

## INTRODUCTION

This timber Fire Door/Doorset design has been tested to B.S 476 Part - 22 and manufactured in accordance with the terms of the British Woodworking Federation - CERTIFIRE Product Certification Scheme. As such it carries an identification label giving the following information:

- The name and telephone number of the manufacturer.
- Colour coded fire rating for this product in minutes.
- The CERTIFIRE certificate number under which this door/doorset has been approved.
- A reference number unique to this particular door. This number should be quoted on all correspondence in connection with the item.

## DELIVERY AND STORAGE

- a) Doors should be stored flat on a level surface and in a dry, well ventilated building and not on end or on edge. They should be stacked on not less than three bearers to eliminate deflection. The bearers should be of greater length than the width of the door and carefully levelled to ensure that all take an equal share of the weight and the plane of the leaf is not in twist.
- b) Doors should be sealed or primed on both faces and all four edges immediately after delivery or after any protective wrapping has been removed unless some form of sealing/decoration has been undertaken in the factory.
- c) Doors should be handled with care, wearing gloves if necessary and not have the faces dragged one across the other.
- d) Doors should be checked at the time of delivery to ensure that they meet with your quality requirements before any processing is carried out.
- e) Doors should be covered to keep them clean but without restricting air circulation.
- f) Do not store or hang in damp or freshly plastered buildings.
- g) Protective wrapping should be left on the door as long as possible.
- h) Natural finished doors should be stacked in such a way that they are not partially exposed to daylight. Opaque wrappings must not become torn. Exposure to ultra violet light can cause fading or discolouration of timber or veneers.
- i) Maximum trimming permitted - Top of door cannot be trimmed due to label, Max 4mm from both sides and 6mm from the bottom. Doors must not be cut down in any attempt to produce special sizes.

## FD 30 FIRE RESISTING DOOR CERTIFIRE CERTIFICATE OF APPROVAL NO.160

### GENERAL

This door leaf design has been fire tested and is certified by CERTIFIRE reference CF160 as being capable of providing fire resistance of 30 minutes insulation (if incorporating not more than 20% of uninsulating glass and timber/MDF framed) and 30 minutes integrity as defined in BS 476: Part 22: 1987, when installed in accordance with the following conditions. Subject to these, the door would be expected to meet the relevant requirements of BS 5588 for FD 30 doorsets when used in accordance with the provisions therein.

In recognition of this, the leaf carries a prefixed label on the top edge of the door, issued under the terms of the British Woodworking Federation - CERTIFIRE scheme. This label uniquely identifies the door leaf, the manufacture of which complies with BS: ISO 9001:2000 for quality systems and is subject to on-going surveillance. This label must not be removed.

It is emphasised that the certification is conditional upon the following instructions being complied with in their entirety. Failure to do so will invalidate this approval and may jeopardise the fire performance of the door. Door assemblies supplied pre-fitted with components by JELD-WEN UK Limited may be considered to meet the requirements in respect of those items.

### DOOR LEAF

This leaf may be used in single-acting, single-leaf, latched and unlatched ITT doorsets, single-acting, double-leaf, latched and unlatched ITT doorsets, double-acting, single and double leaf doorsets and single-acting, single-leaf, latched ITM doorsets at leaf dimensions up to those given in Figures 1 - 4 of Certificate CF160. Double-leaf doorsets may incorporate leaves of unequal width providing the smaller leaf is a minimum of 40% of the width of the larger leaf.

## DOOR FRAME

Material: Softwood or hardwood with the exception of Iroko, Geronggang and Ash. Ash may be used, subject to a minimum density of 650 kg/m<sup>3</sup>.

Minimum specification: BS EN 942 1996, Clause 5.2 Table 1 (Class J40) or better (for softwood)

Density: minimum 510kg/m<sup>3</sup>

Section size: minimum 70mm by 25mm plus 12mm stop rebated from solid or planted

25mm wide by 12mm thick. The stop may be machined from solid timber, glued and pinned or pinned only using 40mm long steel pins.

Material: Mild steel (Single-acting, single leaf latched doorsets only)

Density: N/A

Section size: 52mm by 28mm with a 19mm by 3mm stop. 1.2mm thick, rolled mild steel.

Material: MDF

Density: minimum 720kg/m<sup>3</sup>

Section size: minimum 77mm by 25mm plus 12mm stop rebated from solid or planted 25mm wide by 12mm thick. The stop may be machined from the solid, glued and pinned or pinned only using 38mm long steel pins.

Jointing: Mortice and tenon or half lapped joint with the head fixed to the jambs with two steel fixings.

Door to frame gaps: Not to exceed 3mm except at threshold where up to 10mm is permitted.

## SUPPORTING CONSTRUCTION

The door assemblies are approved to be installed in brick, block, masonry or timber stud of minimum thickness 72mm, providing at least 30 minutes fire resistance.

### INSTALLATION

The opening may be lined with softwood which shall be continuous and of minimum width, 70mm. Any voids between the lining and the wall to be infilled with mineral fibre or, if less than 6mm wide, with intumescent mastic or paste. Each door frame jamb to be fixed through to the wall at not less than three points with steel fixings penetrating the wall to at least 50mm. Any voids between the door frame and lining or door frame and wall to be filled as above for lining to wall gaps. Architraves are optional with no restrictions on material, size or fixing.

Door leaves may be trimmed to fit the frame by the following maximum amounts:

Stiles (each)	4mm
Bottom	6mm

Note that the maximum door to frame and door to threshold gaps specified shall not be exceeded nor shall the door edge fitted with the BWF-CERTIFIRE label be trimmed since removal of the label will invalidate the certification.

### GLAZED APERTURES

All apertures to be factory prepared. No site cutting of apertures permitted.

Beading: Hardwood or MDF, minimum densities as shown in table below.

Straight beads: Hardwood - Minimum 23.5mm wide by 23mm high including a 10mm by 7mm bolection return. The beads are to be splayed to be between 5°-10° with 15mm cover to the glass edge. The beads are to be tightly mitred at all corners.

MDF - Minimum 25mm wide by 22mm high or 25mm wide by 15mm high including a 5mm bolection return. The beads may be square topped or splayed up to 10° with 15mm cover to the glass edge. The beads are to be tightly mitred at all corners.

Curved beads: Minimum 22mm wide by 20mm high including a 5mm by 5mm bolection return. The beads are to be splayed to approximately 150 with 15mm cover to the glass edge. The beads are to be tightly mitred at all corners. The beads are to be formed from butt jointed timber sections, glued before machining.

Fixings: Minimum 38mm long steel pins or screws at maximum 150mm centres, skew fixed at approximately 200. Minimum 2 No. pins per bead.

Intumescent: Square or rectangular apertures:

Glazing System		Max. Height (mm)	Max. Width (mm)	Max. Area (m <sup>2</sup> )	Bead Type
Pilkington Pyroshield	Lorient Flexible Figure 1, Sealmaster Therm-A-Strip 10x2mm	1707mm (at 702mm wide)	702mm (at 1707mm high)	1.2	Hardwood Minimum Density 490kg/m <sup>3</sup>
Schott Pyran S	Sealmaster Therm-A-Strip 10x2mm, Sealmaster Fireglaze mastic, Sealmaster intumescent compound, all min. 2mm thick	1700mm (at 290mm wide)	700mm (at 700mm high)	0.5	Hardwood Minimum Density 490 kg/m <sup>3</sup>
CGI Pyroguard	Sealmaster Therm-A-Strip 10x2mm	2125mm (at 375mm wide)	375mm (at 2125mm high)	0.8	MDF Minimum Density 720kg/m <sup>3</sup>
Pilkington Pyroshield	Sealmaster Therm-A-Strip 10x2mm	910mm (at 660mm wide)	726mm (at 820mm high)	0.6	MDF Minimum Density 720kg/m <sup>3</sup>
Schott Pyran S	Sealmaster Therm-A-Strip 10x2mm	1855mm (at 647mm wide)	745mm (at 1611mm high)	1.2	MDF Minimum Density 720kg/m <sup>3</sup>
Glaverbel Pyrobelite EW7	Sealmaster Therm-A-Strip 10x2mm	1085mm (at 737mm wide)	700mm (at 1143mm high)	0.8	MDF Minimum Density 720 kg/m <sup>3</sup>

Laminated hardwood glazing beads may be used in conjunction with the following system:

Beads -	Laminated hardwood minimum density 490kg/m <sup>3</sup>
Bead dimensions	Minimum 22mm wide by 20mm high including a 5mm by 5mm bolection return.
Aperture dimensions	510mm diameter (maximum)
Glass	Pilkington Pyroshield, CGI Cross-mesh Glass, Schott Pyran S, 7.2mm Pyroguard
Clear	Intumescent system Therm-A-Strip 10 x 2mm
Fixings	38mm pins or screws (minimum) skewed at 20°
Lining	Softwood blocking or 6mm thick laminated hardwood aperture liner

Hardwood lay-bars, surface mounted to the face of the glass may be included at maximum spacing of 250mm in line with the following specification:

**GLAZING BARS**

Material:	Hardwood
Density:	350kg/m <sup>3</sup>
Dimensions:	22mm high chamfered on the upper and lower edges at 15°
Fixing:	Glued and stapled
Intumescent protection:	22mm by 2mm FGL30 material

PVCu or timber frets may be adhered to the face of the glass via either double-sided self adhesive tape or hot melt glue.

Alternative system: Any CERTIFIRE approved glass or glazing system subject to conditions contained in the relevant approval.

Single-acting, single leaf and double leaf 'hatch' doors (of leaf dimensions up to 1300mm high by 1000mm wide) are to include a single 10mm wide by 4mm thick Therm-a-Seal in the centre of the door leaf at the threshold.

Seals may be interrupted at hinge and latch positions.

Type: Therm-A-Seal by Intumescent Seals or equivalent CERTIFIRE approved (to TS35) seals subject to conditions contained in the relevant approval.

**HINGES**

Hinges shall be CE marked for use on fire resisting timber doors, in addition to the specifications below:

Number: Doors up to 2400 mm high 3 No. per leaf  
Doors larger than 2400 mm high 4 No. per leaf

Type: Steel, Phosphor bronze or brass butt, journal supported fixed or loose pin.  
Any washers or ball bearings to be of steel.

Positions: Centrally in the leaf height, 150mm from the head of the leaf and 225-250mm from the base of the door leaf.

Size:

Height: 100mm

Blade width: 26 - 36mm

Thickness: 2-3mm thick

Knuckle dia: 12mm maximum

Fixings: Steel screws, minimum 4 No. and no smaller than No. 8 by 32mm long. (Fixings within MDF frames are to be a minimum of 25mm long)

Hinges may be substituted by CERTIFIRE approved items subject to the conditions contained within the relevant CERTIFIRE certificate for the specific hinge.

Specific hinges referenced 61029BB may be used with each blade bedded on 1 mm thick Mono-ammonium phosphate (Interdens) material.

**LATCHES**

Where fitted, latches shall be CE marked for use on fire resisting timber doors in addition to the specification below:

Mortice type, automatic (sprung) latch bolt, cylinder rim night latches and knobsets.

Maximum case dimensions: 120mm high by 19mm thick.

Forend dimensions: 165mm long by 25mm wide (maximum).

Latch bolt material: material with a melting point greater than 800°C.

Handles: No restriction on type and material.

The following cylinders and door furniture are specifically assessed for use on these doorsets:

Cylinders 801 / 802 / 803

Door Furniture 57.5000 / 5402 / 5404/5

Note rebate conversion kit bedded onto intumescent mastic may be used on rebated double-leaf doorsets. Maximum case dimensions of 57mm high by 78mm wide by 25mm thick.

Latches may be substituted by CERTIFIRE approved items subject to the conditions contained within the relevant CERTIFIRE certificate for the specific latch.

**INTUMESCENT SEALS**

Configuration	Position	Specification
Single-leaf	Head	Minimum 10mm wide by 4mm thick Therm-A-Seal in the centre of the frame reveal or the centre of the door leaf edge (minimum 25 x 4mm Therm-A-Seal in steel frame).
	Vertical edges	Minimum 10mm wide by 4mm thick Therm-A-Seal in the centre of the frame reveal or the centre of the door leaf edge (minimum 25mm x 4mm Therm-A-Seal in steel frame).
Double-leaf	Head	Single 20mm wide by 4mm thick Therm-A-Seal or two opposing minimum 10mm wide by 4mm thick Therm-A-Seal in the leaf and frame.
	Vertical edges	Minimum 10mm wide by 4mm thick Therm-A-Seal in the centre of the frame reveal or the centre of the door leaf edge.
	Square and radiused meeting stiles	A single 20mm wide by 4mm thick Therm-A-Seal or two non-opposing minimum 10mm wide by 4mm thick Therm-A-Seal offset by 2-3mm.
	Rebated meeting stiles	Two minimum 10mm wide by 4mm Therm-A-Seal thick spaced 2-3mm from the stop, one on each leaf.

Specific locksets referenced below may be used and shall be bedded onto 1 mm thick Mono-ammonium phosphate (Interdens) material:

5410.60 / 5420.60 / 5430.60 / 5440.60 / 3722 Chubb 3R55 / Chubb 3G110 / Lockey No. 2430

Specific locksets referenced below may be used and shall be bedded onto ISL Therm-A-Flex intumescent sheet material (these latches may only be used on door leaves approved for unlatched configurations and sizes):

Samuel Heath 'Trip Catch'

Royde & Tucker 'Hush Latch'

The Abloy '4238 Roller Catch' is specifically assessed for use on these doorsets.

The following items of exit hardware are specifically assessed for use on these doorsets:

1413E/KE / 1438E / 376E / 377E / 378E

### OVERHEAD CLOSERS

All unlatched doorsets shall be fitted with a door closer covered by a CERTIFIRE certificate. Closers are not essential for fire performance if the doorset incorporates a latch and the leaf is in the closed and fully latched position.

A self-closing device is however required to be fitted to satisfy fire regulations and if fitted shall be a CERTIFIRE approved product. Note: closers with mechanical hold-open mechanisms are not permitted to be used.

The Briton '2003' surface mounted overhead door closer is specifically assessed for use on these doorsets.

### JAMB MOUNTED CLOSERS

Recessed cylindrical door closers referenced 'Perko (R1/R2)' and 'Perkomatic (R85)' are permitted to be used with the above mentioned doorset references within the following constraints:

- i) On internal, single-leaf, single-acting, latched door assemblies
- ii) In single occupancy, domestic dwellings including on a door between an integral garage and the living accommodation
- iii) On internal doors ONLY within a single residence (flat) of multiple occupancy domestic dwellings
- iv) Use on individual entrance (flat entrance) doors and in common areas within multiple occupancy dwellings and flats and all industrial and commercial applications are expressly excluded.

(1) Note: use of 'Perko (R1/R2)' and 'Perkomatic (R85)' closers are permitted on the basis that, when the door is latched shut, it will not detract from the fire performance of the door assembly in the event of a fire. The closing device is not CERTIFIRE approved and no claims are made or should be implied or inferred on the ability of the device to close and latch the door or in respect of its mechanical performance or durability.

### FLOOR SPRING CLOSERS

All double-acting doorsets shall be fitted onto floor springs and associated accessories which are covered by a CERTIFIRE certificate. This is not essential for fire performance if the doorset incorporates a latch and the leaf is in the closed and fully latched position. A self-closing device is however required to be fitted to satisfy fire regulations. Note: closers with mechanical hold-open mechanisms are not permitted to be used.

### FURTHER INFORMATION

Further information regarding the details contained in this data sheet may be obtained from JELD-WEN UK Limited (Tel: 0845 122 2890).

Further information regarding the CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777).

Further information regarding BWF labelling requirements can be obtained from the British Woodworking Federation (Tel: 0870 4586939).