

THOR HELICAL[®] South Africa

TECHNICAL INFORMATION AND QUICK GUIDE

CRACK STITCHING WALL REPAIR

DESCRIPTION

Helical crack stitching rods are available in 1 and 6 metre lengths.

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

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

BENEFITS

Retrospectively applied helical bed joint reinforcement enables crack repairs to be made discretely 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, to permit use of diagonal reinforcement and/or use of heavy duty rods.

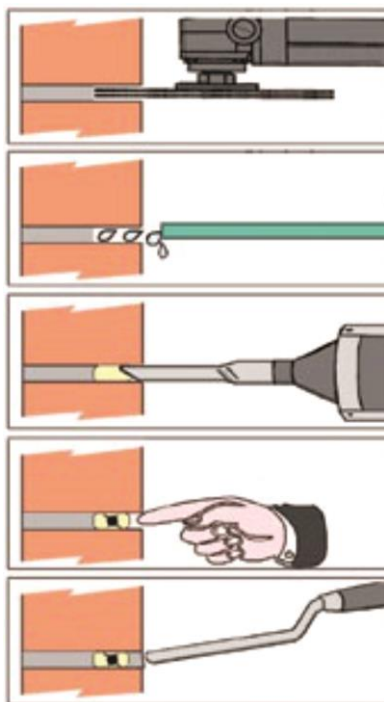
DISTINCTION

Radial fins and ribs are formed on stainless steel wire in a cold rolling process that significantly increases its tensile strength.

The profiled wire is twisted via torsional stresses that are so evenly applied that the resulting helix is formed with precise pitch accuracy, (European Patent No. 1307303) making Thor Helical crack repair rods the most consistent and reliable helical wire products available.

METHOD STATEMENT

PRODUCT SPECIFICATION



1. Chase slots at 300mm intervals along a length wall that extends 500mm each side of the 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 two-thirds of slot depth. 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 discrete filler.

REINFORCING BAR

Material: Austenitic Stainless Steel (316)

Ultimate Tensile Strength: =

1181-1200N/mm²

6mm Rod – Nom. CSA = 7mm²

9mm Rod – Nom. CSA=15mm²

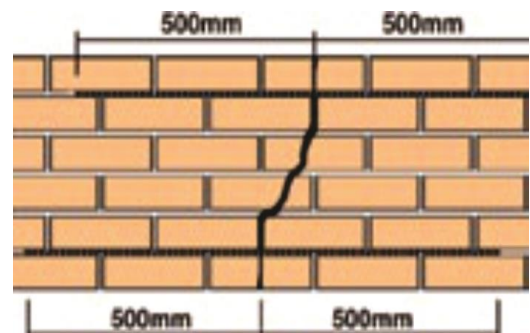
WHO60[®] Grout at 28 Days at 20°C

Compressive Strength: = 55N/mm²

Tensile Strength: = 5N/mm²

Flexural Strength: = 12N/mm²

CRACK REPAIR GUIDE			
Tolerances = +5mm / -0mm			
DEPTH OF			
MASONRY	SLOT	GROUT	ROD
102mm	30mm	20mm	20mm
215mm	45mm	30mm	30mm



www.thorhelical.co.za

Postal Address 3 Fairford Downs, Cotswold Downs 105 Inanda Road Hillcrest KZN 3650

Telephone 073 485 2979 Email sales@thorhelical.co.za Internet www.thorhelical.co.za

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