

Metal Faced Riser Door **Installation Guide**



Available Locks



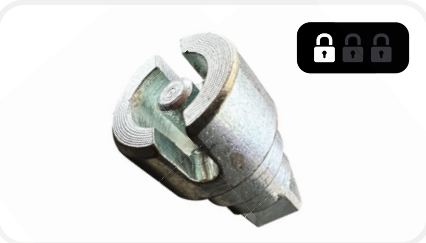
3 Point Lock

The standalone 3-point lock is operated solely using the square key. Access to the lock is concealed behind a lock cover.

To operate the lock, remove the lock cover, insert the square key into the lock, and rotate it 90 degrees to unlock the door leaf.

The above lock is fitted as standard

The below locks are available upon request



5mm Bit Insert

Where a 3-point lock is combined with a 5mm bit insert. Access to the lock is concealed behind a lock cover.

To operate the lock, remove the lock cover, insert the key into the lock, and rotate it 90 degrees to unlock the door leaf.



Key Retaining Lock

Where a 3-point lock is combined with a key-retaining lock insert, the key should be turned 90 degrees while applying light pressure to operate the lock.

The key can only be removed when the lock is in the locked position.



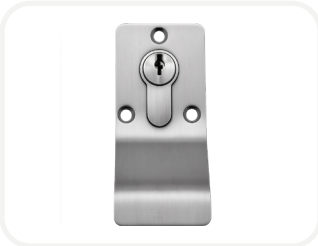
Euro Profile 3 Point Locking System with Cylinder

Where a 3-point lock is combined with a euro cylinder, the euro cylinder must first be unlocked using the keyed cylinder.

Turn the key slightly until it stops and hold it in this position. While holding the key, operate the 3-point lock using the square key to unlock the door.

This is a two-hand operation and is required to allow the door leaf to be unlocked.

Available Ironmongery



Stainless steel finger pulls.



Stainless steel fire door keep locked shut signage.



Stainless steel escutcheons.



Hidden ironmongery magnetic stainless steel fire door keep locked shut signage. The lock holes are concealed behind the signage.

Other ironmongery options are available

Installation Process

Guidance

Please make sure to follow the pre-installation and post-installation guidelines below to ensure a successful application

Wall Preparation

The wall construction will need to be constructed to suit the fire rating specified.

Fixings

The fixings to secure the frame in place are as per the fixing type details in this installation guide.

Post-Installation Checklist

After installation, please ensure that all the steps in the post-installation checklist (located on the back cover/final page) are completed to ensure safety and compliance.

Tools Required

These are the tools we recommend to complete the installation in the easiest and most efficient way. Some tools may not be necessary for your install.



Cordless Drill



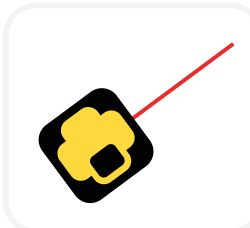
Tape Measure



Marker Pen



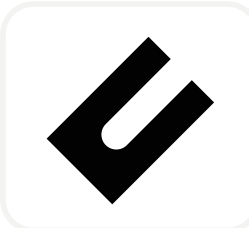
Mann McGowann Pyromas A or Rockwool FirePro Intumescent Sealant Rockwool Firepro



Laser Level



Spirit Level



Steel Frame Packers

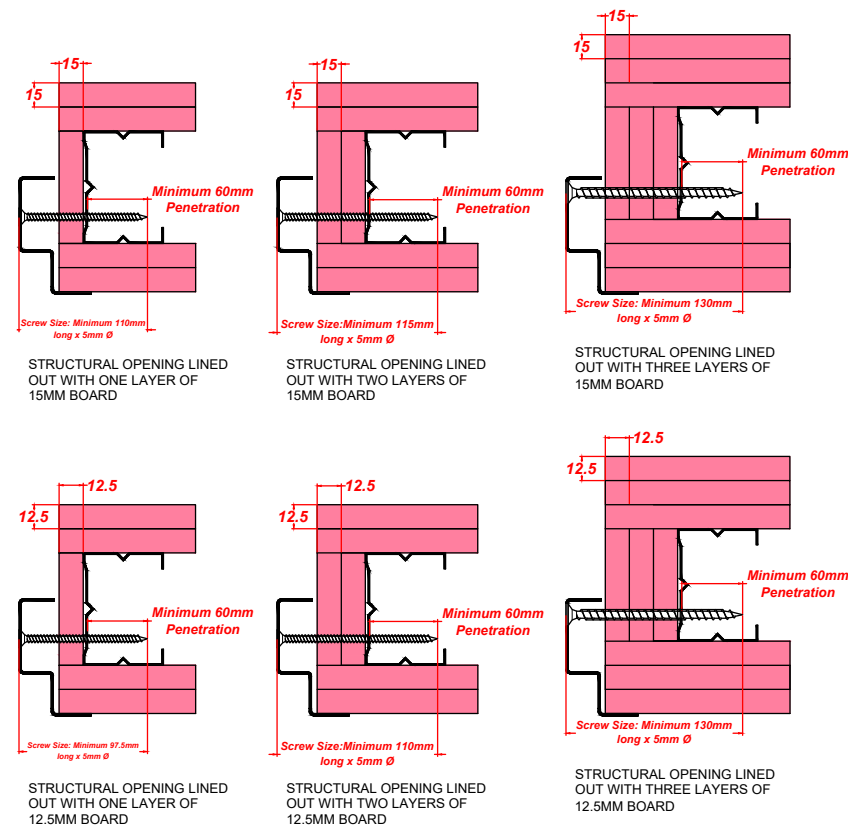


Fixings Steel Stud Partitions Self-Drilling Drywall Screws



Masonry partitions Self-Drilling Masonry Frame Anchor Screws

Fixing Type Details for Flexible Steel Stud Partitions

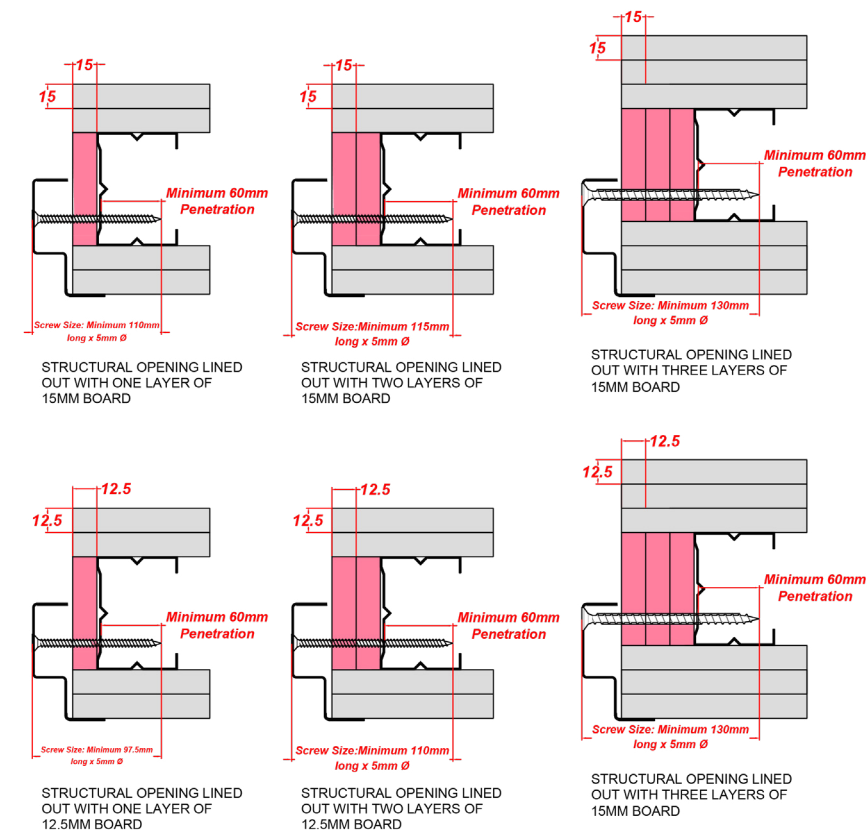


SELF DRILLING DRYWALL SCREWS

**(WITHOUT A TIMBER LINING
TO THE STEEL STUDS)**

FRONT & REAR OF PARTITION:
GYPROC FIRELINE
(BS EN 520 - Type F)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)

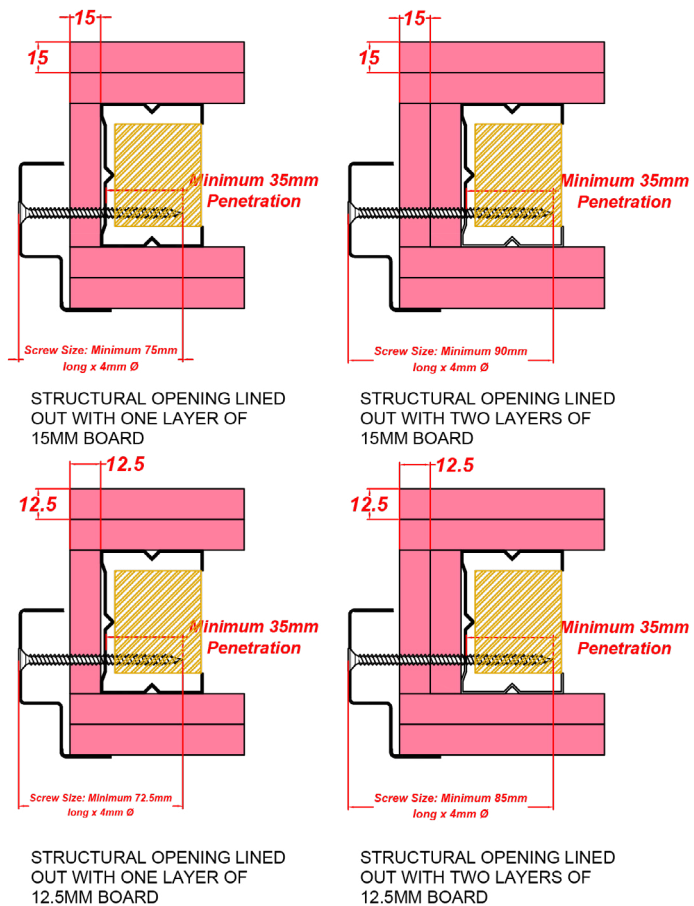


SELF DRILLING DRYWALL SCREWS

**(WITHOUT A TIMBER LINING
TO THE STEEL STUDS)**

FRONT & REAR OF PARTITION:
STANDARD PLASTERBOARD
(BS EN 520 - Type A)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)

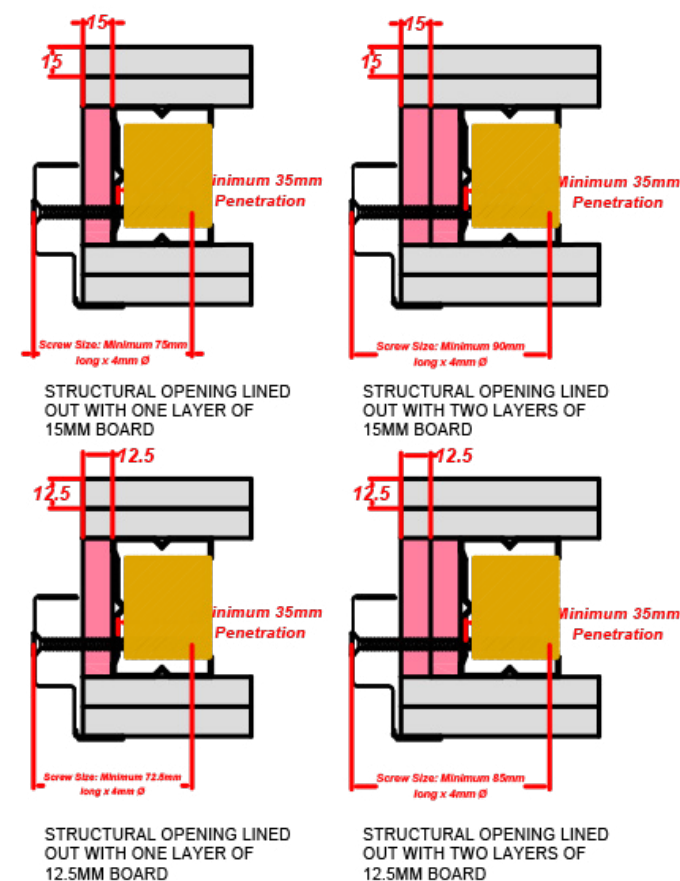


SELF TAPPING MULTIPURPOSE SCREWS

**(WITH A TIMBER LINING
TO THE STEEL STUDS)**

FRONT & REAR OF PARTITION:
GYPROC FIRELINE
(BS EN 520 - Type F)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)



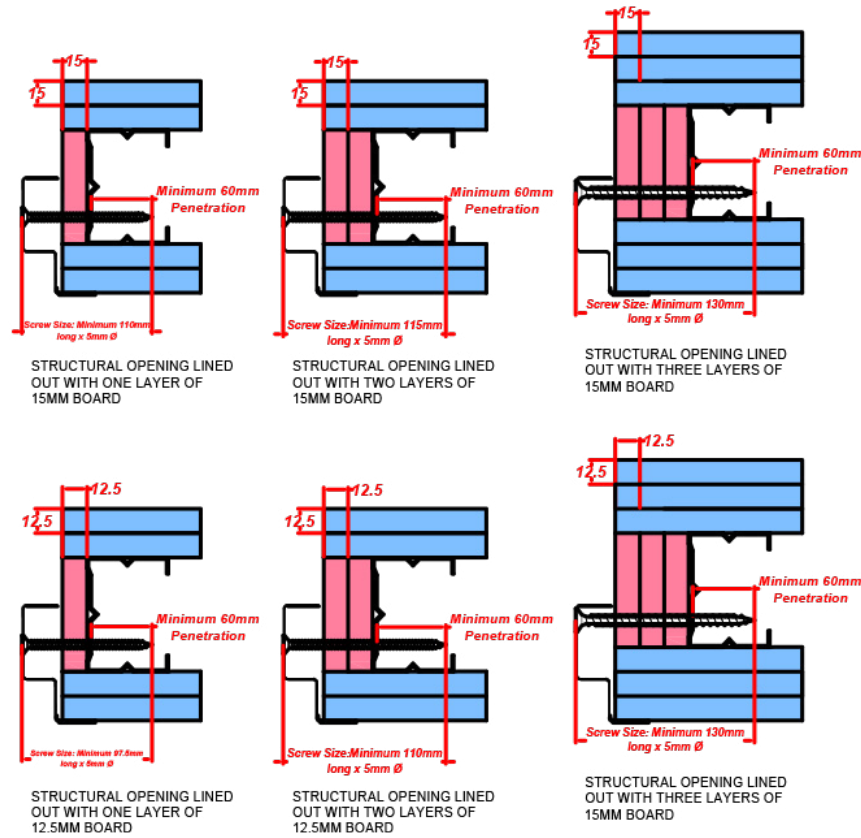
SELF TAPPING MULTIPURPOSE SCREWS

**(WITH A TIMBER LINING
TO THE STEEL STUDS)**

FRONT & REAR OF PARTITION:
STANDARD PLASTERBOARD
(BS EN 520 - Type A)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)

Fixing Type Details for Flexible Steel Stud Partitions



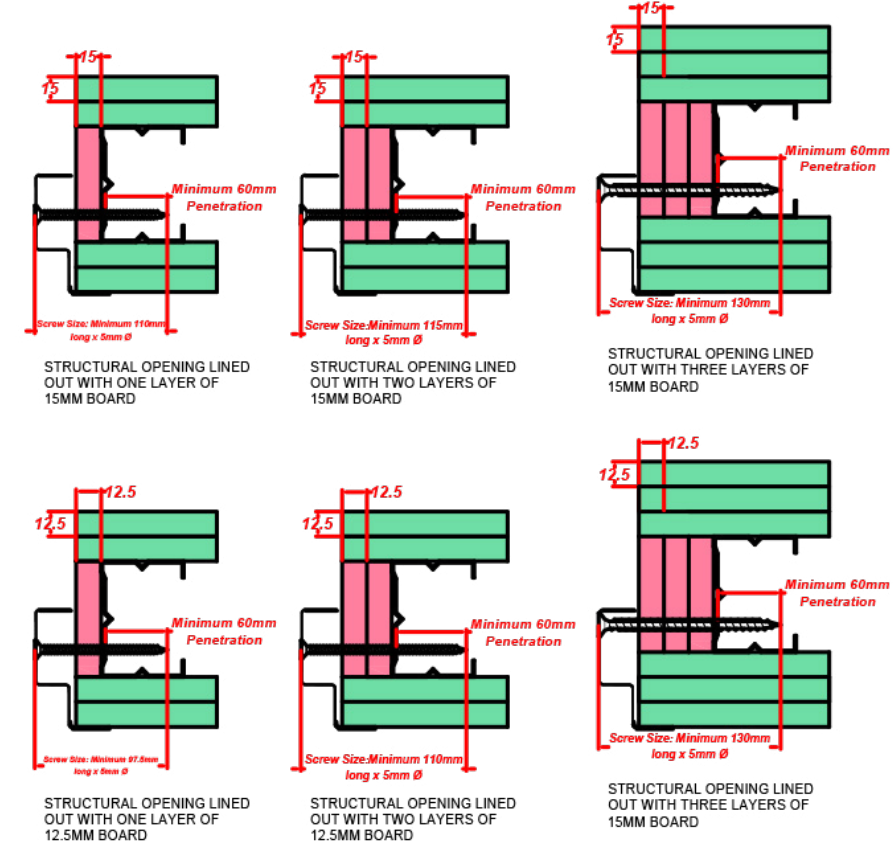
SELF DRILLING DRYWALL SCREWS

(WITHOUT A TIMBER LINING TO THE STEEL STUDS)

FRONT & REAR OF PARTITION:
ACOUSTIC PLASTERBOARD
(BS EN 520 - Type D)

STRUCTURAL OPENING LINING:

Fixing Type Details for Flexible Steel Stud Partitions

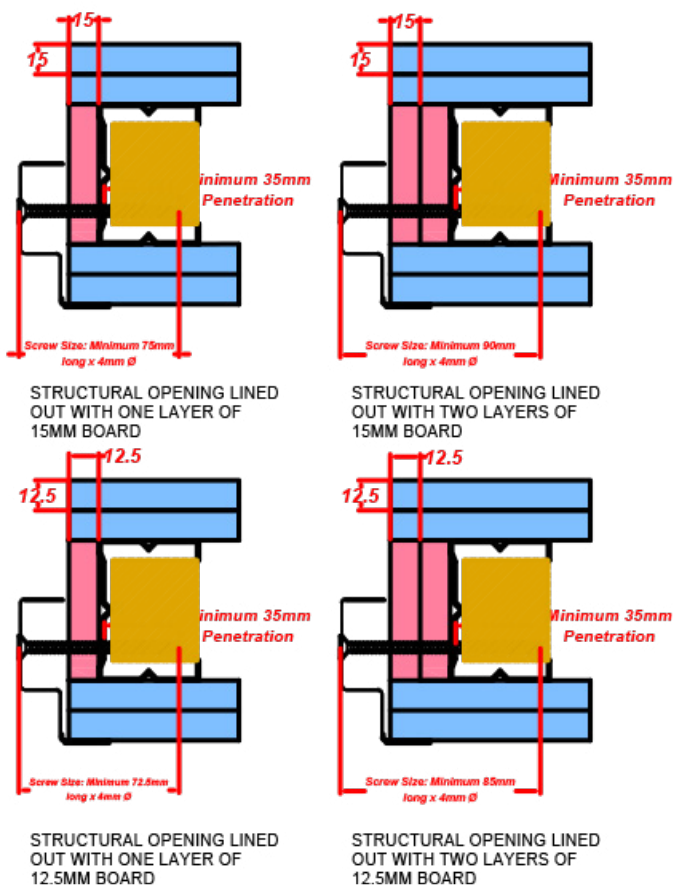


SELF DRILLING DRYWALL SCREWS

(WITHOUT A TIMBER LINING TO THE STEEL STUDS)

FRONT & REAR OF PARTITION:
MOISTURE RESISTANT
PLASTERBOARD
(BS EN 520 - Type A, H1)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)

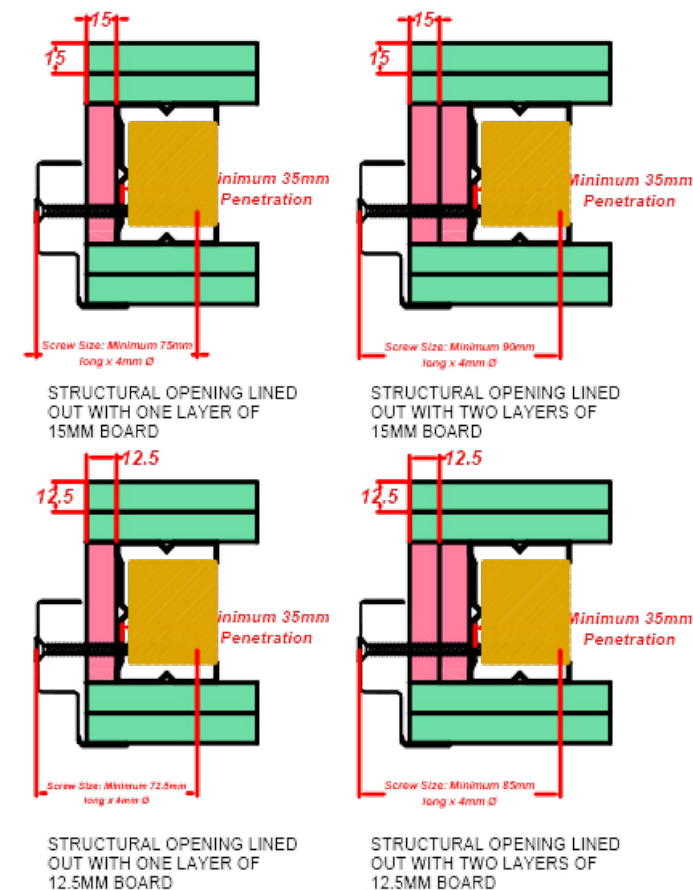


SELF TAPPING MULTIPURPOSE SCREWS

(WITH A TIMBER LINING TO THE STEEL STUDS)

FRONT & REAR OF PARTITION:
ACOUSTIC PLASTERBOARD (BS EN 520 - Type D)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)



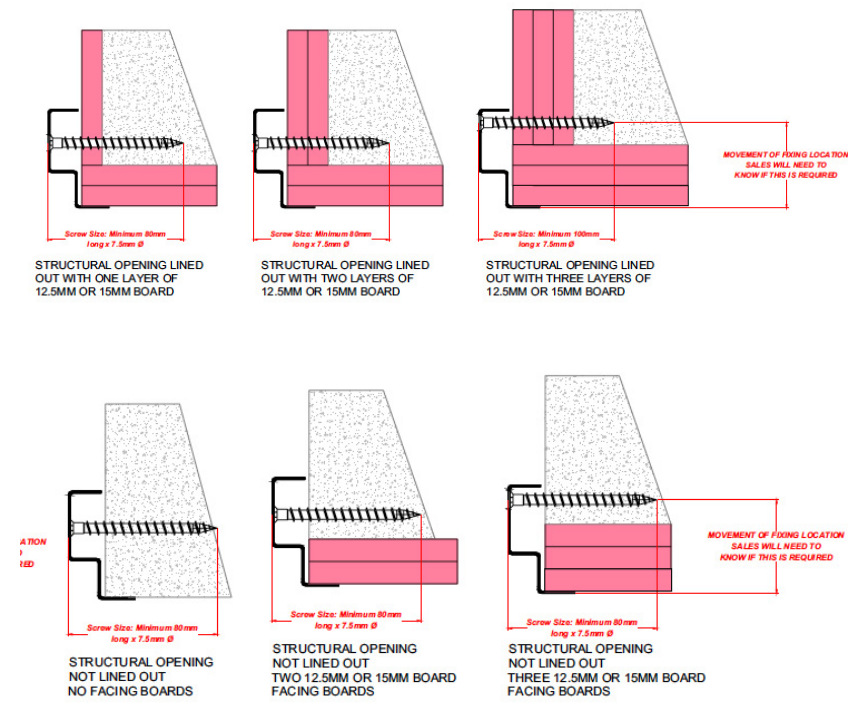
SELF TAPPING MULTIPURPOSE SCREWS

(WITH A TIMBER LINING TO THE STEEL STUDS)

FRONT & REAR OF PARTITION:
MOISTURE RESISTANT
PLASTERBOARD
(BS EN 520 - Type A, H1)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)

Fixing Type Details for Rigid Partitions



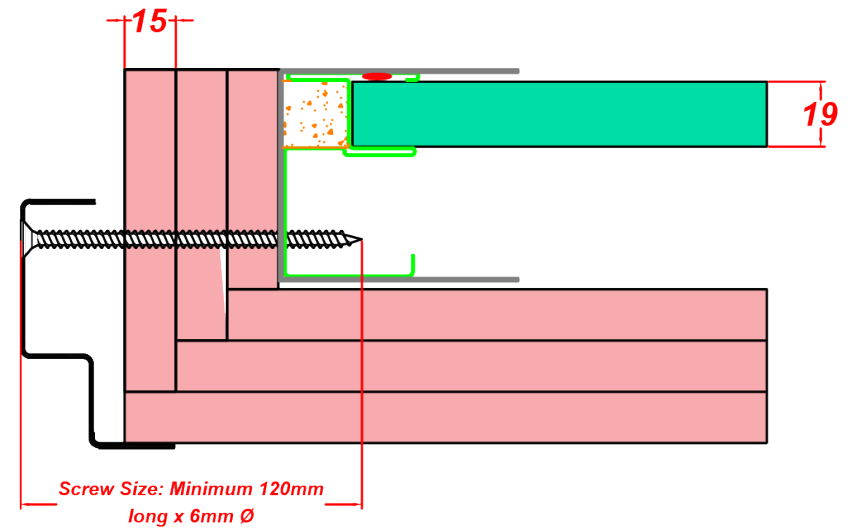
SPAX TYPE SELF DRILLING FRAME ANCHOR SCREWS

(WITHOUT A TIMBER LINING TO THE STEEL STUDS)

FRONT OF PARTITION:
GYPROC FIRELINE
(BS EN 520 - Type F)

STRUCTURAL OPENING LINING:
GYPROC FIRELINE
(BS EN 520 - Type F)

Fixing Type Details for Knauf Shaftwall Systems



SELF TAPPING MULTIPURPOSE SCREWS

FRONT OF PARTITION:
KNAUF 15MM FIRE PANEL
(EN 520 - Type A)

REAR OF PARTITION:
KNAUF 19MM COREBOARD

STRUCTURAL OPENING LINING:
KNAUF 15MM FIRE PANEL
(EN 520 - Type A)

STRUCTURAL OPENING LINED OUT WITH THREE LAYERS OF 15MM BOARD

Fire Rated Permitted Wall Constructions Types

The following wall types are approved for this doorset design:
(refer to the relevant product datasheet, as this may vary by product).

- a) Plasterboard clad timber stud partitions
- b) Plasterboard clad steel stud partitions
- c) Masonry constructions (wall thickness and overall density must be equal to or greater than 150mm thick and 850 kg/m3).
- d) Concrete walls (excluding no fines concrete) (wall thickness and overall density must be equal to or greater than 150mm thick and 850 kg/m3).
- e) Shaftwall design as detailed in section shaftwall design.
- f) Rigid Plinth Shaftwall design as detailed in section rigid plinth design

Wall types a & b above must have supporting fire resistance test evidence which demonstrates that it is capable of staying in place and intact for, as a minimum, the required performance period of the doorset (classified to BS EN 13501-2) supporting a doorset design.

Wall type c and d above must be determined to be able to provide at least the same level of fire resistance as the required performance period of the doorset design.

The structural opening (for wall types a & b) must be lined, and underlying studwork (“framed out”) must be provided at the perimeter of the aperture to provide adequate fixity.

For all wall types the structural opening shall be square, plumb and provide a flat surface for installation of the doorset.

- All wall types detailed above shall provide a suitable medium to permit adequate fixity, it is anticipated that for:
- Wall type a, plasterboard clad timber stud partitions, the timber stud will be of sufficient dimensions such that the fixing for the door frame penetrates into solid timber.
 - Wall type b, plasterboard clad steel stud partitions, are not required to include a timber lining for the door frame fixings to penetrate into unless this is required by the supporting fire resistance test evidence for the wall type.
 - Wall type c, masonry constructions are anticipated to be constructed of a solid block or brickwork to receive the fixings.
 - Wall type d, Concrete must be suitably homogenous with fixing positions away from any reinforcement.

Additionally, for flexible wall types a & b:

The aperture must be lined with either 1No, 2No or 3No. layer(s) of 12.5mm or 15mm thick Type F plasterboard (EN520). The lined aperture size shall be sized to ensure the permitted gap between the rear of the frame and the structural opening is not exceeded.

The structural opening must be prepared in line with the test evidence provided by the wall manufacturer.

Additionally, for rigid wall types c & d:

It is optionally permitted for the structural opening for wall types c & d to be lined with up to 3No. layer(s) of 12.5mm or 15mm thick Type F plasterboard (EN520). The boards must be mechanically fixed to the underlying wall, without voids behind them.

The aperture or lined aperture size shall be sized to ensure the permitted gap between the rear of the frame and the structural opening is not exceeded.

The length of frame fixings must be increased directly proportionally to the thickness of the aperture lining, to ensure penetration of fixings as detailed in section Fixing Type Details.

Plasterboard facings to masonry and concrete walls

Facing boards to the walls must be mechanically fixed with steel fixings at a minimum of 300mm centres, no further than 100mm from the finished structural opening, with a penetration to the underlying masonry or concrete wall of minimum 30mm. Dot and dab (for example) without mechanical fixings is not permitted.

Voids between board layers and between the first board layer and the masonry or concrete wall are not permitted in the 100 mm zone immediately surrounding the structural opening.

Shaftwall design

The Shaftwall design below provided the opening face of the doorset is to the shaftwall face containing three layers of 15 mm Fire Panel, as tested.
Knauf J channel (62mm web x 60/30mm flange, 0.92 gauge) screw fixed to the floor and soffit.
Knauf deep flange U Channel (62mm web x 70mm flange, 0.70 gauge) screwed to the CT studs to form structural opening framing.
Knauf CT Stud (60mm web x 38/39 mm flange, 0.92 gauge) screwed to the U channel
100mm thick Knauf Rocksilks RS60 filling voids as tested
Knauf Intumescent and acoustic mastic sealing all coreboard panels and fire panel boards.

Fire Rated Permitted Wall Constructions

15mm Knauf Fire Panel – Type A to EN520. 3 layers to one face of the shaftwall and lining the structural opening.
19mm Coreboard – Type F to EN520. 1 layer retained by the shaftwall framework
Knauf tape and fill applied to all plasterboard joints and screw heads.

Rigid Plinth design

A rigid plinth design made of the materials specified in section as wall type c) or d) may be fitted as a plinth in conjunction with one of the section wall types (types a), b) or e).
When fitting a rigid plinth the following must be complied with:

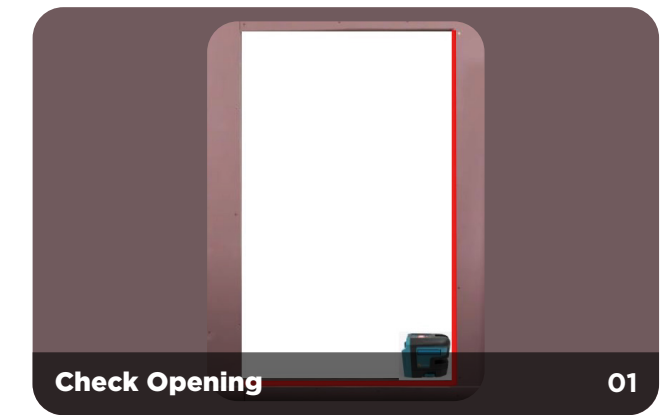
- The plinth height range permitted is 75mm to 250mm, above the finished floor level on either side.
- The plinth is located at the bottom of the structural opening.
- The face of the plinth and the face of the flexible wall must be flush with no more than 1mm tolerance to the opening face of the doorset in order for the integral architrave of the frame to form a tight fit against the face of the supporting construction.

Frame Packers

Steel packers are permitted at all edges of the frame and the structural opening, at nominally 500mm centres.

When the gap between the rear of the frame and the structural opening is greater than 2mm, steel packers must be fitted at maximum of 500mm centres, otherwise they may be optionally fitted.

Product Installation



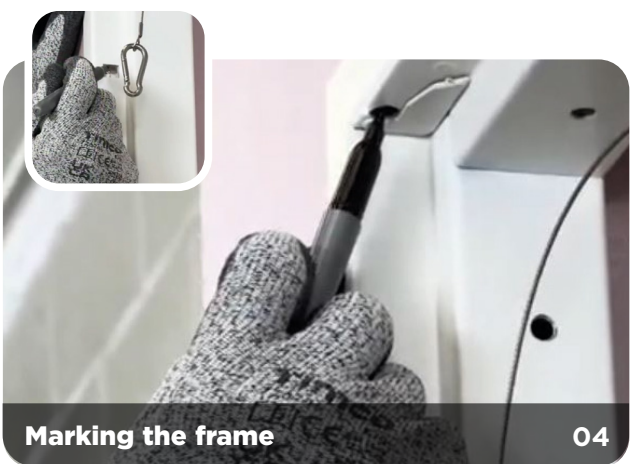
It is crucial to ensure that the opening is square and level, ideally using a laser level. Additionally, verify that the structural opening dimensions are correct.



Open the door, release the door restrictor hook from the rear of the door, release the Spring Pin hinge system, and lift the door out of the frame.



Place the frame in the aperture, ensuring it's 7mm larger than the panel size.



Mark the hinge pivot point holes on top and bottom and the door retaining pin positions on the hinge side using a marker pen or similar tool.

Product Installation



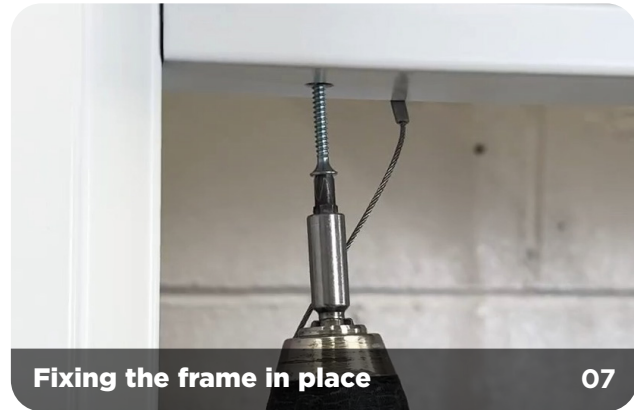
Drilling the frame 05

Remove the frame & drill clearance holes with an 8mm diameter drill bit for the marked positions



Sealing the frame before installing 06

Apply intumescent sealant to the rear of the picture frame before installation.



Fixing the frame in place 07

Fix the frame into the aperture with a suitable fixing screw (see fixing type details page) ensuring all fixing holes are used, ensuring it is square and flush with the wall. Steel frame packers can be used to space frame out if required. We recommend that the frame is positioned on a flat solid surface at the bottom to prevent distortion.



Levelling and the frame 08

Check frame is level and square. We recommend using a laser level for this step.



Fitting the slave door (Double Door Unit) 09

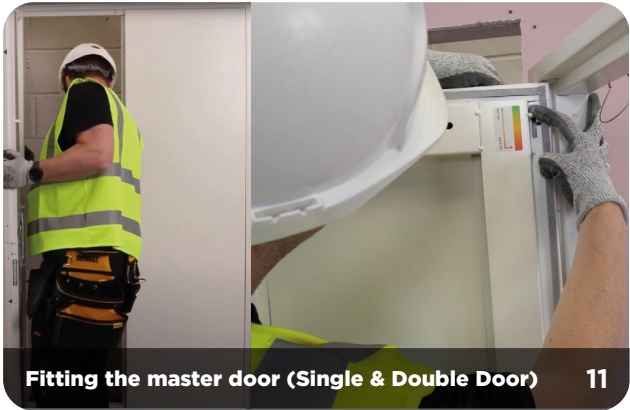
Refit the slave door by inserting the lower Spring Pin hinge pin into the hinge pin pivot point location and then slide the top hinge pin into place until it is fully secured by checking the lever is in the secure position.



Fitting the slave door continued 10

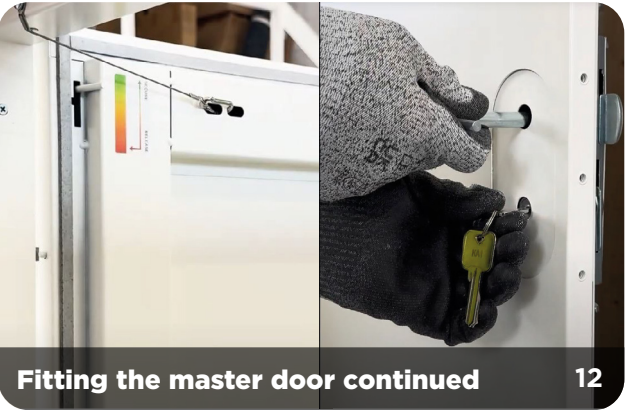
Attach the door restrictor hook and then close the door & lock from the rear of the door with the key provided ensuring the locking bars top and bottom are fully located within the locking slots. Check that the doors are flush on the face after locking. Open and close the door to ensure it does not rub and adjust frame if necessary.

Product Installation



Fitting the master door (Single & Double Door) 11

Refit the master door by inserting the lower Spring Pin hinge pin into the hinge pin pivot point location and then slide the top hinge pin into place until it is fully secured by checking the lever is in the secure position.



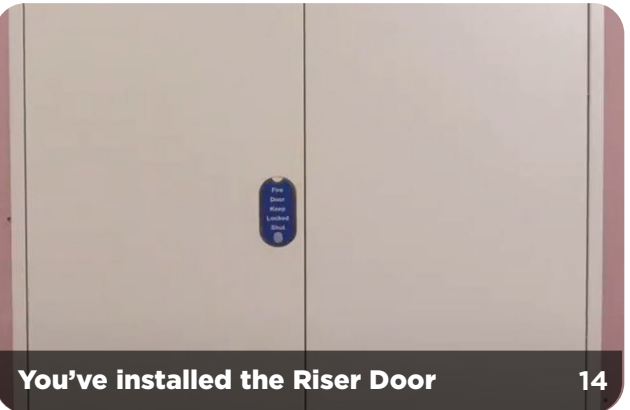
Fitting the master door continued 12

Attach the door restrictor hook and then close the door & lock from the face of the door with the key provided ensuring the locking bars top and bottom are fully located within the locking slots. Check that the doors are flush on the face after locking. Open and close the door to ensure it does not rub and adjust frame if necessary.



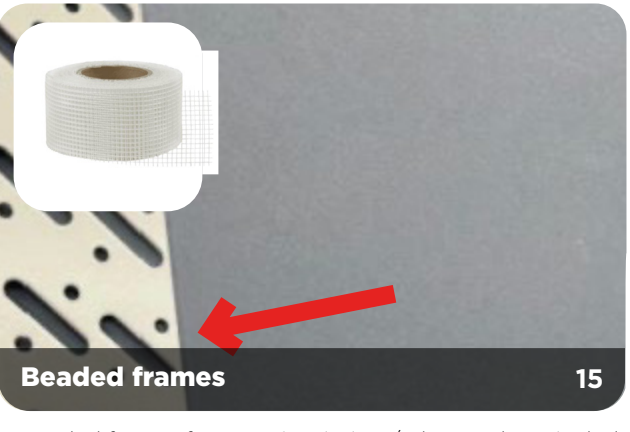
Sealing the structural opening 13

Open the door / doors and apply a minimum 5mm wide bead of intumescent sealant to seal the back of the frame to the structural opening.



You've installed the Riser Door 14

Close the door / doors, ensuring locks are fully latched, and doors are flush.



Beaded frames 15

Beaded frames for Tape & Jointing / Plaster. These include an additional fixing point (see above), allowing the perforated frame flange to be screw fixed to the supporting structure. Apply plasterboard joint / scrim tape to all four sides, ensuring it is positioned halfway on the frame flange and halfway on the plasterboard surface. Tape & Joint or Plaster over the perforated flange to conceal the frame.

Post Installation Checklist

Item Check	Requirements	Tick / Cross
Frame Fixings	Check all frame fixings holes have a fixing present and are not loose	
Intumescent sealant to structural opening	Gaps between the frame and the structural opening should be sealed, nominally 5mm wide. This gap should be filled with a bead of suitable acrylic intumescent.	
Seals in place (if applicable)	Seals should be intact and continuous along the entire rear edge of the door leaf to ensure the perimeter of the door is fully sealed when closed.	
Door operation	Door must open and close securely, flush with the frame and adjacent doors if applicable.	
Hinge device	Ensure that each door operates and the hinge is fully located.	

Routine Riser Door Checklist

Item Check	Requirements	Tick / Cross
Frame Fixings	Check all frame fixings holes have a fixing present and are not loose	
Intumescent sealant to structural opening	Gaps between the frame and the structural opening should be sealed, nominally 5mm wide. This gap should be filled with a bead of suitable acrylic intumescent.	
Seals in place (if applicable)	Seals should be intact and continuous along the entire rear edge of the door leaf to ensure the perimeter of the door is fully sealed when closed.	
Door operation	Door must open and close securely, flush with the frame and adjacent doors if applicable.	
Hinge device	Ensure that each door operates and the hinge is fully located.	

Site	Signed	Door ID	Date

Post Installation Checklist

A post-installation checklist is required to ensure safety and compliance upon completion. This checklist should also be completed periodically, every six months.

Item Check	Requirements	Tick / Cross	Initials
Double Door only	Leaf to leaf gaps at meeting edges: See door to frame gap & alignment tolerances on installation guide.		
Frame Fixings	Check all frame fixings holes have a fixing present and are not loose		
Intumescent sealant to structural opening	Gaps between the frame and the structural opening should be sealed, nominally 5mm wide. This gap should be filled with a bead of suitable acrylic intumescent.		
Seals in place (if applicable)	Seals should be intact and continuous along the entire rear edge of the door leaf to ensure the perimeter of the door is fully sealed when closed.		
Door Operation	Door must open and close securely, flush with the frame and adjacent doors if applicable.		
Hinge device	Ensure that each door operates and the hinge is fully located.		
Locking Device	Ensure that each door operates and fully engages the locking system. Check the security of all locking devices.		

Site	Door ID
Signed	Date

