

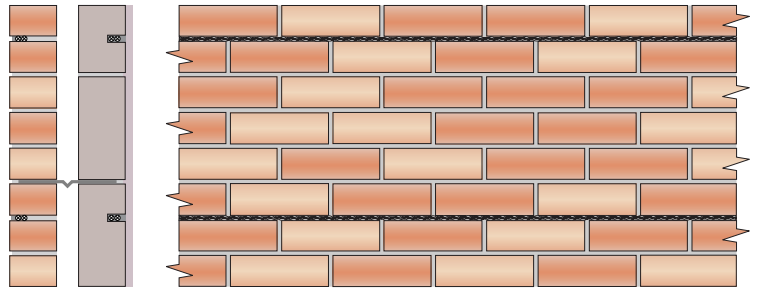
# Creating Load Bearing Beams in Cavity Walls using HeliBars, External and Internal Beaming

## Method Statement

- Using a twin-bladed, diamond-tipped wall chaser and vacuum attachment, cut slots into the horizontal mortar joints, to the specified depth and at the required vertical spacing. Ensure that **NO** mortar is left attached to the exposed brick surfaces in order to provide a good masonry/grout bond. Internally, if the mortar joints are not visible, cut the horizontal slots through any plaster and into the masonry.
- Remove ALL dust and mortar from the slots and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use Helifix WB Primer. Ensure the slot is damp or primed prior to commencing step 4.
- Mix HeliBond cementitious grout using a power mixer and load into the Helifix Pointing Gun Kit CS.
- Inject a bead of HeliBond cementitious grout, approx. 15mm deep, into the back of the slot.
- Push the first 6mm HeliBar into the grout to obtain good coverage.
- Inject a second bead of HeliBond grout over the exposed HeliBar.
- Push the second 6mm HeliBar into the grout to obtain good coverage.
- 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.
- Point up the remaining slot with a matching mortar to suit or leave ready for any decoration.

N.B. Pointing may be carried out as soon as is convenient after the HeliBond has started to gel.

**This repair is to be undertaken by a Helifix Approved Installer only.**



## Recommended Tooling

For cutting slots more than 40mm deep: Twin bladed cutter with vacuum attachment.  
 For mixing HeliBond: 3-jaw-chuck drill with mixing paddle.  
 For injection of HeliBond into slots: Helifix Pointing Gun Kit CS with mortar nozzle.  
 For smoothing pointing: Standard finger trowel.

## 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 slot into the masonry to be 40mm to 55mm **plus the thickness of the plaster.**
- B** Height of slot to be equal to full mortar joint height, with a minimum of 8mm. For thin mortar joint specifications refer to the Helifix Technical Dept.
- C** If HeliBars are to be joined in a straight run, overlap the bars by a minimum of 500mm.
- D** Top and bottom reinforcements should be positioned as far apart as practicable, up to a maximum distance equivalent to 12 brick courses (approx. 900mm).
- E** Any fractures in the masonry within the 'beam zone' **MUST** be stabilised by Crack Stitching, CrackBond TE or replacement of the masonry.
- F** Any missing or very poor quality masonry **MUST** be replaced.
- G** If existing wall ties are defective in any way additional Helifix remedial ties should be installed.
- H** Multiple HeliBeams should be installed starting at the top and working down to the bottom.
- I** 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 slot, or priming with Helifix WB primer, should be carried out just prior to injecting the HeliBond grout.
- J** 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.