Masonry Arch Pinning of Cracked Brick Rings using CemTies

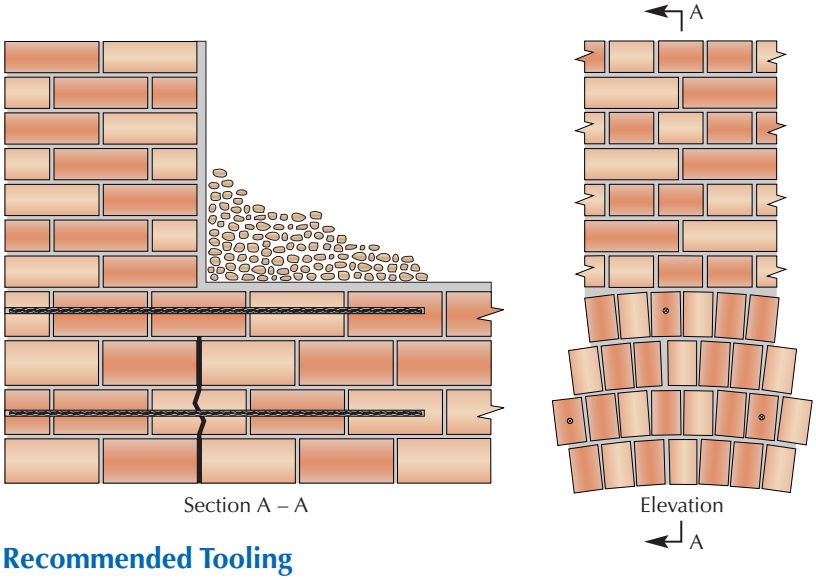
MA08

Method Statement

1. Mark locations for the pins onto the face of the arch at the required spacing.
2. Drill 14mm clearance holes (16mm if the CemTie is longer than 450mm) to the required depth at the position marked.
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 8.
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 brick dust or a suitable matching mortar.

NOTE: If there is a lot of movement in the brickwork then the ties will have to be installed in phases. After each phase the ties should be left for 24 hours for the grout to achieve an initial set. After 24 hours continue with the next phase.

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



Recommended Tooling

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.

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 *Nominal vertical and horizontal spacing between CemTies to be 450mm.*

B *CemTies are to extend a minimum of 200mm past any visible or known crack.*

C *Depth of hole to be CemTie length +25mm.*

D *1 metre long CemTies should be sufficient in most normal applications.*

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 holes, or priming with Helifix WB primer, 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 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.