

A composite of Matrix Crack Fixing Bar and Matrix Epoxy Grout makes the repair of cracked masonry not only quick, but also permanent.

Features.

Matrix Crack Fixing Bar wires maximise bonding characteristics when embedded in grout. The wire/grout composite provides excellent compressive and axial strength along the full length of the helically grouted unit. When subjected to an axial load, torsion (a rotational tendency) is transmitted to the helical wire via one of its angular faces. This is resisted by an equal reaction on the opposite face of the helix. This torque enables the helical tie wire to accumulate the load progressively; to accommodate natural building movement; and to avoid catastrophic or sudden failure.

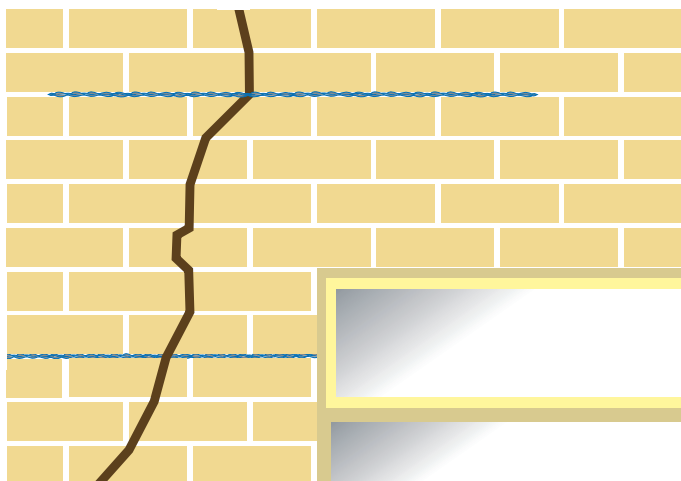
Benefits:

- Matrix Bars are manufactured from 316 austenitic stainless steel
- A much concealed, non-disruptive repair method
- Cost effective, and more stable than other crack injection systems
- Matrix cementitious grout is easily injected and quickly produces a high compressive strength
- Matrix Bars and Matrix grout maintain excellent bond strength within the masonry
- Matrix Bars have a superb combination of axial strength and flexibility
- Free from further stress
- Reduces existing and secondary crack development
- Eliminates need for rebuilding
- Permanent repair

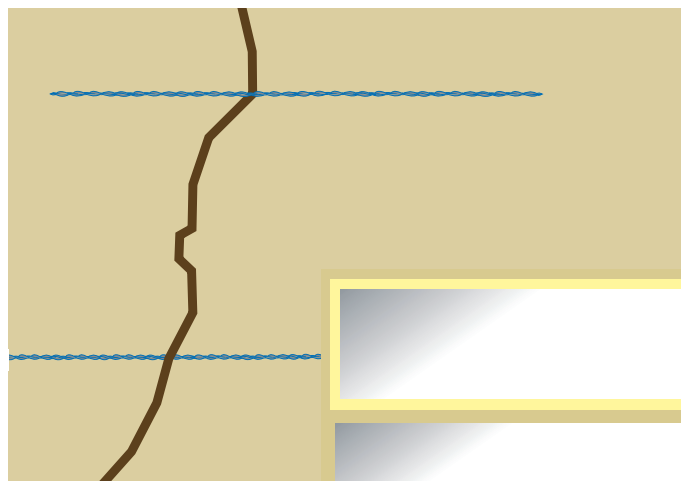
Guide:

Lengths of helical bar are grouted into the raked out slots and are used to stitch across cracks in masonry. Combining axial strength with elastic yield, the grouted wires are utilised to distribute the loads along the full length of the reinforced zone to restore the integrity of the structure.





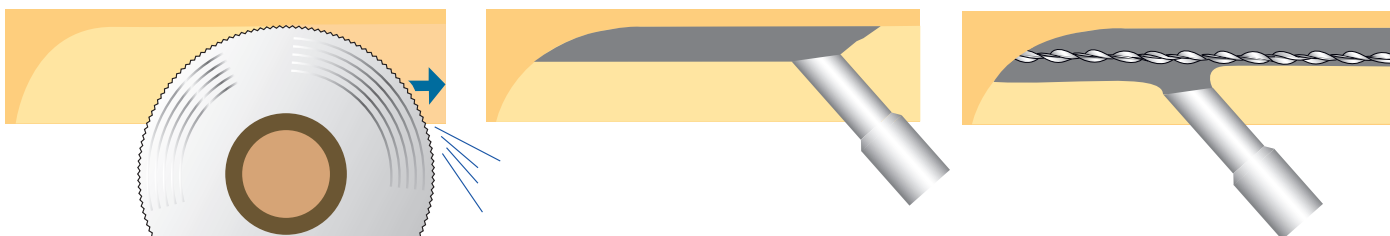
Crack stitching a conventional brick wall using Matrix Crack Stitching helical bars



Crack stitching rendered or plastered wall using Matrix Crack Stitching helical bars

Application guide – Tolerance -0mm/+5mm

Wall thickness and Application		Slot Depth	Depth of wire
102mm wall	Crack Stitch	30mm	20mm
215mm wall	Crack Stitch	40mm	30mm



Installation:

1. Cut out mortar bed joints to specified depth and locations. Clean out slots and thoroughly soak with clean water.
2. Using flat grout nozzle apply continuous bead of Matrix cementitious grout to back slot.
3. Insert length of bar 8mm reinforcement bar and push into face of grout bead. Provide final bead of grout and make good in accordance with specification.

Recommended tooling:

- Twin bladed diamond tipped wall chasing power tool with vacuum attachment.
- Power mixing paddle.
- Crack stitching pointing gun and injection nozzle.
- Suitable finger trowel for mortar finishing.

1. Wires to extend 500mm beyond the end of any opening or crack.
2. Where cracks are within 500mm of corners or reveals wire is to be bent and bonded 100mm around the corner.
3. Overlap adjoining wires, where needed by at least 500mm.

Matrix Industries PTY LTD
 144 Oxley Island Road
 Oxley Island NSW 2430
 Ph (02) 6553 2577
 Fax: (02) 6553 2585