Leviat®
A CRH COMPANY

Ancon®

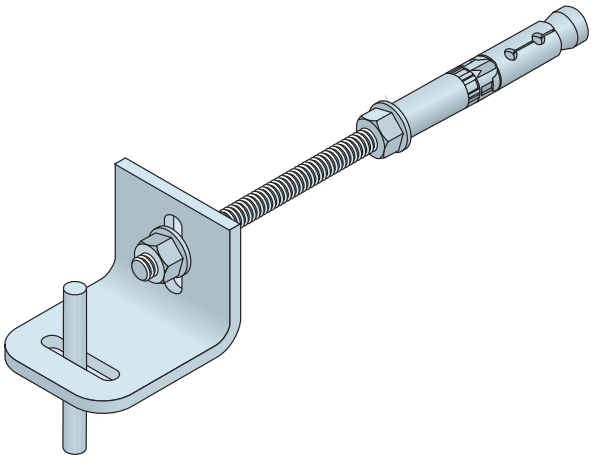
Installation Guide

Ancon 2000 Thin Facing Restraint

Restraint fixing for connecting thin facing units back to a structure

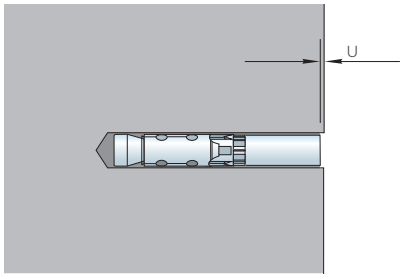
The Ancon 2000 is designed to restrain thin facing units, such as natural stonework, and provides a secure fixing in the structural frame thanks to the expansion anchor. The restraint comprises an M12 expansion anchor with internal thread to suit an M6 threaded stud, a fixing clip and loose Ø4 x 60mm dowel pin.

The Ancon 2000 can be manufactured to suit facing thicknesses of between 20 and 40mm and can accommodate cavity sizes up to 180mm. It is suitable for use in cracked or uncracked concrete. For other substrates e.g. blockwork or steel, please refer to Leviat's Technical team.



Installation Procedure

- Mark out hole location for expansion anchor – typically this will be 13mm above the centre of the horizontal joint in the facing unit to be restrained.
- Drill Ø12 x 85mm hole using hammer drilling & clean hole using blow pump.
- Unscrew the threaded stud and insert expansion anchor until it is flush with the outer face of the concrete.
- Tighten anchor using the hexagon bit supplied. Correct installation is reached at either 15Nm setting torque or when the gap between face of concrete and outer face of expansion bolt reaches 3 – 5mm (dimension 'U' shown opposite).
- Insert M6 threaded stud into internally threaded expansion anchor. The exact screw-in depth for the stud will depend on the cavity dimension but should not be less than 16mm. Note, positioning a nut and washer approximately 25mm from the end of the stud before screwing it into the expansion anchor can speed up the next step.
- Fasten a single nut and washer on the stud so the washer is in contact with the concrete face. Assemble the fixing clip in the desired position using the remaining 2 No. nuts.
- At this point, for smaller cavities, the studding may require cutting back to avoid a clash with the facing unit.
- Lay facing unit and use a Ø4 x 60mm loose dowel inserted through the fixing clip to provide restraint. Ø4.5 x 30mm holes should be provided in the facing unit.
- Adjustment is provided by the horizontal and vertical slots in the fixing clip and fine cavity adjustment can be achieved by moving the fixing clip along the length of studding.



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The full Ancon 2000 range is shown below for reference.

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Reference	Facing Thickness (mm)	Cavity Min.* (mm)	Cavity Max (mm)	Drill Hole Size (mm)	Setting Torque** (Nm)	Safe Working Load*** (N)
2000/A	20	25	70	Ø12 x 85	15	600
	25	22	67			
2000/B	30	30	75	Ø12 x 85	15	600
	40	25	70			
2000 - 75	20	60	105	Ø12 x 85	15	600
	25	57	102			
	30	55	100			
	40	50	95			
2000 - 100	20	85	130	Ø12 x 85	15	600
	25	82	127			
	30	80	125			
	40	75	120			
2000 - 125	20	110	155	Ø12 x 85	15	600
	25	107	152			
	30	105	150			
	40	100	145			
2000 - 150	20	110	180	Ø12 x 85	15	600
	25	107	177			
	30	105	175			
	40	100	170			

*Studding will require cutting down on site to accommodate some cavity sizes.
**Setting can also be confirmed by visual check - refer to installation instructions.
***Based on C20/25 cracked concrete. For other substrates e.g. blockwork or steel, please refer to Leviat's Technical team.

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