

Split Steel Frame – Installation Instructions

Split Steel Frame Installation Guide

1.0 Measure the doorway



Measure top and bottom wall thickness. In this case there was a 15mm difference between the top and bottom.



Check the wall for plumb.



In this case the wall was tapered by 15mm on the inside. In bad situations like this contact the door manufacturer with the details as adjustments can during manufacture to accommodate large values like this.

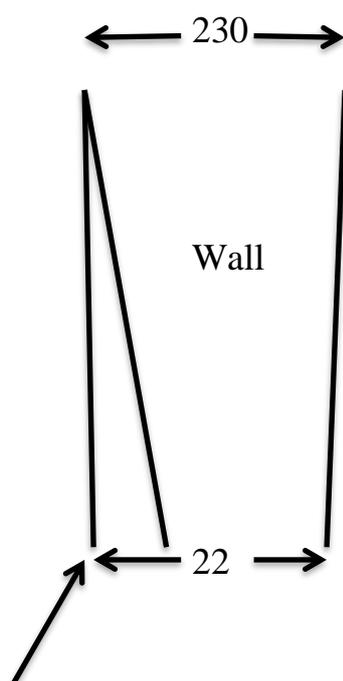
If the wall thickness is uniform but the wall is out of plumb the system can cope with up to 10mm out of plumb conditions. If the wall is out of plumb on the stop side the discrepancy will be hidden behind the stop.

Out of plumb on the hinge side will result in an unavoidable gap between the frame and the wall as the frame has to be fitted plumb for correct door operation. Hiding the gap in this situation is up to the installer.

Use the guide below for determining the wall thickness for out of plumb and varying thickness walls.

Place a straight edge plumb on the hinge side of the wall and measure the distance from the plumb edge to the stop side of the wall. Measure the top of the opening and take a second measurement at the bottom of the opening.

Subtract 10mm from the largest measurement and compare that to the smallest wall measurement. The wall thickness is the larger of these two values. See the following example.



Plumb line

The largest measurement is 230mm less 10 mm is 220mm. The smallest wall thickness is 225mm which is larger than 220 so the wall thickness is 225mm.

Provide the wall details to the manufacturer.

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2.0 Installation

The door is designed so the frame can be installed with the leaf in the frame. In this case we elected to install it with door out of the frame to make it easier to photograph.

If the wall is not plumb on the hinge side place an H packer between the frame and the wall until the frame is plumb. The packer can be removed after the install is complete.



Pack under the frame to get the correct floor gap and allow for adjustment for out of level floors.



Place packers under the hinge plates



Place additional packers between the door leaf and the jamb to keep the gaps constant.



Drill 6mm diameter hole in the top hinge plate on the hinge side.



Install the dyna bolt. The correct dyna bolt to use is DP06060 with a stainless steel countersunk head DF045SS.

In timber frames use Stainless steel timber screws with a 10mm dia. head 50mm long. 8mm dia. head screws can be used but they will not be a flush fit in the frame.

For Speedwall and steel frames use Allfast Tek screws. TEKS101638CSQ

Repeat for all visible fixing points. Then open the door and repeat for the other fixing points.



Note the large hole in the hinge plate to the left of the fixing shown. This is the fixing position if the customer has elected the discrete fixing option.

Check the frame for plumb and function of the door in the frame. Adjust the packers if required.

Check the back of the frame for fit and adjust if required.



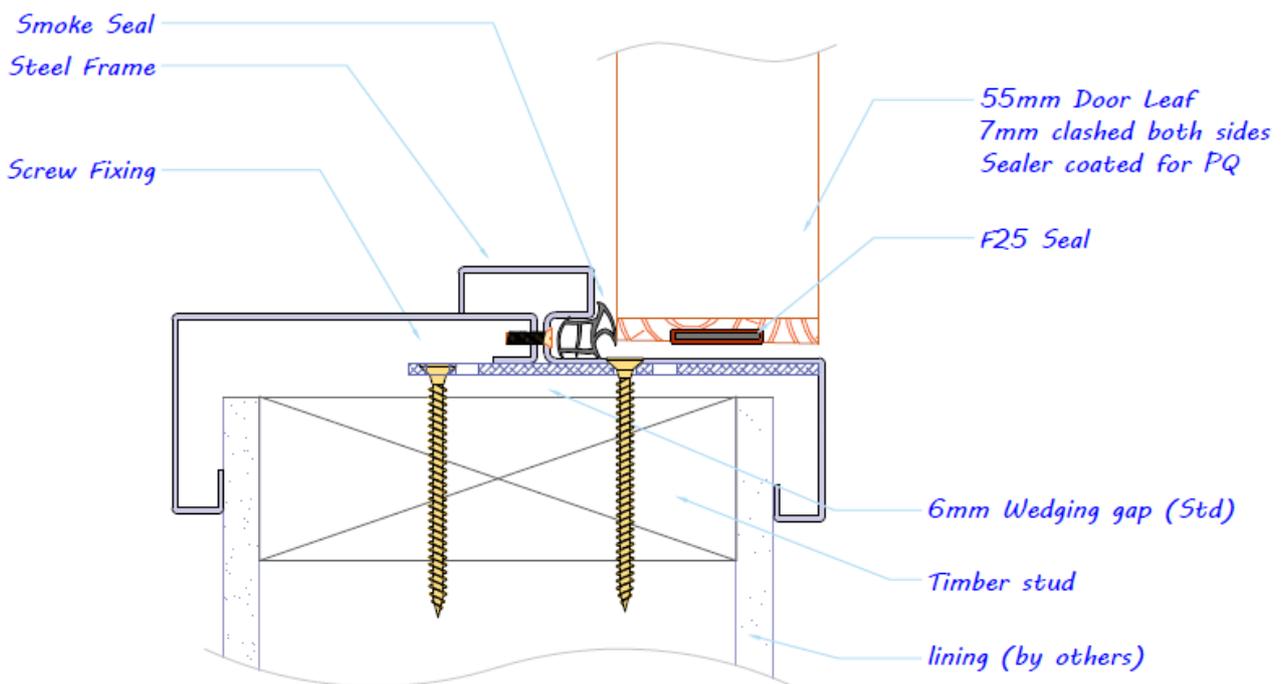
In this case a notch was required. Push fit the frame into place.





Remove the rubber doorstop seals to expose the fixing holes to fix the front half of the frame to the back half.

Before the final fixing of the front and back halves together you should test fit the back half of frame and consider how it will sit in relation to the finished wall and keeping it plumb. Take into account whether it may be prone to being knocked by trolleys or general traffic. For thicker walls especially the wide back half may need to be secured to the wall by packing, drilling and screwing in the highlighted area, as shown in the two following sketches.



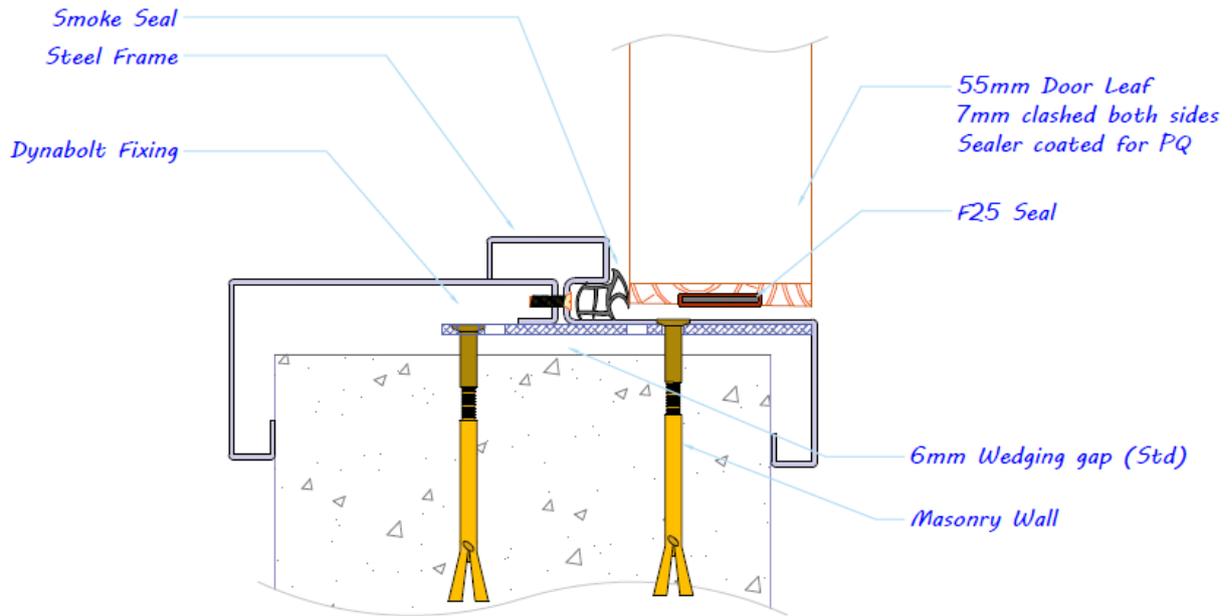
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Use Allfast TEKS101638 CSQ screws to join the back half to the front half.



Refit the rubber doorstop seals

Use a sealant to seal the frame edge wall interface and exterior applications place a flashing on the wall above the top of the door frame. Fit door hardware.



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