm deep hardwood beads (minimum density 640kg/m³) with an 18°
- 40mm long size 6 8 steel wood screws at maximum of 50mm from corners and 150mm centres inserted at 45° to the glass
- 10mm x 2mm Interdens located between the glass and the beads
- 3mm high x 6mm wide x 40mm long hardwood or non-combustible setting blocks fitted at 300mm centres along bottom edge of glass with 3mm expansion allowance to all edges.

Maximum single pane dimensions:

Screen Element	Height (mm)	Width (mm)
Fanlight	810	1830
Side screen	2040	485

The pane dimensions given above represent the maximum permitted width against maximum permitted height. Panes with smaller dimensions are acceptable.

8.3.2.8 Pyrodur 30-104 (7mm thick) – Pilkington Ltd.

Transom/mullion details:

Minimum 80mm deep x 44mm thick hardwood (minimum density 640kg/m³). This timber section can be used for both door jambs and transoms above doors included within screens and for the perimeter framing of the screen and the transoms and mullions separating individual panes of glass within the fanlights and side screens.

Glazing details:

- 20mm high x 20mm deep hardwood beads (minimum density 640kg/m³) with a 15° chamfer:
- 40mm long size 6 8 steel wood screws at maximum of 50mm from corners and 150mm centres inserted at 30° to the glass;
- 20mm x 2mm Interdens located between the glass and the beads;
 3mm high x 6mm wide x 40mm long bordwood and the beads; fitted at 300mm centres along bottom edge of glass with 3mm expansion allowance to all edges.

Maximum single pane dimensions:

Screen Element	Height (mm)	to litigate winds with the last to the las
Fanlight	810 ₃₀ div ²	1670 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Side screen	2057 and kath	Tert sign dust 956 dein cat of the

Falcon Ranus docures of Little feeting resident of the Residen

 The pane dimensions given above represent the maximum permitted width against maximum permitted height. Panes with smaller dimensions are acceptable.

8.3.2.9 Pyrodur 60-10 (10mm thick) – Pilkington Ltd.

Transom/mullion details:

Minimum 80mm deep x 44mm thick hardwood (minimum density 640kg/m³). This
timber section can be used for both door jambs and transoms above doors included
within screens and for the perimeter framing of the screen and the transoms and
mullions separating individual panes of glass within the fanlights and side screens.

Glazing details:

- 20mm high x 20mm deep hardwood beads (minimum density 640kg/m³) with a 15° chamfer
- 40mm long size 6 8 steel wood screws at maximum of 50mm from corners and 150mm centres inserted at 30° to the glass
- 20mm x 2mm Interdens located between the glass and the beads
- 3mm high x 6mm wide x 40mm long hardwood or non-combustible setting blocks fitted at 300mm centres along bottom edge of glass with 3mm expansion allowance to all edges.

Maximum single pane dimensions:

Screen Element	Height (mm)	Width (mm)
Fanlight	810	1670
Side screen	2057	956

• The pane dimensions given above represent the maximum permitted width against maximum permitted height. Panes with smaller dimensions are acceptable.



8.3.2.10 Pyrostop 30-10 (15mm thick) - Pilkington Ltd.

Transom/mullion details:

Minimum 95mm deep x 44mm thick hardwood (minimum density 640kg/m³). This
timber section can be used for both door jambs and transoms above doors included
within screens and for the perimeter framing of the screen and the transoms and
mullions separating individual panes of glass within the fanlights and side screens.

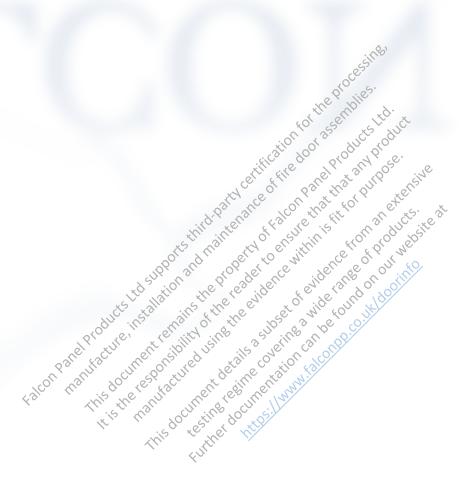
Glazing details:

- 20mm high x 37mm deep hardwood beads (minimum density 640kg/m³). Can be square or chamfered
- 60mm long size 6 8 steel wood screws at maximum of 50mm from corners and 150mm centres inserted at 45° to the glass
- 12mm x 3mm Hodgsons Sealants Firestrip 30 located between the glass and the beads
- 5mm high x 15mm wide x 40mm long hardwood or non-combustible setting blocks fitted at 300mm centres along bottom edge of glass with 5mm expansion allowance to all edges.

Maximum single pane dimensions:

Screen Element	Height (mm)	Width (mm)
Fanlight	733	1001
Side screen	2870	1366

The pane dimensions given above represent the maximum permitted width against maximum permitted height. Panes with smaller dimensions are acceptable.



8.3.3 Jointed Door Frames & Fanlights/Sidelights

The approval of fanlights/sidelights which are joined on to compliant doorsets is based on the on WF411193 for the framing, glazing system and glass type being used to form a module.

The following general principles apply:

- 1. The maximum height of the overall assembly constructed using modular units is 2950mm.
- 2. A maximum of 2 single or double leaf doorsets can be included.
- 3. The maximum width is unlimited provided the doorset and each glass/solid panel module complies with this assessment and following details in 8.3.3.1 respectively.
- 4. The sidelights and or fanlights can be glazed or consist of a solid panels constructed. Solid panels are fitted as detailed for overpanels (see section 8.2).

8.3.3.1 Glass, Glazing System and Framing

Based on WF411193 the following details are permitted:

Module Framing:

- Maximum of 2 panes/panels within one framed module.
- Timber Softwood or hardwood of minimum density 520 kg/m³
- Dimensions 44mm (w) x 100mm (d) used around glass/panel perimeter or as a mullion or transom to separate 2 panes/panels.

Glazing:

The glass tested in the modular units was Pyrobelite 7 from AGC Flat Glass. Based on this glass type it is permitted to fit other glass types that have the same or better integrity and insulation performance. The following glass types are therefore approved with jointed door frames and sidelights/fanlights

- Pyrobelite 7 AGC Flat Glass
- Pyrostop 30-10 Pilkington
- Pyrobel 16 AGC Flat Glass
- Pyroguard El30 Pyroguard
- Pyranova 15- Schott
- Pyrodur 30-104 Pilkington
- Pyrodur 60-10 Pilkington
- Pyrostop 30-10 Pilkington

Facor Paral Products lid supports third raintenance of the Products lid supports the Product light lig

The following maximum dimensions are permitted for each of the modular units depending on where they are located:

Fanlight dimensions: Maximum area 0.648m² Maximum height 666mm(h) Maximum width 1800mm(w)

Sidelight dimensions: Maximum area 0.636m² Maximum height 2865mm(h) Maximum width 400mm(w)

The following glazing system is to be used when glazing the modular units:

- Beading: Hardwood with minimum density 640kg/m³, measuring 25mm(h) x 30mm(d) including a 17° chamfer
- Bead Fixing: 38mm (I) steel pins 18g or 40mm long No. 6 or 8 steel woodscrews located a maximum 100mm from corners and at 200mm centres.
- Glazing perimeter: 15x3mm FAS Ceramic fibre fitted between glass and bead with FAS filling the remaining glazing void.

An example of a jointed door frame and sidelight can be seen below (taken from test report WF411193):

Eaten Panel Products lid supports third party certification for the products lid supports third party entire door assemblies.

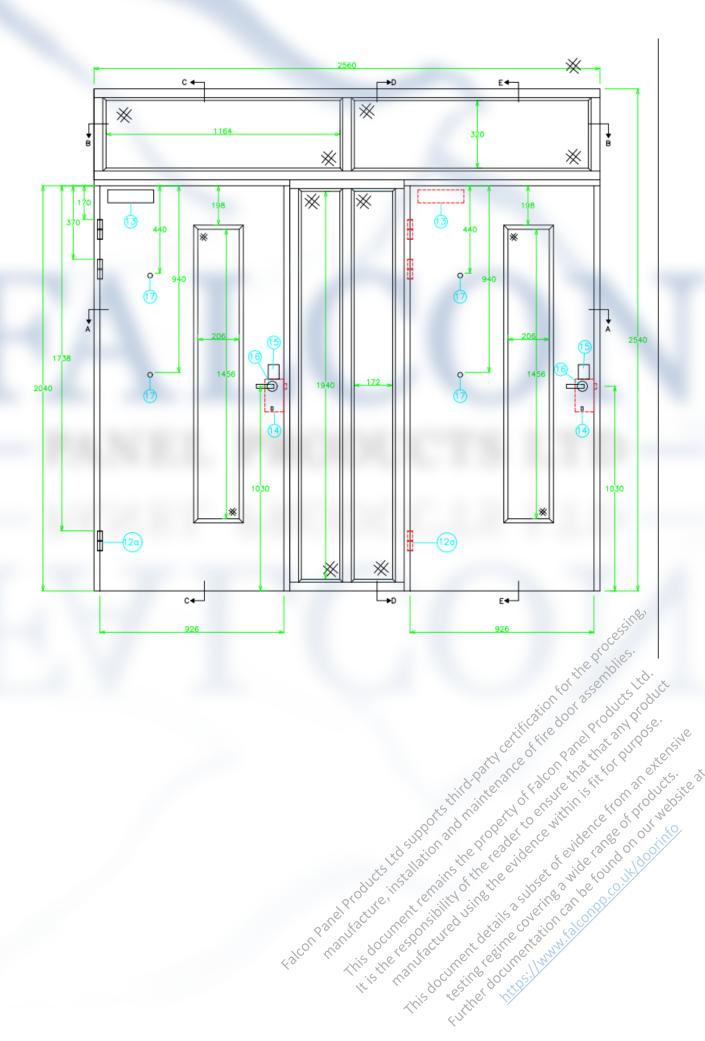
anutacture, installation and maintenance of the ensure that that any products little property of the reader to ensure that that any product this the responsibility of the reader to ensure that that any product the responsibility of the reader to ensure the reader to ensu This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

This document details a subset of evidence from an extensive

*esting regine documentation can be range of products ite at a section of the state of the country of the section of the secti

testine regime covering a wide range of products ite at the regime documentation and eround on our mino



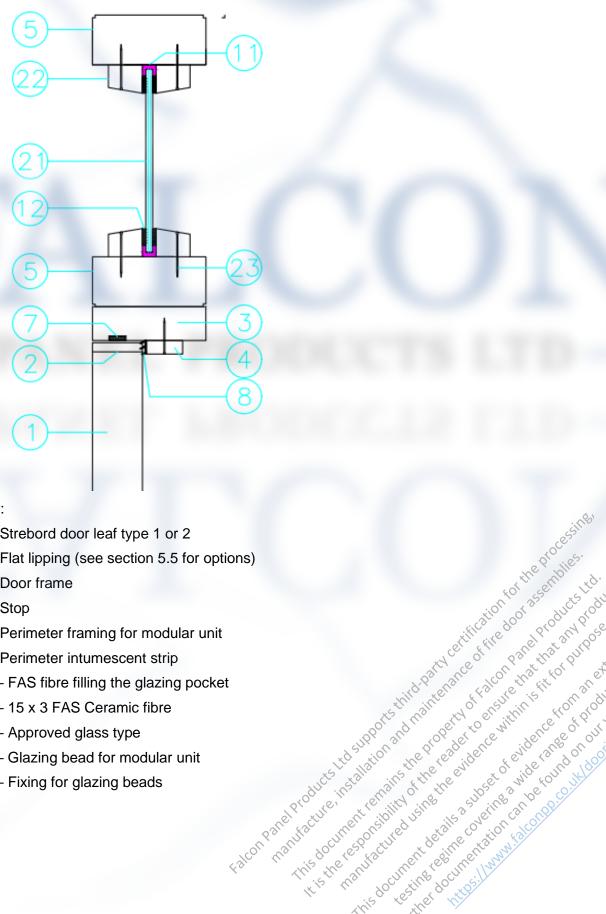
anufacture, installation and maintenance of the ensure that that any products little property of the reader to ensure that that any product this the responsibility of the reader to ensure that that any product the responsibility of the reader to ensure the reader to ensu This document remains the property of Early in a street of the read of the evidence within is the for purpose.

This document remains the disting the evidence within is the read of the r

This document details a subset of evidence trange of products.

*Esting regimentation and continued in the found of the documentation and continued in the found of the found

The following drawing is taken from test report WF 411193 and shows a modular fanlight above a door leaf. The components are given in the key underneath the drawing:



Key:

- 1 Strebord door leaf type 1 or 2
- 2 Flat lipping (see section 5.5 for options)
- 3 Door frame
- 4 Stop
- 5 Perimeter framing for modular unit
- 7 Perimeter intumescent strip
- 11 FAS fibre filling the glazing pocket
- 12 15 x 3 FAS Ceramic fibre
- 21 Approved glass type
- 22 Glazing bead for modular unit
- 23 Fixing for glazing beads

Notes:

- 1. When using separate modular units with the doorset, each section must be suitably fixed to one another using appropriate steel screw fixings and glued using one of the adhesives approved for the lipping in the adhesive section of this report.
- 2. Screws must be fixed at 600mm centres and located to approximately 2/3 depth of the adjacent timber section.
- 3. The overall dimensions of the door frame and frame around glass/solid panel must not be less than 80mm by 44mm.
- 4. Joints must be tight with no gaps.
- 5. It is permitted to include maximum 3mm (w) x 3mm (d) quirks at the junction of each timber section.
- 6. The drawing above is representative of each type of common frame member; actual construction in terms of intumescent seal location and material, etc. must be as given within this document for the doorset.

8.3.3.2 Solid Panels

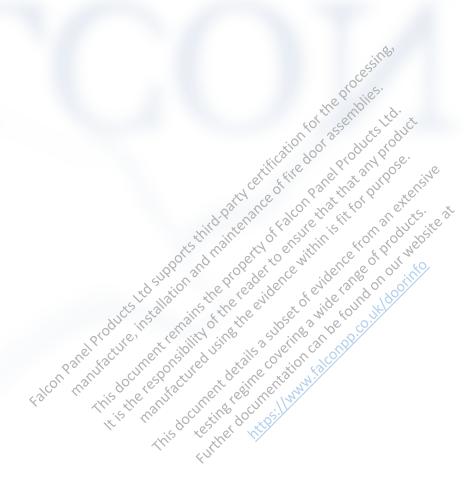
It is permitted to infill the modular unit with panels constructed using Leaf 1 and 2.

Single piece solid panels can be fitted in lieu of glazing. Modular side panels or overpanels can be fitted providing the following is complied with:

- Maximum size in portrait orientation: 2100mm high by 900mm wide
- Maximum size in landscape orientation: 2100 mm wide by 900mm high

The panel to be lipped on all 4 edges with a minimum 15mm by 4mm intumescent seal centrally fitted on all 4 edges. The seal must be one of the types specified and approved in section 4 of this assessment.

The solid side panels must be fixed in line with the fixing details for overpanels given in section 8.2



9 Intumescent

9.1 Door Perimeter Intumescent

Tested and permitted intumescent seal configurations are as specified in section 4 for all permitted door configurations. Leaf size envelope charts are specific to the same type and manufacturer. The lines in the charts are colour coded against each approved manufacturer (see colour coding in table below).

The intumescent seals may be provided with or without pile or elastomeric fins in order to provide additional performance i.e., smoke or acoustic control. Whilst seals may be installed with the additional features; it is beyond the remit of this Field of Application report to provide scope for acoustic or cold smoke control performance.

Variations of the tested intumescent seals from the same product group in the table below are available and are considered acceptable.

Manufacturer	Product Group	Product Variations	Envelope Colour Code
Astroflame	Astro Strip	Astro Strip FO (no additional seal) Astro Strip FS (with pile brush) Astro Strip SB (with elastomeric fin) Astro Strip TB (with 2 elastomeric fins)	
	Therm-A-Seal	Therm-A-Seal (no additional seal) Therm-A-Stop (with pile brush) Therm-A-Blade (with elastomeric fin)	Ocessing,
Dixon International Group Ltd	30	IF30 (no additional seal) N30 (with elastomeric fin)	on or the princes and the state of the state
	60	IF60 (no additional seal) N60 (with elastomeric fin)	Acerification on Productorse.

5 the support string to be strictly to be strictly to be strictly to the strictly to be strictly to the strictly to be str

Manufacturer	Product Group	Product Variations	Envelope Colour Code
Dormakaba Group	Kilargo	KP (no additional seal) KP TS (with 2 elastomeric fins)	-
Lorient Polyproducts Ltd	Type 617	LP (no additional seal) LP SS (with pile brush) LP AS (with elastomeric fin) LP TS (with 2 elastomeric fins) LP DS (with 2 elastomeric fins) LP Finesse (with 2 elastomeric fins)	
Mann McGowan Ltd	Pyrostrip 100P	100P (no additional seal) 100PSS (with pile brush) 100PSS Flexifin (with 2 elastomeric fins) 100PSS Flexifin Co-Extruded (with 2 elastomeric fins)	
	Pyrostrip 500P	500P (no additional seal) 500PSS (with pile brush) 500PSS Flexifin (with 2 elastomeric fins) 500PSS Flexifin Co-Extruded (with 2 elastomeric fins)	he processins
Norsound Ltd	Norfast	Norfast (with elastromeric fins)	Source Standard Control of the
		** Lind Supports third party certification of the property of	Parie that the pull the kensile of broad website of broad

Manufacturer	Product Group	Product Variations	Envelope Colour Code
Pyroplex Ltd	Rigid Box	Rigid Box (with no additional seal) Rigid Box – Pile (with pile brush) Rigid Box – Pile with fin (with pile brush and fin) Rigid Box – Single Flipper (with elastomeric fin) Rigid Box – Side Flipper (with elastomeric fin) Rigid Box – Twin Flipper (with 2 elastomeric fins) Rigid Box – Triple Flipper (with 3 elastomeric fins)	
Sealed Tight Solutions Ltd	STS	STS FO (with no additional seal) STS FS (with pile brush) STS SBS (with elastomeric fin)	

Each leaf size envelope chart in section 4.5 is specific to a particular seal size, or combination of seal sizes. To simplify manufacturing processes and tolerances, the tested intumescent specifications have been consolidated. This has been done on the basis of making sure there is at least the same or more intumescent material appropriately configured around the leaf edges or in the frame reveal. Care has been taken to ensure that there is not too much intumescent around the edges of leaves, to avoid the increased intumescent specification potentially forcing the doors open in test conditions (particularly relevant to unlatched doorsets). The consolidated intumescent specifications are provided in the envelopes Allation and maintenance of fire door assemblies. and tables in section 4 but still refer to the base test evidence from which they have been derived. osthe property of Eston Panel Products Itd.

the reader to ensure that that that any product

at of evidence from an extensive

Cund on our mebsite at

9.2 Essential Hardware Protection

Hardware protection is usually in the form of an intumescent sheet material, often with a self-adhesive backing, applied to parts of a hardware component or lining the mortice to which the component is to be installed. The hardware protection types considered are in the following table:-

Manufacturer	Thickness	Product/Reference	Material Type
Astroflame	0.8mm	Flexiseal	Graphite
	1mm	Therm-A-Strip	Monoammonium Phosphate
	2mm	Therm-A-Strip	Monoammonium Phosphate
Dixon International Group Ltd	1mm	Therm-A-Flex	Graphite
Dixon international Group Etd	2mm	Therm-A-Flex	Graphite
	1mm	Sealmaster G30	Monoammonium Phosphate
	2mm	Sealmaster G30	Monoammonium Phosphate
Dufaulita Davalanmenta I td	1mm	Interdens	Monoammonium Phosphate
Dufaylite Developments Ltd	2mm	Interdens	Monoammonium Phosphate
	0.8mm	Spartan	Graphite
Fire & Acoustic Seals Ltd	1mm	Spartan	Monoammonium Phosphate
	2mm	Spartan	Monoammonium Phosphate
Lariant Dahman danta Ltd	1mm	MAP Paper	Monoammonium Phosphate
Lorient Polyproducts Ltd	2mm	MAP Paper	Monoammonium Phosphate
	1mm	Pyrostrip Interdens	Monoammonium Phosphate
Maray Ma Oassay 144	2mm	Pyrostrip Interdens	Monoammonium Phosphate
Mann McGowan Ltd	1mm	Pyrostrip Heat Seal	
	2mm	Pyrostrip 500F	Graphite Graphite
	0.5mm	NOR905	Graphite Graphite Graphite Graphite Graphite Graphite
Norsound Ltd	1mm	NOR910	Graphite The State of the State
	2mm	NOR920	Graphite Transfer Leri
		NOR920	Graphite Graphi

Continued from previous page			
Manufacturer	Thickness	Product/Reference	Material Type
Duranlay I tel	0.5mm	PMFS1 Mineral Fibre Sheet	Graphite
Pyroplex Ltd	1mm	PMFS2 Mineral Fibre Sheet	Graphite
Cooled Tight Colutions Ltd	1mm	STS Graphite	Graphite
Sealed Tight Solutions Ltd	2mm	STS Graphite	Graphite
	0.8mm	FlexiFire	Graphite
	1mm	FlexiFire	Graphite
Vanquish Hardware Protection Ltd	2mm	FlexiFire	Graphite
	1mm	Vanquish Interdens	Monoammonium Phosphate
	2mm	Vanquish Interdens	Monoammonium Phosphate

The following sections provide the requirements for hardware protection across various components that can form part of a doorset using the Strebord® system. Hardware protection is denoted as either "required" or "enhanced permitted".

Where hardware protection is "required" in the individual component tables that follow, the **minimum** required specification is detailed.

Where hardware protection is "enhanced permitted" in the individual component tables that follow, it is has been proven through testing (and therefore accepted) that the application of additional/thicker intumescent materials for the protection of hardware will not be detrimental to expected performance. Where this is the case, only the hardware protection types in the above table which are of the same type to those permitted for the particular hardware item, being of equal or increased thickness to the "required" protection are considered. If the hardware item does not require intumescent protection but "enhanced permitted" is denoted as acceptable, any intumescent protection from the above table may be used.

It is not permitted to increase the intumescent gasket thickness beyond 2mm, unless specifically required for a certain item of hardware.

Any hardware protection types **not** listed are not permitted by this Field of Application. For certain items of hardware, there may be specific guidance regarding the required intumescent protection, which will be detailed in the relavnt section for that item of hardware (e.g. ensuring there is a certain amount of perimeter intumescent that runs past a piece of hardware in addition to any gasket protection or where there are Jteu. The reader to ensure that that any prosevidence within is fit for purpose. specific requirements for certain types of hardware). at of evidence from an extensive

cound on our med site at

It has been requested by Falcon Panel Products to include the option for increasing the hardware protection, if required for the following reasons:

- To consolidate/simplify manufacturing processes and tolerances
- To follow guidance from the component manufacturer whilst maintaining the requirements of this Field of Application report

9.2.1 Locks

9.2.1.1 Single Point Locks and Latches

The hardware protection permissible for this doorset design is as follows:

Single Point L	ock/Latch Intur	nescent Specification				
Leaf Type	Frame Type	Configuration	Location	Required	Enhanced Permitted	Product & Manufacturer
1, 2, 3 and 4	1, 2, 3, 4, 5 and 6	Single leaf doorsets	Lining all sides of the mortice for the lockset and/or fitted under the forend and keep	No	Yes	All 1mm thick or above
1 and 2	8, 10 and 11	Single leaf doorsets	Lining all sides of the mortice for the lockset and fitted under the forend	Yes	Yes	All 1mm thick or above
1, 2 and 3	All	Double leaf doorsets (twin strip at meeting edge)	Fitted under the forend and keep	Yes	Yes	All 1mm thick or above
1, 2 and 3	All	Double leaf doorsets (single strips centrally fitted at meeting edge)	Lining all sides of the mortice for the lockset and fitted under the forend and keep	Yes	Yes the	All 1mm thick or above
			*SL*td SUPPO	nand maintenant and m	Yes the deline to the deline t	All 1mm thick or above

9.2.1.2 Multi Point Locks and Latches

The hardware protection permissible for this doorset design are as follows:

Multi Point Lo	ock/Latch Intum	escent Specifica	ation			
Leaf Type	Frame Type	Configuration	Location	Required	Enhanced Permitted	Product & Manufacturer
	Н	$^{\triangleright}$	Lining all keep mortices or adhered to back of keeps	Yes	Yes	All 1mm thick or above
1 and 2	1, 2 and 3	LSASD – 3pt	Lining lock case and hook case mortices or encasing lock and hook cases	Yes	Yes	All 1mm thick or above
			Behind forend and/or lining groove behind espagnolette drive bar	No	Yes	All

ts It allation and maintenance of the property of Eastern the property of Eastern and products and products are producted to the product of products and products are producted to the product of products and products are property of Eastern and Products and Products are producted to the product of products are producted to the product of the product

9.2.2 Hinges

9.2.2.1 Butt and Lift-Off Hinges

The hardware protection permissible for this doorset design are as follows:

Butt and Life	t-Off Hinge Intum	nescent Specific	ation			
Leaf Type	Frame Type	Configuration	Location	Required	Enhanced Permitted	Туре
1 and 2	1 and 2	All Single Action	Under all hinge blades of door leaf heights 2670mm or under	No	Yes	All
1 and 2	1 and 2	All Single Action	Under all hinge blades of door leaf heights 2671mm or over	Yes	Yes	All 1mm thick or above
1 and 2	3	All Single Action	Under all hinge blades	Yes	Yes	All 1mm thick or above
3 and 4	1 and 2	All Single Action	Under all hinge blades	Yes	Yes	All 1mm thick or above
1, 2 and 3	3	All Single Action	Under all hinge blades	Yes	Yes	All 1mm thick or above
2	8 and 10	All Single Action	Under hinge blades of leaf side only	Yes	Yes	Monoammonium Phosphate 1mm thick or above
			xd ^c upq ^c	ts third partite partitions in and maintenance the property of	ither to the forther to the following the fo	and and adopting the street of

9.2.3 Flush bolts

The hardware protection permissible for this doorset design are as follows:

Flush bolts Int	tumescent Spec	cification				
Leaf Type	Frame Type	Configuration	Location	Required	Enhanced Permitted	Туре
1, 2, 3	All SA type	All Single Action	Lining all sides of the mortice for the flush bolt for bolts up to 210mm (h)	Yes	Yes	All minimum 1mm thick
1, 2, 3	All SA type	All Single Action	Lining all sides of the mortice for the flush bolt for bolts up to 900mm (h)	Yes	Yes	Minimum 1mm thick STS graphite

ts It allation and maintenance of the property of engine in a first product strate of products and maintenance of the product strate from an extensive at a contract of products and maintenance of the product of the p

9.2.4 Automatic Closing

9.2.4.1 Overhead Face Fixed Closers: Single Acting

Face fixed closing devices do not require any intumescent protection.

9.2.4.2 Overhead Concealed Closers: Single and Double Acting

The hardware protection permissible for this doorset design are as follows and is specific to each closer model:

Overhead Co	oncealed Closer	Intumescent Sp	ecification			
Rutland ITS	11204 (various)				_	
Leaf Type	Frame Type	Arrangement	Location	Required	Enhanced Permitted	Туре
1, 2 and 3	1, 2 and 3	All Single Action	Lining long sides of mortice for closer slider channel and on top of closer body	Yes	No	Rutland IP.114 kit or 1mm STS Graphite or 1mm Therm-A-Flex

tell supports third partie property of ensure this stift for products like of products size of and maintenance of fine and entire property of ensure this stift for products size of products siz

Field of Application for: Falcon Panel Products Ltd Strebord® 44 and Strebord ® 54 Door Assemblies Report No: Chilt/A02066 Rev O Page 424 of 519

ts Ltd supports third party certification for the door assemblies.

The reader to ensure that that any product

t of evidence from an extensive

Cound on our medite at

Arrone 7383 (WF414162)					
Leaf Type	Frame Type	Arrangement	Location	Required	Enhanced Permitted	Туре
1, 2 and 3	1, 2 and 3	All Single Action	Lining long sides of mortice for both closer arm and closer body	Yes	No	Monoammonium Phosphate 2mm thick

10 Adhesives

The following adhesives must be used in construction:

Element	Adhesive Type
Decorative Facings (section 5.6.2.2)	UF, PRF, PF, PU, PVA or CR
Timber Facings (section 5.6.2.1)	UF, PRF, PF, PU or PVA
Lippings (section 5.5)	UF, PRF, PF, PU ¹ or PVA
Aperture Linings (section 6)	UF, PRF, PF, PU or PVA
PVC cladding or postforming (section 4.3.3)	UF, PRF, PF, PU, PVA or CR

Notes

- 1. Includes Hot Melt Polyurethane
- 2. The acronyms for the adhesive types are provided along with other commonly used names below:-

UF = Urea Formaldehyde (Plastic Resin Glue)

PRF = Phenol Resorcinol Formaldehyde (Resorcinol Formaldehyde)

PF = Phenol Formaldehyde (Phenolic Resin)

PU = Polyurethane (PUR)

PVA = Polyvinyl Acetate (PVAc, Polyethenyl Ethanoate)

CR = Polychloroprene Rubber (Contact Adhesive, Neoprene)



11 Hardware

11.1 General

The following section details the permitted scope and constraints for fitting hardware to this door design. The following items of hardware must also bear the UKCA Mark or CE Mark:

- Locks & Latches: Test Standard EN 12209
- Single axis hinges: Test Standard EN 1935
- Controlled door closing devices: Test Standard EN 1154
- Electrically powered hold-open devices: Test Standard EN 1155
- Door co-ordinators: Test Standard EN 1158
- Emergency exit hardware: Test Standard EN 179
- Panic exit hardware: Test Standard EN 1125.

The following sections consider what alternative items of essential hardware can be used on these doorsets.

Each item of hardware is considered in each section giving the items of hardware which:

- Have been tested
- Can be used as a result of an assessment of the appropriateness of the item of hardware, based on test evidence not commissioned by Falcon Panel Products
- Can be used as a result of the Certifire approval of the item of hardware

Each section will consider the named item of hardware and detail if there are any limitations associated with:

- Leaf size
- Configuration
- Intumescent seals
- Intumescent protection
- Frame

Eaton Parel Products the Installation and maintenance of fire door as sendings. No item of hardware at the hanging stile and head should be within 200mm of another item of hardware unless there is test evidence to demonstrate they can be closer.

anutacture, installation and maintenance of the reader to ensure that that any product like the reader to ensure that that any product like this document, remains the reader to ensure that that any product like this the responsibility of the reader to ensure this document, remains the reader to ensure that that any product like the responsibility of the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

This document details a subset of a wide range of products.

Esting regime covering a mide range of products ite?

11.2 **Essential Hardware**

The table of essential hardware is given for each door assembly configuration, as a baseline for the doorset described. Changes to hardware can affect the intumescent specification and frame details which are considered for each item of hardware as listed in the following sections.

The following table details the essential hardware for each permitted door leaf configuration. In some cases, it may be possible to apply hardware to a doorset that isn't essential for the doorsets operation or configuration (e.g. fitting a lock into a double acting doorset).

Essential Hardwar	е
Configuration	Hardware
LSASD	 Latch Hinges Overhead face fixed closer
ULSASD	HingesOverhead face fixed closer
DASD	Top pivot / bottom strapFloor spring
LSADD	 Latch Hinges Overhead face fixed closer Flush bolt Selector if rebated meeting stile present
ULSADD	 Hinges Overhead face fixed closer Flush bolt Selector if rebated meeting stile present
DADD	Top pivot / bottom strap Floor spring
	Selector if rebated meeting stile present Top pivot / bottom strap Floor spring Flore spring Floor spring Flore spring Floor

Manufactureu uzine racine covering a mide range of products.

*Esting regime covering a wide range of products site is

11.3 **Locks & Latches**

Locks & Latches: Single Point

Single point locks and latches which have been successfully tested in the Strebord® doorset design for 30 minute applications are detailed in section 20.4 alongside the associated test reference and are therefore approved for use with the Strebord® doorset design.

This Field of Application also considers locks and latches tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and listed these items in sections 20.4 and 20.4 alongside the associated test reference.

Single point locks and latches are permitted for use in:

Leaf Types: 1, 2, 3 and 4

FrameTypes: All types

The lock and latch must comply with the following.

Based on the maximum size of locks tested in the Strebord® doorset design, alternative locks and latches which meet the following specification are acceptable, providing the lock has been tested to BS 476: Part 22: 1987 or BS EN 1634-1 in a timber door assembly incorporating a maximum¹ 44mm thick door leaf that has achieved a minimum of 30 minutes fire resistance.

Lock & Latch Specification	
Element	Specification
Maximum forend & keep dimensions	235 (h) x 25 (w) x 4mm (t)
Maximum body dimensions	180 (h) x 100 (w) x 18mm (t)
Intumescent protection	See section 9.2.1
Materials	All parts essential to the locking/latching action (including the latch bolt, forend & keep) to be steel or brass (with a melting point ≥800°C)
1 (2	Between 750 – 1200mm from the threshold ³
Location ²	Between 1201 – 1400mm from the threshold ³ , ⁴
	Between 1201 – 1400mm from the threshold ³ , and Between 1201 – 1400mm from the thresh

This document detains a covering a mide range of products.

*Esting regime covering a wide range of products site in the range of products.

Alternatively, Certifire approved locks and latches approved for 30 minutes in an ITT door assembly (i.e. a door assembly containing intumescent, a timber frame and a timber leaf) is acceptable providing all the requirements for intumescent and frame are complied with.

Notes:

- 1 If evidence for lock or latch is from a leaf thickness exceeding 44mm, the lock or latch may be included providing the Strebord® door core thickness used is the same or exceeds that of the test evidence to support the lock or latch and the lockset dimensions do not exceed that stated in the table above
- 2 A maximum of 2 latches or locks may be included within the same leaf provided there is a minimum of 200mm between lock forends or keeps. The locks must be located within the height limitations from the threshold as defined in the table above.
- 3 Threshold is defined as finished floor level.
- 4 only allowed when lockset has been fitted with intumescent gasket under forend and keep and on all sides of the mortice for the lock

11.3.2 Locks & Latches: Multi Point

Multi-point locks which have been successfully tested in the Strebord® door assembly system for 30 minute applications are detailed in section 20.4.2 alongside the associated test reference.

This Field of Application also considers multi-point locking systems tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and listed these items in section 20.4.2 alongside the associated test reference.

These locks and latches are permitted for use in:

1 and 2 Leaf Types:

FrameTypes: 1.1 and 2.1, 1.3 and 2.3

Configurations: **LSASD**

ation and are and and maintenance of Falcon Panel Products Lite and Maintenance of Falcon Panel Panel Products Lite and Maintenance of Falcon Panel Products Lit Alternative multi-point locking systems are not considered within this Field of Application report. Therefore multi-point locks included within Strebord® 30 minute doorset designs are nanthacture installation and maintenance of three door as semines, that the responsibility of the reader to ensure that that any products and maintenance of three door as semines, the product of the reader to ensure that that any product of the reader to ensure that the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the limited to the following:-This document remains the property of Falcon Panel Products It de purpose.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

- **ERA Surefire Classic**
- **ERA Surefire Heritage**
- Glutz Mint 1893
- **GU Ferco**
- Winkhaus AV2
- Winkhaus AV3
- Yale Lockmaster Autoengage

The top of the face plate must be no closer than 150mm to the top of the leaf.

The multi-point locking devices assessed for use within the Strebord® 30 minute door assembly system consist of both auto-engaging and manually-engaged bolts. The tests conducted to generate evidence for manually-engaged multi-point locks were undertaken with the centrepoint engaged but with deadbolts and end latches disengaged, which permits both the auto-engaging and manually engaging bolt options.

Multi-point locks are restricted to leaf sizes and intumescent configurations AS16, AS17 and AS18 check only.

See section 9.2.1 for the required intumescent gasket protection when fitting these types of locksets.

It is not permissible to use other assessments or Certifire certificates to fit alternative multipoint locksets within the Strebord® doorset design.

Note:

1 – The inclusion of multi-point locking systems within this Field of Application considers resistance to fire performance only and does not infer door assemblies fitted with these systems to support any security performance criteria.

11.3.3 Electronic Locking Systems

The following electronic locking systems have been tested in the Strebord 44 design as well as other timber based door constructions similar to the Strebord 44 design, in addition to solid timber based doorsets (see section 20.4.3). Based on the testing conducted all of the listed locksets are assessed for use with leaf types 1, 2 and 3.

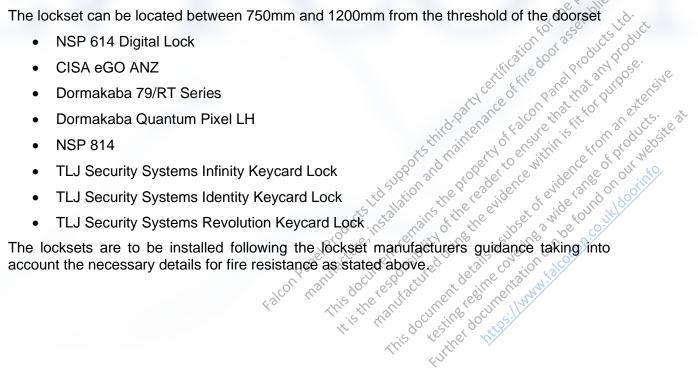
The electronic locking systems must be used in latched single leaf, single acting doorsets comprising hardwood door frames (frame types 1.1, 2.1, 1.3 and 2.3) of minimum density 640kg/m³. The frames must be single acting.

The locksets must be fitted with minimum 1mm (t) monoammonium phosphate based gaskets. which are to be located underneath the forend and keep of the lockset, as well as to all sides of the mortice for the lockset.

The intumescent strip arrangement at the perimeter of the doorset must be no less than a single centrally fited 15 x 4mm intumescent seal or 2 No. 10 x 4mm intumescent seals spaced mains the property of Eacon Panel Products Ltd. 10mm apart. The intumescent seals are to be located in the frame reveal.

The lockset can be located between 750mm and 1200mm from the threshold of the doorset

Ture of the entire or the first the products the products the first the entire or the first the entire o



*Esting regime covering a wide range of products ite?

11.3.4 Electronic Strikes

The following electronic strike has been tested in the Strebord 44 design (see section 20.4.5). Based on the testing conducted the electronic strike is assessed for use with leaf types 1 and 2.

Gem GK700

The electronic strike must be used in doorsets comprising softwood or hardwood door frames (frames types 1.1, 2.1 and 1.3 and 2.3) of minimum density 510kg/m³. The frames must be single acting.

The electronic strike can be used in single or double leaf doorsets.

The electronic strike must be fitted with 2mm thick intumescent gaskets lining all edges of the mortice for the strike.

The intumescent strip arrangement at the perimeter of the doorset must be no less than 2 No. 10 x 4mm intumescent seals spaced 10mm apart. The intumescent seals are to be located in the closing edge or the frame reveal of the leaf for single leaf doorsets and in the opposing meeting edge when fitted in double leaf doorsets.

The electronic strike can be located between 750mm and 1200mm from the threshold of the doorset, appropriate to the latch/lock fitted to the doorset.

The electronic strike can be used in conjunction with a cableway as described in section 5.11.

The electronic strike is to be installed following the electronic strikes manufacturers guidance, taking into account the necessary details for fire resistance as stated above.

11.3.5 Cylinders

A range of cylinders have been tested the Strebord 44 design as well as other timber based door constructions similar to the Strebord 44 design, in addition to solid timber based doorsets (see section 20.4.6). Based on the testing conducted all of the cylinders listed in section 20.4.6 are assessed for use with leaf types 1, 2, 3 and 4.

Providing the hole for the cylinder is cut tight to the shape of the cylinder, no additional intumescent protection is necessary. However, if an oval shape is cut to receive the cylinder, any resulting gap between the hole cut for the cylinder and the body of the cylinder must be filled with intumescent gasket.

This document, responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the responsibility of th This document remains the property of Facon Panel Products It d. purpose.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose. . Oser t.
Oser Falcon Panel Products Ltd supports third naintenance of fine do Cylinders can be fitted up to 1400mm from the threshold of the doorset and no closer than 50mm to the leaf edge, or any aperture, groove or recess. This document detains a subset of a wide range of products.

11.3.6 Rebated Meeting Edges – Leaf 1 and 2 only

The supporting evidence for locksets/latches at rebated meeting edges needs to be considered to ensure that the item of hardware can be fitted into the edges of the doorset without compromising integrity performance.

The following guidance must be followed.

A steel forend conversion set for the lockset/latch can only be fitted when covered by Certifire approval for an ITT designated doorset i.e. a doorset incorporating Intumescent, Timber leaf and Timber frame. The conversion set must be suitable for fitting a lockset/latch within an equally rebated meeting edge.

All details given in the relevant Certifire approval must be followed, including maximum lockset/latch and keep dimensions and associated intumescent protection. If specific intumescent protection is not given in the Certifire approval, the conversion kit must be fitted onto a minimum of 1mm thick intumescent gasket and the lockset/latch must be fitted with 1mm thick intumescent gasket linining all sides of the mortice and under the forend. The perimeter intumescent specification must remain as specified for double leaf doorsets with rebated meeting edges.

Double leaf doorsets with equally rebated meeting edges may only be fitted in conjunction with a face fixed flush bolt or shoot bolt, if required.

Falcon Panel Products Ltd supports third Panty enance of fine bloor assemblies.

This document responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the reader to ensure that the responsibility of the reader to ensure the This document remains the property of Facon Panel Products that any problem to ensure that the purpose.

This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

This document details a subset of a wide range of products.

*esting regine documentation can be range of products ite at a section of the state of the country of the section of the secti

The guidance for a door selector must be followed as in section 11.6.12.

Report No:

11.4 **Hinges and Pivots**

Butt & Lift-Off Hinges

Hinges which have been successfully tested in the Strebord® door assembly system for 30 minute applications are detailed in section 20.2 alongside the associated test reference.

This Field of Application also considers hinges tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and these items are isted in section 20.2 alongside the associated test reference.

These hinges are permitted for use in:

Leaf Types: 1, 2 and 3

FrameTypes: 1, 2, 3, 8, 10, 11

Based on the dimensions of the hinges tested in the Strebord® doorset design, alternative hinges which meet the following specification are acceptable, providing the hinges have been tested to BS 476: Part 22: 1987 or BS EN 1634-1 in a timber door assembly having a maximum¹ 44mm thick door leaf and achieved a minimum of 30 minutes.

Alternative Hinge Specification					
Element Spe		Specific	pecification		
Blade hei	ght	90 – 120)mm		
Blade wid (excluding		28 – 35r	28 – 35mm		
Blade thic	kness	2.5 – 4m	nm		
Fixings		Minimum of 4No. 30 long No. 8 or No. 10 steel wood screws per blade or Tested screw fixings as supplied with the hinge			
Materials		Steel or stainless steel or brass (melting point ≥800°C)			
Hingo	Leaf height: <1200mm	Тор	120 – 200mm from head of leaf to top of hinge		
Hinge positions		Bottom	150 – 300mm from foot of leaf to bottom of hinge		
	Leaf	Тор	120 – 200mm from head of leaf to top of hinge		
	height:	2 nd	Min - 100mm from top hinge Max - centrally between top and bottom hinge 150 – 300mm from foot of leaf to bottom of hinge 120 – 200mm from head of leaf to top of hinge Min - 100mm from top hinge		
	2400mm	Bottom	150 – 300mm from foot of leaf to bottom of hinge		
		Тор	120 – 200mm from head of leaf to top of hinge		
	Leaf height:	2 nd	120 – 200mm from head of leaf to top of hinge Min - 100mm from top hinge Max - centrally between top and 3 rd hinge Min – 100mm from bottom hinge Max – centrally between 2 nd and bottom hinge 150 – 300mm from foot of leaf to bottom of hinge tion 9.2.2		
	>2401mm		Min – 100mm from bottom hinge Max – centrally between 2 nd and bottom hinge		
		Bottom	150 – 300mm from foot of leaf to bottom of hinge		
Intumescent See se protection		See sec	tion 9.2.2		

Falcon Panel Produce Interpretation of the Country of the Country

Alternatively, Certifire approved hinges approved for 30 minutes in an ITT door assembly (i.e. a door assembly containing intumescent, a timber frame and a timber leaf) is acceptable providing all the requirements for intumescent and frame are complied with.

Notes:

- 1 If evidence for alternative hinges are from a leaf thickness exceeding 44mm, the hinge may be included providing the Strebord® door core thickness used is the same or exceeds that of the test evidence to support the hinge and the hinge is within the dimensions stated in the table above
- 2 Additional intermediate hinges may be included within door assemblies inbetween the hinges required for the leaf as specified in the table above, provided there is a minimum 100mm between hinges. Where intermediate hinges are introduced, their positioning may influence 2nd and 3rd hinge parameters. No more than 5 hinges at the hanging edge of doorsets may be fitted and providing the spacing requirements of this assessment can be
- 3 Rising butt hinges are not assessed for the Strebord® 30 minute doorset system.

11.4.2 Concealed Hinges

Concealed hinges which have been successfully tested in the Strebord® doorset design for 30 minute applications and are detailed in section 3 alongside the associated test reference.

This Field of Application also considers hinges tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and these items are listed in section 20.2 alongside the associated test reference.

These hinges are permitted for use in:

1 (Tectus hinges only - see section 11.4.2.1) and 2 (all hinge types listed Leaf Types: below)

FrameTypes: 1.1, 2.1, 1.3 and 2.3 and 8

LSASD, ULSASD, LSASD+OP, ULSASD+OP, LSADD, ULSADD, Configurations: LSADD+OP & ULSADD+OP.

The following hinges are assessed for use with leaf type 2 based on the cited test evidence:

- Atomika Karacter
- Rocyork RY 80/60
- Simonswerk Tectus TE340 3D FR, TE540 3D FR, TE540 3D A8 FR, TE640 3D FR & TE640 3D A80 FR

The single action hinges must be fitted with a minimum of 1mm intumescent gasket under the blade in the frame and leaf for doorsets fitted into timber based frames and under the blade fitted in the leaf for doorsets in steel frames.

The hinges must be fixed in accordance with manufacturer's instructions including using the supplied hinge fixings and instructions for morticing and taking into account the necessary details for fire resistance as stated above.

The mortice for concealed hinges must be no closer than 50mm to to any aperture or other mortice or recessed area within the door leaf.

The hinges must be used in conjunction with a twin strip perimeter intumescent arrangement where one of the seals remains continuous past the hinge blade in the frame revealer land edge. the results of the regime of the control of the con

The timber based frames must be hardwood of minimum density 640kg/m³

11.4.2.1 Tectus Hinges and Leaf Type 1

The following specification is required when using the Tectus hinges with leaf 1:

It is permitted to fit the following Tectus concealed hinges to the Falcon Strebord© 44 leaf type 1 design based on fire test referenced WF316349:

TECTUS TE 340 3D FR

TECTUS TE 640 3D A8 FR.

Assessed frame profiles are:

1.1, 2.1, 1.3 and 2.3 with a minimum thickness of 44mm, not including the doorstop and must be a minimum density of 510kg/m³.

The material of the Tectus hinges must remain as tested; die cast zinc hinge body parts with aluminium knuckle components.

The mortice must be as tight to the hinge body as is compatible with its operation.

Fixings for the hinges must be stainless steel counter sunk head wood screws; 4No. per hinge blade and 40mm long by 5.2mm diameter.

The following tables define the permitted intumescent protection and installation details required for use with the tested Tectus hinges.

11.4.3 TECTUS TE 340 3D FR

Element	Product & Manufacturer	Location (mm)		
TECTUS TE 340 3D FR ROKU strip M13 Rolf Kuhn Gmb		Self-adhesive graphite strips fitted as illustrated below: Single strip–1 thick x 27 wide x 47 or 59 long. Double strip–Each 2 thick x 17 wide x 47 long.		
blade to door leaf	blade to door frame	single strip of intumescent double strip of intumescent protection Details of Intumescent protection		

This document details a subset of ender range of products.

testing tegine covering a mide range of products like of the continue of the c

11.4.4 **TECTUS TE 640 3D A8 FR**

Element	Product & Manufacturer	Location (mm)
TECTUS TE 640 3D A8 FR	ROKU strip M130 – Rolf Kuhn GmbH	Self-adhesive graphite strips fitted as illustrated below: Single strip–1 thick x 36 wide x 115 long. Double strip–Each 2 thick x 22 wide x 115 long
blade to door leaf	blade to door frame	single strip of intumescent double strip of intumescent Details of Intumescent protection

The hinges must be fixed in accordance with manufacturer's instructions including using the supplied hinge fixings and instructions for morticing and taking into account the necessary details for fire resistance as stated above.

The mortice for concealed hinges must no closer than 50mm to to any aperture or other mortice or recessed area within the door leaf.

Almens

Almens

Almens

Almens

Allegary Certification for the portion and maintenance of fire door asserting the products literature, installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door asserting to the products literature installation and maintenance of fire door as a second control of the products literature installation and maintenance of the products literature in the product literature in the products literature in the product A Panel Products Line to the recovery of the r This document remains the property of the leader to ensure that that any product the responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure that the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader to ensu The hinges may be used in conjunction with a single intumescent strip (minimum dimensions This document remains the property of Falcon Panel Products that any problem.

This document remains the property of the evidence within is fit for purpose. 15 x 4) or twin strip perimeter intumescent arrangement.

All concealed hinges are to be positioned as follows. It is not permitted to fit any more hinges than that stated in the table below, as appropriate for the required leaf height:

Conceale	Concealed Hinge Locations			
Hinge	Leaf	Тор	150 – 200mm from head of leaf to top of hinge	
positions	height: <1200mm	Bottom	150 – 300mm from foot of leaf to bottom of hinge	
	Leaf	Тор	150 – 200mm from head of leaf to top of hinge	
	height: 1201- 2400mm	2 nd	Min - 200mm from top hinge Max - centrally between top and bottom hinge	
		Bottom	150 – 300mm from foot of leaf to bottom of hinge	
		Тор	150 – 200mm from head of leaf to top of hinge	
	Leaf height: >2401mm	2 nd	Min - 200mm from top hinge Max - centrally between top and 3 rd hinge	
		3 rd	Min – 200mm from bottom hinge Max – centrally between 2 nd and bottom hinge	
		Bottom	150 – 300mm from foot of leaf to bottom of hinge	

11.4.5 Pivots

Pivots which have been successfully tested in the Strebord® doorset design for 30 minute applications are detailed in section 20.8 alongside the associated test reference.

This Field of Application also considers pivots tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and these items are listed in section 20.8 alongside the associated test reference.

Pivots are permitted for use in:

1, 2 and 3 Leaf Types:

FrameTypes: 1, 2, 3, 4, 5 and 6 (excluding Slimline1.2, 2.2, 1.4 and 2.4)

LSASD, ULSASD, DASD, LSADD, ULSADD & DADD. Configurations:

The frame head dimensions must be a minimum of 100mm wide x 44mm deep (excluding the stop if they are to be used with single acting frames) to accommodate the body of the top pivot.

The pivots are to be fitted in accordance with manufacturer's instructions taking into account the necessary details for fire resistance as stated above.

ocument details a subset of evidence from an extent *esting regime covering a wide range of products ite Pivots may be used on single acting doorsets with face fixed self closers or they may be used in conjunction with their associated double acting floor spring (supplied by the same manufacturer as the pivot set). The following pivot sets are assessed for use with the Strebord doorset design (offset pivot variations are not allowed by this assessment):

- Hoppe AR700 series pivot set
- Rutland PS 190 pivot set
- Rutland PS 260 pivot set

11.4.6 Cranked Hinges

Cranked hinges have been successfully tested in the Strebord® doorset design for 30 minute applications (reference test BMT/FER/F13263A)

The permitted hinges are the following tested Eclipse cranked bearing butt type hinge:

These hinges are permitted for use in:

Leaf Types: 4

FrameTypes: 1.1, 2.1, 1.3 and 2.3

The hinges must be fitted onto 1mm intumescent gaskets.

The hinges must be fixed in accordance with manufacturer's instructions including using the supplied hinge fixings and taking into account the necessary details for fire resistance as stated above and given within this assessment report, based on the leaf size envelopes and required intumescent specification for leaf type 4.

Cranked H	linges	
Leaf	Тор	150 – 200mm from head of leaf to top of hinge
height: 1201-	2 nd	Min - 200mm from top hinge Max - centrally between top and bottom hinge
2400mm	Bottom	150 – 300mm from foot of leaf to bottom of hinge
	Тор	150 – 200mm from head of leaf to top of hinge
Leaf height:	2 nd	Min - 200mm from top hinge Max - centrally between top and 3 rd hinge
>2401mm	3 rd	Min – 200mm from bottom hinge Max – centrally between 2 nd and bottom hinge
	Bottom	150 – 300mm from foot of leaf to bottom of hinge
		150 – 300mm from foot of leaf to bottom of hinge 150 – 200mm from head of leaf to top of hinge Min - 200mm from top hinge Max - centrally between top and 3 rd hinge Min – 200mm from bottom hinge Max – centrally between 2 nd and bottom hinge 150 – 300mm from foot of leaf to bottom of hinge

11.5 Automatic Closing

11.5.1 Overhead Face Fixed Closers: Single Acting

Closers which have been successfully tested in the Strebord® doorset design for 30 minute applications are detailed in section 20.3 alongside the associated test reference.

This Field of Application also considers closers tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and these items are listed in section 20.3 alongside the associated test reference.

These closers are permitted for use in:

Leaf Types: 1, 2, 3, 4

FrameTypes: All single acting frames

Based on the range of overhead face fixed closers tested in Strebord® doorset design, alternative closers are acceptable, providing the closers have been tested to BS 476: Part 22: 1987 or BS EN 1634-1 in a timber door assembly achieving a minimum of 30 minutes.

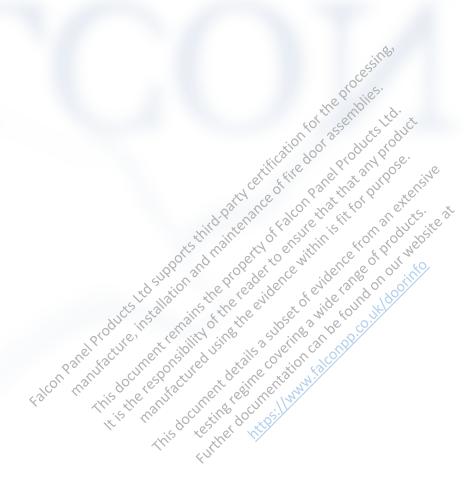
Alternatively, Certifire approved overhead face fixed closers approved for 30 minutes in the following:

- A closer that is approved with an ITT door assembly is acceptbale for use with doorsets in timber based door frames (i.e. a door assembly containing intumescent, a timber frame and a timber leaf),
- A closer that is approved with an ITM door assembly is acceptable for use with doorsets in steel frames (i.e. a door assembly containing intumescent, a metal frame and a timber leaf)

Providing all the requirements for intumescent and frame are complied with.

Note:

1 – Closers with mechanical (i.e. not automatically disengaged through alarm system or similar) back-check/hold-open functionality are not approved for the Strebord® 30 minute door assembly system.



11.5.2 Overhead Concealed Closers: Single and Double Acting

Overhead concealed closers which have been successfully tested in the Strebord® door assembly system for 30 minute applications are detailed below:

- Rutland ITS 11204
- Arrone 7383

These closers are permitted for use in:

Leaf Types: 1 and 2

FrameTypes: 1.1, 2.1, 1.3 and 2.3 where the stop is increased to 18mm and minimum density of frame is 510kg/m³.

Based on the size of overhead concealed closers tested in Strebord® door assemblies, alternative closers are acceptable, providing the closers have been tested to BS 476: Part 22: 1987 or BS EN 1634-1 in a timber door assembly having a minimum¹ 44mm thick door leaf and achieved a minimum of 30 minutes.

The required intumescent specification for the approved closers is given in section 9. The closers may be used with a single strip or double strip intumescent arrangement at the head of the doorset providing the associated intumescent protection is fitted to the closer. The single strip must be at least 15 x 4mm.

Alternatively, Certifire approved overhead face fixed closers approved for 30 minutes in an ITT door assembly (i.e. a door assembly containing intumescent, a timber frame and a timber leaf) is acceptable providing all the requirements for intumescent and frame are complied with.

Note:

- 1 If evidence for alternative closers are from a leaf thickness exceeding 44mm, the closer may be included providing the Strebord® door core thickness used is the same or exceeds that of the test evidence to support the closer.
- 2 Closers with mechanical (i.e. not automatically disengaged through alarm system or similar) back-check/hold-open functionality are not approved for the Strebord® 30 minute door assembly system.



11.5.3 Jamb Mounted Concealed Closers: Single Acting

Jamb mounted concealed closers which have been successfully tested in the Strebord® door assembly system for 30 minute applications are detailed in section 20.3 alongside the associated test reference. These are:

The Astra 4000 Series

This Field of Application also considers closers tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and these items are listed in sections 20.3 alongside the associated test reference.

These closers are permitted for use in:

Leaf Types: 1 and 2

Frame Types: Frames 1.1, 2.1, 1.3 and 2.3 and frame type 8 for steel door frames.

For timber based frames the perimeter intumescent must be a minimum of 1 No. 15 x 4mm centrally fitted in the frame reveal or leaf edge or 2No. 10 x 4mm intumescent seals spaced 10mm apart in either the frame reveal or leaf edge.

For steel frame type 8 the required intumescent specification is given in the relevant envelope and table in section 4.

The closer may be fitted up to 1000mm from the threshold.

11.5.4 Flush Bolts

Flush bolts may be incorporated centrally into the top and bottom of one meeting edge, providing the following maximum mortice dimensions are not exceeded

- 210 long x 22mm deep x 22mm wide,
- Flush bolts must be steel or brass and the mortice must be as tight to the mechanism as is compatible with its operation.
- All edges of the mortices in the frame and leaf must be protected with intumescent gaskets as specified in section 9.2.3.
- Intumescent strips in door leaf edge must be located opposite the flush bolt so that they run continuously to the head of the leaf.
- Bottom flush bolts cannot be used in conjunction with a drop down seal morticed into the bottom edge of the doorset

Alternatively, the hardware manufacturers tested gaskets may be used. See diagram below for example of intumescent protection to flush bolt:



11.6 Additional Items of Hardware

11.6.1 Handles

11.6.1.1 **Pull handles**

Pull handles may be surface-fixed or bolted through the door leaf, providing they are steel or brass and the length is limited to 1200mm between the fixing points. If through-fixed, there must be no more than 1mm clearance between the hole and stud.

11.6.1.2 Lever handles

The following handles have been tested in the Strebord doorset design and are approved for use. Alternative handles are permitted providing they meet the specification given above:

Tested Handle Specification		
Product Reference (Test Reference)	Manufacturer /Supplier	Dimensions (mm)
Ref. 1A000 Balmoral inline lever type handle (WF391032A) ¹	Fab & Fix	240 x 30
Ref. 2812H Lever on rose type handle (WF369636) (BMT/FEP/F16174)	Smith & Locke	Rose: Ø50
Union steel lever on rose type handle (WF374929B)	Union	Rose: Ø52
ZPS Steel lever handle on rose with escutcheon (CFR1812191_1)	Zoo Hardware	Handle: Ø19 x 130 Rose: Ø48 x 7 Escutcheon: Ø51 x 4 (stop face) Ø51 x 8 (hinge knuckle face)
Steel lever type handle (WF392155) ¹	Arrone	Rose: Ø53
Steel lever type handle (WF374929B)	Zoo Hardware	Rose: Ø52
	Falcon Panel Products Lide sur This document	Rose: Ø52

11.6.2 Push Plates/Kick Plates

Face-fixed hardware such as push plates and kick plates may be fitted to the doorsets provided that their fitting requires the removal of no part of the door leaf. Based on test experience a limited area of face fixed metal plate has been shown as having no detrimental influence on the fire performance of the timber based fire reisting doorsets, subject to the provisos stated in this section.

Face fixed push plates and kick plates are permitted up to a maximum of 20% of the door leaf area if mechanically fixed and a maximum of 30% if bonded with a thermo-softening contact adhesive. Plates must not return around the door leaf edges.

11.6.3 Panic Hardware

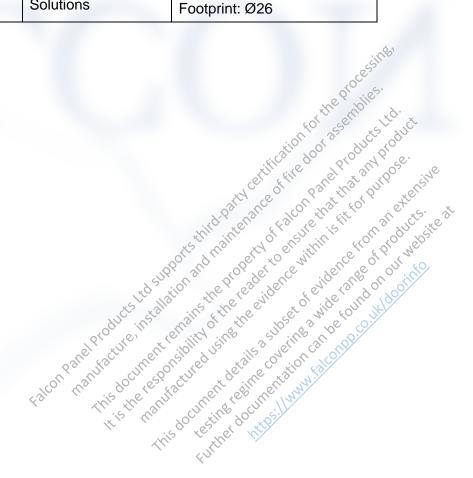
Panic hardware may be fitted, provided that its installation does not require the removal of any timber from the leaf, stop or frame reveal and it in no way interferes with the self-closing action of the door leaf.

11.6.4 Door Security Viewers

Door security viewers with brass or steel bodies of a diameter less than or equal to 15mm may be used provided that the through-hole is bored tight to the case of the viewer (maximum tolerance +1mm). Lenses must be glass and the item must be bedded into a tested intumescent mastic.

The following eye viewer has been tested and is approved for use. Alternative eye viewers are acceptable providing they meet the specification given above:

Tested Security Viewer Specification			
Product Reference (Test Reference)	Manufacturer /Supplier	Dimensions (mm)	
STS4008 (WF391032A) ¹	Sealed Tight Solutions	Body: Ø14 Footprint: Ø26	



11.6.5 Environmental Seals

The following flame retardant acoustic, weather and dust seals are approved for use with the Strebord doorset design and timber based door frames:

- Fire and Acoustic Seals Ltd: FAS35, FAS39, FAS-Trident, FAS-Twin
- Lorient Polyproducts Ltd: IS1212, IS1511, IS7025, IS7060
- Mann McGowan ACS-1, TD5, Tri-blade
- Norsound Ltd: NOR710, NOR710FR, NOR710SR, NOR710STOP, NOR720
- Raven Products Pty. Ltd: RP120, RP124, RP134, RP150, RP500, RP520, RP670
- Reddiplex Ltd: 9927, 9945, 9946, 10623, 11300, 11301, 11302
- Schlegal: Aquamac 21
- Sealed Tight Solutions Ltd: ST1009, ST1009K
- Sealmaster: Delta, Double Fin Seal, Duxback

It must be ensured that the fitting of the seals listed above does not interfere with the activation of the intumescent seals or hinder the self-closing function of the leaves.

11.6.6 Letter Boxes/Plates

Letter boxes/plates may be fitted providing the product can demonstrate contribution to the required performance of this type of 30 minute door assembly design, when tested to BS 476: Part 22: 1987 or BS EN 1634-1, when installed within a timber based doorset of comparable thickness. Products may be fitted up to 1200mm from floor level and not closer than 100mm to any leaf edge. The area occupied by the letter box/plate must be deducted from the area of glazing, if both elements are fitted.

Letterboxes/plates which have been successfully tested in the Strebord® doorset design for 30 minute applications are detailed in section 20.7 alongside the associated test reference.

This Field of Application also considers letterboxes/plates tested in similarly constructed timber-based door assemblies where the evidence is made available to the sponsor and these items are listed in sections 20.7 alongside the associated test reference.

The letter boxes must be fitted in accordance with manufacturer's instruction of the letter boxes must be fitted in appropriate or manufacturer's instruction of the letter boxes must be fitted in accordance with manufacturer's instruction.

The intumescant The letter boxes must be fitted in accordance with manufacturer's instructions, they must be fitted no closer than 80mm to any other aperture or mortise. *esting regime covering a wide range of products ite of the products of the continue of the product of the prod

The intumescent rptoection must be fitted to the letterplate as disted below. No other letterplates other than those listed below may be fitted to the Strebord decreased as a listed below. Octument details a subset of ander table form The intumescent rptoection must be fitted to the letterplate as listed below. No or letterplates other than those listed below may be fitted to the Strebord doorset design:

Tested Letter Box/Plate Specification					
Product Reference	Manufacturer	Dimensions	Hardware Intumescent		
(Test Reference)	/Supplier	(mm)	riardware intamoscont		
ERA Fab & Fix 3C018 with security shield 3F005	ERA	75(h) x 310(w)	Fire and Acoustic Seals Ltd Spartan FASGP1013 100mm(l) x 40mm(w) x 1.3mm(t)		
Royde & Tucker LP08	Royde and Tucker	80(h) x 312(w)	Royde & Tucker LP008 intumescent kit		
Sealed Tight Solutions Ltd STS 4001	Sealed Tight Solutions	80(h) x 310(w)	Sealed Tight Solutions Ltd intumescent liner 30mm(w) x 2.3mm(t)		
Royde & Tucker LP08 with TS008 security cowl	Royde and Tucker	80(h) x 312(w)	Royde & Tucker LP008 intumescent kit		
Lorient Polyproducts Ltd RJ008	Loreint Polyproducts	As supplied	Supplied with letterplate		

11.6.7 Threshold Seals

The following types of automatic threshold drop seals may be recessed into the bottom edge of leaves to this design without compromising the performance.

Threshold Seal Specification			
Product Reference	Manufacturer /Supplier		
Pemko 411_NBL / PKL / RL / SL	Assa Abloy		
Schall-Ex Duo L-15	Athmer		
FAS45	Athmer Fire & Acoustic Seals Ltd. Lorient Polyproducts Ltd. Mann McGowan Ltd Norsound Ltd. Raven Reddiplex Ltd.		
LAS8001si	Lorient Polyproducts Ltd.		
DD-1703ACU, DD-420S	Mann McGowan Ltd Norsound Ltd. Raven Reddiplex Ltd. Sealed Tight Solutions Ltd.		
NOR810, NOR810S, NOR810dB+	Norsound Ltd.		
RP8Si	Raven knikelikeria of Fall he in is fill of		
HID, HEID	Reddiplex Ltd.		
STS 422, STS 422GT	Sealed Tight Solutions Ltd.		
DRP2712	Sealmaster (Dixon International Group Ltd)		
	Sealed Tight Solutions Ltd. Sealmaster (Dixon International Group Ltd)		

11.6.8 Air Transfer Grilles

The following Pyroplex air transfer grilles have been assessed as acceptable for use with the door leaf types 1 and 2 referred to in this assessment based on test report WF146520 (held on file by Warringtonfire).

The grilles must be fitted 100mm from the edge of the door leaf and 80mm apart if more than one grille is to be fitted. The area occupied by the air transfer grille(s) must be deducted from the percentage of glazing, if both elements are fitted. The grilles may be fitted up to a maximum height of 2200mm from the threshold.

Part No.	Dimensions (mm)	Air Flow (sq. cm)	Compatible Faceplates
ATG 1500	150 x 150	153	FP1500
ATG 1503	150 x 300	307	FP1503
ATG 1300	300 x 300	614	FP1300
ATG 2251	112 x 225	161	FP2251
ATG 2250	225 x 225	323	FP2250

The Pyroplex air transfer grilles must be installed in accordance with the manufacturer's installation details, which include a 6mm thick hardwood aperture liner and Pyroplex intumescent mastic applied around the perimeter of the grille. Full details can be obtained from Pyroplex Ltd.

11.6.9 Cable Loop

The following cable loops have been successfully incorporated in the tests on Strebord 44 and Strebord 54 doorset design (the Securefast cableloop has been permitted with leaf 1 and 2 on the basis that it is smaller than the cableloop successfully tested on the the Strebord 44 design):

- Abloy EA280 (footprint) 320mm (h) x 25mm (w) including a Ø12 spring assembly
- Securefast steel cableloop (footprint) 290mm (h) x 25mm (w) including a Ø12 spring assembly (tested

This cable loops are permitted for use in:

Leaf Types: 1 and 2

FrameTypes: 1.1, 2.1, 1.3 and 2.3 (minimum density 510kg/m³) Configurations Single acting, Single and double leaf application.

The top of the loop should be below 1200mm from the threshold and no closer than 200mm from another item of hardware.

The body of the cable loop is to be located centrally in the frame. The entry point for the cable into the leaf is to be central within the leaf thickness

The cable loops are to be protected using a minimum 2mm thick intumescent liner and can be used in conjunction with a single strip or double strip intumescent arrangement, where the single strip arrangement is no less than 15 x 4mm. The seal can be in the frame reveal or the leaf edge.

11.6.10 Cableways

Cableways have been successfully tested on the Strebord doorset design on leaf type 1 and have been deemed acceptable for use on Leaf Types 1 and 2.

Cableways are to be used to route cables though or around the door leaf to operate electronic hardware. The cableway will be routed from a cable loop fitted at the jambs of a doorset to the relevant item of hardware (e.g. a lockset or electronic strike).

The methods for cable routing are given in section 5.11.

11.6.11 Security Chains

Face fixed security chains may be fitted at the closing edge of single leaf, single acting. doorsets providing they do not remove any material from the door leaf or frame and do not interfere with any edge mounted sealing system.

It is also possible to fit the following tested concealed security chain to single leaf single acting . doorsets (leaf types 1, 2 and 3) without compromising the integrity performance of the doorsets

Frame types: 1.1, 2.1, 1.3, 2.3

The mortice for the chain must be no closer than 50mm to any other mortice within the doorset. The item does not require any additional intumescent protection and can be fitted up to 1400mm from the threshold:

Door Selectors may be fitted providing the materials are non-combustible and the installation does not require the removal of any timber from the leaf, stop or frame reveal and the installation interfere with the self-closing action of the door leaf This document de tails a substitution of the s testing telline cheritation can be for Ints document test do not blitty of the responsibility of the ne respuishmed using the Ochlitein utteline coverine on interfere with the self-closing action of the door leaf

testing tegine covering a mide range of products like of the continue of the c

12 Installation

This section considers the installation of the different types of frames and doorset. This section considers:

- the door frame and architrave installation position relative to the wall
- the fire stopping between the frame and the wall
- the fixing requirement including packers
- the requirements for door edge gaps
- the trimming of door edges

The following table details which wall type the frame can be installed into

Frame type	Wall construction
Frames1, 2, 3, 4, 5, 6, 11	Masonry wall
	Timber stud partition
	Steel stud partition
Frame 7 – TBA	ТВА
Frame 8 – Steel Studco EZ Jamb	Timber stud Partition
	Steel stud partition
Frame 9 – TBA	ТВА
Frame 10 – Steel – One piece	Masonry wall
	High Density blockwork wall
	Concrete walls

Mestadiut

Alles tidiut

Alles This give responsibility of the reader to ensure that the responsibility of the reader to ensure the reader that the reader the reader to ensure the reade A Panel Products It'd supports third part year three doors, and maintenance of the land fram, frame products the supports third partie of fire of the following sections consider the fire stopping arrangement between door frame and wall. This document details a subset of a wide range of products.

12.1 Door Frame Installation: Frame 1, 2, 3, 4, 5, 6, 11

Generic systems 12.1.1

The following tables detail permitted fire stopping details

The architrave can be softwood minimum density 500 kg/m³ or MDF minimum density 600kg/m³. Architrave to be mechanically fixed in place.

For the generic systems that specific the application of intumescent mastic, the sealant must have been fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1 and shown to provide at least the level of fire reistance required from the doorset.

Guidance for various methods of sealing the frame to structural opening gap is also given in BS 8214: 2016, "Code of practice for fire door assemblies", which may be referred to where appropriate.

Mineral rock fibre with Architraves

Wall construction	Timber stud / masonry	
Architrave	15mm thick overlapping 15mm each side	
Linear gap joint seal	Mineral rock fibre packed to full depth	
Maximum gap size	20mm	

Mineral rock fibre and mastic with architraves

Wall construction	Steel and Timber stud / masonry	
Architrave	15mm thick overlapping 15mm each side	OCES!YS)
Linear gap joint seal	Mineral rock fibre packed to full depth with 10mm intumescent capping both sides	Certification for the products to duck to the state of the last and pose sine
Maximum gap size	20mm	"Helpatho co, Legin fight to all office,"
		Falcon Panel Products the Production of the Product

Mineral rock fibre and mastic

Wall construction	Steel and Timber stud / masonry	
Architrave	None	
Linear gap joint seal	Mineral wool packed to full depth with 10mm intumescent capping both sides	
Maximum gap size	15mm	

Intumescent mastics with architraves

Wall construction	Timber stud / masonry	
Architrave	15mm thick overlapping 15mm each side	7.1
Linear gap joint seal	Minimum 10 mm depth of intumescent mastic each side	
Maximum gap size	10mm	

Lacon band kodites firstalities and the brokesting and the brokesting and before the brokesting and brokesting

12.1.2 Specific fire stopping solutions

12.1.2.1 Sealed Tight Solutions Ltd

Based on test test WF 386595 which supports assessment WF419831 the following Sealed Tight Solutions Ltd have been considered appropriate.

ST88 intumescent mastic

Wall construction	Steel and Timber stud / masonry	
Architrave	Optional	
Linear gap joint seal	10mm depth ST88 intumescent mastic either side.	
Maximum gap size	10mm	

Mineral Fibre or ST99 fire foam with ST88 intumescent mastic both sides

Wall construction	Steel and Timber stud / masonry
Architrave	Optional
Linear gap joint seal	ST99 full depth foam or mineral wool and 10mm deep ST88 intumescent mastic each side
Maximum gap size	10 to 20mm

Falon Parel Products the British of the Product of the British of

ST99 Expanding foam with architraves

Wall construction	Steel and Timber stud / masonry	
Architrave	18mm thick overlapping 15mm each side minimum 45mm wide	
Linear gap joint seal	Full depth foam	
Maximum gap size	20mm	

Large gaps with timber/non-combustible subframe

= an go gape man	timbor, non compact
Wall construction	Steel and Timber stud / masonry
Architrave	18mm thick overlapping 15mm each side minimum 45mm wide I
Linear gap joint seal	Timber or non-combustible sub frame bedded on wall with ST88 and gap between sub frame and frame filled with ST99
Maximum gap size	Gap between frame and sub frame 25mm
	Overall gap 60mm max

Lacou base broduces the desire of the following the state of the state of the following the state of the state of the following the state of the state of the following the state of the state of the following the state of the state of the following the state of the following the state of the state

12.1.2.2 Fire and Acoustics Seals Ltd

Based on test test WF 414882 which supports assessment WF385912 the following Fire and Acoustic Seals Ltd Ltd have been considered appropriate.

Intumescent mastics

Wall construction	Timber stud / masonry
Architrave	Optional
Linear gap joint seal	Minimum 10 mm depth of intumescent mastic each side
Maximum gap size	10mm

Expanding foam and mastics - Wall depth 100mm min

Wall construction	Steel and Timber stud / masonry
Architrave	Optional
Linear gap joint seal	Successfully tested full depth Fire and Acoustic Seals Ltd foam and 10mm deep intumescent mastic each side
Maximum gap	25mm

Calcon Panel Products the responsibility distributes the legisles of engine for the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of the responsibility of the factor of the state of

Expanding foam with architraves - Wall depth 70mm min

Wall construction	Steel and Timber stud / masonry
Architrave	18mm thick overlapping 15mm each side minimum 45mm wide
Linear gap joint seal	Successfully tested full depth Fire and Acoustic Seals foam and 10mm deep intumescent mastic each side
Maximum gap size	25mm

12.2 Door Frame Installation: Frame 7 TBA

12.3 Door Frame Installation: Frame 8 studeo

This bespoke framing system must following the installation method as given by the Falcon Panel Products which is based on the test evidence (fixing details including screw type, length and centres). The key factors for this system are:

• The aperture around the door opening is lined out with a timber stud of minimum density 500 kg/m³, which is full thickness of the wall and a minimum of 32mm deep.

The system is designed that the frame oversails the plasterboard and the frame rebate is fixed directly to the stud, which means there is no gap between door frame and door rebate.

12.4 Door Frame Installation: Frame 9 TBA

12.5 Door Frame Installation: Frame 10

The frame must be fixed using the appropriate type and length of fixing for the wall and must include a minimum of 1 fixing no more than 600mm apart and 200mm from a corner for head and jambs. The fixing must be located back from the face of the wall so that it does not split the wall when tightened.

Any gaps between wall and frame up to maximum of 10mm must be capped off with intumescent mastic. The sealant must have been fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1 and shown to provide at least the level of fire reistance required from the doorset.

12.6 **Packers**

For frames 1 to 6 and 11, packers between the frame and the structural opening can be timber of equal density to the frame, or plywood, or plastic packers if fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1.

Plastic packers should be cut short and capped with intumescent mastic unless test evidence demonstrates that mastic capping is not required.

No packers are needed for frame 8.

Metal shims or non combustible packer must be used when installing frame 10, if required.

12.7 Wall Types

The frame needs to be fixed back to a supporting construction which will remain in place for the duration of the fire resistance period. The following aspect of the different supporting constructions need to be considered.

12.7.1 Masonry, Concrete & Solid Blockwork

These are considered as rigid constructions and are solid throughout the depth of the wall and have inherent fire resistance. These walls are denoted as rigid constructions in BSEN 1364 Part 1 as they deflect very little during a fire test. Due to the solid nature of the wall firestopping as detailed above will be adequate. Highly perforated blockwork is not covered by this category and specific test evidence must be referenced to ensure adequate support during the fire exposure period.

12.7.2 Steel Stud Partitions

These are considered as flexible constructions and incorporate large voids in their construction. These walls deflect during a fire test. Specific evidence is required to ensure the stud supporting the door frame is stabilised to reduce deflection during the fire test and the aperture is adequately lined to prevent gases getting into the void.

12.7.3 Timber Stud Partitions

These are not categorised but tend not to distort significantly during a fire test. A timber stud does not need to be stabilised during the fire test and the aperture will only need to be lined if Falcon Panel Products Lides Up of stallation and maintenance of fine door assemblies. the timber stud is not fully protecting the void in the partition. Rand Products Lides Upports third party certification for the processive in Paral Products Lides Upports third party certification for the products Lides Upports third party certification for the products Lides Upports the processive the processi

This document responsibility of the reader to ensure that the responsibility of the reader to ensure that the responsibility of the reader to ensure the responsibility of the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the reader This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

Manufactures using racing covering a wide range of products.

Enther documentation and example of products ite?

12.7.4 Bespoke Walls & Partitions

These will require specific test evidence.

12.8 Onsite Leaf Size Adjustment

The door leaves should not be modified on site so only limited actions can be taken, see table below.

Leaf Size Adjustment Specification		
Element	Reduction	
Lipping	The dimensions stated in section 5.5 may be reduced by 1mm for fitting purposes but cannot go below the minimum.	

12.9 Door Gaps

For fire resistance performance, door edge gaps and alignment tolerances must fall within the range shown in the following table.

Door Edge Gaps & Alignment Tolerance Specification		
Location Dimensions		
Door edge gaps A minimum of 2mm and a maximum of 4mm		
Alignment tolerances	Leaves must not be proud of each other or from the door frame by more than 1mm	
Threshold 10mm between bottom of leaf and top of floor covering		

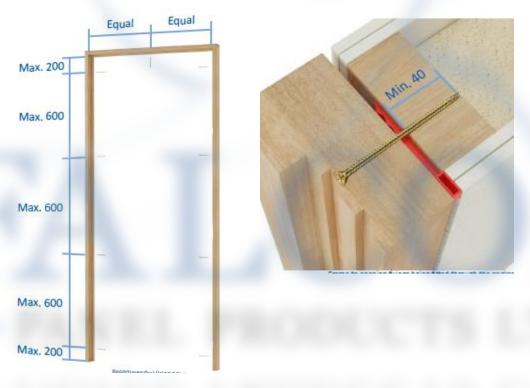
12.10 Structural Opening

The supporting construction must provide the required level of fire resistance designated for the doorset design and be a suitable medium to permit adequate fixity.

Facon Panel Products the stability of the field by the following string the following string the products the product string th

12.11 Fixings

The following drawings show the location of the fixings and the minimum depth of 40mm into the wall. A plastic packer is shown and proprietary plastic packers have been successfully tested.



Frame fixing locations

Frame fixing depth

The fixings must be of the appropriate type for the supporting construction.

13 Insulation

Insulation performance may be claimed for a doorset to this design meeting the following.

Insulation Performa	
Туре	
Partially insulating	Doorsets incorporating up to 20% of non-insulating glazing
Fully insulating	Unglazed doorsets and glazed doorsets with fully insulated glass (see section 6 for insulating glass types)
	Details Doorsets incorporating up to 20% of non-insulating glazing Unglazed doorsets and glazed doorsets with fully insulated glass (see section 6 for insulating glass types) Note that the second doorsets with fully insulated glass (see section 6 for insulating glass types) Note that the second doorsets with fully insulated glass (see section 6 for insulating glass types)

*esting regime covering a wide range of products site re-

14 Smoke Control

14.1 General

Fire doorsets required to provide an ambient temperature smoke control function will need to fit smoke seals, or combined intumescent/smoke seals, which have been tested in accordance with one of the following test methods:

- BS 476-31.1: 1983; Fire tests on building materials and structures, Section 31.1 Method of measurement under ambient temperature conditions
- BS EN 1634-3: 2004: Fire resistance tests for door and shutter assemblies —Part 3: Smoke control doors and shutters

In order for the doorset to provide the smoke leakage performance demonstrated by the smoke leakage test evidence, the orientation and position of the smoke seals, any interruptions, door edge gaps, and the type and configuration of the doorset must be consistent with the details tested. Additionally, any other components installed where smoke leakage may occur, such as glazing, hardware, or sealing between the frame and structural surround, must also be taken into account.

The tested leakage rate will be expressed in the test reports as the volume of air leakage through the complete specimen, per linear metre of door gap, per hour (m³/m/hr), which is measured at the pressure differences stated in the relevant standard e.g. 10Pa, 25Pa and 50Pa. The test reports will also state the tested threshold arrangement (i.e. taped or fitted with a threshold seal).

Combined fire and smoke seals can be used in lieu of separate fire seals and perimeter smoke seals, where there is appropriate fire resistance and smoke leakage test evidence to support the respective performances.

The fitting of smoke seals must not compromise the fire resistance performance of the doorset designs assessed within this field of application. Smoke seals that are fitted to fire resisting doorsets must therefore have suitable fire resistance test evidence that demonstrates the performance of the seal in fire test conditions, when tested as part of a complete doorset, to the relevant test standard (e.g. BS 476: Part 22: 1987 or BS EN 1634-1). The configuration and location of the seal in the fire test evidence must align with that tested for smoke leakage.

Smoke seals can compromise the fire resistance performance of door designs by, for example, preventing the door leaf from closing fully within the frame reveal or igniting if the seal is fitted to a door design without insulation performance. It is therefore recommended the noke spicable to nicable to native the new transfer the door asserting the products the day of the door asserting the new transfer the new transfe that fire test evidence is sought that directly supports the use of the smoke seal with the door Janufacture installation and maintenance of the leader to ensure that the leading of the reader to ensure that the leading of the reader to ensure that the leader to ensure the leader to ensure that the leader to ensure the leader to ensure the leader to ensure that the leader to ensure t This document remains the property of Falcon Panel Products that any problem.

This document remains the property of the evidence within is fit for purpose. design assessed herein, or, where cascaded evidence is being relied upon, the smoke seal manufacturer is contacted to verify that the fire test evidence for the seal is applicable to the door design assessed herein. This document detains a subset of evidence from an extensive of products.

Report No: Chilt/A02066 Rev O Page 459 of 519

Eaten Panel Products lid supports third party certification for the products lid supports third party entire door assemblies.

This document repairs the property of a locure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that that any product of the reader to ensure that the reader to ensure that that any product of the reader to ensure that the reader to ensure that the reader to ensure the reader to ensure that the reader to ensure the reader This document remains the property of the evidence within is fit for purpose.

This document remains the property of the evidence within is fit for purpose.

This document details a subset of evidence trange of products.

*Esting regime covering a wide range of products the at

15 Conclusion

If the Falcon Panel Products Ltd. Strebord® 44 doorset design (based on Leaf 1, 2, 3 and 4 and Frames 1 - 6, 8, 10 and 11), constructed in accordance with the specifications documented in this Field of Application, were to be tested in the appropriate configuration in accordance with BS 476: Part 22: 1987, it is our opinion that it would provide a minimum of 30 integrity and insulation (subject to section 14).

16 Declaration by the Applicant

- 1) We the undersigned confirm that we have read and comply with obligations placed on us by the Passive Fire Protection Forum (PFPF) Guide to undertaking technical assessments and engineering evaluations based on fire test evidence 2021 Industry Standard Procedure
- 2) We confirm that any changes to a component or element of structure which are the subject of this assessment have not to our knowledge been tested to the standard against which this assessment has been made.
- 3) We agree to withdraw this assessment from circulation should the component or element of structure, or any of its component parts be the subject of a failed fire resistance test to the standard against which this assessment is being made.
- 4) We understand that this assessment is based on test evidence and will be withdrawn should evidence become available that causes the conclusion to be questioned. In that case, we accept that new test evidence may be required.
- 5) We are not aware of any information that could affect the conclusions of this assessment. If we subsequently become aware of any such information, we agree to ask the assessing authority to withdraw the assessment.

(in accordance with the principles of FTSG Resolution No. 82: 2001)

(in accordance with the principles of FTSG Resolution No. 82, 2001)
Nach .
Signed:
· <i>V</i>
Name:
Neil Harrison
Neil Harrison For and on behalf of: Falcon Panel Products Ltd. **Products Ltd.** **Pro
For and on behalf of: Falcon Panel Products Ltd. Falcon Panel Products Ltd. Falcon Panel Panel Products Ltd. Falcon Panel Pan
A State of the Pare that that an at eter is
Hoofs thin sinte to the state of braining the following sinters of the state of the
Facon Panel Products Lite and Land Betting the product of the day of the product
Pate Protite, Chueting Line Height aging aging the Control of the
Falco, this the resultace doctive testiment testiment things
This is the total

turther documentation and example of products are at the covering and example found on the continuentation and continuentation

17 Limitations

The following limitations apply to this assessment:

- This field of application addresses itself solely to the elements and subjects discussed 1) and do not cover any other criteria. All other details not specifically referred to should remain as tested or assessed.
- 2) This field of application report is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available to Warringtonfire, the assessment will be unconditionally withdrawn, and the applicant will be notified in writing. Similarly, the assessment evaluation is invalidated if the assessed construction is subsequently tested since actual test data is deemed to take
- This field of application has been carried out in accordance with Fire Test Study 3) Group Resolution No. 82: 2001.
- 4) Opinions and interpretation expressed herein are outside the scope of UKAS accreditation.
- 5) This field of application relates only to those aspects of design, materials and construction that influence the performance of the element(s) under fire resistance test conditions. It does not purport to be a complete specification ensuring fitness for purpose and long-term serviceability. It is the responsibility of the client to ensure that the element conforms to recognised good practice in all other respects and that, with the incorporation of the guidance given in this field of application, the element is suitable for its intended purpose.
- This field of application report represents our opinion as to the performance likely to 6) be demonstrated on a test in accordance with BS 476: Part 22: 1987, on the basis of the test evidence referred to in this report. We express no opinion as to whether that evidence, and/or this field of application would be regarded by any Building Control authorities or any other third parties as sufficient for that or any other purpose.
- This report may only be reproduced in full. Extracts or abridgements of reports shall 7) not be published without permission of Warringtonfire. All work and services carried out by Warringtonfire Testing and Certification Limited are subject to, and conducted in accordance with, the Standard Terms and Conditions of Warringtonfire Testing and Certification Limited, which are available at https://www.element.com/terms/termsand-conditions or upon request.
- The version/revision stated on the front of this field of application supersedes all 8) from Application of the Applicat previous versions/revisions and must be used to manufacture doorsets from the This document remains the property of Facon Panel troducts the property of Facon Panel troducts in the Property of Panel troducts in the Property of Panel troducts in the Panel Troducts in stated validity date on this front cover. Previous revisions of the Field of Application cannot be used once an updated Field of Application has been issued under a new revision. stated validity date on this front cover. Previous revisions of the Field of Application manufactured usine regime covering a wide range of products.

 This document detains covering a wide range of products.

18 Validity

- 1) The assessment is valid 5 years from the date of issue, after which time it must be submitted to Warringtonfire for technical review and revalidation.
- 2) This assessment report is not valid unless it incorporates the declaration given in section 16 duly signed by the applicant.

Signature:		
Name:	Dr K.D.S Towler*	P N Barker*
Title:	Senior Product Assessor	Senior Product Assessor

Eaton Panel Products Lide installation and maintenance of fine door assemblies.

This document, remains the property of the reader to ensure that that any product the responsibility of the reader to ensure the reader to ensure the responsibility of the reader to ensure the responsibility of the reader to ensure the reader to ensu This document remains the property of Falcon Panel Products that any probe.

This document remains the property of the evidence within is fit for purpose.

This document remains the distributed using the evidence within is fit for purpose.

This document details a subset of evidence from an extensive

*Esting regime covering a wide range of products the at

^{*} For and on behalf of Warringtonfire

19 Appendix A: Revisions

Revisions

Rev.	BM TRADA Ref.	Date	Description
Α	02251	01/03	New test data incorporated (RF02109) to increase leaf dimensions and glazed area.
В	03052	03/03	Inclusion of data from test RF03018.
С	05080	04/05	Inclusion of data from test Warres 144699 and Warres 141445.
D	06067	05/06	Inclusion of data from Chilt/RF05134 and Chilt/RF06067. PVA gluelines, MDF frames, leaf size increases, alternative perimeter intumescent seals and frame density amendments made.
Е	06083	10/06	Inclusion of data from Chilt/RF06083 to include lower density lippings.
F	06175F	01/07	Changes to include Pyroswiss glass, ventilation grilles, Pyroplex seals and more flexibility in the glazing location.
G	08040	05/08	Update into new format and revalidation for a further 5 years. Inclusion of data from RF07109, Warres 141445. Data sheet revised in terms of intumescent seal type and size.
Н	08204	10/08	Revalidation for a further 5 years and inclusion of data from RF08088, RF08094, RF08125, RF08135, WF153130, WF146520 and WF137714 (see Appendix A for details).
I	09232	15/12	Addition of Nordform steel frame data contained in RF09031, grooves based on IF09145, Pyrotech 630 glazing system based on IF08011, Norfast perimeter seal tested in RF10011 and re-instatement of Type 617 seals and additional glass types.
J	12120	07/12	Addition of Strebord© 35+, Strebord© 38+ and Strebord© Superpan designs, an expansion of the decorative groove scope within the facing section of this assessment, reduction in density and dimensions of the door frames and inclusion of identification discs/signage based on data from RF03114, RF11160, RF11172, RF11192, RF12061.
К	13155	07/13	Addition of CS Group edge protectors and post- formed Acrovyn based on RF11059. Addition of Pilkington Pyroclear based on RF11177. Included the option to fit the Safehinge™ product. Increased the maximum leaf dimensions based on the Strebord© 44 panelled design. Addition of Norsound hardware gaskets based on IF13014. Addition of Norsound glazing systems IF12011 and IF13061.
L	15076	07/15	Addition of Streframe glazing beads based of PF14029; Morland MDF glazing beads based of
		4860	The 14029, Monand Mer Grazing beads based of the 14029, Monand Mer Grazing beads based of the 14029 the 14

A Product A Product Street A Product Str

			WF341550 & WF342584, a multi-point lock based on PF14233 & PF14168 Rev. A, a flush pull handle based on PF14168 Rev. A, STS test scope based on PF15034, over-rebated leaf edges based on RF13263, Therm-A-Seal perimeter intumescent with large leaf sizes & Therm-A-Bead glazing system based on CFR1403122. Also, clarification provided on leaf thickness calibration, amount of lipping trim, screw fixings for hinges & updated the CS Group Acrovyn scope for full leaf encapsulation.
			The assessment has been written into the latest Warringtonfire format and revalidated for a further 6 months based on a review of the evidence contained in Appendix A.
			Blue 60 has been removed as a fire stopping for the back of frame as has generic sealant option for fixing mock glazing beads to glass.
	40000-	00/10/5	The assessment has been revised to remove the option for Strebord 35+ and 38+ bond up designs.
M	436807	23/12/2020	The scope of application for the Superpan product has been revised and is now contained within a separate appendix detailing the permitted configurations, leaf sizes and design options.
			Clarification on grooving specification (groove width and groove spacing)
			Clarification that PVC encapsulated leaves are not permitted with steel door frames
N	WF506220	08/07/2021	The assessment has been reviewed and revalidated for a further 3 months.
0	WF505794	01/10/2021	The assessment has been technically reviewed and validated for a further 5 years. The assessment has been written to: (1) Amendment of Leaf types to include: Strebord 44 (leaf 1), Strebord 54 (leaf 2), Stebord encapsulated (leaf 3) and over-rebated Strebord (leaf 4), (2) Superpan removed from assessment, (3) Option for leaves with thick applied facings (4) summaries of test evidence to justify leaf size envelopes, design features, mill types and steel door frames, (5) updated frame section, (6) updated glazing section linked to Certifire for cascaded glass and glazing systems, (7) update to fanlight, sidelight and overpanel section, (8) update to leaf size envelopes made specific for each intumescent specification and configuration directly linked to test evidence, (9) updated hardware section with lists of specific items of hardeware based on primary and supplementary evidence, (10)
		₹9fc0t	primary and supplementary evidence, (10)

	updated installation section based on different sealing materiasl and frame types, (11) removal of rebated meeting edges for double leaf doorsets, (12) amendment of Frame types to include: Morland, and Over rebated frames and Studco Ezy jamb design, (13) amendment of orientation section to include references to test evidence (14) amendment of door frame section to include thresholds and raised cill (15) addition of Appendix B providing reference to hardware test evidence, (16) amendment to hardware intumescent protection section, (17) Revision of report layout to new WF styling.
--	---

Eaton Panel Products Lid supports third party certification for the products lid supports lid supports the products lid supports the products lid supports lid sup

This document, remains the property of talcon panel products little reader to ensure that that any product this the property of talcon panel products little reader to ensure that that any product this the reader to ensure that that any product this the responsibility of the reader to ensure This document responsibility of the the evidence within is the product of the treatment of the distinguished using the evidence within is the product of the treatment of the treatment of the read of the read of the evidence within is the product of the read of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the read of the evidence within is the product of the evidence within its product

This document details a subset of evidence tanks of products.

testing regime covering a wide range of products ite at the regime documentation and the range of products in the range o

20 Appendix B: Performance Data

Primary Data 20.1

Test Reference	Specific Tested Feature	Configuration	Leaf Size (h x w x t) (mm)	Test Standard	Performance (minutes)
CFR1812191_1	STS seals, ERA multipoint lock, Pyrobelite 12 El30/EW60 glazing, STS glazing seals,	LSASD	2192 1046 54	BS 476: Part 22: 1987	Integrity: 71 Insulation: 34
WF369636	Pyroplex seals, Pyrobelite 12 60/0 glazing, ISL glazing seals,	ULSADD	2145 923/923 54	BS 476: Part 22: 1987	Integrity: 65 Insulation: 35
WF412601 A	Type 617 seals, Rutland pivot/strap, Rutland floor spring,	DASD	2040 926 54	BS 476: Part 22: 1987	Integrity: 71 Insulation: 71
BMT/FEP/F16174	Pyroplex seals, Pyrodur 10 EW60-10 glazing, ISL glazing seals,	ULSADD	2140 923/923 54	BS 476: Part 22: 1987	Integrity ¹ : 68 Insulation: 0
WF374929 B	STS seals, Pyrobelite 12 glazing, STS glazing seals,	ULSADD	2400 927/582 54	BS 476: Part 22:,100 1987	Integrity: 67 Insulation: 67
			34 *Situation and the state of	Pople of the party	Midolingo

Test Reference	Specific Tested Feature	Configuration	Leaf Size (h x w x t) (mm)	Test Standard	Performance (minutes)
WF392155	STS seals, Feature grooves,	ULSADD	2400 952/952 54	BS 476: Part 22: 1987	Integrity: 57 Insulation: 57
WF391032	STS seals, ERA multipoint lock with ERA electric locking mechanism, Cableway, STS eye viewer, STS letterplate,	LSASD	2395 1180 54	BS 476: Part 22: 1987	Integrity: 43 Insulation: 19
WF412601 B	Type 617 seals, Rutland pivot/strap, Rutland floor spring,	DASD	2040 926 54	BS 476: Part 22: 1987	Integrity: 71 Insulation: 71
WF407334	Pyroplex seals, Pyrobelite 12 glazing, ISL glazing seals,	ULSADD	2146 923/923 54	BS 476: Part 22: 1987	Integrity: 65 Insulation: not evaluated

ts. It d supports third paint the property of the product strain and product site of products and maintenance of fine door as sent but product site at the product site and product site at the product site a

Test Reference	Specific Tested Feature	Configuration	Leaf Size (h x w x t) (mm)	Test Standard	Performance (minutes)
CFR1404291 B	Pyrodur 10 EW60-10 glazing, ISL60 Plus glazing system,	Fixed Door Leaf	2135 665 64	Principles of BS 476: Part 22: 1987	Integrity: 104
CFR1405131 B	11mm Contraflam Door Lite glazing, ISL60 Plus glazing system,	Fixed Door Leaf	2135 665 64	Principles of BS 476: Part 22: 1987	Integrity: 105
CFR1405201 A	6mm Schott Pyran S glazing, Sealmaster Fireglaze glazing system,	Fixed Door Leaf	2135 665 64	Principles of BS 476: Part 22: 1987	Integrity: 76
CFR1405201 B	6mm Schott Pyran S glazing, ISL60 Plus glazing system,	Fixed Door Leaf	2135 665 64	Principles of BS 476: Part 22: 1987	Integrity: 93
WF413865	Strelip 60 8mm thick engineered timber	ULSADD	2135 935/935 54	BS 476: Part 22: 1987	Integrity: 70 Insulation: 70
WF414781 ²	Rutland Door Controls ITS11204 concealed overhead	ULSADD	2040 935/935 44	BS 476: Part 22: 1987 1987 BS 476: Part 22: 1987 1987 BS 476: Part 22: 1987 1987	Integrity: 33

Note:

- In accordance with section 8.6.1 of BS 476: Part 22: 1987, the specimen has not been evaluated for insulation. Glass tested was Pilkington Group Ltd, Pyrodur EW60-10. Based on the performance recorded in the test it is our opinion that glass types known to have better or similar insulation performance may be utilised, up to maximum of 16mm thick as assessed in section 6. Glazed area was 0.616m². Based on internal assessment rules, a maximum glazed area of 1.1m² is permitted, subject to the requirements of section 6.
- 2. 30 minutes fire resisting application only.

20.2 Hinges

20.2.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
WF416689 (B)	ULSASD	46	Ash	Hoppe Arrone AR8182
WF414882	LSADD	32	Softwood	Zoo VLH243
RF11121*	ULSADD	38	Redwood	R&T H105
RF11170*	ULSADD	38	Redwood	R&T H101
RF13132	ULSADD	36	Redwood	R&T H101
RF13176 (A)	ULSASD	32	Redwood	R&T H101

&T H101

&T

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
BMT/FER/F13263 (A)	ULSASD	41	Redwood	Eclipse cranked bearing butt type hinge
BMT/FER/F13263 (B)	ULSASD	32	MDF	Eclipse cranked bearing butt type hinge
WF388638	ULSADD	39	PVC Wrapped Redwood	R&T H101
WF401039 (A)	LSASD	36	Redwood	Zoo ZHSS243
WF391843 (A)	LSASD	51	Redwood	R&T H101
WF384630	LSADD	43	Finger Jointed Softwood	R&T H101
WF405305 (A)	ULSASD	40	Redwood	Eurospec
BMT/FEP/F14233 (A)	LSASD	45	-	Zoo ZHSS243
WF402305	LSASD	51	Redwood	R&T H102 Eurospec Enduro HIN1433/13
CFR1811071 (A)	ULSASD	39	Softwood	Eurospec Enduro HIN1433/13 Vier VLHL243RS &VLHR243RS Leting Hills And Hills
WF411193	LSASD	37	MDF	Vier VLHL243RS &VLHR243RS
				Eurospec Enduro HIN1433/13 Vier VLHL243RS &VLHR243RS &VLHR243RS Eurospec Enduro HIN1433/13 Vier VLHL243RS Eurospec Enduro HIN1433/13 Vier VLHL243RS Eurospec Enduro HIN1433/13 Eurospec Endur

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
WF414162	LSASD	36	Ash	R&T H207
WF426842 (B)	ULSADD	16	Redwood	Hoppe Arrone AR8182
WF386959 (A)	ULSASD	32	Redwood	R&T H101
CFR1810221 (A)	ULSASD	37	Softwood	Eurospec Enduro HIN1433/13
CFR1811071 (B)	ULSASD	38	Softwood	Eurospec Enduro HIN1433/13
<u>CFR1812111</u>	ULSADD	36	Softwood	Eurospec Enduro HIN1433/13
CFR1812121	ULSADD	36	Softwood	Eurospec Enduro HIN1433/13
BMT/FEP/F15050 (A)	LSADD	49	MDF	R&T H101
Chilt/RF03108	ULSADD	30	Redwood	R&T H105

TH101

TH105

TH

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
RF01030	ULSADD	32	Redwood	R&T H105
RF08088	ULSADD	44	Redwood	R&T H105
RF08125	ULSADD	49	MDF	R&T H105
RF97059	ULSADD	37	Redwood	R&T H105
RF98048	ULSADD	42	Redwood	R&T H105
RF98137	ULSADD	32	Redwood	R&T H105
BMT/FEP/F14072	ULSADD	32	Redwood	R&T H101
Chilt/RF05134 (A)	ULSASD	37	Redwood	R&T H101
Chilt/RF05134 (B)	ULSASD	38	Redwood	R&T H101
Chilt/RF03083	ULSADD	30	Redwood	R&T H105

AT H105

AT H105

AT H105

AT H105

AT H105

AT H106

AT H107

AT H109

AT

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
RF00136	ULSADD+OP	37	Redwood	R&T H105
Chilt/RF09170	ULSADD	36	Redwood	R&T H105
Chilt/RF11006	ULSADD	33	Redwood	R&T H105
Chilt/RF08135	ULSADD	31	Redwood	R&T H105
Chilt/RF08094	ULSADD	33	Redwood	R&T H105
Chilt/RF10098	ULSADD	32	Redwood	R&T H105
RF99050	ULSADD+OP	36	Redwood	R&T H105
Chilt/RF07109	ULSADD	36	Redwood	R&T H105
BMT/FEP/F16035	ULSADD	47	Softwood	R&T H101
BMT/FEP/F14168	LSASD	48	Sapele	R&T H101

TH101

AT H101

AT H1

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
WARRES 141445	ULSADD	40	Softwood	R&T H102
Chilt/RF09060 (A)	ULSASD	19	Redwood	R&T H105
Chilt/RF09060 (B)	ULSADD	43	Redwood	R&T H105
CFR1403122	ULSADD	34	Redwood	R&T H101
Chilt/RF10011 (A)	ULSASD	51	Redwood	R&T H101
Chilt/RF02109 (A)	ULSASD	13.5	Redwood	R&T H101
Chilt/RF02109 (B)	LSASD	35	Redwood	R&T H101
BMT/FEP/F15178 (A)	LSASD	38	Redwood	Zoo CF849
BMT/FEP/F15178 (B)	LSASD	38	Redwood	Zoo CF849
BMT/FEP/F15178 (C)	LSASD	45	MDF	Zoo CF849

DO CF849

DO CF8

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
WF427417	ULSASD	40	Meranti	Eclipse Frisco 14854
WF405307 (A)	LSASD	31	Softwood	Zoo VHP243
RK141-5A	LSASD	42	Steamed Beech	Euroart HINBB433/SSS
SF013-5A (A)	LSASD	46	Softwood	Dorma 3090F
SF013-9 (A)	LSADD	37	Veneer wrapped Spruce	Dorma 3090F
SF013-9 (B)	LSASD	44	Veneer wrapped MDF	Dorma 3090F
WF419865	LSASD	34	Poplar	Hoppe Arrone AR8182
WF421795	LSASD	35	Poplar	Consort CF5511
WF (B)	LSASD	33	Redwood	Nico Load Pro Lift off

co Load Pro Lift off

To Load Pro Load Pro Lift

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
WF426603	LSADD	0	Redwood	R&T H105
WF419820 (A)	ULSASD	35	Redwood	Eurospec Enduro CF339
WF419820 (B)	ULSASD	29	Redwood	Eurospec Enduro CF339
BMT/FEP/F15027A	LSASD	38	sapele	Nico Load Pro Lift off
BMT/FEP/F15034	ULSADD	33	Redwood	Intelligent Hardware HST.100
WF430460 (A)	ULSADD	35	Redwood	Hoppe Arrone AR8182
WF346351 (A)	LSASD	34	Softwood	R&T H101
WF433832	ULSADD	23	Redwood	R&T H105
BMT/FEP/F14265 (A)	ULSASD	47	Redwood	R&T H101
BMT/FEP/F14265 (B)	ULSADD	42	Redwood	R&T H101
WF435986(A)	ULSADD	36	Simplis Soleco Steel Flush Frame	R&T H101 R&T H101 Hoppe Arrone AR8182

pe Arrone AR8182

pe Arrone AR

20.2.2 Tested in Similarly Constructed 44mm Substrates

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
<u>CFR1505191</u>	ULSASD	0	Redwood	R&T H101
Chilt/RF11172	ULSADD	39	MDF	R&T H105
Chilt/RF12061	ULSADD	34	Redwood	R&T H101
WF426842 (A)	ULSASD	29 Glazing aperture, no failure to hinge	Redwood	Hoppe Arrone AR8182

ts Itd supports third partie property of Eastern the superior street on an extensive at the property of eastern the superior street on an extensive at the superior street of the superior street on an extensive at the superior street of the superior street on an extensive at the superior street of the superior street on a s

20.2.3 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
<u>WF416690</u>	LSASD	34	Sapele	Zoo ZHSS243
<u>WF414781</u>	ULSADD	33	Redwood	Eurospec Enduro HIN1433/13
EFR-18-H-003671 (A)	LSASD	36	Redwood	R&T H207
<u>WF419584</u>	LSASD	0	Softwood	Hoppe Arrone AR8182
WF391843 (B)	LSASD	47	Redwood	R&T H101
BMT/FEP/PF16012	ULSADD	42	Redwood	Hafele SUS 304
WF399749	ULSADD	31	Sapele	CB7735
WF399751	ULSADD	31	Redwood	CB7735
WF385685	ULSADD	40	Redwood	R&T H101

CB7735

R&T H101

R&T H101

Reprocess

Reproducts the property of the product of

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
BMT/FEP/16031	ULSADD	40	Redwood	Hafele SUS 304
				1/
<u>WF419854</u>	LSASD	33	Redwood	Hoppe Arrone AR8182
<u>WF369451</u>	ULSADD	35	Redwood	Smith & Locke 2900G
<u>WF426419</u>	LSASD	35	Redwood	Eurospec Enduro HIN1433/13
WF428987 (A)	LSASD	31	Sapele	Rutland RH.BB.43R.SS
WF428987 (B)	LSASD	41	Sapele	Rutland RH.BB.43R.SS
<u>WF432578</u>	LSASD	46	Softwood	Eurospec Enduro HIN1433/13

ts. It supports third paintenance of fire and another the properties of products it and maintenance of fire and the first and products it and maintenance of the first and the first and

20.3 Closers

20.3.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model
<u>WF416689 (B)</u>	ULSASD	46	Ash	Arrow 324BP
<u>WF414882</u>	LSADD	32	Softwood	Hoppe AR8200-SE
<u>RF11121*</u>	ULSADD	38	Redwood	Dorma TS71
<u>RF11170*</u>	ULSADD	38	Redwood	Rutland TS3204
RF13132	ULSADD	36	Redwood	Rutland TS3204
RF13176 (A)	ULSASD	32	Redwood	Rutland TS3204
BMT/FER/F13263 (A)	ULSASD	41	Redwood	Turentek TSS225 OHC
BMT/FER/F13263 (B)	ULSASD	32	MDF	Turentek TSS225 OHC
WF388638	ULSADD	39	PVC Wrapped Redwood	Rutland ITS 11204

Turentek ISS225
OHC

Rutland ITS 11204

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model	
WF401039 (A)	LSASD	36	Redwood	Rutland TS9205	
WF391843 (A)	LSASD	51	Redwood	Astra 4000	
WF384630	LSADD	43	Finger Jointed Softwood	Arrone AR1500 & Rutland TS50204	
WF405305 (A)	ULSASD	40	Redwood	Rutland TS9205	
BMT/FEP/F14233 (A)	LSASD	45	Sapele	Dorma TS73V OHC	
WF402305	LSASD	51	Redwood	Astra 4000	
CFR1811071 (A)	ULSASD	39	Softwood	Dorma TS68	
WF411193	LSASD	37	MDF	Rutland TS11205	<u> </u>
WF414162	LSASD	36	Ash	Arrone AR7383	Orocessing,
WF426842 (B)	ULSADD	16	Redwood	Hoppe AR1500	the processing, the processing the p

Hoppe AR1500

Ho

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model	
WF386959 (A)	ULSASD	32	Redwood	Rutland ITS.11204	
<u>CFR1810221 (A)</u>	ULSASD	37	Softwood	Rutland TS4204	
<u>CFR1810221 (B)</u>	DASD	39	Softwood	Rutland ITS.11204	
<u>CFR1811071 (B)</u>	ULSASD	38	Softwood	Dorma TS68	
<u>CFR1812111</u>	ULSADD	36	Softwood	Rutland TS.9205	
<u>CFR1812121</u>	ULSADD	36	Softwood	Rutland TS.5204BC.SRFB.SESE	
BMT/FEP/F15050 (A)	LSADD	49	MDF	N/A	
Chilt/RF03108	ULSADD	30	Redwood Dorma TS73V		موا
<u>RF01030</u>	ULSADD	32	Redwood	Dorma TS73 Dorma TS71	ocessims
RF08088	ULSADD	44	Redwood	Dorma TS71	mor lid.

Dorma TS73

Dorma TS71

Dorma

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model	
D=00/05					
RF08125	ULSADD	49	MDF	Dorma TS71	
RF97059	ULSADD	37	Redwood	Dorma TS73	
<u>RF98048</u>	ULSADD	42	Redwood	Dorma TS73	
RF98137	ULSADD	32	Redwood	Dorma TS73	
BMT/FEP/F14072	ULSADD	32	Redwood	Rutland TS3204	
Chilt/RF05134 (A)	ULSASD	37	Redwood	Dorma TS73V	
Chilt/RF05134 (B)	ULSASD	38	Redwood	Dorma TS73V	
Chilt/RF03083	ULSADD	30	Redwood	Dorma TS73V	(B)
<u>RF00136</u>	ULSADD+OP	37	Redwood	Dorma TS73V Dorma TS73V Dorma TS71)°
<u>Chilt/RF09170</u>	ULSADD	36	Redwood	Dorma TS71	1,091

Dorma TS73V

Dorma TS71

Dorma

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model	
Chilt/RF11006	ULSADD	33	Redwood	Dorma TS71	
Chilt/RF08135	ULSADD	31	Redwood	Dorma TS71	
Chilt/RF08094	ULSADD	33	Redwood	Dorma TS71	
Chilt/RF10098	ULSADD	32	Redwood	Dorma TS73V	
<u>RF99050</u>	ULSADD+OP	36	Redwood	Dorma TS73V	
Chilt/RF07109	ULSADD	36	Redwood	Dorma TS73V	
BMT/FEP/F16035	ULSADD	47	Softwood	Arrone AR1500	
BMT/FEP/F14168	LSASD	48	Sapele	Arrone AR1500	(5)
WARRES 141445	ULSADD	40	Softwood	Dorma TS68 Arrone AR1500 Dorma TS73V Dorma TS68	
Chilt/RF09060 (A)	ULSASD	19	Redwood	Dorma TS68	ig.

Dorma TS68

Dorma TS68

Dorma TS68

Dorma TS68

Dorma TS68

Later the process of product of the product of the

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model
Chilt/DE00060 (B)	ULSADD	43	Redwood	Dorma TS68
Chilt/RF09060 (B)	ULSADD	43	Redwood	Dollila 1300
RF02075 (B)	LSASD	31	Redwood	0
CFR1403122	ULSADD	34	Redwood	Dorma TS68
011(1403122	OLOADD	J-1	rcawood	Doma 1000
Chilt/RF10011 (A)	ULSASD	51	Redwood	Dorma TS71
Chilt/RF02109 (A)	ULSASD	13.5	Redwood	Dorma TS73V
Chilt/RF02109 (B)	LSASD	35	Redwood	Dorma TS73V
BMT/FEP/F15178 (A)	LSASD	38	Redwood	Rutland TS3204
BMT/FEP/F15178 (B)	LSASD	38	Redwood	Rutland TS3204
BMT/FEP/F15178 (C)	LSASD	45	MDF	Rutland TS3204 Rutland TS3204 Rutland TS3204
Chilt/RF11192	ULSADD	34	Redwood	Rutland TS3204

Rutland TS3204

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model	
WF427417	ULSASD	40	Meranti	Dorma TS72	
WF405307 (A)	LSASD	31	Softwood	Rutland TS9205	
<u>RK141-5A</u>	LSASD	42	Steamed Beech	Rutland TS11204	
SF013-5A (A)	LSASD	46	Softwood	Dorma TS68 RA	
SF013-9 (A)	LSADD	37	Veneer wrapped Spruce	Dorma TS83	
SF013-9 (B)	LSASD	44	Veneer wrapped MDF	Dorma TS83	
<u>WF419865</u>	LSASD	34	Poplar	Dorma TS92	
WF421795	LSASD	35	Poplar	Dorma TS93	ing,
WF421964 (B)	LSASD	33	Redwood	TBC Arrone AR700 Floor Spring	e Processi
CFR2003051	DADD	37	Redwood	Arrone AR700 Floor Spring	ssemil its lid.

TBC

Arrone AR700 Floor Spring of the product of th

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model
WF426603	LSADD	0	Redwood	Dorma TS73
WF419820 (A)	ULSASD	35	Redwood	Smith & Locke 8709G
WF419820 (B)	ULSASD	29	Redwood	Smith & Locke 8709G
BMT/FEP/F15027A	LSASD	38	sapele	Rutland TS3204
BMT/FEP/F15034	ULSADD	33	Redwood	Rutland TS3204
WF430460 (A)	ULSADD	35	Redwood	Arrone AR6383
<u>WF433832</u>	ULSADD	23	Redwood	Rutland ETS.18314
BMT/FEP/F14265 (A)	ULSASD	47	Redwood	Arrone AR1500 OHC
BMT/FEP/F14265 (B)	ULSADD	42	Redwood	Arrone AR1500 OHC

Arrone AR1500 OHC

20.3.2 Tested in Similarly Constructed 44mm Substrates

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model
WF418407 (B)	LSASD	8* (Glazing) Perimeter failure at 34 min	Streframe E	Briton 1120B
CFR1505191	ULSASD		Redwood	Dorma TS71
WF380214 (A)	LSASD	52	Redwood	Arrone AR1500
Chilt/RF11172	ULSADD	39	MDF	Rutland TS3204
Chilt/RF12061	ULSADD	34	Redwood	Rutland TS3204
WF423917	LSASD		Sapele	Arrone AR7383
WF426842 (A)	ULSASD	29	Redwood	Arrone 6383

Arrone 6383

Arrone 6383

Arrone 6383

20.3.3 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model
WF416690	LSASD	34	Sapele	Hoppe AR1500
NVE 44 4704	111 CADD			D. II. LITO44004
<u>WF414781</u>	ULSADD	33	Redwood	Rutland ITS11204
EFR-18-H-003671 (A)	LSASD	36	Redwood	Astra 4000
WF419584	LSASD	0	Softwood	Arrone F6700
WF391843 (B)	LSASD	47	Redwood	Astra 4000
BMT/FEP/PF16012	ULSADD	42	Redwood	Rutland TS3204 OHC
WF399749	ULSADD	31	Sapele	Rutland TS3204
WF399751	ULSADD	31	Redwood	Rutland TS9205
WF385685	ULSADD	40	Redwood	Arrone AR1500 OHC
				COLUMN CO
BMT/FEP/15066	ULSADD	0	Redwood	Arrone AR1500

Arrone AR1500 OHC

Arrone AR1500 OHC

Arrone AR1500

Test Ref	Tested Config	Time of First Failure	Frame Material	Closer Manuf/ Model
BMT/FEP/16031	ULSADD	40	Redwood	Arrone AR1500
<u>WF419854</u>	LSASD	33	Redwood	Rutland TS9205
WF369451	ULSADD	35	Redwood	Geze OHC / Arrone AR1500
<u>WF426419</u>	LSASD	35	Redwood	Astra 4003
WF428987 (A)	LSASD	31	Sapele	Rutland ITS.11204
<u>WF428987 (B)</u>	LSASD	41	Sapele	Rutland ITS.11204

ts. It supports third paintenance of fire door assemble that any products it as a product of products and maintenance of fire and the first and products it and maintenance of products in the property of paintenance of products at the product of a contract of a contrac

20.4 Locks & Latches

20.4.1 Single Point Locks

20.4.1.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
<u>WF414882</u>	LSADD	32	Softwood	FS1257 Universal din sash lock
<u>RF11121*</u>	ULSADD	38	Redwood	Euro Spec mortice lock/latch
<u>RF11170*</u>	ULSADD	38	Redwood	Simplex mortice & Euro cylinder
PE40400	111 04 P.P.	00	Dadward	Easi-T steel mortice latch and Eurospec
RF13132	ULSADD	36	Redwood	Eurocylinder lock Easi-T steel mortice latch and
RF13176 (A)	ULSASD	32	Redwood	Eurospec Eurocylinder lock
BMT/FER/F13263 (A)	ULSASD	41	Redwood	Union/ASSA Abloy steel mortice latch and Eurocylinder lock with thumbturn on exposed face

Tell and the broke the bearing to the following of the following of the product o

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
BMT/FER/F13263 (B)	ULSASD	32	MDF	Union/ASSA Abloy steel mortice latch and Eurocylinder lock with thumbturn on exposed face
WF388638	ULSADD	39	PVC Wrapped Redwood	DIN Standard
<u>WF384630</u>	LSADD	43	Finger Jointed Softwood	Laidlaw 13861 & Gem GK700
WF405305 (A)	ULSASD	40	Redwood	ERA Tubular Latch
CFR1811071 (A)	ULSASD	39	Softwood	ERA Tubular Latch
<u>WF411193</u>	LSASD	37	MDF	Salto Ælement Mortice
WF386959 (A)	ULSASD	32	Redwood	Porta Din Sashlock
CFR1810221 (A)	ULSASD	37	Softwood	Eurospec Tubular Mortice
<u>CFR1811071 (B)</u>	ULSASD	38	Softwood	ERA Tubular Latch

ts. Itd supports third party certification panel products that that any products the property of endergoe and products the property of endergoe from an extensive at a support of products the property of endergoe from an extensive at a support of products.

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
CFR1812111	ULSADD	36	Softwood	ERA Tubular Latch
CFR1812121	ULSADD	36	Softwood	Altro Heavy Duty Tubular Latch - 65mm Case - 44mm Backset - SS
BMT/FEP/F15050 (A)	LSADD	49	MDF	Gridlock tubular latch
RF01030	ULSADD	32	Redwood	Henderson Hardware tubular latch
RF08125	ULSADD	49	MDF	Eurospec tubular latch
RF98048	ULSADD	42	Redwood	Henderson Hardware tubular latch
RF98137	ULSADD	32	Redwood	Henderson Hardware tubular latch
BMT/FEP/F14072	ULSADD	32	Redwood	Zoo tubular latch
RF00136	ULSADD+OP	37	Redwood	Henderson Hardware tubular latch
Chilt/RF09170	ULSADD	36	Redwood	Eurospec tubular latch

Telt allation and maintenance of fire and endergraphs of products the property of endergraphs of and products the property of the products of products the attention and maintenance of the property of endergraphs of products the products the products the product of endergraphs of the products the product of endergraphs of endergraphs of the products the product of the products the product of the products the product of the produ

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
Chilt/RF11006	ULSADD	33	Redwood	Eurospec tubular latch
RF99050	ULSADD+OP	36	Redwood	Henderson Hardware tubular latch
Chilt/RF07109	ULSADD	36	Redwood	Eurospec tubular latch
BMT/FEP/F16035	ULSADD	47	Softwood	Zoo 3X910C-BO2O
WARRES 141445	ULSADD	40	Softwood	Tubular
CFR1403122	ULSADD	34	Redwood	Legge H810F
Chilt/RF10011 (A)	ULSASD	51	Redwood	E&S tubular latch
BMT/FEP/F15178 (A)	LSASD	38	Redwood	Yale Snapkeep 39- CH mortice latch
BMT/FEP/F15178				Yale Snapkeep 39- CH
(B) BMT/FEP/F15178 (C)	LSASD	45	Redwood	mortice latch Yale Snapkeep 39- CH mortice latch

Telt allation and maintenance of fire and endergraphs of products the property of endergraphs of orders and products the property of the fire that that any products the at the support of products the property of the products of products the property of the products of t

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model	Hardware Intumescent	
Chilt/RF11192	ULSADD	34	Redwood	E&S tubular latch		
WF405307 (A)	LSASD	31	Softwood	Zoo ZTKA76R		
<u>RK141-5A</u>	LSASD	42	Steamed Beech	Euroart DLA7255EP/SSS		
SF013-5A (A)	LSASD	46	Softwood	Dorma 281CE		
SF013-9 (A)	LSADD	37	Veneer wrapped Spruce	Dorma 381E		
SF013-9 (B)	LSASD	44	Veneer wrapped MDF	Dorma 381E		
WF421964 (B)	LSASD	33	Redwood	NSP 614 Digital Lock		
<u>CFR2003051</u>	DADD	37	Redwood	Altro Easi-T		esing,
WF426603	LSADD	29* (Top hanging corner)	Redwood	Henderson tubular mortice	Jon to the second	ndies.

telt and of the property of endergraphs of order of order of the street of the street

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
<u>WF419820 (A)</u>	ULSASD	35	Redwood	Glutz 1052.7/60 Sashlock
WF419820 (B)	ULSASD	29	Redwood	Glutz 1052.7/60 Sashlock
BMT/FEP/F15034	ULSADD	33	Redwood	Union Sashlock
WF430460 (A)	ULSADD	35	Redwood	Hoppe AR8100
WF346351 (A)	LSASD	34	Softwood	GU Security Automatic M101313
<u>WF433832</u>	ULSADD	23	Redwood	Sparka tubular mortice
BMT/FEP/F14265 (A)	ULSASD	47	Redwood	Arrone 3 lever mortice sashlock
BMT/FEP/F14265 (B)	ULSADD	42	Redwood	Arrone 3 lever mortice sashlock

Arrone 3 lever monuce sashlock

Arrone 3 lever monuce sashlock

Arrone 3 lever monuce sashlock

Sashlock

Sashlock

Arrone 3 lever monuce sashlock

Sashlock

Arrone 3 lever monuce sashlock

Sashlock

Sashlock

Sashlock

Sashlock

Sashlock

Sashlock

Sashlock

Sashlock

Arrone 3 lever monuce sashlock

Sa

20.4.1.2 Tested in Similarly Constructed 44mm Substrates

Test Ref	Tested Config	First Frame Material		Lock Manuf/ Model
WF418407 (B)	LSASD	8* (Glazing) Perimeter failure at 34 min	Streframe E	CISA eGO ANZ
CFR1505191	ULSASD		Redwood	Eurospec CE21121
WF380214 (A)	LSASD	52	Redwood	Eurospec DIN Latch
Chilt/RF11172	ULSADD	39	MDF	Eurospec tubular latch
Chilt/RF12061	ULSADD	34	Redwood	Arrone mortice latch
WF426842 (A)	ULSASD		Sapele	Arrone AR8100
WF419361 (A)	LSASD	29 22	Redwood	Frelan JL1091
WF151228 Issue	DACD	Indicative Test, Failure of lock @	Coffusod	New Star LRB1
<u>2</u>	DASD	30 mins	Softwood	New Star LRB1

New Star LRB1

New St

20.4.1.3 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
WF414781	ULSADD	33	Redwood	Union JHD72ESL-R-SS60
<u>WF419584</u>	LSASD	0	Softwood	NSP 814
BMT/FEP/PF16012	ULSADD	42	Redwood	Hafele Mortice 911.23.465
<u>WF399749</u>	ULSADD	31	Sapele	Eurospec tubular latch
<u>WF399751</u>	ULSADD	31	Redwood	Eurospec tubular latch
<u>WF385685</u>	ULSADD	40	Redwood	Zoo mortice latch
BMT/FEP/15066	ULSADD	34	Redwood	ERA latch
BMT/FEP/16031	ULSADD	40	Redwood	Hafele 911.23.465
<u>WF419854</u>	LSASD	33	Redwood	NSP 814
WF369451	ULSADD	35	Redwood	Tubular mortice

Tubular mortice

Tubula

20.4.2 Multi-point Locks

20.4.2.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model	
WF416689 (B)	ULSASD	46	Ash	Winkhaus AV2	
WF401039 (A)	LSASD	36	Redwood	Glutz 1893 Mint	
WF391843 (A)	LSASD	51	Redwood	ERA Surefire Classic	
BMT/FEP/F14233 (A)	LSASD	45	Sapele	Winkhaus AV2	
WF402305	LSASD	51	Redwood	Winkhaus AV2	
WF414162	LSASD	36	Ash	Winkhaus AV3	
BMT/FEP/F14168	LSASD	48	Sapele	Winkhaus AV2	
WF419865	LSASD	34	Poplar	ERA Surefire Classic Winkhaus AV3	
<u>WF421795</u>	LSASD	35	Poplar	Winkhaus AV3	5
BMT/FEP/F15027A	LSASD	38	sapele	ERA Truelock multipoint	:118
				Winkhaus AV3 ERA Truelock multipoint ERA Tru	igosigos ses.

torthe processines. t of evidence from an extensive

Cound on Our website at

20.4.2.2 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
WF416690	LSASD	34	Sapele	ERA Surefire Classic
EFR-18-H-003671 (A)	LSASD	36	Redwood	ERA Surefire Classic
(7-1)	20/102		reamoda	ETA COMPINIO GIAGGIO
WF391843 (B)	LSASD	47	Redwood	ERA Surefire Classic
<u>WF426419</u>	LSASD	35	Redwood	ERA Surefire Classic
WF428987 (A)	LSASD	31	Sapele	ERA Surefire Heritage
WF428987 (B)	LSASD	41	Sapele	ERA Surefire Heritage
WF412333 AR2 (A)	LSASD	36	Redwood	UAP Fullex Crimebeater XL16
WF432578	LSASD	46	Softwood	Yale Lockmaster Autoengage 2LB Classic 45mm

Yale Lockmaster
Autoengage 2LB Classic
45mm

Reproductive production of the producti

20.4.3 Electronic Locking Systems

20.4.3.1 Tested in Strebord 44

Test Ref Tested Config		Time of First Failure	Frame Material	Lock Manuf/ Model
WF421964 (B)	LSASD	33	Redwood	NSP 614 Digital Lock

ts Itd supports third party certification for the processing of products the processing of products the product that the products the products the products the product the products the product the

20.4.3.2 Tested in Similarly Constructed 44mm Substrates

		_		
Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
		8* (Glazing) Perimeter failure at 34		
WF418407 (B)	LSASD	min	Streframe E	CISA eGO ANZ
DMT-DO-50-582- R1 (A)	LSASD	Int: 46 Ins: 46	Hardwood	Dormakaba 79/RT Series
DMT-DO-50-582- R1 (B)	LSASD	Int: 45 Ins: 45	Hardwood	Dormakaba 79/RT Series
DMT-DO-50-582- R1 (C)	LSASD	Int: 43 Ins: 43	Hardwood	Dormakaba Quantum Pixel LH
DMT-DO-50-582- R1 (D)	LSASD	Int: 46 Ins: 46	Hardwood	Dormakaba Quantum Pixel LH

ts Itd supports third party certification for the processing of products the processing of products the property of the processing of products the attendence of fire and products the attendence of products the

20.4.3.3 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Lock Manuf/ Model
			_	
<u>WF419584</u>	LSASD	0	Softwood	NSP 814
WF419854	LSASD	33	Redwood	NSP 814
				TLJ Security Systems
CFR1506041 (A)	LSASD	36	Softwood	Infinity Keycard Lock
				TLJ Security Systems
CFR1506041 (B)	LSASD	36	Softwood	Infinity Keycard Lock
				TLJ Security Systems
CFR1603011 (A)	LSASD	36	Softwood	Identity Keycard Lock
				TLJ Security Systems
CFR1603011 (B)	LSASD	36	Softwood	Identity Keycard Lock
				TLJ Security Systems
CFR1711291 (A)	LSASD	36	Softwood	Infinity Keycard Lock
				TLJ Security Systems
CFR1711291 (A)	LSASD	36	Softwood	Revolution Keycard Lock
				TLJ Security Systems
<u>CFR1711291 (B)</u>	LSASD	36	Softwood	Identity Keycard Lock

TLJ Security Systems
Revolution Keycard Lock

TLJ Security Systems
Identity Systems
Identity Keycard Lock

TLJ Security Systems
Identity Systems
Identity Systems
Identity Keycard Lock

TLJ Security Systems
Identity Systems
Identity Keycard Lock

TLJ Security Systems
Identity Systems
Identity Systems
Identity Keycard Lock

TLJ Security Systems
Identity Systems
Identity Systems
Identity Keycard Lock

TLJ Security Systems
Identity Systems
Identity Systems
Identity Systems
Identity Keycard Lock

TLJ Security Systems
Identity Systems
Identity

20.4.4 Magnetic Locks

20.4.4.1 Tested in Strebord 44

20.4.4.2 Tested in Similarly Constructed 44mm Substrates

20.4.4.3 Tested in Solid Timber 44mm Door Leaves

20.4.5 Electronic Strikes

20.4.5.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Strike Manuf/ Model	Dimensions	Hardware Intumescent
<u>WF384630 Rev</u> <u>A</u>	LSADD	43	Streframe®E	Gem GK700	175mm(h) x 44mm(w) x 27mm(d)	Sealed Tight Solutions Ltd 1mm thick graphite

20.4.5.2 Tested in Similarly Constructed 44mm Substrates

20.4.5.3 Tested in Solid Timber 44mm Door Leaves

te lid supports third to robe end for the property of the property of the property of the products and maintenance of the property of the thirty of the products of the product of the property of the property of the product of the p

20.4.6 Cylinders

20.4.6.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Cylinder Manuf/ Model
WF416689 (B)	LSASD	46	Ash	ERA Fortress
<u>WF414882</u>	LSADD	32	Softwood	Vier thumbturn ZL30T/30CAS
RF11170*	ULSADD	38	Redwood	Eurocylinder
RF13132	ULSADD	36	Redwood	Eurocylinder
RF13176 (A)	ULSASD	32	Redwood	Eurocylinder
BMT/FER/F13263 (A)	ULSASD	41	Redwood	Eurocylinder
BMT/FER/F13263 (B)	ULSASD	32	MDF	Eurocylinder
WF401039 (A)	LSASD	36	Redwood	Glutz GC0001 Eurocylindor
WF391843 (A)	LSASD	51	Redwood	ERA Fortress

A Fortress

A Fort

Test Ref	Tested Config	Time of First Failure	Frame Material	Cylinder Manuf/ Model
BMT/FEP/F14233				
(A)	LSASD	45	Sapele	Winkhaus 30/30
WF402305	LSASD	51	Redwood	Eurocylinder
WF411193	LSASD	37	MDF	Salto thumbturn
WF414162	LSASD	36	Ash	ERA Fortress
WF426842 (B)	ULSADD	16	Redwood	Hoppe AR780
BMT/FEP/F14168	LSASD	48	Sapele	Winkhaus XR6
CFR1403122	ULSADD	34	Redwood	Eurocylinder
SF013-5A (A)	LSASD	46	Softwood	Dorma 600s
SF013-9 (A)	LSADD	37	Veneer wrapped Spruce	Dorma PC83
SF013-9 (B)	LSASD	44	Veneer wrapped MDF	Dorma PC83

Dorma PC83

Dorma PC83

Dorma PC83

Seriologe Structure of the product of the pro

Test Ref	Tested Config	Time of First Failure	Frame Material	Cylinder Manuf/ Model
<u>WF421795</u>	LSASD	35	Poplar	ERA Fortress
WF421964 (B)	LSASD	33	Redwood	NSP SMF614*
WF419820 (A)	ULSASD	35	Redwood	Glutz GUK002
WF419820 (B)	ULSASD	29	Redwood	Glutz GUK002
BMT/FEP/F15027A	LSASD	38	sapele	Eurospec cylinder
WF430460 (A)	ULSADD	35	Redwood	Hoppe AR780
WF346351 (A)	LSASD	34	Softwood	Assa Abloy KMT3030-NP

20.4.6.2 Tested in Similarly Constructed 44mm Substrates

Test Ref	Tested Config	Time of First Failure	Frame Material	Cylinder Manuf/ Model
<u>WF419361</u> (A)	LSASD	38	Softwood	Frelan JL70-OPDPB

an JL70-OPDPB

an JL70-OPDPB

The processing of the product of the

20.4.6.3 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Cylinder Manuf/ Model
WF416690	LSASD	34	Sapele	ERA Fortress
WF414781	ULSADD	33	Redwood	Assa Union JHD72ESL-R- SS60
EFR-18-H-003671 (A)	LSASD	36	Redwood	ERA Fortress
WF391843 (B)	LSASD	47	Redwood	ERA Fortress
WF419854 (B)	LSASD	33	Redwood	NSP 814*
WF428987 (A)	LSASD	31	Sapele	Access2 Premier 3
WF428987 (B)	LSASD	41	Sapele	Access2 Premier 3
WF432578	LSASD	46	Softwood	Yale Platinum 3*

Yale Platinum 3*

Yale Platinum 3*

Productive of occessing to the product of the

20.5 Bolts

20.5.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Bolt Manuf/ Model
WF414882	LSADD	32	Softwood	Zoo ZAS03RSS
BMT/FEP/F15050 (A)	LSADD	49	MDF	Zoo ZAS03RSS
CFR1403122	ULSADD	34	Redwood	Cambridge Fire Research
SF013-9 (A)	LSADD	37	Veneer wrapped Spruce	Dortez AFB 6" L
BMT/FEP/F15034	ULSADD	33	Redwood	Zoo ZAS1355 & ZAS03RSS
WF430460 (A)	ULSADD	35	Redwood	Hoppe Arrone AR326B

testid supportes third partice property of talcon to a see that the product of th

20.5.2 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model
<u>WF414781</u>	ULSADD	33	Redwood	Zoo ZAS03RSS
BMT/FEP/PF16012	ULSADD	42	Redwood	Hafele 900.17.984
<u>WF399749</u>	ULSADD	31	Sapele	Hafele 900.17.984
WF399751	ULSADD	31	Redwood	Hafele 900.17.984
WF369451	ULSADD	35	Redwood	Smith and Locke 5020J



20.6 Door Viewers

20.6.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Viewer Manuf/ Model
WF416689 (B)	ULSASD	46	Ash	D&E Architectural 3850 Ultrascope
WF401039 (A)	LSASD	36	Redwood	Glutz GY3504
<u>WF402305</u>	LSASD	51	Redwood	Norseal DV160/C
<u>WF411193</u>	LSASD	37	MDF	2no UAP Nanocoast CVPLSSS 180° viewer
<u>WF414162</u>	LSASD	36	Ash	Jedo JV942
WF386959 (A)	ULSASD	32	Redwood	Sealed Tight Solutions STS4008
<u>WF421795</u>	LSASD	35	Poplar	D&E SWLAF EI30
<u>WF421964 (B)</u>	LSASD	33	Redwood	UAP CVPLCH

UAP CVPLCH

UAP CVPLCH

UAP CVPLCH

The processing of the product of the product

20.6.2 Tested in Similarly Constructed 44mm Substrates

Test Ref	Tested Config	Time of First Failure	Frame Option	Frame Material	Viewer Manuf/ Model	Dimensions
WF147045	N/A	66	Т	N/A	UAP Salamander Secure-to-view Firecheck SWALF	Barrel: Ø14mm Footprint: Ø26mm
WF147046	N/A	66		N/A	UAP Salamander Secure-to-view Firecheck SWALF	Barrel: Ø14mm Footprint: Ø26mm

ts Itd supports third party certification for the processing of products the processing of products the property of the processing of products the attendence of fire and products the attendence of products the

20.6.3 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Viewer Manuf/ Model
WF416690	LSASD	34	Sapele	ERA Fab&Fix
EFR-18-H- 003671 (A)	LSASD	36	Redwood	Sealed Tight Solutions 4008
WF426419 (A)	LSASD	35	Redwood	Sealed Tight Solutions 4008
WF426419 (B)	LSASD	41	Redwood	Sealed Tight Solutions 4008
WF428987 (A)	LSASD	31	Sapele	Rutland
WF428987 (B)	LSASD	41	Sapele	Rutland
WF432578	LSASD	46	Softwood	Yale DH000768

ts Itd supports third party certification for the processing of products the processing of products the product that the products the products the products the product the products the product the

20.7 Letter Plates

20.7.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Letterplate Manuf/ Model	Hardware Intumescent
WF414882	LSADD	32	Softwood	ERA Fab & Fix 3C018 with security shield 3F005	Fire and Acoustic Seals Ltd Spartan FASGP1013 100mm(I) x 40mm(w) x 1.3mm(t)
WF414162	LSASD	36	Ash	Royde & Tucker LP08	Royde & Tucker LP008 intumescent kit
WF419865	LSASD	34	Poplar	Sealed Tight Solutions Ltd STS 4001	Sealed Tight Solutions Ltd intumescent liner 30mm(w) x 2.3mm(t)
WF421795	LSASD	35	Poplar	Royde & Tucker LP08 with TS008 security cowl	Royde & Tucker LP008 intumescent kit

ts Itd supports third party certification for the processing of products the processing of products the product that the products the products the products the product the products the products the product the

20.7.2 Tested in Solid Timber 44mm Door Leaves

Test Ref	Tested Config	Time of First Failure	Frame Material	Hinge Manuf/ Model	Hardware Intumescent
WF416690	LSASD	34	Sapele	Royde & Tucker LP08 with TS008 security cowl	Royde & Tucker LP008 intumescent kit
WF428987 (A)	LSASD	31	Sapele	Lorient Polyproducts Ltd RJ008	As supplied by Lorient

ts Itd supports third party certification for the products that the for panel products the product the products the products the products the products the product the products the products the products the products the product the products the products the products the product the products the product the products the product the

20.8 Pivots & Floor Springs

20.8.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Item Type	Item Manuf/ Model
<u>CFR1810221 (B)</u>	DASD	39	Softwood	Pivot kit	Rutland PS.190
CFR1810221 (B)	DASD	39	Softwood	Floor spring	Rutland PS.260
CFR2003051	DADD	37	Redwood	Pivot kit	Hoppe Arrone AR700
CFR2003051	DADD	37	Redwood	Floor spring	Hoppe Arrone AR700

ts Itd supports third party certification for the processing of products the processing of products the product that the products the products the products the product the products the product the

20.9 Cableways

20.9.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Cableway Location / Method	Dimensions	Hardware Intumescent
WF384630 Rev A	LSADD	43	Streframe® E	Drilled through the left hand leaf horizontally	Ø10mm borehole, 1154mm from the bottom of the leaf across the width at mid-leaf thickness.	Sealed Tight Solutions Ltd ST CablePro graphite 10mm x 1mm thick
WF384630 Rev A	LSADD	43	Streframe® E	Routed out centrally in the left hand leaf edge around the bottom half perimeter	10mm(w) x 42mm(d) channel capped with a 10mm(w) x 30mm(d) hardwood insert installed with PU adhesive	Sealed Tight Solutions Ltd 10mm x 1mm thick graphite
WF386959 (A)	LSASD	32	Redwood	Drilled through the leaf horizontally	Ø11mm borehole, 1150mm from the bottom of the leaf across the width at mid-leaf thickness.	Sealed Tight Solutions Ltd ST CablePro graphite 10mm x 1mm thick

nickness.

**The property of and maintenance of a state that the product of and analyze of products the product of and maintenance of a state that the product of a state of a s

20.10 Cable Loops

20.10.1 Tested in Strebord 44

Test Ref	Tested Config	Time of First Failure	Frame Material	Cable Loop Manuf / Model	Dimensions	Hardware Intumescent
WF386959 (A)	LSASD	32	Redwood	Abloy EA280	320mm(h) x 25mm(w) footprint including a Ø12mm spring assembly	Sealed Tight Solutions Ltd 2mm thick STS 302 liner
WF391032 (B)	LSASD	37	Sapele	Stainless steel cable loop	290mm(h) x 25mm(w) footprint including a Ø12mm spring assembly	Sealed Tight Solutions Ltd 1mm(t) x 10mm(w) raw graphite

ts Itd supports third party certification for the processing of products the processing of products the property of the processing of products the attendence of fire and products the attendence of products the

20.11 Security Chains

20.11.1 Tested in Strebord 44

20.11.2 Tested in Similarly Constructed 44mm Substrates

Test Ref	Tested Config	Time of First Failure	Frame Material	Туре	Viewer Manuf/ Model	Dimensions
WF419361 (A)	LSASD	38	Softwood	Concealed Chain	Frelan J3004SN	Body: 91.5mm(l) x 16mm(t) Latch: 11mm x 6mm Forend: 56.5mm(h) x 25mm(w) x 2mm(t)

20.11.3 Tested in Solid Timber 44mm Door Leaves

Ethasion and maintenance of fire and ender the forther of products the at any posterine at a seemble for an analytic at a seemble for a se