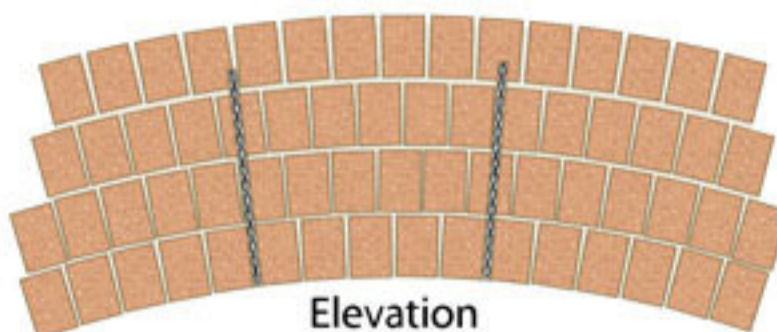


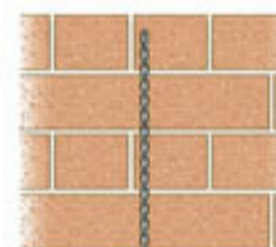
# Masonry Arch Pinning of Separated Brick Rings, through Mortar Joints, using Grout Ties

## Method Statement

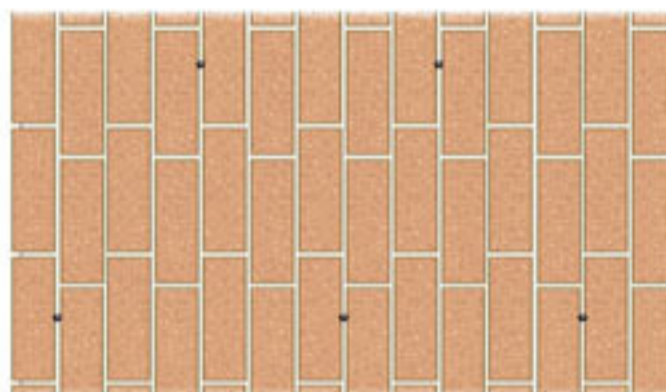
1. Mark locations of the Grout Ties on the underside of the arch at the specified centres.
2. Drill 14mm clearance holes (16mm if the Grout Tie is longer than 450mm) to the required depth.
3. Clean out all dust from the holes and thoroughly flush with water. Use Thor Primer to seal the faces of the hole where substrate is very porous or water can't be used.
4. Attach the appropriate length of Grout Tie pinning nozzle to the grout gun.
5. Mix the Thor WHO Grout constituents together, as directed, in the bucket provided using a powered mixing paddle. Additional liquid should not be added.
6. Load the grout into the grout gun and pump grout to fill the nozzle.
7. Screw the Grout Tie into the pinning nozzle and ensure it is fully encapsulated in grout.
8. Insert the nozzle to the full depth of the hole and pump the grout gun to expel the grout and Grout Tie. Finish the grout back from face of brickwork to allow application of a colour matched mortar.
9. **Note.** Re-pointing can be commenced when grout has begun to set.  
**Note.** Thor WHO Grout has an accelerated gelling time. Should the grout become too stiff to inject, empty the contents of the grout gun back into the mixing bucket and re-mix using the powered mixing paddle without adding additional liquid. Reload the injection gun and proceed as before.



Elevation



Section



Plan

## SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

- A. Nominal spacing between lines of Grout Ties to be 450mm
- B. Nominal spacing between Grout Ties along lines to be 450mm
- C. Depth of the clearance hole to be Grout Tie length +25mm.
- D. **Climatic Conditions.** In hot conditions Thor WHO 60 grout should be stored and mixed in the shade to maximize the working life of the mixed product. As Thor WHO 60 grout is a cementitious product it should not be used when the temperature is +4°C and falling.
- E. Where arch rings are badly delaminated and/or brickwork is very loose the Grout Ties may have to be installed in phases allowing a minimum of 24 hours for the grout to set before proceeding to the next phase. Thor Drive Ties can be used to locally stabilise poor brickwork.

## RECOMMENDED TOOLING

- A. 2.5kg SDS hammer drill
- B. Drill bits of appropriate diameters and lengths
- C. Power mixing paddle.
- D. Thor Grout gun and injection nozzle.
- E. Grout Tie pinning nozzle of appropriate length.

## General Notes

These notes are for general use only. Should these notes not apply to your specific project, please consult the Thor Helical Remedial Technical Support Team on 0870 6006164. Thor Helical Remedial are able to offer a full project design service by either our in house design team or our National network of Approved installers. In most instances this service is provided free of charge. Projects completed by our network of approved installers offer the benefit of a fully underwritten insurance backed guarantee.