

## 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: 20<sup>th</sup> October 2005 Revised: 7<sup>th</sup> December 2022 Valid to: 20<sup>th</sup> January 2025





# 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 against TS10
  - ii) Audit testing at the frequency specified in TS10
  - iii) A design appraisal against TS10
  - iv) Certification under a CERTIFIRE approved Quality Management System
  - v) Inspection and surveillance of factory production control
- 3. The doors comprise cellulosic cored leaves for use with timber frames, with intumescent edge seals (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 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.
- 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.
- 7. Hardware items, including closing devices and intumescent fire seals, shall be as specified in the data sheet.
- 8. 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. CF331 and FD60 classifications shall be affixed to each door in the prescribed position.

Page 2 of 3 Signed E/128 & E/262

Pol ligg-

Issued: 20<sup>th</sup> October 2005 Revised: 7<sup>th</sup> December 2022 Valid to: 20<sup>th</sup> January 2025



## CERTIFICATE No CF 331 JELD-WEN UK LIMITED

10. 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.

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m²)
Single-Acting, Single and Double-Leaf Latched / Unlatched Minimum 640 kg/m³ hardwood frame	2150 (at 935 wide)	941 (at 2136 high)	2.01
Single-Acting, Single-Leaf Latched / Unlatched Minimum 750 kg/m <sup>3</sup> MDF frame	2540 (at 1173 wide)	1175 (at 2536 high)	2.98
Single-Acting, Double-Leaf Latched / Unlatched Minimum 750 kg/m <sup>3</sup> MDF frame	2040 (at 926 wide)	926 (at 2040 high)	1.89
ERA Holiday Multi-point lock Single-Acting, Single-Leaf Central bolt Latched, hook bolts Latched / Unlatched Minimum 500 kg/m <sup>3</sup> hardwood frame.	2227 (at 925 wide)	1011 (at 2037 high)	2.06

#### Table 1

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

Page 3 of 3 Signed E/128 & E/262

Pal legg-

Issued: 20<sup>th</sup> October 2005 Revised: 7<sup>th</sup> December 2022 Valid to: 20<sup>th</sup> January 2025

#### **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. <u>Door Leaf Dimensions</u>

This approval is applicable to single-action, single, latched, assemblies at leaf dimensions up to those detailed within Table 1 below:

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m²)
Single-Acting, Single and Double-Leaf Latched / Unlatched Minimum 640 kg/m³ hardwood frame	2150 (at 935 wide)	941 (at 2136 high)	2.01
Single-Acting, Single-Leaf Latched / Unlatched Minimum 750 kg/m <sup>3</sup> MDF frame	2540 (at 1173 wide)	1175 (at 2536 high)	2.98
Single-Acting, Double-Leaf Latched / Unlatched Minimum 750 kg/m <sup>3</sup> MDF frame	2040 (at 926 wide)	926 (at 2040 high)	1.89
ERA Holiday Multi-point lock Single-Acting, Single-Leaf Central bolt Latched, hook bolts Latched / Unlatched Minimum 500 kg/m³ hardwood frame.	2227 (at 925 wide)	1011 (at 2037 high)	2.06

#### Table 1

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

#### 3. <u>Door Frames</u>

To be any of the following:-

Hardwood	i) Density:	640 kg/m <sup>3</sup> min.
(Excluding Beech) for use with single	ii) Dimensions:	70 mm by 32 mm min.
point locks / latches	iii) Door Stop:	12 mm deep pinned, screwed or rebated from solid Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth.
MDF	i) Density:	750 kg/m <sup>3</sup> min.
	ii) Dimensions:	70 mm by 30 mm min.
	iii) Door Stop:	12 mm deep pinned, screwed or rebated from solid Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth.
Hardwood	i) Density:	500 kg/m <sup>3</sup> min.
(Excluding Beech) for use with ERA	ii) Dimensions:	87 mm by 42 mm min.
Holiday Multi point lock	iii) Door Stop:	13 mm deep pinned, screwed or rebated from solid Where the stop is rebated from solid the overall frame thickness must be increased by 13 mm to accommodate the 13 mm rebate depth.
Jointing:	Butt joints, mortice and tenon, mitred 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 the threshold where up to 10 mm is permitted and 3.5 mm at the meeting stiles.	

#### 4. Overpanels / Sidepanels

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.

Mullioned sidepanels, manufactured to the same specification as the door leaves, may be included up to 1000 mm wide, with a mullion rail of minimum dimensions as frame sections.

Overpanels / sidepanels 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.

Entire overpanel may be glazed in accordance with point 5 below.

#### 5. Glazed Fanlights

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. Each door frame jamb to be fixed through to the wall at not less than four points with steel or nylon fixings at maximum 600 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. 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 mmTop 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 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.

Doors 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):

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

Aperture dimensions: Doors may incorporate one of more vision panels to the maximum sizes

identified in the table below:

Area: See Table below Margins: See Table below

Jeld-Wen UK Limited Data Sheet CF331

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.

**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 (m²)
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/m³ (excluding Ash, Beech & Iroko)	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/m³ (excluding Ash, Beech & Iroko)	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/m³ (excluding Ash, Beech & Iroko)	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/m³ (excluding Ash, Beech & Iroko)	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 -	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
Hardwood frame	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	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
Single-Acting, Single-Leaf - Hardwood frame	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*
	Head	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart in the frame / transom reveal
Single-Acting, Double-Leaf –	Hanging Edges	2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart in the frame reveal
Hardwood frame Meeting Edges		2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart within one leaf edge <b>OR</b> 1 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted in each leaf edge (seals not opposing)

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

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

Door assembly Configuration	Position	Required Intumescent Specification
Single-Acting, Single-Leaf -	Head	2 No. 15 mm wide by 4 mm thick Pyroplex F08700 rigid box seals fitted 10 – 12 mm apart in the frame reveal.
MDF frame	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*.
	Head	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,	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*.
Double-Leaf – MDF frame  Meeting Edges		2 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted 10 mm apart within one leaf edge <b>OR</b> 1 No. 15 mm wide by 4 mm thick Lorient Polyproducts Palusol seals (LP1504) fitted in each leaf edge (seals not opposing)

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

See Table 1 for size restrictions

Intumescent strips cannot be changed from the specific size type and location specified within the data sheet.

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 in accordance with EN 1935 for use on 60 minute timber fire doors

Number:	3No.			
Type:	Steel lift-off or butt	Steel lift-off or butt hinges		
Positions*:	Maximum 200 mm from top of door to top hinge 2 <sup>nd</sup> hinge central in the leaf height			
	Maximum 200 mm	from bottom of door to	b bottom hinge	
	Blade height:	10 mm (+/- 10 mm)		
	Blade width:	Hardwood frame	31 mm (+ 2 mm / - 3 mm)	
Dimensions:	Diade widin.	MDF frame	35 mm (+ 2 mm / - 3 mm)	
	Blade thickness:	3 mm (+/- 0.5 mm)		
	Knuckle dia.: 12 mm (+ 1 mm / - 2 mm)			
Fixings:	Minimum 4 No. steel screws			
	Minimum No. 8 x 32 mm			
Intumescent: protection**	1 mm Interdens in	1 mm Interdens intumescent sheet material under all hinge blades		

<sup>\*</sup> The datum in all cases is the centreline of the hinge.

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 above.

Where the Certifire approved hinge exceeds the specification given 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.

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

#### 11. Latches

Latches where fitted shall be CE marked in accordance with EN 12209 or EN 179 for use on 60 minute timber fire doors

#### Mortice type, Tubular latch bolt.

Max. case dimension:	24 mm high by 105mm deep x 17 mm wide		
Max. forend dimension:	57 mm high by 26 mm wide		
Max. keep dimension:	57 mm high by 26 mm	wide (excluding latch plate lip)	
Latchbolt material:	Steel or material with a melting point greater than 800°C		
Position:	Max. 1100 mm from bottom of door to centreline of the spindle		
Intumescent: protection*	Hardwood frames None required		
	MDF frames	1 mm Interdens behind forend and beneath keep of single action, single leaf assemblies only	

OR

<sup>\*\*</sup> This specification overrides any requirement 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.

Max. case dimension:	24 mm high by 105 mm deep by 17 mm wide			
Max. forend dimension:	60 mm high by 25 mr	60 mm high by 25 mm wide		
Max. keep dimension:	60 mm high by 25 mm	n wide (excluding latch plate lip)		
Latchbolt material:	Steel or material with	a melting point greater than 800°C		
Position:	Max. 1100 mm from b	ottom of door to centreline of the spindle		
Intumescent: protection*	Hardwood frames None required			
	MDF frames  1 mm Interdens to both faces of latch case and behind forend and beneath keep			

#### OR

Max. case dimension:	80 mm high by 106 mm deep by 17 mm wide
Max. forend dimension:	118 mm high by 23 mm wide
Max. keep dimension:	60 mm high by 25 mm wide (excluding latch plate lip)
Latchbolt material:	Steel or material with a melting point greater than 800°C
Position:	Max. 1000 mm from bottom of door to centreline of the spindle
Intumescent: protection*	1 mm Interdens to both faces of latch case and behind forend and beneath keep

#### <u>OR</u>

Max. case dimension:	166 mm high x 98 mm deep x 20 mm wide		
Max. forend dimension:	235 mm high by 25 mm wide		
Max. keep dimension:	185 mm high by 25 mm wide (exc	luding latch plate lip)	
Latchbolt material:	Steel or material with a melting po	oint greater than 800°C	
Position:	Max. 1100 mm from bottom of doo	r to centreline of lockcase	
Intumescent: protection*	Lock / latch <u>not</u> exceeding:  1 mm Interdens to fully encase body and behind forend and beneath strikeplate  (exc. latch plate lip)		
	Lock / latch exceeding:  155 mm by 22 mm forend  125 mm by 24 mm keep (exc. latch plate lip)	2 mm Interdens to fully encase body and behind forend and beneath keep	

<sup>\*</sup> This specification overrides any requirement for additional intumescent identified in the lock manufacturer's certification providing the lock/latch specification falls within the parameters identified 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 above and subject to the conditions contained within the relevant certificate.

Where the Certifire approved lock/latch exceeds the specification given 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.

No restriction on type and material of handle.

#### **ERA Holiday Multi Point lock**

Max. case dimension:	Central:	222 mm by 62.5 mm by 15 mm deep
	Top & Bottom:	60 mm by 32 mm by 15 mm deep
Max. forend dimension:	1572 mm high by 20 mm wide	
Max. keep dimension:	Central Keep:	250 mm by 45 mm
	Top & Bottom keeps:	177 mm by 35 mm
Latchbolt material:	Steel or material with a melting point greater than 800°C	
Position:	Max. 1000 mm from bottom of door to centreline of the spindle	
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.	

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

- 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)
- The spindle hole shall be a maximum of 16 mm in diameter, 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 20 mm in diameter 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 22 mm in diameter 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.

#### 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.

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

Doorsets may incorporate flushbolts in accordance with the following specification requirements:

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.	

Barrel bolts which are wholly surface mounted and do not encroach into the door/frame gap may be fitted 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 fixings are of steel and maximum bolt to bolt centres do not exceed 1000 mm.

A maximum 15 mm diameter 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.

#### 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 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.

#### 13e. 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.

#### 13f. 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.

#### 13g. Dropseals

Fire and Acoustic Seals, FAS45 dropseals with overall dimensions 21 mm high by 11 mm wide may be recessed to the bottom edge of CF331 door leaves.

Alternatively, Lorient LAS8001si dropseals with overall dimensions 35 mm high by 15 mm wide may be recessed to the bottom edge of CF331 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.

Wholly surface mounted CERTIFIRE approved dropseals may also be fitted to the bottom edge of CF331 door leaves.

Note: Threshold gaps as stated in Section 3 are to be maintained

#### 13h. 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

#### 13i. Electric Strikes / Electromechanical locks

Not permitted

#### 14. Further Information

Further information regarding the details contained in this data sheet may be obtained from JELD-WEN UK Limited (Tel: 0114 2293250).

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