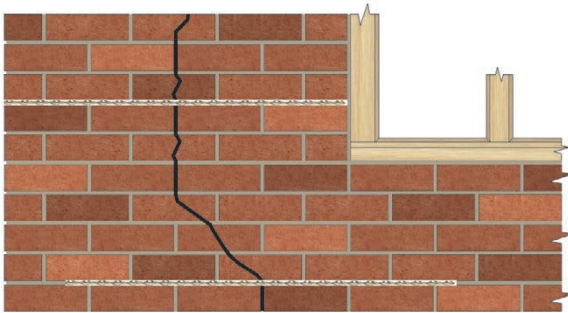


Crack Stitching

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

Applications

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



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 the HeliBond grout within the cut slot



For full Product Information, Case Studies and downloadable Repair Details, giving specifications for many common structural faults, go to:

www.helifix.com/products/retrofit-products/crack-stitching-2/

Installation Procedures

1. HeliBar to be long enough to extend a minimum of 20" either side of the crack or 20" beyond the outer cracks if two or more adjacent cracks are being stitched using one rod.
2. Where a crack is less than 20" from the end of a wall or an opening the HeliBar is to be continued for at least 4" around the corner and bonded into the adjoining wall or bent back and fixed into the reveal, avoiding any Damp Proof Course.
3. For solid masonry in excess of 12" and in a cavity wall where both wythes are cracked, the wall must be crack stitched on both sides.
4. If there is stucco, this thickness must be added to the depth of slot. Crack stitching must be installed in the masonry and never in the stucco.
5. 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 should be carried out just prior to injecting the HeliBond grout.
6. Do not use HeliBond when the air temperature is 40°F 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 20" either side of the crack.



4. Using the brick jointer, 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 1/2" from the face, and 'iron' into the slot using the brick jointer.



3. Using the Helifix Pointing Gun Kit, 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 TE3.

Slot Depth and Spacing

	Single skin/ Cavity wall	Solid Masonry		
		Up to 4"	4" to 9"	Over 9"
Depth of slot	1" – 1 1/4"	1" – 1 1/2"	1" – 1 1/2"	On both sides
Vertical Spacing	Every 4 – 6 courses, 12" – 18"			

Technical Specifications

Material:	Austenitic stainless steel Grade 304 or 316
Diameter:	6mm (or 4.5mm for thin mortar joints)
Tensile strength:	192ksi (1325 N/mm ²)
0.1% Proof stress:	140ksi (965 N/mm ²)
0.2% Proof stress:	159ksi (1100 N/mm ²)
Length:	Cut lengths up to 80"
Width of slot:	1/2"
Bonding agent:	HeliBond cementitious grout. 1 x 3ltr HeliBond = 32 linear feet of crack stitching
RECOMMENDED TOOLING	
For cutting slot up to 1 1/2" deep:	Twin-bladed cutter with vacuum attachment or angle grinder or hammer and mortar chisel
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
For inserting HeliBar:	HeliBar Insertion Tool