

REMEDIAL MASONRY REINFORCEMENT

CRACK-STITCHING

Thor Helical 6mm bed joint reinforcement wires are grouted with proprietary Thor WHO60 cementitious grout into slots prepared in existing walls for the purpose of crack repair, increasing flexural strength of masonry to combat the effects of localized ground movement and other forms of distress.

The highly deformed helical profile maximizes bonding characteristics between the wire and the Thor WHO60 cementitious grout, providing excellent compressive and axial strength along the full length of the bonded composite. Combining these strengths with the torsional yield characteristics of the wire, the composite unit is utilized to accumulate imposed loads and to disperse them along the full length of the reinforced zone to fully reinstate the structural integrity of distressed masonry and provide resilience against further cracking whilst still accommodating natural masonry movement.

INSTALLATION

Locations are to be generally as specified, preferably within existing horizontal mortar bed joints although vertical spacing for rendered finishes will be governed by dimension rather than mortar course location.

The height of the slot should be a minimum of 10mm and the minimum slot depth should be as per following table - making allowances for any rendered or plaster finishes.

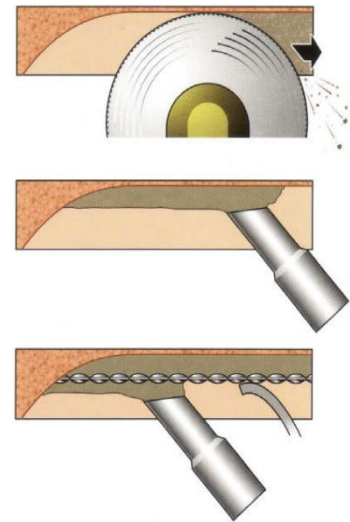
CRACK-STITCHING GUIDE		
<u>Wall Type</u>	<u>Cavity</u>	<u>Solid</u>
Slot Depth	30mm	40mm
Wire Depth	25mm	35mm
Grout Beads	2	2
Spacing	340mm	340mm

Slots should be free of dust and mortar to ensure the WHO60 Grout bonds to exposed upper and lower brick surfaces. Slots should be thoroughly flushed with water or treated with a suitable primer.

Thor WHO60 cementitious grout must be applied with a flattened grout nozzle to the back of the slot and, following insertion of the Thor Helical crack stitch wire, a second bead of grout is to be applied to cover the wire and provide a rebated finish, where re-pointing is required, or filled flush with mortar, for a re-plastered finish, in accordance with the specifications.

Thor Reinforcement wires are available in lengths from 1 metre up to 6 metres to service multiple adjacent vertical cracks, and in use, they should extend a minimum of 500mm

beyond any opening or crack. Where installation occurs within 500mm of an opening or corner the wire must extend and be bonded a minimum of 100mm around the corner.

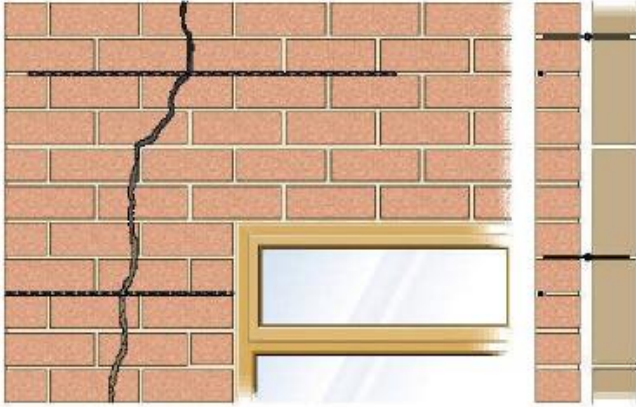


MOVEMENT JOINTS

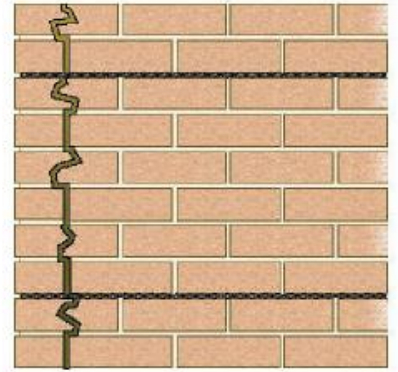
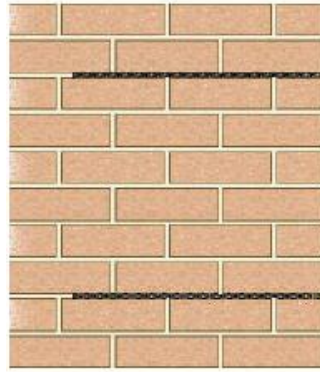
6mm Thor Helical wire can be used for planar reinforcement at expansion joints. The wire is grouted one side only and is sleeved in the other. The wire should extend 250mm either side of joint to permit expansion\contraction whilst providing resilience against out of plane movements.

EXPANSION JOINT GUIDE		
<u>Wall Type</u>	<u>Cavity</u>	<u>Solid</u>
Slot Depth	40mm	70mm
Wire Depth	35mm	65mm
Grout Beads	2	2
Spacing	340mm	340mm

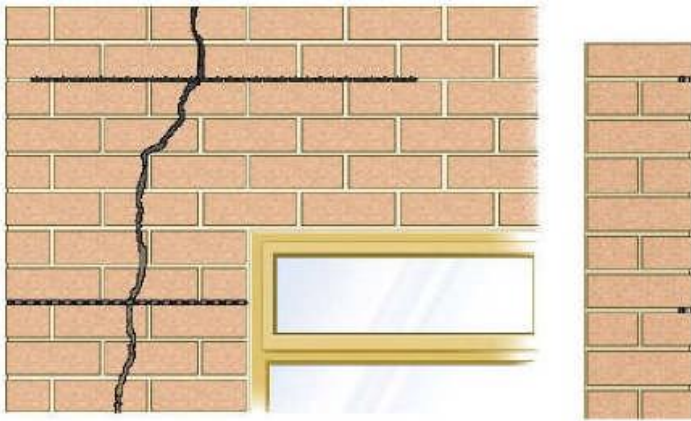
Graphics for Illustrative Purposes Only



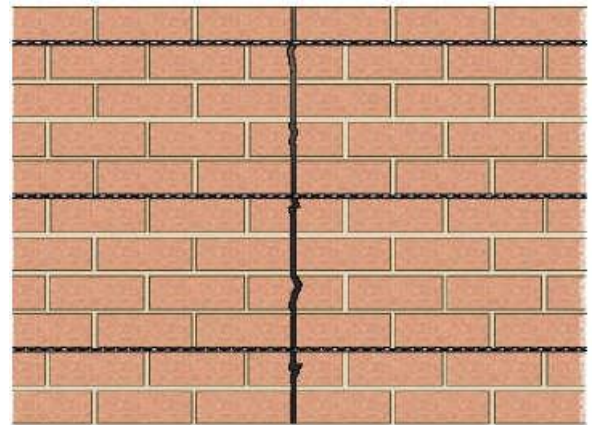
Cavity Wall-Additional wall ties may be required



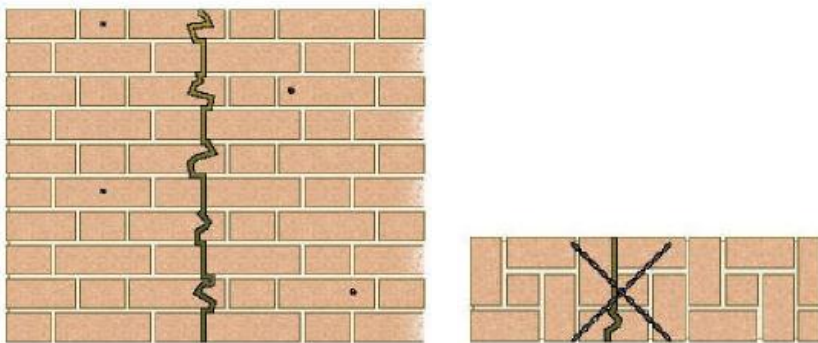
Corner Crack Stitching Solid 230mm wall



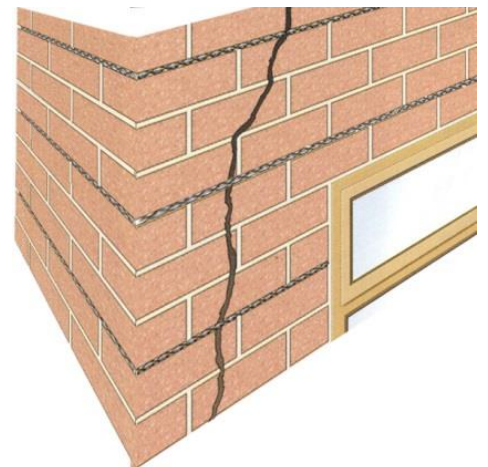
Solid 230mm Wall



Solid 230mm Wall

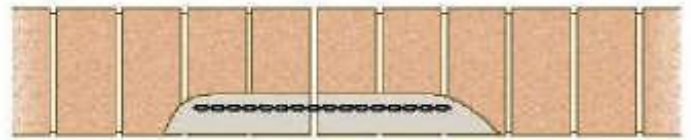
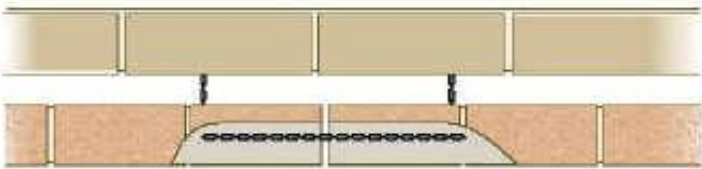
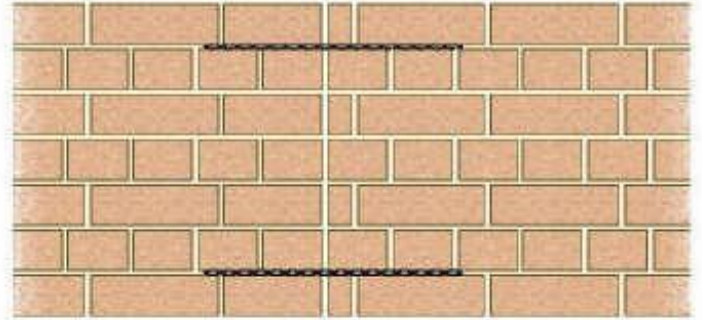
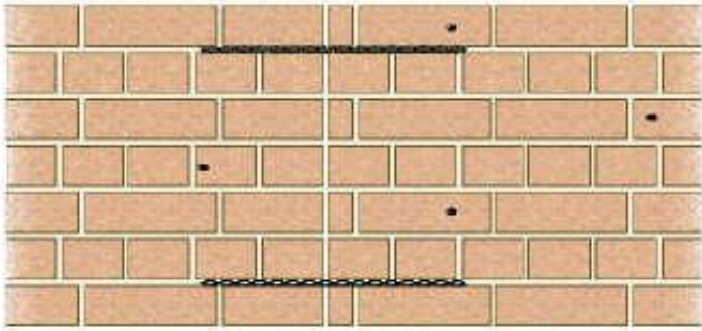


Thor 9mm WHO60 Grouted Ties Cross Stitching a Cracked 350mm Solid Wall
(Cosmetic crack repair to walls having architectural patch resistant renders)



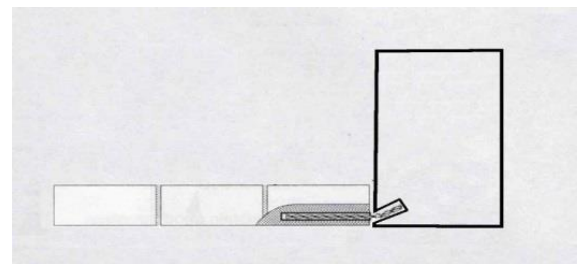
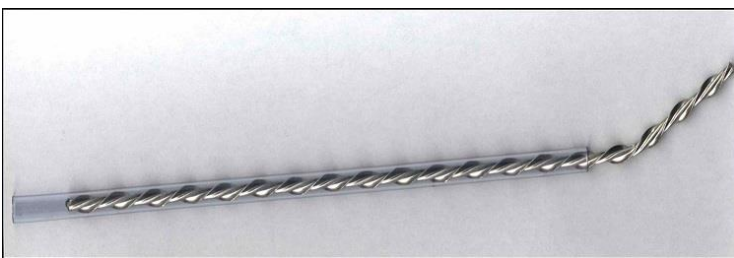
Corner Crack-Stitch

Thor 6mm Remedial Expansion Ties



Cavity Walls
(Additional Thor Remedial Wall Ties Recommended)

Solid Walls



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