

BCS 12

BCS 13

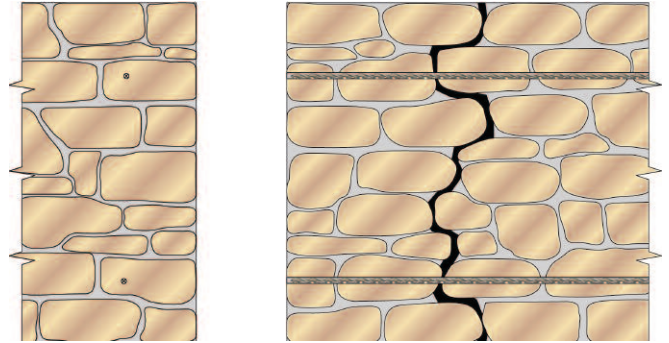
Repair of a crack near a corner in a stone wall using CemTies

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

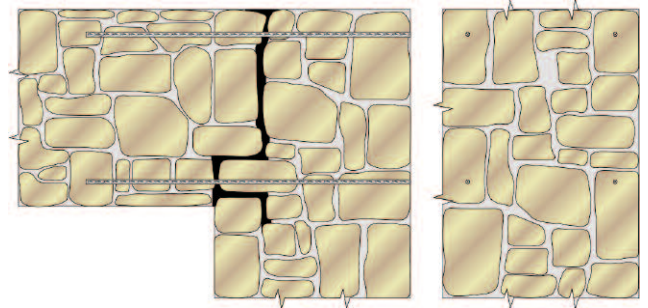
METHOD STATEMENT

1. Mark the locations for the CemTie pins onto the face of the wall at the required spacing.*
2. Drill a 14–16mm Ø clearance hole through the outer wall to the required depth.*
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, e.g. CrackBond, depending on the width of the crack.
10. Clean tools with clean, fresh water.

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.



REPAIR OF A CRACK NEAR A CORNER, BCS12



REPAIR OF INTERNAL AND EXTERNAL CRACKS NEAR A CORNER, BCS13

RECOMMENDED TOOLING

- For drillingSDS rotary hammer drill 650/850w
 For mixing HeliBondDrill with mixing paddle
 For insertion of the CemTiesHelifix Pointing Gun with CemTie Pinning Nozzle

* Specification Notes

The following criteria are to be used unless specified otherwise:

- A. CemTies are to be installed at a vertical spacing of 425mm.
- B. CemTies are to extend an equal distance, and typically to not more than 500mm, either side of the crack.
- C. Depth of hole to be CemTie length + 25mm.
- D. Ensure the CemTies are installed into solid stone and not the mortar joints or loose rubble within the wall.
- E. If cracking occurs on both elevations consider using HeliBar crack stitching around the corner (see Repair Detail BCS11). If CemTies have to be used, they should be staggered between each elevation.
- 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 hole, or priming with HeliPrimer WB, 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.
- If your application differs from this repair detail or you require specific technical information, call Helifix on 1300 66 70 71.