



CERTIFICATE OF APPROVAL

No CF 331

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
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 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: 20th October 2005
Revised: 24th September 2019
Valid to: 23rd December 2019





CERTIFICATE No CF 331

JELD-WEN UK LIMITED

JELD-WEN UK LIMITED FD60 TIMBER DOOR ASSEMBLIES

This approval relates to the use of the above doors in providing fire resistance of 60 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 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. This approval relates to the use of the above doors in providing fire resistance of 60 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 FD60 door assemblies when used in accordance with the provisions therein.
4. The doors comprise cellulosic cored leaves for use with timber frames, with intumescent edge seals (ITT FD60).
5. 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.
6. This approval is applicable to latched and unlatched, single-acting, single and double-leaf, ITT assemblies with or without overpanels, at leaf dimensions up to those given in Table 1.
7. 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.
8. Hardware items, including closing devices and intumescent fire seals, shall be as specified in the data sheet.
9. The door assembly shall be mechanically fixed to wall constructions having a fire resistance of at least 60 minutes.

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10. Labels to the CERTIFIRE design, or approved by CERTIFIRE, referencing CERTIFIRE and CERTIFIRE Ref. No. CF331 and FD60 classifications shall be affixed to each door in the prescribed position.
11. The 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 where appropriate.

Table 1
Size Envelope

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m ²)
Single-Acting, Single and Double-Leaf Latched / Unlatched Minimum 640 kg/m ³ hardwood frame	2150	941	2.01
Single-Acting, Single-Leaf Latched / Unlatched Minimum 750 kg/m ³ MDF frame	2540	1175	2.98
Single-Acting, Double-Leaf Latched / Unlatched Minimum 750 kg/m ³ MDF frame	2040	926	1.89
ERA Holiday Multi-point lock Single-Acting, Single-Leaf Central bolt Latched, hook bolts Latched / Unlatched Minimum 500 kg/m ³ hardwood frame.	2227	1011	2.06

- (1) All doorset configurations may incorporate overpanels which include a transom rail as detailed within data sheet.
- (2) Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

CF 331 DATA SHEET

1. General

This door leaf has been tested and is certified by CERTIFIRE as being capable of providing fire resistance of 60 minutes integrity as defined in BS 476: Part 22: 1987, when installed in accordance with the following conditions. Subject to these, the door will meet the relevant requirements of BS 9999 for FD60 doorsets 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 leaf may be used in a latched or unlatched, single-acting, single or double-leaf configuration. The following table gives a maximum door leaf height at a standard width and a maximum width at a standard height (excluding overpanel). Intermediate maximum dimensions may be calculated by linear interpolation between the absolute maximum values as shown on Table 1 (reproduced below) appended to Certificate of Approval.

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m ²)
Single-Acting, Single and Double-Leaf Latched / Unlatched Min 640 kg/m ³ hardwood frame	2150	941	2.01
Single-Acting, Single-Leaf Latched / Unlatched Min 750 kg/m ³ MDF frame	2540	1175	2.98
Single-Acting, Double-Leaf Latched / Unlatched Min 750 kg/m ³ MDF frame	2040	926	1.89
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Table 1
Size Envelope

- (1) All doorset configurations may incorporate overpanels which include a transom rail as detailed within data sheet.
- (2) Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

3. Door Frames

To be any of the following:-

Hardwood:
(Excluding Beech) Minimum density 640 kg/m³ and basic section sizes 70 mm by 32 mm plus a pinned, screwed or rebated from solid stop of minimum dimensions 12 mm deep minimum.

Where the ERA Holiday Multi point lock is being utilised frames must be hardwood (excluding Beech) min. density 500 kg/m³ with a minimum section size of 87 mm by 42 mm plus a pinned, screwed or rebated from solid stop of minimum dimensions 13 mm deep.

MDF: Minimum density 750 kg/m³ and basic section sizes 70 mm by 30 mm plus a pinned, screwed or rebated from solid stop of minimum dimensions 12 mm deep minimum

Door to frame gaps: Not to exceed 4 mm except at the threshold where up to 10 mm is permitted and 3.5 mm at the meeting stiles.

4. Overpanels

Transomed overpanels, manufactured to the same specification as the door leaves, may be included up to 1000 mm high, with a transom rail of minimum dimensions as frame sections.

Overpanels shall be fixed using steel screws at a maximum of 400 mm centres and a maximum of 100 mm from each corner, through centre of panel to a depth of at least 30 mm.

5. Glazed Fanlights and Sidelights

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 or timber stud of minimum thickness 70mm, 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, 70 mm. Any voids between the lining and the wall to be infilled with mineral fibre or, if less than 6 mm 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 50 mm. 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): 3 mm
- Bottom: Unlimited*

*As the door leaves include no rails, reduction from the bottom edge may be unlimited.

Note that the maximum door to frame and door to threshold gaps specified shall not be exceeded nor shall the top 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 by a CERTIFIRE approved Licensed Door Processor. No site cutting of apertures permitted as this will invalidate the certification.

Aperture dimensions: Doors may incorporate one or more vision panels to the maximum sizes identified in the table below:

Area: See Table below

Margins: See Table below

Maximum Permitted Aperture Dimension			
Minimum Aperture Margin (mm)	Maximum Height (mm)	Maximum Width (mm)	Maximum Area (m²)
100	1200 (at 350 wide)	600 (at 700 high)	0.42
100	1480 (at 148 wide)	150 (at 1466 high)	0.22
120	2201 (at 510 wide)	604 (at 1860 high)	1.21
120	881 (at 675 wide)	743 (at 801 high)	0.59

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

The leaf / leaves may incorporate any CERTIFIRE approved glazing system subject to the conditions contained within the relevant certificate (e.g. maximum size associated with glass or system, edge cover, aperture lining requirements etc).

All glazing beads are to be tightly mitred at the joints.

Non-Insulating Glasses: 6 mm Pyroshield 2 glass or other CERTIFIRE approved glass subject to the conditions of the glass certificate and 100 mm minimum margins.

Intumescent System	Bead Dimensions	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Dia. (mm)	Max. Area (m ²)
Lorient Polyproducts System 90+ and 54 mm by 2 mm LX5402 aperture liner	22 mm by 19 mm chamfered at nominally 45° to the glass plus a 5.5 mm high by 5.5 mm wide bolection.	Hardwood min. 650kg/m ³ (excluding Beech)	50 mm long steel screws at max 150 mm centres at 45° to the vertical	1200 (at 350 wide)	600 (at 700 high)	N/A	0.42
Lorient Polyproducts System 90+ and 54 mm by 2 mm LX5402 aperture liner	22 mm by 19 mm chamfered at nominally 45° to the glass plus a 5.5 mm high by 5.5 mm wide bolection.	Hardwood min. 650kg/m ³ (excluding Beech)	50 mm long steel screws at max 150 mm centres at 45° to the vertical	1480 (at 148 wide)	150 (at 1466 high)	N/A	0.22
Lorient Polyproducts Rigid Figure 1 and 54 mm by 2 mm LX5402 aperture liner	25 mm by 19 mm chamfered at nominally 17 - 20° to the glass plus a 5 mm high by 5 mm wide bolection.	Hardwood min. 610kg/m ³ (excluding Beech)	50 mm long steel pins or screws at max 150 mm centres at 45° to the vertical	1200 (at 350 wide)	600 (at 700 high)	N/A	0.42
Lorient Polyproducts Rigid Figure 1 and 54 mm by 2 mm LX5402 aperture liner	25 mm by 19 mm chamfered at nominally 17 - 20° to the glass plus a 5 mm high by 5 mm wide bolection.	Hardwood min. 610kg/m ³ (excluding Beech)	50 mm long steel pins or screws at max 150 mm centres at 45° to the vertical	1480 (at 148 wide)	150 (at 1466 high)	N/A	0.22

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 Frame

Door assembly Configuration	Position	Required Intumescent Specification
Single-Acting, Single-Leaf - Hardwood frame	Head	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart in the reveal to frame or transom
	Vertical Edges	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart within the reveal to the frame*.
ERA Holiday Multi point lock Single-Acting, Single-Leaf - Hardwood frame	Head	1 No. 15 mm wide by 4 mm thick Lorient Polyproducts Type 617 seal (positioned towards the frame stop) & 1 No 15 mm wide by 4 mm thick Pyroplex 8700 seal positioned 11 mm apart in the frame / transom reveal
	Vertical Edges	1 No. 15 mm wide by 4 mm thick Lorient Polyproducts Type 617 seal (positioned towards the frame stop) & 1 No 15 mm wide by 4 mm thick Pyroplex 8700 seal positioned 10 mm apart in the frame reveal*
Single-Acting, Double-Leaf – Hardwood frame	Head	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart in the frame / transom reveal
	Hanging Edges	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart in the frame reveal
	Meeting Edges	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart within one leaf edge OR 1 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted in each leaf edge (seals not opposing)

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

Single-Acting, Single-Leaf - MDF frame	Head	2 No. 15 mm wide by 4 mm thick Pyroplex F08700 rigid box seals fitted 10 – 12 mm apart in the frame reveal.
	Vertical Edges	2 No. 15 mm wide by 4 mm thick Pyroplex F08700 rigid box seals fitted 10 – 12 mm apart in the frame reveal*.
Single-Acting, Double-Leaf – MDF frame	Head	2 No. 15 mm wide by 4 mm thick Pyroplex F08700 rigid box seals fitted 10 – 12 mm apart in the frame reveal.
	Hanging Edges	2 No. 15 mm wide by 4 mm thick Pyroplex F08700 rigid box seals fitted 10 – 12 mm apart in the frame reveal*.
	Meeting Edges	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart within one leaf edge OR 1 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted in each leaf edge (seals not opposing)

* One seal is to be continuous at hinge positions whilst the other will be fully interrupted by the hinges. Both seals may be partially interrupted at latch position.

Seals may be substituted by equivalent CERTIFIRE approved seals subject to the conditions contained within the relevant CERTIFIRE certificate for the intumescent seal.

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:	3 No. per leaf (minimum)	
Type:	Steel butt, journal supported fixed or loose pin. Any washers or ball bearings to be of steel.	
Positions*:	Centrally in the leaf height (± 50 mm), 150 mm (± 50 mm) from the head of the leaf and 150 mm (± 50 mm) from the base of the door leaf.	
Dimensions:	Blade height:	100 (± 10) mm
	Blade width:	Hardwood frame - 31mm MDF frame - 35mm
Fixings:	Blade thickness:	3 mm
	Knuckle dia.:	10 - 13 mm
	Steel screws:	Min. 4 No. min No. 8 by 32 mm long
Intumescent protection:	Hardwood frames –	1 mm Interdens
	MDF frames –	1 mm Interdens

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

** This specification overrides any requirements for additional intumescent identified in the hinge manufacturer's certification providing the hinge specification falls within the parameters identified above, specifically maximum dimensions and material. Where alternative hinges exceed the specification given above the intumescent protection as identified in the hinge manufacturer's CERTIFIRE certificate shall apply.

Any other CERTIFIRE approved hinges may be used, subject to the conditions contained within the relevant certificate.

Cooke Brothers Ltd.'s Grade 13 hinges may be used within this doorset construction in line with the specification given above.

11. Latches

Latches are not necessary. When fitted shall be CE marked for use on 60 minute timber fire doors.

Mortice type, Tubular latch bolt.

Max. Forend dimension: 57 mm long by 26 mm wide maximum
Latch bolt material: Steel or material with a melting point greater than 800⁰C
Position: Shall be fitted at a maximum height of 1100mm from the spindle to the bottom of the door.
Intumescent protection*: Hardwood frames: none required.
MDF frames: 1mm Interdens behind strike plate to single action, single leaf assemblies only.

OR

Max latch case dimension: 24 mm high by 105 mm deep by 17 mm wide
Max. Forend dimension: 60 mm long by 25 mm wide maximum
Latch bolt material: Steel or material with a melting point greater than 800⁰C
Position: Shall be fitted at a maximum height of 1100mm from the spindle to the bottom of the door.
Intumescent protection*: 1 mm interdens to both faces of latch case and under forend and beneath strike plate.

OR

Max lockcase dimension: 80 mm high by 106 mm deep by 17 mm wide
Max. Forend dimension: 118 mm long by 23 mm wide maximum
Latch bolt material: Steel or material with a melting point greater than 800⁰C
Position: Shall be fitted at a maximum height of 1000mm from the spindle to the bottom of the door.
Intumescent protection*: 1 mm interdens to both faces of lock case and under forend and beneath strike plate.

OR

Max. case dimension: 166 mm high x 98 mm deep x 20 mm wide
Max. forend dimension: 235 mm high x 25 mm wide
Max. keep dimension: 185 mm high x 25 mm wide (excluding latch plate)
Latchbolt material: Steel or brass
Position: Max. 1100mm from the bottom of door to centreline of lockcase.
Intumescent protection*: Lock / latch **not** exceeding: 1 mm Interdens to body, forend and keep.
• 155 x 22 mm forend
• 125 x 24 mm keep (exc. latch plate)
Lock / latch exceeding: 2 mm Interdens to body, forend and keep
• 155 x 22 mm forend
• 125 x 24 mm keep (exc. latch plate)

OR

ERA Holiday Multi Point lock

Max. Forend dimension:	1572 mm long by 20 mm wide maximum
Strike plate – central:	250 mm by 45 mm maximum
Strike plate (top & bottom):	177 mm by 35 mm
Casing dimensions - Central:	222 mm by 62.5 mm by 15 mm deep
Casing – Top and bottom:	60 mm by 32 mm by 15 mm deep
Latch bolt material:	Steel or material with a melting point greater than 800 ⁰ C
Operation:	Central latch bolt: Engaged Central lock bolt: Disengaged Top and bottom: Disengaged
Cylinder:	Mila 4050EDMBA, 4050EDMNA or ISEO F6 Extra anti bump 40/40 thumb turn
Handles:	Hoppe - Tôkyô 1710RH/3239N-ZA/3623B, Tôkyô 1710RH/3239N-ZA/3623N or Mila Pro secure
Intumescent protection:	1 mm Interdens to all faces of central / top and bottom lock cases.

* This specification overrides any requirements for additional intumescent identified in the lock manufacturer's certification providing the latch specification falls within the parameters identified above, specifically maximum dimensions and material. Where alternative latches exceed the specification given above the intumescent protection as identified in the latch manufacturer's CERTIFIRE certificate shall apply.

Any other CERTIFIRE approved latch may be fitted, subject to the conditions contained within the relevant certificate.

Recessing for locks should result in a tight fit, allowing for any intumescent protection where required.

No restriction on type and material of handle.

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.

13. Ancillary Items

13a. Door Viewers

Carlisle Brass SWE1000 and SWE1010 door viewers may be fitted into the leaf providing the door viewer is not positioned higher than 1590 mm from the threshold to the centreline of the viewer. The door viewer is to be tightly fitted within the leaf.

13b. 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.

13c. Flushbolts

Max. Dimension:	200 mm high x 25 mm deep x 19 mm wide
Material:	Steel.
Position:	Top and bottom on door edge.
Intumescent protection:	1 mm Interdens to base and sides of bolt body and under the keep.

Note: Where flushbolts are fitted the meeting stile intumescent configuration will comprise of 2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart within one leaf edge.

13d. 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.

13e. Air transfer grilles

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

Where apertures are pre-cut by JELD-WEN UK Limited, 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.

13f. Letter Plates

The above referenced doorsets may include Royde & Tucker Letterplate assembly referenced LP03 – FD60 in accordance with CF255.

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.

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

14. Further Information

Further information regarding the details contained in this data sheet may be obtained from JELD-WEN UK Limited (Tel. 0114 229 3250).

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