Wall Starter
(Channel and Tie System)

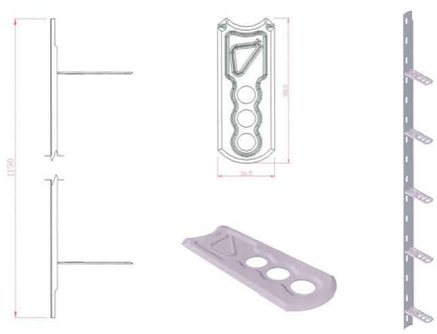
Product

The wall starter system is a 2-part system consisting of a 1.2m long channel, and wall ties which slot into the channel and can slide within the channel. The channel is fixed onto existing masonry using 50mm long x 5.45mm diameter bolts with blue wall plugs at the manufacturer recommended centres (3 fixings per strip). Wall ties are supplied to be used at 215mm vertical centres.

Test Results

Summary of Loads Achieved BS Fixings Wall Starter System Tested in a 'H' Wall Format Fixed to an Existing AAC Block Wall with a New Fletton Brick Masonry Wall Built Off

'H' Wall Number	Load at 5mm Vertical Displacement (kN)	Load at 10mm Vertical Displacement (kN)	Shear Load at Failure (kN)
1	8.8	8.5	5.0
2	7.0	6.8	5.1
3	8.5	8.0	5.1



Test Method

Three walls in the form of 'H' sections were constructed using fletton bricks (comp strength 27.5/mm2, Water Absorption 16.8%) as the cross walls and AAC (Autoclaved Aerated Concrete) blocks (comp. strength 3.9/mm2) as the head walls. These were tested in shear with and without an applied vertical displacement of the cross wall with respect to the head wall of up-to 10mm. A horizontal shear load, equivalent to the design load, was applied to the face of the cross wall in one increment and released in one increment.

The shear load was then reapplied to the wall in five equal increments and released in five equal increments. This was then repeated. A vertical load was then applied to the cross wall so as to produce a 5mm vertical movement of the cross wall in relation to the head wall. The load required to produce the deflection was noted. Maintaining the 5mm displacement the vertical load was released and the shear load was reapplied.

A vertical load was then applied to the cross wall so as to achieve a maximum displacement of 10mm. The load was noted. Maintaining the 10mm displacement as appropriate but with the vertical load released, the shear load was applied to the wall in the equal increments up to the design load and then loaded to failure. .

Results

The BS Fixings Wall Starter System, having been assessed by CERAM Building Technology would be able to withstand shear loads of 5.0 kN per 1.2m strip and would be suitable for tying new masonry to existing masonry using the appropriate number of fixings as recommended by the manufacturer and would meet with the appropriate parts of NHBC standards.

BS Fixings

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