

INSTALLATION

**ANZ
CS02**

Crack stitching a rendered wall using HeliBars and HeliBond

Product	Description	Code
HeliBar	Helical stainless steel reinforcement	HBR
HeliBond	Injectable cementitious grout	HLB
HeliPrimer	Water-based primer for porous substrates	HWB
CrackBond	Epoxy resin for filling cracks	HCB

Method Statement

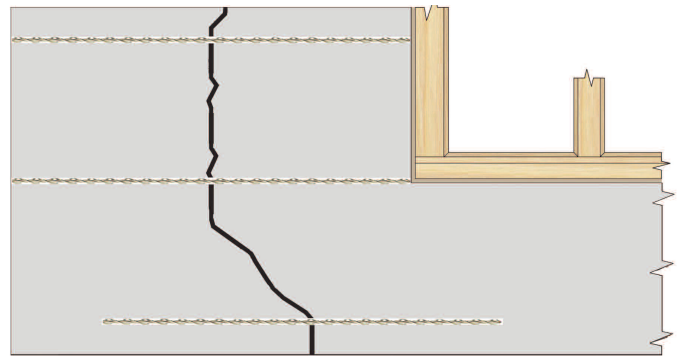
- Using an appropriate power cutting tool with vacuum attachment, cut slots through the render and into the masonry to the specified depth and at the required vertical spacing.* Ensure the masonry surfaces are clean to ensure a good bond. HeliBars and HeliBond must be installed in the masonry and never in the render.
- Clean out all dust and loose mortar from the slots and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use HeliPrimer WB. Ensure the slot is damp or primed prior to commencing step 5.
- Mix HeliBond cementitious grout thoroughly using a drill and mixing paddle and load into the Helifix Pointing Gun.
- Fit the mortar nozzle to the pointing gun.
- Inject a bead of HeliBond grout, 10-15mm deep, into the back of the slot.
- Push the HeliBar into the grout to obtain good coverage.
- Inject a second bead of HeliBond grout over the exposed HeliBar and iron it into the slot using a finger trowel. Inject additional HeliBond as necessary, leaving 10-15mm for new pointing.
- The crack within the wall should be waterproofed using an appropriate Helifix bonding agent or filler, e.g. CrackBond, depending on the width of the crack, and the crack and remaining slots at the surface made good with a suitable matching render or mortar.
- Clean tools with clean, fresh water.

NOTE. Pointing may be carried out as soon as is convenient after the HeliBond has started to gel. Ensure that pointing does not disturb the masonry/HeliBond connection.

CAUTION. Always locate, identify and isolate any electrical, water or gas services which may be present in the wall or the wall cavities and can pose a safety risk before drilling or cutting. Always take the necessary safety precautions. Use electrical safety gloves and wear appropriate footwear and eyewear. Refer to the Helifix Wall and Pinning Tie Safe Installation Guide for further instruction.

SLOT DEPTH AND VERTICAL SPACING

	Single Leaf	Solid / Multi-Leaf Masonry		
		Up to 110mm	110 to 230mm	Over 230mm
Slot Depth	25-35mm + render thickness	25-40mm + render thickness	25-40mm + render thickness	On both sides
Vertical Spacing	Every 4 brick courses (340mm approx.)			



RECOMMENDED TOOLING

- For cutting slots Chisel, mortar saw (e.g. Arbortech All Saw) or angle grinder with dust guard (e.g. C-Tec) and vacuum
- For mixing HeliBond Drill with mixing paddle
- For injection of HeliBond into slots Helifix Pointing Gun with mortar nozzle
- For smoothing pointing Standard finger trowel

*SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

- Depth of slot and slot spacing as per Depth and Spacing Guide.
- Height of slot to equal mortar joint height, with a minimum of 8mm.
- HeliBar to be long enough to extend a minimum of 500mm either side of the crack or 500mm beyond the outer cracks if two or more adjacent cracks are being stitched using one rod.
- For solid masonry in excess of 300mm and in a cavity wall where both leaves are cracked, the wall must be crack stitched on both sides.
- Where a crack is less than 500mm from the end of a wall or an opening the HeliBar is to be continued for at least 100mm around the corner and bonded into the adjoining wall or bent back and fixed into the reveal, avoiding any DPC.
- In hot conditions ensure the masonry is well wetted or primed to prevent premature drying of the HeliBond due to rapid de-watering. Ideally additional wetting of the slot, or priming with HeliPrimer WB, should be carried out just prior to injecting the HeliBond grout.
- Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the slot must be thoroughly damp or primed prior to injection of the HeliBond grout.

The above specification notes are for general guidance only and Helifix reserves the right to amend details/notes as necessary.

GENERAL NOTES

- Product details available from Helifix.
- Contact Helifix if your application differs from this repair detail or you require specific technical information.