

Installation Guide

Frame Cramps

Frame cramps are an ideal solution where a restraint is required between masonry and in-situ structures. They can be fixed to a range of materials including concrete, steelwork and masonry.

SDB

Ancon SDB Frame Cramps exceed the requirements of a Type 2 tie to PD 6697 for lengths up to 450mm. They have a 7mm diameter hole to suit a range of fixings.

SDV

Ancon SDV Frame Cramps have an 8mm x 30mm vertical slot that allows adjustment to the vertical fixing position where required. The load capacity is limited when fixed in the top of the slot therefore they are not recommended for applications where tension is a consideration.

Fixings

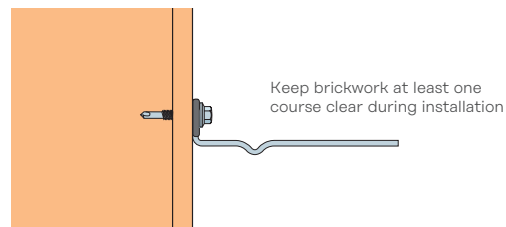
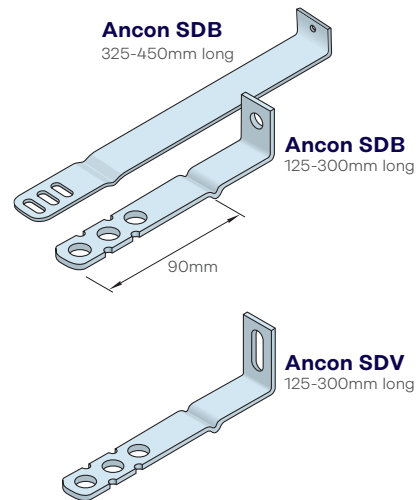
Ancon M6 expansion bolts are recommended for fixing to concrete and M6 set screws or SDTSS-38-5PT self drilling screws for fixing to steelwork. Frame Cramps can be fixed to masonry with suitable plugs and screws or resin anchors. Poor substrates will limit the capacity of fixings and site testing is advisable in such applications.

Installation Guidance

Frame Cramps are important to the stability of masonry and failure to install them correctly may lead to damp penetration, cracking or even the collapse of walls.

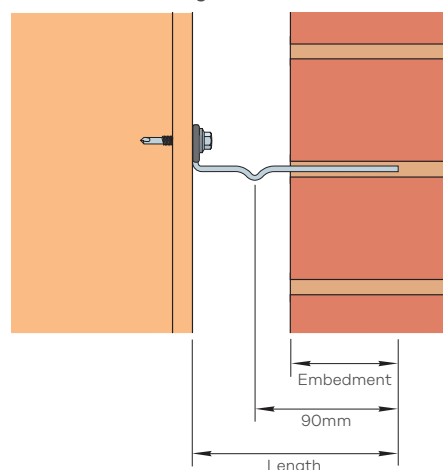
The drip part of the tie should point downward and be positioned near the centre of the open cavity. Installed ties should be clear of mortar droppings to allow the drip to function and prevent water from crossing to the inner leaf of masonry. The outer leaf brickwork should be kept one course clear during installation of these ties.

Ancon Frame Cramps should have a minimum embedment depth of 55mm in the outer leaf.



Cavity Width (mm)	Length of Wall Tie (mm)	Recommended Spacing (mm)	
		Type 1	Type 2
20-44*	100	600 x 450	900 x 450
45-69	125		
70-94	150		
95-119	175		
120-144	200		
145-169	225		
170-194	250		
195-219	275		
220-244	300		
245-269	325	900 x 450	
270-294	350		
295-319	375		
320-344	400		
345-369	425		
370-394	450		

Ancon SDB Frame Cramp Fixed to Steel with Ancon Self-Drilling Screw



*Due to limited length of tie a water drip would not be provided. Centres shown achieve equivalent tie type performances to PD 6697:2019.

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Isolation

Ancon isolation sleeves and pads are supplied blank for use with self-drilling screws to isolate stainless steel Frame Cramps from mild steel. Self-adhesive isolation pads are also available for __ _ B (20x30mm) and __ _ V (25x50mm) referenced Frame Cramps up to 300mm long.

Thermal Breaks

Ancon Frame Cramps can now be supplied with thermal breaks to be located between the upstand and the structural frame. They are manufactured from a material with a thermal conductivity of just 0.3 W/mK.

UKCA, CE and CEUKNI Marking

A UKCA Declaration of Performance is available for the SDV and SPV Frame Cramps. The SDB and SPB Frame Cramps are CE marked. The rest of the range is CEUKNI marked. All declarations are available to download from www.ancon.co.uk/approvals. These certificates feature declared load capacities established through independent testing.

Insulation Retaining Clips

The red Ancon Staifix Universal Insulation Retaining Clip is suitable for use in partial fill cavities with all standard Ancon Staifix / Ancon wall ties / Frame Cramps.

Pre-Fixing Aids

The practice of pre-fixing Frame Cramps in advance of masonry can accelerate the speed of construction and provides an opportunity to check that wall restraints have been located correctly and are securely fixed.

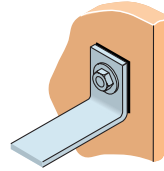
Ancon Gauge Tape (Pre-Fix Patent 2 256 223)

Gauge Tape illustrates the standard 225mm brick/block gauge and the fixing position of frame cramps. It is applied directly to the structural frame (steel, concrete, timber or masonry) to facilitate the pre-fixing of frame cramps and to maintain accurate masonry coursing.

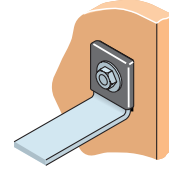
Ancon ISO-TW Washer

The ISO-TW washer enables Ancon slot-ended frame cramps to be vertically adjusted within the 30mm range of the slot to suit the exact location of mortar joints without affecting the integrity of the fixing. In addition, this washer prevents bi-metallic corrosion by separating the frame cramp from the structural frame and fixing screw.

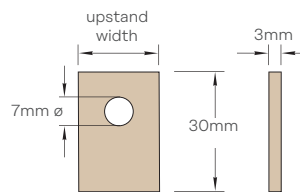
Adhesive Isolation Pad



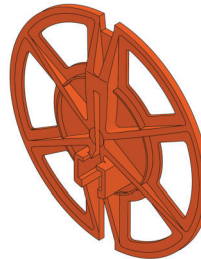
Isolation Sleeve



Frame Cramp Thermal Break



Universal Insulation Retaining Clip



Ancon Gauge Tape

