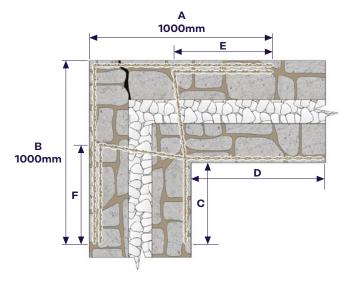




# Reconnecting a Cracked Corner in a Rubble-Filled Wall using HeliBars

#### **METHOD STATEMENT**

- Using a twin-bladed, diamond-tipped wall chaser and vacuum attachment, cut slots into the horizontal mortar joints on the outer face at positions A & B and on the internal face at positions C & D, to the specified depth and at the required vertical spacing. NOTE: Internal slots must be vertically staggered with external slots.
- 2. Ensure that **NO** mortar is left attached to the exposed stone surfaces in order to provide a good masonry/grout bond. This operation may require the use of hand tools to remove the mortar due to the random nature of the stone.
- 3. At the end of the slot on the internal wall closest to the corner, drill a 12mm hole through the wall into the same height mortar joint on the outer face.
- **4.** Repeat steps 1 & 2 to the mortar joints E & F on the outer face to which the holes have been drilled.
- 5. Remove **ALL** dust and mortar from the slots and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use HeliPrimer WB. Ensure the slot is damp or primed prior to commencing step 8.
- 6. Mix HeliBond cementitious grout using a power mixer and load into the Helifix Pointing Gun CS.
- 7. Fit an appropriate mortar nozzle.
- 8. Insert HeliBars into all four slots. Where relevant, feed the HeliBar through the hole to allow sufficient length to be bent at 90° and be bedded into slots E and F.
- 9. Inject a bead of HeliBond grout, approx. 15mm deep, into the back of the slot.
- **10.** Bend the HeliBar to the required angle and push firmly into the grout to obtain good coverage.
- **11.** Inject a second bead of HeliBond grout over the exposed HeliBar and iron it into the slot using a finger trowel. Inject additional HeliBond grout as necessary, leaving 10-15mm for new pointing.



- 12. Point up the remaining slot with a suitable matching mortar and make good the crack using an appropriate Helifix bonding agent depending on the width of the crack.
- 13. 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.

### **RECOMMENDED TOOLING**

- For cutting slots up to 40mm deep Twin bladed cutter 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 CS with mortar nozzle
- For smoothing pointing Standard finger trowel



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## **Specification Notes**

The following criteria are to be used unless specified otherwise:

- **A.** Depth of slot into the masonry to be 35-40mm + the thickness of any render.
- **B.** 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.
- **C.** Internal HeliBars to be drilled through adjoining wall, bent and returned in external bed joints to a minimum of 1000mm beyond crack or apex of corner. External bars to extend a minimum of 1000mm beyond crack or apex of corner.
- **D.** All 3 HeliBars to be installed at every 450mm vertical centre.
- 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 slot, or priming with HeliPrimer WB, should be carried out just prior to injecting the HeliBond grout.
- F. Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the slot 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.

#### **GENERAL NOTES**

If your application differs from this repair detail or you require specific advice on your particular project or Helifix products, call our 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