

BRF02

BRF03

# Repair of brick-faced random stone walls using CemTies through brick faces or mortar joints

Product	Description	Code
CemTie	Grade 316 stainless steel structural pin	HCT
HeliBond	Injectable cementitious grout	HLB
HeliPrimer	Water-based primer for porous substrates	HWB

## METHOD STATEMENT

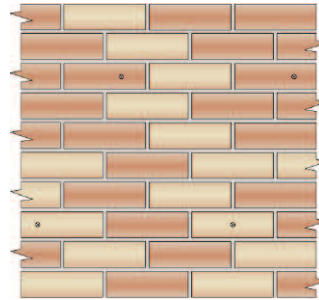
1. Mark the positions for the holes on the outer face of the wall.\*
2. Drill a 14–16mm Ø clearance hole at the required location, through the brick face of the wall and into the back-up material to the specified depth.\*

Alternatively, to avoid marking the brick faces, the hole should be drilled through the perpendicular mortar joint between two adjacent bricks. The hole should be angled either upwards (as shown) or downwards to pass through the brick and then continue into the back-up material.

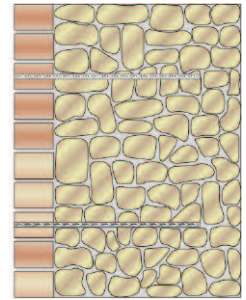
3. Clean out all dust from the hole and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use HeliPrimer WB. Ensure the hole is damp or primed prior to commencing step 8.
4. Attach the required length of CemTie Pinning Nozzle to the Helifix Pointing Gun.
5. Mix HeliBond cementitious grout thoroughly using a drill and mixing paddle and load into the gun.
6. Pump grout to fill the nozzle.
7. Wind the CemTie into the nozzle and ensure that it is fully covered in grout. (Alternatively, fill the hole with grout and wind the CemTie into the grout-filled hole.)
8. Insert the nozzle to the full depth of the drilled hole and pump the grout. Slowly withdraw the nozzle while pumping. The CemTie will be carried out with the HeliBond grout as it is forced through the nozzle. Back pressure will help to push the nozzle back out of the hole.
9. Make good all holes at the surface using either a mixture of sand, cement and oxide colouring to match the original surrounding brick surfaces or a silicone sealant coated with brick dust or drillings. Make good the crack using an appropriate Helifix bonding agent or filler depending on the width of the crack.
10. Clean tools with clean, fresh water.

**NOTE.** If diamond core drilling is used, the internal surface of the hole must be roughened to ensure a good bond.

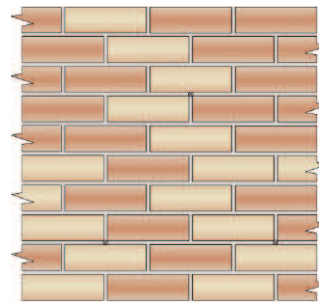
**CAUTION.** Always locate, identify and isolate any electrical, water or gas services which may be present in the wall or the wall cavities and can pose a safety risk before drilling or cutting. Always take the necessary safety precautions. Use electrical safety gloves and wear appropriate footwear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



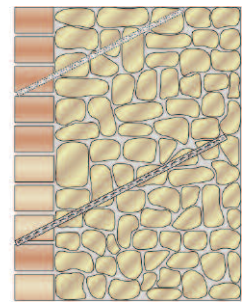
Elevation BRICK FACE REPAIR, BRF02



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## RECOMMENDED TOOLING

- For drilling .....SDS rotary hammer drill 650/850w  
 For mixing HeliBond .....Drill with mixing paddle  
 For insertion of the CemTies .....Helifix Pointing Gun with CemTie Pinning Nozzle

## \* Specification Notes

The following criteria are to be used unless specified otherwise:

- A. The density of the ties will depend upon the condition of the masonry and the loading that it is expected to withstand. Typically, CemTies should be installed at a minimum density of 2.8 ties/m<sup>2</sup> (approx. 600mm horizontal and 600mm vertical spacing).
- B. The depth of fixing into the back-up material must be sufficient to provide a secure connection (prior testing may be required).
- C. Depth of hole to be CemTie length + 25mm.
- D. CemTies are to be installed at an angle of 30° to 40° when following the hidden repair detail to allow sufficient fixing in the brick facing.
- E. 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 hole should be carried out just prior to inserting the CemTie.

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

## GENERAL NOTES

- Helifix product details available at [www.helifix.com.au](http://www.helifix.com.au).
- If your application differs from this repair detail or you require specific technical information, call Helifix on 1300 66 70 71.