



Thor Helical bars are highly deformed reinforcement rods that are generally used for stitching cracked walls. The crack stitching process delivers an effective and durable masonry repair by introducing into the wall fully concealed tension straps, which strengthen fractured masonry and brickwork.

Cracks in house walls aren't just unsightly; they can be warning signs of structural problems. Cracks in brickwork occur when there is a build-up of stress in the wall. Stress may be caused by normal thermal or moisture movement or by support failure. In either case once the brick block or mortar cracks, the stress is relieved. Following the fracture, the ability of the wall to act as a composite structural unit may be compromised, the wall being unrestrained in cracked zone and vulnerable to further movement.

In order to reconnect the masonry on either side of a crack in a wall it may be strapped or stitched 500mm either side of the crack, at regular intervals

to enhance the tensile, shear and flexural capacity of masonry walls. Fractured brickwork should be deeply filled to restore compressive strength and to weatherproof the area.

WHAT MAKES THE THOR HELICAL STITCHING BARS A CUT ABOVE THE REST?

- Fully concealed tension straps for stitching cracked walls.
- Patented manufacturing process delivers consistency in tensile strength (1025-1225N/mm²).
- Highly deformed helical bar combines with Thor Grout to produce an excellent bond within the wall.
- Enhances the tensile, shear and flexural capacity of masonry walls.
- Permits a degree of torsional yield to accommodate natural building movement.
- Progressively accumulates building loads, dispersing them back into the structure to strengthen cracked walls and provide resilience against further cracking.
- Quick, easy and durable.
- Conforms to conditions for CE marking according to BS EN 845-1 2013, mean tensile strength greater than 8kN.

A series of helical bars are bonded into slots cut across the fracture with Thor Grout a highly durable thixotropic cementitious grout. The bar forms an excellent bond within the grout by virtue of its continuous deep-trough helix to strap the brickwork on either side of the crack.

We have an array of bars in different diameters for stitching cracked walls. Each has been independently tested in accordance with BS EN 846-4:2002 'Methods of Test for Ancillary Components for Masonry – Part 4: Determination of load capacity and load-deflection characteristics of straps'. BS EN 845-1:2013 National Annex NA states that the strap needs to provide an equivalent performance to 30 mm x 5 mm tension straps and the fitted straps should have a tensile load capacity of at least 8kN.

Thor Helical high tensile 316 grade stainless steel crack stitching bars are available in 6mm Diameter, 1m and 6m lengths and 9mm Diameter, 1m and 2m lengths.

