

SIGMA

SINGLE SKIN STEEL.

MODULAR AND FLEXIBLE

The Sigma system is ideal for factory or warehouse environments. It is perfect for enclosing working areas where appearance is important, but a double skin system is not necessary, making our Sigma range a very popular economic solution.

It offers a lightweight yet durable solution for your workplace. Applications include perimeter guarding for heavy-duty machinery, robots, conveyors, and other automated processes.

SIGMA PANELS

Sigma is available in six different configurations: AS (all steel), FM (full mesh), SG (steel glass), SMS (steel-mesh-steel), SGS (steel-glass-steel) and SM (steel mesh).

All Sigma panels come in the standard sizes below.

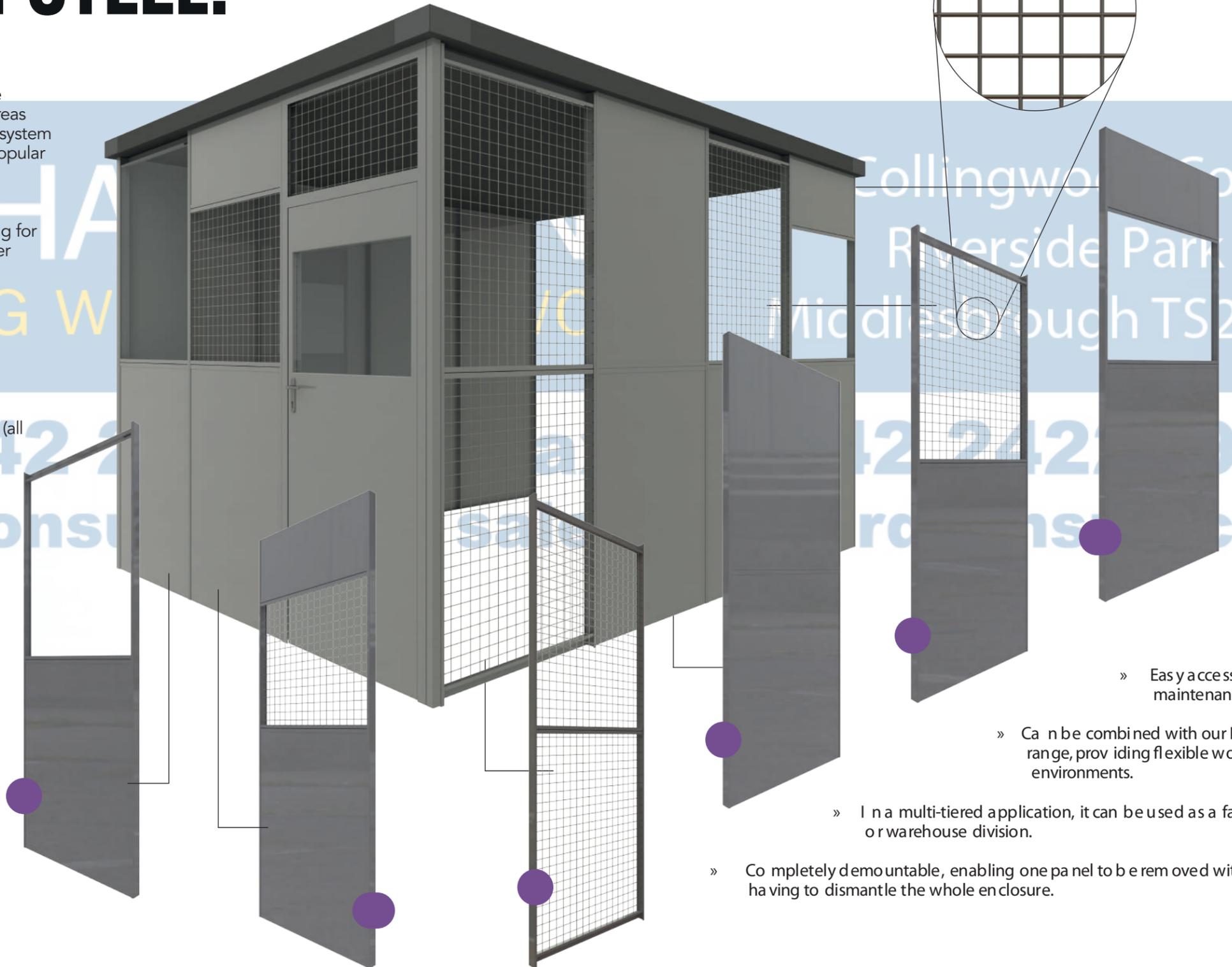
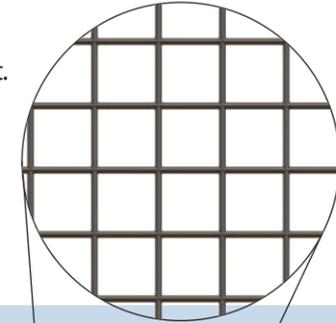
3657 mm
3048 mm
2743 mm
2438 mm



300 mm
400 mm
500 mm
600 mm
700 mm
800 mm
900 mm
1000 mm

SIGMA MESH OPTIONS

Our standard mesh is 50.8 mm (2 inch), however other mesh options such as 25.4 mm (1 inch) and 12.7 mm (1/2 inch) are also available upon request.



» Easy access for maintenance.

» Can be combined with our Elan range, providing flexible working environments.

» In a multi-tiered application, it can be used as a factory or warehouse division.

» Completely demountable, enabling one panel to be removed without having to dismantle the whole enclosure.

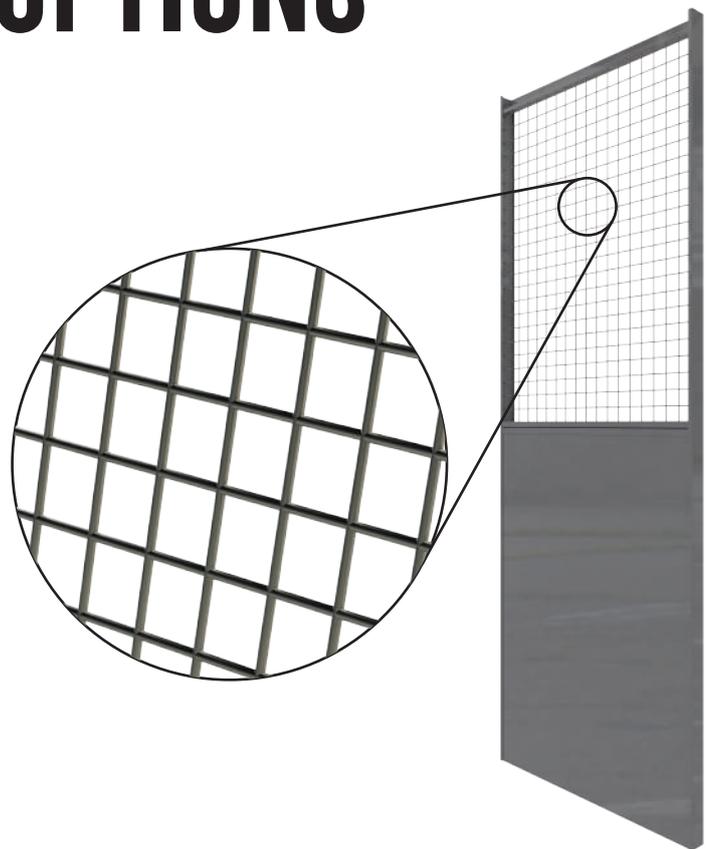
TROAX MESH OPTIONS



Basic Information

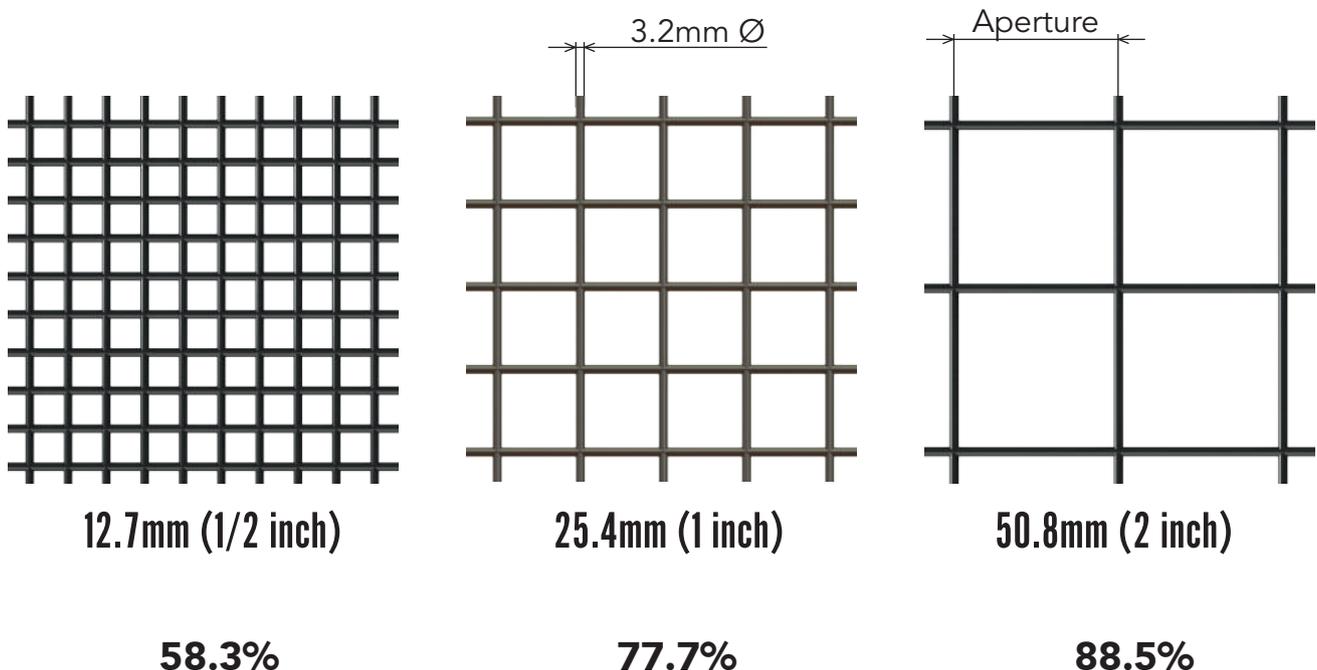
Our welded mesh is produced from bright drawn mild steel to **BS 1052** and welded at every intersection to give maximum strength.

Aperture dimensions are measured from point to point within the aperture. 10 swg wire is 3.2mm in diameter.



POA (Percentage of Open Area)

Open area is a ratio that reflects how much of the sheet is occupied by holes, normally expressed by a percentage. For example, if the open area of the mesh sheet is 70%, it means that 70% of the sheet is holes and 30% of the sheet is the steel wires. This also reflects percentage of airflow.



Sigma Doors

Single Skin Steel Doors

Sigma hinged doors are popular access points in factories, warehouse environments and paint plants.

Both single and double doors options are available within the Sigma system. With a variety of accessories to choose from the Sigma door system is the perfect solution for numerous applications.



TROAX[®]

Facts

The doors are manufactured using box sections to strengthen the structure making it safe from an intruder.

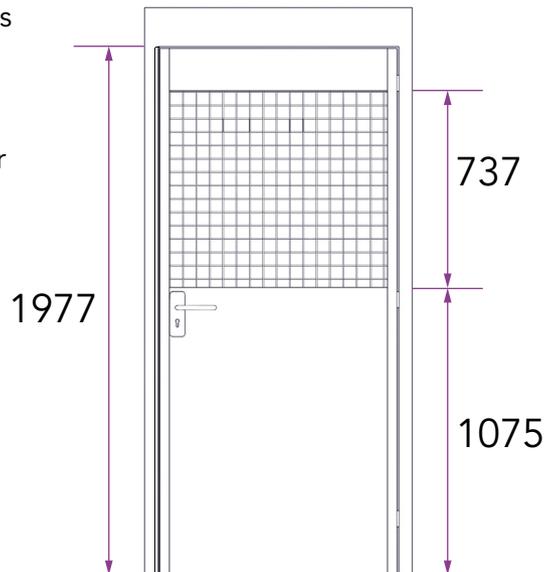
As standard stainless steel hinges and a 3 lever lock and handles are provided with the Sigma doors.

Single Door:

	Panel Height (mm)		
Panel Width (mm)	2438	2743	3048
1000	✓	✓	✓

Double Door:

	Panel Height (mm)		
Panel Width (mm)	2438	2743	3048
2000	✓	✓	



The dimensions shown also account for the glazed panels.

Features and Options

- Digital lock
- Euro Lock
- Panic Bar
- Self-closers
- Other locks and door furniture available upon request.
- Sigma doors are ideal for creating secure divide between work areas.



Sigma Sliding Doors



Single Skin Steel Sliding Doors

Sigma sliding doors are popular when a robust and smart access point within a locations where space is at a premium is required.

Sigma sliding doors are ideal for storage with their integrated locking system they can create fully secure enclosures.

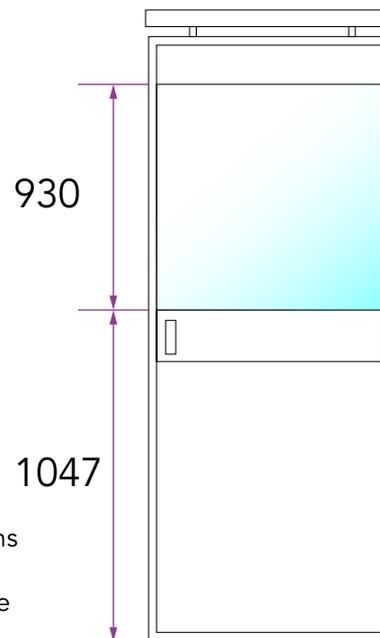


Facts

Sigma sliding doors are available in full mesh or steel, steel/mesh, steel/glazed and steel/glazed/steel. All the sliding doors as standard have a flush pull handle and padlockable bolts.

A selection of trolleys are available, this ensures the Sigma range of sliding doors can be used in a wide variety of environments.

Panel Width (mm)	Panel Height (mm)			
	2438	2743	3048	3657
900	✓	✓	✓	✓
1200	✓	✓	✓	✓
1800	✓	✓	✓	✓
2400	✓	✓	✓	✓



The dimensions shown also account for the mesh panels.

Features and Options

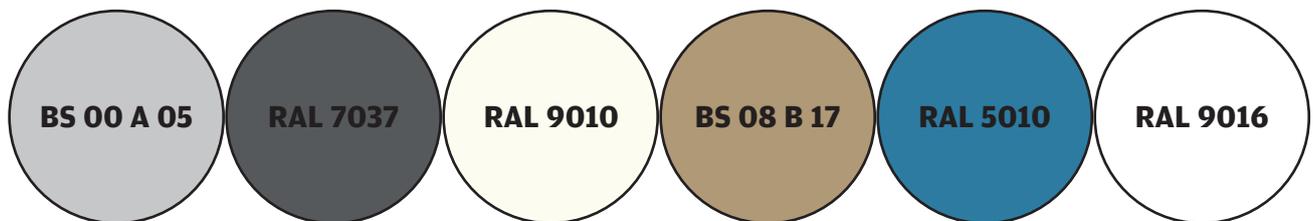
- Claw lock (Deadlock)
- Claw lock (Euro cylinder)
- Upon request Sliding doors can be available with an increased height that can account for forklift access.
- Small spaces can truly be maximised for storage by the use of a bi-parting sliding door.



Troax Steel Panel Finishes

The finish of our steel panels is just as important as the initial design, we always prepare our products to the highest of quality. As soon as our products reach their site the modular design and high quality finish ensures they are ready for fast and clean installation.

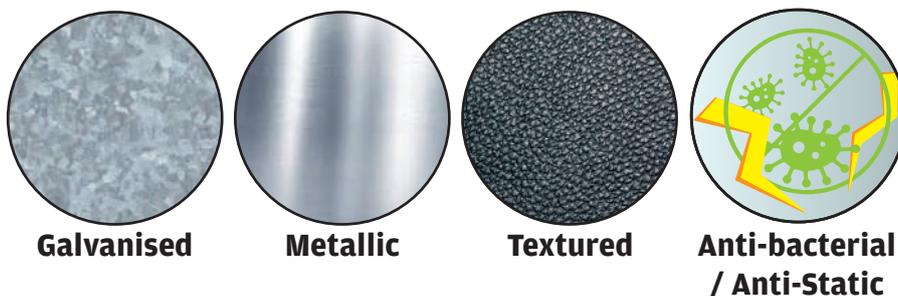
Standard Colours:



*Sample colour swatches are available upon request

You are not limited by our standard colours as we can offer any colour as to your request.

Special Finishes



Galvanised

Metallic

Textured

Anti-bacterial
/ Anti-Static



RICHARDSONS
MAKING WORKSPACE WORK

6 Collingwood Court
Riverside Park
Middlesbrough TS2 1RP

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Sigma - Single Skin Steel Partitioning

Installation Pack



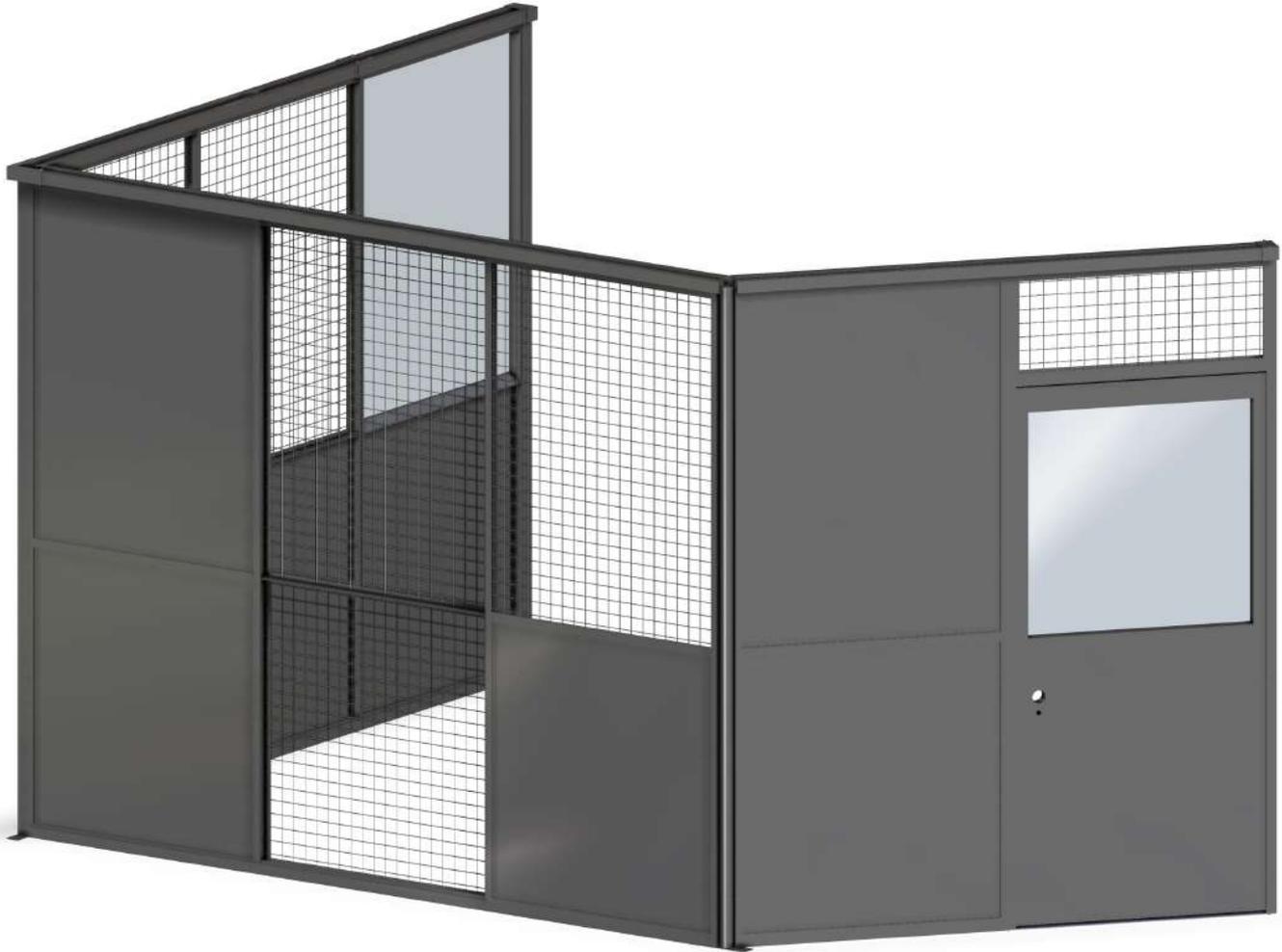
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Sigma Partitioning

Installation Instructions



Drill with hammer action



Metal Shears



Hacksaw



Tape Measure



Pliers or Mole Grips



Spirit Level



File



Screwdriver



Adjustable Spanner



Set Square

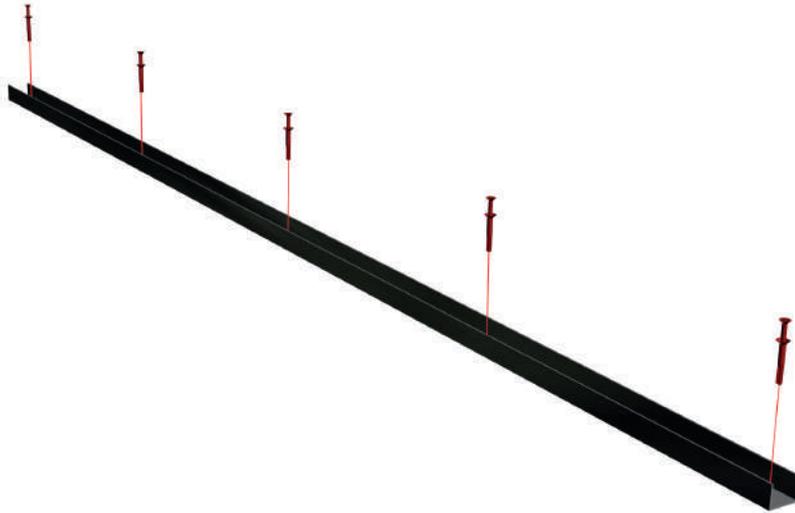


Hammer

Beginning Installation

Before you begin:

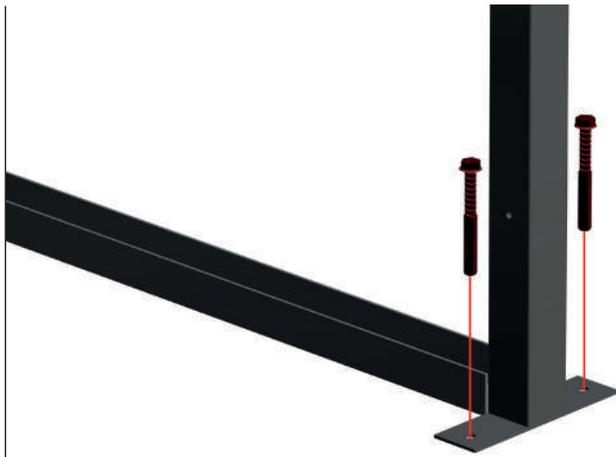
- Identify all of the components for your installation.
- Choose a datum point from which to measure all positions of corners.
- Measure and mark up the lines of the walls with a chalk line, between the feature points.



Fix the mullion to floor using M6 spit hit fixing.

Approx. 600mm apart.

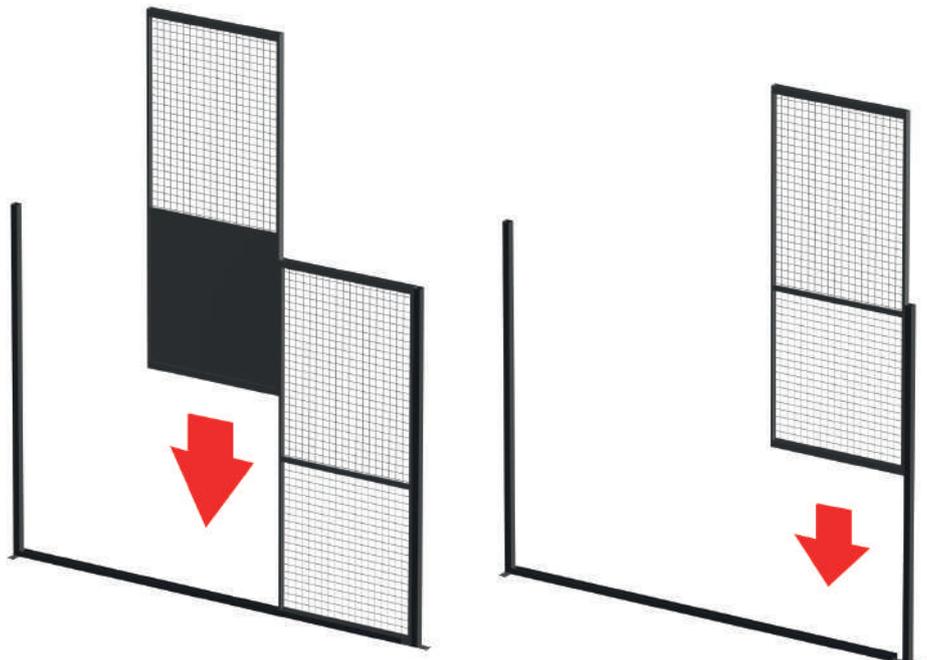
Ensure that the floor the mullion is fixing onto is level using a spirit level.



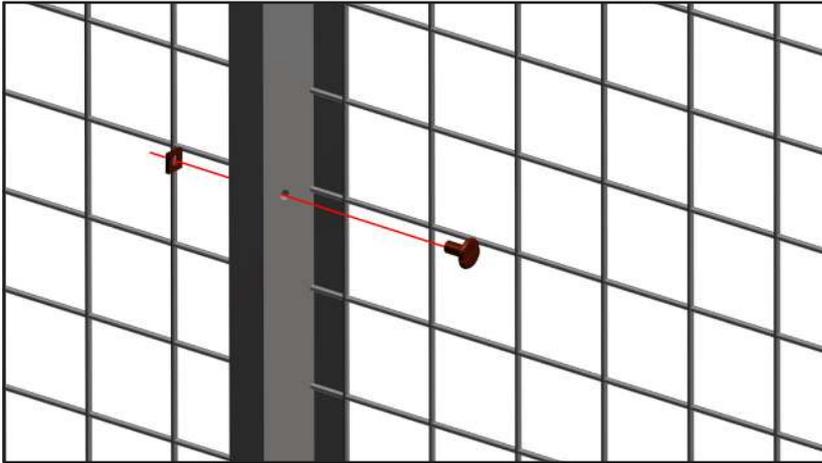
Fix the mullion to the floor using M10 x 100 countersunk expansion Bolts.

If NOT fixing into concrete check the fixing listed on the delivery notes.

Fit the appropriate panels into the Floor Channel.



Fixing Panels

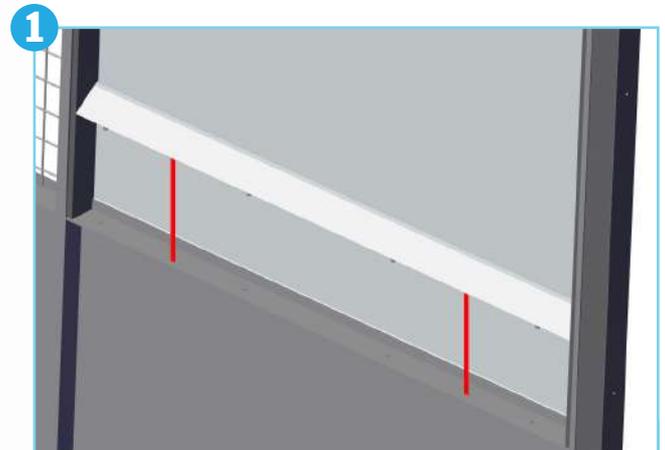
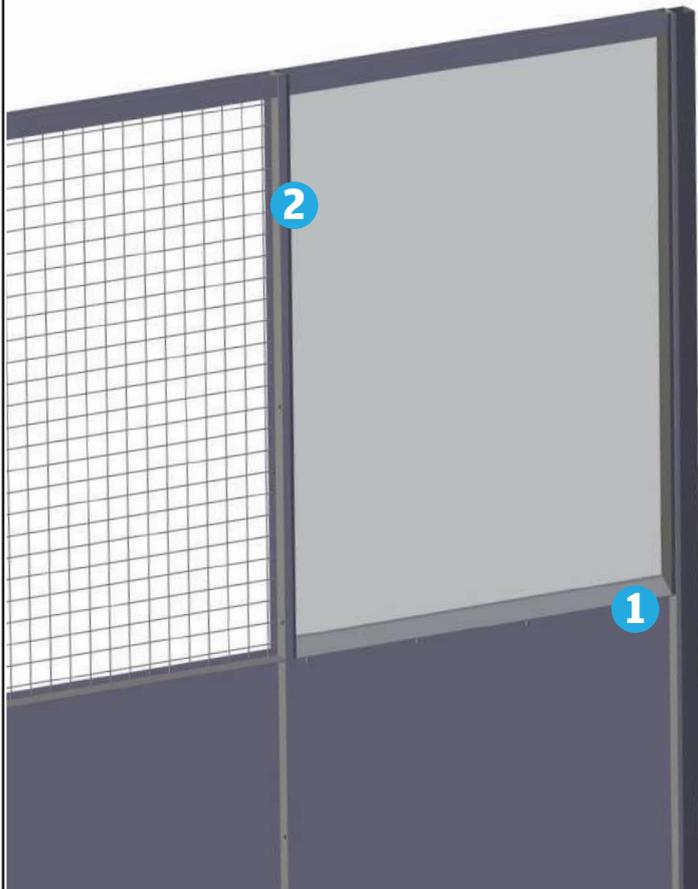


Align the pre-drilled holes in the panels.

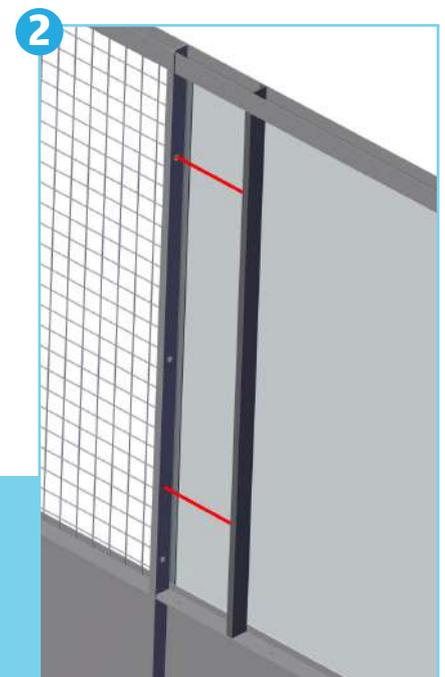
Use an M6 x 12mm bolt and nut to fix in place.

Fixing Glazed Panels

Glazed panels come pre-assembled and need to be disassembled as shown in order to fix in place.



First unclip the triangular bead at the base of the glazing.



Remove the u-channel either side of the glazing to reveal the fixing points.

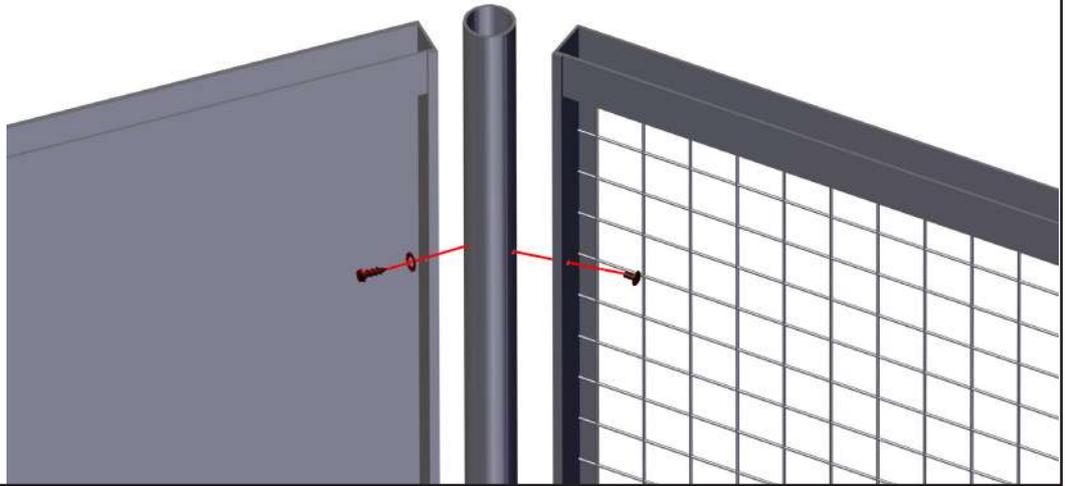
Once fixed in place re-assemble the glazed panel.

Fixing Panels to Mullions and Fillers

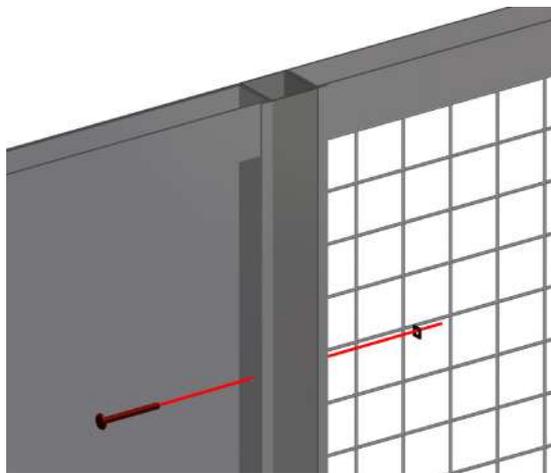
Round mullions are used when creating non-standard angles.

1 set of holes are pre-drilled and tapped, fix panel to the holes using M8 x 16mm Bolts.

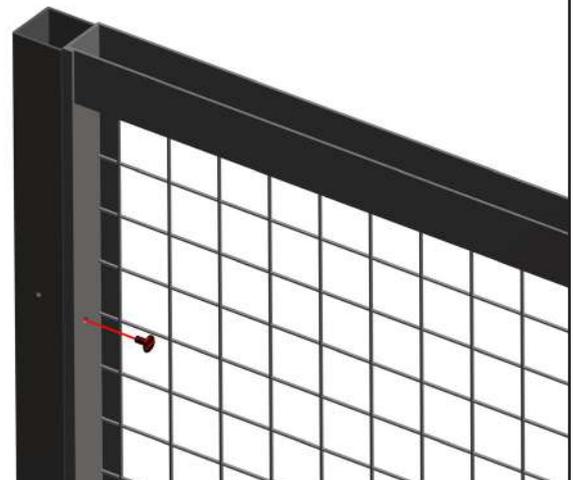
The second Panel is Tek Screwed to the appropriate angle.



To fix two panels either side of a mullion an M6 x 60mm bolt and nut is used.



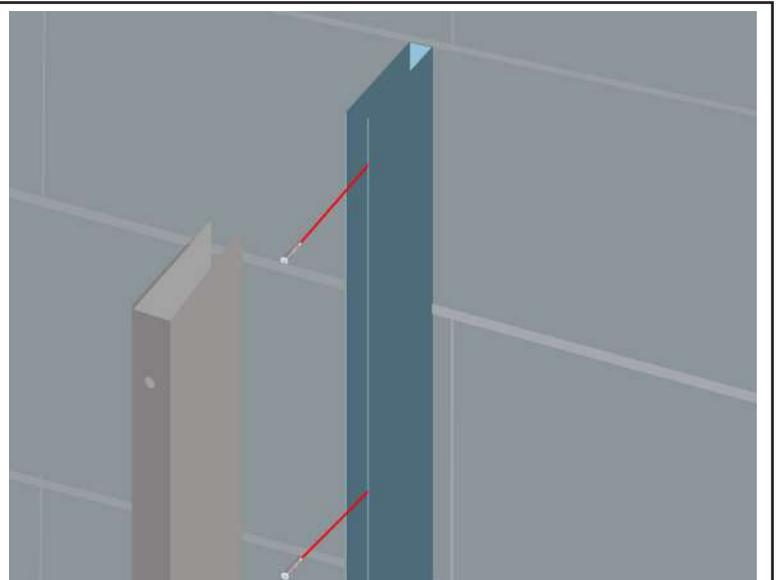
To connect a single panel to a mullion a M6 x 12mm bolt is used.



Fitting the Filler Panel

Filler panels should be measured and cut to size before spit-hit fixing to the wall.

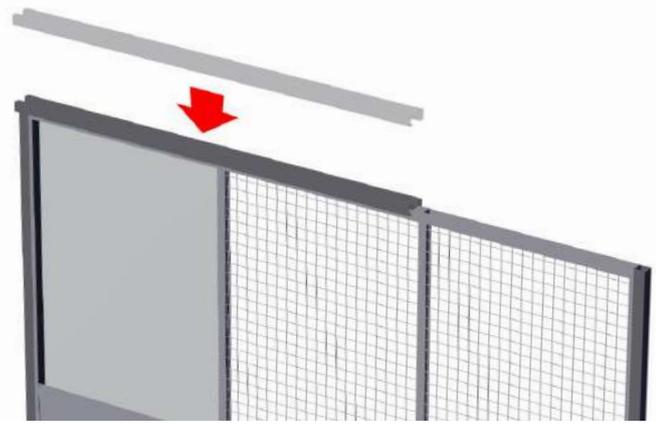
The second half of the filler is bolted to panels using M6 x 12mm bolts.



Installing Top Caps

The top caps are cut to the lengths in relation to the panels.

As shown the top cap will push fit onto the top of the panels.



51 / 75mm Top Capping

Needs to be done prior to install if fixing to ceiling.

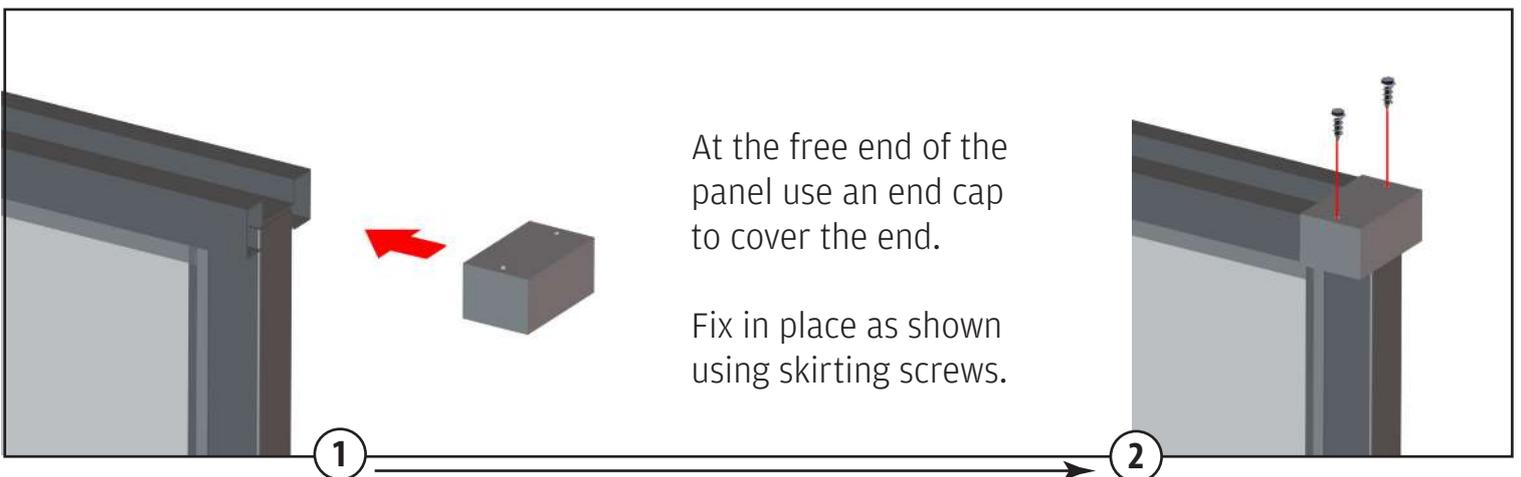
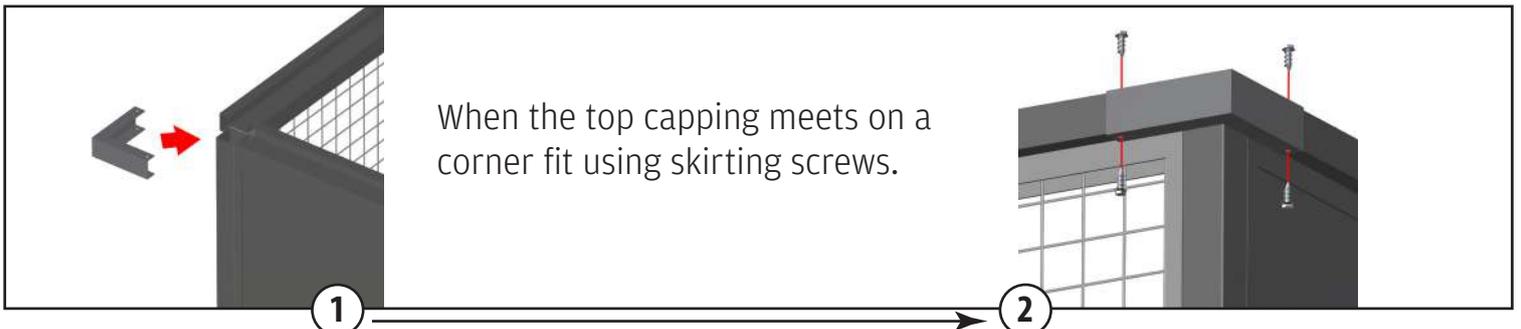
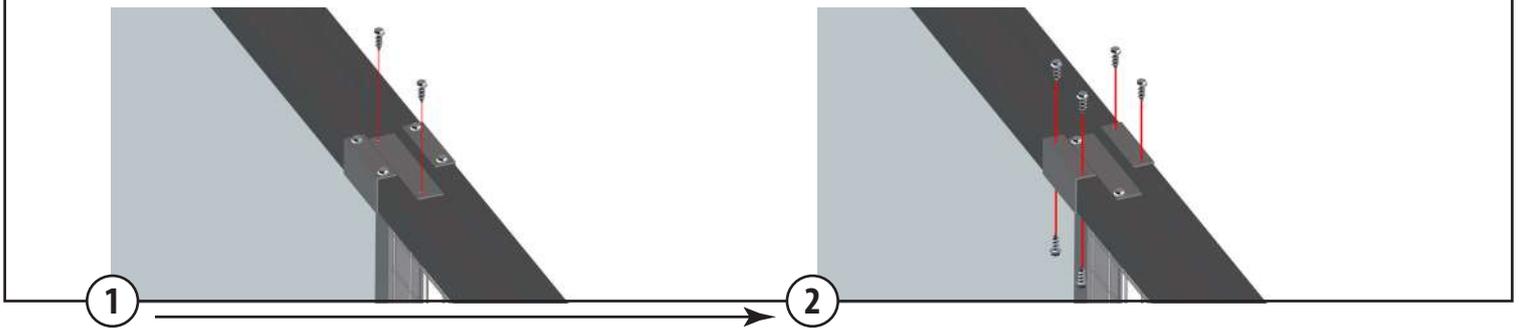
Insert top of panel into capping then panel lowered into floor-track.

If free standing capping is fixed into face of panel.



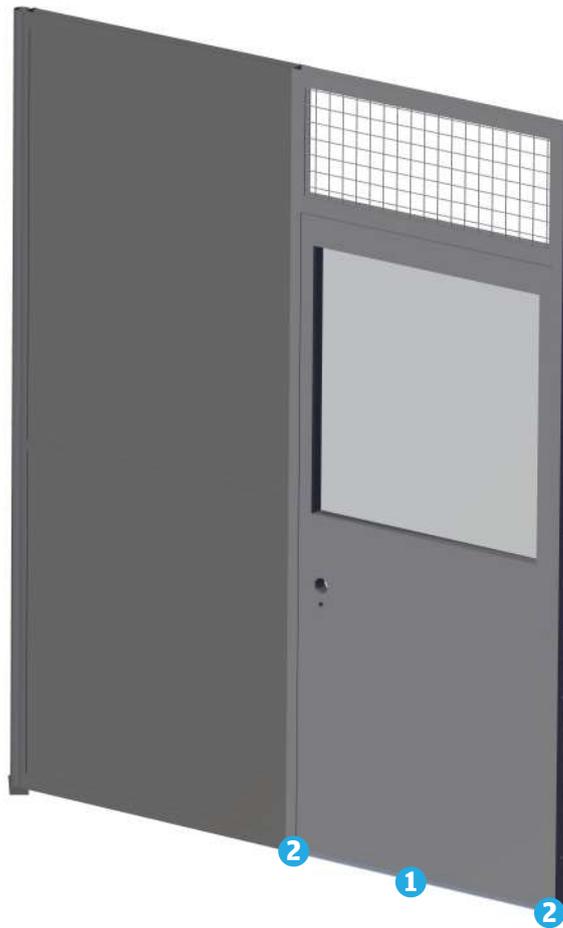
Heavy Duty Top Capping

When the top capping meets on the same line fix the parts together as shown using skirting screws.



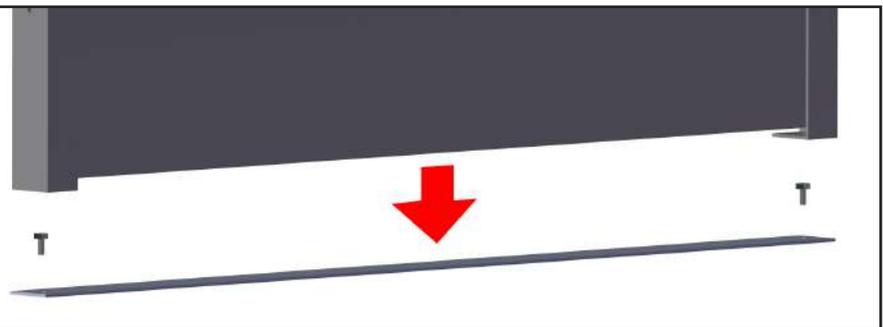
Installing Doors

Single doors usually come pre-hung into the frame.



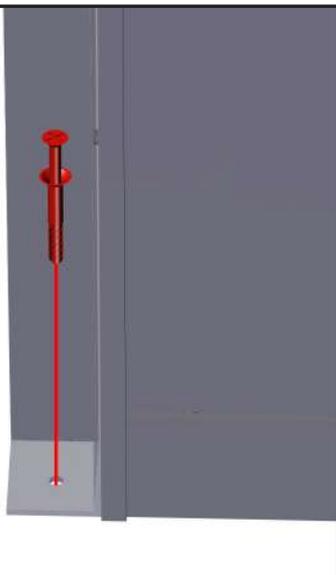
1

Before install ensure that the threshold strip is removed from the base of the Door.



2

Fix the door frame to the floor using spit-hit fixings.



Double doors will need to be fitted together with provided fixings.

Install the completed frame into the run of partitioning.

Install the over panels.

A hole will need to be drilled into the floor to accommodate the shoot bolt.

***If door closers are to be fitted, install instructions will be provided.**



Drill with hammer action



Metal Shears



Hacksaw



Tape Measure



Pliers or Mole Grips



Spirit Level



File



Screwdriver



Adjustable Spanner



Set Square

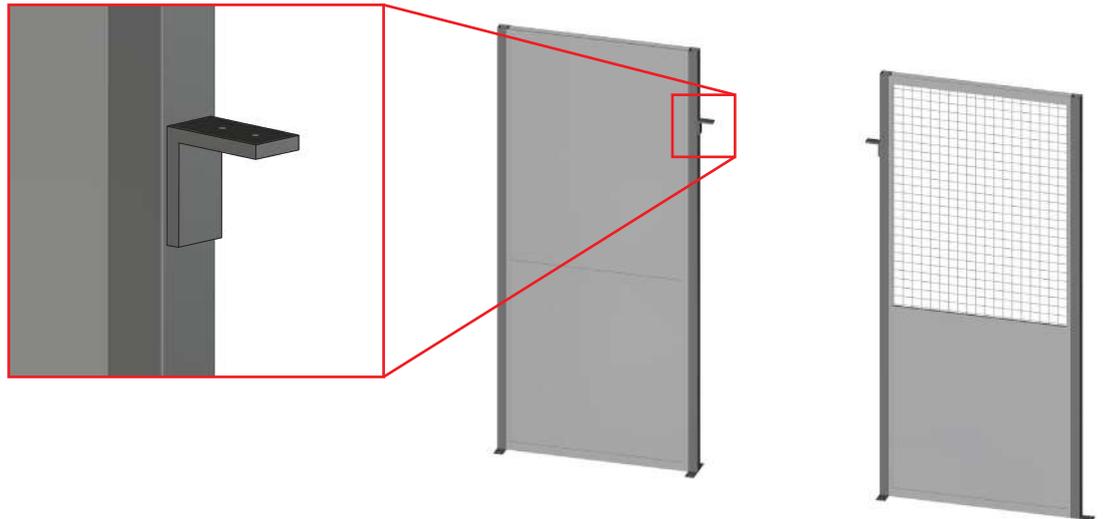


Hammer

Installing Over Panel

Once the panels are installed a gap will be left for the door.

There will be two lintel cleats welded onto the mullions situated as shown.



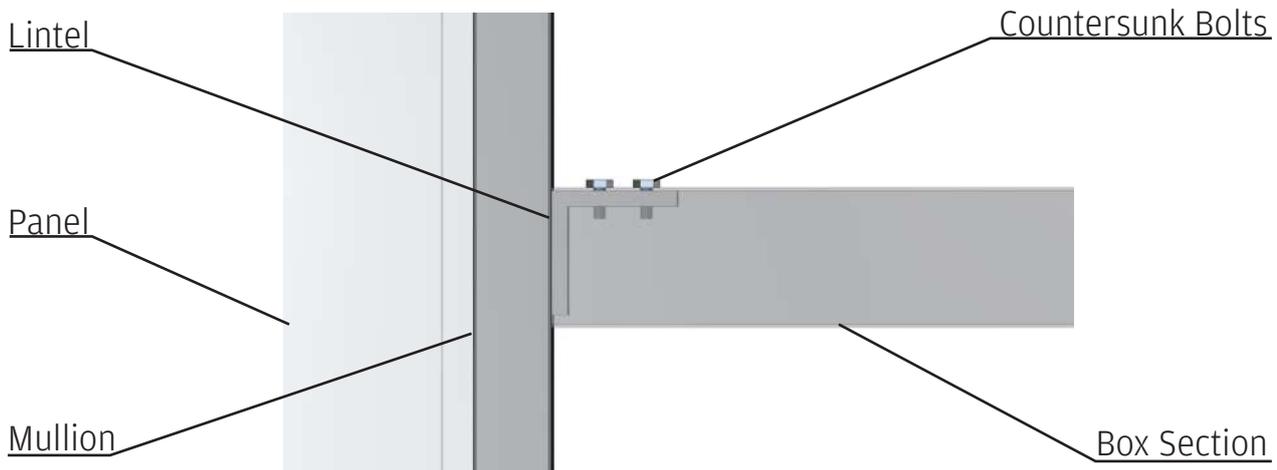
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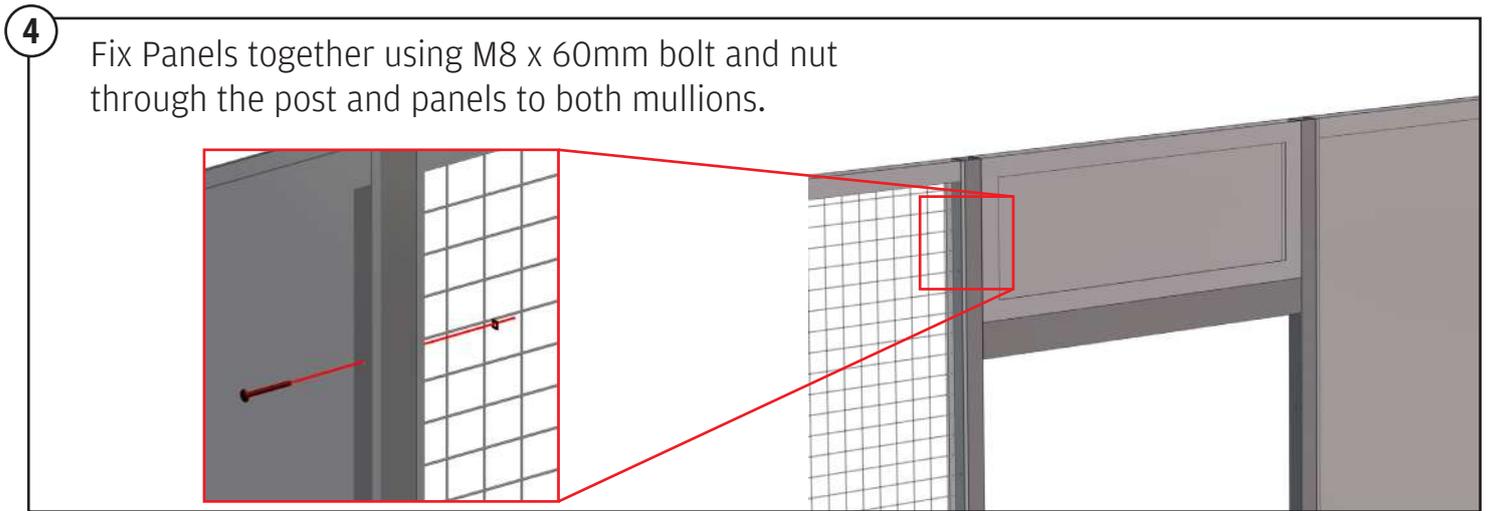
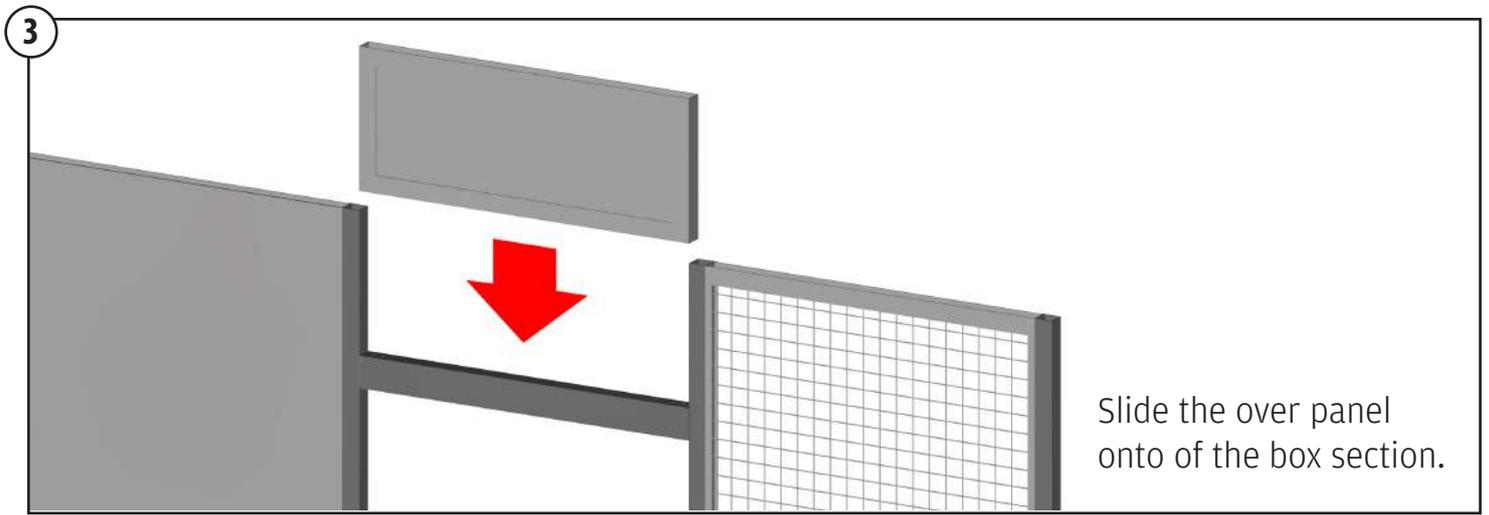
Place the box section around the lintels as shown. Align the pre-cut holes in both section.

2

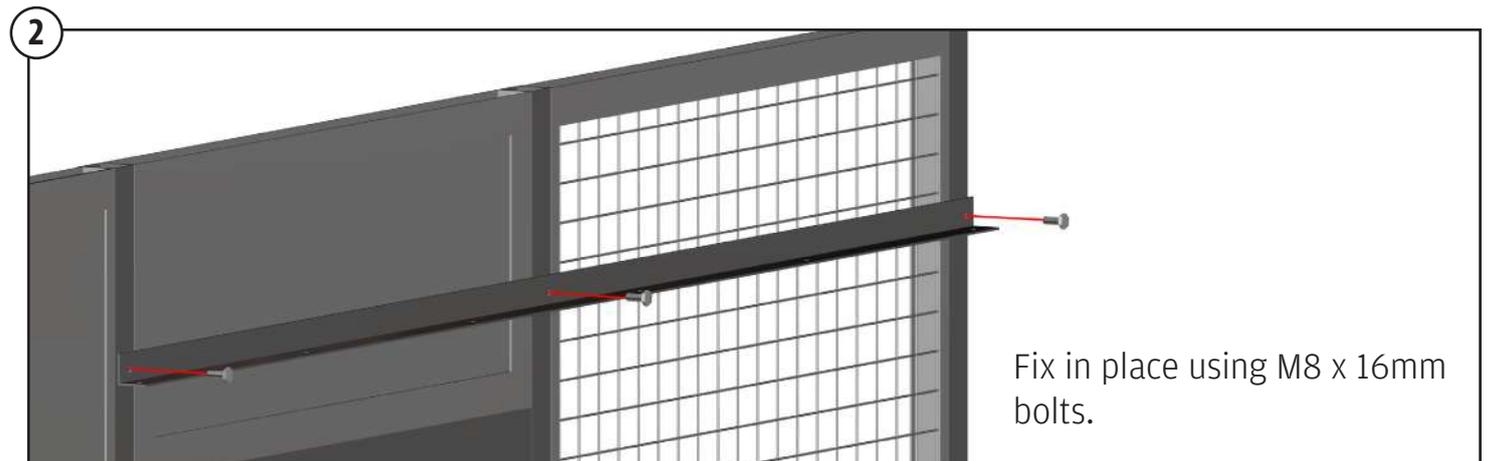
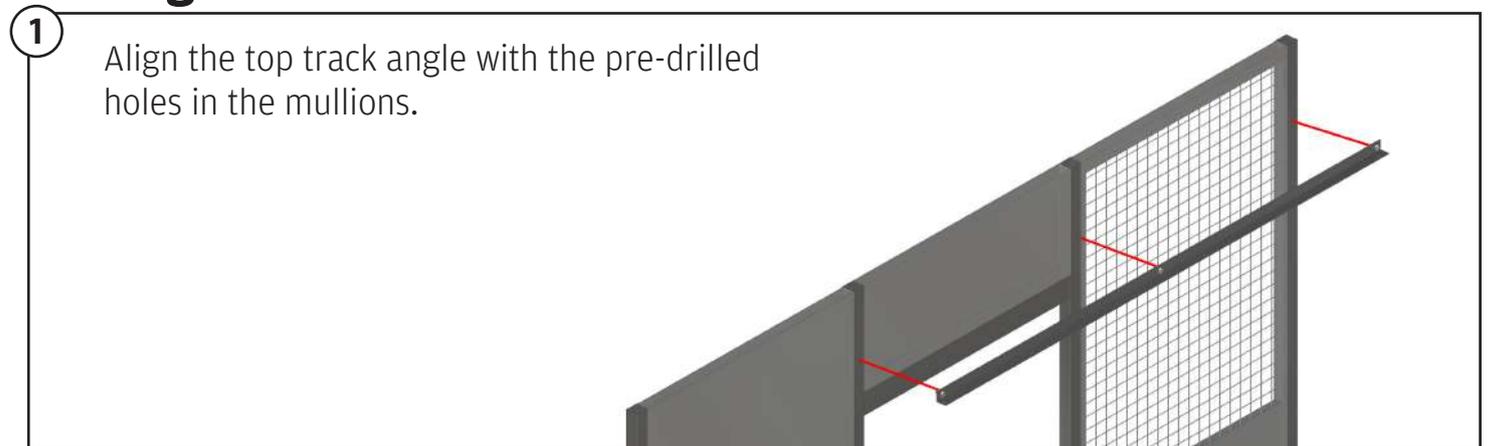
Fix the box section to the lintel as shown using a M8 x 20mm or M10 x 25mm countersunk bolt.

Repeat for both sides, tighten with an allen key



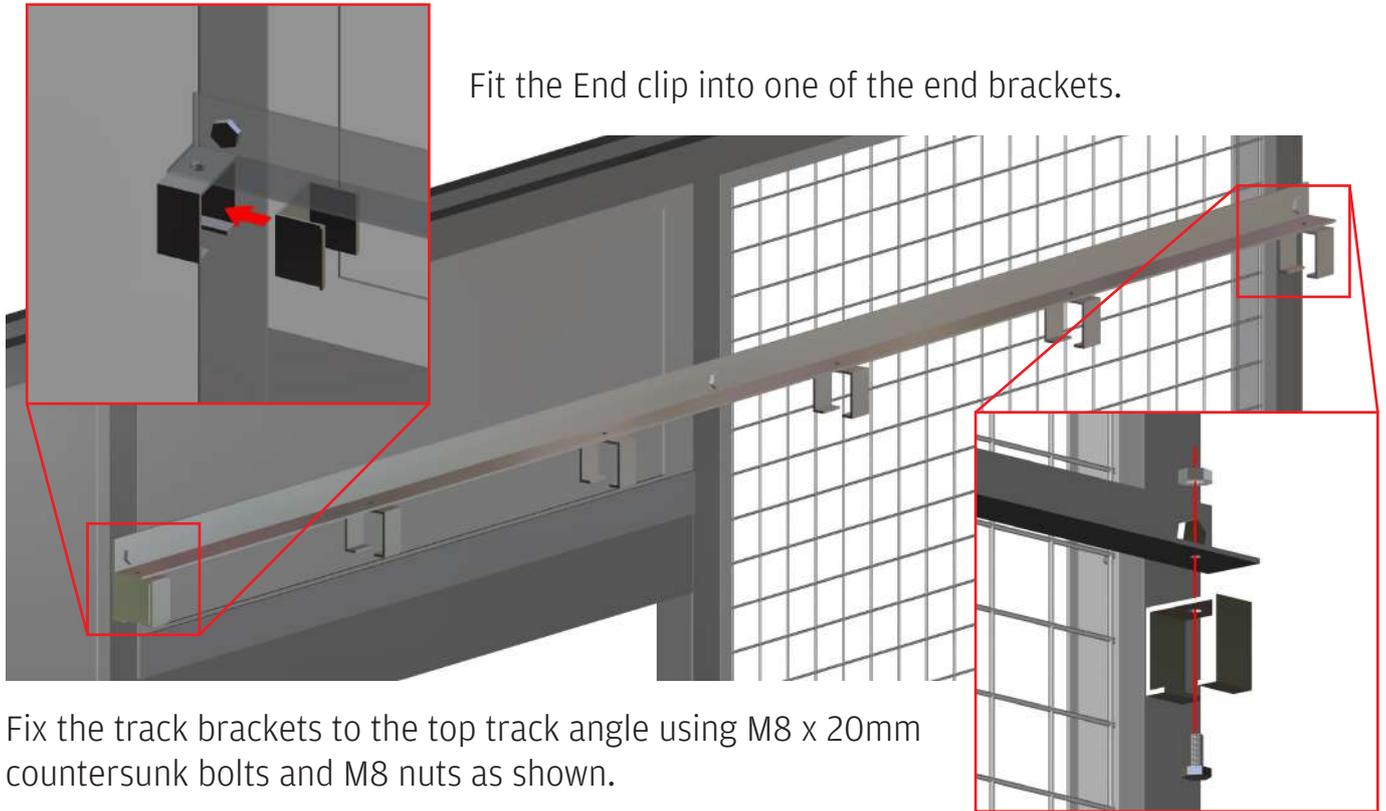


Fitting the Track



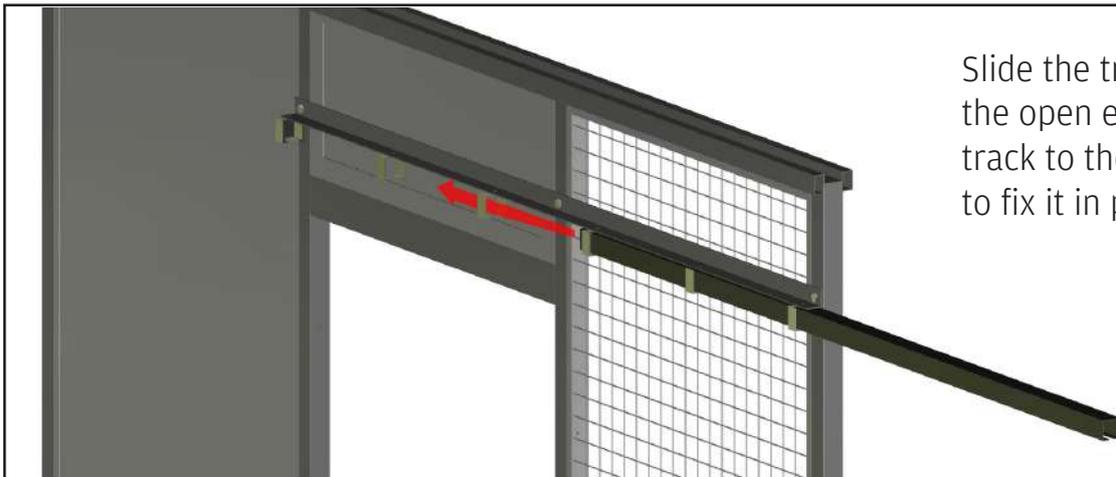
3

Fit the End clip into one of the end brackets.



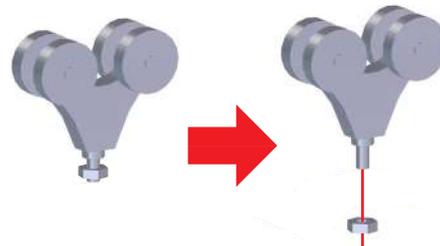
Fix the track brackets to the top track angle using M8 x 20mm countersunk bolts and M8 nuts as shown.

Slide the track in as shown at the open end. Tek screw the track to the open end bracket to fix it in place.

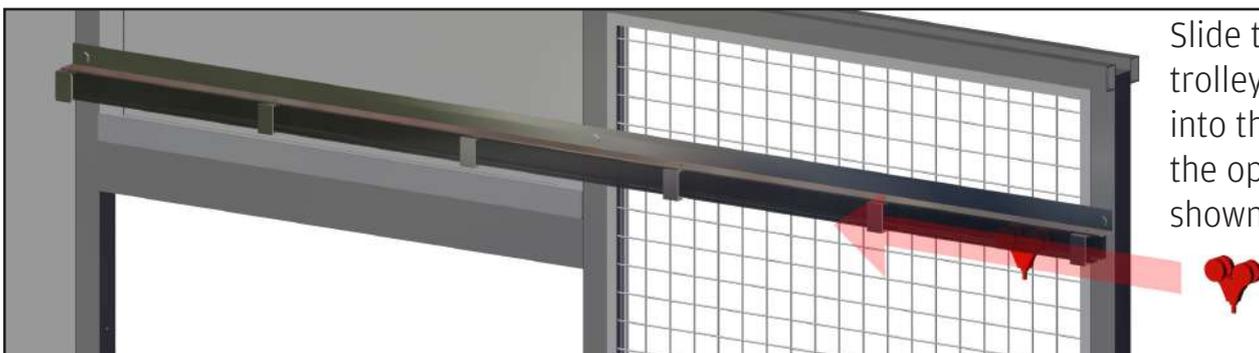


Trolley Assembly

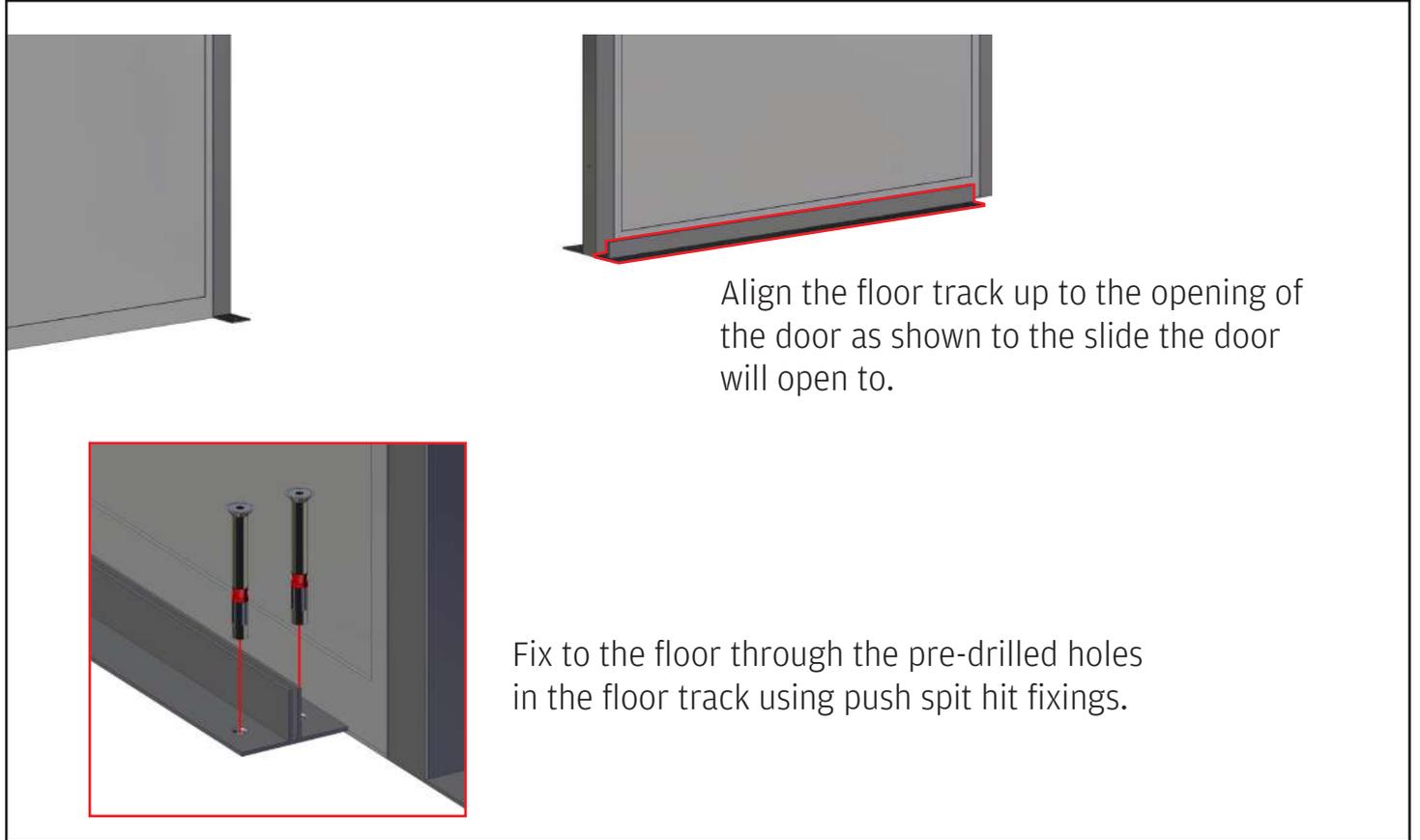
Before using the two trolleys unscrew the bolts from them.



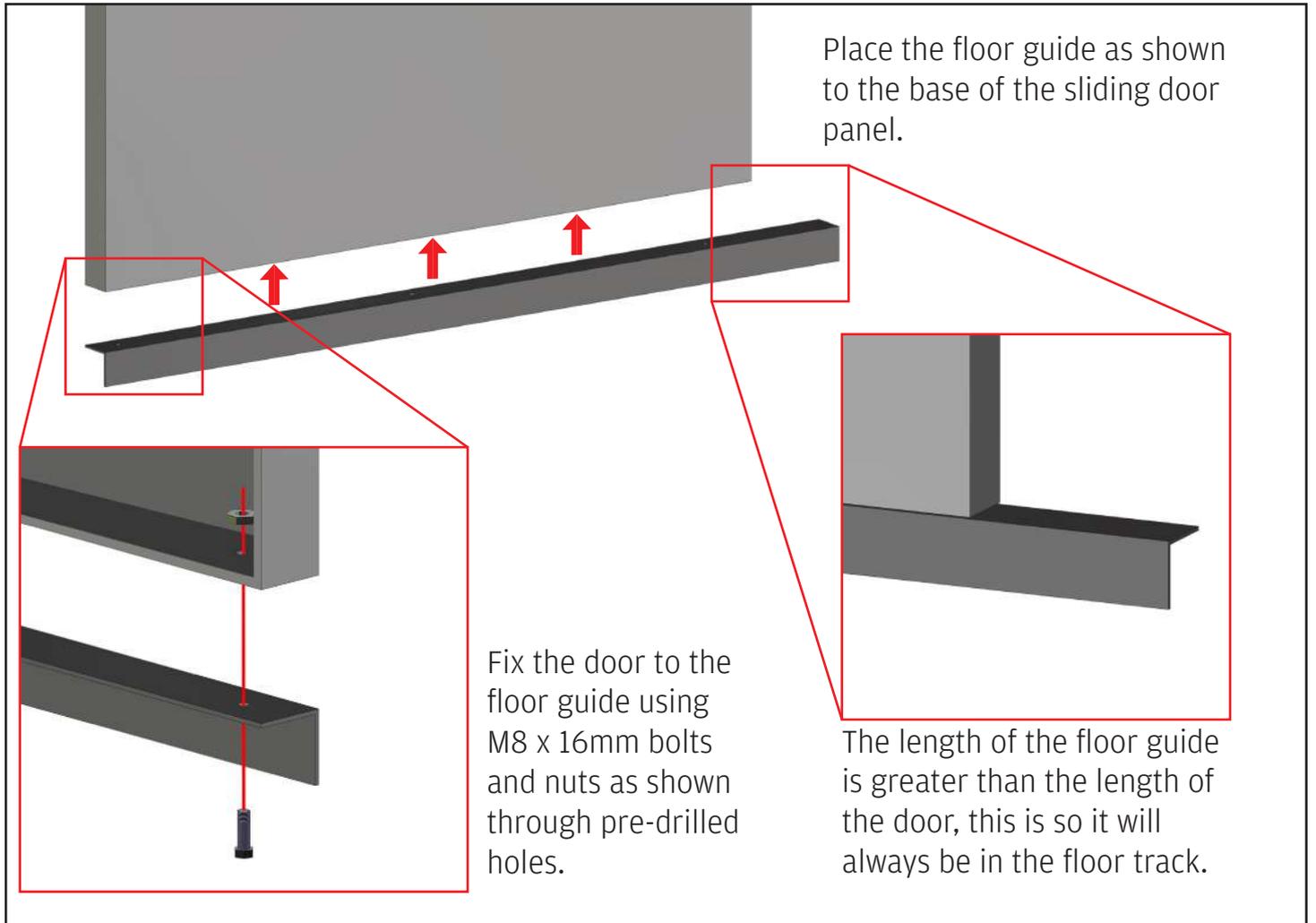
Slide the roller trolley halves into the track at the open end as shown.



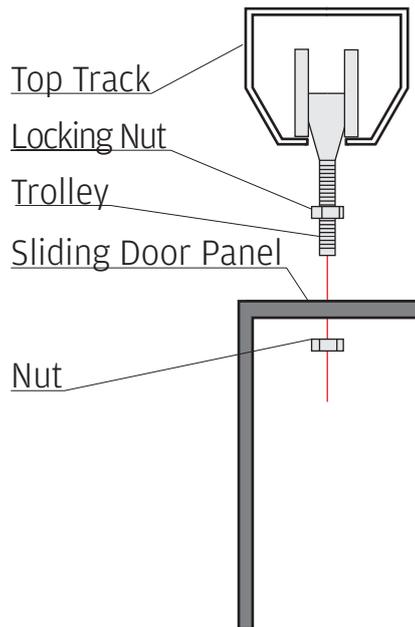
Fixing Floor Track



Fixing Floor Guide

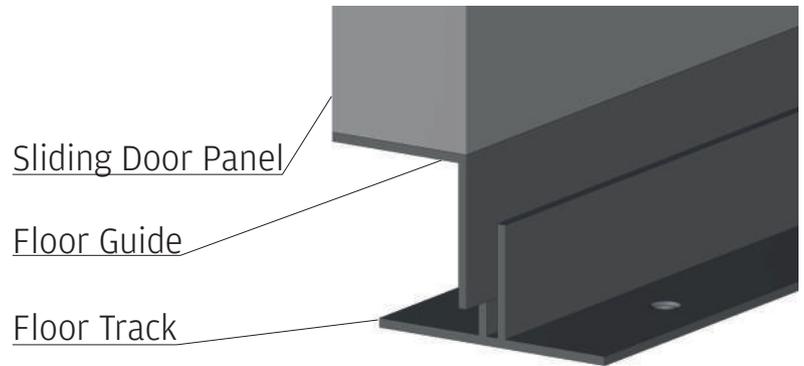


Attaching the Sliding Door



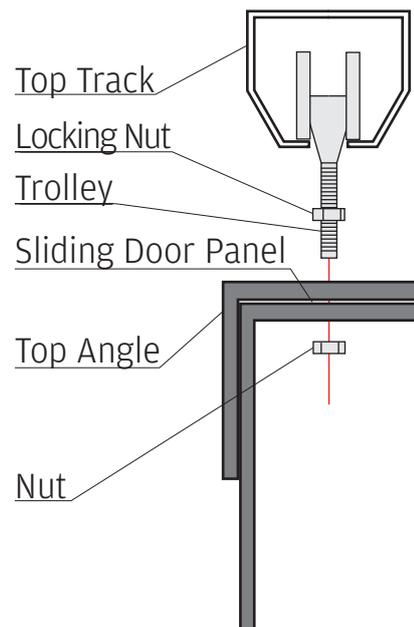
To attach the sliding door bolt the trolley halves that are in the top track through pre-drilled holes in the door. Fix in position using the bolt removed from the trolley.

Ensure that the floor track and guide align as shown.



Multiple Panel Sliding Door

If the door is constructed of multiple panels then a top angle will have to be used as shown.





Drill with hammer action



Metal Shears



Hacksaw



Tape Measure



Pliers or Mole Grips



Spirit Level



File



Screwdriver



Adjustable Spanner



Set Square

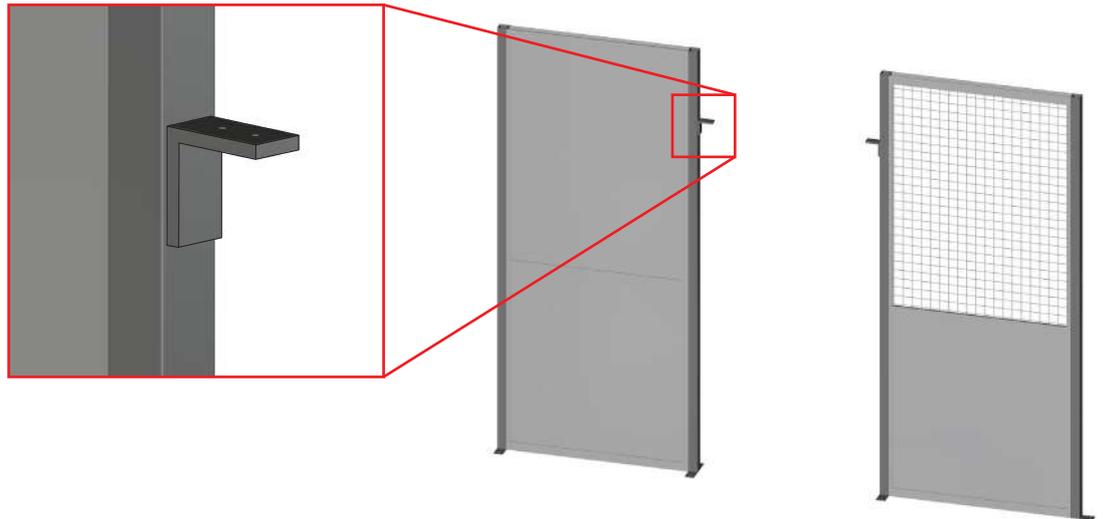


Hammer

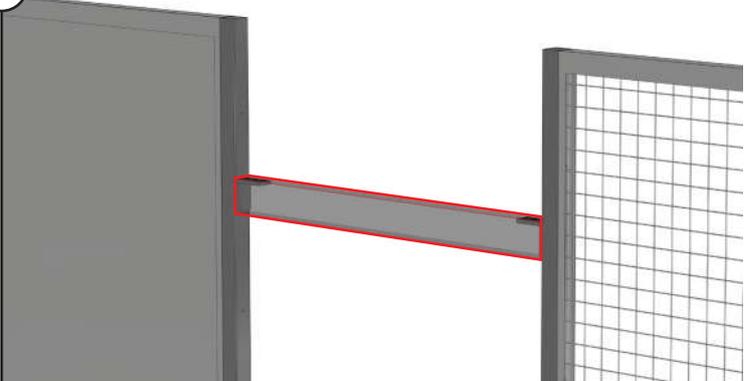
Installing Over Panel

Once the panels are installed a gap will be left for the door.

There will be two lintel cleats welded onto the mullions situated as shown.

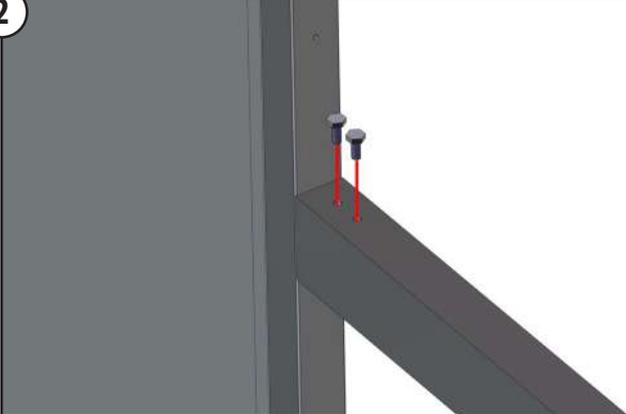


1



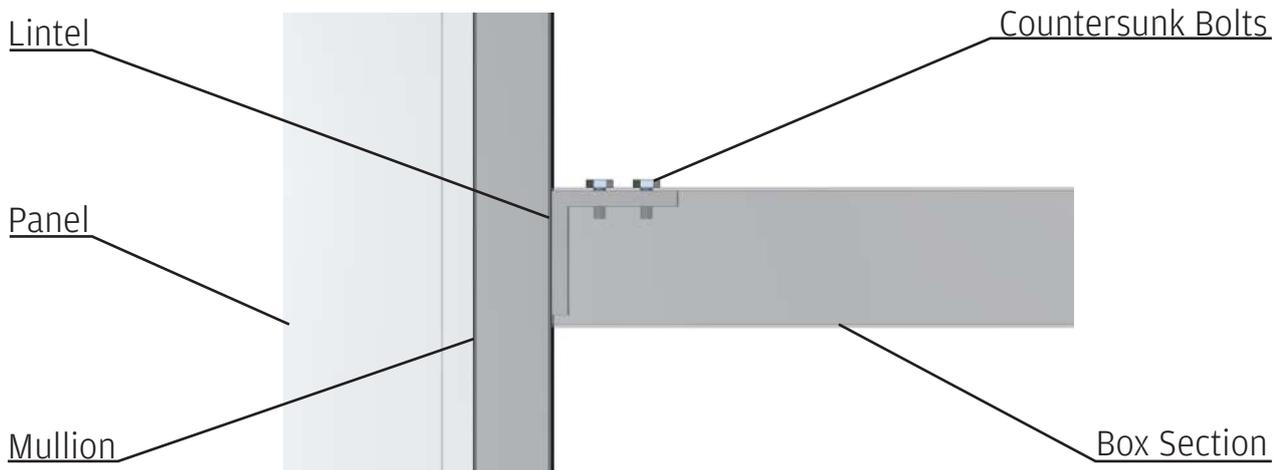
Place the box section around the lintels as shown. Align the pre-cut holes in both section.

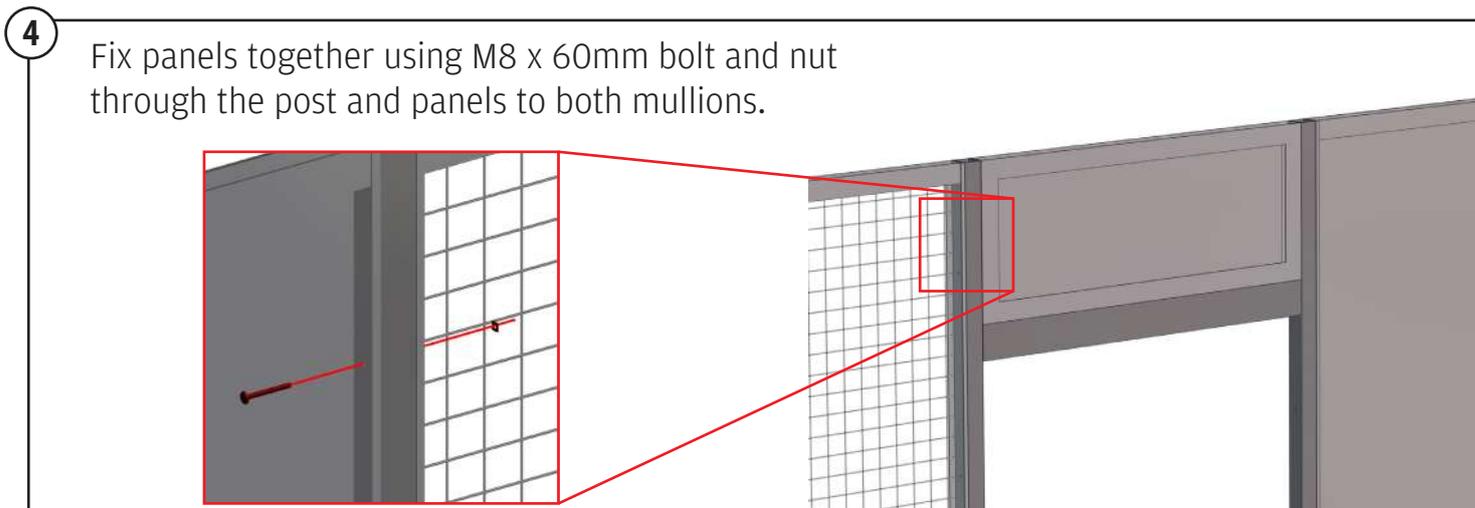
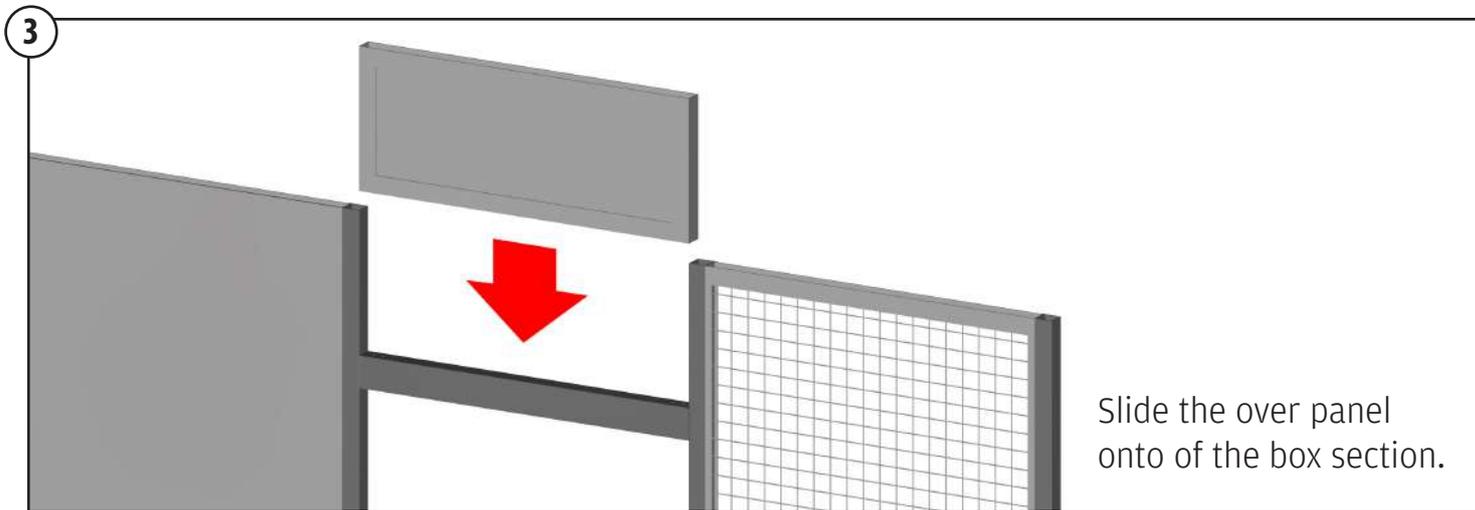
2



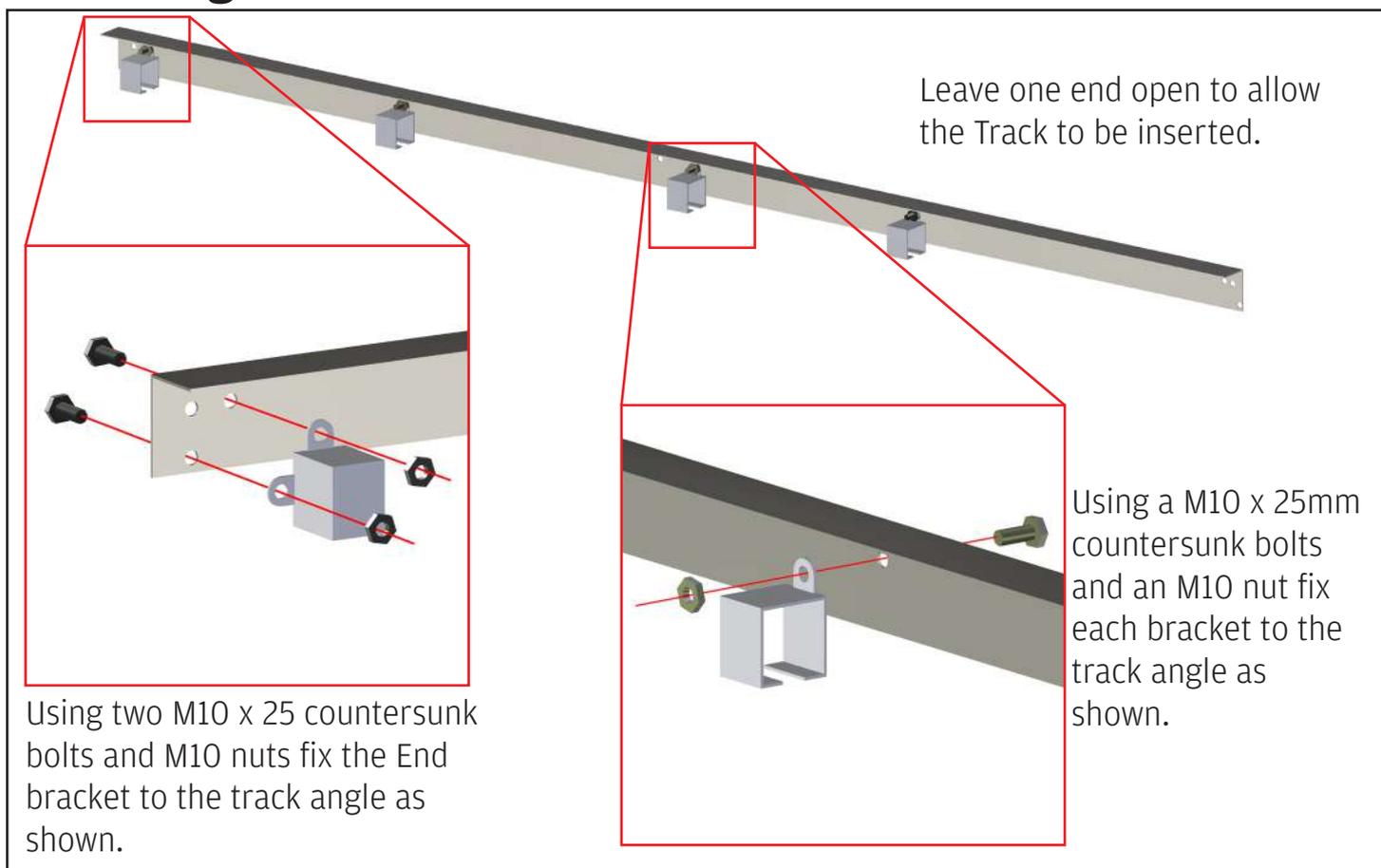
Fix the box section to the lintel as shown using a M8 x 20mm or M10 x 25mm countersunk bolt.

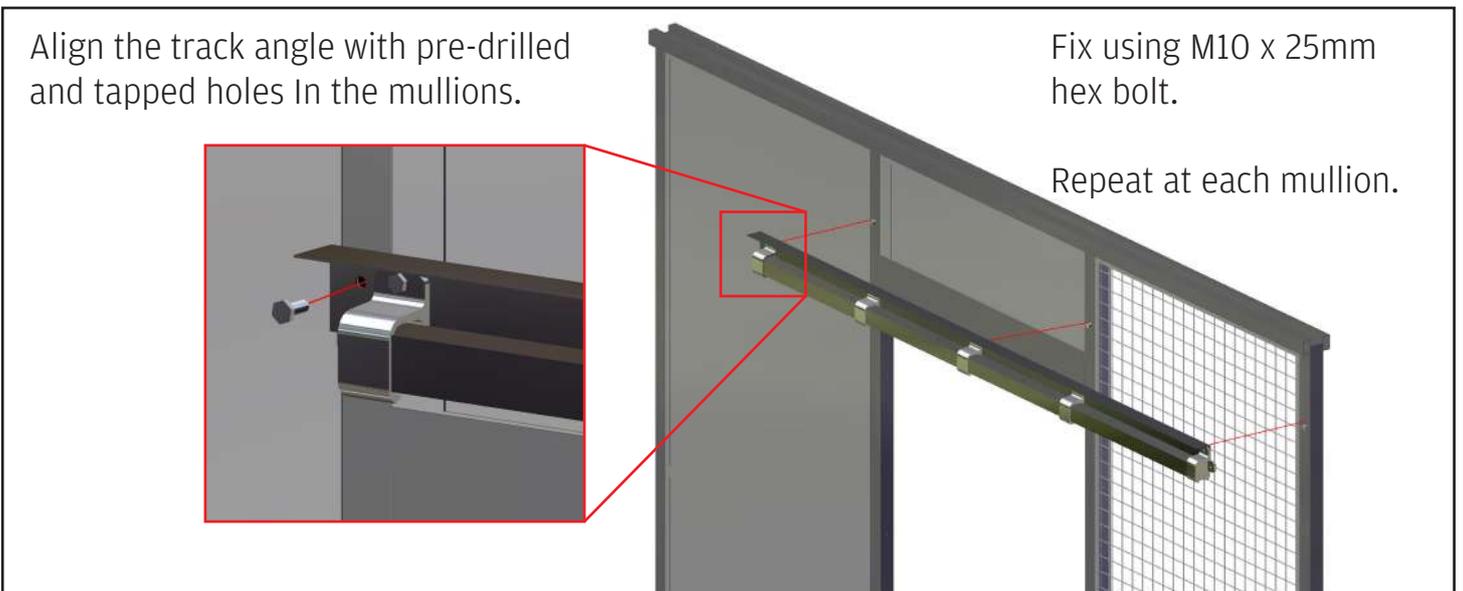
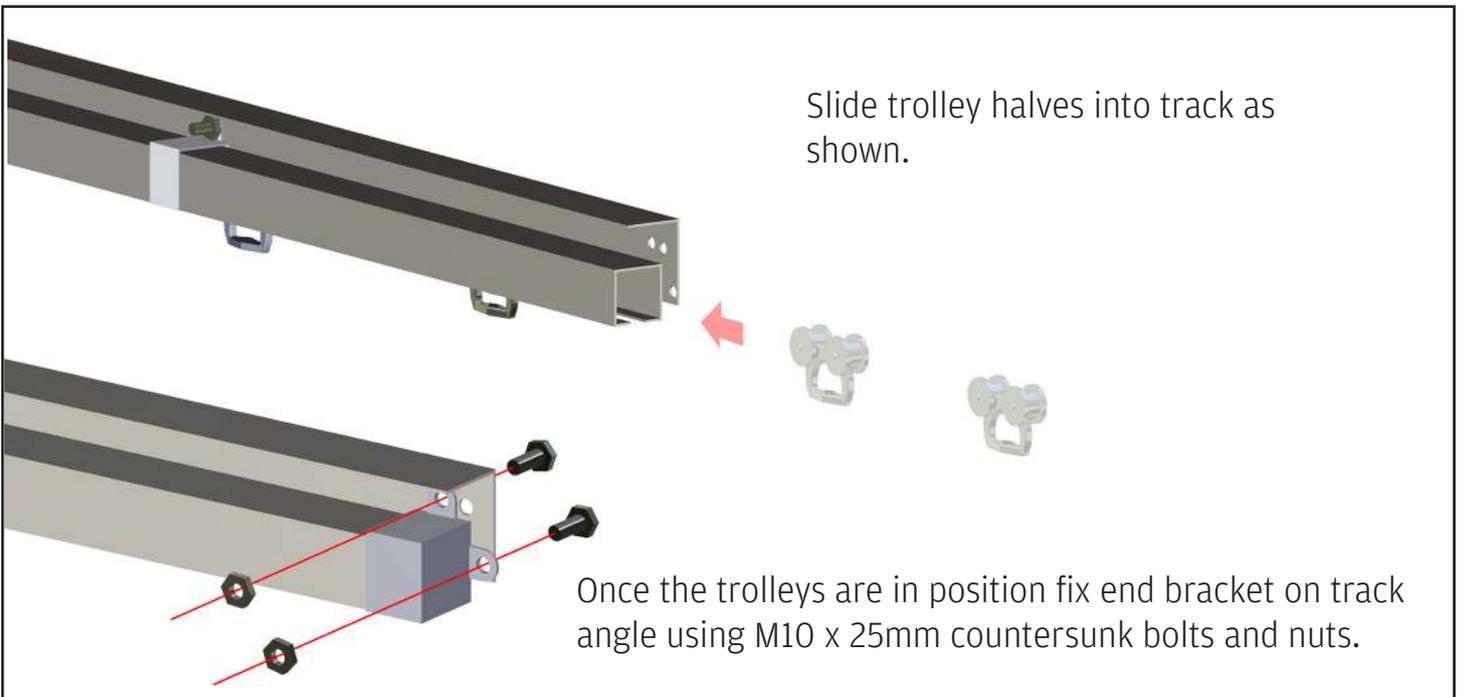
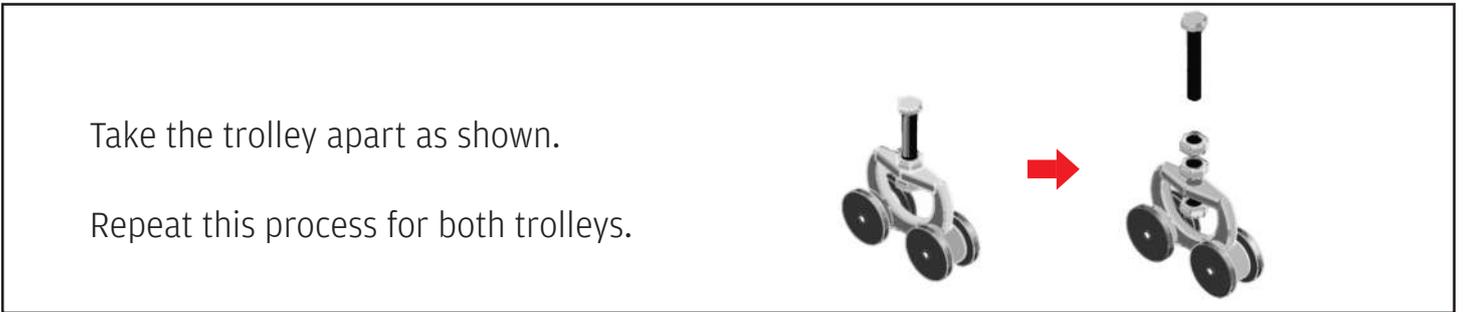
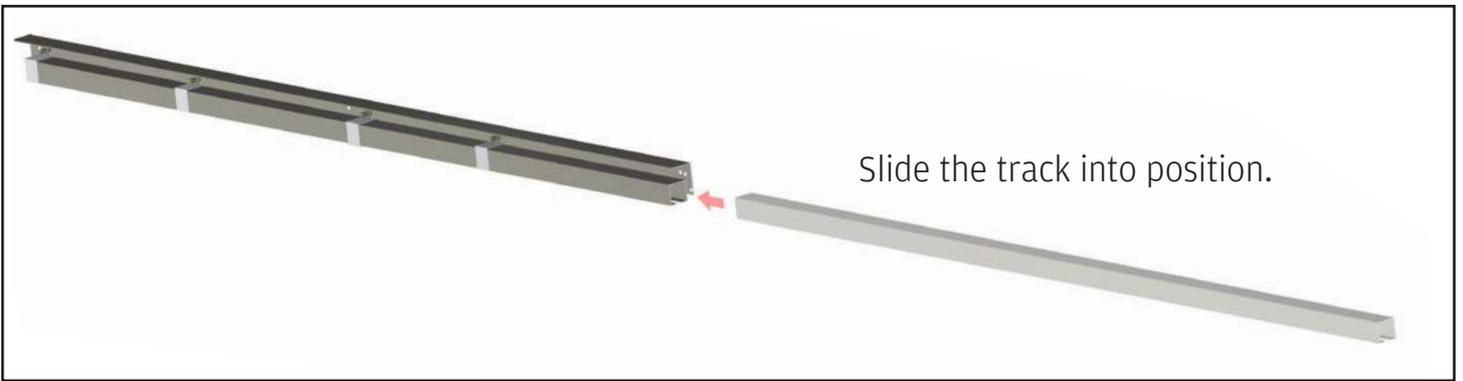
Repeat for both sides, tighten with an allen Key



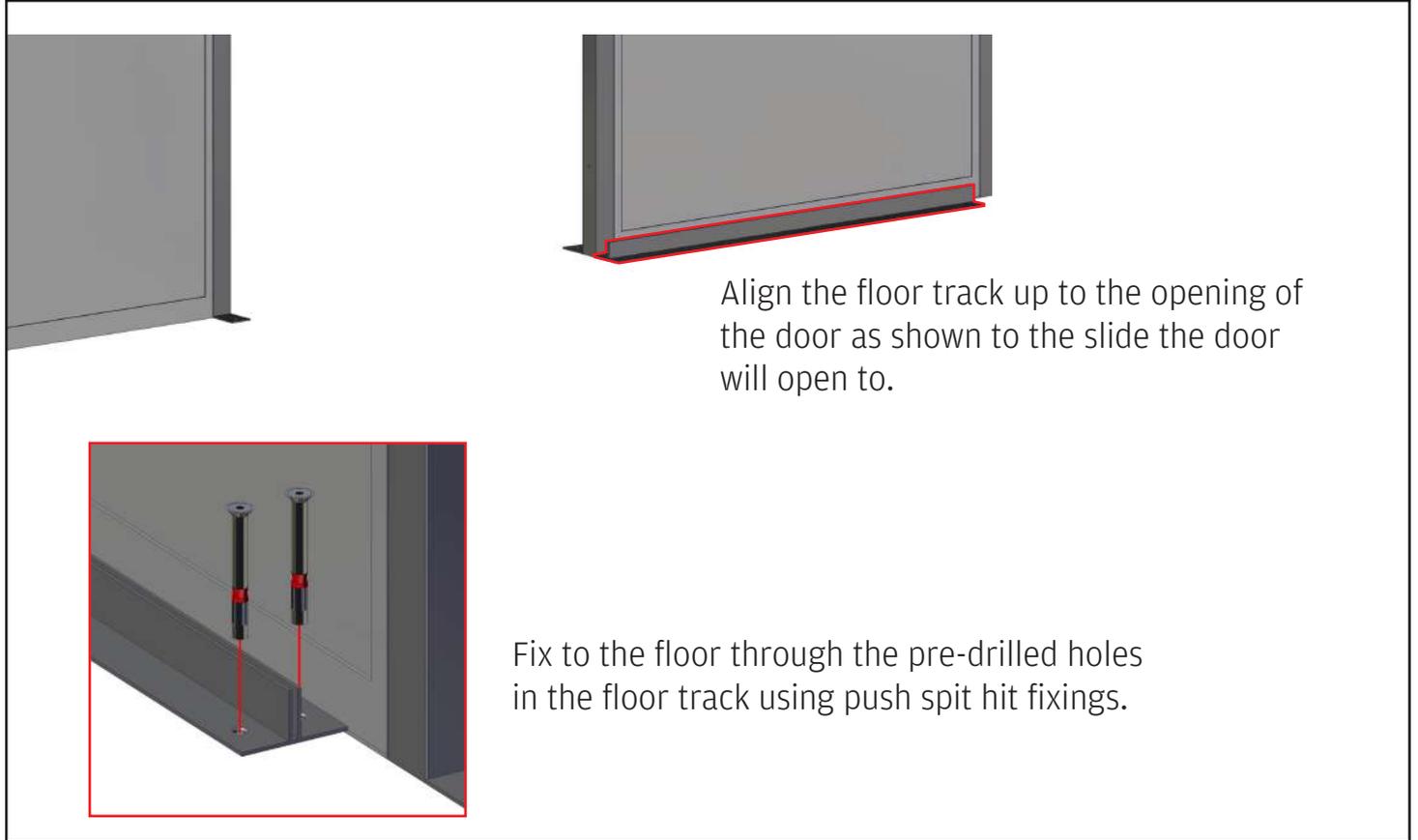


Installing the Track

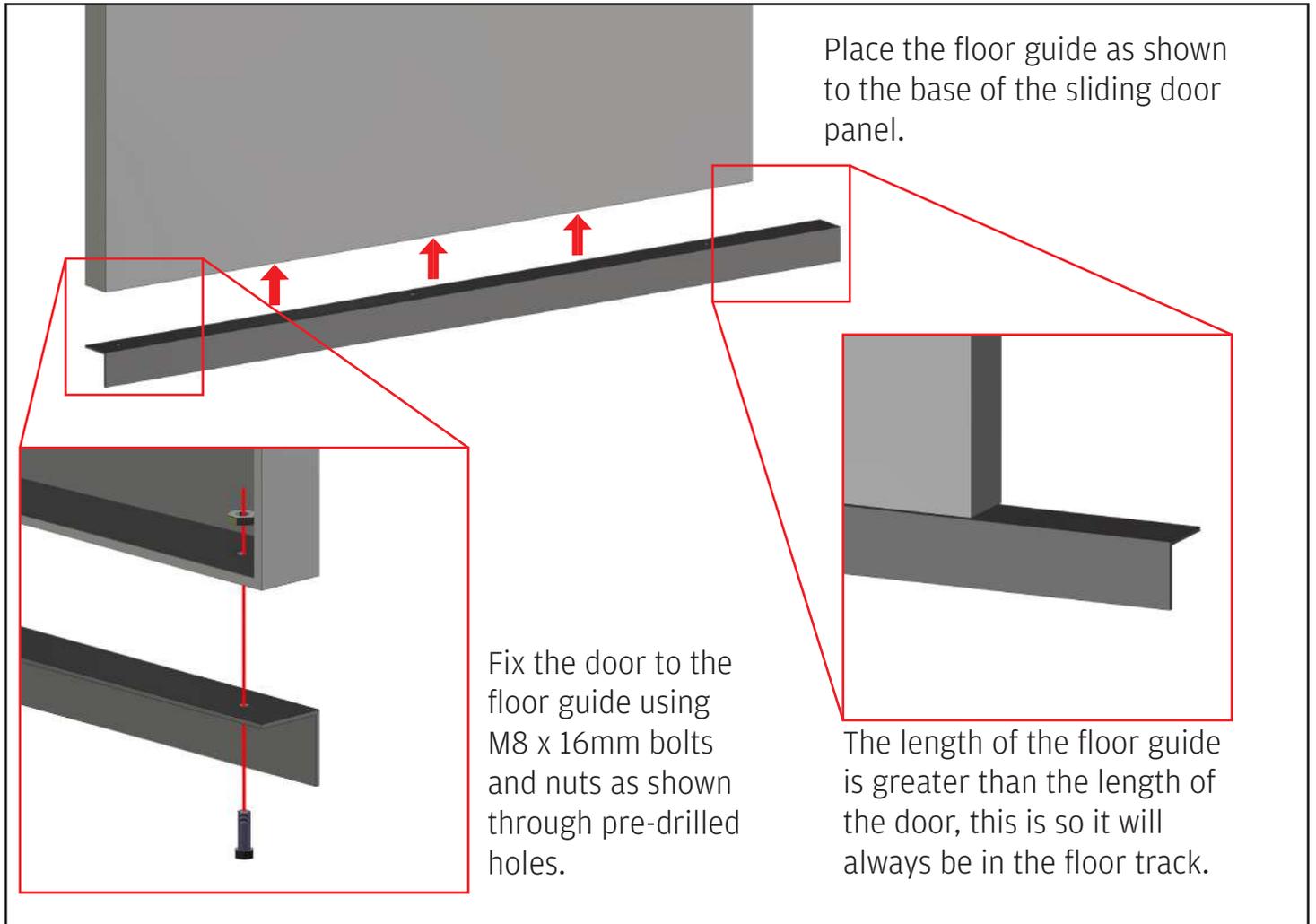




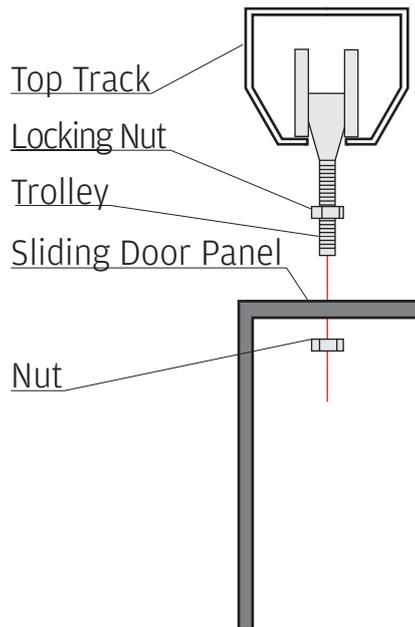
Fixing Floor Track



Fixing Floor Guide

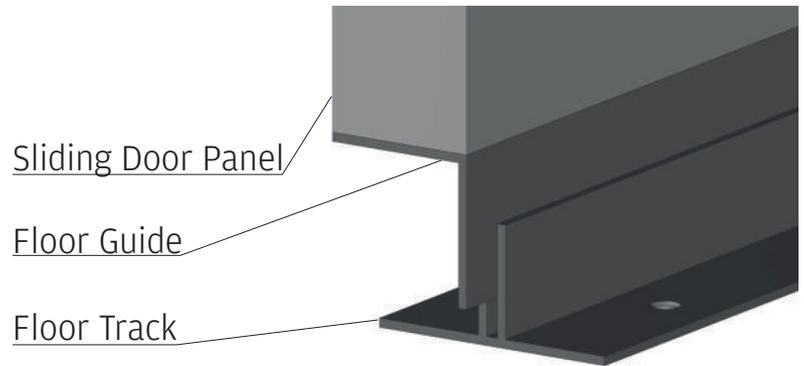


Attaching the Sliding Door



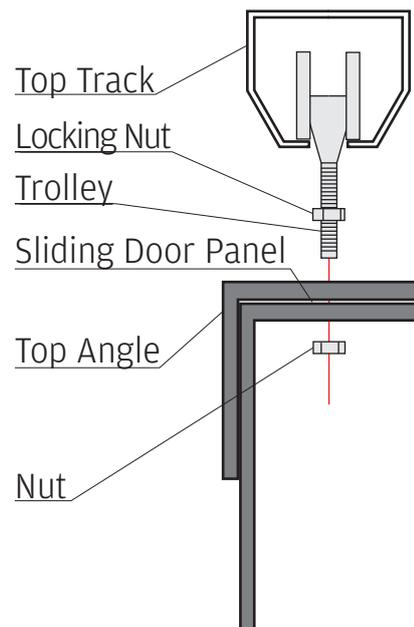
To attach the sliding door bolt the trolley halves that are in the top track through pre-drilled holes in the door. Fix in position using the bolt removed from the trolley.

Ensure that the floor track and guide align as shown.



Multiple Panel Sliding Door

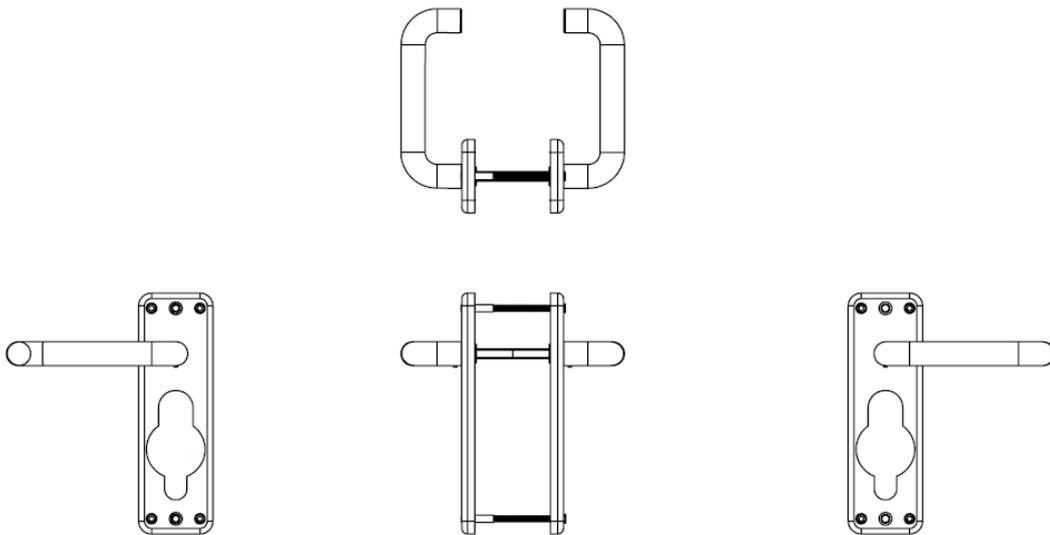
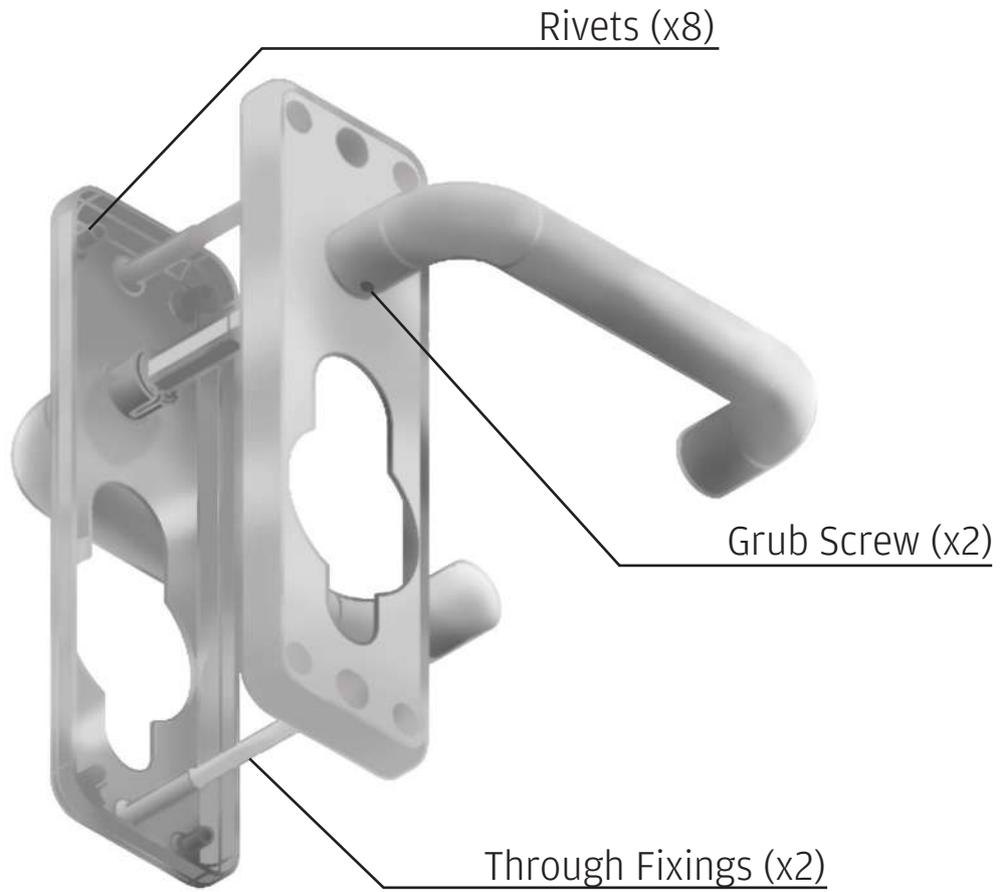
If the door is constructed of multiple panels then a top angle will have to be used as shown.



SSS Handle

All Fixings must be used when installing the SSS Handle.

- 2 x Grub Screw
- 2 x Through Fixings
- 8 x Rivets



1.0 General Cleaning:

- 1.1 Daily cleaning is recommend for the removal of dust and dirt.
- 1.2 Do not use abrasive cleaning solutions, abrasive papers or alkaline solutions.
- 1.3 Wipe down only! Must not be washed down.

2.0 Laminated & Wooden Doors:

- 2.1 Wipe down periodically using a damp cloth and mild detergent drying with a clean cloth afterwards.

3.0 Sliding Doors:

- 3.1 Lightly oil trolley hangers every 3 to 5 months.
- 3.2 Check the trolley alignment in the track every 3 to 5 months.

4.0 Locks & Hinges:

- 4.1 Duplicate keys can be ordered from Troax Lee Manufacturing Ltd.
- 4.2 Lightly oil hinged every 3 to 5 months.

5.0 Bolt Fixings:

- 5.1 Check bolted fixings to ensure they are still tight every 6 to 12 months.

6.0 Glazing:

- 6.1 Clean glass when necessary using a suitable glass cleaner only.
- 6.2 Wipe down only! Must not be washed down.

7.0 Polycarbonate

- 7.1 Cleaning must be carried out manually. Carefully brushed with a very soft brush to remove any particles. Using a lint free cloth, gently wipe (do NOT rub) with lukewarm water mixed with a mild domestic soap (i.e. Washing-Up Liquid). Rinse thoroughly with clean water and wipe dry with a very soft lint free cloth (do NOT rub)

8.0 Door Closers:

- 8.1 To be maintained as per manufacturers recommendations.

9.0 Damaged Items:

- 9.1 Contact Troax Lee Manufacturing Ltd. for a range of replacement parts, doors, panels & glazing.