Falcon Panel Products

Strebord® | STREDOR®

Fire and Security Dual Scope System

FD60 / PAS24

STREBORD® 54

STREDOR® 54

FALCON PANEL PRODUCTS LTD

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1. Introduction to Dual Scope Certification

This document outlines the details and requirements of the Falcon Panel Products Strebord and Stredor Fire and Security Dual Scope System.

1.1 Strebord® and STREDOR® Doorset System

Having been subject to an extensive, robust and ongoing testing and certification program, the market-leading brands for door core and door blank products, Strebord and Stredor, have been incorporated into a doorset system that is certified by BM Trada Q Mark for both Fire and Enhanced Security door schemes.

This system provides our customers with additional support - particularly when working in the flat entrance door market - to ensure there is no conflict between the Building Regulations for fire safety (Part B) and security (Part Q) where specifiers require both to be met. Manufacturing doorsets from this fully tested system complies with both fire and security requirements. Furthermore, manufacturers can certify the doorsets produced under the BM Trada Q Mark third-party product certification scheme, providing clients and end users with additional confidence that their properties and loved ones are safe and secure.

A joint publication: 'A Guide for Selecting Flat Entrance Doorsets; A publication for housing associations, landlords, building owners and local authorities in England', relates to new doorsets and is the product of DHF (Door & Hardware Federation), Secured by Design (SBD) and the Fire Industry Association (FIA).

The publication brings together the best collaborative advice available from the industry in one straightforward document to highlight the fundamental issues of fire safety and security for those selecting fire doorsets.

1.2 System Features

- FD60s and Enhanced Security
- Choice of Strebord (Solid Particleboard) or Stredor (Solid Timber) for door leaf construction
- Evidence to support 54mm door leaf thickness.
- Auto-firing, multi-point security lock
- Economically designed timber frame section (nominal 2" x 4" section)
- Includes evidence for both overhead and jamb mounted concealed automatic closing devices
- Options for key/key and key/thumbturn cylinders
- Up to 1047mm x 2402mm leaf sizes for fire and security
- Provision for glazed apertures using fire rated P1A glazing
- Tested to BS 476: Part 22, BS EN 1634-1, BS EN 1634-3, PAS 24:2016, BS 6375-1, BS 6375-2 & BS 6375-3

1.3 Fire and Smoke Performance

This dual scope system is certified by the Q Mark Fire Door Manufacturer Scheme, and will perform to 60 minutes for fire and smoke. The components of the system have been extensively tested to the British Standard BS 476: Part 22, and to European Standards BS EN 1634-1, BS EN 1634-3. For 30 minute performance, please see Falcon Panel Products' FD30 Dual Scope Manual.

1.4 Security Performance

The dual scope system is certified by the Q Mark Enhanced Security Scheme. The system has been tested to PAS24: 2016. All of the permitted ironmongery components have also been rigorously tested individually and hold robust certification.

The dual scope system is accredited by Secured by Design, the Official Police Security Initiative. As noted in the Secure By Design 'Homes 2019' Brochure, Section 21.5;

"Where there is a requirement for a doorset to be both fire and security rated, … the manufacturer or fabricator supplying the finished product to site is required to present independent third party dual certification from a single UKAS accredited certification body for both elements."

Door Blank Manufacture

Enhanced Lifetime Performance of Doors

Fire Door Manufacture

Enhanced Security Door

Secured by Design

Official Police Security Initiative

2. Door Cores

The FD60 dual scope system offers two of the market leading door cores from Falcon Panel Products, Strebord and Stredor.
Both cores are available with FSC Certification, and Strebord is available with PEFC Certification.

Strebord®

Strebord is a robust graduated density particleboard core. Strebord particleboard is the market leader for fire-rated, as well as non fire-rated door cores, and is easy to process and work with using modern joinery practices. This core is suited to an internal setting, in corridors or otherwise internally in buildings.

STREDOR®

Stredor is a lighter weight, solid laminated timber core. Stredor does not have core perimeter framing like other laminated timber cores, meaning that it can be processed easily and without restriction to size reduction. Ply faced Stredor cores are suitable for an internal or external setting.

	Strebord 54	Stredor 54 Ply
Type	Three layer particleboard specially developed as a high performance door core	Engineered multi-layered solid timber
Raw Material (Wood Content)	Produced with softwood (Spruce / Pine / Fir) with hardwood (Birch , Chestnut) and using recycled wood based raw materials	Produced with Poplar, Beech, Spruce/Pine/Fir/ and Redwood
Adhesive	Urea Formaldehyde	Melamine and PVA
Moisture Content	8% + or- 2% moisture	8% + or- 2% moisture
Fire	Tested to BS476: Part 22: 1987 and BS EN 1634-1:2014+A1:2018, opening in both directions	Tested to BS476: Part 22: 1987 and BS EN 1634-1:2014+A1:2018, opening in both directions
Sheet Size Note - non standard sizes available to special order	2135 x 915mm 2440 x 915mm 2440 x 915mm 2740 x 915mm Tolerance: Height & Width +/- 0.5mm Thickness +/- 0.2mm	2135 x 915mm 2440 x 1220mm 2740 x 915mm Tolerance: Height & Width +/- 0.5mm Thickness +/- 0.2mm
Surface	Has a precision finish meeting the highest requirements and is suitable as a base for use with a wide range of facing materials including delicate veneers, laminates and thin foils.	Beech or EV veneered suitable for painting and staining, or for use with a wide range of facing materials including delicate veneers, laminates and thin foils.
Density	Avg. bulk density = 570 ~ 610kgs/m³	Avg. bulk density = 505 kg/m³
Weight	Nom. 34kgs/m²	Nom. 27kgs/m²
Machining	Suitable for use with standard woodworking tools and machinery	Suitable for use with standard woodworking tools and machinery

Table 1a - Core Performance Summary

	Core			Thickness (mm)				Fire				App.					Certification			COC						
	Particleboard	Solid Timber	Specialist	35	44	54	57	FD30	FD60	FD90	FD120	Internal	External	Max dB (RW)	PAS24 Security	Thermal Range	Certifire	Q Mark	IFCC	FSC	PEFC	EUTR	DD171/BS EN 1192	BS EN 13986	Perimeter Framing	Recessed Panels
Strebord 54	✓					✓		✓	✓			✓		36	✓			✓		✓	*	✓	✓	E1		
Stredor 54		✓				✓		✓	✓			✓	✓	37	✓			✓		✓		✓	✓	E1		

*If specified at the point of order

3. Lippings and Facings

3.1 Lippings

Lippings provide stability and durability to the edges of a door leaf, and are more aesthetically desirable than the exposed door core.

The dual scope system requires that door leafs be lipped on all four edges. The lipping material must be an approved timber, and should be straight grained, joinery quality, and free from knots, splits and checks.

Hardwood timber lippings should be 6-12mm thick and applied to all four edges of the leaf. Strelip 60 lippings should be 8-13mm thick and applied to all four edges of the leaf.

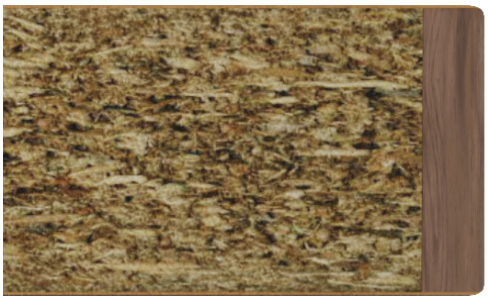
Lippings should be bonded to the door leaf using a Polyurethane (PU) or Polyurethane-Reactive (PUR) adhesives.

Door may be lipped before or after the facing is applied.

Table 2 - Lipping Details

Material	Dimensions	Density
Sapele, Oak, Meranti, Ash, Mahogany, Maple, Utile, Walnut, Wenge, European Cherry, KSK	6-12mm thick x 54mm wide	640
Strelip 60	8-13mm thick x 54mm wide	661

Lippings at the closing and meeting stiles may need to be profiled either at the time of manufacture, or on site at the time of installation, to ensure correct operation while maintaining operating gaps to the satisfaction of BS 4787-1:1980. Profiling is only to be carried out where necessary and should not be done as standard practise.



Pencil round to the leading edge

Maximum 2.5° chamfer to the leading edge

It is important to ensure that the lipping material and the cores are properly dried and have similar moisture contents (10-12% for internal use). Timber can shrink or grow by up to 1% across the grain for every 4% variation in moisture content. Differential movement between the core and lipping resulting from adverse environmental conditions or use of components with different moisture contents can give rise to 'telegraphing' of the core and, in extreme circumstances, splitting of veneer facings.

3.2 Facings

Facings are the decorative layers applied to the outside of a door core.

As solid core constructions, Strebord and Stredor provide a stable base for the application of door facings. Under the Dual Scope system, doors can be faced with a variety of facings.

The adhesives used for the application of door facings should be suitable for use with the particular material for bonding onto a wood or chipboard base.

Core calibration is limited to 0.5mm to each face (1mm over the total thickness of the door). Veneer facings may be laid with a vertical or horizontal grain direction.

Plastic laminate or PVC facings should not extend over or wrap around the door edges. Metallic facings are not approved.

Table 3 - Facing Options

Approved Facings	Dimension
Paint / Paper Foils	Max 0.5mm
Timber veneers	Max 1.8mm
PVC or plastic laminates	Max 2mm
Cellulosic / non-metallic foil	Max 0.4mm

3.3 Decorative Mouldings

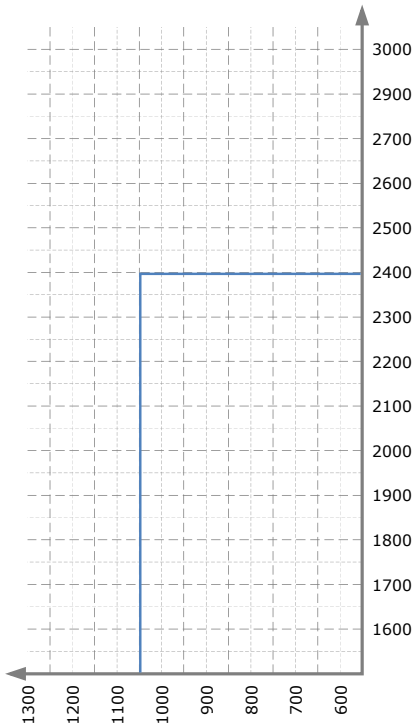
Decorative mouldings can be applied to both faces of the leaf. Mouldings can be used to create faux panels or to continue a design theme.

Mouldings must be surface applied to the door leaf without the use of mechincal fixings, using a suitable adhesive.
Mouldings must be a maximum size of 30mm high (proud of the door face) x 50mm wide, and can be of any profile.
No more than 20% of the door area can be covered by the mouldings.
Any timber species can be used, and mouldings may have any finish applied.

4. Approved Dimensions and Operating Gaps

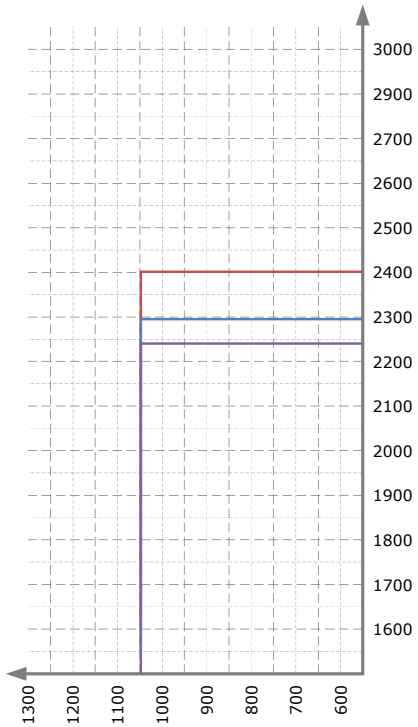
4.1 Approved Leaf Dimensions

Under the FD60 dual scope system, the maximum door leaf size is consistent for Strebord and Stredor, at 1047mm wide by 2402mm high. This is the maximum measurement for the door leaf, including the lipping, and not including the door frame.



54mm Stredor

1046x2393mm STS154FO



54mm Strebord

1047x2402mm Type 617

1047x2294mm STS154FO

1047x2240mm Therm-A-Seal

4.2 Operating Gaps and Alignment

The following describes the minimum and maximum approved operating gaps and door leaf positioning for the dual scope system. The **recommended** margins are 3mm at the head and stiles. The operating gap at the threshold is a maximum of 10mm, but should be manufactured in accordance with the manufacturers recommendations of any dropseal or threshold that is fitted.

Table 4 - Operating Gaps and Alignment

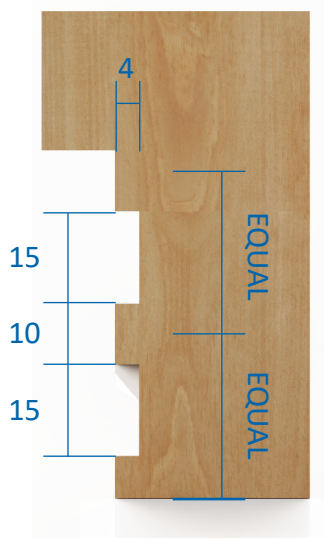
Location	Dimension
Head and stiles edge gaps	Minimum = 2mm Maximum = 4mm
Threshold	Maximum = 10mm above finsished floor level*
Alignment	Leafs must not project beyond the face of the frame by more than 1mm

*Subject to dropseal or threshold manufacturer's installation instructions

5. Seals

5.1 Intumescent Seals

An intumescent seal contains a material that is chemically designed to expand and swell when exposed to heat. Intumescent seals are used to fill operating gaps in the event of a fire.
The use of intumescent seals within the FD60 dual scope system is essential to achieve the potential fire performance. The dual scope system has been tested with PVC encapsulated graphite based intumescent seals.



Seal arrangement to suit Strebord 54 and Stredor 54

See Appendix A for data sheets

Table 5 - Approved Intumescent Seals and Intumescent Seal Arrangements

	Strebord 54	Stredor 54
Seal Type	Sealed Tight Solutions Ltd ST154FO Lorient Polyproducts Ltd Type 617 Intumescent Seals Ltd Therm-A-Seal	Sealed Tight Solutions Ltd ST154FO
Size	15x4mm	
Quantity	2	
Position	Fitted 5mm either side of the frame reveal centre line	

It is important to ensure that the seals extend the full height and width of the perimeter, to enable suitable sealing at the top joints of the frame.

Ensure that the seal grooves are machined cleanly and are free of any deviation, defect or contaminant.

Cut the seal to size before removal of adhesive cover. Peel off the adhesive cover and ensure the adhesive does not contact fingers, or any other contaminants. Place the seal directly into the pre-prepared groove, applying firm, overall pressure to achieve a good bond to the contact area. Do not remove the seal once fitted.

If the surface has been primed, lacquered or painted, it must be completely dry before the seal is fitted.

If surface materials and/or the self-adhesive tape are too cold the adhesive will harden, severely affecting the bonding process. Apply the seals in temperatures above 10°C, and ideally between 20°C - 30°C. The seal will withstand extremes of cold and heat when properly applied.

Intumescent seals should be carefully fitted in accordance with the manufacturer's recommendations, these should be referred to if in any doubt.

Once installed, the exposed surface of the seal may be painted over if required.

5.2 Smoke Seals

Smoke seals are fitted between the door leaf and frame to reduce the passage of smoke. If the doorset is required to provide for a smoke control function, there is allowance in the FD60 dual scope system for smoke seals, as shown below.

Table 6 - Approved Smoke Seals and Smoke Seal Arrangements

	All Cores
Seal Type	Sealed Tight Solutions Ltd ST1009
Size	11x5mm
Quantity	1
Position	Fitted in swipe or compression mode, to the stop or to the frame reveal

See Appendix A for data sheets

Smoke seal in compression mode

Smoke seal in swipe mode

For optimum performance, seals should compress to approx. 50% of maximum. Over compression can lead to distortion of the seal with subsequent leakage and possible interference with the door operation.

Smoke seals should be fitted the full length and width of the frame reveal. The smoke seals that are approved for the dual scope system can be fitted in swipe or compression configuration, although compression mode is recommended for the best operation of the door and longevity of the seal.

Regardless of fitting configuration, smoke seals must not compromise the operation of the door.

Seals should be checked for any damage or defect. Cut the seal to size before removal of any protective tape. Ensure that the area of application is sound, clean, dry and dust-free.

Peel off the protective tape and ensure the adhesive does not contact fingers, or any other contaminants. Place the seal directly onto the stop or frame reveal, applying firm, overall pressure to achieve a good bond to the contact area. Do not remove the seal once fitted.

It is not acceptable to apply paint or similar finishes to the smoke seal. Smoke seals should be applied after the final finish.

Note that dropseals as described in the following section are also integral to the smoke sealing system of the doorset.

5.3 Automatic Drop Seals

The gap underneath the door cannot be controlled by the doorset manufacturer, who can only assemble doorsets to provide for a nominal dimension from the bottom of the door to the bottom of the frame jamb. Similarly, it may be difficult for the installation contractor to control under door gaps, as these are influenced to a major degree by the quality of the surrounding structure, and the quality and nature of the floor preparation and finish. In the FD60 dual scope system, automatic drop seals may be used to control the gap underneath the door, and control smoke passage.

The FD60 dual scope system allows for the following automatic drop seals.

Table 7 - Approved Automatic Drop Seals and Thresholds

Manufacturers	Models	Protection
Lorient Polyproducts Ltd	LAS8001si	1mm Lorient Polyproducts Ltd MAP paper or 1mm Intumescent Seals Ltd Therm-A-Strip lining the drop seal mortice
Sealed Tight Solutions Ltd	STS422, STS422GT	
Athmer oHG	Schall-Ex Duo L-15	
Norsound Ltd	NOR810, NOR810S, NOR810dB+	
Fire and Acoustic Seals Ltd	FAS45	
Sealmaster Ltd	DRP2712	
Raven Products Ltd	RP8Si	

See Appendix A for data sheets

Dropseal fitted centrally in the door leaf

The drop seal should be machined in the centre of the width of the door leaf, and installed in accordance with the manufacturer's recommendations.

Suitable tolerances at the bottom of the door should be allowed for a threshold, and the threshold should be installed in accordance with the manufacturer's recommendations.

Where it is impractical to provide for seals at the threshold, the maximum threshold gap between the bottom of the door and the top of the finished floor should not exceed 3mm.

If a smoke rating is required then a drop seal must be fitted.

6. Glazing

Doors are glazed primarily for the safety of users of a building. Glazing is often also incorporated as an aesthetic consideration, or to allow for the passage of light. The dual scope system allows for apertures to be machined, glazed with approved glass, lined with an approved system of glazing tape and glazing liner, and secured with a hardwood beading.

6.1 Glass

The dual scope system allows for the use of two types of 60 minute fire rated, minimum P1A security rated monolithic glass, as described in the table below.

Table 8 - Approved Glass Types

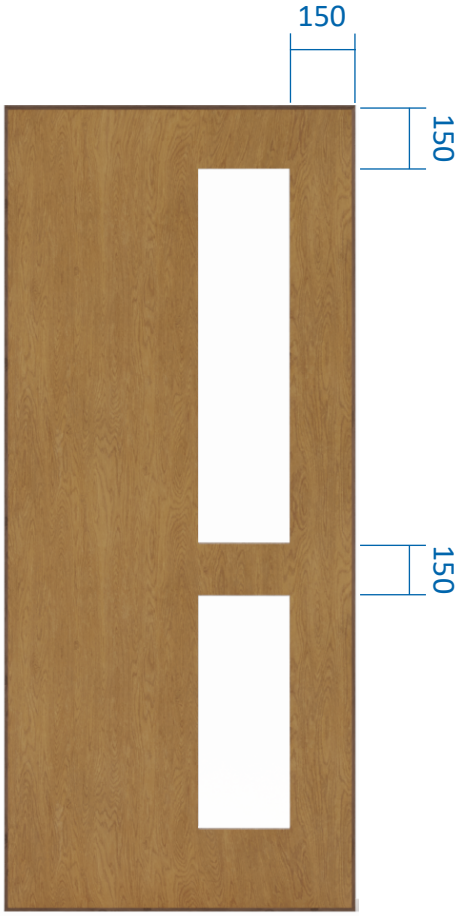
Product	Thickness	Glazing Type	Grade	Safety Rating	Burglar Resistance	Fire	Insulation	dBrw
AGC Pyrobelite 12EG	16mm	Single	External	Class 1(B)1	P2A	E60	60	36
Pilkington Pyrostop 30-10	15mm	Single	External	Class 2(B)2	P1A	E60	30	38

See Appendix A for Declarations of Performance

6.2 Area and Position

The glazing apertures must be located to ensure an adequate margin between the nearest edge of the door, and between apertures. Apertures cut into the door leaf must be a minimum of 150mm from the edges of the leaf, and a minimum of 150mm between apertures.

The maximum glazed area allowed is 1m². This can be in one aperture or split over several apertures, in any configuration that complies with the restrictions on position.



6.3 Beading

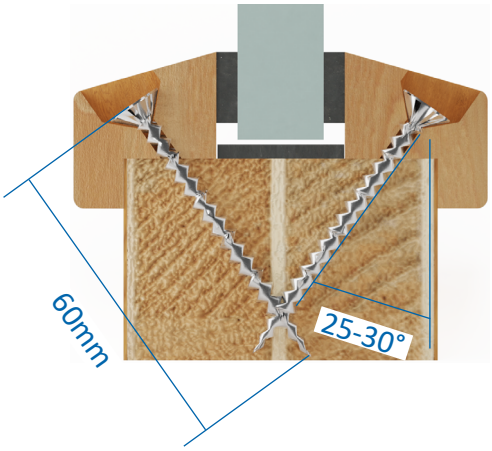
The dual scope system allows for a hardwood splayed bolection bead. The beading material must be a hardwood timber with a minimum density of 640kg/m³. Hardwood for beading should be straight grained, joinery quality, and free from knots split and checks.

Table 9- Glazing Systems

	Core	Glass	Overall Dimensions (WxH)	Bolection (WxH)
Config. 1	Strebord 54	Pyrobelite 12EG	30 x 26mm	5 x 7mm
Config. 2	Strebord 54	Pyrostop 30-10	35 x 23mm	10 x 6mm
Config. 3	Stredor 54 Ply	Pyrobelite 12EG	30 x 26mm	5 x 7mm
Config. 4	Stredor 54 Ply	Pyrostop 30-10	35 x 23mm	10 x 6mm

Beadings must be fixed securely to prevent any movement of the glass in the event of a fire.

Beadings should be fixed with 4x60mm screws, or 1.6x60mm pins. Fixings should be fitted a maximum of 50mm from each corner and a maximum of 150mm centres. Screws should be inserted at 25-30 degrees to the vertical.



6.4 Glazing Seal Systems

Glazing seal systems are intended to the glass in place for regular use of the door, and not to be detrimental in the event of a fire.

Where a hardwood glazing liner is required, it must be 6mm thick, made of hardwood of minumum density of 640 kg/m³ and be fixed with PUR/PU/UF adhesive.

The FD60 dual scope system allows for the following glazing system options.

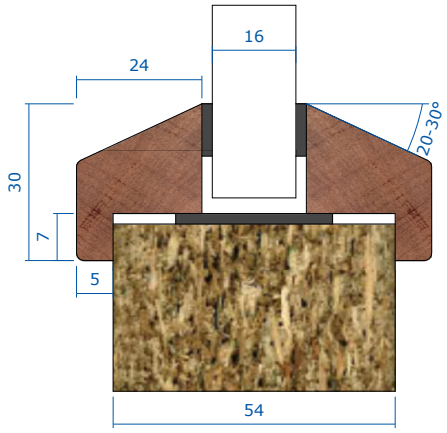
Table 10 - Glazing Systems

	Core	Glass	Hardwood Liner	Glazing Gaskets	Glazing Liner
Config. 1	Strebord 54	Pyrobelite 12EG	Optional	Sealed Tight Solutions Ltd STS104SG	Sealed Tight Solutions Ltd 302GL
Config. 2	Strebord 54	Pyrostop 30-10	Required	Lorient Polyproducts Ltd RG2704 (RF1)	Lorient Polyproducts Ltd B25402 (RF1)
Config. 3	Stredor 54 Ply	Pyrobelite 12EG	Optional	Sealed Tight Solutions Ltd STS104SG	Sealed Tight Solutions Ltd 302GL
Config. 4	Stredor 54 Ply	Pyrostop 30-10	Required	Lorient Polyproducts Ltd RG2704 (RF1)	Lorient Polyproducts Ltd B25402 (RF1)

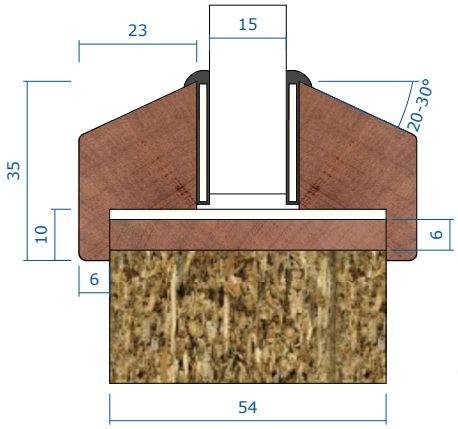
6.5 Vision Panel Machining, Assembly and Fitting

All processes and specifications described in sections 6.1 - 6.4 must only be carried out by a certificated company/operative, demonstrating competency to do so as required by the scheme. In most cases, this will be the system fabricator having the fire and security dual scope documents listed on their Q Mark certificate.

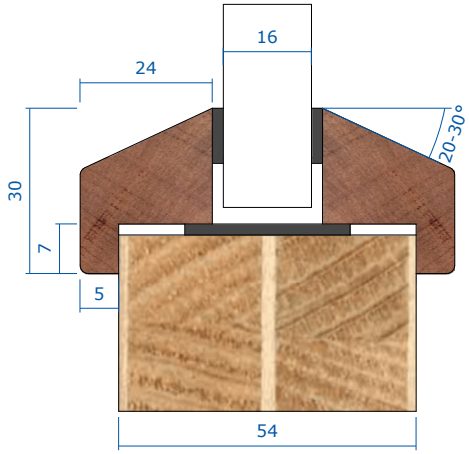
6.6 Approved Glazing Configurations



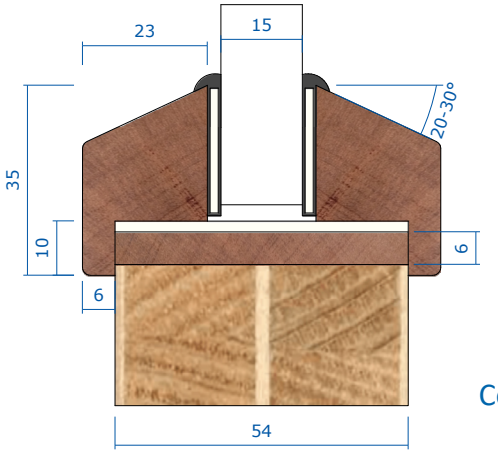
Config. 1



Config. 2



Config. 3



Config. 4

7. Framing

7.1 Door Frames

The FD60 dual scope system requires that doors be framed on three sides, the two vertical sides and the top.

The FD60 dual scope allows for a variety of hardwood framing materials, with the required minimum density of 640kg/m³. Approved materials are; Sapele, Oak, Meranti, Ash, Mahogany, Maple, Utile, Walnut, Wenge, European Cherry, KSK.

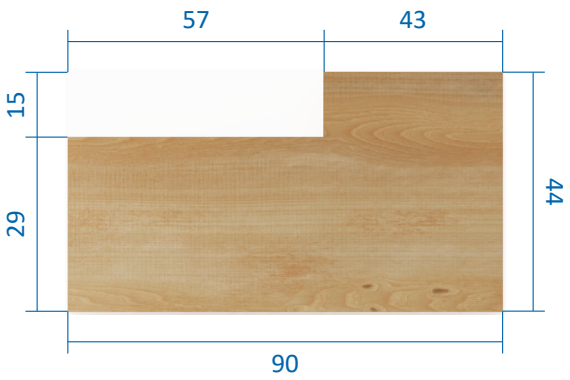
Hardwood for door frames should be straight grained, joinery quality, and free from knots split and checks. Any minor defects should be orientated away from intumescent seal activation.

The moisture content should be 9-13% on average.
Under the FD60 dual scope system, transoms, over panels and side screens are not permitted.

7.2 Minimum Frame Dimensions

Door frames must be a minimum of 90mm depth x 44mm thick, with a rebated or loose planted stop that is minimum 12mm thick.

A 57mm rebate should be allowed for the door leaf. Where any other thickness is used, allow 3mm on the door leaf thickness.



7.3 Frame Joints

Frames should be manufactured and installed plumb and square. Frames should be assembled with mortice and tenon, mitred, butt or half lap joints with PVA D4 adhesive and mechanical fixings. All joints should be of a tight fit. Pilot holes should be drilled to receive mechanical fixings.

Mortice and Tenon

Mitre

Butt

Half Lap

7.4 Architrave

The use of architrave is recommended for fire doors, and aesthetically, it conceals the joint between door frame and wall.

Architraves should be minimum of 12mm thickness and conform with the material specifications applicable to frames.

8. Hardware

8.1 Preparation and Fixing of Hardware

Preparation of hardware should be carried out in accordance with the manufacturer's instructions. It should be ensured that any hardware is tightly fitting in the cut openings and that any intumescent protection is allowed for.

Strebord and Stredor cores provide for universal screw fixing without the need for timber blocking.

It is recommended that hardware is fixed using fully threaded, suitable wood or chipboard screws. The recommended screw size for load bearing items is detailed in each of the following sections. Pilot holes should always be drilled to receive fixings.

Fixings supplied with the hardware or recommended by the manufacturer will generally be sufficient for use, and will have been tested to the relevant standards for use in this door set system.

8.2 Intumescent Protection

Strebord and Stredor cores rely on the core material to erode at a predictable rate, and for intumescent materials to fill gaps to ensure their fire performance. As such, the removal of core and intumescent material to accommodate hardware potentially creates weaknesses that could be detrimental to performance in the event of a fire. As such, it can be important to line the hardware recesses with intumescent material. Where intumescent protection is noted as 'Optional', it is recommended to always include the protection.

The specific protection required for each type of hardware is detailed in the following sections.

8.3 Hinges

The following hinges are permitted under the dual scope system.

Table 11 - Approved Hinges

Hinge	Quantity	Blade Size	Fixing	Protection
Royde and Tucker H101	3	100x35mm	5no 4.2x30mm screws to leaf 5no 4.2x30mm screws to frame	**Required to under all hinge leaves.** **Dufaylite Developments Ltd 2mm interdens** **Lorient Polyproducts Ltd 2mm MAP paper** **Mann McGowan Ltd 2mm Pyrostrip 300** **Intumescent Seals Ltd 2mm Therm-A-Strip** **Sealed Tight Solutions Ltd 1mm Graphite**
Royde and Tucker H208	3	102x36mm	4no 5x32mm screws to leaf 4no 5x32mm screws to frame	
Cooke Brothers CB7765 (RH) CB7766 (LH)	3	102x36.5mm	4no 4.2x30mm screws to leaf 4no 4.2x30mm screws to frame	

See Appendix A for Data Sheets

It should be ensured that the hinge fits tightly in the recess and that if hinge protection is used, it is allowed for in the recess depth. The face of the hinge should sit flush with the face of the door leaf or frame.

Pilot holes should be drilled to receive hinge fixing screws. Hinges should be fitted to allow for maximum opening angle, taking into consideration all fitted hardware and the surrounding supporting construction.

Double action pivots or floor spring devices are not permitted under the dual scope system.

	Table 12 - Hinge Positions
Top	150- 180mm from top of the leaf to top of the hinge
Middle	Equally spaced between top and bottom hinge
Bottom	180- 250mm from bottom of the leaf to bottom of the hinge

8.4 Locking Systems

The following Locking System is permitted under the dual scope system.

Table 13 - Approved Locks

Lock	Length	Backset	Fixing	Position	Protection
ERA Surefire Classic	1634mm	45mm	11no 4x30mm screws to leaf	Min. 900mm	**Sides of latch body and fully encasing the top and bottom lock body** Dufaylite Developments Ltd 1mm interdens Lorient Polyproducts Ltd 1mm MAP paper Intumescent Seals Ltd 1mm Therm-A-Strip Sealed Tight Solutions 1mm Graphite **Under forends** Dufaylite Developments Ltd 2mm interdens Lorient Polyproducts Ltd 2mm MAP paper Intumescent Seals Ltd 1mm Therm-A-Strip Sealed Tight Solutions 1mm Graphite

See Appendix A for Data Sheets

It should be ensured that the lock is fitted tightly into the recess and in accordance with the manufacturer's fitting instructions.

Ensure that where intumescent protection is used, it fully covers the required areas as per the manufacturer's fitting instructions. Ensure that any intumescent protection does not hinder the operation of the lock.

The following keeps are permitted under the FD60 dual scope system.

Table 13b - Approved Keeps

Lock	ERA Surefire Classic
Centre	DKSFCKL23487- Left Hand DKSFCKL24272- Left Hand (Extended Strike) DKSFCKR23488- Right Hand DKSFCKR24271- Right Hand (Extended Strike)
Upper and Lower	DKSFHKL23489- Left Hand DKSFHKL24274- Left Hand (Extended Strike) DKSFHKR23490 - Right Hand DKSFHKR24273- Right Hand (Extended Strike)
Fixing	Centre- 3no 4.2x30mm screws Upper and Lower- 2no 4.2x30mm screws
Protection	**Under all keeps** Dufaylite Developments Ltd 2mm interdens Lorient Polyproducts Ltd 2mm MAP paper Intumescent Seals Ltd 2mm Therm-A-Strip Sealed Tight Solutions 2mm Graphite

See Appendix A for Data Sheets

The keeps used must be securely fixed and in line with the latch/bolt/hooks, and must provide for smooth operation of the lock.

8.5 Cylinders

The following cylinder is permitted under the dual scope system.

Table 14 - Approved Cylinders

Cylinder	Dimensions	Fixing	Protection	Configuration
ERA Fortress 3* Euro Profile Cylinder	80mm	1no M5 (size varied with cylinder dimension) supplied with cylinder	Not required	Key / Key Key / Thumbturn
Yale Platinum 3* Euro Profile Cylinder	80mm	1no M5 (size varied with cylinder dimension) supplied with cylinder	Not required	Key/Key Key/Thumbturn

See Appendix A for Data Sheets

It is important to ensure that the cylinder is fitted in the correct orientation. Cylinders will be marked to indicate the external face. It should be ensured that the cylinder is fitted into the machined opening tightly. The fixings supplied with the cylinder should be used, and the cylinder should be fitted in accordance with the manufacturer's instructions.

8.6 Handles and Escutcheons

The following handle is permitted under the dual scope system.

Table 15 - Approved Handles

Handle	Escutcheon	Protection
Zoo ZPS 030SS	Zoo ZPS 001SS	Not required
Glutz Zurich 5088	Glutz 5380C	Not required
Hafele HL03	Serozzetta EPSS	Not required

See Appendix A for Data Sheets

Handles should be fitted in accordance with the manufacturer's instructions.

8.7 Door Viewers

The following door viewer is permitted under the dual scope system.

Table 16 - Approved Door Viewer

Door Viewer	Dimensions	Fixing	Protection
UAP SWALF14BRASSUP	12mm barrel diameter	Fixed through door leaf with integral bolt system	Hole must be within 1mm of the body diameter and bedded onto a tested intumescent mastic
Glutz GY3504	15mm barrel diameter	Fixed through door leaf with integral bolt system	

See Appendix A for Data Sheets

It should be ensured that the door viewer is fitted into the machined opening tightly, and that the intumescent protection lines the machined opening completely. Door viewers should be fitted in accordance with the manufacturer's instructions.

8.8 Automatic Closing Devices

The following hinges are permitted under the dual scope system.

Table 17 - Approved Closers

Closer	Core	Fixing	Position	Protection
Geze Boxer 2-4 Concealed Overhead Closer	Strebord 54	As supplied with closer	Top of the leaf/head of frame as per manufacturers instructions	Lorient Polyproducts 1mm MAP or Interdens lining all sides and top of closer body
Astra 4003 Concealed Jamb Closer	Strebord 54 Stredor 54 Ply	As supplied with closer	At the door edge/frame jamb. Mounted between 600-1000mm from the bottom of the door leaf	Intumescent Seals Ltd 1mm Therm-A-Strip ecasing closer body and under both forends
Arrone AR1500	Strebord 54 Stredor 54 Ply	As supplied with closer	Faced fixed at top of the leaf/head of frame as per manufacturers instructions	Not required
Rutland TS11204 Overhead Face Fixed Closer	Strebord 54 Stredor 54 Ply	As supplied with closer	Faced fixed at top of the leaf/head of frame as per manufacturers instructions	Not required
Dorma TS92 Overhead Face Fixed Closer	Strebord 54 Stredor 54 Ply	As supplied with closer	Faced fixed at top of the leaf/head of frame as per manufacturers instructions	Not required

See Appendix A for Data Sheets

Automatic closing devices must either be as tested or components of equal specification that have demonstrated contribution to the required performance of these types of 30 minute doorset designs, when tested to BS 476: Part 22: 1987, BS EN 1634-1 or BS EN 1634-2.

Closers should be fitted in accordance with the manufacturer's instructions. All adjustments to closing forces or fitting should be made in line with the manufacturer's instructions. Closers should not impede the operation of the door, and should close the door from any position to fully closed in under 25 seconds.

8.9 Letter Plates

The following Letter Plates are permitted under the dual scope system.

Table 18 - Approved Letter Plates

Letterplate	Dimensions	Position	Protection
Royde and Tucker LP08	250x40mm aperture	400-1200mm from the bottom of the leaf, minimum 150mm from any edge	Protection integral to unit as supplied
ERA Nu Mail with Nu Mail Shield Security Cowl	264x40mm aperture	400-1200mm from the bottom of the leaf, minimum 150mm from any edge	Intumescent kit supplied with letterplate must be installed

See Appendix A for Data Sheets

Letterplates should adhere to the same edge margins as glazing. Letterplates must be fitted at 400 - 1200mm above the threshold level. It should be ensured that the letterplate is fitted into the machined opening tightly, and that the intumescent protection lines the machined opening completely. Letterplates must have a current TS008 Kitemark license. Letterplates should be fitted in accordance with the manufacturer's instructions.

8.10 Decorative and Ancillary Hardware

The following items of decorative hardware are permitted under the dual scope system.

Table 19 - Approved Decorative Hardware

Hardware	Details	Direct Test Evidence
Push Plates / Kick Plates	Steel, stainless steel, or brass. Mechincally fixed at max. 20% of the door leaf area, bonded at max. 30% of the door leaf area. No return on door edges allowed	Generic
Pull Handles	Face fixed or through bolted with max. 1mm clearance on stud	Generic
Signage	Plastic or metal surface mounted with glue or screws	Generic
Recessed Signage	2mm aluminium or 3mm PVC, max. 45mm dia. flush fitted at min. 50mm from any edge	Generic
Security Chain	Steel, stainless steel, or brass. Mechincally fixed with fixings provided	ERA Fab&Fix PVCu/Timber Door Chain 791-65
Numerals	Metal, mechincally fixed with fixings provided	ERA Fab&Fix Door Numerals FFNUM8BC
Knocker	Stainless Steel, mechincally fixed using fixings provided.	ERA Ingot Door Knocker 4A550

See Appendix A for Data Sheets

9. Installation

Doorsets are not freestanding products and they will not provide for any design performance until they have been competently installed into a suitable structure. If the installed doorset is difficult to operate the users of the building may disable elements of the doorset on the basis of user convenience with consequential safety risks, for example by wedging the doors in an open position.

It is vital that performance doorsets are installed by competent tradesmen and it is strongly recommended that the installer is a member of a recognised quality assurance scheme. Installers should be familiar with the content of BS 8214: 2008 - Code of practice for fire door assemblies.

The dual scope system is approved for installation into most structures, including:

- Cast dense concrete
- Dense concrete blocks or brickwork
- Lightweight concrete
- Lightweight aerated concrete
- Timber stud partition
- Steel stud partition

All structures should provide for secure fixings and in the case of Steel stud partitions, the jamb fixing studs should be generally be back filled with softwood to receive fixings.
Doorsets may be fixed to some propriety steel stud partitions where the partition system has been successfully tested to the required performance with timber doorsets. In this event fixings must comply with the partition suppliers or manufacturer specifications.

9.1 Adjusting Door Leafs

The extent to which door leafs need to be adjusted will be influenced by a number of factors including provisions made at the time of manufacture, environmental conditions affecting moisture content during transport and storage, and quality of installation.

When installed, the operating gaps between the door and the frame and at the meeting stiles of pairs should comply with BS 4787 Part 1: 1980 when measured from the opening face of the door leaf.

It is recommended that the moisture content of the door leaf is checked before attempting adjustment, and that possible shrinkage should be considered in the adjustment.

Additional care is required where doorsets are fitted with smoke seals to ensure smooth operation and to reduce wear on the seal.

9.2 Sealing to Structural Opening (Fire Stopping)

For second fixing of doorsets into prepared openings it is essential that there is an installation gap between the frame and the surrounding structure.

It should be ensured that structural openings are plumb and square, and are prepared to accurate dimensions.

9.3 Fire Stopping Solutions with Primary Test Evidence

The following details a selection of methods of fire stopping with Primary Test Evidence. Please find illustrations of these methods on Page 26.

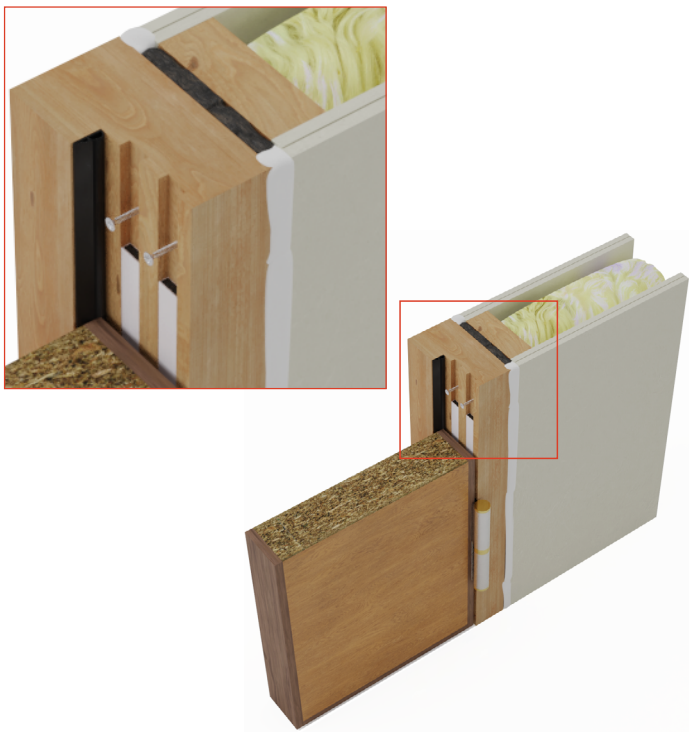
Table 20 - Fire Stopping, Direct Evidence

Product Type	Product	Test Std	Supporting Construction	Architrave	Packers	Test Duration (min)	Method
Acrylic Mastic	Mann MacGowan Pyromas	BS 476: Part 22: 1987	Plasterboard clad timber stud	45x18mm MDF	Softwood	67	1
Acrylic Mastic	Mann MacGowan Pyromas	BS 476: Part 22: 1987	Plasterboard clad timber stud	None	Softwood	60	2
Acrylic Mastic	Everbuild Sealant 300	BS 476: Part 22: 1987	Plasterboard clad steel stud	45x18mm Softwood	Plastic	61	3
Intumescent Foam	FAS Fire Door Foam	BS EN 1634-1:2014	Plasterboard clad steel stud	45x18mm	Plastic	62	4
Intumescent Foam	STS ST99	BS 476: Part 22: 1987	Plasterboard clad steel stud	45x18mm MDF	Plastic	62	4

Selected primary supporting evidence. Further evidence is available on request.

Method 1

Frame fitted to a plasterboard clad timber stud partition, with 45x18mm softwood architrave. Structural opening gap packed with Rockwool and sealed with acrylic intumescent mastic.



Method 2

Frame fitted to a plasterboard clad timber stud partition, with no architrave. Structural opening gap packed with Rockwool and sealed with acrylic intumescent mastic.

Method 3

Frame fitted to a plasterboard clad steel stud partition, with architrave. Structural opening gap packed with Rockwool and sealed with acrylic intumescent mastic.

Method 4

Frame fitted to a plasterboard clad steel stud partition, with architrave. Structural opening gap filled with intumescent expanding foam.

9.4 Assessed Fire Stopping Solutions

The following details a selection of methods of **Assessed** fire stopping for the Dual Scope System.

Gaps up to 10mm must be sealed on both sides with a 10mm depth of acrylic intumescent mastic. Joint must be fitted with 15mm thick architraves overlapping by at least 15mm each side.

Gaps between 10mm and 20mm may be tightly packed with mineral fibre, capped on both sides with a 10mm depth of acrylic intumescent mastic. Architraves are optional.

Gaps up to 20mm are filled with proprietary fire stopping product (e.g. expanding PU foam or compressible intumescent foam). Products must be fitted with 15mm thick architraves overlapping by at least 15mm each side.

Timber based or non-combustible sub-frame up to 50mm thick, with no gaps between the components. Joint must be fitted with architraves overlapping by at least 15mm each side.

Timber based or non-combustible sub-frame up to 50mm thick, with gaps up to 10mm between the components filled on both sides with 10mm depth of acrylic intumescent mastic or full depth expanding PU foam. Joint must be fitted with 15mm architraves overlapping by at least 15mm each side.

9.5 Associated Standards

Guidance for various methods of sealing the frame to structural opening gap is also given in BS 8214: 2008, 'Code of Practice for Fire Door Assemblies', which may be referred to where appropriate.

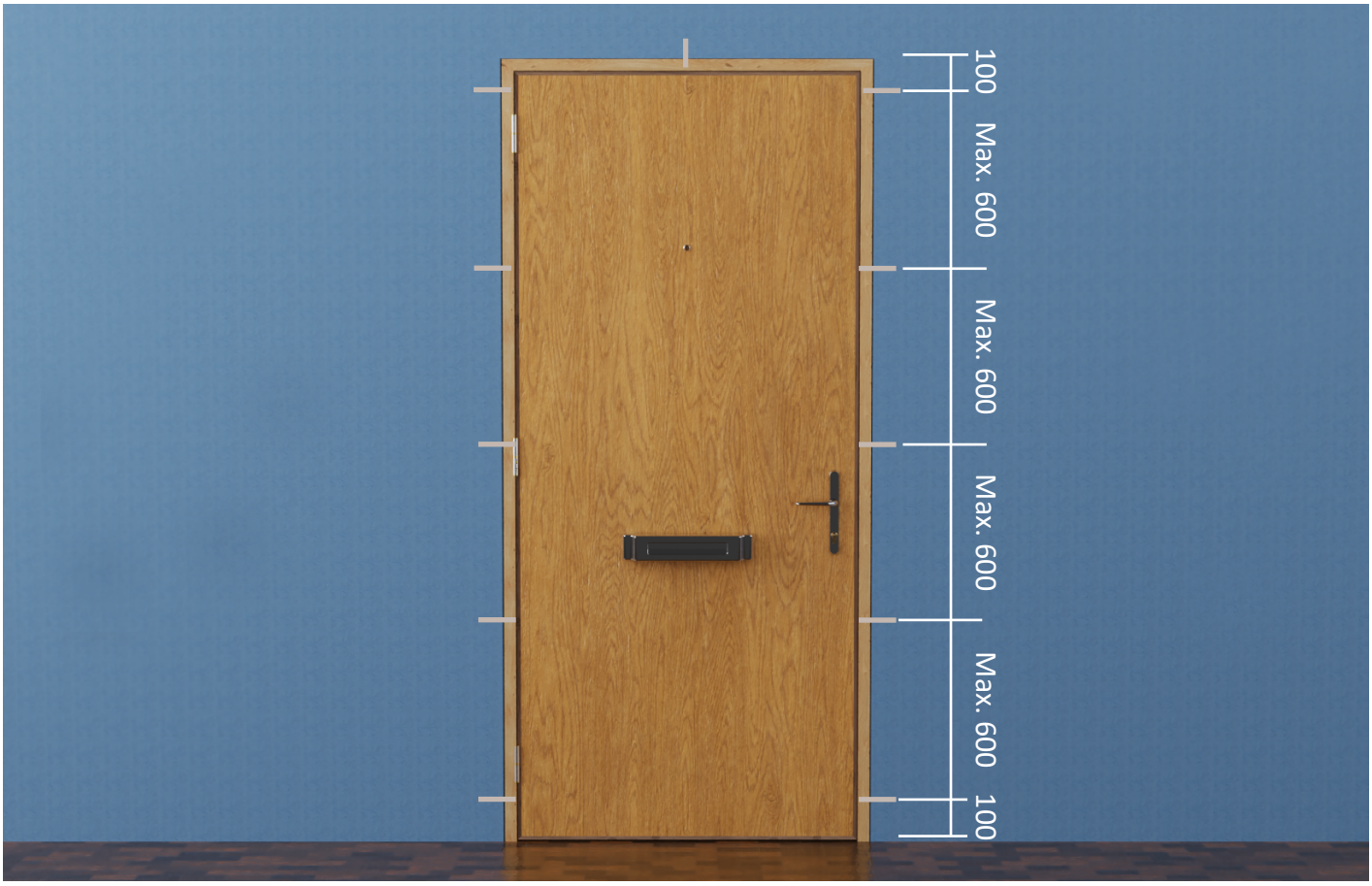
9.6 Installation Fixings

Fasteners used for the installation of doorsets must be of a size and type suitable for securing into the medium to which the doorset is to be installed. Fixings must penetrate the structure to a minimum depth of 40mm.

Steel wood screws are approved for use with timber stud partitions and for use with steel stud partitions that incorporate a timber infill. When fixing to propriety metal stud partitions without timber infill the fixings must be of the size and type approved by the partition manufacturers fire test/assessment data. The positioning of installation fixings in height should be planned to avoid conflicts with hardware, sealing systems and other building elements.

The fixings can be covered by using timber pellets or by fixing behind the intumescent seals.

The maximum fixing centres are 100mm from the top and bottom, with maximum 600mm between each fixing. A fixing can be fitted to the head of the frame if required.



Maximum fixing centres

10. Labelling and Marking

Doorsets manufactured under the dual scope system should be labelled or marked appropriately to enable quick and easy identification of the fire and security rating. Doors can also be labelled separately to assist with distribution on site or to assist with manufacturing and chain of custody requirements.

The dual scope system is certificated by BM Trada under the Q Mark Fire Door manufacture and Q Mark Enhanced security doorset schemes. BM Trada will supply suitable labelling for the relevant schemes to doorset manufacturers.

10.1 Labelling for Fire Performance

The Q Mark Fire Door Manufacture scheme requires that a series of coloured plugs be fitted to the door set to indicate fire door type, componentry, scope of certification, member details and installation. The outer ring indicates the fire integrity, the inner tree colour indicates the status of manufacture and installation, and the number within the central tree is the manufacturers unique certification number. Typically, doorsets manufactured under the FD60 dual scope system will require a plug comprising a blue surround and silver central tree (FD60 Complete certified factory hung doorset). If the doorset is glazed, it will also require a plug comprising a blue surround with an orange central tree (FD60 Approved factory fitted glazing).

Plugs should be fitted to the edge of the door leaf in a place that is visible for onsite and ongoing inspections.

For further details, please refer to the BM Trada plug details document in Appendix A.

10.2 Labelling for Security

The Q Mark Enhanced Security scheme requires that a silver self-adhesive label be fitted to the door set to indicate scope of certification, manufacturer, date of manufacture and classification.

Manufacturers must mark each label with the year and quarter in which the doorset was manufactured. The label will be supplied by BM Trada already marked with the doorset classification. In the case of a doorset manufactured under the dual scope system, the classification is 'D'.

The label should be fitted to the edge of the door leaf in a place that is visible for onsite and ongoing inspections.

Appendix A

Appendix A compiles the pertinent pages from data sheets and declarations of performance for the seals, glass and hardware components that are approved under the Dual Scope system.

STS ST154FO Intumescent Seal 36
Lorient Type 617 Intumescent Seal 37
Intumescent Seals Therm-A-Seal 38
STS ST1009 Smoke Seal 39
Lorient LAS8001si Drop Seal 40
STS ST422 Drop Seal 41
STS ST422GT Drop Seal 42
Athmer Schall-Ex Duo L-15 Dropseal 43
Norseal NOR810/NOR810S Dropseal 44
Norseal NOR810dB+ Dropseal 45
Fire and Acoustic Seals FAS45 Dropseal 46
Sealmaster DRP2712 47
Raven Products RP8Si 48
Pyrobelite 12EG Glass 49
Pyrostop 30-10 Glass 50
STS ST302GL Glazing Liner 51
Lorient RF1 Glazing System 52
Royde and Tucker H101 Hinge 53
Royde and Tucker H208 Hinge 54
Cooke Brothers CB7765 Hinge 55
Cooke Brothers CB7766 Hinge 56
ERA Surefire Classic Locking System 57
ERA Fortress 3* Cylinder 58
Yale Platinum 3* Cylinder 59
Zoo ZPS030SS Handle 60
Glutz Zurich Handle 61
Hafele HL03 Handle 62
UAP Door Viewer 63
Geze Boxer Concealed Overhead Closer 64
Astra 4000 Concealed Jamb Closer 65
Rutland TS11204 Face Fixed Closer 66
Dorma TS92 Face Fixed Closer 67
Royde and Tucker LP08 Letterplate 68
ERA NuMail Letterplate 69
ERA NuMail Letterplate Security Cowl 70
ERA FabFix Security Chain 71
ERA Fab&Fix Numerals 72
ERA Fab&Fix Ingot Knocker 73

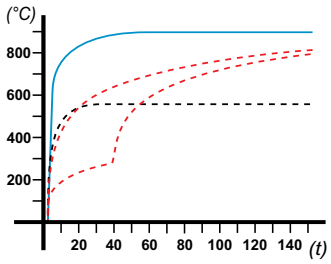
SEALED TIGHT SOLUTIONS

fire smoke acoustic

fire & smoke test data

All STS acoustic data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

Approved Document 'B' (Fire Safety)
Approved Document 'M' (Access To and Use of Buildings)
BS 9999
BS 476: 22 - 1987
BS 8214 - 2008
BS EN 1634 - 1: 2008
BS EN 1634 - 3: 2004
BS 476: 31 - 1



STS INTUMESCENT SEALS :13

Intumescent Only

Product code	Size*
STS 104FO	10mm x 4mm
STS 154FO	15mm x 4mm
STS 204FO	20mm x 4mm

Intumescent & Smoke (brush)

Product code	Size*
STS 104FS	10mm x 4mm
STS 154FS	15mm x 4mm

Intumescent, Smoke & Acoustic

STS "SBS"

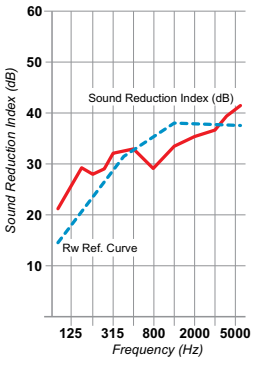
Product code	Size*
STS 104SBS	10mm x 4mm
STS 154SBS	15mm x 4mm

acoustic test data

All STS acoustic data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

Approved Document 'E' (Passage of Sound)
Approved Document 'B' (Fire Safety)
Approved Document 'M' (Access To and Use of Buildings)
Building Bulletin 93 (Acoustic design in schools)*

** See also: "Acoustic Performance Standards for the Priority Schools Building Programme" including: "Technical Guidance Document TGD-021-5 Acoustic Performance in Schools"*



Characteristics / features - all products (unless otherwise stated)

Material	Standard lengths*	Colour(s)*	Performance**
Outer box section: PVC	2100mm, 2400mm, 3000mm	BROWN	FD30 / FD60
Active product: Graphite		BLACK	** SEE NOTE
Brush (FS only): Nylon		GREY	
Blade (SBS only): Butyl		WHITE	

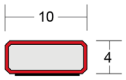
*Others available on request. MOQ may apply.
**Fire, smoke & acoustic test data available on request.

Units 1B & 1C Princess Court, Prudhoe, Northumberland. NE42 6NP. +44 (0)1661 830101 +44 (0)1661 897454 info@sealedtightsolutions.com www.sealedtightsolutions.com

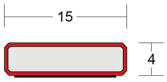
FIRE SEALS

LP1004, LP1504, LP2004, LP2504

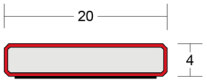
Our intumescent fire door seals offer fire protection where no smoke sealing is required. Combine a fire seal with a Batwing® seal for acoustic + smoke containment. Available in a choice of sizes to cover 30 + 60 minute applications, the fire seal also includes integral antimicrobial protection.



LP1004 Fire seal

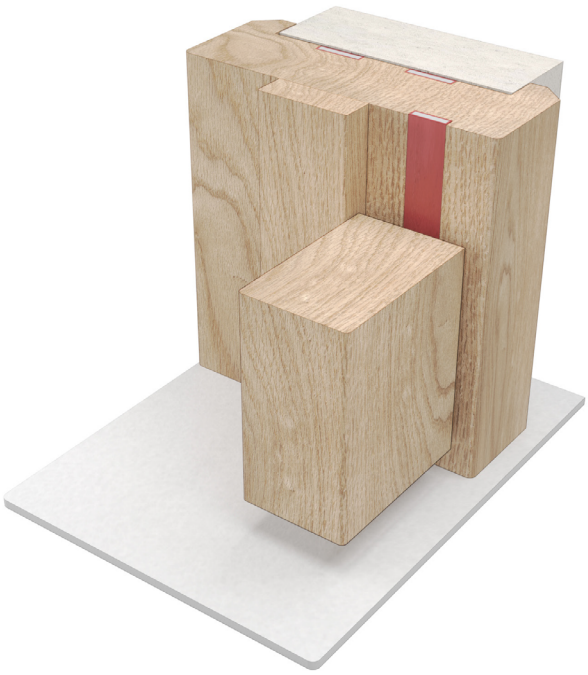


LP1504 Fire seal



LP2004 Fire seal

LP2504 Fire seal



Fire seal

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS EN 1634-1: 2008.
- Fire: BS 476-22: 1987.

Performance
- Protects against fire.
- Integral antimicrobial protection.

Size
- 10 x 4mm.
- 15 x 4mm.
- 20 x 4mm.
- 25 x 4mm.
- Other sizes available, please ask for details.

Location
- Single and double leaf doors.

Use with
- Smoke seals and any architectural seals.

Min/max gap size
- 3mm/4mm.

Seal material
- PVC encased sodium silicate.

Standard lengths
- 1m and 2.1m.
- Other lengths to special order.

Fixing
- Heavy duty self-adhesive backing tape.

Finishes
- Available in a range of standard colours, plus woodgrain and metallic finishes for superior aesthetics.

Accreditations

BBA BRITISH BOARD OF AGREEMENT CERTIFICATE No. 92/2841

IFC certification UKAS FRPP454

certifire (CF330 & CF341)

Intumescent Seals

Therm-A-Seal

Part of the Dixon International Group Ltd
www.dig.co.uk

Introduction

The installation of intumescent fire seals around fire door assemblies is essential to meet the requirements of BS5588 'Fire precautions in the design and construction of buildings'. To meet this requirement Intumescent Seals has developed a unique intumescent formulation representing a breakthrough in intumescent product technology.

The Product

THERM-A-SEAL has been developed primarily for sealing the air-gap between the edges of the leaves and the frames, or between the separate leaves, of both timber and steel fire-resisting door assemblies in the event of a fire.

In a fire situation, an intumescent foam is produced which is voluminous and also capable of exerting a pressure high enough to restrain the edges adjacent to the seal. THERM-A-SEAL is therefore ideally suited to applications where some applied restraint combined with the normal gap-filling properties of intumescent materials is needed. Unlatched door leaves, or double swing assemblies are most likely to benefit from such characteristics across the head, although the seal is equally well suited to conventional latched single-leaf doors.

Application

For most latched single-leaf single-swing 30 minute (FD30) timber fire-resisting door assemblies, a single 10 mm x 4 mm strip of THERM-A-SEAL down each jamb and across the head will normally suffice. Unlatched single-leaf assemblies may be satisfactory with a 10 mm x 4 mm THERM-A-SEAL but, depending on the nature of the door, it may be necessary to increase the size to 15 mm x 4 mm.

Some latched single-leaf single-swing 60 minute (FD60) timber fire-resisting door assemblies, will satisfy the requirement of the BS476: parts 20 and 22: 1987 test procedures when fitted with a single 20 mm x 4 mm strip across the head and down both jambs. If improved performance is required a pair of 15 mm x 4 mm will ensure better protection around the hinges and across the head.

The intumescent foam produced by THERM-A-SEAL has high temperature tolerances and so is well suited for use with steel framed timber door assemblies where conventional intumescent foams may break down.

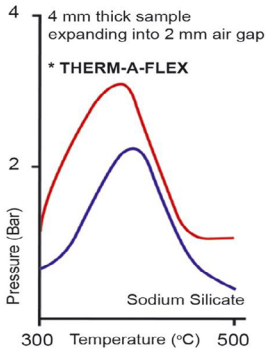
Description

THERM-A-SEAL is made from a unique chemical formulation based on expandable graphite. The seal is supplied in a PVC casing of various colours. The core material THERM-A-FLEX is capable of large expansion combined with significant pressure forming an excellent seal against the ingress of fire.

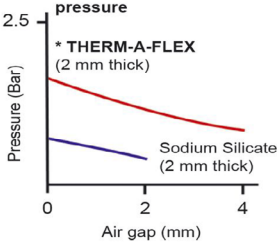
Unlike many other types of intumescent material, THERM-A-SEAL is not affected by moisture and therefore does not require any further protection; it is also unaffected by carbon dioxide.

* Core material of THERM-A-SEAL

Effect of temperature on intumescent pressure



Effect of air gap on maximum intumescent pressure



SEALED TIGHT SOLUTIONS

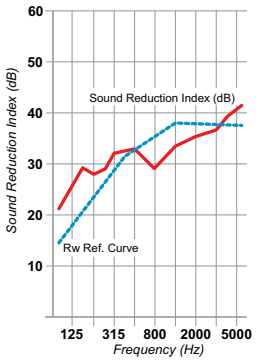
acoustic

acoustic test data

All STS acoustic data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

Approved Document - 'E' (Passage of Sound)
Approved Document - 'B' (Fire Safety)
Approved Document - 'M' (Access To and Use of Buildings)
Building Bulletin - 93 (Acoustic design in schools)*

** See also: "Acoustic Performance Standards for the Priority Schools Building Programme" including: "Technical Guidance Document TGD-021-5 Acoustic Performance in Schools"*



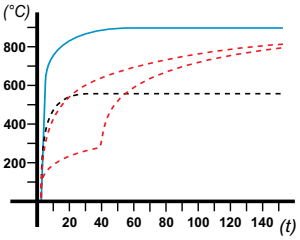
STS 1009 Acoustic/smoke perimeter seal :20

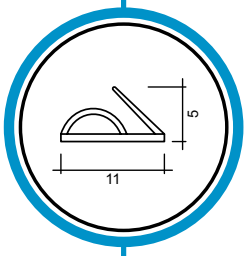
Characteristics / features

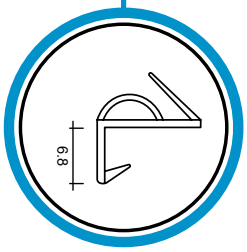
Product code	Size / Length	Colour(s)	Material(s)
STS 1009 * "COLOUR/SIZE" See below	2100mm 2400mm 2700mm 3000mm	B BROWN BK BLACK CL CLEAR G GREY W WHITE	NEOPRENE/BUTYL

Characteristics / features

Protects against / Resisits	Fitting / installation	Performance
SMOKE SOUND DRAUGHT DUST INFESTATION	STS 1009 - self-adhesive STS 1009K* - kerf/push-fit	ACOUSTIC - See STS data sheets :01 - :16 SMOKE / FIRE - STS test data available on request







STS 1009

Perimeter acoustic/smoke seal

Available in both kerf-fit and self-adhesive versions, the ST1009 is the most versatile, cost-effective perimeter seal on the market. It offers simple solutions and is specifically designed to have no adverse effects on the operational integrity of the door.

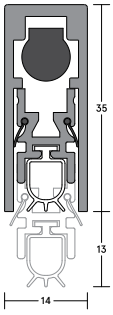
Used in "compression", the ST1009 fits to the active face of the door-stop and thus has a minimal effect on the force required to close the door. The low co-efficient of the material ensures even less resistance to compression and excellent product recovery when the door is opened.

LAS8001 si

HEAVY DUTY 39dB

A slimline, mortised automatic drop seal. It features a high efficiency mechanism, which lifts the seal clear of the floor as soon as the door is opened by a few millimetres; resulting in lower door operating forces. Requires no power connection. Self-levelling on uneven floors; seal height can be adjusted independently of fixing screws.

ID No. 518



LAS8001 si

LAS8001 si (shown with LAS4001)

SYSTEM SPECIFICATIONS

Test evidence

- Acoustic: BS EN ISO 10140-2: 2010 (up to Rw 39dB).
- Smoke: BS EN 1634-3: 2004 & BS 476-31.1: 1983.
- Fire: BS 476: Pt.20/22: 1987 & BS EN 1634-1: 2014.
- Durability: 1 million cycles.

Performance

- Meets smoke requirement: BS 9999: 2017.
- Protects against sound, smoke, fire, draught, light and insects.
- Suitable for wheeled traffic.

Location

- Single swing, single and double leaf doors. For use on both right and left handed doors.

Use with

- Any perimeter seal. Any threshold plate.

Min/max gap size

- 1mm/13mm.

Seal material

- Grey or black silicone rubber.

Standard lengths

- 335mm, 435mm, 535mm, 635mm, 735mm, 835mm, 935mm, 1035mm, 1135mm and 1235mm. Sizes above 1235mm are available on request.
- Note: Each length can be cut back to the next size down. The 335mm can be cut back to 255mm.

Fixing

- Fixing screws are supplied. This seal is mortised. Pre-drilled radiused end plates are supplied which also secure the product in place. (Square end plates available on request).

Adjustment

- Self-levelling on uneven surfaces.

Finishes

- Silver anodised aluminium with silver end plates, and grey silicone rubber gasket.
- Silver anodised aluminium with bronze end plates, and black silicone rubber gasket.

Accreditations

(R27972)

certifire (CF5179)

SEALED TIGHT SOLUTIONS

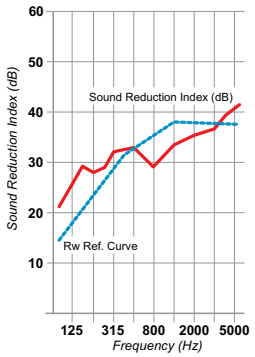
acoustic

acoustic test data

All STS acoustic data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

Approved Document - 'E' (Passage of Sound)
Approved Document - 'B' (Fire Safety)
Approved Document - 'M' (Access To and Use of Buildings)
Building Bulletin - 93 (Acoustic design in schools)*

** See also: "Acoustic Performance Standards for the Priority Schools Building Programme" including: "Technical Guidance Document TGD-021-5 Acoustic Performance in Schools"*



STS 422 Door-bottom seal :16

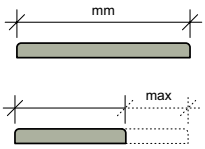
Characteristics / features

Product code	Size / Length	Colour(s)	Performance
STS 422 - "SIZE" See table below	VARIOUS See table below	N / A	ACOUSTIC - See STS data sheets :01 - :16

Characteristics / features

Protects against / Resisits	Fitting / installation	Material(s)
FIRE	See STS data sheet :17	Casing: ALUMINIUM (T60/60)
SMOKE		Seal: NEOPRENE/BUTYL
SOUND		Mechanism: STEEL/NYLON
DRAUGHT		
DUST		
INFESTATION		

Sizes

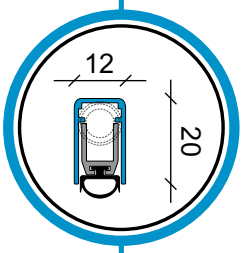


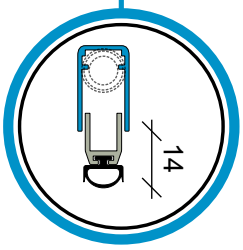
Product size (pre-cut) mm							
330	530	730	830	930	1030	1130	1330
70	200	200	200	200	200	200	200

Product cuts back by (maximum) mm

Please note

Pre-cut sizes are available at **925mm**, **825mm** & **725mm** to suit standard width doorsets.





Derwent House, Station Industrial Estate, Prudhoe, NE42 6NP. +44 (0)1661 830101 +44 (0)1661 897454 info@sealedtightsolutions.com www.sealedtightsolutions.com

SEALED TIGHT SOLUTIONS

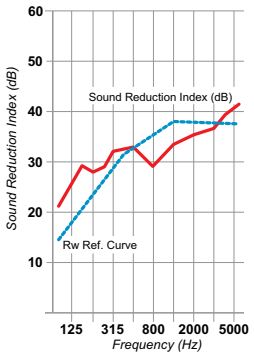
acoustic

acoustic test data

All STS acoustic data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

Approved Document - 'E' (Passage of Sound)
Approved Document - 'B' (Fire Safety)
Approved Document - 'M' (Access To and Use of Buildings)
Building Bulletin - 93 (Acoustic design in schools)*

** See also: "Acoustic Performance Standards for the Priority Schools Building Programme" including: "Technical Guidance Document TGD-021-5 Acoustic Performance in Schools"*



STS 422GT Door-bottom seal :18

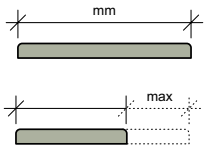
Characteristics / features

Product code	Size / Length	Colour(s)	Performance
STS 422GT - "SIZE" See table below	VARIOUS See table below	N / A	ACOUSTIC - See STS data sheets :01 - :16

Characteristics / features

Protects against / Resisits	Fitting / installation	Material(s)
FIRE	See STS data sheet :19	Casing: ALUMINIUM (T60/60)
SMOKE		Seal: NEOPRENE/BUTYL
SOUND		Mechanism: STEEL/NYLON
DRAUGHT		
DUST		
INFESTATION		

Sizes



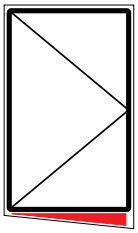
Product size (pre-cut) mm					
430	530	730	930	1130	1330
150	160	200	200	200	200

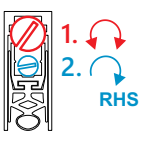
Product cuts back by (maximum) mm

Adjustment

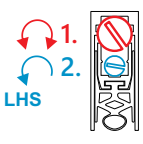
Uneven Threshold

Left to right

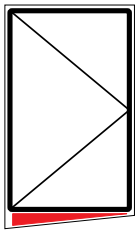


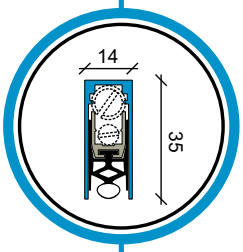


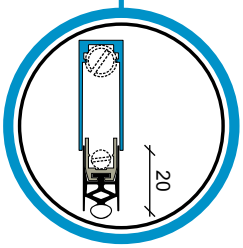
Adjust seal to close gap
Turn for more downward pressure



Right to left





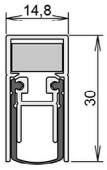


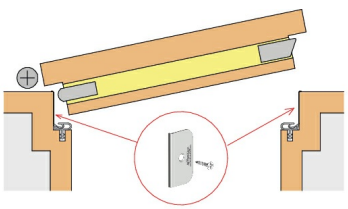
Athmer oHG, Sophienhammer, D-59757 Arnsberg-Müschede, Tel +49 2932 477-500 02.09.2020 09:09

Schall-Ex DUO L-15 WS

Product images

Cross section drawing





Details

Article number	1-382
Product description	¬ SCHALL-EX DUO L-15 WS ¬ Double actuation ¬ High sound reduction values > 50dB with 7 mm sealing height ¬ No visible worn areas ¬ Minimal pressure required for actuation ¬ For fitting: in the groove ¬ Actuator: on hinge side ¬ Actuator: on the lock side
Function	hinged door
Door leaf material	Wood Metal

Technical data

Maximum length (mm)	2000
Minimum length (mm)	708
Standard lengths (mm)	708 , 833 , 958 , 1083 , 1208
Reducibility	125
Groove width x height (mm)	15 x 30
Actuation	Double actuation
Maximum travel (mm)	14
Maintenance free	Yes

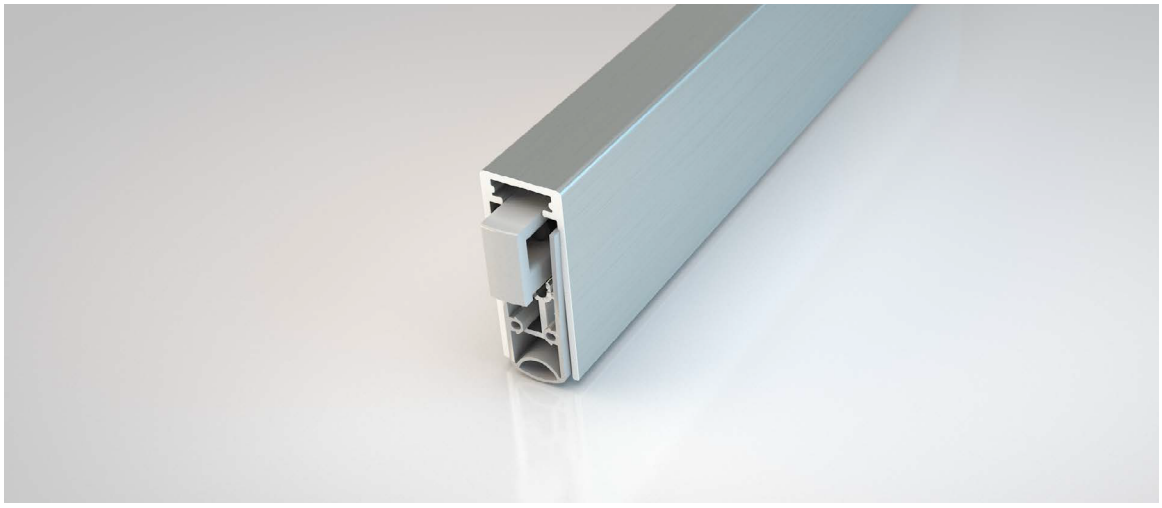
Installation

Mounting type	In-groove
Accessories	art. no. 5435

NORSEAL
SPECIALIST SEAL SOLUTIONS

NOR810®

NORSOUND BY NORSEAL



Application
Bottom edge of acoustic timber doorsets

Fixing
Rebated, held in place with end caps

Performance
Suitable for use on most fire doors
Compliant with BS 476-22
UL Approval
Smoke tested in accordance with BS 476-31.1
Acoustically tested in accordance with
BS EN ISO 10140-2
Certifire CF629
1,000,000 cycle tested

Material
Aluminium, Silicone gasket

Standard lengths (mm)
320, 435, 535, 635, 735, 835, 935, 1035, 1135, 1235, 1335, 1435, 1535

Minimum / Maximum length (mm)
320 / 1700

Gap coverage (mm)
20

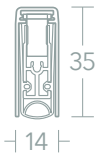
Actuation
Single

Cutback (mm)
Various, >100, 320 limited to 85

Colour
Mill finish, Grey gasket

Order codes
NOR810 + Length eg. *NOR810320* (320mm)

Dimensions



5 Regents Drive
Prudhoe
Northumberland
NE42 6PX

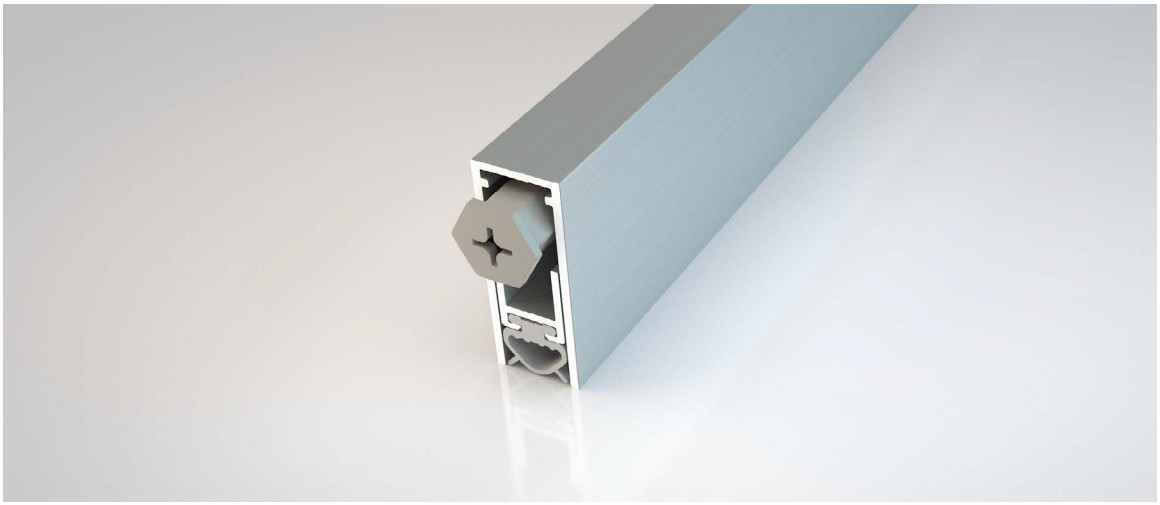
norseal.co.uk sales@norseal.co.uk 01661 830088

Registered in Companies House Cardiff No. 04317595 VAT Reg. No. 733 9466 08

NORSEAL
SPECIALIST SEAL SOLUTIONS

NOR810S+

NORSOUND BY NORSEAL



Application
Bottom edge of acoustic timber doorsets

Fixing
Rebated, screw fixed

Performance
Suitable for use on most fire doors
Meets smoke requirements BS 8214

Material
Aluminium, TPE gasket

Actuation
Single

Colour
Mill finish, Grey gasket

Lengths (mm)
325, 425, 525, 625, 725, 825, 925, 1025, 1125, 1225, 1325

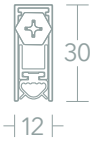
Maximum length (mm)
1325

Gap coverage (mm)
15

Cutback (mm)
125 (425 limited to 105)

Order codes
NOR810S+ + Length eg. *NOR810S+325* (325mm)

Dimensions



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NE42 6PX

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FIRE & ACOUSTIC SEALS

Medium Duty Drop Seal

FAS45

40dB RATED

The recently improved **FAS45 Medium Duty Drop Down Seal** is an unobtrusive, mortised automatic acoustic and smoke drop seal. It boasts a highly responsive mechanism, ensuring that floor clearance is maintained on opening of the door. The santoprene compression seal gives excellent sealing capabilities against sound, smoke, light and the elements of weather.

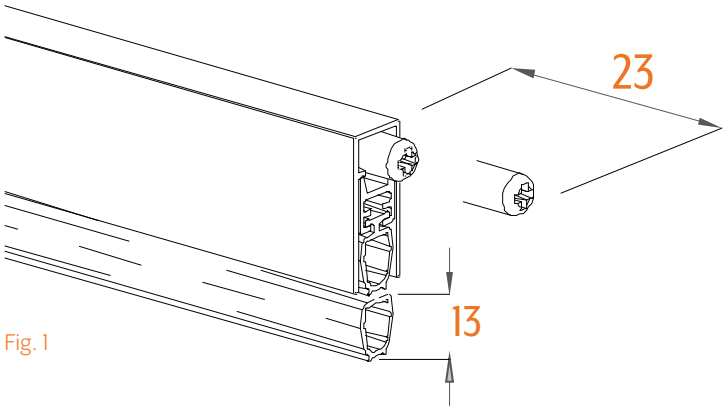


Fig. 1

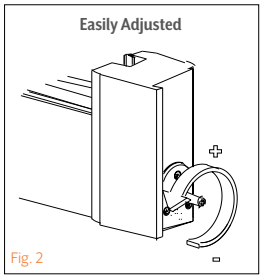


Fig. 2

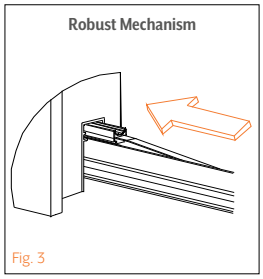


Fig. 3

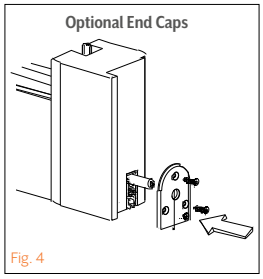


Fig. 4

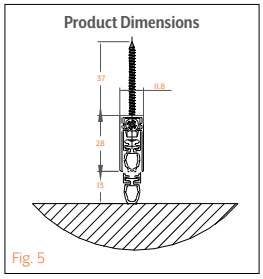


Fig. 5

SPECIFICATIONS

Test Evidence
- Acoustic: BS EN ISO 10140-2: 2010 (up to Rw 40dB)
- Smoke: BS EN 1634-3: 2004
- Fire: BS 476: Pt 20 and 22: 1987 and BS EN 1634-1: 2014.
- Durability: 1,000,000 Cycles.

Performance
- Meets smoke requirement: BS 9999: 2017.
- Protects against sound, smoke, fire, draught, light and insects.
- Does not impact accessibilty.

Location
- Single swing, single & double leaf doors.
- Designed for use on both right and left handed doors.

Use with
- Can be used with any perimeter seal or threshold plate. Tested alongside our **FAS35**, **FAS35R** and **FAS39** Perimeter Seals.

Min/max gap size
- From 3mm up to 13mm. (Fig.5)

Seal material
- Black EPDM rubber.

Standard Lengths
- 400mm, 426mm, 526mm, 610mm, 626mm, 686mm, 726mm, 762mm, 826mm, 838mm, 864mm, 914mm, 926mm, 1026mm, 1200mm, 1300mm.
- Note - Each length can be cut back to the next size down. The 400mm can be cut back to 221mm.

Fixing
- Fixing screws are supplied. This seal is mortised . Pre-drilled radiused end plates are supplied which also help to secure the product in place. (Fig. 4)

Adjustment
- Self-levelling on uneven surfaces. (Fig. 1)

Finishes
- Silver anodised aluminium with silver end plates and black EDPM rubber gasket.

bwf certifire FIRE DOOR SCHEME

bwf BRITISH WOODWORKING FEDERATION

FIRE AND ACOUSTIC SEALS LTD
Units 6 - 11 Spartan Industrial Estate,
Brickhouse Lane, West Bromwich, B70 0DH
[t]+44 [0]121 521 2179 **[f]**+44 [0]121 521 2183
[e] sales@fireandacousticseals.co.uk **www.fireandacousticseals.co.uk**

Issue Number: 1
Issue Date: May 2018

Acoustic and Smoke Seals

Sealmaster of Cambridge

Dropseal DRP2712E

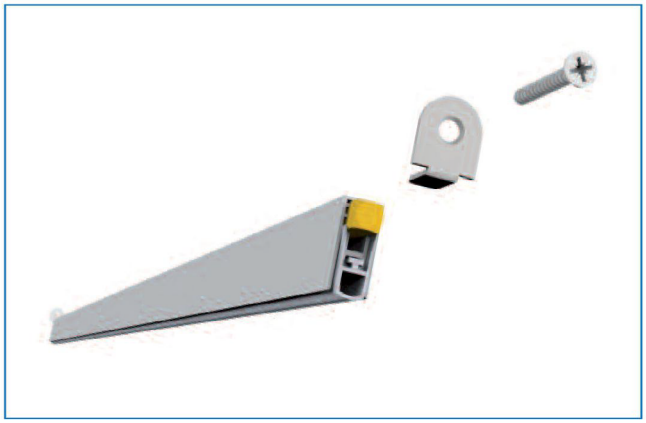
Part of the Dixon International Group Ltd
www.dig.co.uk

Introduction

Sealmaster Dropseal

Sealmaster Automatic Dropseal has been engineered to fill the gap between the door bottom and the floor or threshold plate. The seal is operated automatically by pressure against the door jamb on its adjustable plunger. The spring loaded mechanism ensures a self levelling sealing along the entire door bottom length. The mechanism retracts into the aluminium case when the door is opened.

We provide the dropseal in lengths of 535mm, 635mm, 735mm, 835mm, 935mm, 1135mm and 1025mm all supplied with end clips for easy fitting. Can be used in conjunction with the Sealmaster Delta and Double Fin Acoustic Seals.

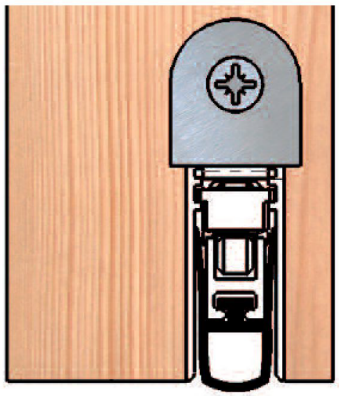


Technical Information

Sealmaster Dropseal:-

The Sealmaster dropseal has been tested to BS EN 1634-1 2014 BS EN 1363-1 2012 and BS476 Part 22. Test data available on request. It has been durability tested to over 1,000,000 cycles. Test evidence on request.

The case and carrier is Aluminium ENAW 6060 T6 with an extractable internal mechanism with steel leaf springs, the seal is in self extinguishing silicone VMQ.



Application

Sealmaster Dropseal:-

Suitable for new and retro fit projects, the dropseal provides smoke containment along with acoustic properties as part of an acoustic sealing system. The seals are provided with detailed fitting instructions and are routed into the door bottom, stainless steel clips and screws are provided. Our technical team are happy to provide advice on applications and fitting.

Available ex stock.

Contacting Us

Sealmaster, Brewery Road,
Pampisford, Cambridge,
CB22 3HG, England

Phone: 01223 832851
Fax: 01223 837215
Email: info@sealmaster.co.uk

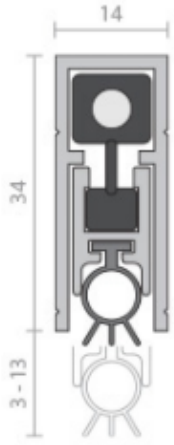
Design, Innovation & Manufacture since 1962

4020 www.redgraphic.co.uk

Table 7 - Raven Products RP8Si Drop Seal

RP8Si

A concealed, automatic door bottom seal that is spring loaded to lift clear of the floor when the door is opened. It is acoustically designed, featuring silicon gaskets for medium temperature smoke and fire door applications. Operated automatically by pressure against the door jamb on its adjustable strike. RP8Si can also be fitted into the bottom rail of a metal door by the fabricator. Has a level adjustment to achieve an optimum seal.



Location: Fully morticed into a 15mm x 34mm groove into the bottom of single and double butt hinged timber and metal doors.

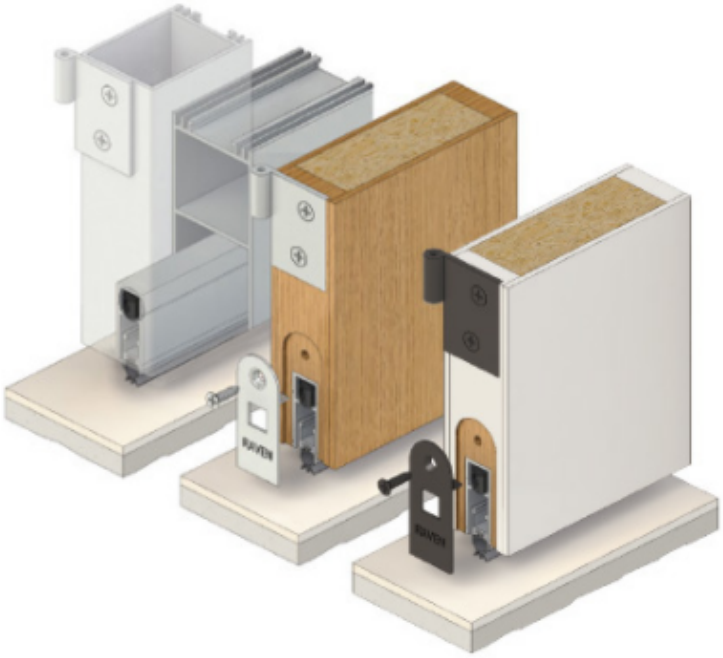
Min/Max Gap: 3mm to 13mm.

Finish: Satin clear (silver), bronze or black anodised aluminium (15µm).

Fixing: Concealed screw fix with colour matched stainless steel escutcheon plates and screws supplied.

Seal: RP308Si. Grey silicon rubber (SE).

Sizes: 1500mm, 1220mm, 1070mm, 920mm, 820mm, 600mm, 380mm to 295mm(min). Seals cut back to exact size.



Approvals

Cert. GVYI.R37913
certifire CF5710
ANSI/BHMA A156.22
Acoustic AUS/NZ: NCC Spec. F5.5.
UK/EU: Approved Document E. Rated to BS EN ISO 717.1.
Fire AUS/NZ: NCC Spec. C3.4. AS1530.4 & AS/NZS 1905.1.
NZ BC Compliance Doc. C/AS1 6.19.2 & App. C6.1.1.
UK/EU: Approved Document B. BS 476 Pt. 20 & 22 (similar to BS EN 1634-1).
FRL & FRR-/240/60 and FD240.
Gasket flammability index 1 when tested to AS1530.2.
Smoke NCC Spec. C3.4. AS1530.7 & BS EN 1634-3. Meets smoke leakage rates specified in AS6905 & EN 13501-2 "Sa", "Sm".
Energy NCC Pt. 3.12.3.3 & J3.4.
Design for Access and Mobility High efficiency mechanism to assist with the closing force requirements detailed in AS1428.1.
Durability Tested to over 1,000,000 operating cycles without failure.

NSG GROUP

Declaration of Performance

CE DOP 10/215228/1

CE

The undersigned, representing the following:

Company placing on the market:
NSG Group European Technical Centre Hall Lane Lathom Nr Ormskirk Lancashire L40 5UF

Manufacturing Plant:
Pilkington Deutschland AG, Gelsenkirchen, Germany (Addresses of other sites kept on record)

Herewith declare that the following product:
Pilkington **Pyrostop®** 30-10, 15 mm

is in conformity with the provisions of the following EU Regulation when installed in accordance with the installation instructions contained in the product documentation:
Regulation (EU) No 305/2011 Construction Products Regulation.

The following product standard referenced below has been applied:
EN 14449: 2005 + AC:2005 Laminated safety glass, intended to be used in buildings and construction works

Declared Performance

Essential Characteristics	AVCP Systems	Performance
Resistance to Fire	1	EI30
Reaction to Fire	3,4	NPD
External Fire Performance	3,4	NPD
Bullet Resistance	1	NPD
Explosion Resistance	1	NPD
Burglar Resistance	3	P1A
Pendulum Body Impact Resistance	3	2(B)2
Resistance Against Sudden Temperature Changes and Temperature Differentials	4	40 K
Wind, Snow, Permanent and Imposed Load Resistance	4	NPD
Direct Airborne Sound Insulation	3	38 (0; -2) dB
Thermal Properties	3	5.1 W/m2K
Radiation Properties		
Light Transmittance / Reflectance	3	0.87/0.08/0.08
Solar Transmittance / Reflectance	3	0.69/0.07/0.07
g Value	3	0.75
Durability	3,4	Pass

Notified production control certification body number
1121, 0432, 0757, 1750, 1234, 1004, 1680, 2509, 1314, 1488, 1812, 0833

Martin Neifer
Operations Director Fire Protection Glass
01/07/2013

Nils Brinkmann
Commercial Director Fire Protection Glass
01/07/2013

SEALED TIGHT SOLUTIONS

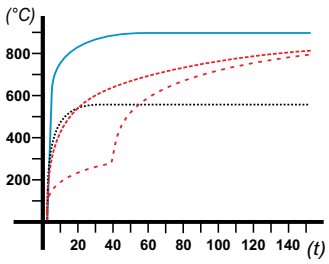
fire & smoke

fire test data

All STS acoustic data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

Approved Document 'B' (Fire Safety)
Approved Document 'M' (Access To and Use of Buildings)

BS 9999
BS 476: 22 - 1987
BS 8214 - 2008



STS 105GT

:23

Glazing tape - FD30/FD60 doors

For SCREENS see STS data sheet :24

Characteristics

Product code	Colour(s)	Size / Length	Features
STS 105GT	BLACK	10mm x 5mm 100m/COIL	INTUMESCENT COMPRESSIBLE EASY FIT COST-EFFECTIVE FULLY PROVEN FD30 & FD60* COMPLIANT
STS 105GT-3 "COLOUR"	BLACK BROWN WHITE	10mm x 3mm 150m/COIL	

Characteristics

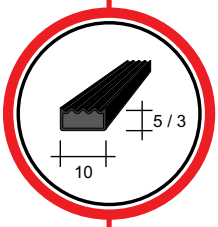
Material	Fitting / installation	Performance
Closed-cell foam	Apply and trim to length	GLASS - from 6mm GWPP and above* *Refer to manufactures' test data

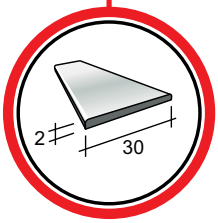
STS 302 LINER

Glazing liner - FD60 doors

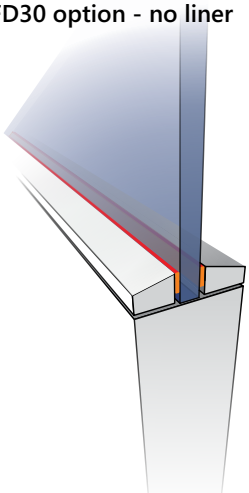
Characteristics

Product code	Colour(s)	Size / Length	Features
STS 302 LINER	WHITE	30mm x 2mm 100m/COIL	INTUMESCENT EASY FIT COST-EFFECTIVE FULLY PROVEN

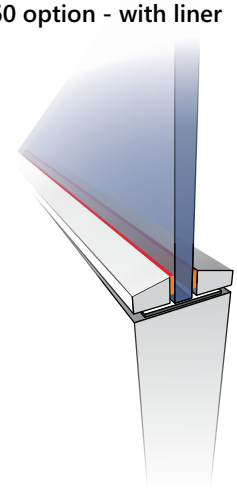




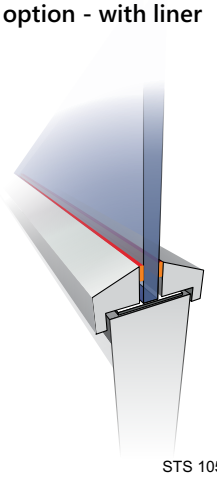
FD30 option - no liner



FD60 option - with liner



FD60 option - with liner



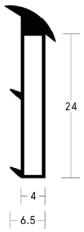
STS 105GT product shown orange/red for illustrative purposes only.

Derwent House, Station Industrial Estate, Prudhoe, NE42 6NP. +44 (0)1661 830101 +44 (0)1661 897454 info@sealedtightsolutions.com www.sealedtightsolutions.com

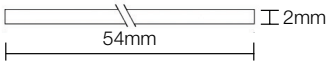
RF1™

FD60

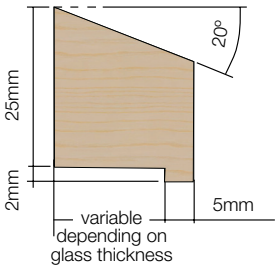
RF1™ is a versatile bead-applied glazing system for 60 minute fire resistant doors and screens. Comprises a pair of bead applied intumescent glazing seals and an intumescent liner. With premium aesthetics, the caps are the only visible elements when fitted and a variety of colours are available to harmonise with the door.



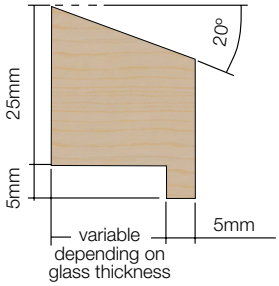
RF1



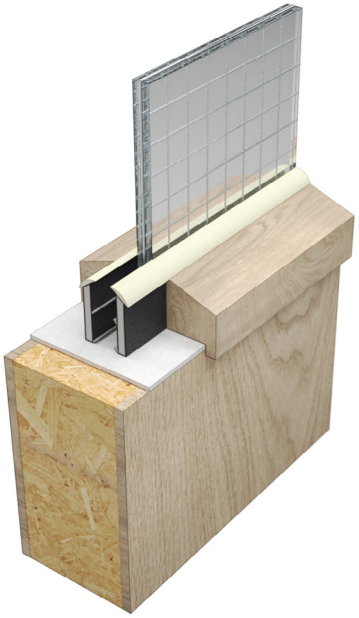
B25402
Sodium silicate intumescent liner.



RG2704



RG2704



Note: The bead should be hardwood excluding Ash and Beech (min density 610 kg/m³).

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS 476-22: 1987.

Performance
- Provides 60 minutes fire resistance.

Size
- 24mm x 6.5mm.

Standard lengths
- 1 pack contains:
  2 No. x RG2704 in 2.1m.
  2 No. x B25402 in 1.050m.
  minimum order quantity 10 packs.

Seal material
- Sodium silicate intumescent encapsulated in rigid PVC with flexible fins.

Finish
- Black profile with white, cream, grey, light brown, dark brown or black caps.

Glass thickness
- Suitable for use with a variety of fire rated glass types for both doors and screens.

Glass type
- Please refer to Certifire certificate CF5033 for the full range of glass types.

Application
- FD60 fire doors and screens.

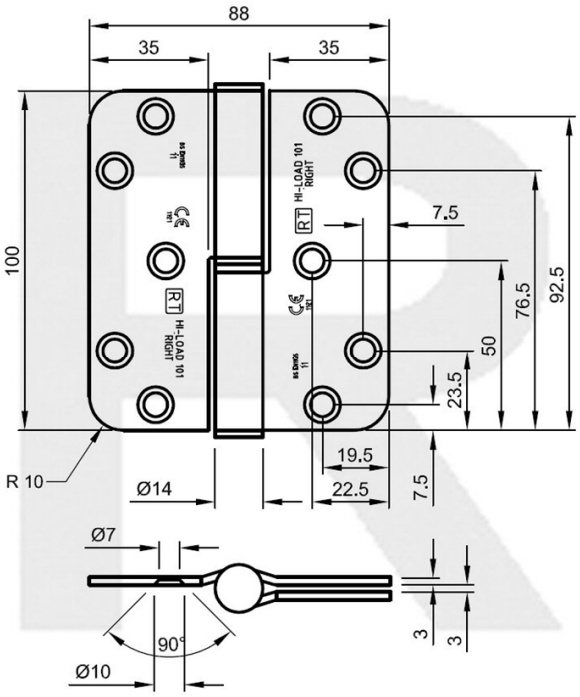
Intumescent liner
- 54mm door: B25402.

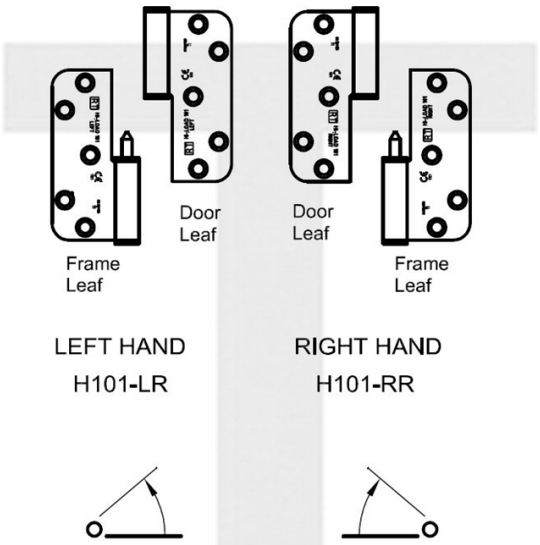
Glazing beads
- Glazing beads are required on both sides of the glass.
- Note: Hardwood beads are available (min density 550kg/m³).
- Fixing of beads: pin or screw in to place using 50mm long steel pins at 150mm nom. centres, or steel screws 50mm long (No.8) at 150mm nom. centres.

Accreditation

certifire
(CF5033)

Royde & Tucker H101 HI-LOAD lift-off hinge





BS EN 1935

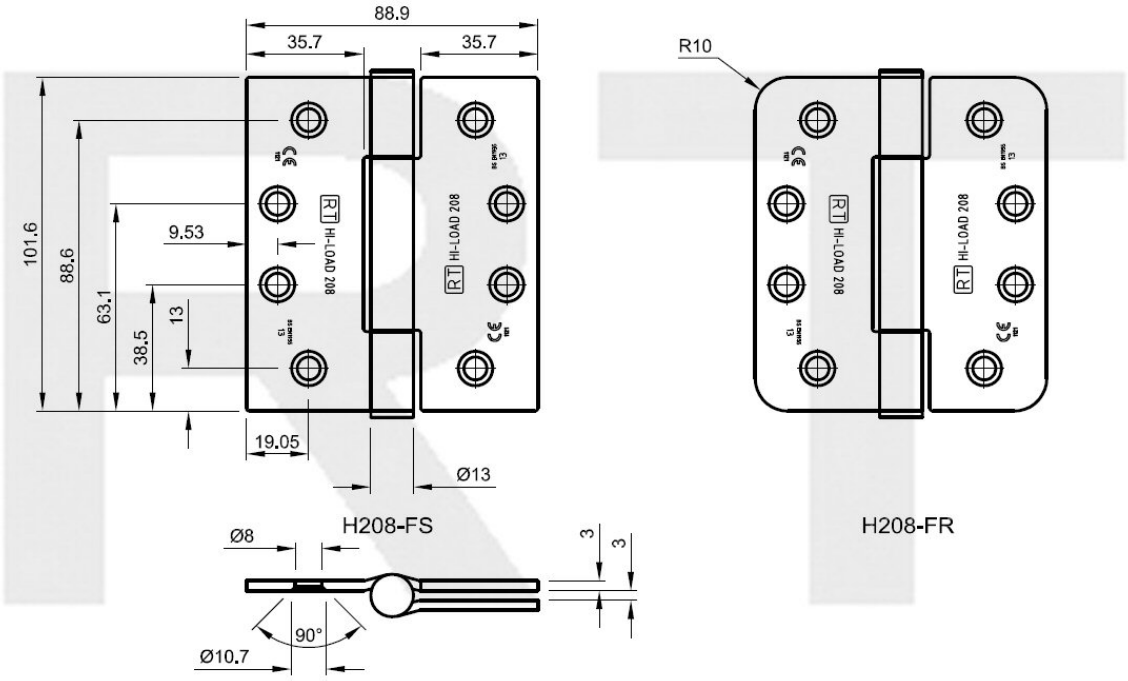
3 (1-4) | 7 (1-7) | 4 (0-7) | 1 (0/1) | 1 (0/1) | 2/4 (0-4) | 0 (0/1) | 11 (1-14)

CE certifire

- 100x88x3mm Lift-off hinge
- Maximum adjusted door weight 80kg
- To BS EN 1935 Grade 11
- Minimum door thickness 44mm
- Maintenance free, guaranteed for 25 years
- CE Certificate No. 1121-CPR-AC0029 (SS)
- CE Certificate No. 1121-CPR-AC0020 (MS)
- Suitable for use on fire doors: Certifire approved – CF209
- To be fitted with HP102 intumescent hinge pads, if being installed on fire doors
- c/w metric 5 x 32mm wood screws
- Unless stated Mild steel substrate, Grade 304 or 316 stainless steel available

Royde & Tucker Ltd
Bilton Road
Cadwell lane
Hitchin
SG4 0SB
Tel: 01462 444444
Fax: 01462 444433
www.ratman.co.uk
e-mail: sales@ratman.co.uk

Royde & Tucker H208 HI-LOAD concealed bearing butt hinge



BS EN 1935

4 (1-4) | 7 (1-7) | 6 (0-7) | 1 (0/1) | 1 (0/1) | 2/4 (0-4) | 0 (0/1) | 13 (1-14)

CE certifire

- 101.6x88.9x3mm Three knuckle butt hinge
- Maximum adjusted door weight 120kg
- To BS EN 1935 Grade 13
- Minimum door thickness 44mm
- Tested to over 1m cycles at 120kg
- Independently tested to in excess of 2.5m cycles
- Maintenance free, guaranteed for 25 years
- CE Certificate No. 1121-CPR-AC0007 (SS)
- CE Certificate No. 1121-CPR-AC0008 (MS)
- Suitable for use on fire doors: Certifire approved – CF215
- To be fitted with HP208 intumescent hinge pads, if being installed on fire doors
- c/w metric 5 x 32mm wood screws
- Unless otherwise stated stainless steel substrate, Grade 316 stainless steel available

Royde & Tucker Ltd
Bilton Road
Cadwell lane
Hitchin
SG4 0SB
Tel: 01462 444444
Fax: 01462 444433
www.ratman.co.uk
e-mail: sales@ratman.co.uk

Technical Product Datasheet

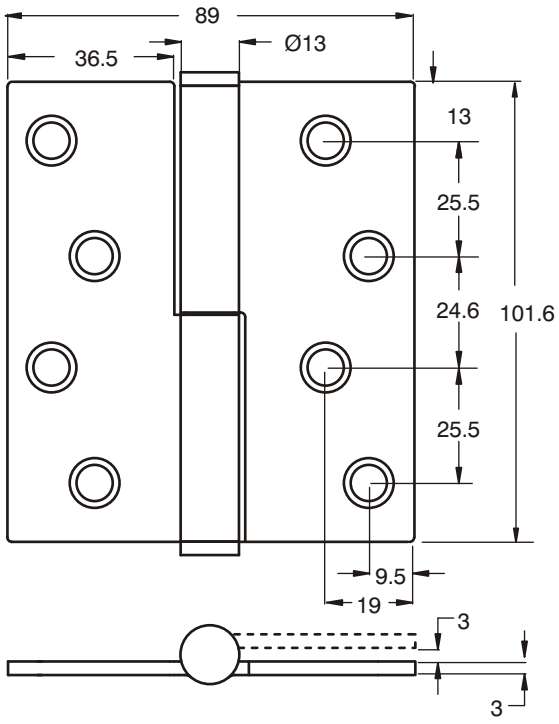
7765 - Concealed Bearing Hinge Range
89mm version - Lift off -
Clockwise closing - right hand

PHOENIX
COOKE BROTHERS

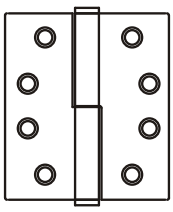
HINGE FEATURES

- Fully concealed bearing design
- Integrated high performance bearings
- Maintenance free, low friction design
- Available in mild steel, 304 & 316 stainless steel
- 3 hinge widths available
- Tested to EN1935 : 2002 Grade 13
- Certifire approved
- Holes countersunk to suit No 12 w/screws or M6 m/c screws
- Full range of options and finishes available
- 25 year guarantee

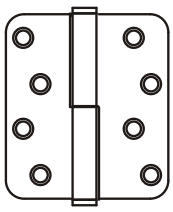
FIXED PIN



FURTHER OPTIONS



ANSI hole pattern
(Template drilled)



Radiused corners

01922 740011 sales@cookebrothers.co.uk www.cookebrothers.co.uk

Technical Product Datasheet

7766 - Concealed Bearing Hinge Range
89mm version - Lift off -
Anti-clockwise closing - left hand

PHOENIX
COOKE BROTHERS

HINGE FEATURES

- Fully concealed bearing design
- Integrated high performance bearings
- Maintenance free, low friction design
- Available in mild steel, 304 & 316 stainless steel
- 3 hinge widths available
- Tested to EN1935 : 2002 Grade 13
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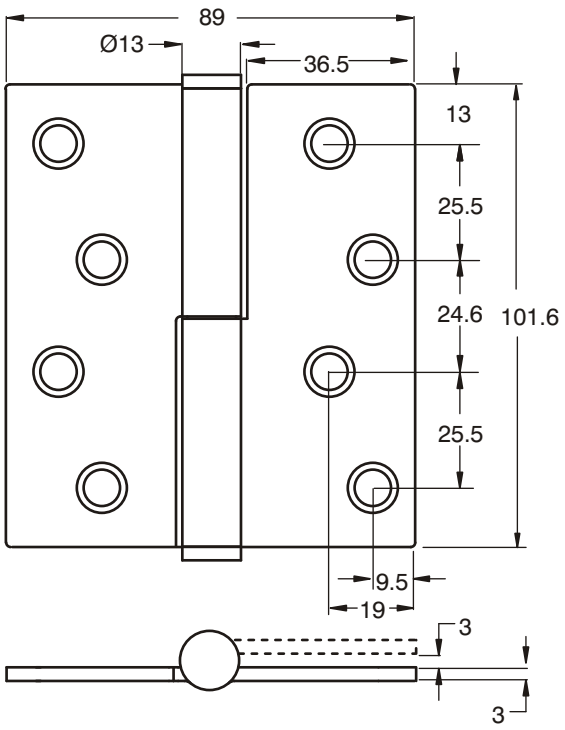
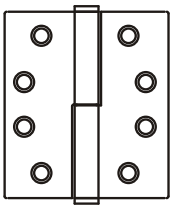
- Holes countersunk to suit No 12 w/screws or M6 m/c screws
- Full range of options and finishes available
- 25 year guarantee

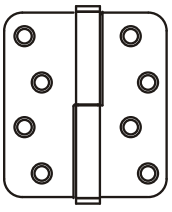
FIXED PIN



FURTHER OPTIONS



ANSI hole pattern
(Template drilled)



Radiused corners

01922 740011 sales@cookebrothers.co.uk www.cookebrothers.co.uk

EXTERNAL DOORS

Multi-Point Locks For Timber/ Composite

SureFire Classic 2 Hook Multi-Point Door Lock

Ordering Details

KEY

To select the required 2 hook MPL part number, use the below to determine:

B	Backset	OL	Overall Length
FB	Face Bar	TH	Top Hook
DL	Datum Line	BH	Bottom Hook

1. The face bar and backset
2. The overall length of the unit
3. The position of the hooks

SQUARE END

B	FB	DL	OL	TH	BH	Part No.
35	20	977	2137	715	680	DLSF-35-604-85
45	"	"	"	"	"	DLSF-45-604-85

ROUND END

B	FB	DL	OL	TH	BH	Part No.
35	20	788	1634	715	680	DLSF-35-609-85
45	"	"	"	"	"	DLSF-45-609-85

KEEPS

Description	Timber, Non-Fire (Zinc)	Composite & Timber, Fire (Steel)
Centre Keep Left Hand	DKSFCKL0044	DKSFCKL23487*
Centre Keep Right Hand	DKSFCKR0044	DKSFCKR23488*
Hook Keep Left Hand	DKSFHKL0044	DKSFHKL23489*
Hook Keep Right Hand	DKSFHKR0044	DKSFHKR23490*
Motor		DLSF-MOTOR-12V

Technical Information

Corrosion resistance
Meets the requirements of BS EN 1670:2007 Grade 4 (240 hours)

Operation
Endurance tested in excess of 150,000 cycles

Performance
Tested to meet the requirements of PAS 24 as part of a compliant door set.
Fire test to BS 476 FD30 and FD60, and EN 1634 FD30.
*Suitable for fire door applications in appropriate door assemblies, subject to approval by an accredited and authorised third party organisation.

Material Specification

Lock case:	BZP CR3 Passivate + Seal
Face bar:	Stainless Steel 430
Hooks:	Aluminium anodised 2A50-T6
Deadbolt:	Zinc CR3 Passivate + Seal, PTFE insert
Latch Bolts:	Stainless Steel 304
Trigger:	Stainless Steel
Keeps:	Zinc with Brass roller

Maintenance

All moving parts should be lightly lubricated using a light non-acidic mineral oil (e.g. "3 in 1") twice per year and the surface cleaned with a soft damp cloth. The product may need to be adjusted and fixings tightened to ensure a satisfactory operation.

SureFire Classic Multi-Point Door Lock

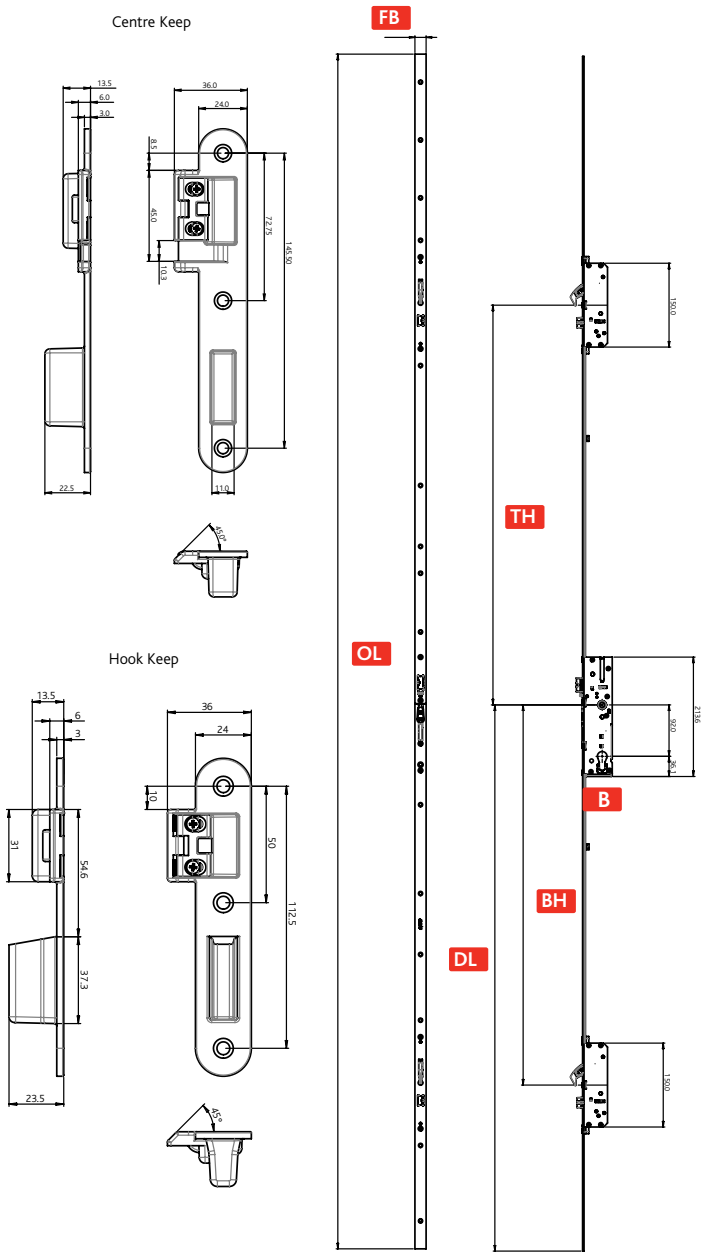


Diagram illustrates product in locked position. Not to scale.
All dimensions are in mm and are nominal. ERA reserves the right to change specification without notice. It is the responsibility of the door manufacturer to ensure that the finished product meets any required safety and performance specification.

Packaging

Locks: 5 locks per box
Keeps: 50 keeps per box

ERA Valiant Way, Wolverhampton, West Midlands WV9 5GB United Kingdom
Tel: +44 1922 490049 Fax: +44 1922 494420 info@erahomesecurity.com
www.eraeverywhere.com

ERA FORTRESS

Door Cylinders

EXTERNAL DOORS

British Standard 3 Star Anti Snap Euro Profile Cylinder

Ordering Details

Single

Dimensions A	B	C	Finish	Part No.
37.5	10	47.5	Dual	BS-FOR-3510-DC-1K
41.5	10	51.5	Dual	BS-FOR-4010-DC-1K
45	10	55	Dual	BS-FOR-4510-DC-1K
50	10	60	Dual	BS-FOR-5010-DC-1K
55	10	65	Dual	BS-FOR-5510-DC-1K
60	10	70	Dual	BS-FOR-6010-DC-1K

Double

Dimensions A	B	C	Finish	Part No.
37.5	37.5	75	Dual	BS-FOR-3535-DC-1K
37.5	37.5	75	Dual	BS-FOR-3535-DC-TP2K
37.5	41.5	79	Dual	BS-FOR-3540-DC-1K
37.5	45	82.5	Dual	BS-FOR-3545-DC-1K
41.5	41.5	83	Dual	BS-FOR-4040-DC-1K
41.5	41.5	83	Dual	BS-FOR-4040-DC-TP2K
41.5	45	86.5	Dual	BS-FOR-4045-DC-1K
41.5	45	86.5	Dual	BS-FOR-4045-DC-TP2K
41.5	50	91.5	Dual	BS-FOR-4050-DC-1K
41.5	55	96.5	Dual	BS-FOR-4055-DC-1K
41.5	55	96.5	Dual	BS-FOR-4055-DC-TP2K
41.5	60	101.5	Dual	BS-FOR-4060-DC-1K
45	45	90	Dual	BS-FOR-4545-DC-1K
45	45	90	Dual	BS-FOR-4545-DC-TP2K
45	50	95	Dual	BS-FOR-4550-DC-1K
45	50	95	Dual	BS-FOR-4550-DC-TP2K
45	55	100	Dual	BS-FOR-4555-DC-1K
45	55	100	Dual	BS-FOR-4555-DC-TP2K
50	50	100	Dual	BS-FOR-5050-DC-1K
50	50	100	Dual	BS-FOR-5050-DC-TP2K

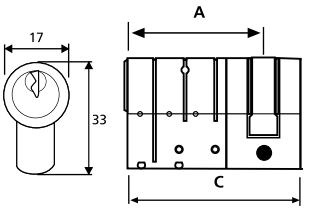
Double Thumbturn

Dimensions A	B	C	Finish	Part No.
37.5	37.5	75	Dual	BS-FOR-T3535-DC-1K
37.5	37.5	75	Dual	BS-FOR-T3535-DC-TP2K
37.5	41.5	79	Dual	BS-FOR-T3540-DC-1K
37.5	45	82.5	Dual	BS-FOR-T3545-DC-1K
41.5	41.5	83	Dual	BS-FOR-T4040-DC-1K
41.5	45	86.5	Dual	BS-FOR-T4045-DC-1K
41.5	50	91.5	Dual	BS-FOR-T4050-DC-1K
41.5	55	96.5	Dual	BS-FOR-T4055-DC-1K
45	45	90	Dual	BS-FOR-T4545-DC-1K
45	45	90	Dual	BS-FOR-T4545-DC-TP2K
45	50	95	Dual	BS-FOR-T4550-DC-1K
45	50	95	Dual	BS-FOR-T4550-DC-TP2K
50	45	95	Dual	BS-FOR-T5045-DC-1K
50	45	95	Dual	BS-FOR-T5045-DC-TP2K
50	50	100	Dual	BS-FOR-T5050-DC-1K
50	50	100	Dual	BS-FOR-T5050-DC-TP2K
55	45	100	Dual	BS-FOR-T5545-DC-1K

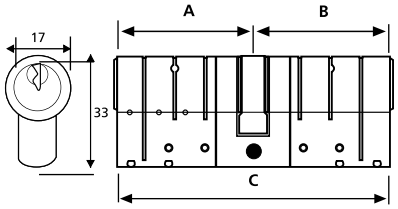
Key Blank

BS 3* Fortress Cylinder Key Blank	BS-FOR-KEYBLANK-K

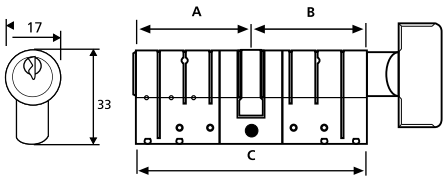
Fortress 3 Star BS Single Euro Profile Cylinder



Fortress 3 Star BS Double Euro Profile Cylinder



Fortress 3 Star BS Double Euro Profile Thumbturn Cylinder



All dimensions are in mm and are nominal.
ERA reserves the right to change specification without notice
It is the responsibility of the door manufacturer to ensure that the finished product meets any required safety and performance specification.

Maintenance

Wipe the surface periodically with a soft cloth to remove excess grease or moisture.

Packaging

Fortress 3 Star Cylinder
1 cylinder per box, 10 per outer box

Technical Information

Corrosion resistance
Meets the requirements of BS EN 1670:2007 Grade 3

Operation
Endurance tested in excess of 100,000 cycles

Performance
Independently tested to meet the requirements of BS EN 1303:2005 and accredited to TS007 3*. BSI Kitemark License No. 553031. Designed to meet the requirements of PAS 24 in a compliant door set.
Fire test to BS 476 FD30 and FD60, and EN 1634 FD30.

Material Specification

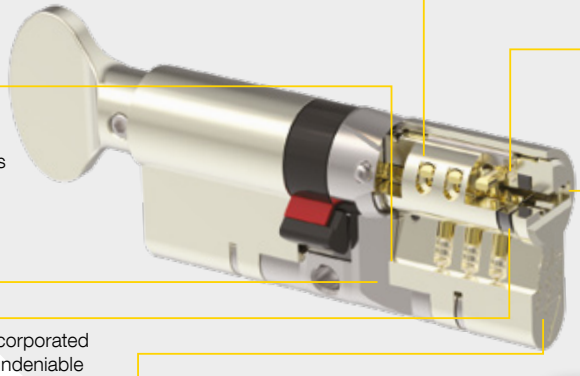
Cylinder:	Brass
Cam:	Sintered Steel
Pins:	2 hardened pins, anti bump anti pick and anti-drill
Key:	Nickel plated brass
Screw:	M5 x 45mm and M5 x 70mm nickel plated screws
Finish:	Satin nickel plated brass with brass keyhole

ERA Valiant Way, Wolverhampton, West Midlands WV9 5GB United Kingdom
Tel: +44 1922 490049 Fax: +44 1922 494420 info@erahomesecurity.com
www.eraeverywhere.com

The **Yale Platinum 3 Star Cylinder** is a TS007 3 star kitemarked anti-snap cylinder which has been designed, developed and tested to Yale's exacting standards to deliver high-performance security and deter even the most determined intruders.

Anti-Snap
A small section of the cylinder is sacrificed under attack, leaving the remainder of the cylinder intact and your door safely locked.

Anti-Bump
Specialised side pins provide bump resistance.



Anti-Pick
Unique multi shear-line technology designed to resist lock picking and bumping.

Inner Strength
The dedicated central bridge delivers unparalleled inner strength to the cylinder providing protection even if the cylinder is attacked from the outside.

Horizontal Keyway
With reversible flat key for easy key entry.

Anti-Drill
Hardened steel protection incorporated within the cylinder provides undeniable resistance against drill attacks.

Certified
Approved to TS007:2014 3 star - the highest current certified level.
BSI accredited to KM559658.
Tested to BS EN 1303:2015.

Features

- An anti-snap sacrificial front section
- Anti-pick, anti-bump, anti-pull, anti-drill and anti-screw
- Horizontal keyway
- Supplied with three Yale branded, dimple cut keys as standard
- Stylish Yale reversible key with nylon keybow to allow for easy identification and grip
- BSI-approved re-pinning allows multiple doors to be accessed with a single key
- Available in double and thumb-turn variants
- Available in brass, nickel and black finishes
- Suitable for PVCu, timber and composite doors

Specification

- TS007:2014 3 star accredited
- BS EN 1303:2015 accredited
- Secured by Design approved
- 10-year Mechanical Guarantee
- Lifetime Security Guarantee when used in conjunction with other Yale Hardware*
- BSI accredited to KM559658

1	6	0	0	0	C	5	2

For more information on this standard please visit http://www.dhfonline.org.uk

Yale Door and Window Solutions
School Street, Willenhall, West Midlands WV13 3PW, UK
T: 01902 366800 F: 01902 369041
www.yaledws.co.uk

THE YALE BRAND, with its unparalleled global reach and range of products, reassures more people in more countries than any other consumer locking solution.

THE ASSA ABLOY GROUP is the world's leading manufacturer and supplier of locking solutions, dedicated to satisfying end-user needs for security, safety and convenience.

Due to a continuous programme of development the company reserves the right to make alterations without notice. (Products which are not a stocked item will be subject to a longer lead time which needs to be agreed with your Yale representative).

*Terms and conditions apply.

TECHNICAL SPECIFICATION SHEET

ZPS030

ZOO ARCHITECTURAL HARDWARE

CODE	FINISH
ZPS030SS	SATIN STAINLESS

SPECIFICATIONS

- Rose diameter 50mm
- Rose projection 8mm
- 19mm diameter tubular lever
- ZPS 304 Grade material
- Screw on stainless steel outer rose
- M4 male / female fixings supplied
- 100mm Heso steel spindle supplied
- M6 Heso grub screws for additional fixing strength
- Also supplied with 20mm wood screws
- Fire tested suitable For 30 & 60 min timber doors
- BS EN 1906 Grade 3 tested

3	7	-	B	0	5	0	B

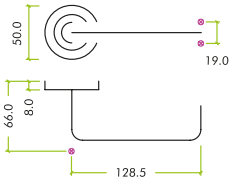
STANDARDS

BS EN 1906 3 GRADE · FIRE DOOR 30/60 · MECHANICAL 10 YEAR GUARANTEE

SUITABLITY

SUITABLE FOR DOMESTIC · SUITABLE FOR COMMERCIAL

TECHNICAL



CODE	DESCRIPTION	FINISH	ADDITIONAL INFO.
ZPS030SS	RTD lever - screw on rose (sprung)	SS	SS304 lever on rose

ZOO ARCHITECTURAL HARDWARE

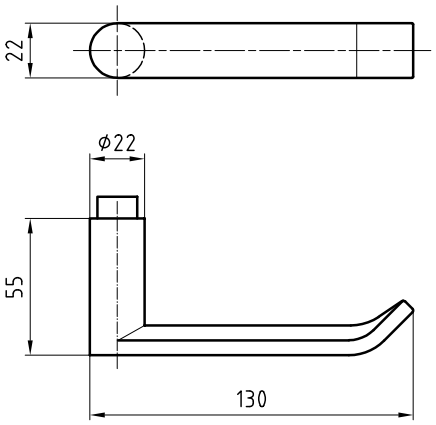
For more information please contact us today:
Call: 01228 672900
Fax: 01228 672928
Email: sales@zoo-hardware.co.uk
Web: www.zoohardware.co.uk

ZOO Hardware Ltd, Unit B, Dukes Drive
Kingmoor Park North, Carlisle, Cumbria CA6 4SH

5088 Zurich

Stainless steel lever handle

EN1906 KL 3/4 EN1634



Picture shows handle with 5620C rose

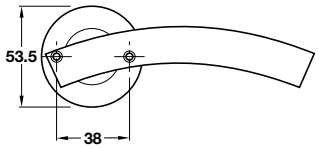
Product profile
Banks, commercial buildings, administrative centres

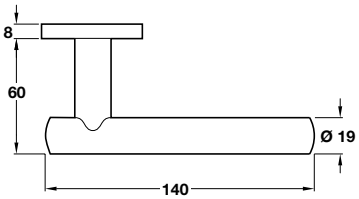
Standard version
Lever handle Length: 130 mm, Ø 22 mm
Projection: 55 mm
Square spindle 8 mm
Solid satin stainless steel
16 mm guide for Glutz glide / easyfix

Options
Polished stainless steel
RAL lacquered
PVD lacquered
Square spindle 8,5 mm or 9 mm
16 mm guide for Glutz twin glide
Version for narrow stile doors
Category of use class 4, EN 1906: 2002-05

Standards
Category of use class 3, EN 1906: 2002-05
Tested for use in fire-rated and smoke protection doors to DIN 18273: 1997 - 12

HL03 Lever handle set, grade 304 stainless steel





Standard keyway escutcheon

Euro profile cylinder escutcheon

WC release and inside turn

- Pair of lever handles and roses with escutcheon or WC set included
- 8 mm spindle included
- Sprung, for use with standard duty followers
- To suit doors 38-55 mm thick
- WC/emergency release and inside turn with 8 mm spindle, suits doors 38-45 mm thick
- Grade 304 stainless steel
- Order qty: 1 set

BS EN 1906

2	6	-	B	0	3	0	B

Satin st. steel | Polished st. steel

Fire rated 60 minute | GRADE 2 BS EN 1906 | Piercing spindle | Fixings included ✔

Lever handles	Satin	Polished
with standard keyway escutcheon		
Cat. No.	903.91.177	903.91.178
with Euro profile cylinder escutcheon		
Cat. No.	903.92.177	903.92.178
with WC release and inside turn		
Cat. No.	903.93.177	903.93.178

UAP LIMITED
INNOVATIVE DOOR HARDWARE SOLUTIONS

Features Include:

Awarded 'Secured by Design' approval by the Association of Police Officers

Made with a solid brass body

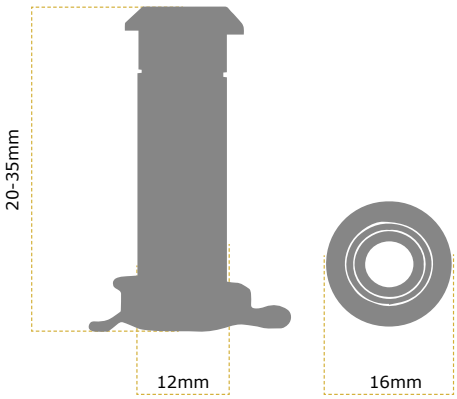
Comprises of 3 plastic lenses (glass lenses for stainless steel products)

Ensured to give crystal clear performance for years of safe, secure use

Comes in a range of colours to suite door furniture

Additional extensions available if you need to make your viewer even longer

Up to a 5 year inland coating guarantee on standard finishes,
and LIFETIME guarantee on stainless steel finishes



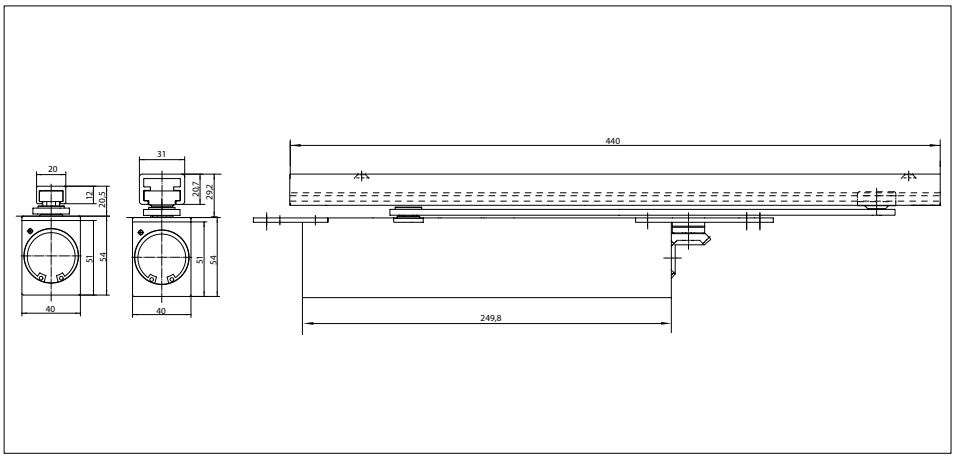
12MM WOODEN AND COMPOSITE DOOR VIEWERS (35-55MM)

Finishes	Product Code	Material Construction	Privacy Cover Included	PVD Head	Lens	Coating Guarantee
Polished Brass	CILBR	Brass	Yes	Yes	Plastic	5 Years Inland
Polished Chrome	CILCH	Brass	Yes	Yes	Plastic	5 Years Inland
White	CILWH	Brass	Yes	No	Plastic	5 Years Inland
Black	CILBL	Brass	Yes	No	Plastic	5 Years Inland
Gold Anodised	CILGA	Aluminium	No	No	Plastic	10 Years Colour Fast
Silver Anodised	CILSA	Aluminium	No	No	Plastic	10 Years Colour Fast
Satin Chrome	CILSC38-63	Brass	No	No	Plastic	5 Years Inland
PVD Gold	CILPVDG38-63-NANOCOAST	Stainless Steel	Yes	No	Glass	LIFETIME
Mirror Polished	CILMPSS38-63-NANOCOAST	Stainless Steel	Yes	No	Glass	LIFETIME
Satin Stainless	CILSSS38-63-NANOCOAST	Stainless Steel	Yes	No	Glass	LIFETIME

Table 17 - Geze Boxer

Integrated door closers

GEZE BOXER



Size 3-6

Application range

- For right and left hung doors without the need for conversion
- Closer size 2-4 for interior doors up to a leaf width of 1100 mm and a leaf weight of 130 kg
- Closer size 2-4 2V with independent latching action valve. This makes it possible to increase and reduce the latching action speed (brake-to-stop function).
- Closer size 3-6 for interior and exterior doors up to a leaf width of 1400 mm and a leaf weight of 180 kg
- Door leaf thickness from 40 mm for size 2-4, from 50 mm for size 3-6
- For fire protection doors with appropriate suitability certificate

Closer technical data

Product features	GEZE Boxer 2-4 closer	GEZE Boxer 2-4 2V closer	GEZE Boxer 3-6 closer
Closing force in accordance with EN 1154	2 - 4	2 - 4	3 - 6
Leaf width recommended up to	1100 mm	1100 mm	1400 mm
Leaf weight recommended up to	130 kg	130 kg	180 kg
Minimum leaf thickness	40 mm	40 mm	50 mm
Same version for DIN left and DIN right	●	●	●
Product tested in accordance with	door closer tested in accordance with EN 1154		
Length	286 mm	286 mm	293 mm
Installation depth	32 mm	32 mm	40 mm
Height	45 mm	45 mm	54 mm
Functions			
Adjustable closing force	yes, infinitely variable		
Adjustable closing speed	●	●	●
Adjustable latching action	yes, via valve		
Integrated back check	yes, hydraulically adjustable		
Closing force adjustment position	Top		
Safety valve to protect against vandalism	●	●	●
Valve control for regulating the latching action speed		●	

Guide rail technical data

Product features	Boxer guide rail 12 mm	Boxer guide rail 20,7 mm
For use on single-action/double-action doors	single-action door	
Length	440 mm	
Installation depth	20 mm	31 mm
Height	12 mm	20,7 mm
Functions		
Integrated opening restrictor	○	○
Integrated hold-open device	○	○

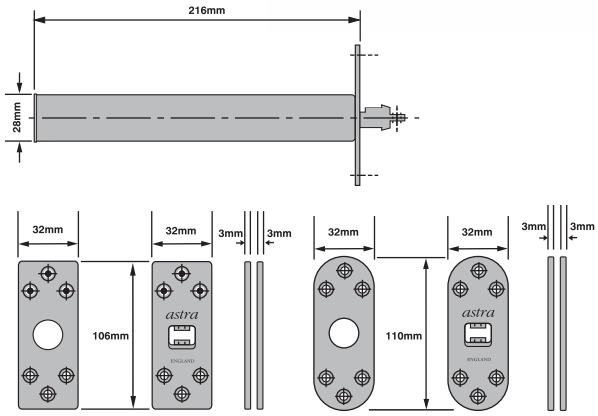
○ = Optional
● = Standard

4000 Series

Following market research and feedback gathered from a combination of architects, interior designers, architectural ironmongers, doorset manufacturers and joiners it became apparent that there was a demand in the market for a jamb mounted concealed closer that was efficient, fully concealed but also easier to install compared to the current products available. Our Research and Development Department were tasked to produce a concealed jamb mounted door control that was fully concealed when the door is closed, seamless to fit in to the doorset at the factory stage through CNC machines, easy to install on site, and fully adjustable once the closer is installed.

The UK-manufactured 4000 Series includes three different power size door closers each with easily adjustable speed: the 4001, 4002 and 4003. It is manufactured with a single spring and hydraulic unit, that offers a higher efficiency rate than a typical overhead closer so it does not require any adjustable latching. The 4000 Series does not need to be removed to adjust the closing speed, this can be done with a flat headed screwdriver with the door closer installed.

4000 Series Dimensions



An ultra-compact high efficiency design makes the Astra 4000 Series the perfect choice for both new-build and refurbishment projects.

They are ideally suited to a wide variety of applications including hotel bedrooms, office doors, residential dwellings, student accommodation and any setting with a reduced ligature requirement.

The Astra 4000 Series door closers are tested and certified to all British and international performance standards and programmes, including FD30 & FD60 fire tests conducted in accordance with BS EN1634-1:2000 (test report CHILT/RF06118). It will allow specifiers to meet PAS 24 standards for residential entrance doors since it is Secured by Design (SBD) accredited. Astra 4000 Series door closers have also been successfully included in tests in both Halspan and Streboard core 44mm and 54mm doors and has successfully completed in house-testing to over 500,000 cycles.

RUTLAND

Specification Overview

Fire Tested to EN1634

Max Door Weight up to 80kg

Opening Angle 110°

Max Door Width 1100mm

Universal Application

Adjustable Closing Speed

IFCC 1438

Power Size EN2-4

Adjustable Latch Speed

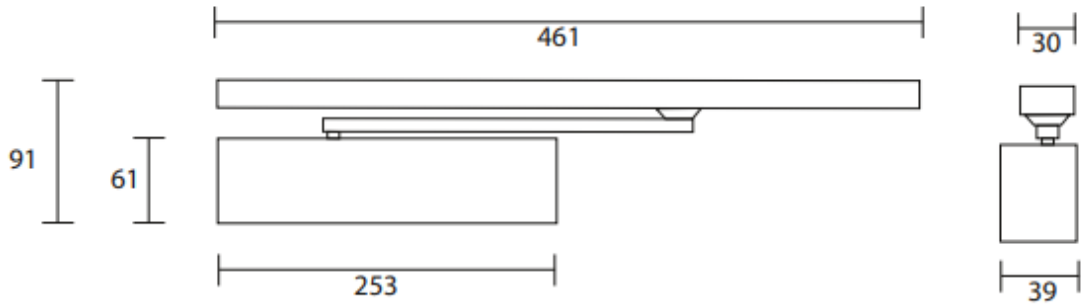
35 YEARS Guarantee

DoP 11204TS0 CPR191118

Min Door 857mm fig30

Rut Lock

All dimensions shown are in mm.



For fitting instructions see website - www.rutlanduk.co.uk

Technical Information

BS EN 1154 Classification

TS.11204 door closers have been independently tested to conform with the EN 1154 performance standard. They are CE marked and classified as follows:

3	8	2/4	1	1	3

BS EN 1634 Fire Test

TS.11204 door closers have been tested to EN 1634 Fire Pressure Test for, 30 and 60 minutes on a TFTDoor and TFCDoor.

ADA Compliant

Fire doors shall have a minimum opening force allowable by the appropriate administration authority, and doors other than fire doors 5 pounds maximum opening force (22.2N) from push or pull side.

UL Listed

The TS.11204 has been certified and labelled to the Underwriters' Laboratories (UL) testing, inspection, certification, auditing and validation.

ITT Timber Leaf & Timber Frame

May be fitted Standard, Parallel arm or Transom fixing position on previously tested single-acting, latched or unlatched, intumescent sealed timber door and timber frame assemblies.

Options

- Mechanical hold open slide rail (*Not to be used on fire doors. Not covered by CE)*
- Back check availble as a cushion stop in the rail
- Anti-ligature
- For uninsulated doors see code in components list for intumescent kit

Other Benefits

- BS8300 & ADA.cv door closer helping the less able (min door size 857mm)

The universal closers for standard doors –
Tested and approved to EN 1154

As units designed especially for interior applications, the TS 92 and TS 91 door closers constitute the perfect complement to the dormakaba TS 93 cam-action door closer system. They likewise come in the Contur design and, thanks to their linear drive mechanism with heart-shaped cam, they offer the same ease of use. Moreover, their competitive pricing combined with their outstanding level of assured quality make them particularly attractive from an economic standpoint as well.

Certified to ISO 9001

Plus points

For the trade
- Inexpensive cam-action technology for standard interior doors.
- Low storage costs and reduced inventory requirement thanks to uniform slide channels of the Contur series.

For the fabricator
- Non-handed.
- Easy to fix and quickly adjustable.

For the architect/specifier
- Excellent value for money.
- Uniform appearance throughout the entire Contur slide channel range.

For the user
- Exceptional ease of use and fully controlled closing action.
- Optimum adaptability of the closing speed with reliable latching thanks to two regulating valves.

Data and features		TS 92 B/G[1]	TS 91 B
Closing force	Size	EN 1–4	EN 3
Adjustable		●	–
Standard doors[2]	≤ 950 mm	–	●
	≤ 1100 mm	●	–
External doors, outward opening[2]		–	–
For fire and smoke check doors		●	●
Non-handed design		●	●
Arm assembly type	Slide channel	●	●
Closing speed and latching action independently adjustable at two separate valves	180°–15°	●	●
	15°– 0°		
Cushioned limit stay, mechanical		O	O
Backcheck		–	–
Delayed action		–	–
Hold-open		O	O
Weight in kg		2,0	1,9
Dimensions in mm	Length	281	267
	Overall depth	47	47
	Height	65	65
Door closer tested to EN 1154		●	●
CE mark for building products		●	●

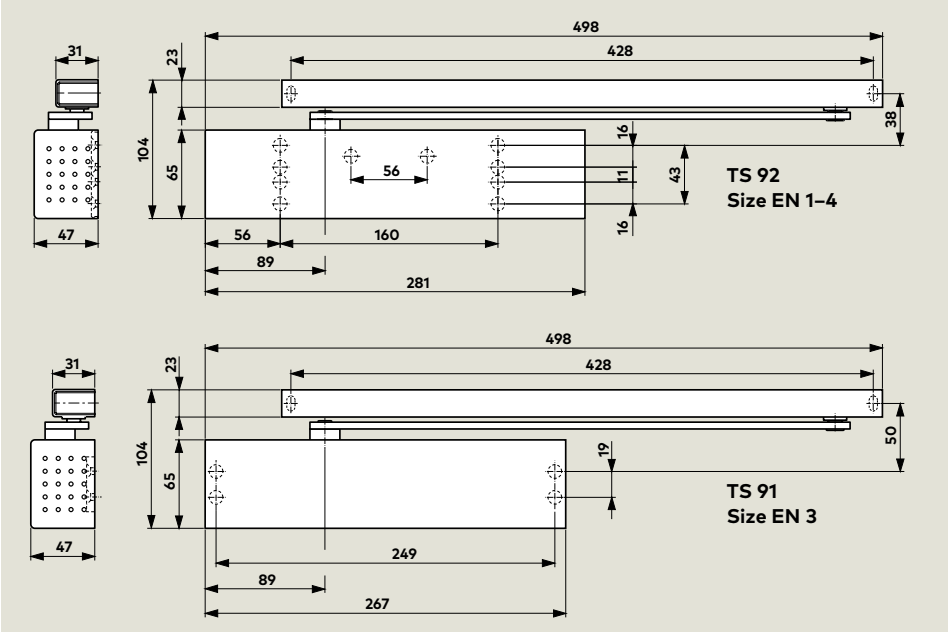
● yes – no O optional

[1] B = Standard model for pull-side door leaf fixing/push-side transom fixing
G = Special model for push-side door leaf fixing/pull-side transom fixing.
[2] For particularly heavy doors and doors which have to close against wind resistance, we recommend the TS 93.

certifire

The TS 92/TS 91 complies with the requirements and/or recommendations of the following: CERTIFIRE approved for fire doors ITT 120, MM/IMM 240; Ref. CF 119

DORMA EASY OPEN



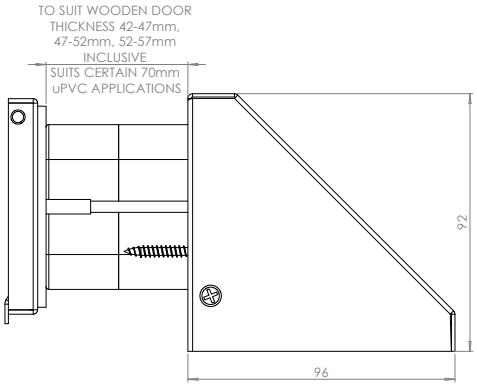
LP08 – Approved Document Q

TS008:2015 approved letterplate & security cowl (complete kit)

Classification

A	1	2	N	3	Y	1	0

- Supplied complete with external and internal flaps,aperture liner and security cowl
- System includes for fire/smoke resistant models FD30S and FD60S doors
- System included integral weather seals
- Appropriate for installation where fire risk may be from either side of the door
- Suitable for use on acoustic doorsets. Achieves 31Db/Rω sound reduction on an appropriate door
- Security Tested to TS008:2015
- To suit door thicknesses: 42–47mm, 47–52mm, 52–57mm and 70mm
- Flaps held in the closed position on magnets
- Easy to install, either at works or on site
- Suitable for use on timber and some UPVC doors, please contact the sales office for guidance



CLASSIFICATION

Classification of enhanced security and general requirements are detailed below –

1st Digit: Product type
A = Without any remotely fitted security hardware
B = With remotely fitted security hardware p.7 of 22

2nd Digit: Aperture type
Type: 1 = Letterplate assemblies
2 = Slide through box

3rd Digit: Enhanced security level
1 = Resistance to thumb-turn manipulation
2 = Resistance to thumb-turn manipulation and fishing

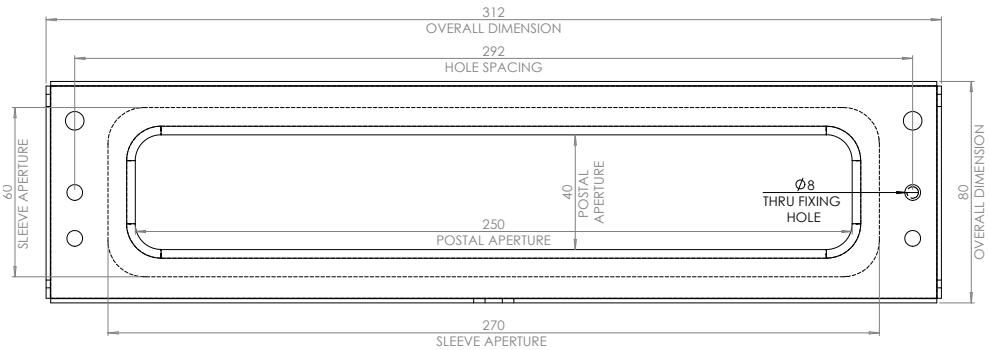
4th Digit: Option to lock the letter plate to prevent delivery of mail
N = No not lockable
Y = Yes lockable

5th Digit: Corrosion
3 = 96 hours
4 = 240 hours
5 = 480 hours

6th Digit: Resistance to water penetration
N = No performance determined
Y = Pass

7th Digit: Fire Resistance (to either BS476– 22 or EN 1634-1)
0 = No Fire resistance
1 = Yes

8th Digit: Arson attack
Grade 0 = No performance determined
Grade 1 = Yes



PARTS

Mild Steel/Stainless Steel frames and flaps and cowl

LP08-44: E30/E60 Fire rated inc Smoke seals 42–47mm Doors
LP08-49: E30/E60 Fire rated inc Smoke seals 47–52mm Doors
LP08-54: E30/E60 Fire rated inc Smoke seals 52–57mm Doors
LP08-70: E30/E60 Fire rated inc Smoke seals 70mm Doors
(suitable for some UPVC doors)

Finishes*: Silver Anodised Finish – SAA,, Brushed Stainless Steel – BSS, Polished Stainless Steel – PSS, Polished Brass Lacquered – PBL, Imitation Bronze – RBZ, Antique Brass – ABR, Dark Bronze – DBZ, Colour Powder Coated – NST

** (For some finishes the frame is a different finish to the flaps. Please contact the same office if in doubt).*

Fab&Fix Letterplates

EXTERNAL DOORS

Nu Mail Letterplate

Ordering Details

Product

Nu Mail Letterplate

Finish	Part No.			
	Panel 68 (20-40)	Midrail 68 (40-80)	Panel 76 (20-40)	Midrail 76 (40-80)
Hardex Chrome	3C301	3C101	3C201	3C001
Hardex Satin	3C302	3C102	3C202	3C002
Hardex Bronze	3C303	3C103	3C203	3C003
Hardex Gold	3C305	3C105	3C205	3C005
Hardex Graphite	3C311	3C111	3C211	3C018
Antique Black	3C306	3C106	3C206	3C006
White	3C300	3C100	3C200	3C000
Black	3C308	3C108	8D001	3C008
Silver	3C309	3C109	3C209	3C009
*Easy Fit Rubber Drip Gasket		9B000		

Technical Information

Corrosion resistance
Meets the requirements of BS EN 1670:2007 Grade 5 (480 hours)

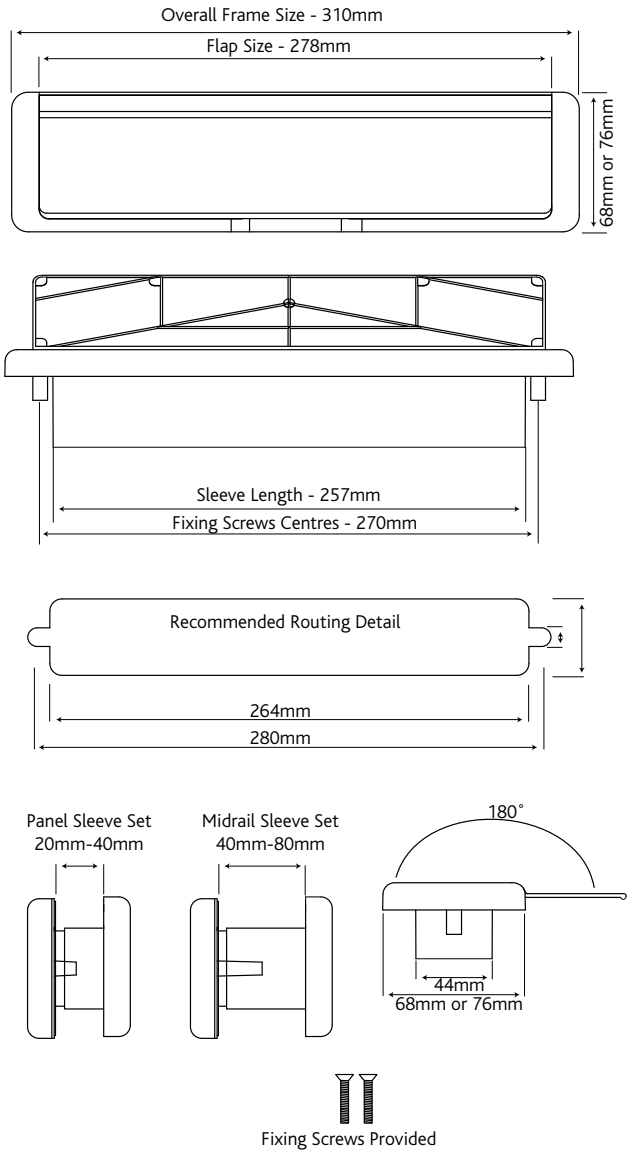
Operation
Flap cycle tested to 30,000 cycles
Conforms to the requirements of BS EN 13724: 2002

Performance
Tested as part of a complete door set that successfully achieved PAS23 (rubber gasket fitted)
Tested as part of a complete door set that successfully achieved PAS24

Screws
Midrail version includes 2 x M5 x 50mm machine screws, 2 x M5 x 70mm machine screws and 2 screw guides
Panel version includes 2 x M5 x 28mm machine screws and 2 screw guides

Material Specification

Frame and Flap:	High quality Zinc
Coatings:	Hardex Chrome, Hardex Satin, Hardex Bronze, Hardex Gold, Hardex Graphite, Antique Black, White, Black and Silver.



All dimensions are in mm and are nominal.
Fab&Fix reserves the right to change specification without notice
It is the responsibility of the door manufacturer to ensure that the finished product meets any required safety and performance specification.

Maintenance

For continued protection of the quality finish and appearance, Fab&Fix advise routine cleaning of all our external hardware. Moving parts should also be lightly lubricated at least twice a year. This procedure is particularly essential if products are used within a 25-mile radius of coastal areas or close proximity to building sites or large industrial areas, where more frequent cleaning may be required to prevent the accumulation of corrosive contaminants.

Packaging

Nu Mail Letterplate
Individually boxed with fixings and care instructions.
15 letterplates in an outer box.

Unit 4 The Moorings Business Park, Channel Way, Exhall, Coventry, CV6 6RH United Kingdom
Tel: +44 1922 490049 Fax: +44 1922 494420 info@erahomesecurity.com
www.erahomesecurity.com

Fab&Fix Letterplates

EXTERNAL DOORS

Nu Mail Letterplate Security Shield

Ordering Details

Nu Mail Letterplate Security Shield

Finish	Part No.
Hardex Chrome	3F002
Hardex Bronze	3F003
Hardex Gold	3F004
Hardex Graphite	3F005
Antique Black	3F006
White	3F000
Black	3F001

Technical Information

Corrosion resistance
Meets the requirements of BS EN 1670:2007 Grade 5 (480 hours)

Performance
Independently tested to meet the requirements of TS008: 2015 (Inc. Corr, No 1) when used in conjunction with the Fab&Fix 3C 76mm Nu Mail Letterplate. Designed to meet the requirements of PAS 24 in a compliant door set.

Fixings
Includes 4 x M5 x 65mm screws, 4 x Jack Nuts and 2 x cover caps.

Material Specification

Frame:	High quality Zinc
Coatings:	Hardex Chrome, Hardex Bronze, Hardex Gold, Hardex Graphite, Antique Black, White and Black.

Classification

The Nu Mail Security Shield (Cowl) has been certified to TS008:2015 and carries the following classification:

Category	1	2	3	4	5	6	7	8
Classification	B	1	2	N	3	N	0	0

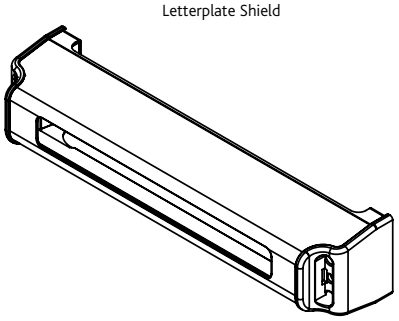
Packaging

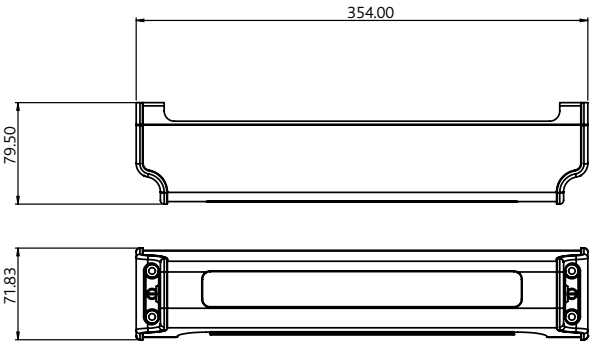
Nu Mail Letterplate Security Shield
Individually boxed with fixings and care instructions.
10 letterplate shields in an outer box.

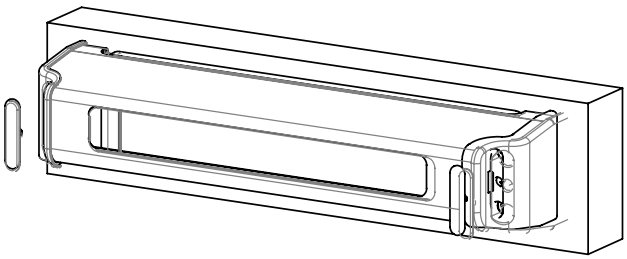
Maintenance

For continued protection of the quality finish and appearance, Fab&Fix advise routine cleaning of all our external hardware. Moving parts should also be lightly lubricated at least twice a year. This procedure is particularly essential if products are used within a 25-mile radius of coastal areas or close proximity to building sites or large industrial areas, where more frequent cleaning may be required to prevent the accumulation of corrosive contaminants.

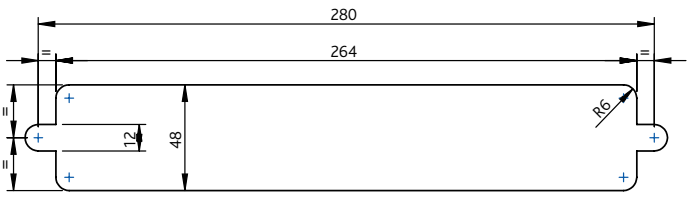
Letterplate Shield







Routing Detail



All dimensions are in mm.
ERA reserves the right to change specification without notice.
It is the responsibility of the door manufacturer to ensure that the finished product meets any required safety and performance specification.

ERA Straight Road, Short Heath, Willenhall, West Midlands WV12 5RA United Kingdom
Tel: +44 1922 490049 Fax: +44 1922 494420 info@erahomesecurity.com
www.eraeverywhere.com

ERA

Door Accessories

EXTERNAL DOORS

Door Chains and Viewers

Ordering Details

Product	Part No.
Door Viewer	
120° Brass - Glass Lens	786 - 32
120° Chrome - Glass Lens	786 - 62
160° Brass - Glass Lens	784 - 32
160° Chrome - Glass Lens	784 - 62
120° Brass - Plastic Lens	190 - 32
120° Chrome - Plastic Lens	190 - 62
160° Brass - Plastic Lens Wide Angle	191 - 32
160° Chrome - Plastic Lens Wide Angle	191 - 62
180° Brass - Plastic Lens Wide Angle	192 - 32
180° Chrome - Plastic Lens Wide Angle	192 - 62
Concealed Door Chain	
Brassed	700 - 32
Satin	700 - 52
Slide Door Chain	
Brass	787-32
Satin	787-52
Timber/ PVCu Door Chain	
Brassed	791-32
Satin	791-52
Chrome	791-62
Door Restrictor	
Brassed	789-32
Chrome	789-62

Maintenance

The surface should be cleaned with a soft cloth to remove any dust or grime. The product should be periodically adjusted and the fixings tightened to ensure a satisfactory operation

Packaging

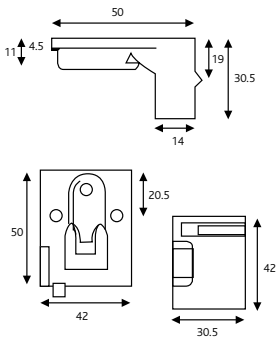
Door Viewer
1 per clam, 10 per box.

Concealed Door Chain:
1 per clam, 10 per box.

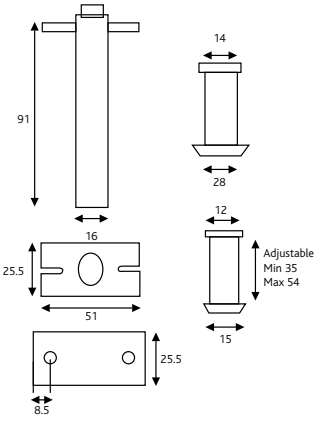
Door Chains:
1 per clam, 10 per box.

Door Restrictor:
1 per clam, 10 per box.

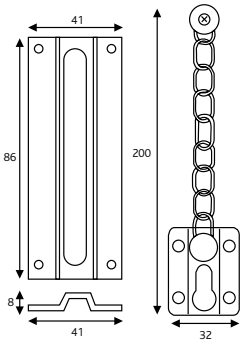
Concealed Door Chain



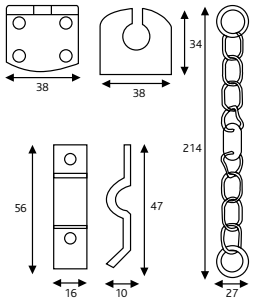
Door Viewer



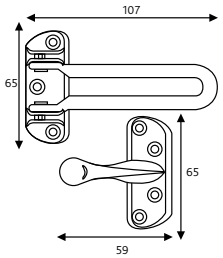
Slide Chain



Door Chain



Door Restrictor



All dimensions are in mm.
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It is the responsibility of the window manufacturer to ensure that the finished product meets any required safety and performance specification

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www.erahomesecurity.com

Fab&Fix Door Accessories

EXTERNAL DOORS

Numbers 0-9

Ordering Details

Numbers 0 - 9

Finish	Part No.								
	0	1	2	3	4	5	6 or 9	7	8
Hardex Chrome	4B304	4B354	4B404	4B454	4B504	4B554	4B604	4B654	4B704
Hardex Satin	4B305	4B355	4B405	4B455	4B505	4B555	4B605	4B655	4B705
Hardex Bronze	4B306	4B356	4B406	4B456	4B506	4B556	4B606	4B656	4B706
Hardex Gold	4B308	4B358	4B408	4B458	4B508	4B558	4B608	4B658	4B708
Hardex Graphite	4B312	4B362	4B412	4B462	4B512	4B562	4B612	4B662	4B712
Antique Black	4B309	4B359	4B409	4B459	4B509	4B559	4B609	4B659	4B709
White	4B300	4B350	4B400	4B450	4B500	4B550	4B600	4B650	4B700
Black	4B301	4B351	4B401	4B451	4B501	4B551	4B601	4B651	4B701
Silver	4B302	4B352	4B402	4B452	4B502	4B552	4B602	4B652	4B702

Technical Information

Corrosion resistance
Meets the requirements of BS EN 1670:2007 Grade 5 (480 hours)

Material Specification

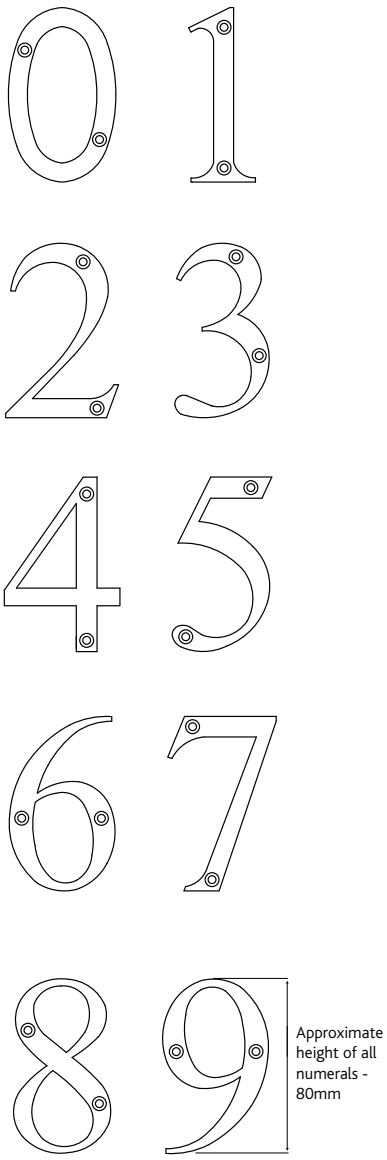
Numerals:	High quality Zinc
Coatings:	Hardex Chrome, Hardex Satin, Hardex Bronze, Hardex Gold, Hardex Graphite, Antique Black, White and Silver
Screws:	Includes 2 X M3.5 x 25mm colour coordinated countersunk flat head screw

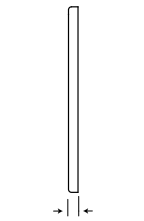
Maintenance

For continued protection of the quality finish and appearance, Fab&Fix advise routine cleaning of all our external hardware. Moving parts should also be lightly lubricated at least twice a year. This procedure is particularly essential if products are used within a 25-mile radius of coastal areas or close proximity to building sites or large industrial areas, where more frequent cleaning may be required to prevent the accumulation of corrosive contaminants.

Packaging

Numerals
Individually bagged with screws and care instructions.
10 in an outer box.





Standard width of all letters and numerals - 4.50mm

2 x Screws Provided Per Numeral

Approximate height of all numerals - 80mm

All dimensions are in mm and are nominal.
Fab&Fix reserves the right to change specification without notice
It is the responsibility of the door manufacturer to ensure that the finished product meets any required safety and performance specification.

Unit 4 The Moorings Business Park, Channel Way, Exhall, Coventry, CV6 6RH United Kingdom
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www.erahomesecurity.com

Fab&Fix Door Accessories

EXTERNAL DOORS

Ingot Door Knocker

Ordering Details

Product

Ingot Knocker

Finish	Part No.
Brushed Steel	4A550

Technical Information

Corrosion resistance
Salt spray tested to 1000 hours (BS EN1670: Class 5)

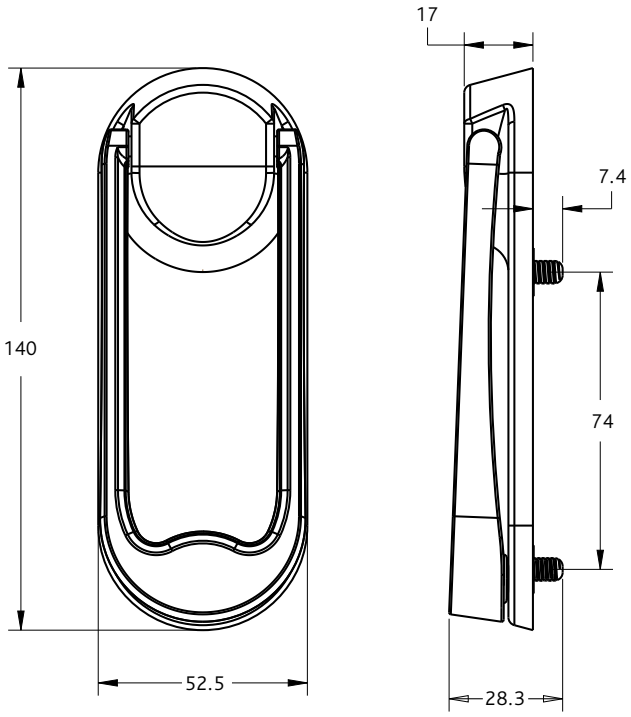
Operation
Tested to 200,000 cycles

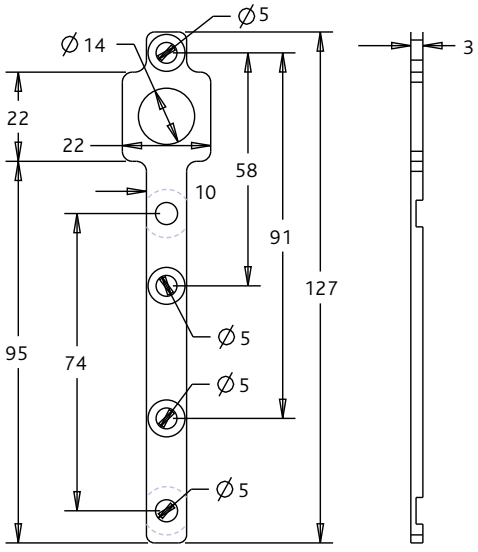
Material Specification

Handle Grip and Backplate:	Stainless Steel
Coatings:	Brushed Steel

Maintenance

To maintain your stainless steel product in best condition, we recommend routine cleaning once a month. All exposed stainless steel surfaces should be wiped over with a clean cloth and warm water with a mild detergent on a frequent and routine basis. Cleaning should always be immediately followed by rinsing in clean hot water and the surface then wiped completely with a dry towel. For more stubborn dirt or stains use mild, non-scratching abrasive powders such as typical household cleaners. These can be used with bristle brushes, sponges or non-abrasive scourers. For more aggressive cleaning a small amount of vinegar can be added to the powder. Carbon steel brushes and steel wool should be avoided as they may leave particles embedded in the surface, which can lead to rusting.





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Unit 4 The Moorings Business Park, Channel Way, Exhall, Coventry, CV6 6RH United Kingdom
Tel: +44 2476 585785 Fax: +44 2476 585786 info@erahomesecurity.com
www.erahomesecurity.com

Appendix B

Appendix B compiles the relevant certification held by Falcon Panel Products, details on Q Mark Labelling and links to other useful documents and websites.

Q Mark Fire Certificate 72
Q Mark Enhanced Security Certificate 73
Q Mark Fire Door Plug Details 74
Secured by Design Certificate 75
Links

012

CERTIFICATE OF REGISTRATION

This is to certify that

Falcon Panel Products Ltd

Clock House
Station Approach
Shepperton
Middlesex
TW17 8AN

Meets the requirements of the Exova BM TRADA **Q-Mark Fire Door Manufacture** scheme to **STD 006 083 - Issue 2 - 11/07/2014**

Karen Prendergast
Sector Director - Certification
Exova BM TRADA

Certificate Number
020

Date of Initial Certification
27 January 2009

Date of Last Issue
20 July 2018

Date of Expiry
5 July 2021

012

CERTIFICATE OF REGISTRATION

This is to certify that

Falcon Panel Products Ltd

Clock House
Station Approach
Shepperton
Middlesex
TW17 8AN

Meets the requirements of the BM TRADA **Q-Mark Enhanced Security Door** scheme to **PAS 24:2016 and BS 644:2012 Timber**

All companies manufacturing doorsets to the certified specification must hold permission from Falcon Panel Products Ltd and hold Q-Mark certification in their own name in order to claim to be certified by BM TRADA for these products

Certificate Number

297

Date of Initial Certification

29 November 2019

Date of Last Issue

2 December 2019

Date of Expiry

5 July 2021

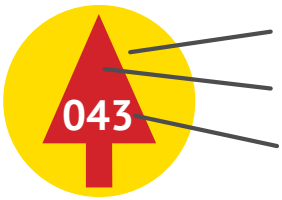
Karen Prendergast
Divisional Director - Certification
BM TRADA

Warringtonfire Testing and Certification Limited t/a BM TRADA, Chiltern House, Stocking Lane, High Wycombe, Buckinghamshire, HP14 4ND, UK
Registered Office: Warringtonfire Testing and Certification Limited, 10 Lower Grosvenor Place, London, SW1W 0EN, UK.
Reg No. 11371436.

bmtrada

Proud to be part of element

Fire Door Certification Scheme



Outer colour - period of fire integrity.
Inner/tree colour - status of manufacture.
Unique certified company's number.

Outer colour - Period of fire integrity (mins)

30	60	90	120
(Yellow)	(Blue)	(Brown)	(Black)

Inner/Tree colour

(Red) Approved door leaf and/or frame* (FD30 & FD60 only). Intumescent strips not supplied.

(Green) Approved door leaf and/or frame* (FD30 & FD60 only). Intumescent strips prepared for & supplied.

(Orange) Approved factory fitted glazing.

(Silver) Complete certified factory hung doorset.

(Gold) Certified installation of a complete factory hung doorset.

*Where the frame and leaf are produced by separate Q-Mark companies, both the frame and leaf must have their own red/green plug.

For details of the scheme and list of certified companies visit www.bmtrada.com or call +44 (0) 1494 569960

bmtrada Q-MARK CERTIFICATION

SECURED BY DESIGN LICENCE HOLDER

THIS IS TO CERTIFY THAT

Falcon Panel Products Ltd

OF

Head Office, Clock House, Station Approach, Shepperton, Middlesex, TW17 8AN, United Kingdom

HOLDS A SECURED BY DESIGN LICENCE
VALID IN CONJUNCTION WITH THE CURRENT SCHEDULE UNTIL

26th April 2021

PLEASE REFER TO HTTPS://WWW.SECUREDBYDESIGN.COM/MEMBER-COMPANIES/SBD-MEMBERS FOR THE CURRENT SCHEDULE INFORMATION

G. Ferg

GUY FERGUSON
CEO, POLICE CRIME PREVENTION INITIATIVES LIMITED

DATE 27th April 2020

Secured by Design

SBD

Official Police Security Initiative

Links

Strebord 54 & Stredor 54 FD60 Front Entrance Door Global Assessment - WF427746
https://www.falconpp.co.uk/media/28289/strebord-stredor-60-minute-fed-wf427764.pdf

Strebord Door Cores
https://www.falconpp.co.uk/products/door-cores/strebord-door-cores/

Stredor Door Cores
https://www.falconpp.co.uk/products/door-blanks/stredor/

BM Trada/Q Mark
https://www.bmtrada.com/

Secured by Design
https://www.securedbydesign.com/

Hardware

Royde and Tucker
https://www.ratman.co.uk/

Cooke Brothers
https://www.cookebrothers.co.uk/

ERA Hardware
https://www.eraeverywhere.com/

Zoo
https://www.zoohardware.co.uk/

Glutz
https://glutz.com/uk/

Hafele
https://www.hafele.co.uk/en/

Yale
https://www.yaledoorandwindowsolutions.co.uk/

Astra
http://www.astradoorcontrols.com/

Geze
https://www.geze.co.uk/en/

Arrone
https://www.hoppe.com/gb/en/home

Rutland
https://www.rutlanduk.co.uk/

Dorma
https://www.dormakaba.com/gb-en

Seals

Lorient Polyproducts
http://lorientuk.com/

Sealed Tight Solutions
http://sealedtightsolutions.com/

Athmer
https://www.athmer.com/en/

Norseal
https://www.norseal.co.uk/

Fire and Acoustic Seals
https://www.fireandacousticseals.co.uk/

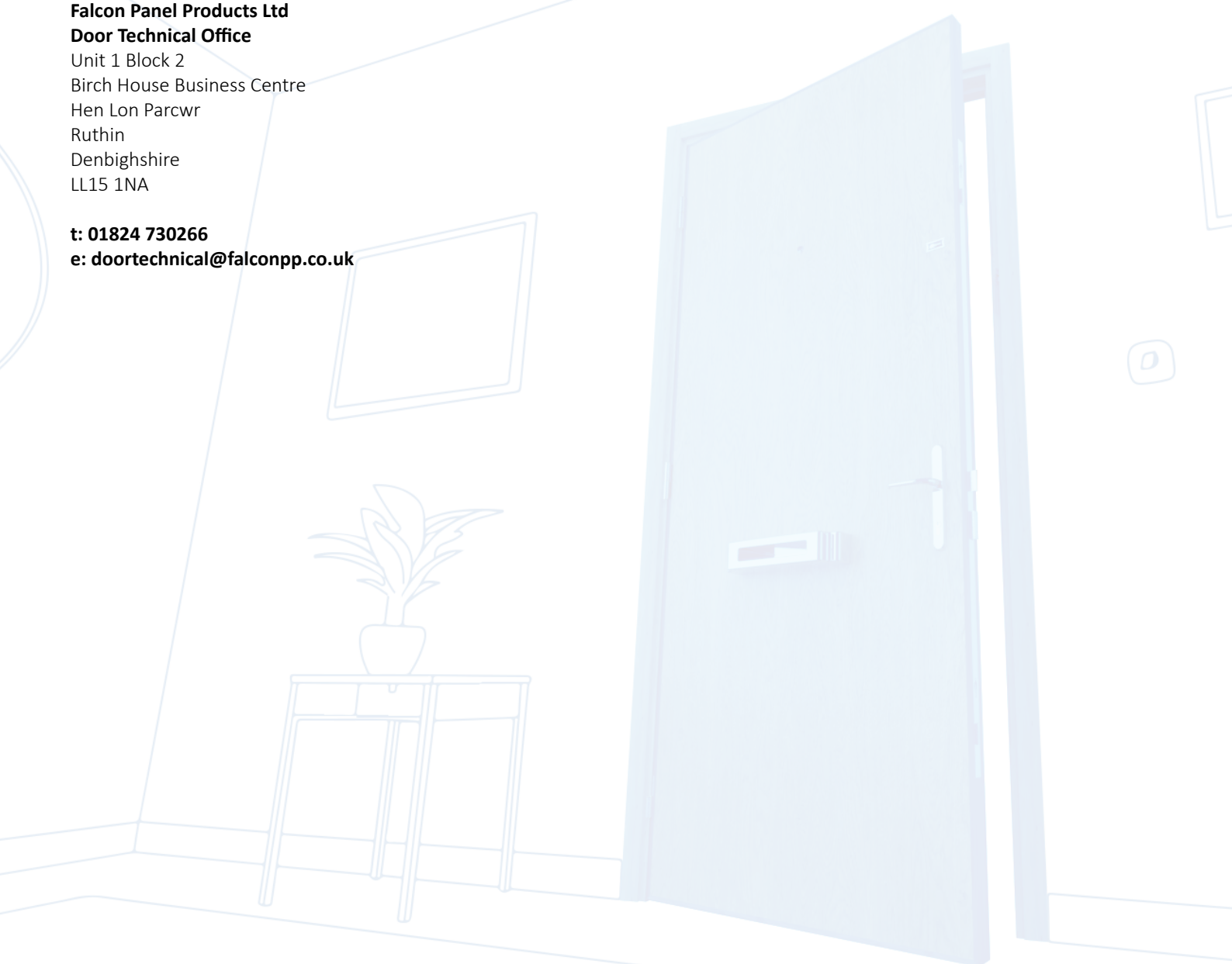
Sealmaster
https://sealmaster.co.uk/

Intumescent Seals Ltd
https://intumescentseals.co.uk/

For technical support, training and guidance

Falcon Panel Products Ltd
Door Technical Office
Unit 1 Block 2
Birch House Business Centre
Hen Lon Parcwr
Ruthin
Denbighshire
LL15 1NA

t: 01824 730266
e: doortechnical@falconpp.co.uk



Gateshead Depot	T 0191 338 8208	E gateshead@falconpp.co.uk
Haydock Depot	T 01744 416 600	E haydock@falconpp.co.uk
High Wycombe Depot	T 01494 291 777	E highwycombe@falconpp.co.uk
Leeds Depot	T 0113 887 2222	E leeds@falconpp.co.uk
Nottingham Depot	T 0115 919 2000	E nottingham@falconpp.co.uk
Tilbury Depot	T 01375 487 300	E tilbury@falconpp.co.uk
West Bromwich Depot	T 0121 525 8844	E westbrom@falconpp.co.uk

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www.falconpp.co.uk