

Technical Data Sheet

ACS Concrete Framifix

Used in conjunction with the ACS 25/15 4000 Range Channel Tie

✓ Austenitic Stainless Steel Channels

And Ties (Grade 1.4301)

✓ CE Marked

(EN 845-1)

✓ Lucideon Tested

✓ Masonry - Channel Tie

✓ 2.7m Standard Lengths

✓ Standoff Sleeves

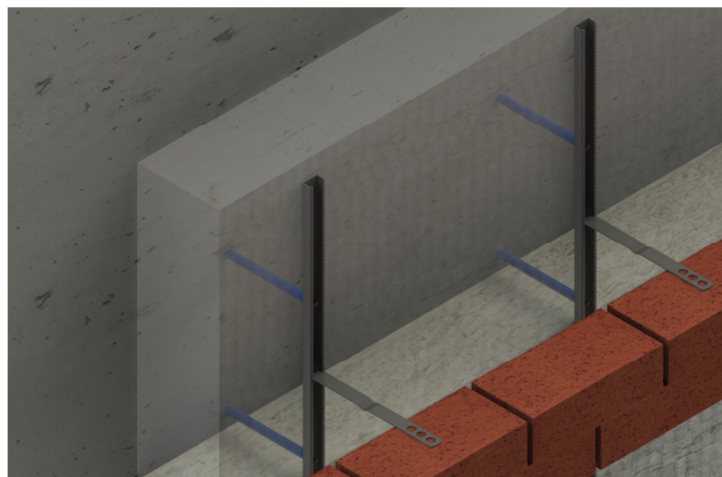
- Low Thermal Conductivity
- High Compressive Strength
- Stabilises Channel
- Class 2 Fire Resistant (BS 476)
- Prevents Compression of Insulation



BS EN 845 -1



Meets the Requirement of the
NHBC Technical Specification



Technical Data

ACS Concrete Frame Fix is designed to allow an outer leaf of a cavity wall constructed from masonry to be tied to a concrete frame through insulation using a suitable fixing. Composite, high compressive capacity sleeves are used at every fixing position to provide a rigid, high capacity fixing detail. The sleeves have a Class 2 fire resistance to BS476 Part 6. The channel is fixed back to the structure via the pre-punched holes in the channel which are spaced at close centres to allow the fixing point to be selected depending on the application. Once fixed, ACS 4000 range ties can be positioned at any point along the channel to suit the coursing of the masonry panel.

System Performance

Table 1.0 below provides wall tie type performance values from PD 6697 based on standard stud centres of 600mm.

Panel Required Type (PD 6697)	Wall Tie Vertical CTRS (mm)	Fixing Vertical CTRS (mm)	Panel Unfactored Design Resistance (kN/m ²)	Panel Factored Design Resistance (kN/m ²)
Type 1	300	337.5	2.27	3.41
Type 2	450	337.5	1.51	2.27
Type 3	450	450	0.91	1.37

1.0 – Channel Tie/Fixing Centres

For alternative performance requirements or spacing's, please contact the ACS Technical Department for further information.

Installation

Each fixing point will need marking out and a 5mm pilot hole should be drilled with a 5mm SDS+ drill. Compression sleeves can then be installed through the insulation and sat against the concrete behind. The fixing can then be installed through the compression sleeve and into the concrete behind with an embedment of between 25mm and 50mm.

Channels are normally set at 600mm horizontal centres. Ties can then be positioned at any point along the channel length to suit the bed joint coursing at the required vertical centres. (Refer to Table 1.0)

Tie Lengths

An ACS 4000 Range Channel Tie should be selected to ensure a minimum of 50mm and a maximum of 75mm is selected to ensure that the minimum embedment of 50mm is always achieved. ACS recommends that ties should be selected to an embedment (Eb) of 62.5mm.

Tie Reference	Tie Length (mm)	Clear Cavity Range (mm)
ACS4000/100	100	40-65
ACS4000/125	125	66-90
ACS4000/150	150	91-115
ACS4000/175	175	116-140
ACS4000/200	200	141-165
ACS4000/225	225	166-190
ACS4000/250	250	191-215
ACS4000/275	275	216-240
ACS4000/300	300	241-265

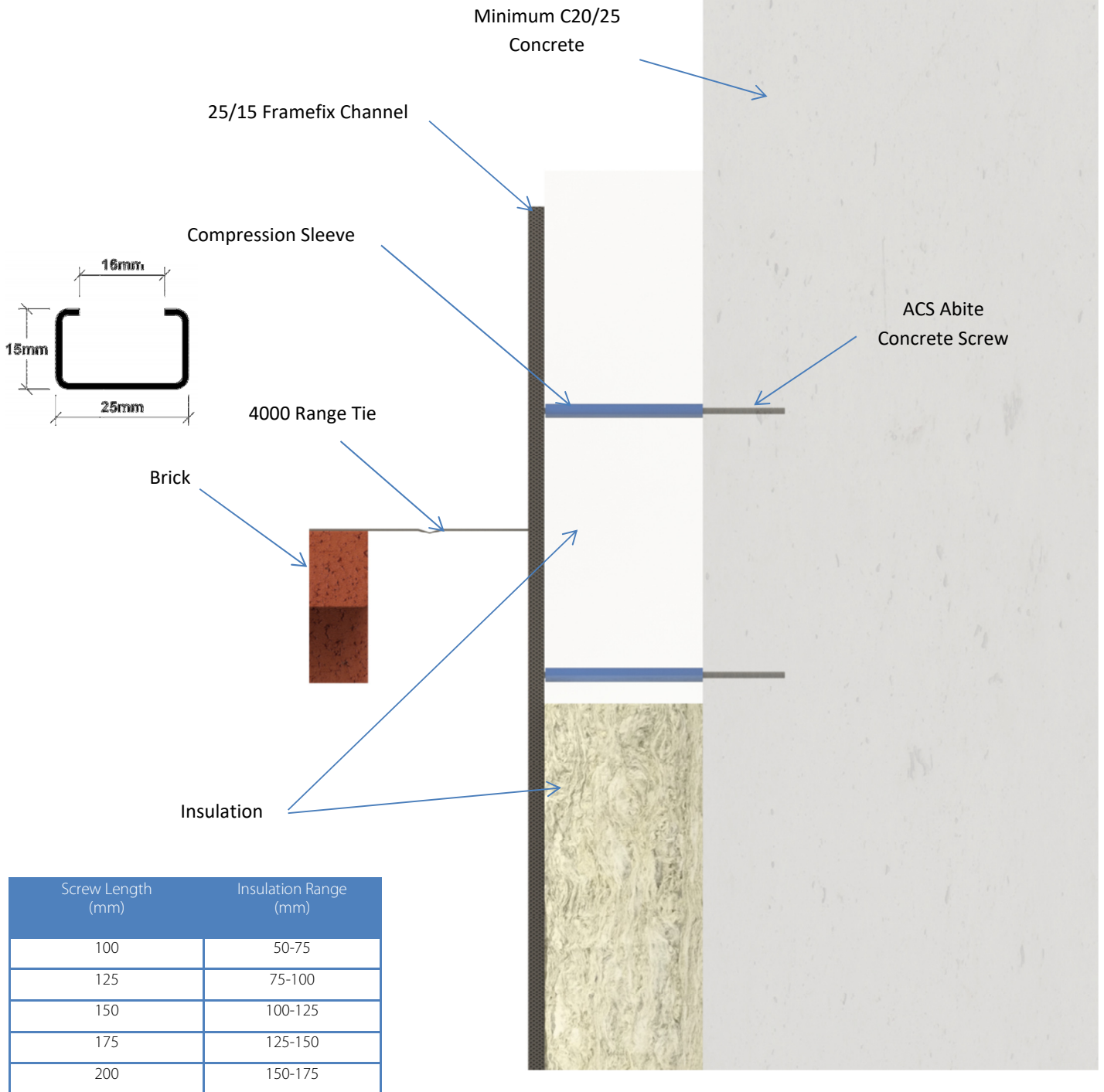
Table 1.1 – Tie Lengths

Standoff Sleeves

The Concrete Framifix system is supplied with standoff tubes which correspond to the thickness of the insulation specified. The tubes are designed to ensure that the compressive strength and stability of the channel tie system is achieved and maintained by preventing the channel deflecting into and compressing the insulation during installation and whilst under normal load.

The tubes are manufactured from a fire resistant composite material with a thermal conductivity of 0.300 W/mK.

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System Warranty

The ACS Concrete Framefix system comes with a full warranty and CE marking. If used in an inland environment and not within an environment where chlorine may be present the system can be offered with a 25 year warranty.

For further information or technical assistance please contact the ACS Technical Department on 0870 850 0860 or email technical@acsstainless.co.uk

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