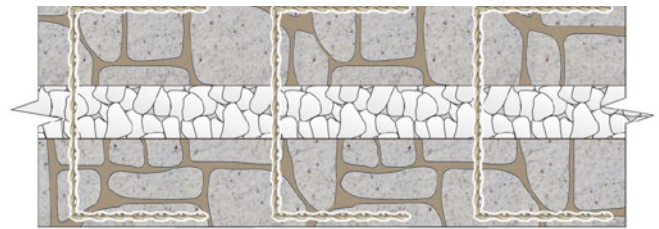


Repair of Delaminated or Separating Masonry in a Rubble-Filled Wall using HeliBars

METHOD STATEMENT

1. Mark the positions for the holes on the outer face of the wall.
2. Drill 12mm clearance holes through the wall in a staggered pattern.
3. Using a twin-bladed, diamond-tipped wall chaser and vacuum attachment, cut 350mm long slots into the horizontal mortar joints to one side of the holes, to the specified depth and at the required vertical spacing. 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.
4. Repeat step 3 on the other side of the wall ensuring the slots are opposite those already cut.
5. Clean out ALL mortar from the slots and dust from the slots and holes and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use HeliPrimer WB. Ensure the holes are damp or primed prior to commencing step 9.
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 the HeliBar through the hole, making sure that it is long enough for a minimum of 300mm to be bent at right angles and bedded into the slots on both the inner and outer faces of the wall.
9. Inject a large bead of HeliBond grout, approx. 15mm deep, into the back of the slot on the outer face and tool firmly into the slot.
10. Bend the HeliBar to the required angle and push firmly into the grout to obtain good coverage.



11. Inject a second smaller 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. Repeat steps 9 to 12 on the inner wall.
14. 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 insertion of the CemTies**
Helifix Pointing Gun Kit HD with pinning nozzle
- **For smoothing pointing**
Standard finger trowel

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. Bars to be installed at 450mm vertical x 450mm horizontal centres in a staggered pattern.
- D. 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 holes and slots should be carried out just prior to inserting the CemTies and HeliBar.
- E. Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the holes and slots must be thoroughly damp or primed with HeliPrimer WB 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