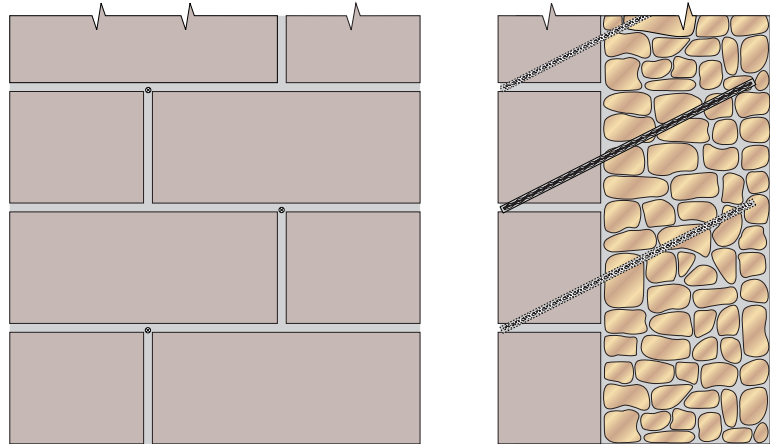


# Hidden Repair of Stone-Faced Random Stone Walls using CemTies through Mortar Joints

## Method Statement

1. Mark the positions for the holes on the outer face of the wall.
2. Drill a 14mm clearance hole (16mm if the CemTie is longer than 450mm), at the required location, through the stone facing of the wall and into the backup material to the specified depth.  
To avoid marking the stone faces, the hole should be drilled through the perpendicular mortar joint between two adjacent stones. The hole should be angled upwards to pass through the upper stone and then continue into the backup 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 Helifix WB Primer. Ensure the hole is damp or primed prior to commencing step 7.
4. Attach the required length of CemTie pinning nozzle to the gun.
5. Mix HeliBond cementitious grout using a power mixer and load into the Helifix Pointing Gun Kit HD.
6. Pump grout to fill the nozzle.
7. Wind the CemTie into the nozzle and ensure that it is fully covered in grout.
8. Insert the nozzle to the full depth of the drilled hole and pump the grout.
9. Make good all holes at the surface with matching mortar.



## Recommended Tooling

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

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

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

## 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 at an angle of 30° to 40° to allow sufficient fixing in the stone facing.
- B** The density of the ties will depend upon the condition of the masonry and the loading it is expected to withstand. In general, the density should not be less than 2.5 ties/m<sup>2</sup> (900mm x 450mm).
- C** The depth of fixing into the backup material must be sufficient to provide a secure connection (prior testing may be required).
- D** Depth of hole to be CemTie length +25mm.
- E** 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 hole, or priming with Helifix WB primer, should be carried out just prior to inserting the CemTie.
- F** Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the hole must be thoroughly damp or primed with Helifix WB primer 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.