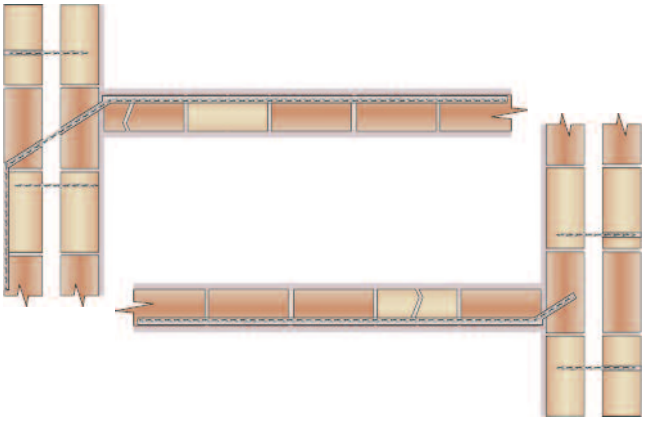
BRW01 Reconnecting a cracked internal wall to an external cavity wall using HeliBars

METHOD STATEMENT

1. Using an appropriate power cutting tool with vacuum attachment, cut slots into the horizontal mortar joints, to the specified depth and at the required vertical spacing (see Specification Notes). Use a power/hand chisel to continue slots up to the internal corner. Ensure that as much mortar is removed as possible from the exposed brick surfaces in order to provide a good masonry/grout bond. If the wall is rendered and the mortar joints are not visible, cut the horizontal slots through the render and into the masonry.
2. Where the slot ends at an internal corner drill a 12mm Ø hole at an angle into the adjoining wall. If required, drill a 12mm Ø hole all the way through to the external face of the adjoining wall and prepare an additional slot in the external face as per step 1.
3. Clean out all dust and loose mortar from the slots and holes and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use HeliPrimer WB. Ensure that the slots are damp or primed prior to commencing steps 6 and 7.
4. Cut the 6mm HeliBar to the required length. If the HeliBar is not required to extend through to the external face of the adjoining wall, bend the end of the HeliBar to fit to the full depth of the hole, then remove. If the HeliBar is required to extend through to the external face, bend the bar so that a sufficient length of HeliBar extends through the hole for grouting into the external face, then remove.
5. Mix HeliBond cementitious grout thoroughly using a drill and mixing paddle and load into the Helifix Pointing Gun.
6. Inject a bead of HeliBond grout, 10-15mm deep, into the back of the slot using the mortar nozzle.
7. Push the HeliBar into or through the grout-filled hole and the remaining portion of bar into the grout-filled slot to obtain good coverage. Bend the bar as necessary to install any remaining HeliBar portion into the external face of the adjoining wall.
8. Inject a second bead of HeliBond grout over the exposed HeliBar and iron it into the slot using a finger trowel. Inject additional HeliBond as necessary into the slot, leaving 10-15mm for new pointing.
9. Inject HeliBond grout or HeliFix resin into the hole to fill.
10. Point up the remaining slot with a suitable matching mortar and make good the crack using an appropriate Helifix bonding agent or filler.
11. Clean tools with clean, fresh water.

N.B. Pointing may be carried out as soon as is convenient after the HeliBond has started to gel. Ensure that pointing does not disturb the masonry/HeliBond connection.

CAUTION. Always locate, identify and isolate any electrical, water or gas services which may be present in the wall or the wall cavities and can pose a safety risk before drilling or cutting. Always take the necessary safety precautions. Use electrical safety gloves and wear appropriate footwear and eyewear.



RECOMMENDED TOOLING

For cutting slots up to 40mm deep .....Wall chaser, mortar saw or angle grinder with vacuum attachment

For drilling .....SDS rotary hammer drill 650/700w

For mixing HeliBond .....Drill with mixing paddle

For injection of HeliBond into slots .....Helifix Pointing Gun with mortar nozzle

For injection of HeliBond into holes .....Helifix Pointing Gun with pinning nozzle

For smoothing pointing .....Standard finger trowel

Specification Notes

The following criteria are to be used unless specified otherwise:

A. Depth of slot into the masonry to be 25 to 35mm + thickness of any plaster.

B. Height of slot to be equal to full mortar joint height, with a minimum of 8mm.

C. HeliBar to be long enough to extend a minimum of 500mm either side of the crack or 500mm beyond the outer cracks if two or more adjacent cracks are being stitched using one rod.

D. Normal vertical spacing is 340mm (4 brick courses).

E. Suitable Helifix wall ties to be installed on each side of the junction not more than 225mm back from the junction and at a maximum of 300mm vertical spacing (see Repair Details BRT01–03).

F. In hot conditions ensure the masonry is well wetted or primed to prevent premature drying of the HeliBond due to rapid de-watering. Ideally additional wetting of the slot, or priming with HeliPrimer WB, should be carried out just prior to injecting the HeliBond grout.

The above specification notes are for general guidance only and Helifix reserves the right to amend details/notes as necessary.

GENERAL NOTES

- If your application differs from this repair detail or you require specific technical information, call Helifix on **1300 66 70 71**.