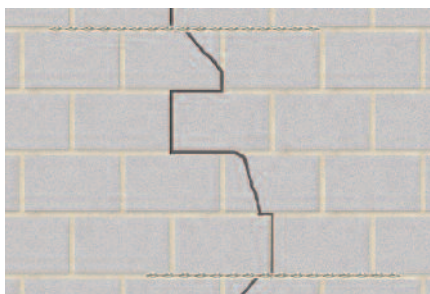
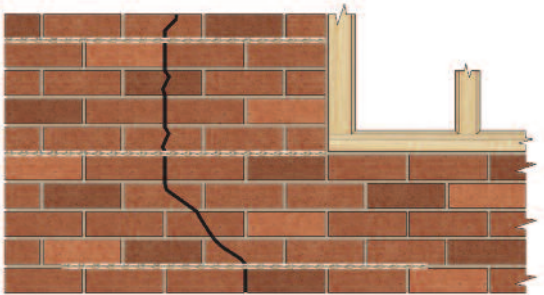


Crack Stitching

A reliable and cost-effective means of repairing and stabilising cracked masonry

Applications

- Rapid and permanent solution to cracked masonry
- Suitable for all forms of masonry structure



Features

- Fully concealed, non-disruptive repair solution
- More reliable than crack injection methods
- HeliBond cementitious grout is injectable and rapidly produces high compressive strength
- HeliBars and HeliBond grout combine to create excellent tensile strength within the masonry
- No additional stresses are introduced during installation
- Masonry remains flexible enough to accommodate normal building movement
- Tensile loads are redistributed
- Reduces likelihood of further cracking nearby
- Avoids costly and disruptive taking down and rebuilding



HeliBar is inserted into HeliBond grout within a cut slot

Over 50 standard repair specifications are available online, covering all common structural faults.

Relevant Repair Details: CS01 to CS03



Scan the QR Code for full Product Information, Case Studies and downloadable Repair Details

Installation Procedures

- 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.
- 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 200mm around the corner and bonded into the adjoining wall or bent back and fixed into the reveal, avoiding any DPC.
- For solid masonry in excess of 230mm thick and in a cavity wall where both leaves are cracked, the wall must be crack stitched on both sides.
- If there is render, this thickness must be added to the depth of slot. Crack stitching must be installed in the masonry and never in the render.
- Ensure the masonry is well wetted or primed to prevent premature drying of the HeliBond due to rapid de-watering, especially in hot conditions. Ideally additional wetting of the slot should be carried out 1 to 2 minutes 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.



1. Rake out or cut slots into the horizontal mortar beds, a minimum of 500mm either side of the crack



4. Using a finger trowel, or similar, push one HeliBar into the grout to obtain good coverage



2. Clean out slots and flush with clean water and thoroughly soak the substrate within the slot



5. Insert a further bead of HeliBond over the exposed HeliBar, finishing 10 – 15mm from the face, and 'iron' firmly into the slot using the HeliBar Finger Trowel



3. Using the Helifix Pointing Gun, inject a bead of HeliBond along the back of the slot



6. Re-point the mortar bed and make good the vertical crack with CrackBond TE

Slot Depth and Spacing

	Single leaf	Solid / multi-leaf masonry		
		Up to 110mm	110mm to 230mm	Over 230mm
Depth of slot	25 – 35mm	25 – 40 mm	25 – 40mm On both sides	
Vertical Spacing	Every 4 courses (approx. 340mm)			

Technical Specifications

Material:	Austenitic stainless steel Grade 316 as standard (Grade 304 also available)
Diameter:	6mm as standard
Tensile strength (6mm HeliBar):	9.5 kN
0.2% Proof stress (6mm HeliBar):	840 MPa
Length:	To extend 500mm either side of the crack or outer cracks, if more than one
Standard lengths:	1m or 7m as standard. May be cut to length on site
Height of slot:	Full height of mortar bed or approx. 10mm if cut through the masonry unit
Bonding agent:	HeliBond cementitious grout. 1 x 3ltr HeliBond = approx. 10 linear metres of crack stitching
RECOMMENDED TOOLING	
For cutting slots:	Chisel, mortar saw or angle grinder with dust guard and vacuum
For mixing HeliBond grout:	3-jaw-chuck drill with mixing paddle
For injection of HeliBond into slots:	Helifix Pointing Gun CS with mortar nozzle
For smoothing pointing:	Standard finger trowel