



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 with a NanYa door leaf. 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 recommend 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, glass edge, eye viewer or letterplate.
- If in doubt, the installer should seek advice from the door manufacturer before assembly of any components.

Only when hardware, cills, glass, intumescent and other materials are fitted in accordance with this door supplier installation guide will the doors be suitable for fire door compliance.

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

Section 1: 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 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 	
	Manufacturers unique identification number	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 as described below:

	Company:	IDM Doors Ltd	Manufacturing	
	Certificate No:	309	Year:	
	Standard:	PAS24:2016 + BS8529:2010	Quarter:	
	Classification:	D		

Section 2: Structural Opening

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

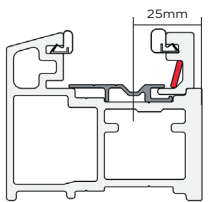
Composite FD30 door sets hung in the FireFrame® composite fire door systems may be fitted into the following types of structural opening:

- 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.

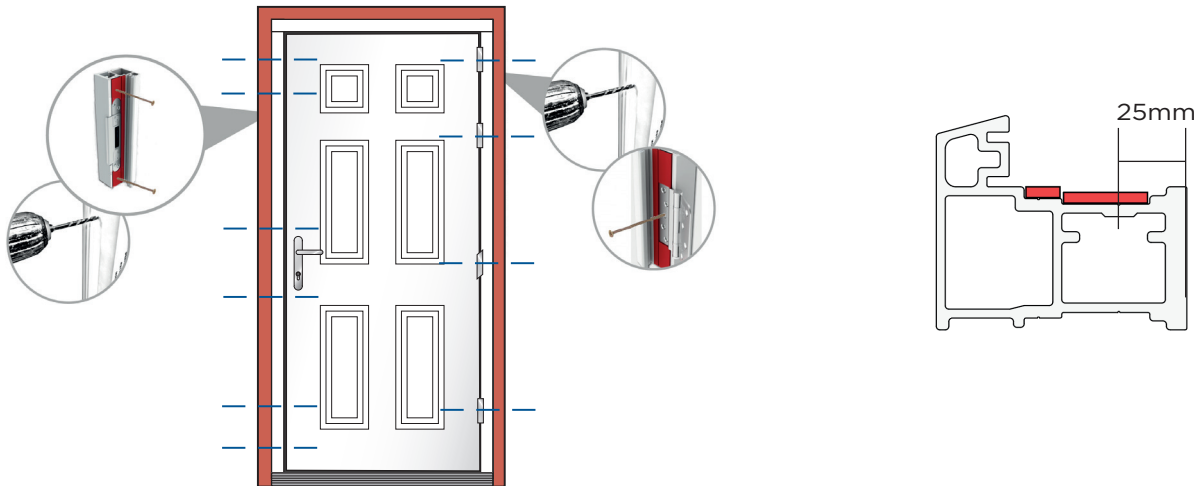
Section 3: Frame Fixing at Opening Door

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.

Hinge Jamb	Frames or frames fitted with extension profiles (see Section 6) As tested, screws shall be located through the purpose designed hole in the frame side hinge wing. There must be a minimum of 4No screw fixings per jamb
Lock Jamb	Frames or frames fitted with extension profiles (see Section 6) As tested, screws shall be located 50mm +100mm / -30mm above and below all the frame side locking keeps. There must be a minimum of 6No screw fixings per jamb.
Head of Door Frame	Frames or frames fitted with extension profiles (see Section 6) The head of the frame shall be fixed using of the options described below: a) Screw fixed as tested, at a position 150mm +/-70mm from the corner of the frame and then at centres no greater than 700mm b) Fixed with steel brackets and screws at a position 150mm +/- 70mm from the corner of the frame and then at centres no greater than 700mm c) As tested, it is possible to omit fixings across the head, providing the head is sealed for the structure as tested, using one of the tested approved fire rated foams listed in Section 7.
Door Thresholds	It is allowed, but as tested, it is not necessary to screw fix door thresholds with or without cills to the structure. In all cases the threshold is to be sealed to the floor with an intumescent mastic as listed in Section 7.
Glazed Frames 	<p>In the case of glazing panels, drill and countersink the aluminium bead retention profile in the screw fixing recess approx. 25mm from the internal face of the frame profile so screw head will not interfere with the glazing, as illustrated.</p> <p>Alternatively, when through frame fixing at different positions, it is important that the screw head is below the upper aluminium surface.</p> <p>Alternatively, secure the frame using suitable steel brackets.</p>
Doors; Head of Glazed Frames	Frames or frames fitted with extension profiles (as Section 6) The head of the frame shall be fixed using one of the options described below. a) Screw fixed as tested, at a position 150mm +/-70mm from the corner of the frame and then at centres no greater than 700mm. b) Frame edges measuring less than 520mm between internal corners may, as tested, be screw fixed with one screw fixed centrally between the 520mm dimension. c) Fixed with steel brackets and screws at the positions identified in “a” and/or “b” above, as tested. d) As tested, it is possible to omit fixings across the head providing the head is sealed to the structure using one of the tested approved fire rated foams listed in Section 7.

Doors; Vertical Edges of Glazed Frames	Frames or frames fitted with extension profiles (see Section 6) The vertical edge of the frame shall be fixed using one of the options described below: a) Screw fixed as tested, at a position of 150mm +/-70mm from the corner of the frame and then at centres no greater than 700mm b) Frame edges measuring less than 520mm between internal corners may, as tested, be screw fixed with one screw centrally positioned between the 520mm dimension. c) Fixed with steel brackets and screws at the positions identified in “a” and/or “b” above, as tested.
Windows; Glazed frames	Frames or frames fitted with extension profiles (as section 6) Vertical and upper edges of frame shall be fixed with: a) Screws fixed as tested, positioned a minimum of 110mm and maximum of 150mm from the outer frame corners, and equally spaced at maximum 450mm centres in between.

Additional fixings may be necessary to ensure adequate fixidity.



Section 4: 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)	✓	✓	✓	✓	✓



Alternatively hardwood shims/packers of minimum material density 640kg/m³ and minimum size 24mm wide x thickness x 70mm long, can be used to pack between the frame and the construction substrate.

Generic plastic glazing packers or other materials are not allowed.

NOTE: See list of approved intumescent mastic- Section 7

Section 5: 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

Section 6: Sealing Between the Frame and the Structural Opening

The FireFrame® to structure / brickwork gap must be protected using one of the methods described below.

Only the FireFrame® approved and tested intumescent mastics and / or FireFrame® approved expanding fire resistant foam identified in Section 7 are allowed to be used.

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 3mm and less than 10mm may use one of the following 3 sealing methods.

Gaps greater than 10mm and less than 20mm must use one of the following 3 sealing methods:

(a) Tightly packed with mineral fibre capped on both sides with a 10-15mm depth of FireFrame® approved intumescent mastic. PVC, MDF, or timber architraves are optional. (Timber minimum density 510kg/m³)

(b) Filled with FireFrame® approved expanding fire resistant foam, when cured the foam may be cut no less than flush with frame and capped on both sides with a minimum 3mm depth of FireFrame® approved intumescent mastic. PVC, MDF, or timber architraves are optional. (Timber minimum density 510kg/m³)

(c) Filled with FireFrame® approved expanding fire resistant foam, when cured the foam may be cut no less than flush with frame. The joint must be fitted with 15mm thick timber architraves (MDF or timber 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.

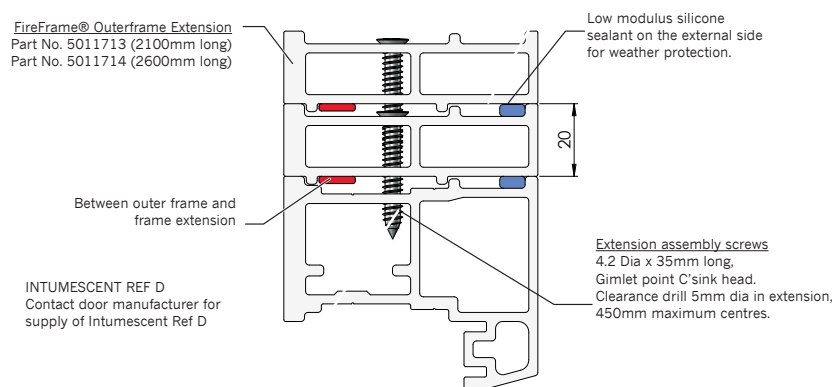
(a) FireFrame® outerframe extension profile 5011713 (2100mm long)
FireFrame® outerframe extension profile 5011714 (2600mm long)

(b) Across the head of a door with / without fanlight -10 x extension profiles allowed.
Across the head of a door/ sidelight assembly - 2 x extension profiles allowed.
Vertical edges of all door frames with / without side lights - 2 x extension profiles allowed.
On horizontal or vertical edges of fixed windows 2 x extension profiles allowed

(c) If necessary the FireFrame® extension profile may be square cut and jointed, if multiples of the extension profile are required then any joints must not align. All joints must be overlapped and joints staggered at least 1 metre apart.

(d) Residual gaps less than 20mm between the extension profile and the structural opening must be filled utilising one of the methods described in items 1 and 2 above, as appropriate to the size of the gap.

4. Gaps of up to 50mm wide may alternatively be filled with hardwood timber of minimum density 640kg/m³ for the full depth of the frame. Residual gaps between the timber and the structural opening must be filled utilising one of the methods described in items 1 and 2 above, as appropriate to the size of the gap.



Section 7: Sealants

For external or internal doorsets acrylic sealant is applied to the internal side of the doorset and silicone sealant is applied to the external side of the doorset. Alternatively for internal doorsets only it is permissible to use acrylic sealants on both the internal and external sides of the doorsets.

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:

Promat Promaseal Fire Resistant Silicone Sealant
Soudal Firesilicone B1 FR
Pyroplex Fire Resistant silicone sealant

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:

Promat Promaseal Fire Intumescent acrylic sealant
Pyroplex Intumescent Acrylic Sealant IFC C1336- not suitable for weather exposure
Soudal FIRECRYL FR intumescent acrylic sealant- not suitable for weather exposure
Firestop Intumescent acrylic acoustic sealant

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:

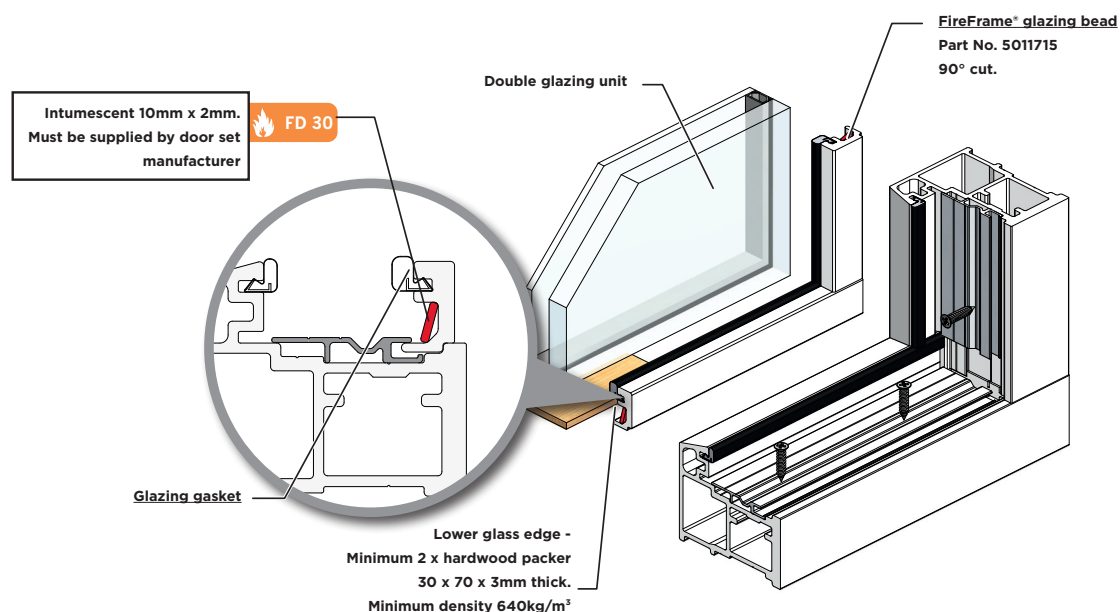
Pyroplex FD120 Fire Resistant Foam CF828
Fire and Acoustic Seals Ltd. 60minutes Fire Door Foam
Exitex Blue FD60 Fire Rated Foam
Soudafoam FR4 Foam

Section 8: 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.

IMPORTANT: Check DGU labels and ensure the orientation of the glass unit is fitted correctly



Section 9: Hardwood Cills

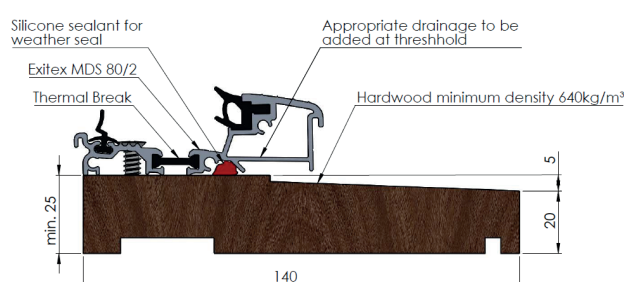
As installation conditions necessitate, the option of a hardwood cill may be fitted under the aluminium door threshold, or under sidelight or flag window assemblies.

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



Section 10: FireFrame® Cableway Detail

It is permissible to pass an AV or similar cables through the extension profiles fitted at the head of the doorset. No more than 8 AV cables are allowed.

Only when the extension profile is fitted with cableway cover caps, or a manufacturers label identifies that the extension profiles have been prepared for cableways, may in accordance with drawing 270 cableways be fitted through the profile.

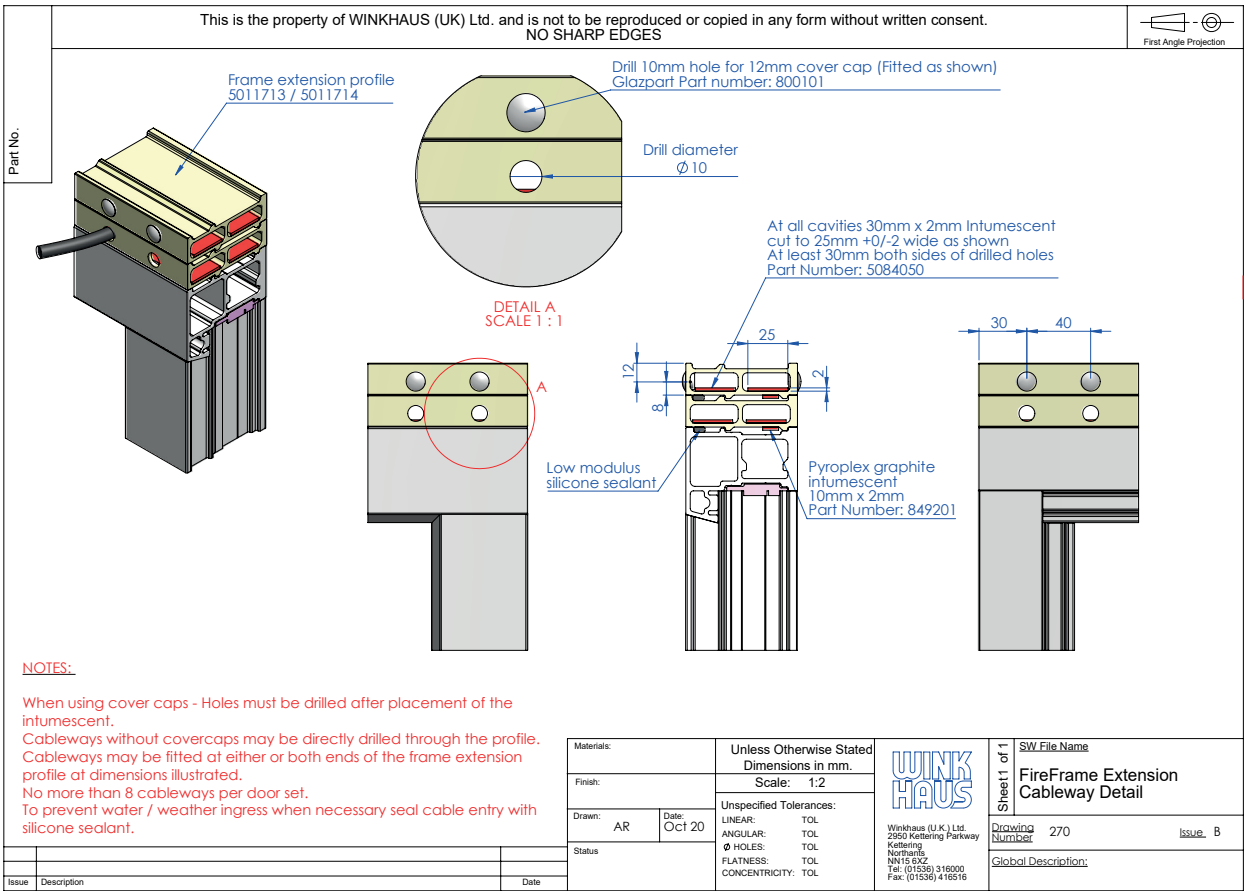
Typical label example:

FireFrame® - Frame Extension profiles are prepared for cableways -

Cables must be fitted in accordance with drawing 270, refer to door supplier installation manual for instruction.

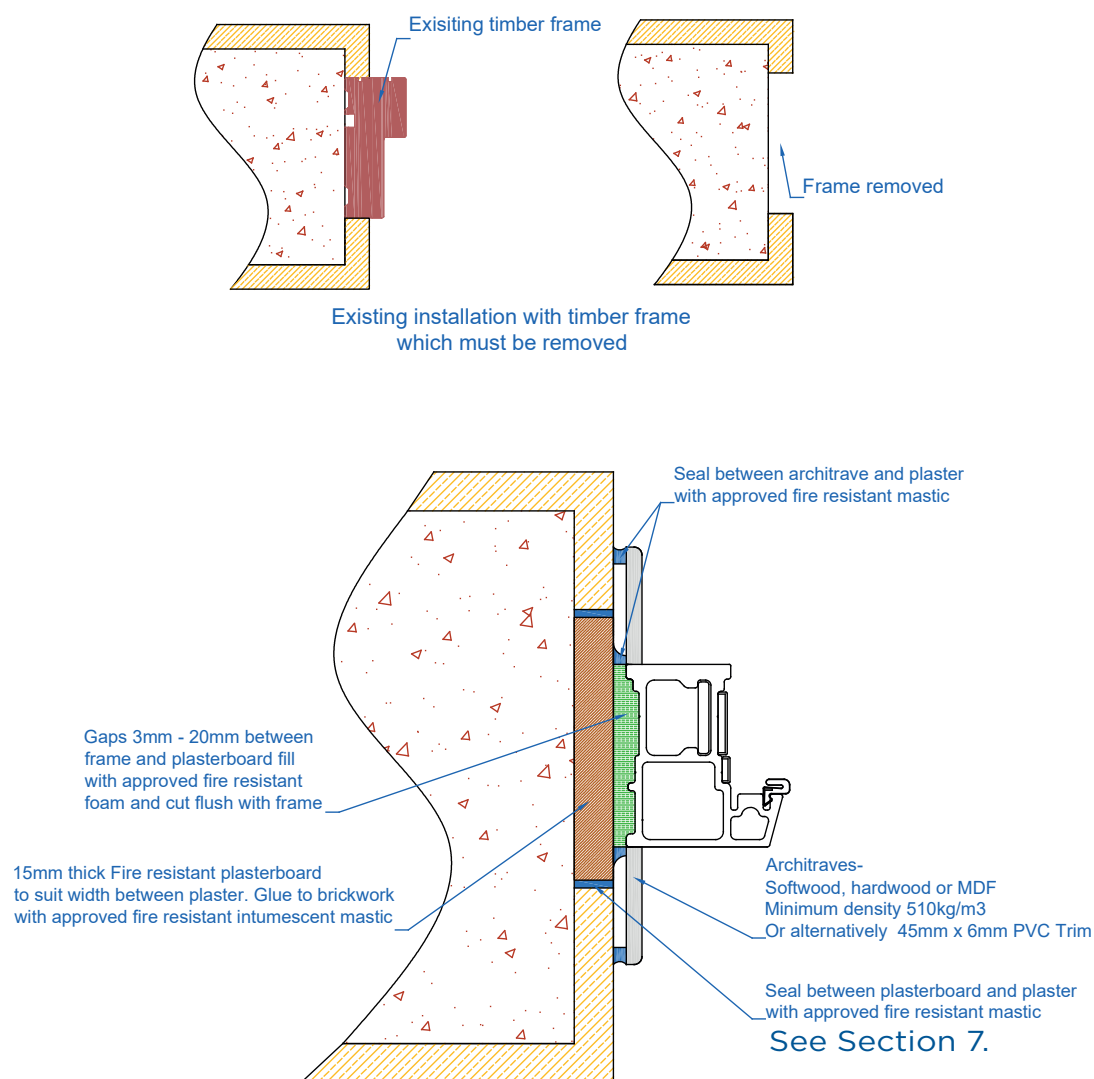
To ensure fire and security performance of the doorset the cableway installation must be carried out by suitably trained person only. If in doubt of any of the details, the installer should seek advice from the door manufacturer prior to installation.

Only when cables are fitted in accordance with door supplier installation guide are these doors suitable for fire door compliance.



Section 11: Alternative Installation Detail

The following alternative installation technique is suitable for internal (not weather facing) doors only. The structure behind the fire door outerframe must be solid brickwork, blockwork or cast concrete.



Section 12: 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 current Q Mark Scope of Accreditation.

IMPORTANT: Maintenance of fire doors without the acknowledged authorisation of the door set manufacturer / test evidence provider may invalidate warranty.

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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**IDM DOORS UNIQUE Q MARK FIRE DOOR
IDENTIFICATION NUMBER: 1708**

**IDM DOORS UNIQUE Q MARK SECURITY
DOOR IDENTIFICATION NUMBER: 309**