



CERTIFICATE OF APPROVAL

No CF 179

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

Retford Road, Woodhouse Mill, Sheffield, South Yorkshire S13 9WH
Tel: 0114 2542000 Fax: 0114 2696696

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
FD60 Dieformed / Flush
Timber Door Assemblies

TECHNICAL SCHEDULE
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: 7th October 1997
Re-issued: 7th July 2021
Valid to: 6th July 2022





CERTIFICATE No CF 179

JELD-WEN UK LIMITED

FD60 DIEFORMED / FLUSH TIMBER DOOR ASSEMBLIES

This approval relates to the use of the above doors in providing fire resistance of 60 minutes insulation (if incorporating not more than 20% of uninsulating glass) and 60 minutes integrity as defined in BS 476: Part 22. Subject to the undermentioned conditions, the doors would be expected to meet the relevant requirements of BS 9999 for FD60 door assemblies 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 a hardwood framing which retains solid panels and is faced with a dieformed or flush facing in various finishes, for use with timber or MDF frames incorporating intumescent edge seals (code ITT FD60).
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 54 mm thick, latched, single-acting, single and double-leaf, ITT assemblies, at leaf dimensions up to those given in Table 1 and Table 2 below:
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 Information Sheet and Construction Specification. No site cutting or glazing of apertures is permitted.



CERTIFICATE No CF 179 JELD-WEN UK LIMITED

FD60 DIEFORMED / FLUSH TIMBER DOOR ASSEMBLIES

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m ²)
Single-Acting, Single-Leaf Latched / Unlatched	2086 (at 926 wide)	947 (at 2040 high)	1.93
Single-Acting, Single-Leaf Latched only	2102 (at 926 wide)	954 (at 2040 high)	1.95

Table 1 – Hardwood Frames & Lorient Type 617 intumescents (CF341)

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m ²)
Single-Acting, Single-Leaf Latched only	2540 (at 978 wide)	1176 (at 2112 high)	2.48
Single-Acting, Double-Leaf Latched only	2540 (at 978 wide)	1176 (at 2112 high)	2.48

Table 2 – MDF Frames & Pyroplex Rigid Box Intumescents (CF355)

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

Double-leaf door assemblies including unequal sized door leaves are permitted on the assumption that the smaller leaf is no less than 40 % of the width of the larger leaf.

- Hardware items, including closing devices and intumescent fire seals, shall be as specified in the data sheet.
- The door assembly shall be mechanically fixed to wall constructions having a fire resistance of at least 60 minutes.
- Labels to the CERTIFIRE design, or approved by CERTIFIRE, referencing CERTIFIRE and CERTIFIRE Ref. No. CF179 and FD60 classifications resistance shall be affixed to each door in the prescribed position.
- This approval relates to on-going production. The product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application when appropriate.

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CF 179 DATA SHEET

1. General

This door leaf has been fire tested and is certified by CERTIFIRE as being capable of providing fire resistance of 60 minutes integrity and 60 minutes insulation (if incorporating not more than 20% of uninsulated glass) as defined in BS 476: Part 22, when installed in accordance with the following conditions. Subject to these, the door will meet the relevant requirements of BS 9999 for FD 60 when used in accordance with the provisions therein.

In recognition of this, the leaf carries a prefixed label on the top or hanging edge of the door, issued under the terms of the CERTIFIRE scheme. This label uniquely identifies the door leaf, the manufacture of which complies with a CERTIFIRE approved Quality Management System and is subject to on-going surveillance. This label shall 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 54 mm thick, latched and unlatched, single-acting, single-leaf.

Door assembly configuration	Max. Height (mm)	Max. Width (mm)	Max. Area (m ²)
Single-Acting, Single-Leaf Latched / Unlatched	2086 (at 926 wide)	947 (at 2040 high)	1.93
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Table 2 – MDF Frames & Pyroplex Rigid Box Intumescents (CF355)			

- (1) Under no circumstances must the maximum height, maximum width or maximum area be exceeded without separate CERTIFIRE approval.
- (2) Double-leaf door assemblies including unequal sized door leaves are permitted on the assumption that the smaller leaf is no less than 40 % of the width of the larger leaf.

3. Door Frame

To be any of the following:-

Hardwood Excluding Ash, Iroko, Beech, Towri and Gerronggang (see Table 1 for leaf dimensions)	i) Density:	650 kg/m ³ min.
	ii) Dimensions:	85 mm by 35 mm min.
	iii) Door Stop:	Minimum 12 mm deep x 25 mm wide pinned, screwed or rebated from solid (min 650 kg/m ³). Minimum stop pin length is 40 mm. Where rebated from solid the overall frame thickness shall be increased proportionately to accommodate the required rebate depth (minimum 12 mm).
MDF (see Table 2 for leaf dimensions)	i) Density:	720 kg/m ³ min.
	ii) Dimensions:	100 mm by 30 mm min.
	iii) Door Stop:	Minimum 12 mm deep x 25 mm wide pinned, screwed or rebated from solid (min 720 kg/m ³). Minimum stop pin length is 40 mm. Where rebated from solid the overall frame thickness shall be increased proportionately to accommodate the required rebate depth (minimum 12 mm).
Jointing:	Mortice and tenon or half lapped joints with the head screw fixed to the jambs using two steel screws	
Door to frame gaps:	Not to exceed 4 mm except at threshold where up to 8 mm is permitted and 3 mm at the meeting stiles.	

4. Overpanels

Not permitted

5 Glazed Fanlights and Sidelights

Not permitted

6. Supporting Construction

The door assemblies are approved to be installed in brick, block or masonry wall or steel stud of minimum thickness 85 mm, providing at least 60 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.

7. Installation

The opening may be lined with hardwood which shall be continuous and of minimum width, 85mm. Each door frame jamb to be fixed through to the wall at not less than four points with steel or nylon fixings at maximum 500 mm centres penetrating the wall to at least 50 mm. Architraves are optional with no restrictions on material, size or fixing.

Door assemblies shall be installed as stated in BS 8214: 2016. 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.

Additionally Fire and Acoustic Seals, Fire Door Foam (FD60) sealant may be used to the rear of frame installations for gaps between 5 mm and 20 mm, where the foam is applied to the full width and depth of the frame to wall gap. This option may be utilised in conjunction with plastic packers subject to the packers being fully concealed by the Fire and Acoustic Seals, Fire Door Foam (FD60) sealant.

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): 4 mm
- Top: 4 mm
- Bottom: 6 mm

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 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.

8. Glazed Apertures

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

Door may incorporate CERTIFIRE approved glazing systems subject to the conditions contained within the relevant CERTIFIRE certificate (e.g. maximum size associated with glass, system, edge cover, 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 identified in the table below:

Area: Maximum total glazed area of 1.26 m² per leaf

Margins: 110 mm from the perimeter edge, 94 mm between aperture cut outs.

Liner: All apertures will include an intumescent aperture liner in accordance with the table below, or as specified in the CERTIFIRE certificate of approval for the alternative glass / glazing system.

Maximum Permitted Aperture Dimensions		
Max. Height (mm)	Max. Width (mm)	Max. Area (m²)
1777 (at 707 wide)	730 (at 1720 high)	1.26

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

Double-leaf door assemblies with equal width leaves shall both be similarly glazed.

Non-insulating glasses: 10 mm thick Pyrodur 60-10, or other CERTIFIRE approved glass subject to the conditions of the glass certificate and the requirements stated above.

Intumescent System	Bead Dimensions	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Dia.	Max. Area (m ²)
Sealmaster graphite foam tape 20mm x 5 mm between glass & beads & Sealmaster GL60 2 mm thick lining to cut out.	35 mm high by 29 mm wide bolection bead with a 17.5° splay and a 10 x 10 mm bolection. (22 mm +/- 1 mm edge cover)	*Hardwood min 610 kg/m ³	No 8 by 50 mm long screws at max 250 mm centres, max 50 mm in from the corners	1777 (at 707 wide)	730 (at 1720 high)	N/A	1.26

*Excluding Ash, Iroko, Beech, Towri and Gerronggang

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 FD60 – Hardwood frames

Door assembly Configuration*	Position	Required Intumescent Protection
Single-acting, Single-leaf latched / unlatched	Frame Head	2No. 15 mm wide by 4 mm thick Lorient LP1504, Type 617 seals, positioned 7 mm and 32 mm from the opening face of the frame (10 mm apart)
	Frame Jambs	2No. 15 mm wide by 4 mm thick Lorient LP1504, Type 617 seals, positioned 7 mm and 32 mm from the opening face of the frame (10 mm apart)

*See Table 1 for size restrictions

For door assemblies to BS476: Part 22 – classified as FD60 – MDF frames

Door assembly Configuration*	Position	Required Intumescent Protection
Single-acting, Single-leaf latched only	Frame Head	2No. 15 mm wide by 4 mm thick Pyroplex Rigid Box seals, positioned centrally, 7 mm and 32 mm from the opening face of the frame (10 mm apart)
	Frame Jambs	2No. 15 mm wide by 4 mm thick Pyroplex Rigid Box seals, positioned centrally, 7 mm and 32 mm from the opening face of the frame (10 mm apart)
Single-acting, Double-leaf latched only	Frame Head	2No. 15 mm wide by 4 mm thick Pyroplex Rigid Box seals, positioned centrally, 7 mm and 32 mm from the opening face of the frame (10 mm apart)
	Frame Jambs	2No. 15 mm wide by 4 mm thick Pyroplex Rigid Box seals, positioned centrally, 7 mm and 32 mm from the opening face of the frame (10 mm apart)
	Meeting Stiles	2No. 15 mm wide by 4 mm thick Pyroplex Rigid Box seals, positioned centrally, 7 mm and 32 mm from the opening face of the primary door leaf (10 mm apart)

*See Table 2 for size restrictions

Seals may be interrupted at hinge and latch positions.

Intumescent strips cannot be changed from the specific size, type and location specified within the tables above, in accordance with the required frame material.

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

10. Hinges

Hinges shall be CE marked against EN 1935 for use on 60 minute timber fire door assemblies.

Number:	Minimum 3 No. hinges	
Type:	Steel lift off or butt hinges.	
Positions:*	Top Hinge:	Max 200 mm from the top of the door to top hinge.
	Middle Hinge:	Middle hinge fitted centrally in the leaf height.
	Bottom.	Max 300 mm from the bottom of the door to bottom hinge
	Note: The hinges may alternatively be arranged in a 2No top / 1No bottom, Hi-Load arrangement where the middle / 2 nd hinge is positioned no closer than 220 mm from the top hinge (centreline to centreline).	
Dimensions:	blade height:	102 mm (+/- 20%)
	Blade width:	33 mm (+/- 3 mm)
	Thickness:	3 mm (+/- 0.5 mm)
	Knuckle dia.:	13 mm (+/- 1 mm)
Fixings:	Quantity:	4No. steel screws (minimum)
	Size:	No.8 by 32 mm long (minimum).
Intumescent Protection**	1 mm Interdens or Graphite intumescent sheet material to all hinge blades.	

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

** The hinge specification above overrides 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 tolerances). 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.

11. Locks and Latches

Locks and latches where required shall be CE marked in accordance with BS EN 12209 or EN179 for use on 60 minute timber fire doors, in addition to the specification below:

Type:	Mortice type, automatic (sprung) latch bolt.
Max. case dimension:	165 mm high by 90 mm deep by 19 mm wide
Max. forend dimension:	235 mm high by 25 mm wide
Max. keep dimension:	150 mm high by 25 mm wide (excluding latch plate lip)
Latchbolt material:	Steel or material with a melting point greater than or equal to 850°C
Position:	Max. 1200 mm from bottom of door to centreline of lockcase
Cylinders:	Euro profile Single cylinder, double cylinder or cylinder / thumbturns shall be suitable for use on FD60 fire resistant assemblies in accordance with BS EN 1303.
Intumescent: protection*	Latch case to be fully wrapped and forend and strike plate to be bedded onto 1 mm of Interdens intumescent sheet material.

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

Any other CERTIFIRE approved lock/latch may be fitted, providing no lock/strikeplate dimension is more than 25% of that approved in the table above and subject to the conditions contained within the relevant certificate. Where the Certifire approved lock/latch exceeds the specification given in the table above, the minimum requirement for intumescent protection to the locks, latches and strikeplates, 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.

- Recessing for locks shall result in a tight fit, allowing for the intumescent protection specified.
- 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) and the spindle hole is a maximum 15 mm in diameter.
- 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 round or oval profile cylinders is not permitted.
- Single cylinder recesses shall penetrate through only half the thickness of the door leaf.

12. 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 a minimum 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.

12a Surface mounted overhead closers

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

12b Transom Mounted and Concealed Closers

Not permitted

12c Floor Springs

Not permitted

13. Ancillary items

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

13a Protection plates and signage

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

- < 2mm thick
- Do not occupy more than 20% of the door leaf in total, or exceed 500mm in height for kickplates and 300mm 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 40-50mm narrower than door width)
- Plates/signage can be bonded with a thermally softening adhesive. Additionally screws may be used.

13b Flushbolts

Single-action, double-leaf assemblies shall incorporate steel flushbolts as detailed below:

- The primary leaf shall be latched.
- Flushbolts shall be included both at the top and bottom of the door leaf.
- Flushbolts (top & bottom) shall be engaged.
- Flushbolts are to be of an all steel construction.
- Flushbolts are to be a maximum of 202 mm high by 37 mm deep by 20 mm wide.
- Flushbolt body to be fully wrapped and keep to be bedded onto 1 mm thick Interdens intumescent sheet material.

Alternatively, steel barrel bolts which are wholly surface mounted and do not encroach into the door/frame gap shall be fitted to the top and bottom of the secondary leaf, providing these items are screw fixed only, and not bolted through the full thickness of the door. When fitted to the closing face of the door assembly, the bolt may be located within a tight recess to the frame head stop.

13c 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 fixing is of steel.

13d Air transfer grilles

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

Where apertures are pre-cut by Jeld-Wen UK LTD., 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 FD60 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.

13e 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 FD60 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.

13f Door Viewers

Door viewers may be utilised subject to the door viewer comprising a metal sleeve and an optical glass lens and not being positioned higher than 1600 mm from the threshold to the centre line of the viewer barrel.

Door viewers shall have an external diameter of not greater than 14 mm and shall be tightly fitted within the leaf.

The aperture provided for the installation of alternative door viewers shall be fully lined with 1mm thick graphite intumescent sheet material, ensuring that the viewer is a tight fit.

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

Additionally door viewers referenced UAP Plastic Secure to View™ fire resistant door viewers may be utilised, subject to the viewer barrel being fully wrapped with 2 mm thick graphite intumescent sheet material.

13g 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

13h Dropseals

CERTIFIRE approved dropseals may be fitted to the bottom edge of CF179 door leaves with overall dimensions 28 mm high by 12 mm wide.

Fire and Acoustic Seals, FAS45 dropseals with overall dimensions 28 mm high by 11.8 mm wide are also permitted.

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 3 are to be maintained

13i. Electric Strikes / Electro mechanical locks

Not permitted

14. Further Information

Further information regarding the details contained in this data sheet may be obtained from Jeld-Wen UK Ltd. (Tel. 01302 394000).

Further information regarding the CERTIFIRE certification and other approved products can be obtained from Warringtonfire Testing and Certification Limited (Tel: +44 (0) 1925 646777).