



FireFrame® FD30 Composite Fire Door Solutions

Installation Guidelines

Q Mark Third Party Accredited Fire and Security Composite Door Set

EN 1634-1 Fire Resistance
EN 1634-3 Smoke Resistance
PAS 24 Enhanced Security



FireFrame® Composite Fire Door Set Installation Guide

All installation details in this document have been proven within FireFrame® composite fire door sets. Tests for fire, smoke and security have been proven to exceed the Performance requirements of:

- FD30 Fire Resistance- When tested in accordance with BS EN 1634-1 and BS EN 1363-1
- FD30Sa Smoke Resistance- When tested in accordance with BS EN 1634-3
- Approved Document Q Enhanced Security Performance requirements- When tested in accordance with PAS 24

Ensure the techniques, standards and procedures set out in this document are applied when installing FireFrame® Composite Fire Door Sets.

It is recommended that Third Party Accredited Fire Door Installers demonstrating a qualification similar to the Q Mark -Installation of Composite fire door scheme, are used for the survey and installation of FireFrame® Composite Fire Door Sets.

It is additionally recommended that surveyors / installers have the enhanced training necessary to survey and/or install specifically the FireFrame® Composite Fire Door Sets rather than generic fire doors. Only persons with this FireFrame® specific advanced training would have the necessary skills to ensure the doors are installed correctly.

To aid transportation of the doorsets, outer frame glazing and cosmetic surface fitted door hardware may be assembled on site. To ensure fire and security performance of the doorset on site assembly of glass panels or cosmetic hardware must be carried out by a suitably trained person observing the following rules.

- ONLY materials / components supplied by the doorset manufacturer may be fitted to the door.
- Internal / external surface of the double glazed unit shall be fitted as the glass label dictates.
- Chains shall be fitted on the door 1200mm +/-50mm from threshold, using the supplied screws and fixing plugs.
- Door knockers shall be fitted on the door, maximum 1700mm from threshold no nearer than 150mm to leaf edge with the supplied screws.
- Handles - only parts supplied by the door manufacturer shall be fitted.
- Door closers - All fixing positions will be pre-drilled at door manufacture ready for Door Closer site assembly, with the supplied screws.
- Numerals - Fix no nearer than 30mm to leaf edge, or glass edge, or letterplate.
- If in doubt, the installer should seek advice from the door manufacturer before assembly of any components.

It is important to recognise that Third Party Accreditation for the installation of **standard** composite doors is different to the accreditation necessary for composite **fire** door installation.

FireFrame® Composite Fire Door Set Installation Guide

Before Installation

On delivery and before the installation process begins, please be reminded that any warranty claim for incorrect specification, quality issues or product damage must be reported, in writing to the door set supplier, within 72 hours of receipt. Items fitted or claims made after this period will be rejected.






Incorrect installation of the fire doors may impede the door operating function, the smoke resistance and the fire resistance of the door set. It is important to read this installation guide COMPLETELY noting ALL the FireFrame® specific technical specifications prior to installation.

All FireFrame® composite fire door sets are Q Mark accredited for both fire and security performance and should be marked to identify the door set manufacturer and any claimed performance.

IMPORTANT: Check that the door supplied is Q Mark certified for FIRE resistance, there should be an identification plug in the side of the door leaf near the top hinge with a code that identifies the manufacturer and the performance for the door. The colours must be exactly as illustrated below.

IMPORTANT: If the door set is supplied without a FIRE identification plug or the details / colours are different to the options illustrated below then the installer should seek advice before installation.

Mandatory identification plug must be exactly as described below:

Yellow Outer = FD30	Q MARK- MANUFACTURERS PLUG(S)	Q MARK- INSTALLERS PLUG (if applicable)
FD30 Doorset WITHOUT GLAZING		
FD30 Doorset WITH GLAZING IN OUTERFRAME OR DOOR LEAF	 and 	
	xxx = Manufacturers unique identification number	xxx = Installers unique identification number

IMPORTANT: Check that the door supplied is Q Mark certified for SECURITY resistance, there should be an identification label on the hinge or upper edge of the door leaf that identifies the manufacturer and the performance for the door.

IMPORTANT: If the door is supplied without a SECURITY identification label, as illustrated below, then the installer should seek advice before installation.

Mandatory identification label must be exactly as described below:

	Company: IDM Doors Limited	Manufacturing Year:	<input type="text"/>
	Certificate No: (Manufacturers Identification Number)	Standard: PAS24:2016 + BS8529:2010	Quarter:
	Classification: D		

Structural Opening

The supporting construction must provide the required level of fire resistance, not less than that designated for the fire door set design, and be a suitable medium to permit adequate fixidity.

Composite FD30 door sets hung in the FireFrame® composite fire door systems may be fitted into the following types of structural opening:

- Masonry
- Dense Concrete blocks or brickwork
- Cast Dense Concrete
- Lightweight concrete
- Lightweight aerated concrete
- Timber stud partition
- Steel stud partition

If in doubt the installer should seek advice before door installation.

Frame Fixing at Opening Door

Frame jambs are to be fixed to the supporting construction using steel screws appropriate for the structural opening substrate. Screws must penetrate the structure by a minimum of 40mm.

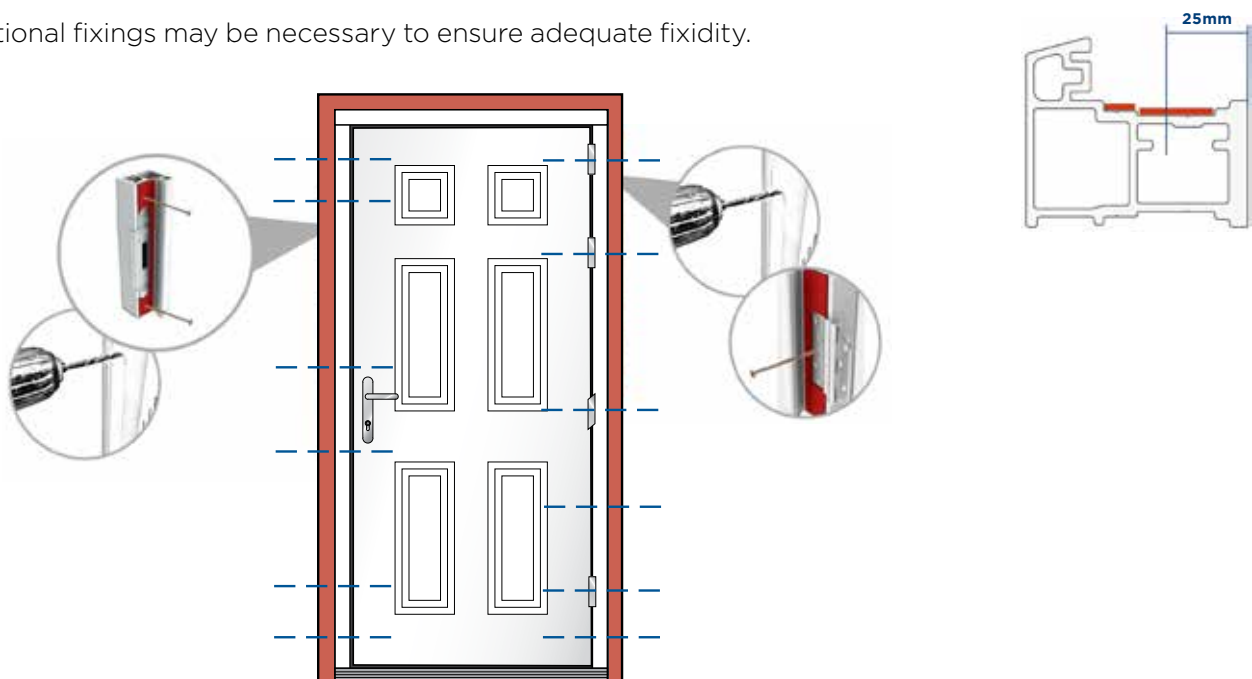
Screws located on the hinge side should be fixed through the centre of each hinge, at a maximum 150mm from the corners and at 600mm maximum centres.

Screws through the lock side must be positioned above and below each locking keep, at a maximum 150mm from each corner and at 600mm maximum centres.

Lock side screws positioned as illustrated, screw fix through the intumescent approx. 25mm from the face of the frame profile (as proven in the fire resistant tests).

It is recommended that where possible the head of the door frame, or any glazed panel, is also screw fixed or bracket fixed into the supporting construction 150mm from each corner, and at 600mm maximum centres. Alternatively, the head of the frame shall be sealed to the structure using one of the approved foams listed at the end of this document.

Additional fixings may be necessary to ensure adequate fixidity.



Frame to Structure / Brickwork Packers

Proprietary frame to construction PVC horseshoe packing shims of maximum size 70mm x 70mm x Thickness are permitted.

A layer of intumescent mastic must cover the exterior edges of the PVC horseshoe packers. Glazing shims or other materials are not allowed.

	Dimension + Thickness (mm)	2mm	3mm	5mm	7mm	9mm
ESL	70 x 70 x High Impact (Slotted)	✓	✓	✓	✓	✓



Load Bearing- High Impact Solid Shims (Slotted)



NOTE: See list of approved intumescent mastic at the end of this document

Hardwood Cills

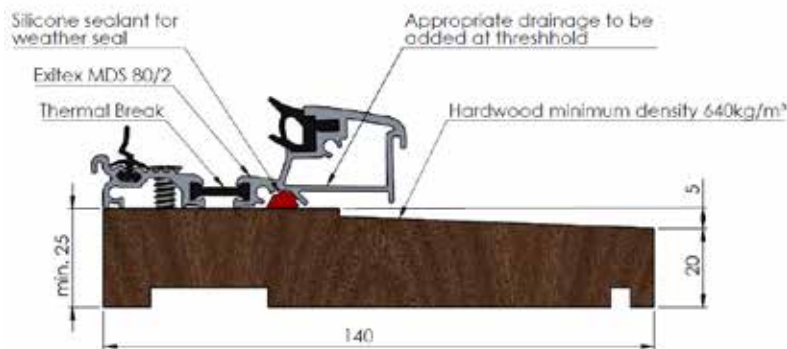
As installation conditions necessitate, the option of a hardwood cill may be fitted under the aluminium door threshold .

The species, density and size of the hardwood cill is limited to the designs as specified in the door set manufacturer Field of Application document / test evidence - therefore all hardwood cills must be supplied by the door set manufacturer.

The aluminium cill should be screw fixed to the hardwood threshold and sealed with silicone sealant (not acrylic sealant) to prevent water ingress - generically as drawn below.

As necessary to suit site conditions:

- Overall thickness of hardwood cill may be increased to a maximum of 40mm
- Length of projecting nose may be increased to overall cill length of 250mm
- Tested internal cill height of 25mm and external height of 20mm must not be reduced
- Length of projecting nose may be reduced to a minimum of no less than 10mm beyond aluminium threshold



Door Gaps and Alignment Tolerances

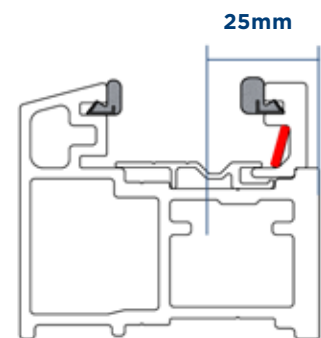
Door gaps and alignments must fall within the allowable range:

- Door edge gaps- Door leaf to frame perimeter gaps at verticals and head nominally 4mm +1mm / -2mm
- Alignment tolerances- Door leaf must not be proud from the door frame by more than 2mm
- Threshold gaps- Nominally 5mm +/- 2mm from the bottom of the leaf to the body of the threshold

Frame Fixing at Glazed Frame- Combination Door sets

In the case of glazing panels, drill and countersink the aluminium bead retention profile in the screw fixing recess approx 25mm from the face of the frame profile so as not to interfere with the glazing, as illustrated.

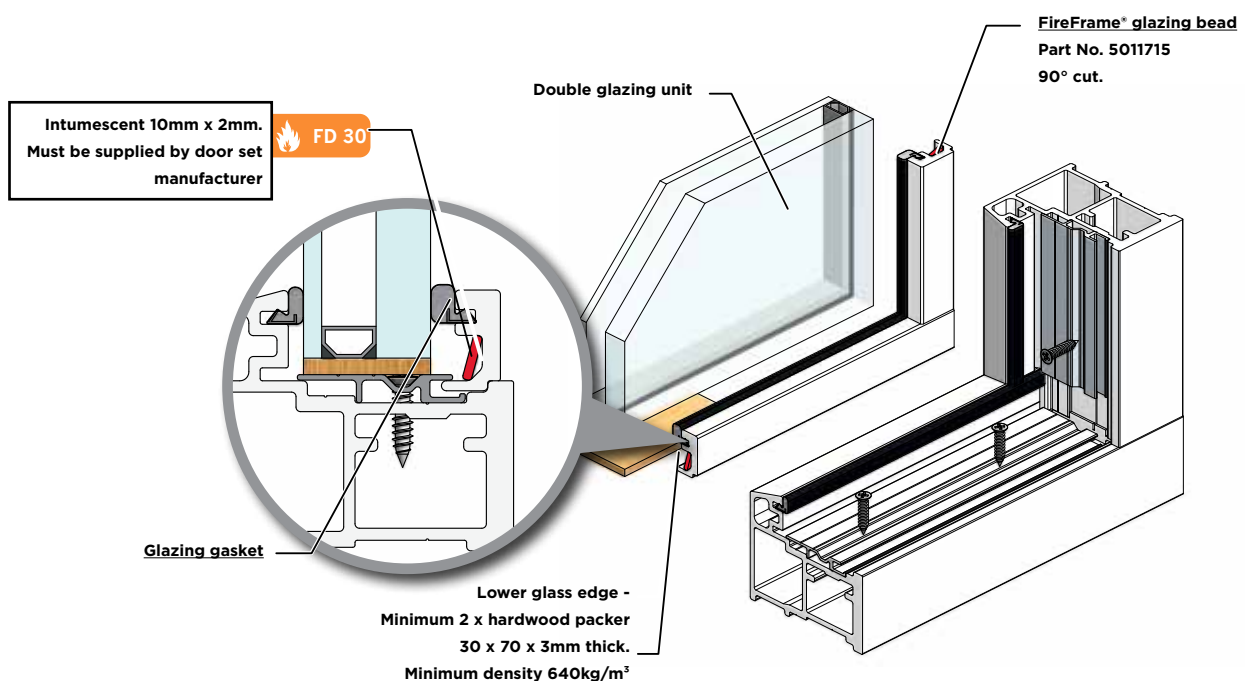
Alternatively, secure the frame using suitable steel brackets as appropriate.



Frame Glazing

When glazing / assembling frame glazing beads
Hardwood glazing packers - supplied by door manufacturer

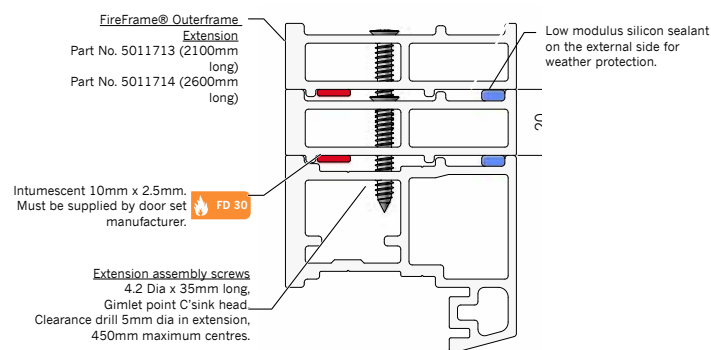
IMPORTANT: Installers MUST check that the door manufacturer supplied 10mm x 2mm thick graphite intumescent strip material is fitted to all glazing beads.



Sealing Between the Frame and the Structural Opening

The FireFrame® to structure seal should be created using one of the methods below and using only approved intumescent mastic / foam, listed at the end of this document:

1. Gaps up to 10mm must be sealed both internally and externally with a 10-15mm depth of approved intumescent mastic. PVC, MDF or timber architraves are optional (timber minimum density 510kg/m³)*
2. Gaps greater than 10mm and less than 20mm must use one of the following 3 sealing methods:
 - (a) Tightly packed with mineral fibre, capped internally and externally with a 10-15mm depth of approved intumescent mastic. PVC, MDF or timber architraves are optional (timber minimum density 510kg/m³)*
 - (b) Filled with proprietary fire stopping product (e.g. approved expanding PU foam). When cured, the foam may be cut no less than flush with frame, capped internally and externally with a minimum 3mm depth of approved intumescent mastic. PVC, MDF or timber architraves are optional (timber minimum density 510kg/m³)*
 - (c) Filled with proprietary fire stopping expanding PU foam, when cured the foam may be cut no less than flush with frame. The joint must be fitted with 15mm thick timber architraves (soft wood, hard wood or MDF - FD30 minimum density 510kg/m³). Architraves must overlap the outer frame by at least 15mm. Other architrave materials are not allowed.
3. Gaps greater than 20mm should be filled with FireFrame® Extension profile. Across the head of a door assembly up to 10 x extension profiles are allowed. At the vertical edge of a door assembly up to 2 x extension profiles are allowed. On long edges of door frame- the extension profiles may be square cut and jointed, if multiples of extension profile are added to the long frame edge then any joints must not align i.e. overlap all joints. Residual gaps between the extension profile and the structural opening must be filled according to the size of the gap, using the method described in Section 2 above. PVC, MDF or timber architraves are optional (timber minimum density 510kg/m³)*



4. Gaps up to 50mm wide may alternatively be filled with hardwood timber of min. density 640kg/m³ for the full depth of the frame. Residual gaps less than 10mm between the timber and the structural opening must be filled utilising one of the methods described in Section 1 above, as appropriate to the size of the gap.



***NOTE: 45mm wide x 6mm deep PVC architraves have been tested for this application, fitted both internally and externally. PVC architraves should be secured using approved intumescent mastic.**

Approved Intumescent Silicone Sealants

The following materials have been successfully proven in fire resistance tests as fire stopping products at the FireFrame® to brickwork junction.

Only the products itemised below are approved for use:

1. Promat Promaseal Fire Resistant Silicone Sealant
2. Soudal Firesilicone B1 FR

Approved Intumescent Acrylic Sealants

The following materials have been successfully proven in fire resistance tests as fire stopping products at the FireFrame® to brickwork junction.

Only the products itemised below are approved for use:

1. Promat Promaseal Fire Intumescent acrylic sealant
2. Pyroplex Intumescent Acrylic Sealant IFC C1336- not suitable for weather exposure
3. Soudal FIRECRYL FR intumescent acrylic sealant- not suitable for weather exposure

Approved Intumescent Expanding PU Foam

The following materials have been successfully proven in fire resistance tests as fire stopping products at the FireFrame® to brickwork junction.

Only the products itemised below are approved for use:

1. Pyroplex FD120 Fire Resistant PU Foam CF828
2. Fire and Acoustic Seals Ltd. 60minutes Fire Door Foam
3. Exitex Blue FD60 Fire Rated Foam

Replacement of Damaged Door Set Components

The on-site replacement of damaged FireFrame® composite door set components is only allowed when controlled via the door set manufacturer, who may nominate an agent to complete the works on their behalf.

Replacement components must only be supplied via the door set manufacturer and must only be products specified in the door set manufacturers Q Mark Scope of Accreditation.

FireFrame® Composite Fire Door Set

Homeowners Care, Cleaning and Maintenance Guideline

Care and Cleaning of Your FireFrame® Composite Fire Door Set and Door Leaf

To prolong the life of your composite fire door set it is recommended that the complete door and frame is cleaned regularly. Frequency depends on the location and exposure to contaminants. It is recommended you wash the surface with warm soapy water (washing up detergent is suitable) and wipe dry with a soft, clean cloth. Extra care must be taken to avoid disturbing the sealant where the edge of the frame meets the wall.

When the door is closed, ensure the top and bottom locking points are engaged to assist in the reduction of thermal movement.

Your door has been fitted with specific hardware including the handle, lock, door closer, letter plate and door viewer. In order to keep the fire rating intact, DO NOT adjust or remove these items, to do so would invalidate the fire rating.

The glass used in your door is fire rated and assembled according to the certification requirements. Replacement of glass should ONLY be carried out by the door manufacturer or accredited persons on a like for like basis.

The door has been fitted with fire rated seals. Report to your landlord immediately if any of these become loose. DO NOT remove or replace them yourself.

The door has been fitted with a door closer to ensure it meets fire regulations, DO NOT prop open, disengage, adjust or remove the closer. This must be intact to protect yours and neighbouring properties.

DO NOT drill holes or fix any items to your door as this may affect the fire certification. Should any part of your door need adjustment or replacement, report to your landlord in the first instance.

Key Instructions:

- Do not use aggressive cleaning methods, abrasive cleaners, scouring pads on the surface of the door or FireFrame®
- Do not use high pressure power washer or steam cleaner
- Do not use any type of bleach or solvent (e.g. white spirit, methylated spirit, cellulose thinner, acetone or nail varnish remover)
- Do not use adhesives of any type or tack for providing temporary protection for the fixing of decorations
- Do not use excessive length key chains, avoid contact with these and any other sharp implements

Cleaning the Hardware

For continued protection of the quality finish and appearance of the composite fire door external hardware (locks, hinges, letter plate etc.) routine cleaning and lubrication is advised.

- Door Lock and Hinges - a light application of PTFE spray be used into the apertures of the hooks, dead-bolt, latch, hinges and into both sides of the cylinder at least twice a year
- Letter plates, Handle, Door Knocker- wash the surface with warm soapy water (washing up detergent is suitable) and wipe dry with a soft, clean cloth

To prevent any damaging effect to the corrosion protection of door hardware, only PER neutral cleaning and care agents which do not contain any abrasives should be used.

If the products are used within 5 miles of the coast line or close proximity of large industrial areas, more frequent cleaning and maintenance is required to prevent accumulation of corrosive contaminants.

Accuracy Of Information

All information in this document has been compiled and reviewed with the utmost care.

The information in this guide is intended as an installation guideline and in no way forms the basis of any guarantee. It is the responsibility of the person specifying the products to ensure they have selected products fit for purpose.

The information and graphic images provided correspond to the current status of the development of this product.

Due to advances in technology or amendments to the legal requirements or other compulsory changes we do not guarantee the accuracy and completeness of the information.

It should be understood that all and any FireFrame® Composite Fire Door system test evidence considered and / or evaluated for the purpose of the Q Mark door manufacturer accreditation, relates to the behaviour of the door design variations under the particular conditions of the fire or security test criteria. It is not intended to be the sole criterion for considering the fire or security hazard of the door set, nor purports to be a complete specification ensuring the door is suitable for its intended purpose. It is the responsibility of the door specifier / surveyor to investigate as appropriate if the test evidence and/or manufactured fire door set is suitable for specific site conditions.

Every effort has been made to guarantee the accuracy of the information in this installation guide; for the purpose of customer satisfaction and product improvement, we reserve the right to make changes to this installation information without notice.

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