

# INSTALLATION

ANZ  
LB02

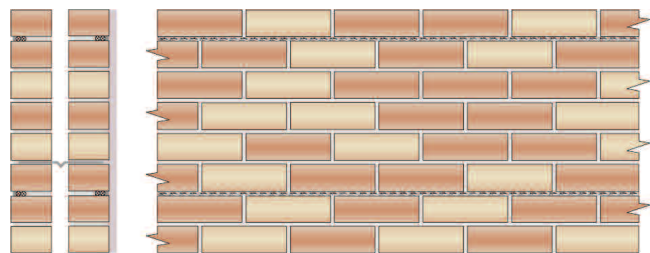
## Creating load-bearing beams in cavity walls using HeliBars, external and internal beaming

### Method Statement

1. Using an appropriate power cutting tool with vacuum attachment, cut slots into the horizontal mortar joints, to the specified depth and at the required vertical spacing.\* If the wall is plastered/rendered and the mortar joints are not visible, cut the horizontal slots through any plaster/render and into the masonry. Ensure that as much mortar is removed as possible from the exposed brick surfaces in order to provide a good masonry/grout bond.
2. Clean out all dust and loose mortar from the slots and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use HeliPrimer WB. Ensure the slot is damp or primed prior to commencing step 5.
3. Mix HeliBond cementitious grout thoroughly using a drill and mixing paddle and load into the Helifix Pointing Gun.
4. Fit the mortar nozzle to the pointing gun.
5. Inject a bead of HeliBond cementitious grout, 10-15mm deep, into the back of the slot.
6. Push the first 6mm HeliBar into the grout to obtain good coverage.
7. Inject a second bead of HeliBond grout over the exposed HeliBar.
8. Push the second 6mm HeliBar into the grout to obtain good coverage.
9. Inject a third bead of HeliBond grout over the exposed HeliBar and iron it into the slot using a finger trowel. Inject additional HeliBond as necessary, leaving 10-15mm for new pointing.
10. Point up the remaining slot with a suitable matching mortar.
11. Clean tools with clean, fresh water.

**NOTE.** Pointing may be carried out as soon as is convenient after the HeliBond has started to gel. Ensure that pointing does not disturb the masonry/HeliBond connection.

**CAUTION.** Always locate, identify and isolate any electrical, water or gas services which may be present in the wall or the wall cavities and can pose a safety risk before drilling or cutting. Always take the necessary safety precautions. Use electrical safety gloves and wear appropriate footwear and eyewear.



#### RECOMMENDED TOOLING

- For cutting slots .....Chisel, mortar saw (e.g. Arbortech All Saw) or angle grinder with dust guard (e.g. C-Tec) and vacuum
- For mixing HeliBond .....Drill with mixing paddle
- For injection of HeliBond into slots .....Helifix Pointing Gun with mortar nozzle
- For smoothing pointing .....Standard finger trowel

#### \*SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

- A. A minimum of two HeliBars should be installed into each cut slot.
- B. Depth of slot into the masonry to be 40mm to 55mm + the thickness of any plaster or render.
- C. Height of slot to equal full mortar joint height, with a minimum of 8mm.
- D. If HeliBars are to be joined in a straight run, overlap the bars by a minimum of 500mm.
- E. Top and bottom reinforcements should be positioned as far apart as practicable, up to a maximum distance equivalent to 10 brick courses (approx. 850mm).
- F. Any fractures in the masonry within the 'beam zone' MUST be stabilised by crack stitching (see Repair Detail CS01), CrackBond or masonry replacement.
- G. Any missing or very poor quality masonry MUST be replaced.
- H. Install Helifix remedial wall ties if existing ties are defective in any way. Refer to Repair Details ANZ RT01-03 for details on Helifix remedial tie installation.
- I. Multiple Helibeams should be installed starting at the top and working down to the bottom.
- J. In hot conditions ensure the masonry is well wetted or primed to prevent premature drying of the HeliBond due to rapid de-wetting. Ideally additional wetting of the slot, or priming with HeliPrimer WB, should be carried out just prior to injecting the HeliBond grout.
- K. Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the slot 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.

#### GENERAL NOTES

- Product details available from Helifix.
- Contact Helifix if your application differs from this repair detail or you require specific technical information.