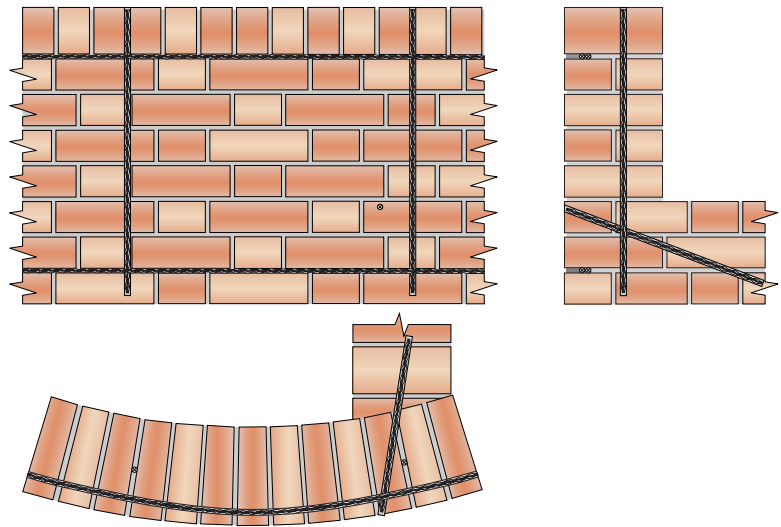


Securing Curved Parapet Walls in Solid Masonry using HeliBars and CemTies

Method Statement

1. Mark the positions for the CemTie holes on the top of the wall.
 2. Drill 14mm clearance holes (16mm if the CemTie is 450mm or longer) into the wall to the specified depth.
 3. 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. Ensure that **NO** mortar is left attached to the exposed brick surfaces in order to provide a good masonry/grout bond.
 4. Clean out ALL dust and mortar from the slots and holes and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use Helifix WB Primer. Ensure the slots and holes are damp or primed prior to commencing steps 9 and 10.
 5. Attach the required length of CemTie pinning nozzle to the gun.
 6. Mix HeliBond cementitious grout using a power mixer and load into the Helifix Pointing Gun Kit HD.
 7. Pump grout to fill the nozzle.
 8. Wind the CemTie into the nozzle and ensure the CemTie is fully covered in grout.
 9. Insert the nozzle to the full depth of the drilled hole and pump the grout.
 10. Inject a bead of HeliBond cementitious grout, approx. 15mm deep, into the back of the slot using the mortar nozzle.
 11. Push the first 6mm HeliBar into the grout to obtain good coverage.
 12. Inject a second bead of HeliBond grout over the exposed HeliBar.
 13. Push the second 6mm HeliBar into the grout to obtain good coverage.
 14. Inject a third bead of HeliBond grout over the exposed HeliBar and iron it into the slot using a finger trowel. Inject additional HeliBond as necessary, leaving 10-15mm for new pointing.
 15. Make good all CemTies holes with brick dust and point up the remaining slots with matching mortar to suit.
- N.B. Pointing may be carried out as soon as is convenient after the HeliBond has started to gel.



Recommended Tooling

For cutting slots up to 40mm deep: Hilti DC-SE 20 wall chaser or similar with vacuum attachment.

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

For mixing HeliBond: 3-jaw-chuck drill with mixing paddle.

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

For insertion of the CemTies: Helifix Pointing Gun Kit HD with pinning nozzle.

For smoothing pointing: Standard finger trowel.

General Notes

If your application differs from this repair detail or you require specific advice on your particular project, call the Helifix Technical Sales Team on 020 8735 5222. Our Technical Department can provide you with a full support service including:

- Advice, assistance and recommendations on all structural repair matters
- Devising and preparing complete repair proposals for specific situations
- An insurance-backed warranty via our Approved Installers scheme

SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

- A** CemTies are to be installed within the centre third of the width of the wall and at a horizontal spacing of 600mm. The ties are to extend at least 225mm into the main, or sound, part of the wall.
- B** The parapet and supporting wall should be tied into abutting or cross walls where possible
- C** HeliBars to be installed at a depth of 25 to 35mm and at a vertical spacing of 450mm (6 brick courses).
- D** Height of slot to be equal to full mortar joint height, with a minimum of 8mm. For thin mortar joint specifications refer to the Helifix Technical Dept.
- E** If HeliBars are to be joined in a straight run, overlap the bars by a minimum of 500mm.
- F** Any fractures in the masonry within the 'beam zone' MUST be stabilised by Crack Stitching, CrackBond TE or masonry replacement.
- G** Depth of hole to be CemTie length +25mm.
- H** Any missing or very poor quality masonry MUST be replaced.
- I** In hot conditions ensure the masonry is well wetted or primed to prevent premature curing of the HeliBond due to rapid de-watering. Ideally additional wetting of the slots and holes, or priming with Helifix WB primer, should be carried out just prior to injecting the HeliBond.
- J** Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the slots and holes must be thoroughly damp or primed prior to injection of the HeliBond grout.

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

This repair is to be undertaken by a Helifix Approved Installer only.

