CERTIFICATE OF APPROVAL
No CF 5143

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

JELD-WEN UK LIMITED

Woodhouse Mill, Sheffield, South Yorkshire S13 9WH, United Kingdom
Tel: 0345 122 2891

Have been assessed against the requirements of the Technical Schedule(s) denoted below and are approved for use subject to the conditions appended hereto:

CERTIFIED PRODUCT	TECHNICAL SCHEDULE
JELD-WEN UK Limited FD30 Timber Door Assemblies (Linex Construction)	**TS10 Fire Resisting Door Assemblies with Non Metallic Leaves**

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager

Issued: 2nd April 2013
Reissued: 18th January 2024
Valid to: 17th September 2028

CERTIFICATE No CF 5143
JELD-WEN UK LIMITED

JELD-WEN UK LIMITED. FD30 TIMBER DOOR ASSEMBLIES (LINEX CONSTRUCTION)

This approval relates to the use of the above doors in providing fire resistance of 30 minutes insulation (if incorporating not more than 20% of uninsulating glass) and 30 minutes integrity as defined in BS 476: Part 22: 1987. Subject to the undermentioned conditions, the doors would be expected to meet the relevant requirements of BS 9999 for FD30 doorsets when used in accordance with the provisions therein.

1. This certification is provided to the client for their own purposes, and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.

2. The doors are approved on the basis of:

   i) Initial type testing

   ii) A design appraisal against TS10

   iii) Inspection and surveillance of factory production control

   iv) Certification under a CERTIFIRE approved Quality Management System

   v) Audit testing in accordance with TS10

3. The doors comprise timber cored leaves in various finishes for use with timber frames, with intumescent edge seals (ITT FD30).

4. This approval is applicable to both complete door assemblies and door leaves. Where the door is not supplied in a fully fitted form it is a condition of this approval that an agreed Data Sheet accompanies the product and is complied with in its entirety. Failure to do so will invalidate this approval and may jeopardise the fire performance of the door.

5. This approval is applicable to latched and unlatched, single-acting single-leaf and single-acting double-leaf ITT assemblies without overpanels, at leaf dimensions up to those given in Table 1, Table 2 and Table 3.

6. Glazing shall only be undertaken by the door manufacturer, or a CERTIFIRE approved Licensed Door Processor, and shall be in accordance with the Data Sheet and Construction Specification. No site cutting or glazing of apertures is permitted.

7. Hardware items, including closing devices and intumescent edge seals, shall be CERTIFIRE approved or otherwise as specified in the data sheet.

8. The doorset shall be mechanically fixed to wall constructions having a fire resistance of at least 30 minutes.

Signed
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9. Labels to the BWF/CERTIFIRE design referencing JELD-WEN UK Limited, CERTIFIRE and CERTIFIRE Ref. No. CF5143 and FD30 fire resistance shall be fixed to each door in the prescribed position.

10. The approval relates to on-going production. Product and/or its immediate packaging is identified with the manufacturers' name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

Max Permitted Leaf Sizes – Standard Intumescents			
Door Assembly Configuration	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Single-Acting, Single-Leaf Latched/Unlatched	2540 (at 1176 wide)	1176 (at 2540 high)	2.99
Single-Acting, Double-Leaf Latched/Unlatched	2444 (at 924 wide)	1109 (at 2037 high)	2.26
Table 1			

Max Permitted Leaf Sizes – Multi-Point Locks			
Door Assembly Configuration	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Single-Acting, Single-Leaf Latched	2062 (at 959 wide)	959 (at 2062 high)	1.98
Table 2			

Max Permitted Leaf Sizes – Lorient 10 mm By 4 mm Perimeter Intumescents			
Door Assembly Configuration	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Single-Acting, Single-Leaf Latched/Unlatched	2391 (at 925 wide)	1084 (at 2040 high)	2.21
Single-Acting, Double-Leaf Latched/Unlatched	2539 (at 944 wide)	1174 (at 2041 high)	2.40
Table 3			

Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

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JELD-WEN UK LIMITED. FD30 TIMBER DOOR ASSEMBLIES (LINEX CONSTRUCTION) CF5143

DATA SHEET

1. General

This door leaf has been tested and is certified by CERTIFIRE as being capable of providing fire resistance of 30 minutes insulation (if incorporating not more than 20% of uninsulating glass) 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 9999 for FD30 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 fire resisting door scheme. This label uniquely identifies the door leaf, the manufacture of which complies with BS ISO 9001 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.

2. Door Leaf Dimensions

This approval is applicable to single-action, single and double-leaf, latched and unlatched, assemblies at leaf dimensions up to those detailed within Table 1, Table 2 and Table 3 below.

Max Permitted Leaf Sizes – Standard Intumescent Configuration			
Door Assembly Configuration	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Single-Acting, Single-Leaf Latched/Unlatched	2540 (at 1176 wide)	1176 (at 2540 high)	2.99
Single-Acting, Double-Leaf Latched/Unlatched	2444 (at 924 wide)	1109 (at 2037 high)	2.26
Table 1			

Max Permitted Leaf Sizes – Multi-Point Locks			
Door Assembly Configuration	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Single-Acting, Single-Leaf Latched	2062 (at 959 wide)	959 (at 2062 high)	1.98
Table 2			

Max Permitted Leaf Sizes – Lorient 10 mm By 4 mm Perimeter Intumescents			
Door Assembly Configuration	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Single-Acting, Single-Leaf Latched/Unlatched	2391 (at 925 wide)	1084 (at 2040 high)	2.21
Single-Acting, Double-Leaf Latched/Unlatched	2539 (at 944 wide)	1174 (at 2041 high)	2.40
Table 3			

Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

3.1 Door Frames To be any of the following:

Standard frames	**Option 1**	
	Material:	Softwood or Hardwood
	i) Density:	500 kg/m^3 minimum.
	ii) Dimensions:	66 mm by 27 mm minimum.
	iii) Door Stop:	12 mm deep pinned, screwed, or rebated from solid (510 kg/m^3 minimum) Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth.
	Softwood or hardwood split frames are permitted providing frame section opposite door edge complies with the minimum requirements for single section timber frames, as specified above.	
	Option 2	
	Material:	MDF
	i) Density:	720 kg/m^3 minimum.
	ii) Dimensions:	66 mm by 25 mm minimum.
	iii) Door Stop:	13.5 mm deep pinned, screwed, or rebated from solid (510 kg/m^3 minimum) Where the stop is rebated from solid the overall frame thickness must be increased by 13.5 mm to accommodate the 13.5 mm rebate depth.
Frames for use with doorsets complete with multi-point locks:	Material:	Softwood or Hardwood
	Density:	510 kg/m^3 (minimum)
	Dimensions:	Minimum 78 mm by 55 mm plus 12 mm stop rebated from solid. The stop shall be machined from solid timber only, with no option for planted stops.
Jointing:	Mortice and tenon or half lapped joints with the head screw fixed to the jambs using two steel screws	
	MDF frames with half-lapped joints may be mechanically fixed using three 50 mm by 1.6 mm by 1.3 mm staples at 12 mm to 22 mm horizontal centres.	
Door to frame gaps:	Not to exceed 4 mm except at threshold where up to 8 mm is permitted. Meeting stile gap not to exceed 3.5 mm. Please note that a reduced threshold gap may be required to comply with smoke leakage requirements.	

3.2 Softwood Tri-Laminated & Finger Jointed Frames

Softwood tri-laminated & finger jointed frames may be used, subject to compliance with the following specification:

- Single-acting, single-leaf door assemblies only with maximum overall leaf dimensions 2040 mm high by 926 mm wide.
- The door assemblies may be latched or unlatched, in accordance with the specific CERTIFIRE certificate requirements.
- The once rebated knock down frames will be manufactured from clear engineered softwood of minimum density 500 kg/m^3 and shall have a minimum overall section of 66 mm wide by 56 mm thick complete with a 13 mm deep rebate.
- Alternatively, the once rebated knock down frames will be manufactured from clear engineered softwood of minimum density 500 kg/m^3 and shall have a minimum overall section of 66 mm wide by 52 mm thick complete with a 20 mm deep rebate.
- The softwood frame material will be finger jointed in length only and include a maximum of three laminated elements.
- The finger joints will be orientated to the opening face and closing face of the frame only.
- The frame jambs and head will incorporate a 20 mm wide by 4 mm thick CERTIFIRE approved intumescent seal and a Q-Lon Aquamac 21 seal.

4. Overpanels

Flush overpanels are not permitted.

Transomed overpanels, manufactured to the same specification as the door leaves, may be included up to 1000 mm high, with a minimum 66 mm wide by 27 mm thick (plus additional planted stops) softwood or hardwood transom rail.

Overpanels to be bedded against beads or the stop of the rebate and be screw fixed at minimum 400 mm centres.

Intumescent seals as specified in the CF5143 Data Sheet shall be fitted centrally to all for edges of the overpanel or within the reveal of the frame.

Entire overpanel may be glazed in accordance with point 6 below.

5. Glazed Fanlights and Sidelights

Fanlights and Sidelights will comply with the following specification details:

Toplight/Sidelight Framing:	
Manufacturer:	JELD-WEN UK
Reference:	FD30 Head
Material:	Softwood (solid or clear engineered tri-laminated and finger jointed material)
Density:	500 kg/m^3 minimum
Dimensions:	66 mm wide by 52 mm thick with a 48 mm wide by 20 mm deep rebate or 95 mm wide by 52 mm thick with a 48 mm wide by 20 mm deep rebate
Fixing method:	Mortice and tenon joint, screwed and glued using two Ø5 mm by 70 mm long hardened single thread woodscrews and HB Fuller Rakol Eco 3 Plus adhesive.
Sidelight Framing – T Section:	
Manufacturer:	JELD-WEN UK
Reference:	FD30 T Head
Material:	Softwood (solid or clear engineered tri-laminated and finger jointed material)

Density:	500 kg/m^3 minimum
Dimensions:	48 mm wide by 70 mm thick with a 30 mm wide by 20 mm deep rebate or 77 mm wide by 70 mm thick with a 30 mm wide by 20 mm deep rebate.
Fixing method:	T-Section mulled to door frame and fixed into position using seven Ø4.2 mm by 38 mm long woodscrews at 300 mm centres, 100 mm from the corners.
Coupled Sidelight/Toplight Fixings:	
Supplier:	Timber Mate Fastners
Description:	Pozi double CSK head wood screws
Reference:	Woodscrews
Dimensions:	Ø 4.2 mm by 50 mm long
Position:	Screwed at 300 mm centres, 100 mm from the corners.
Sidelight Frame - Midrail:	
Manufacturer:	JELD-WEN UK
Reference:	FD30 Direct Mulled Midrail Sidelight
Material:	Softwood (solid or clear engineered tri-laminated and finger jointed material)
Density:	500 kg/m^3 minimum
Dimensions:	66 mm wide by 150 mm thick with a 48 mm wide by 20 mm deep rebate.
Fixing Method:	Midrail butt jointed to mullion and frame, screwed and glued using two Ø4.2 mm by 70 mm long CSK woodscrews (each side) and HB Fuller Rakol Eco 3 Plus adhesive.

Toplight / Sidelight – Glazing Option 1 – Pyroguard T-EI30/16-1 VF - Insulated Glass			
Supplier:	CGI International		
Configuration:	**Pyroguard T-EI30/16-1 VF**		
Thickness:	19 mm		
Maximum Pane Dimensions:	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Fanlight	515 (at 1977 wide)	2361 (at 432 high)	1.02
Full hight sidelight	3033 (at 480 wide)	576 (at 2528 high)	1.46
Door height sidelight	2424 (at 990 wide)	1188 (at 2020 high)	2.40
Nominal edge clearance:	5 mm		
Setting Blocks:			
Supplier:	Ram Extrusions		
Reference:	Blue 60		
Description:	Glazing packers		
Dimensions:	4.8 mm by 100 mm by 15 mm		
Glazing System:			
Supplier:	Sealmaster		
Description:	Intumescent closed cell tape – CF5645		
Reference:	CFT		
Dimensions:	15 mm by 3 mm		
Fixing method:	Self-adhesive, applied to rebate and glazing bead		

Toplight/Sidelight – Glazing Option 2 – Pyroguard EW30/6 VF RV - Non-Insulated Glass			
Supplier:	CGI International		
Configuration:	**Pyroguard EW30/6 VF RV**		
Thickness:	13 mm		
Maximum Pane Dimensions:	**Maximum Height (mm)**	**Maximum Width (mm)**	**Maximum Area (m^2)**
Fanlight	506 (at 1962 wide)	2345 (at 422 high)	0.99
Full height sidelight	3019 (at 470 wide)	564 (at 2516 high)	1.42
Door height sidelight	2412 (at 980 wide)	1176 (at 2010 high)	2.36
Nominal edge clearance:	10 mm		
Setting Blocks:			
Supplier:	Ram Extrusions		
Reference:	Blue 60		
Description:	Glazing packers		
Dimensions:	Two 5 mm by 100 mm by 10 mm (to provide 10 mm packer depth)		
Glazing System:			
Supplier:	Sealmaster		
Description:	Intumescent foam tape - CF5387		
Reference:	GTR		
Dimensions:	20 mm by 5 mm		
Fixing method:	Self-adhesive, applied to rebate and glazing bead		

Glazing Beads:	
Glazing method:	Externally beaded
Supplier:	JELD-WEN UK
Reference:	Splayed flush bead
Material:	Red Grandis Hardwood
Density:	570 kg/m^3 minimum
Dimensions:	20 mm by 24 mm
Fixing method:	Ø4 mm by 40 mm long CS security screws, at maximum 150 mm centres, maximum 50 mm in from the corners.

Alternatively, any CERTIFIRE approved glazing systems may be used providing the specification and installation details given in the appropriate certification documents are adhered to.

6. Supporting Construction

The door assemblies are approved to be installed in brick, block, masonry, timber or steel stud of minimum overall thickness 70 mm, providing at least 30 minutes fire resistance. Where stud partitions are used these should be suitably constructed to provide a secure fixing for the door assemblies as recommended by the partition manufacturer.

Where brick, block, masonry walls are plasterboard faced, the plasterboard adjacent to the door assembly shall be mechanically fixed to ensure that it remains in-situ for the required integrity period.

7. Installation:

The opening may be lined with softwood, hardwood or plywood which shall be continuous and of minimum width 70 mm. 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 50 mm.

Door assemblies shall be installed as stated in BS 8214. Suitable CERTIFIRE approved lineal gap sealing systems may also be utilised to protect the frame/supporting construction gap, subject to the conditions contained within the relevant certificate.

The use of third party accredited installers provides a means of ensuring that installations have been conducted by knowledgeable contractors, to appropriate standards, thereby increasing the reliability of the anticipated performance in fire.

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

- Stiles (each): 3 mm
- Top: 3 mm
- Bottom: No limit providing bottom lippings are not fitted, 3 mm if bottom lipping is fitted.

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.

The labelled edge may be subjected to minor 'shooting-in', providing the label is not damaged or removed in the process, and the amount of material removed does not exceed that stated previously.

Any voids between door frame and lining or door frame and wall to be filled as above for lining to wall gaps. Timber based architraves are optional with no restrictions on material, size or fixing.

8. Glazed Apertures

All apertures to be factory prepared by JELD-WEN UK Limited, or a CERTIFIRE approved Licensed Door Processor. No site cutting of apertures permitted as this will invalidate the certification.

Additionally, the doors may incorporate CERTIFIRE approved glass/glazing systems subject to the conditions contained within the relevant CERTIFIRE certificate (e.g., maximum size associated with glass, system, edge cover, intumescent aperture lining requirements, etc.) and the maximum pane dimensions given below (whichever is smaller).

Aperture dimensions:	Doors may incorporate one or more vision panels to the maximum sizes as identified below:
Height:	1700 mm maximum (at 532 mm wide)
Width:	604 mm maximum (at 930 mm high)
Area:	Maximum area per aperture and per leaf 0.9 m^2 subject to height and width restrictions stated above.
Margins:	No closer than 100 mm to the edge of the door leaf or between apertures
Lining to aperture*:	6 mm thick by 42 mm wide hardwood to be of minimum density 470 kg/m^3.

*When utilising alternative CERTIFIRE approved glazing systems the minimum aperture liner density requirements of the door and glazing system must be considered and whichever is the greater of the two must be utilised.

Double- leaf assemblies may incorporate glazed apertures in one or both leaves.

Hardwood or non-combustible setting blocks will be used to establish the correct edge cover.

Figure 1 – Meranti Glazing Bead

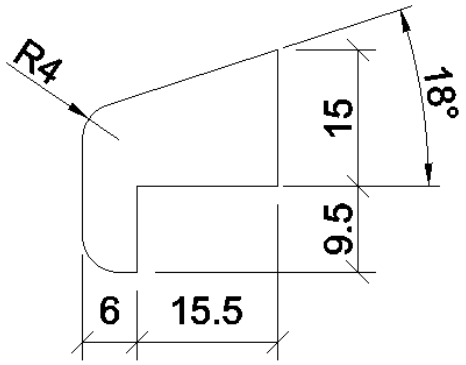


Figure 2 – MDF Glazing Bead – Option 1

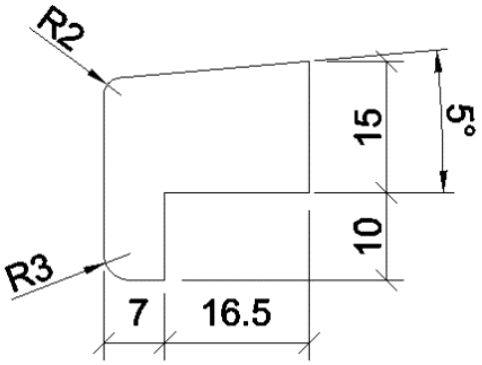


Figure 3 – MDF Glazing Bead – Option 2

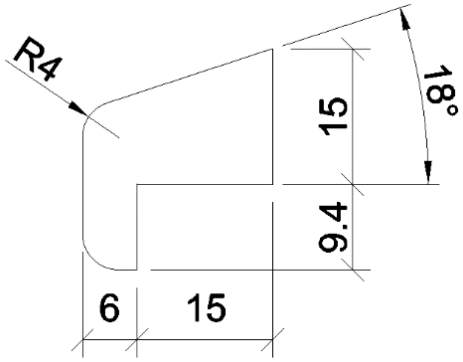
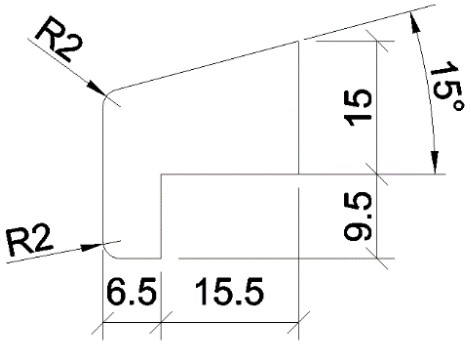


Figure 4 – MDF Glazing Bead – Option 3



Meranti Beads with Pyroclear Glass

Glass: Pyroclear

Glazing System: Sealmaster intumescent foam glazing tape

Aperture Liner: 6 mm minimum hardwood liner min 550 kg/m^3

Beads: Meranti hardwood, minimum density 480 kg/m^3, dimensions and shape as detailed in Figure 1

Bead Fixings: Steel glazing pins minimum Ø1.6 mm by 40 mm long, angled at 45° to the vertical and at maximum 150 mm centres

Pyroclear Glass with Sealmaster Intumescent Foam Glazing Tape & Meranti Beads			
Option	**Maximum Aperture Height (mm)**	**Maximum Aperture Width (mm)**	**Maximum Aperture Area (m^2)**
A	1700	457	0.78
B	915	510	0.47

Meranti Beads with Pyrodur Plus Glass

Glass: Pyrodur Plus

Glazing System: Sealmaster intumescent foam glazing tape

Aperture Liner: 6 mm minimum hardwood liner min 550 kg/m^3

Beads: Meranti hardwood, minimum density 480 kg/m^3, dimensions and shape as detailed in Figure 1

Bead Fixings: Steel glazing pins minimum Ø1.6 mm by 40 mm long, angled at 45° to the vertical and at maximum 150 mm centres

Pyrodur Plus Glass with Sealmaster Intumescent Foam Glazing Tape & Meranti Beads			
Option	**Maximum Aperture Height (mm)**	**Maximum Aperture Width (mm)**	**Maximum Aperture Area (m^2)**
A	225	225	0.51

MDF Beads with Pyrodur Plus Glass

Glass: Pyrodur Plus Glass

Glazing System: Sealmaster intumescent foam glazing tape

Aperture Liner: 6 mm minimum hardwood liner min 470 kg/m^3

Beads: MDF, minimum density 595 kg/m^3, dimensions and shape as detailed in Figure 2, Figure 3 or Figure 4.

Bead Fixings: Steel glazing pins minimum Ø1.6 mm by 40 mm long, angled at 45° to the vertical and at maximum 150 mm centres

Pyrodur Plus Glass with Sealmaster Intumescent Foam Glazing Tape & MDF Beads			
Option	**Maximum Aperture Height (mm)**	**Maximum Aperture Width (mm)**	**Maximum Aperture Area (m^2)**
A	225	225	0.51

MDF Beads with Pyroclear Glass

Glass: Pyroclear

Glazing System: Sealmaster intumescent foam glazing tape

Aperture Liner: 6 mm minimum hardwood liner min 470 kg/m^3

Beads: MDF, minimum density 595 kg/m^3, dimensions and shape as detailed in Figure 2, Figure 3 or Figure 4.

Bead Fixings: Steel glazing pins minimum Ø1.6 mm by 40 mm long, angled at 45° to the vertical and at maximum 150 mm centres

Pyroclear Glass with Sealmaster Intumescent Foam Glazing Tape & MDF Beads			
Option	**Maximum Aperture Height (mm)**	**Maximum Aperture Width (mm)**	**Maximum Aperture Area (m^2)**
A	1700	457	0.78
B	915	510	0.47

Pyroguard EW30 Glass with Lorient Flexible Figure 1

Glass: 7 mm thick Pyroguard EW30 Glass

Glazing System: Lorient flexible Figure 1

Aperture Liner: 6 mm minimum hardwood liner min 470 kg/m^3

Beads: Hardwood minimum density 550 kg/m^3, or MDF minimum density 750 kg/m^3 22 mm wide by 15 mm high with a 5 mm by 5 mm bolection return, chamfered by approximately 15°.

Bead Fixings: Steel glazing pins minimum Ø1.6 mm by 40 mm long or screws, angled to pass under the face of the glass at maximum 150 mm centres.

Pyroguard EW30 Glass with Lorient Flexible Figure 1			
Option	**Maximum Aperture Height (mm)**	**Maximum Aperture Width (mm)**	**Maximum Aperture Area (m^2)**
A	1236	532	0.66
B	930	604	0.56

9. Intumescent Seals

CERTIFIRE certificated intumescent seals are required to be fitted to these doors as below, for door assemblies to BS476: Part 22 – classified as FD30

The specification of the seals will be in accordance with the following tables:

Standard intumescent configurations – See tables 1 & 2 for leaf restrictions		
Door Assembly Configuration	**Position**	**Intumescent Type/Position**
Single-Acting, Single-Leaf	Head & vertical edges	One 15 mm wide by 4 mm thick Intumescent Seals Ltd Therm-A-Seal (graphite) fitted at the centre of the door leaf edge or within the reveal to the frame or transom rail
Single-Acting, Double-Leaf	Head & hanging jambs	One 10 mm wide by 4 mm thick Pyroplex Ltd Rigid box seal (graphite) fitted at the centre within the reveal to the frame or transom rail, with an additional 10 mm by 4 mm intumescent to the top edge of the door leaf offset 10 mm from the closing face of the door leaf to the edge of the strip.
	Meeting edges	Meeting edges to incorporate one 10 mm by 4 mm intumescent in each door leaf offset in opposite directions 2 mm from the centreline of the door leaf to the edge of the strip.

Lorient 10 mm by 4 mm perimeter intumescents – See table 3 for leaf restrictions		
Door Assembly Configuration	**Position**	**Intumescent Type/Position**
Single-Acting, Single-Leaf	Head & vertical edges	One 10 mm wide by 4 mm thick Lorient, Type 617 intumescent fitted at the centre of the door leaf edge or within the reveal to the frame or transom rail
Single-Acting, Double-Leaf	Frame head & jambs	One 10 mm wide by 4 mm thick Lorient, Type 617 intumescent fitted centrally within the frame reveal

	Top edge – Active leaf	One 10 mm wide by 4 mm thick Lorient, Type 617 intumescent fitted to the top edge of the active leaf, offset 10 mm from the closing face.
	Top edge – Passive leaf	One 10 mm wide by 4 mm thick Lorient, Type 617 intumescent fitted to the top edge of the passive leaf, offset 10 mm from the opening face.
	Meeting edges	One 10 mm wide by 4 mm thick Lorient, Type 617 intumescent fitted to the meeting edge of the active leaf, offset 10 mm from the closing face and One 10 mm wide by 4 mm thick Lorient, Type 617 intumescent fitted to the meeting edge of the passive leaf, offset 10 mm from the opening face.

Intumescent seals may be interrupted at hinge and latch positions.

Latched or unlatched, single-acting, single-leaves with maximum leaf dimensions of 2040 mm high by 926 mm wide and of a minimum thickness of 42 mm may utilise alternative intumescents with dimensions as stated in the tables above and in-line with the relevant CERTIFIRE approval for the proposed intumescent seal. All seals to be CERTIFIRE approved to Technical Schedule 35.

All other door assembly configurations should include the specific intumescent size type and location as specified within the table above.

Smoke seals may be included subject to the conditions contained within the relevant CERTIFIRE certificate for the smoke seal.

See Section 3 for intumescent requirements when using softwood tri-laminated, finger jointed frames.

10. Weather Seals

Schlegel Aquamac 21 weather seals may be included, fixed around the head and vertical edges of the frame.

11. Hinges

Hinges shall be CE marked against EN 1935 for use on 30 minute timber fire door assemblies, in addition to the specification options below:

Option 1		
Quantity:	Three minimum	
Type:	Steel lift-off or butt hinges	
Positions*:	Top hinge:	Maximum 250 mm from head of leaf to top hinge
	Bottom hinge:	Maximum 250 mm from bottom of leaf to bottom hinge
	Third hinge:	Middle hinge to be fitted between 500 mm and 1000 mm from the head of the leaf (±50 mm)
Dimensions:	Blade height:	100 mm (±10 mm)
	Blade width:	25 – 40 mm
	Blade thickness:	2.8 mm (±0.5 mm)
	Knuckle dia.:	12 mm (+1mm/-1.5 mm)
Fixings:	Four steel screws minimum Ø3.9 mm by 50 mm long to the door leaf and minimum Ø3.9 mm by 18.3 mm long to frame.	
Intumescent protection**:	None required	
	Option to include 1 mm thick Interdens intumescent sheet material under hinge blades permitted.	

* The datum in all cases is the centreline of the hinge.

Option 2	
Quantity:	Three minimum

Type:	Steel lift off or butt hinges.	
Positions:*	Top hinge:	Maximum 300 mm from head of leaf to top hinge
	Bottom hinge:	Maximum 300 mm from bottom of leaf to bottom hinge
	Third hinge:	Middle hinge to be fitted between 500 mm and 1000 mm from the head of the leaf (± 50 mm)
Dimensions:	Height:	100 mm (±10 mm)
	Blade width:	25 - 36 mm
	Thickness:	2.8 mm (±0.5 mm)
	Knuckle dia.:	12 mm (+1mm/-1.5 mm)
Fixings:	Four steel screws minimum Ø3.9 mm by 50 mm long to the door leaf and minimum Ø3.9 mm by 18.3 mm long to frame.	
Intumescent Protection**:	None required	
	Option to include 1 mm thick Interdens intumescent sheet material under hinge blades permitted.	

* The datum in all cases is the centreline of the hinge.

** The hinge specifications above override any requirement for additional intumescent identified in the hinge manufacturer's certification providing the hinge specification falls within the parameters identified in the table above, specifically maximum dimensions and material.

Any other CERTIFIRE approved hinge may be fitted, providing the hinge dimension are no greater than 10% in blade width and 25% in blade height from that approved in the table above (excluding the tolerances stated). Where the Certifire approved hinge exceeds the specification given in the table above, the minimum requirement for intumescent protection to the hinges, by-passing perimeter intumescent, and the material density and thickness for the door and frame elements given in the hinge manufacture's CERTIFIRE certificate shall apply.

The following hinge specification data relates to hinge recess widths that equal the door leaf thickness:

Quantity:	Three minimum	
Type:	Steel lift-off or butt hinges	
Positions*:	Maximum 230 mm from head of leaf to top hinge Maximum 230 mm from bottom of leaf to bottom hinge Middle hinge to be fitted centrally between the top and bottom hinge positions.	
Dimensions:	Blade height:	65 mm
	Blade width:	35 mm
	Blade thickness:	2.6 mm
	Knuckle dia.:	13 mm
Fixings:	Three steel screws at minimum 32 mm long by Ø4 mm per hinge blade.	
Intumescent protection**:	None required	
	Option to include 1 mm thick Interdens intumescent sheet material under hinge blades permitted.	

* The datum in all cases is the centreline of the hinge.

** The hinge specifications above override any requirement for additional intumescent identified in the hinge manufacturer's certification providing the hinge specification falls within the parameters identified in the table above, specifically maximum dimensions and material.

Double-action hinges are not permitted for use in conjunction with CERTIFIRE approved door assemblies, as they are not a controlled self-closing device, and therefore do not comply with Building regulation requirements.

Projection hinges and rising/falling butt hinges are not permitted for use in conjunction with CERTIFIRE approved door assemblies.

12. Locks and Latches

Where fitted, locks/latches shall be CE marked in accordance with BS EN 12209 or EN 179 for use on 30 minute timber fire doors.

Option 1	
Type:	Mortice type, automatic (sprung) latch bolt, and/or deadlock.
Case dimension:	Maximum 24 mm long by 23 mm wide by 66 mm deep
Forend dimension:	Maximum 58 mm long by 26 mm wide
Strike plate dimension:	Maximum 57mm long by 37mm wide (including latch plate lip)
Latchbolt material:	Steel or material with a melting point greater than 850°C
Position:	Maximum 1200 mm from bottom of door to centreline of spindle
Intumescent protection*:	Standard intumescent configuration Not required
	Lorient 10 mm by 4 mm perimeter intumescents Strike plate & forend bedded on 1 mm thick Interdens sheet material, lock case fully wrapped in 1 mm thick Interdens sheet material.

Or

Option 2	
Type:	Mortice type, automatic (sprung) latch bolt, and/or deadlock.
Case dimension:	Maximum 165 mm long by 14 mm wide by 85 mm deep
Forend dimension:	Maximum 235 mm long by 22 mm wide
Strike plate dimension:	Maximum 180 mm long by 40 mm wide (including a 135 mm by 16 mm latch plate lip)
Latchbolt material:	Steel or material with a melting point greater than 850°C
Position:	Maximum 1000 mm from bottom of door to centreline of spindle
Cylinders:	Euro profile Single cylinder, double cylinder or cylinder/thumbturns shall be suitable for use on FD30 fire resistant assemblies in accordance with BS EN 1303.
Intumescent protection*:	Strike plate and forend bedded on 1 mm thick Interdens sheet material, lock case fully wrapped in 1 mm thick Interdens sheet material.

OR

Option 3	
Type:	Mortice type, automatic (sprung) latch bolt
Case dimension:	Maximum 24 mm long by 17 mm wide by 105 mm deep
Forend dimension:	Maximum 60 mm long by 25 mm wide
Strike plate dimension:	Maximum 57 mm long by 37 mm wide (including latch plate lip)
Latchbolt material:	Steel or material with a melting point greater than 850°C
Position:	Maximum 1000 mm from bottom of door to centreline of spindle
Intumescent protection*:	Standard intumescent configuration Both faces of the lock case, the strike plate and forend are to be bedded on 1 mm thick Interdens sheet material.
	Lorient 10 mm by 4 mm perimeter intumescents Strike plate and forend bedded on 1 mm thick Interdens sheet material, lock case fully wrapped in 1 mm thick Interdens sheet material.

OR

Option 4	
Type:	Mortice type, automatic (sprung) latch bolt, and/or deadlock.
Case dimension:	Maximum 80 mm long by 15 mm wide by 106 mm deep

Forend dimension:	Maximum 118 mm long by 23 mm wide
Strike plate dimension:	Maximum 57 mm long by 37 mm wide (including latch plate lip)
Latchbolt material:	Steel or material with a melting point greater than 850°C
Position:	Maximum 1000 mm from bottom of door to centreline of spindle
Cylinders:	Euro profile Single cylinder, double cylinder or cylinder/thumbturns shall be suitable for use on FD30 fire resistant assemblies in accordance with BS EN 1303.
Intumescent protection*:	Standard intumescent configuration Both faces of the lock case, the strike plate and forend are to be bedded on 1 mm thick Interdens sheet material.
	Lorient 10 mm by 4 mm perimeter intumescents Strike plate and forend bedded on 1 mm thick Interdens sheet material, lock case fully wrapped in 1 mm thick Interdens sheet material.

* The lock specifications above override any requirement for additional intumescent identified in the lock manufacturer's certification providing the lock/latch specification falls within the parameters identified in the tables above, specifically maximum dimensions and material.

Any other CERTIFIRE approved lock/latch may be fitted, providing no lock/strike plate dimension is more than 25% of that approved in the tables above and subject to the conditions contained within the relevant certificate. Where the Certifire approved lock/latch exceeds the specification given in the tables above, the minimum requirement for intumescent protection to the locks, latches and strike plates, by-passing perimeter intumescent, and the material density and thickness for the door and frame elements given in the lock/latch manufacture's CERTIFIRE certificate shall apply.

13a. Multi-Point Locks

Specification: SL16 FULLEX with steel latch bolt and fixed with 2.5" steel screws and fitted with a Hoppe UK 'Birmingham' handle, with Key/Key or Key/Thumb-turn cylinders

The following points relate to all locks & latches discussed within this Data Sheet:

- Recessing for locks shall result in a tight fit, allowing for specified intumescent protection.
- No restriction on type and material of face fixed mechanical lever handles and knobs providing these are wholly surface mounted (with the exception of the spindle and fixing holes).
- The spindle hole shall be a maximum of Ø16 mm, where the lock case is not protected by Intumescent sheet material. In this instance lever handles may be steel, brass, zinc or aluminium and may be screw or bolt through fixed with steel fixings.
- The spindle hole may be increased to a maximum of Ø20 mm where the lock case is not protected with intumescent sheet material, subject to the use of wholly steel or wholly brass lever handles, in conjunction with steel bolt through fixings only.
- The spindle hole may be further increased to a maximum of Ø22 mm where the lock case is protected with 1 mm thick Interdens intumescent sheet material in accordance with the specifications provided in the tables above.
- The Euro profile cylinder recess in the door face shall follow the shape of the cylinder and result in a tight fit.
- The use of oval profile cylinders is not permitted.
- Single cylinder recesses shall penetrate through only half the thickness of the door leaf.
- The use of the Eurospec MPx6 thumbturn cylinder (KM585549) is permitted.

13. Self-Closing Devices

All doors are required to be fitted with a CERTIFIRE certificated self-closing device. The exceptions are doors 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.

The closers shall have a power rating appropriate to the leaf sizes, subject to the closer having the ability to close the door from any angle and against any latch and/or seals fitted. The closer shall have the ability to provide size 3 closing force. Where doors are unlatched a minimum size 3 shall be maintained.

Closers shall be CE marked against EN 1154 and categorised as grade 1 – suitable for use on fire/smoke door assemblies.

Uninsulated glass shall not be included directly below the body of surface mounted overhead closers.

13a. Surface mounted overhead closers

Any CERTIFIRE approved surface mounted overhead closer may be fitted, subject to the conditions contained within the relevant certificate.

13b. Transom Mounted and Concealed Closers

Not permitted

13c. Floor Springs

Not permitted

14. Ancillary Items

Please note that hardware items other than those discussed within this certificate of approval are not permitted.

14a. Protection Plates and Signage

Surface mounted plastic, steel, aluminium or brass plates are acceptable on the following basis:

- < 2mm thick
- Do not occupy more than 20% of the door leaf in total or exceed 500 mm in height for kickplates and 300 mm for mid-plates, whichever is the smaller.
- Do not wrap around the vertical edges, and on the closing face do not extend beneath the door stops (generally 40-50 mm narrower than door width)
- Plates/signage can be bonded with a thermally softening adhesive. Additionally, screws may be used.

14b. Pull Handles

Screw-fixed, bolt-fixed from the back and back-to-back fixed pull handles of steel, brass, aluminium and nylon coated are permitted providing any through-bolt fixings are of steel and maximum bolt to bolt centres do not exceed 1000 mm.

A maximum Ø15 mm recess is permitted for through bolt fixings.

Bolt through fixings will require intumescent protection in the form of a 1 mm thick graphite tube, or Intumescent mastic to the full depth of the recess.

14c. Dropseals

Lorient Polyproducts Ltd LAS8001si dropseal may be fitted to the bottom edge of door leaves

Where dropseals are fitted, the recess for a dropseal may be formed on site by NON-CERTIFIRE approved staff. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate.

Note: Threshold gaps as stated in Section 4 are to be maintained

14d. Flushbolts

The use of steel flushbolts is permitted on the following basis:

- The primary leaf must be latched
- Flushbolts must be engaged where fitted

Where flushbolts are fitted they must be in accordance with the following specification:

Max. dimension	202.5 mm high x 37.5 mm deep x 19 mm wide
Material:	Steel
Position:	Top and bottom of the door leaf edge where the doors have square meeting stiles only.
Intumescent: protection	Flushbolts are to be fully wrapped in 1 mm thick Interdens sheet material.

14e. Air Transfer Grilles

No site cutting of apertures permitted as this will invalidate the certification.

Where apertures are pre-cut by JELD-WEN UK, or a CERTIFIRE approved Licensed Door Processor, intumescent air transfer grilles may be fitted on site by NON-CERTIFIRE approved staff, however, the intumescent air transfer grilles shall be CERTIFIRE approved for use in FD30 timber based doors. The air transfer grilles must be fitted into apertures prepared in line with the relevant CERTIFIRE certificate for the air transfer grille. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate with regards to position of the air transfer grille within the door assembly.

14f. Letter Plates

Where letter plates are fitted, the aperture for a letter plate may be formed on site by NON-CERTIFIRE approved staff, however, the letter plates shall be CERTIFIRE approved for use in FD30 timber based doors. The letter plates must be fitted into apertures prepared in line with the relevant CERTIFIRE certificate for the letter plate. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate with regards to position of the letter plate within the door assembly.

14g. Door Viewers

Door viewers may be fitted into the leaf providing the viewer comprises a metal sleeve and an optical glass lens and is not positioned higher than 1500 mm from the bottom edge of the door leaf. The viewer shall be tightly fitted within the leaf.

The aperture provided for the installation of the viewer should be lined with intumescent mastic or 1mm Interdens intumescent sheet material to be wrapped around the viewer body to the full thickness of the door leaf.

One of more viewers may be fitted to the door leaf providing a minimum of 100 mm centre to centre is retained between the viewers.

UK Fixings door viewer referenced 22525 is permitted in accordance with the requirement stated above.

14h. Coat Hooks and Other Surface Mounted Hardware

Ancillary items which are wholly surface mounted may be fitted providing:

- These items are screw fixed or bonded only
- Are not bolted through the full thickness of the door
- Are not directly above, or closer than 100 mm to any non-insulated glazing

14i. Electric Strikes/Electromechanical Locks

Not permitted

14j. Threshold Plates/Cills

Not permitted

14k. Edge Protectors

Not permitted

15. Further Information

Further information regarding the details contained in this data sheet may be obtained from JELD-WEN UK Limited (Tel. 0345 122 2891).

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