



# How to Stitch a Crack in Masonry

Movement in masonry structures may occur for a variety of reasons. The result is often cracking at the weakest points. Strength may be restored by the installation of masonry reinforcement.

Masonry reinforcement consists of deformed stainless-steel bar or helical stainless-steel wire which is set into resin (polyester or epoxy) or cementitious grout. The helical wire is generally used in brickwork repair and may be 6mm or 8mm in diameter. Solid deformed bar is available from 6mm diameter upwards for more major repairs.

The reinforcement may be installed in short lengths to stitch across cracks, or may be used in continuous lengths to form virtual "beams" in the brickwork. It is important to ensure that there is sufficient bond of the reinforcement into stable sections of the structure.

In order to preserve the aesthetic appearance of the building it is important to pay particular attention to making good the surface of the brickwork, pointing or render to match as closely as possible to the surrounding surfaces.



## TOP TIPS

Ensure that the cracks or movement is dormant and not live.

If cracks are live, they show some change in width, depth or direction over a period of time.





# How to Stitch a Crack in Masonry

## Typical Scenario

Crack Stitching repairs and stabilising cracked masonry using 6mm helical stainless-steel wire or deformed stainless steel bars are bonded into cut chases with a suitable grout or adhesive. For a simple, effective and permanent repair solution.

Tensile loads are then redistributed along the masonry to minimise further developments of the cracks.

## HeliBond

HeliBond is a high performance, 2-part injectable, cementitious, non-shrink grout. It is used to bond HeliBars into masonry for crack stitching, lintel repair and creation, masonry beaming and CemTie installation.



## HeliBar

Helical stainless steel reinforcing bar for masonry repair and strengthening in both remedial and new build situations.



*Click on the product titles to view the datasheet on the Resapol website*



[www.resapol.com](http://www.resapol.com)





# How to Stitch a Crack in Masonry

## Method

1. Rake out by cutting a chase into the horizontal mortar beds, 500mm either side of the crack, to the depth 25 to 35mm (single skin & cavity wall).
2. Vacuum or blow out the chase and remove all dust and debris.
3. Using a pointing gun, inject a bead of resin adhesive into the back of the chase.
4. Push the 6mm helical stainless-steel wire or deformed stainless steel bars into the adhesive.
5. Gun a further bead of resin adhesive over the exposed

reinforcement, finishing 10mm from the brick face.

6. Re-point the mortar bed and make good vertical cracks with rbs Cosmetic Mortar. This is a fast-setting cementitious repair mortar for rapid colour matching repairs.

Where cracks are less than 500mm from an external corner or an opening, for example a window, at least 100mm should be bent around the corner and bonded into the return wall or window reveal, avoid any damp-proof course membrane.

Cut chases should be 10mm wide to accommodate the 6mm diameter reinforcement bars.

