

INSTALLATION

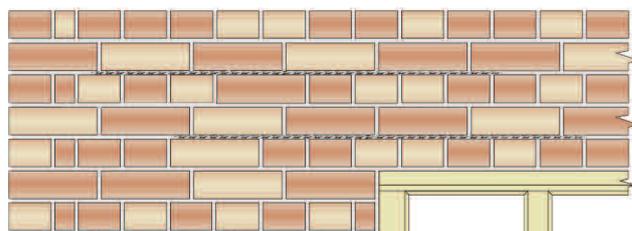
ANZ
NH02

Strengthening new build masonry above openings to resist cracking using HeliBars

Product	Description	Code
HeliBar	Stainless steel reinforcement	HBR

Method Statement

1. If coiled, uncoil the HeliBars prior to installation to ensure that they lie flat and straight.
2. If necessary, cut the HeliBars to the required lengths (see Specification Notes).
3. Build up brickwork pillar as normal, laying bricks frog up and ensuring that all perp ends are full of mortar. Set lintel in place above the opening. If using a steel arch bar lintel, lay one course of brickwork as normal along the length of the bar. Leave lintel exposed if using a concrete lintel or similar. (Refer to New Build Detail BNB05 for details on the construction of concealed lintel using HeliBars.)
4. Lay a half thickness bed of mortar over the section of the exposed wall that is to be reinforced.
5. Bed the specified number of HeliBars into the mortar, using bricks to hold them in place. The HeliBars should be laid straight and positioned at least 30mm in from the brick face. Space HeliBars evenly across the width of the mortar bed to 30mm in from both the inner and outer face if installing more than one bar.
6. Starting from one end, lay a course of brickwork on to the HeliBars by laying another half thickness bed on top of the bars. This course should be well bedded in to ensure that the HeliBars are completely covered in mortar.
7. Complete the courses above as normal, installing additional HeliBars in any further courses as required.



*SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

- A. Allow for the installation of at least one 6mm HeliBar for each skin of new build brickwork. By example, reinforcement of a single cavity wall leaf will involve the installation of at least one HeliBar per specified course. By comparison, a common 230mm solid wall construction (equivalent to two skins of tied brickwork) will require the installation of two HeliBars per specified course. Two or more HeliBars per skin may be installed to create a load-bearing masonry beam. As many as four HeliBars per bed may be installed.
- B. HeliBar to be installed into as many or as few brick courses as needed to suit load and span requirements. Typically, reinforcement of a shallow masonry wall will involve the installation of one to two HeliBars into the mortar directly above the first brick course and below the top brick course.
- B. HeliBar installed into the first course of brickwork above the opening to extend at least 600mm either side of the edge of the opening. HeliBar installed into subsequent courses also to be a minimum 1200mm in length, but installed at an offset position to the position of the HeliBar installed into the first course. HeliBar centres should align along the stepped path most likely to be traced out by any future cracking.
- C. Ensure that the HeliBars are always fully embedded in the mortar during construction and that they are not moved or loosened once the mortar has been laid.
- D. If HeliBars are to be joined in a straight run, overlap the bars by a minimum of 500mm.
- E. Wall sections into which HeliBar are to be installed must not be broken by flashings, damp-proof courses or weep holes.
- F. Minimum mortar strength in accordance with the masonry code. Bond strength is critical and the use of air entraining agents or other additives likely to reduce bond strength is to be avoided.
- G. In high ambient temperatures (above 25°C) do the following
 - a) Match the brick suction with the mortar water retention for maximum bond strength
 - b) Pre-wet bricks with high initial rate of absorption

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.