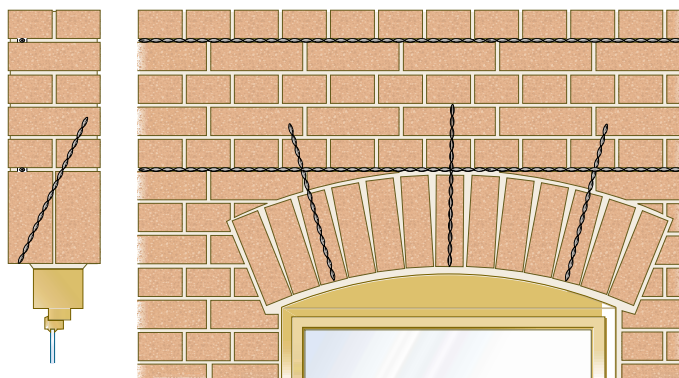


# Repair of Failed Brick Arch Lintels using Thor Heliforce bars and Drive Fix Ties

## Method Statement

1. Use a twin bladed diamond tipped wall chasing unit to cut out horizontal slots in the mortar bed as the specification notes require. For clean dust free cutting use vacuum attachment to Chasing unit.  
**Note.** When installing grouted bar in mortar bed joint, ensure the joint is removed in its entirety to the specified depth, so that the top and bottom faces of the brick are clearly visible within the slot. Failure to follow this procedure will result in reduced effectiveness of the repair.
2. Remove all dust and debris from the slot and seal all faces of the slot using Thor HR primer.
3. Cut the required number of Thor Heliforce bars to the appropriate length, ensuring that they fit into the prepared slot.
4. Mix the Thor Flexi Grout components together in the bucket provided, using a power mixing paddle, until both components are thoroughly blended. Additional fluids should not be added.
5. Load the Thor Flexi Grout into the Flexi Grout gun.
6. Inject a 10-15mm thick bead of grout into the back of the prepared slot. Insert the Thor Heliforce bar into the slot pushing the bar to the back of the slot to ensure displacement of the grout. Inject a further 10mm bead of Thor Flexi Grout.
7. Install the second Thor Heliforce bar into the slot and cover with a third 10mm bead of Thor Flexi grout. Compact the grout and bar composite into the slot using a finger trowel or similar tool.
8. **Note.** Pointing can be commenced immediately grout has been trowelled.  
**Note.** Thor Flexi Grout has an accelerated setting time, should the grout become too stiff to inject, empty the contents of the gun back into the mixing bucket. Reagitate the mixture using the Paddle mixer, without adding additional fluid. Then reload the Injection gun and proceed as before.
9. Drill pilot holes for Thor Drive Fix ties to the underside of the brickwork above the opening. To establish pilot hole diameters consult the Drive Fix design tables or consult with Thor HR technical department. Ensure the pilot hole extends no less than 50mm above the lower cord of masonry beam and that the pilot hole is angled to pass behind the bars used in the lower cord of the beam.
10. Install the Thor Drive Fix ties into the pre drilled pilot holes using the Drive Fix installation tool.
11. Make good all holes with coloured sand and cement mortar.



## SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

- A. Finished depth of slot to be approximately 45-55mm
- B. Finished thickness of slot to be no less than the thickness of the mortar bed
- C. Where the crack is less than 500mm from the edge of the wall, Thor Heliforce bar should be returned a minimum of 100mm beyond the corner, in the case of an internal angle the bar should be returned into the angle a minimum of 100mm.
- D. The top and bottom cords of each masonry beam should be separated by as much vertical spacing as is practical up to a maximum vertical spacing of 900mm.
- E. Masonry fractures located within the cords of the beam must be backfilled with Thor epoxy non shrink resin.

## Climatic Conditions

- E. In hot conditions Thor Flexi Grout should be mixed and stored in the shade to increase workable life of the product. After initial set the Grout can be re agitated to regain workability. Additional fluids must not be added.

As Thor Flexi grout is a cementitious product it should not be used when the temperature is +4°C and falling.

## RECOMMENDED TOOLING

- A. Twin bladed wall chasing unit with vacuum attachment.
- B. Grout mixing paddle and drill, or paddle mixer
- C. Thor HR Grouting gun and injection nozzle.
- D. Finger Trowel for finishing.
- E. 2.5Kg SDS Hammer drill
- F. Thor Drive fix installation tool and pilot drill of appropriate size

## 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.