

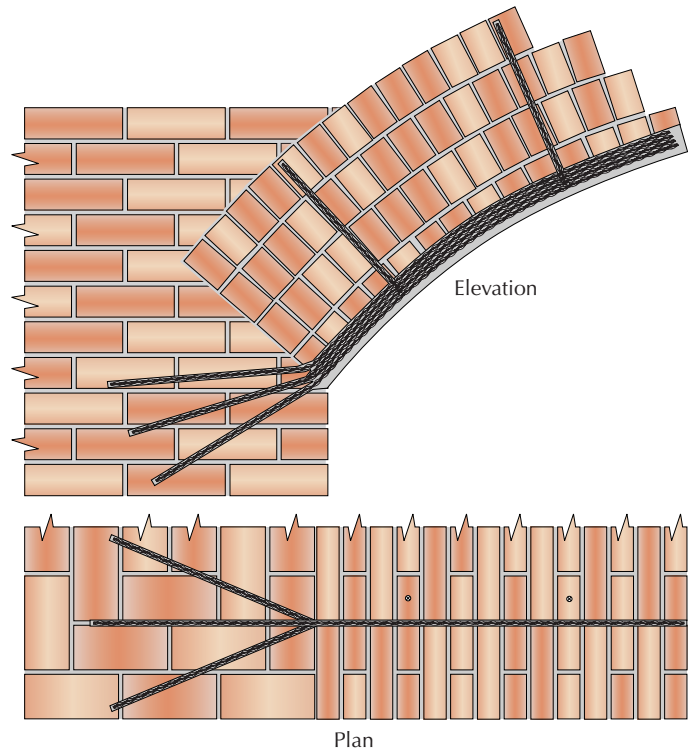
Masonry Arch Circumferential Beam End Fixing using HeliBars

Method Statement

1. Using a twin-bladed, diamond-tipped wall chaser and vacuum attachment, cut slots down to the springing line of the arch, to the specified depth. Ensure that **NO** mortar is left attached to the exposed brick surfaces in order to provide a good masonry/grout bond.
2. Drill 14mm clearance holes to the required depth in line with the slot, for HeliBar 1 (top) and HeliBar 4 (bottom). The holes should be angled upwards and downwards from the line of the reinforcing to give an angle of about 30° between them.
3. Drill 14mm clearance holes to the required depth outwards from the slot, for HeliBars 2 and 3 (central bars). The holes should be angled left and right to give an angle of about 30° between the line of the hole and the line of the reinforcing (i.e. about 60° between the holes).
4. Clean out ALL dust from the slots and holes and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use Helifix WB Primer. Ensure the slots and holes are damp or primed prior to commencing step 8.
5. Attach the required length of CemTie pinning nozzle to the gun.
6. Mix HeliBond cementitious grout with a power mixer and load into the Helifix Pointing Gun Kit HD.
7. Pump grout to fill the nozzle.
8. Insert the nozzle to the full depth of the drilled hole and pump the grout to fill the hole. Maintain the grouting pressure to ensure that all voids are filled with grout.
9. Bend the HeliBar to the correct shape and insert the end into the full depth of the grout filled hole.
10. Continue to fix the other HeliBars as above until all of the ends have been fixed.

NOTE: For details on circumferential beaming and pinning see Repair Detail MA03.

For structural bridge or tunnel repairs refer to the Helifix Technical Department.



Recommended Tooling

For cutting slots more than 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 holes: Helifix Pointing Gun Kit HD with CemTie 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** Depth of HeliBar anchorage holes to be 450mm.
- B** 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 slots and holes, or priming with Helifix WB primer, should be carried out just prior to inserting the HeliBars.
- C** Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the slots and holes 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.