

## RECONNECTING A CRACKED INTERNAL WALL TO AN EXTERNAL CAVITY WALL USING STRUCSOL ULTRABAR (1 OF 2)

### Recommended Tooling

- ∅ For cutting slots 40mm deep or over: Twin-bladed cutter with a vacuum attachment.
- ∅ For drilling: SDS rotary hammer drill 650 / 700w.
- ∅ For mixing StrucSol HSGROUT: SDS Rotary percussion 3-jaw chuck drill with mixing paddle.
- ∅ For injection of StrucSol HSGROUT into slots: Crack-stitching Gun + Mortar Nozzle.
- ∅ For injection of StrucSol HSGROUT into holes: Crack-stitching Gun + Grout Tie Pinning Nozzle.
- ∅ For smoothing pointing: Standard Finger Trowel.
- ∅ For Injection of the StrucSol Crack Filler: A 400ml Mastic Gun is required.
- ∅ PPE Clothing and Protection.

### General Notes

If you require specific advice on your project, please call the StrucSol technical help line +0116 2375082. We can supply a full support service which includes:

- ∅ Advice and assistance on all structural matters.
- ∅ Preparing repair proposals for specific projects.

### Method Statement:

1. Remedial Wall ties should be fitted first, as shown on method statement SWM06
2. Using a twin bladed diamond tipped wall chaser and vacuum attachment, cut slots into the horizontal mortar joints to the specified depth and at the required vertical spacing. Use a power / hand chisel to continue slots up to the internal corner. Ensure that no mortar is left attached to the exposed brick surfaces in order to provide a good masonry / grout bond.
3. Where the slot ends at the internal corner, drill a 12mm hole into the adjoining wall as shown.
4. Remove all dust and mortar from the slots and holes and thoroughly flush with water. Ensure the slots and holes are damp before commencing steps 6 and 7.
5. Cut the StrucSol Ultrabar to the required length and bend the end to fit in the hole, then remove.
6. Mix StrucSol HSGROUT using a power mixer and load into the Crack-stitching Pointing Gun.
7. Fill the hole with StrucSol HSGROUT using the Grout Tie Pinning Nozzle.
8. Inject a bead of StrucSol HSGROUT, approx. 15mm deep, into the back of the slot using the Crack-stitching Mortar Nozzle.
9. Push the StrucSol Ultrabar into the grout to obtain good coverage.
10. Inject a second bead of StrucSol HSGROUT over the exposed StrucSol Ultrabar and iron it into the slot using a finger trowel. Inject additional StrucSol HSGROUT as necessary, leaving 10-15mm for new pointing.
11. Point up the slots using a matching mortar. The cracks within the wall should be weather-proofed using StrucSol TE resin or StrucSol Crack Filler and leave ready for decoration. To achieve a near perfect look, use StrucSol Stain Colour Matching mortar.
12. Clean tools with clean, fresh water.

- ∅ *Pointing may be carried out as soon as is convenient after the StrucSol HSGROUT has started to gel.*

## RECONNECTING A CRACKED INTERNAL WALL TO AN EXTERNAL CAVITY WALL USING STRUCSOL ULTRABAR (2 OF 2)



### SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise.

- A** Depth of slot into masonry to be 25-35mm plus the thickness of the plaster.
- B** Height of slot to be equal to full mortar joint height, (minimum 8mm). For thin mortar joint specifications refer to the StrucSol Technical Dept..
- C** StrucSol Ultrabar 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 450mm.
- E** Wall ties to be inserted at 225mm vertical spacing, 225mm back from the junction, and staggered on alternate sides of the junction.
- F** In hot conditions, ensure the masonry is well wetted or primed to prevent premature curing of the StrucSol HSGrout due to rapid de-watering.
- G** Do not use StrucSol HSGrout when the air temperature is 4°C and falling, or apply over ice. In all instances, the hole MUST be thoroughly damp or primed prior to injection of the StrucSol HSGrout.

The above specification notes are for general guidance only and StrucSol reserve the right to amend as necessary.