Shower seat fixing guide

Use of this document

This document is intended to provide general guidance on the appropriate method of fixing the Impey shower seat to a wall. The guide covers a range of generic wall types that are commonly found in British domestic buildings. These are intended to represent typical situations that an installer may find. In circumstances where the wall construction or substrate material differ from these, it is considered outside of the scope of this guide.

In all cases this product must be installed by a competent person. Impey Showers Ltd takes no responsibility for the selection, use or correct installation of the fixing.
It is entirely the installers responsibility to ensure the Slimfold seat or bench is installed safely and correctly.

Wall types covered

Masonry

- Concrete block - medium density
- Concrete block - lightweight/aerated block
- Solid brick

Concrete

- Solid concrete
- Aerated concrete

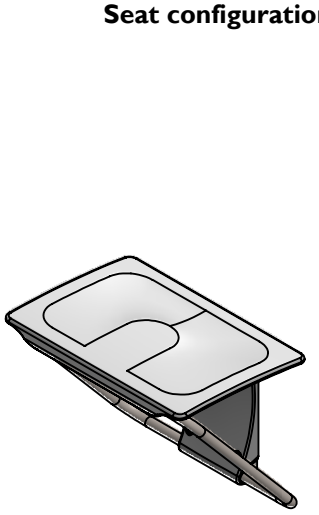
Partition

- Timber framed stud wall with plasterboard

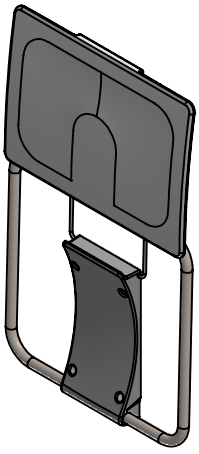
Fixings

Impey recommends the use of Fischer Fixings. The guide features specific fixings made by Fischer and where possible their appropriate part numbers. Fischer extensively test their products and the test data has formed the basis of this guide. More information and technical data can be found on their website: www.fischer.co.uk
Any fixings specified are rated to a maximum safe user load of 200Kg, for higher or lower loads (max 300Kg), in certain wall types a different fixing may be required. Consult Fischer Fixings for more detailed information.

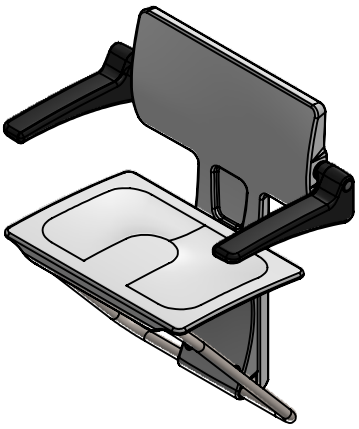
Seat configurations



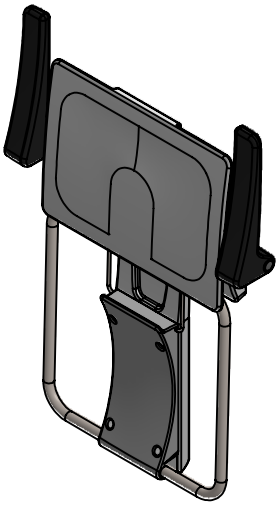
Bench
(lowered)



Bench
(raised)



Seat with Backrest
(seat lowered)



Seat with Backrest
(seat raised)

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Overview

Wall Type	Suitable Fixing			
	Plug type	Screw type	Screw Length Calculation	
			Bench	Seat (with backrest)
Cast Concrete[1]	Fischer SX8x65 (part no. 024828)	M6 Stainless coach screw	7.5mm + non loadbearing thickness[5] + 80mm + 5mm	41.5mm + non loadbearing thickness[5] + 80mm + 5mm
Solid Brick[2]	Fischer SX8x65 (part no. 024828)	M6 Stainless coach screw	7.5mm + non loadbearing thickness[5] + 80mm + 5mm	41.5mm + non loadbearing thickness[5] + 80mm + 5mm
Concrete block medium density[3]	Fischer SX8x65 (part no. 024828)	M6 Stainless coach screw	7.5mm + non loadbearing thickness[5] + 80mm + 5mm	41.5mm + non loadbearing thickness[5] + 80mm + 5mm
Aerated Concrete[4]	Fischer FPX M8-I6 (part no. 519021)	M6 Stainless Pozi Pan - Metric thread	7.5mm + non loadbearing thickness[5] + 10mm	41.5mm + non loadbearing thickness[5] + 10mm
18mm Plywood reinforced stud wall	n/a	M6 Stainless coach screw	7.5mm + non loadbearing thickness[5] + 18mm + 5mm	41.5mm + non loadbearing thickness[5] + 18mm + 5mm

[1] ≥C20/25
C 20/25 means: C = Concrete, 20 = Compressive strength of cylinder (150 diam, 300 height)
25 = Compressive strength of cube 150mm in N/mm2
source: Fischer Fixings

[2] ≥Mz 12
Mz 12 = solid brick, compressive strength 12N/mm2, bulk density 1.8N/mm2, format ≥ 240/175/113mm(l,w,h).
source: http://www.motek.no/mediabank/store/14510/HUS-6---HUS-S-6-Screw-anchor.pdf

[3] Medium density block ≥ 7.3N/mm2 compressive strength.
source: Fischer Fixings

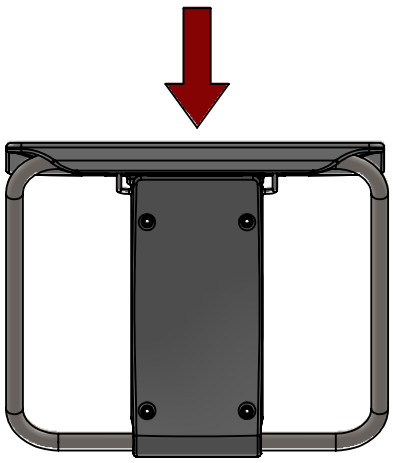
[4] Aerated concrete (AAC) with compressive strength class AAC 2 to AAC 7
Aerated concrete wall and ceiling boards with compressive strength 3.3 to 4.4 N/mm2
Planked aerated concrete masonry, e.g. plastered, tiled, papered etc.

[5]Non loadbearing thickness refers to any substrate layered on top of the load bearing wall
- for example plaster, tile adhesive, tiles.

Maximum safe user load for the specified fixings in this document is 200kg

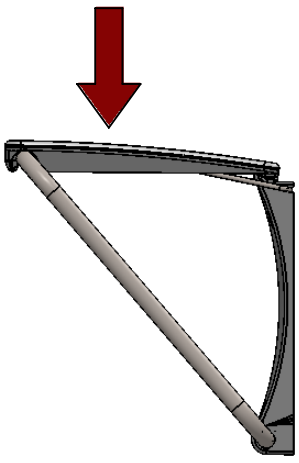
The seat is rated to a maximum safe user load of 300Kg - for information on fixings suitable for this load, we recommend consulting a fixings specialist such as Fischer Fixings.

200 kg



Front view

200 kg



Side view

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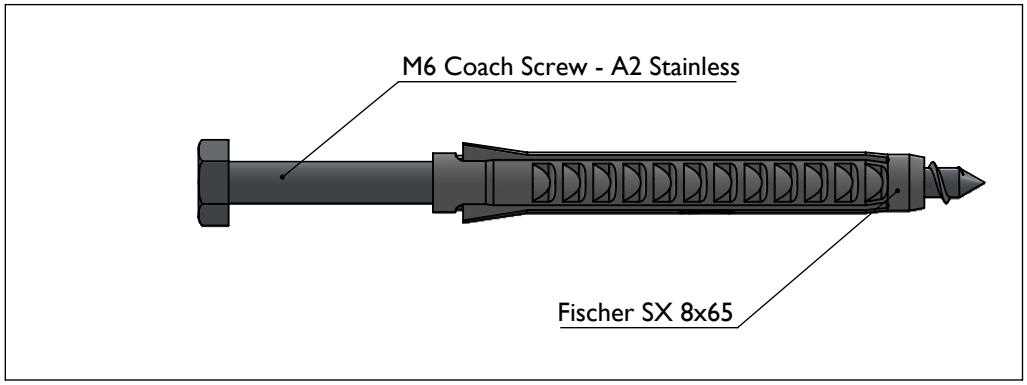
Block wall - concrete or brick



Fixing example:
Bench seat fixed to concrete block wall with render and tiles

Suitable fixings
Fischer SX 8x65 expansion plug (code: 024828)
M6 Stainless steel coach screw (10mm hex head)

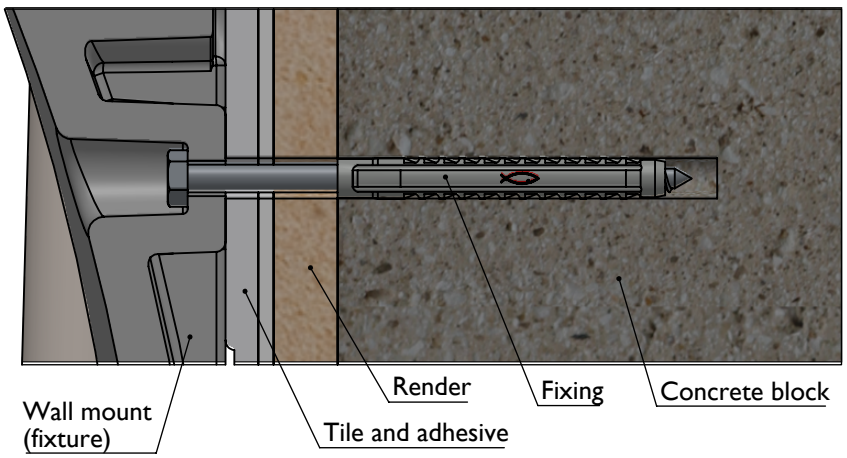
Hole diameter into wall
8mm

Hole depth
100mm - approximately equal to screw length

Considerations
Screw length should allow for 5mm to protrude from the end of the plug. In this example the screw is 100mm long.

The screw should be long enough to pass through the fixture and thickness of tiles/plaster etc. A longer screw will be required when fitting a seat with a backrest due to the increased fixture thickness. The backrest adds 34mm of extra thickness.

The plug should be pushed in up to the load bearing substrate (block work). This example has 22mm of-non load bearing material. Tiles and plaster are **not** classified load bearing, the fixing must be in the block work.



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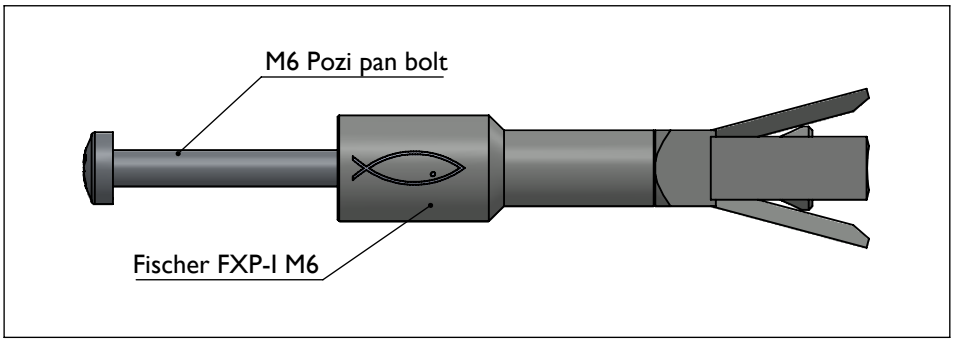
Aircrete wall



Fixing example:
Bench seat fixed to aircrete block wall with render and tiles.

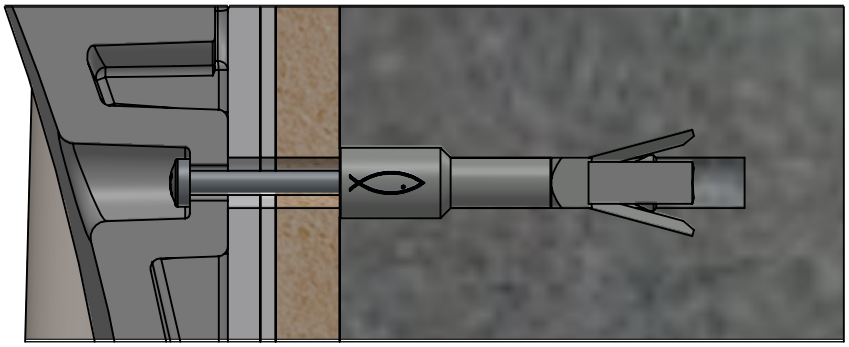
Suitable fixings
Fischer FPX-I M6 (part no. 519021)

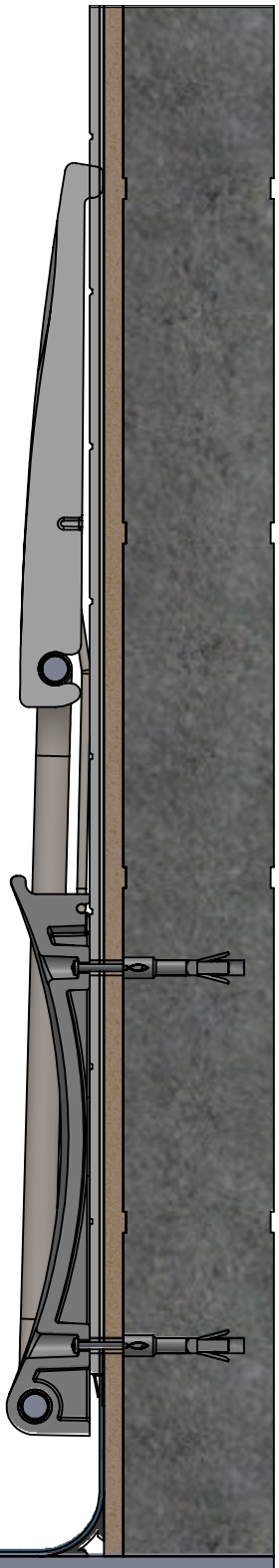
Drill hole diameter into wall
10mm

Clearance hole diameter through tiles
14mm

Hole depth
103mm approx (dependant on substrate thickness)

Considerations
Ensure bolt is sufficient length to allow a minimum of 10mm thread into the wall fixing, taking into account non load bearing substrates.
Follow installation guidelines from Fischer fixings.





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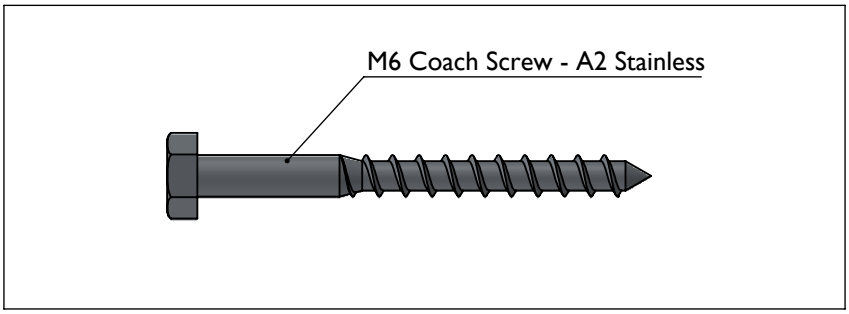
Timber Stud Wall



Fixing example:
Timber stud wall with 18mm plywood reinforcement

Suitable fixings
M6 Stainless steel coach screw (10mm hex head)

Pilot hole diameter into wall
4mm

Clearance hole diameter through tiles
6.5mm

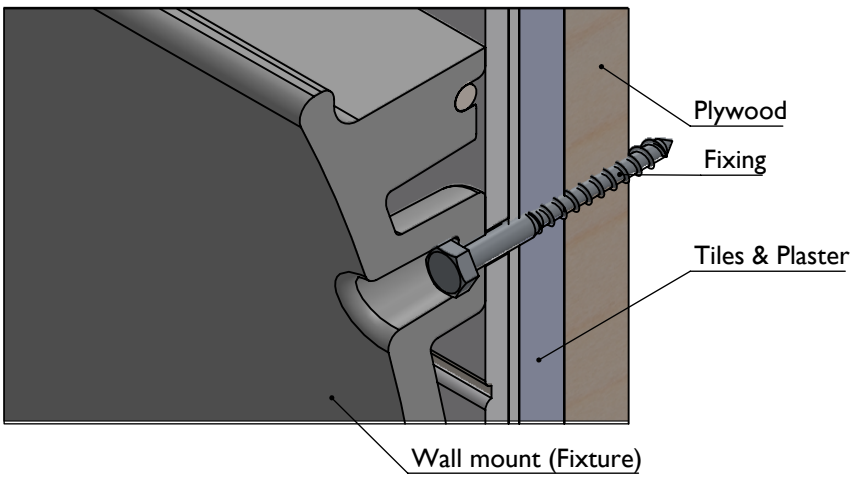
Hole depth
40mm approx (dependant on substrate thickness)

Considerations

The wall **must** be suitably reinforced with 18mm plywood, fixing into the plasterboard does not offer sufficient load bearing strength. For an example of stud wall reinforcement see the appropriate page in this document.

The screw should be long enough to pass through the fixture and fully penetrate the plywood. In this example the screw is 60mm long. A longer screw will be required when fitting a seat with a backrest due to the increased fixture thickness. The backrest adds 34mm of extra thickness.

Non-load bearing substrates such as tiles and plaster should be drilled to a clearance hole diameter. This allows the screw to pass through without the thread catching in order to prevent tile damage.



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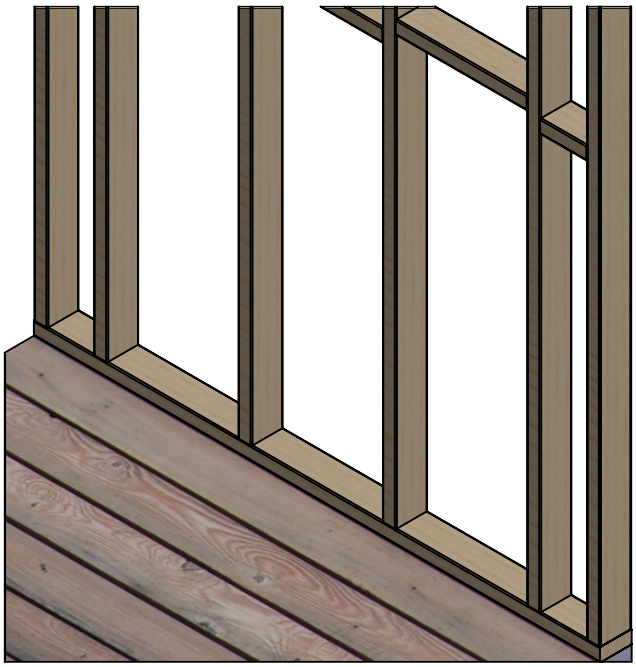
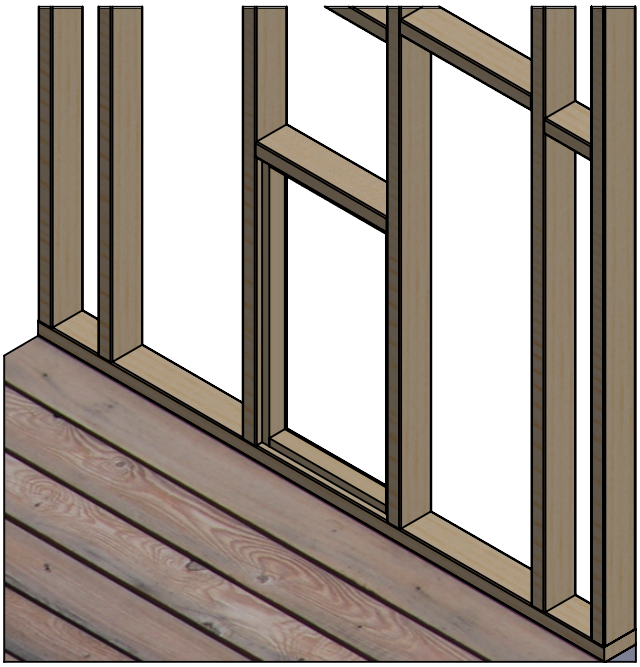
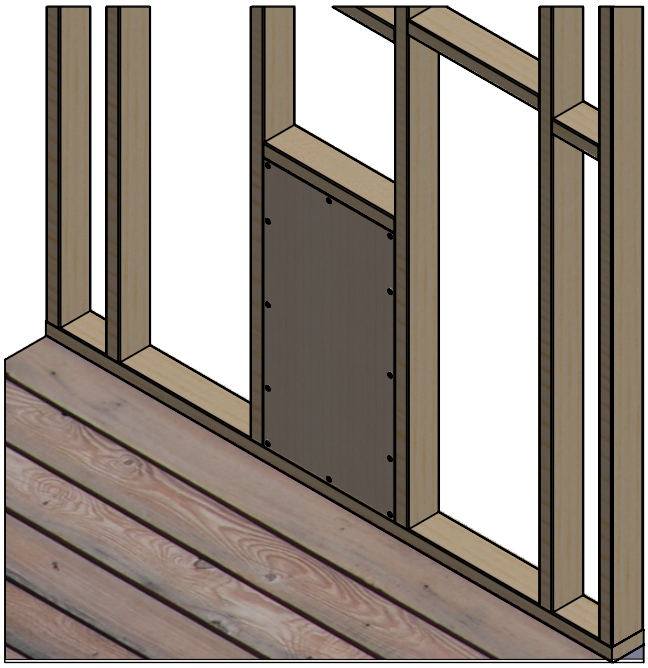
Stud wall reinforcement example



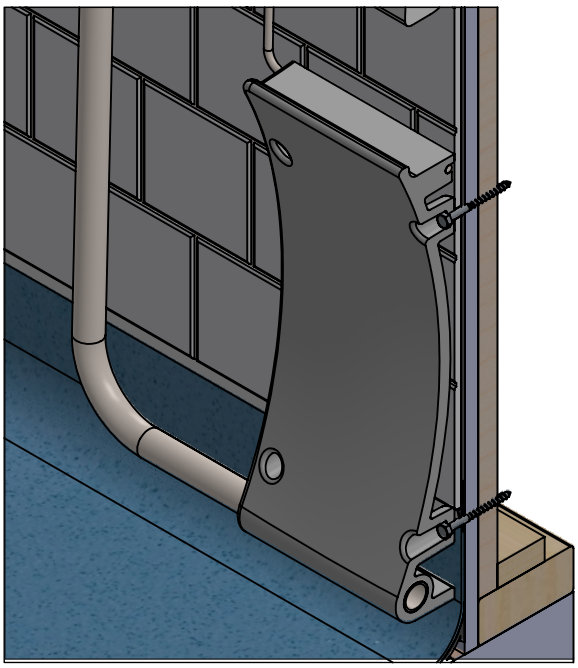
1. A typical timber stud (partition) wall.



2. An extra noggin and battens are added to support a plywood panel.



3. 18mm Plywood panel is added as support for the wall mount.



4. Wall mount is fixed in place