CONSTRUCTIONAL SPECIFICATION FOR
CERTISECURE APPROVED PAS24 DOORSETS WITH FIRE PERFORMANCE

Introduction

This door specification has the potential to be CERTISECURE & CERTIFIRE approved. Refer to fabricator's own certification.

This document specifies constructional and other details for PAS24 compliant doorsets manufactured by Falcon Panel Products Ltd approved fabricators and certified by Warringtonfire Testing and Certification Limited under certificate No. CS 5120. Only doorsets complying with the details of this document may be marked or marketed as CERTISECURE approved. Any change to, or deviation from, this specification requires the agreement of CERTISECURE. CERTISECURE approval is applicable to complete doorsets only.

Scope of Approval - As defined in certificate of approval No. CS 5120

Company: Falcon Panel Products Ltd
Product: Doorset
Model: 44mm Stredor glazed front entrance door

The performance has been assessed to enhanced security performance to PAS24:2016 Annex A & B, a weather performance of 800X for open-in doorsets and 800U for open-out doorsets to BS6375-1:2015, a mechanical strength performance of Medium Duty to BS6375-2:2009, an additional performance to BS6375-3 Annex A & C and a fire resistance performance of 30 minutes integrity and 30 minutes insulation as defined in BS 476: Part 22: 1987 and CERTIFIRE approved in accordance with TS10 under certificate CF5926

1	**Door frame**		
1.1	Door frame head	1.1.1	Reference	Frame Head
		1.1.2	Material	Sapele
		1.1.3	Minimum density	640 kg/m^3 (nominal)
		1.1.4	Section size	44 x 80mm
		1.1.5	Rebate	47 x 12mm
		1.1.6	Fixing jamb to head joints	12mm trench joint glued and screwed with 2no. 5 x 100mm wood screws
		1.1.7	Details of adhesive	Maxitex PU Gel Adhesive
1.2	Door frame jamb	1.2.1	Reference	Frame Jamb
		1.2.2	Material	Sapele
		1.2.3	Minimum density	640 kg/m^3 (nominal)
		1.2.4	Section size	44 x 80mm
		1.2.5	Rebate	47 x 12mm

1.3 Door frame intumescent seals	1.3.1	Supplier	Pyroplex Ltd
	1.3.2	Description	2no PVC encased graphite seals
	1.3.3	Reference	8500
	1.3.4	Fixing method	Self-adhesive
	1.3.5	Position	Head & jambs Separated by 5mm either side of the centre line of the frame reveal
	1.3.6	Continuity	Interrupted by keeps and hinges. Centre keep interrupts first intumescent by 8.5 x 169.5mm and second intumescent 5.5 x 169.5mm Top & bottom keep interrupts first intumescent by 8.5 x 136.5mm and second intumescent 5.5 x 136.5mm Hinges fully interrupt leading intumescent strip and partially interrupts secondary intumescent strip.
1.4 Door frame smoke/ acoustic seals	1.4.1	Supplier	Norseal Ltd
	1.4.2	Description	1no PVC smoke/acoustic seal
	1.4.3	Reference	NOR710
	1.4.4	Fixing method	Self-adhesive
	1.4.5	Position	Head & jambs Corner of stop and frame reveal
	1.4.6	Continuity	Uninterrupted by hardware

2	**Door leaf construction** (see table 1)		
2.1 Door leaf	2.1.1	Manufacturer	Falcon Panel Products
	2.1.2	Description	Stredor 44 EV Ply
	2.1.3	Maximum leaf size	933 x 2153mm
	2.1.4	Thickness	44mm
2.2 Door leaf inner core	2.2.1	Material	Poplar
	2.2.2	Minimum density	510 kg/m^3
	2.2.3	Thickness	2.1mm thick Central inner core
	2.2.4	Details of adhesive	PVAc or MUF
2.3 Door leaf outer core	2.3.1	Material	Spruce lamels
	2.3.2	Minimum density	480 kg/m^3
	2.3.3	Thickness	2no. 18.8mm Either side of central inner core
	2.3.4	Details of adhesive	PVAc or MUF
2.4 Door leaf facing	2.4.1	Material	Plywood
	2.4.2	Minimum density	510 kg/m^3
	2.4.3	Thickness	1.8mm
	2.4.4	Details of adhesive	MUF
2.5 Door leaf lippings	2.5.1	Position	Fitted to all 4 edges
	2.5.2	Material	Sapele
	2.5.3	Minimum density	640 kg/m^3
	2.5.4	Section size	10 x 44mm
	2.5.5	Details of adhesive	Technomelt PUR 270/7G Hot Melt
2.6 Door leaf glazed panel	2.6.1	Supplier	Fireglass UK
	2.6.2	Thickness/ configuration	11mm thick - Pyrobelite 9EG Minimum EN356 P1A rating
	2.6.3	Maximum size	224 x 984mm
	2.6.4	Edge clearance	3mm all around (nominal) Minimum 150 mm margin from the perimeter leaf edge Minimum 180 mm margin between apertures
2.7 Glazing tape	2.7.1	Supplier	Sealmaster
	2.7.2	Reference	Black Glazing Tape
	2.7.3	Material	Bio-soluble Alkaline Earth Silicate Fibres
	2.7.4	Thickness	4mm
	2.7.5	Overall size	10 x 4mm
	2.7.6	Fixing method	Self-adhesive to internal and external face

2.8 Glazing beads	2.8.1	Glazing method	Cassette Beaded
	2.8.2	Material	Sapele
	2.8.3	Minimum density	640 kg/m^3
	2.8.4	Section size	19 x 21mm with a 15° splay and a 13 x 6mm rebate forming a 6 x 6mm high bolection return
	2.8.5	Fixing method	16 gauge 50mm length steel pins 50mm from corners and at maximum 145mm centres

3 Hardware

3.1 Hinges	3.1.1	Supplier	Zoo Hardware
	3.1.2	Description	Ball Bearing Butt Hinge
	3.1.3	Reference	ZHSS243RS
	3.1.4	Primary material	Steel
	3.1.5	Size of knuckle	14.5mm diameter
	3.1.6	Size of blades	102 x 31 x 3mm
	3.1.7	Quantity	3
	3.1.8	Intumescent protection (if applicable)	1mm thick Interdens, Mono Ammonium Phosphate, intumescent sheet material to all hinge blades to both door leaf and frame.
	3.1.9	Top hinge position	150mm from top of door to top of hinge
	3.1.10	Middle hinge position	Positioned centrally within the leaf height or equispaced between the top and bottom hinge positions
	3.1.11	Bottom hinge position	181mm from bottom of door to bottom of hinge
	3.1.12	Fixing hinge to leaf	4no. 4.2 x 30mm wood screws
	3.1.13	Fixing hinge to frame	4no. 4.2 x 30mm wood screws
3.2 Lock	3.2.1	Supplier	ERA
	3.2.2	Description	2 hook multi-point door lock
	3.2.3	Reference	SureFire Classic
	3.2.4	Face plate size	1634 x 20 x 3mm
	3.2.5	Intumescent protection (if applicable)	Fully wrapped with a 1 mm thick graphite based intumescent kit referenced Flexifire Universal SureFire kit by Sealed Tight Solutions Ltd. Forend (above top case and below bottom case only) to be bedded on a 1 mm thick graphite based intumescent kit referenced Flexifire Universal SureFire kit by Sealed Tight Solutions Ltd.
	3.2.6	Position	950mm from bottom of door to centre of spindle/lock
	3.2.7	Fixings	11no. 4.2 x 30mm wood screws

3.3 Lock Keeps	3.3.1	Supplier	ERA
	3.3.2	Description	ERA SureFire standard & extended strike keeps
	3.3.3	Top & bottom keep ref	LH (standard strike) DKSFHKL23489 RH (standard strike) DKSFHKR23490 RH (extended strike) DKSFHKR24273 LH (extended strike) DKSFHKL24274
	3.3.4	Centre keep ref	LH (standard strike) DKSFCKL23487 RH (standard strike) DKSFCKR23488 RH (extended strike) DKSFCKR24271 LH (extended strike) DKSFCKL24272
	3.3.5	Material	Stainless Steel
	3.3.6	Intumescent protection (if applicable)	Pre-cut 1mm STS Graphite
	3.3.7	Top & btm keep size	150 x 24 x 24mm
	3.3.8	Centre keep size	190 x 24 x 20mm
	3.3.9	Fixing top & btm keeps	2no. 3.5 x 25mm wood screws
	3.3.10	Fixing centre keep	3no. 3.5 x 25mm wood screws
3.4 Cylinder	3.4.1	Supplier	ERA
	3.4.2	Description	Euro Profile 3* Cylinder with Thumbturn
	3.4.3	Reference	Fortress 3*
	3.4.4	TS007 certification ref (if applicable)	KM553031
	3.4.5	Overall size	17 x 33 x 75mm
	3.4.6	Intumescent protection (if applicable)	N/A
	3.4.7	Fixings	1no. M5 x 45mm machine screw
3.5 Lever handles	3.5.1	Supplier	ERA
	3.5.2	Description	Heritage Sprung Inline Lever Lever Door Handle
	3.5.3	Reference	1X000
	3.5.4	Material	Zinc
	3.5.5	Overall size backplate	Backplate - 32mm wide x 243mm high x 11.5mm deep
	3.5.6	Overall size lever	139.79mm wide x 60.8mm deep
	3.5.7	Fixings	2no. M5 x 55mm Machine screws

3.6 Door viewer (optional)	3.6.1	Supplier	ERA
	3.6.2	Description	Fab & Fix Steel Spyhole
	3.6.3	Reference	Fab & Fix Spyhole
	3.6.4	Overall size	12mm external barrel diameter by 44mm long requiring a maximum Ø13mm recess.
	3.6.5	Door hole size	13mm diameter
	3.6.6	Intumescent protection	Minimum 0.5 mm thick graphite intumescent sheet material applied to the door viewer body.
	3.6.7	Fixing height (centre of viewer)	Positioned at maximum 1650mm from the bottom of the door leaf to the centre of the viewer.
3.7 Drop seal (optional)	3.7.1	Supplier	Norseal
	3.7.2	Description	Automatic dropseal
	3.7.3	Reference	NOR 810s
	3.7.4	Section size	20 x 12mm
	3.7.5	Intumescent protection	Not required
	3.7.6	Fixing	2no. 3.5 x 18mm screws
3.8 Letter Plate (optional)	3.8.1	Supplier	ERA
	3.8.2	Description	Letterplate with security cowl
	3.8.3	TS008 certification ref (if applicable)	KM660920
	3.8.4	Reference	Nu Mail Door Letterplate with Nu Mail Shield TS008 Letterplate Security Cowl
	3.8.5	Size	310 x 75mm
	3.8.6	Letterplate cut out	280 x 68mm
	3.8.7	Fixing height (centre of letterplate)	850mm from the bottom of the leaf. Where doors are glazed, a minimum margin of 200 mm must be maintained between the aperture cut out and the letter plate cut out,
	3.8.8	Cowl	Nu Mail Letterplate Security Shield
	3.8.9	Intumescent protection (if applicable)	40 x 2mm thick Sealed Tight Solutions Ltd graphite wrapped twice around the letter plate panel
	3.8.10	Fixings	Letter plates to be fixed into position using 4no. 3.5 x 30mm screws and 2no. 4 x 48mm machine bolts supplied in accordance with the manufacturer's instructions.

3.9 Door closer (optional *)	3.9.1	Supplier	Hoppe
	3.9.2	Description	Face fixed closer
	3.9.3	Reference	AR1500
	3.9.4	Overall size	248 x 45 x 53 mm
	3.9.5	Intumescent protection (if applicable)	None
	3.9.6	Fixing to doorleaf	4no. 3.5 x 25mm wood screws
	3.9.7	Fixing to frame	2no. 3.5 x 25mm wood screws
	The use of Hoppe AR1500 surface mounted overhead closers is permitted. Alternative CERTIFIRE approved surface mounted overhead closer approved for use on 'ITC' doorsets may be fitted, subject to the conditions contained within the relevant CERTIFIRE certificate of approval. * All fire doorsets are required to be fitted with a CERTIFIRE certificated self-closing device. The exceptions are doorsets kept locked shut such as service access doors. Note: closers with mechanical hold-open mechanisms are not permitted to be used. Building Regulations may identify locations within domestic locations where self-closing devices are not mandatory. Alternative CERTIFIRE approved surface mounted overhead closers may be fitted, subject to the conditions contained within the relevant CERTIFIRE certificate.		
3.10 Security chain (optional)	3.10.1	Supplier	ERA
	3.10.2	Description	Security Chain
	3.10.3	Reference	PVCu/Timber Door Chain 791-65
	3.10.4	Material	Brass
	3.10.5	Position	Cannot be installed directly above, or closer than 100 mm to any non-insulated glazing.
	3.10.6	Fixings	4no. 3.5 x 25mm wood screws
3.11 Door numerals (optional)	3.11.1	Supplier	ERA
	3.11.2	Description	Door Numerals
	3.11.3	Reference	Fab & Fix Door Numerals – FFNUM8BC
	3.11.4	Material	Zinc
	3.11.5	Overall size	Nominal 80mm high x 4.5mm thick
	3.11.6	Position	Cannot be installed directly above, or closer than 100 mm to any non-insulated glazing.
	3.11.7	Fixings	2no M3.5 x 25mm wood screws

3.12 Door knocker (optional)	3.12.1	Supplier	ERA
	3.12.2	Description	Knocker
	3.12.3	Reference	Ingot Door Knocker – 4A550
	3.12.4	Material	Stainless Steel
	3.12.5	Overall size	140 x 52.5 x 28.3mm
	3.12.6	Position	Cannot be installed directly above, or closer than 100 mm to any non-insulated glazing.
	3.12.7	Fixings	2no. 3.5 x 25mm Wood screws

4 Labels

Labels referencing CERTISECURE, PAS24 D, the trading name of the fabricator, and fabricator's own CERTISECURE certificate and CERTIFIRE certificate references shall be affixed to each approved doorset in the prescribed position.