

Crack Stitching Wall Repair

Description

Helical crack stitching bars are available in 1m, 1.5m and 2m lengths.

The crack stitching ties are grouted into existing masonry to repair cracks in walls and increase their tensile, shear and flexural strength.

WHO60® is a thixotropic, cement-based and shrink-compensated grout with polymer additives. The grout sets in and around the helix and rapidly develops compressive strength to restrict axial deflection under load conditions.

Benefits

Retrospectively applied helical bed joint reinforcement enables crack repairs to be made discreetly and with minimum disturbance. The repair restores the structural integrity of masonry and provides resilience against further cracking.

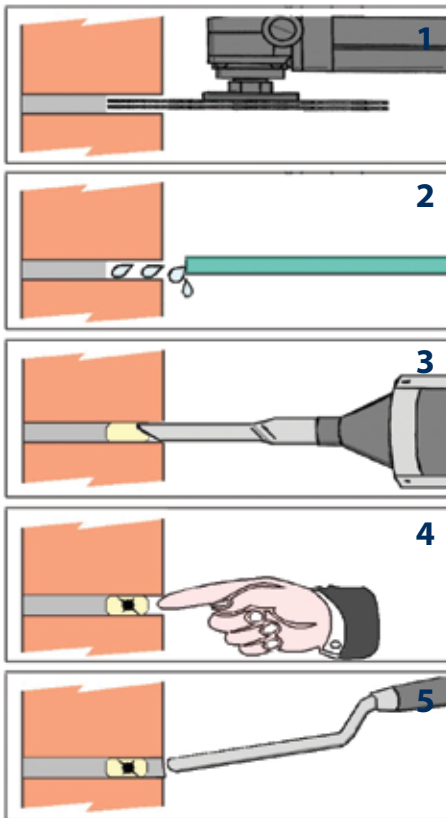
Rendered walls can have crack stitch ties installed directly into masonry units to bind them together and, where shear strength is an issue, permit the use of diagonal reinforcement and/or use of heavy-duty rods.

Distinction

Stainless steel wire undergoes a rolling process that doubles its tensile strength.

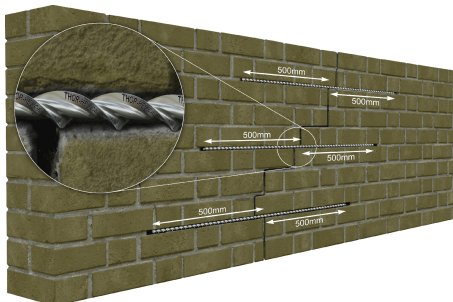
The profiled wire is twisted using a die delivering evenly applied torsional stresses resulting in a precise twist helix (Patent GB2589694) making Thor Helical bars the most consistent and reliable stitching bars available.

Independent testing shows that, when used in retrofit situations, our stitching bars conform to BS EN 845-1 2013 and meet UKCA and CE Marking conditions.



Method statement

1. Chase slots at 300mm intervals along a length of wall that extends 500mm each side of crack.
2. Clear loose detritus from slots and flush thoroughly with water,
3. Pump bead of WHO60® cement grout to rear of slot, filling it evenly to approximately two thirds full.
4. Push helical crack stitching tie into grout to approximately half the depth of the grout. Trowel displaced grout to firmly encapsulate rod.
5. Make good wall chase to disguise slot. Repair cracks between the helically reinforced masonry with appropriate and discreet filler.



Product specification

Reinforcing Bar

Material: Austenitic Stainless steel -(304)

Ultimate Tensile Strength:

= 1050-1200N/mm²

5mm Rod – Nom. CSA = 6 mm²

6mm Rod – Nom. CSA = 8mm²

7mm Rod – Nom. CSA = 10mm²

8mm Rod – Nom. CSA = 13mm²

9mm Rod – Nom. CSA = 16mm²

WHO60® Grout at 28 Days at 20°c

Compressive Strength: = 55N/mm²

Tensile Strength: = 5N/mm²

Flexural Strength: = 12N/mm²

CRACK REPAIR GUIDE

Tolerances = + 5mm / - 0mm

MASONRY	DEPTH OF		
	SLOT	GROUT	ROD
102mm	30mm	20mm	20mm
215mm	45mm	30mm	30mm

Twistfix Ltd

33 Cavendish Square, London. W1G 0PW

www.twistfix.co.uk

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