

ahmarra

Fire Door Manufacture & Installation

Screen Installation Guide

Version 1.9 | 14-10-2024



Fire Door
Manufacture



Enhanced
Security Door



Deliveries, Storage & Handling

Glass Delivery on Site

Glass must be checked before you sign the delivery note. Your signed delivery note means that you are satisfied with the condition of the glass, and that the delivery is complete and in good condition. Once signed, we cannot accept claims for damage in transit or missing items.

We appreciate that on occasions you may not be able to check every piece of glass upon delivery, but as a minimum requirement the corners and edges should be checked for damage.

Damaged or Missing Glass

If the glass is damaged on receipt, has manufacturing defects or the delivery is incomplete, we will repair or replace (at our discretion) at no additional expense to the customer.

You may either refuse delivery of the damaged glass or accept delivery, make a note on the delivery note and also report the damage to Ahmarra within 24 hours with photographic proof of the damage.

Unsigned Deliveries

If the customer/their agent requests that the glass is left and unsigned for, or the delivery note is marked "unchecked" at the time of delivery, Ahmarra will not accept subsequent claims made in relation to the glass.



Glass Storage and Handling

No liability is accepted for the glass during storage or usage after delivery has been accepted, but we offer the following best practice advice:

- DO NOT store externally
- Store in a dry, sheltered and ventilated area which is not exposed to the sun, humidity and solar radiation
- Fire rated glass is designed to be used within the temperature range from -20 to +40°
- Do not place glass directly onto the floor
- Soft spacers should be placed between each unit
- Not more than 10 units per stack
- Never allow water to come into contact with fire rated glass at any time
- Glass should be supported over its full height and width, and never stored against surfaces such as walls, as this will bow the glass
- The back should be slightly inclined (6° to 10° from vertical) with the feet being at 90° to the back of the rack

Cleaning

Screens should be cleaned using a non-abrasive general domestic glass cleaner that is not ammonia, alcohol or vinegar-based. Avoid excessive volumes of water, as damage to the surrounding timber frames may occur.

Cleaning of screens should begin at the top and continue downward. The cleaning solution should be applied to a slightly damp cloth and wiped over the glass. A lint-free cloth should then be used to remove the cleaning solution and buff the glass until it is shiny and streak-free.

All traces of water and cleaning solution must be removed from the glazing, frames and sealant. Failure to remove any residue may cause these components to deteriorate as a direct consequence of the cleaning process.

General Information

- Fire rated glass thickness tolerance +/- 1mm (7mm), +/- 2mm (10mm to 25mm)
- Do not exercise any restraint on the glass
- Do not damage the glazed edges nor the protection tape
- Use hardwood setting blocks or equivalent
- Provide an edge clearance of 4-5mm
- Provide a lateral clearance of 4-5mm
- Keep the rebates dry and free from aggressive products (acids, organic solvents)
- Do not allow any contact of the glazed edges with water
- Apply a neutral silicone joint or dry gasket immediately after glazing

Setting Blocks

Hardwood or non-combustible setting blocks should be used to position the glass in the frame in order to provide sufficient edge cover, room for thermal expansion, fire performance, stable positioning, elevation of the glass in the rebate and to hide any edge sealant. The setting blocks should be 3-5mm thick x the thickness of the glass.

Setting blocks must be used to support the weight of the glass along its length. At a minimum, there should be one setting block close to each corner on the bottom and one in the middle, if the glass width allows. This is to ensure the glass remains centrally spaced in the screen framework with consistent gaps along all four edges.

Please note: Ahmarra does not provide setting blocks. We would suggest using hardwood blocks cut to size or fire-rated board.

Setting blocks are available from C. H. Materials at; <https://www.chmaterials.com/products/thermal-glazing/flammi-blocks/>

They are also available from other brands, including Vermiculite, Promatect H and Supalux.

Screen to Structural Opening Installation

Structural Opening

The supporting construction must provide the required level of fire resistance designated for the screen and/or doorset design and be a suitable medium to permit adequate fixing. Additional guidance for sealing the frame to the structural opening gap may be found in BS 8214:2008 'Code of Practice for Fire Door Assemblies'.

Intumescent

Ahmarra will supply the required intumescent to suit the glazing system, as there are many different products and not all suitable to the exact screen build. Please refer to the relevant screen type within this document.

Screen Type

Ensure you have the correct screen in relation to the opening in which it is to be installed. Each product has its own unique reference. This links with the contract drawings and schedules.



Standard Fixing to Supporting Construction

- The outer frame of the screen is to be fitted tightly within the structural opening at the vertical edges and across the head, using non-combustible packers between the frame and supporting construction.
- The outer frame should be fixed to the supporting structure using steel fixings that are a minimum of 70mm long. Fixings must be at 600mm maximum centres at all edges including the floor, and at a maximum of 200mm from the corners.
- The fixings must penetrate to a minimum depth of 40mm for FD30 doors and 50mm for FD60 doors.
- A screw fixing must be located as close as possible to the bottom corner of the screen into the floor and into the top corner of the door frame - see diagram to the right.
- Further details for gap filling between timber frames and the supporting structure of more than 10mm can be found in the latest edition of the BS 8214 Code of Practice for fire door assemblies with non-metallic leaves section 9.4 and table 2 or 3, according to the fire doorset's rating performance.

Packers

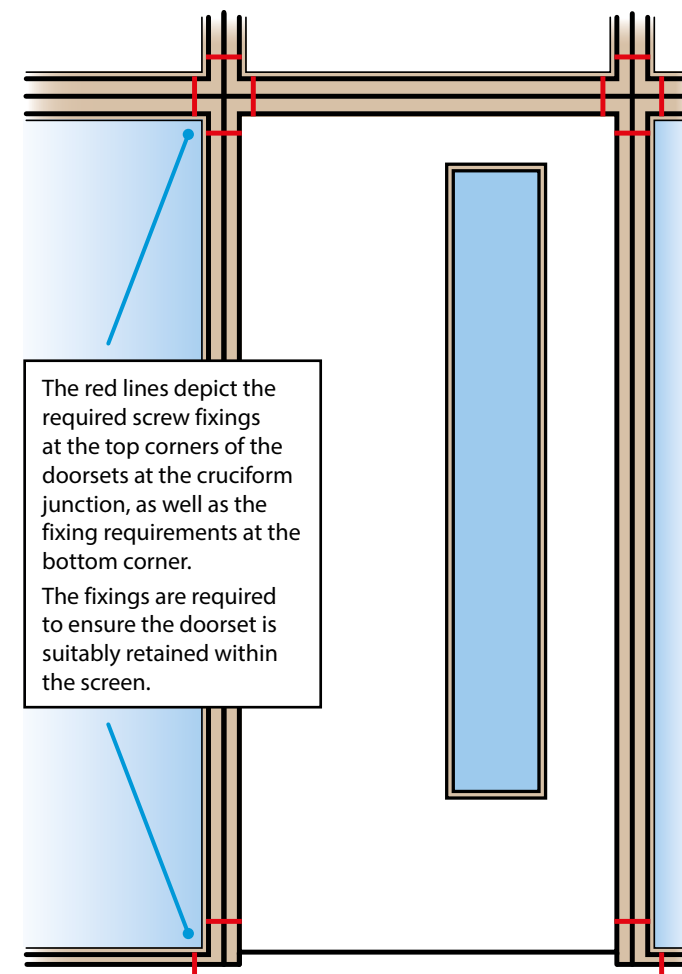
For use of packers, please refer to Q-Mark Certification Bulletin: 052/002 for further advice. If not available, our best practice advice is to use hardwood timber packers. Plastic packers can be used with supporting test evidence from the manufacturer for the relevant fire rating.

Fixing should be kept in from partition faces to stop the wall material breaking away; we recommend a minimum of 35mm.

Screws/bolts should have a minimum shank of no less than 5mm, unless fixing manufacturer states that their fixings are suitable for the load to be applied to them. Fixing screws and panel pins are not supplied by Ahmarra.

Failure to follow the fixing recommendations may invalidate any guarantee, affect fire certification or cause the products not to operate as specified.

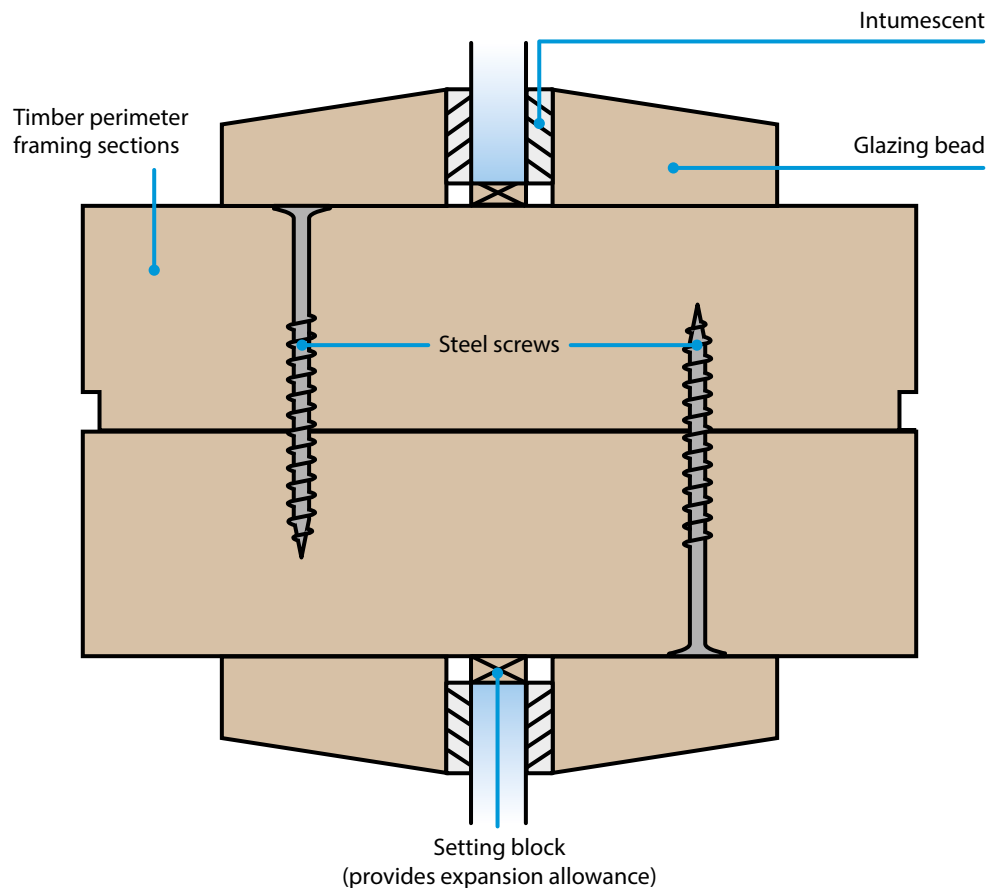
Exposed Section of Door Leaf Within a Glazed Screen



Screen to Screen Installation

Use steel screws (minimum length 50mm) under the beads to join the two frames sections to one another. Screw from opposing sides.

Seal the gap between the frames with PVA or PU glue.



FD30 Test Evidence

Screen Type	Fire Rating	Safety Rating	Glass	Type	Intumescent Product Code	Frame Material
FD30 Screen	30/0 EW	Class 3(B)3	7mm Pyrobelite	Single	ST105GT Glazing Tape	Softwood or Hardwood Woodex Engineered Softwood or Hardwood
FD30 Screen	30/30 EI	Class 2(B)2	16mm Pyrobel	Single	ST105GT Glazing Tape	Softwood or Hardwood Woodex Engineered Softwood or Hardwood

FD30 Fixing Type

Screen Fixed to Door

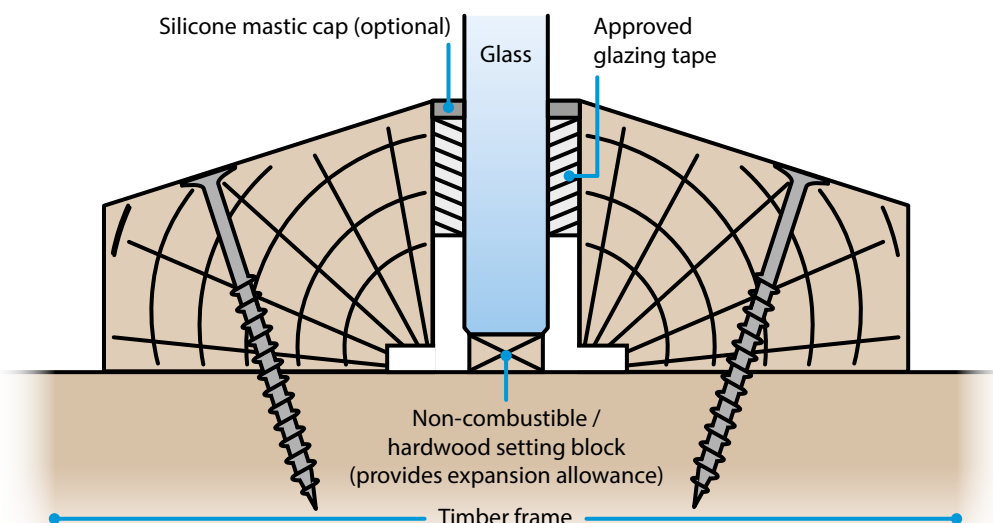
Door frames must be fixed to any surrounding screen framing elements using pairs of steel wood screws of sufficient length as to provide a minimum embedment of 15mm, located at a maximum of 50mm from each corner and spaced at maximum 450mm centres inbetween.

Door frame and screen framing must also be glued to each other with PVA or PU adhesive.

Screens next to door assemblies must additionally be fixed with a screw fixing located as close as practicable to the bottom corner of the screen abutting the door frame jamb(s), into the floor.

FD30 Screen Glazing Bead Details

Beads must be secured within the aperture using steel screws or pins that are at least 50mm long. Pins must have a minimum 16 gauge and minimum 1.6mm diameter. The screws or pins must be fixed at 150mm centres and at a 30° angle to the glass.



FD60 Test Evidence

Screen Type	Fire Rating	Safety Rating	Glass	Type	Intumescent Product Code	Frame Material
FD60 Screen	60/30 EI	El60/30 Class 1(B)1	15mm Pyroguard	Single	ST104SG Glazing Tape & ST302 Glazing Liner	Hardwood or Woodex Engineered Hardwood
FD60 Screen	60/60 EI	El60/60 Class 1(B)1	23mm Pyroguard	Single	ST104SG Glazing Tape & ST302 Glazing Liner	Hardwood or Woodex Engineered Hardwood

FD60 Fixing Type**Screen Fixed to Door**

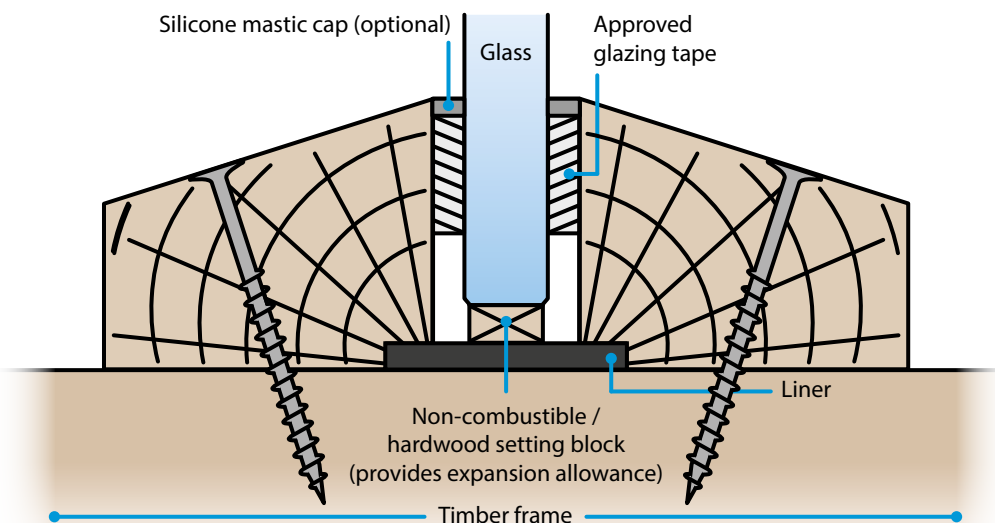
Door frames must be fixed to any surrounding screen framing elements using pairs of steel wood screws of sufficient length as to provide a minimum embedment of 15mm, located at a maximum of 50mm from each corner and spaced at maximum 450mm centres inbetween.

Door frame and screen framing must also be glued to each other with PVA or PU adhesive.

Screens next to door assemblies must additionally be fixed with a screw fixing located as close as practicable to the bottom corner of the screen abutting the door frame jamb(s), into the floor.

FD60 Screen Glazing Bead Details

Beads must be secured within the aperture using steel screws or pins that are at least 50mm long. Pins must have a minimum 16 gauge and minimum 1.6mm diameter. The screws or pins must be fixed at 150mm centres and at a 30° angle to the glass.





ahmarra
Fire Door Manufacture & Installation

T 02392 389 076
E sales@ahmarra.co.uk
W www.ahmarra.co.uk

Unit 2 Hermitage Park,
Harts Farm Way, Havant,
Hampshire PO9 1FA

Fire Door
Manufacture



Fire Door
Installation

