



# HALFEN

## Sitework Guidance for Halfen HK4 Bracket

**SG-HK4** 03/00  
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### General

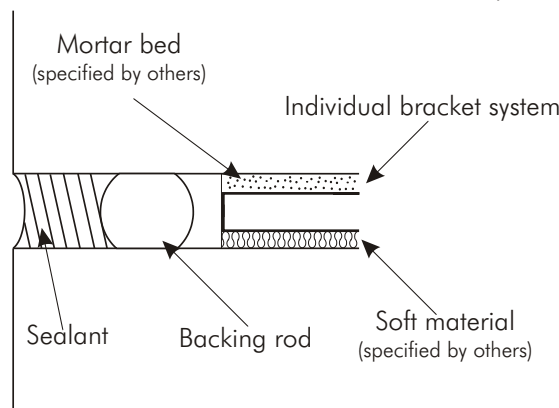
The HK4 Brickwork Support System provides an adjustable means of support for masonry facades above horizontal soft joints.

This notice gives basic sitework guidance. For full details see the current technical literature (Nov 1997).

Halfen are pleased to discuss and explain any points of detail - please phone the number shown below.

Drawings showing the channel and bracket setting out are normally provided by Halfen Limited. Check that the current approved drawings are available on site.

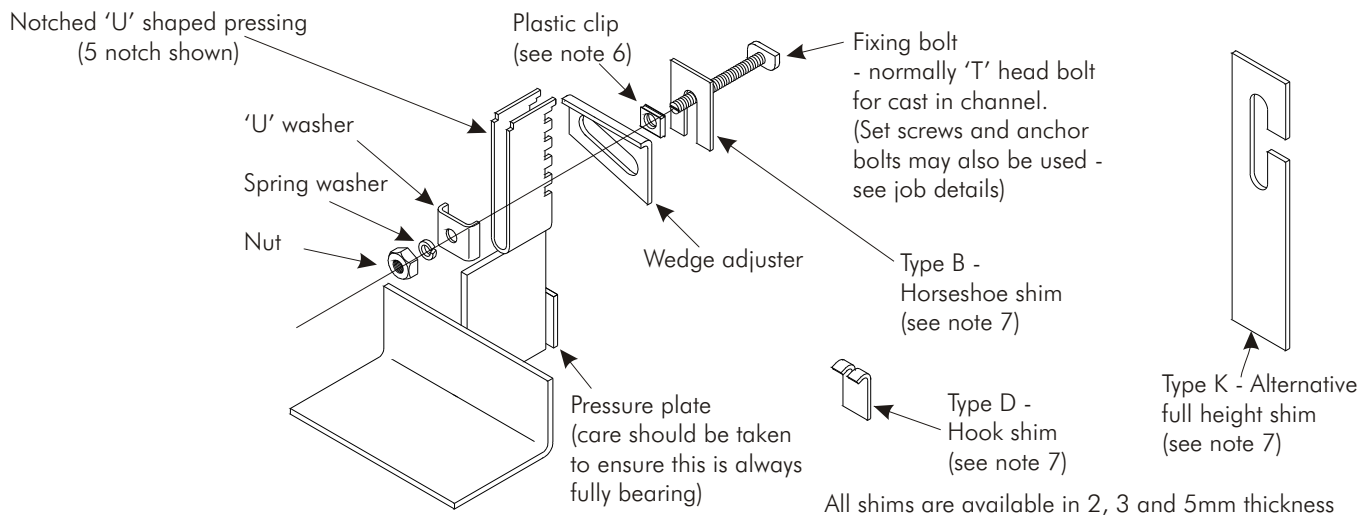
A soft joint in the facade usually occurs under the bracket, as shown on the drawing below. Care must be taken to ensure that the soft joint is maintained at the correct thickness and is kept clear of all hard material.



**Diagram showing typical cross section at soft joint.**

The bed joint above the bracket may be a minimal thickness sufficient to place the brick level - subject to architects approval

### Typical HK4 Bracket assembly



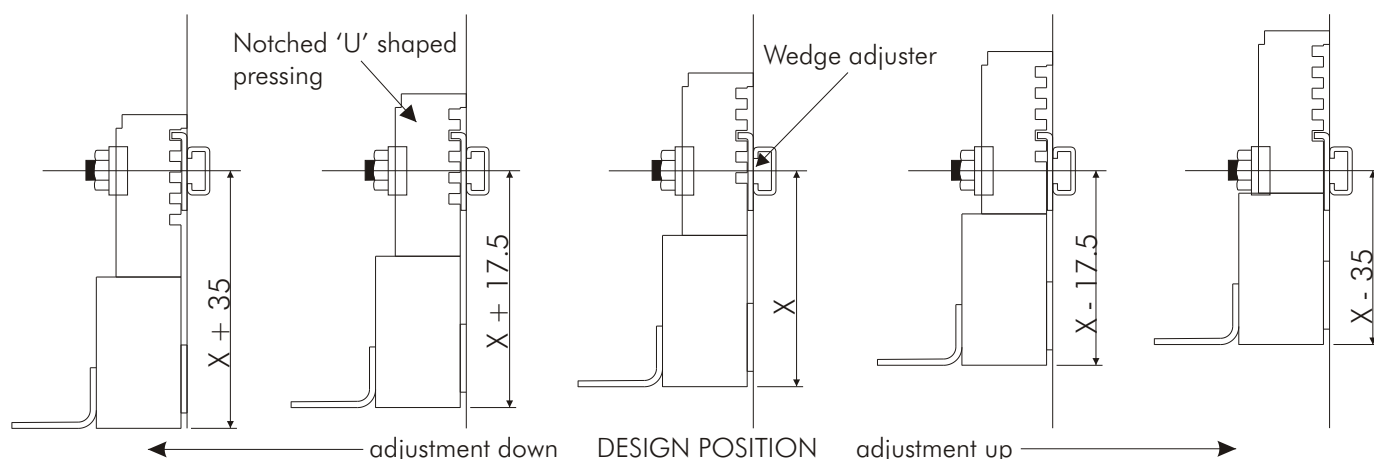
### Adjustment

Horizontal adjustment: is achieved by using a horizontal cast in channel for concrete framed buildings, by providing horizontal slots in the steel structure or by providing Halfen channel welded to the structure.

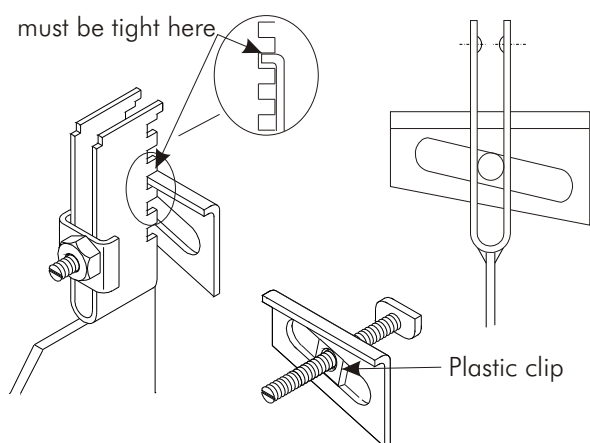
Vertical adjustment: is achieved by using a combination of a wedge adjuster and a series of notches in the 'U' shaped pressing.

### Installation

- Initial adjustment is achieved by assembling the wedge adjuster in the back leg notch which positions the bracket nearest to the required level.
- Brackets are then offered up to the cast in channel and the bolt rotated until the head 'blocks' fully in the channel. When the bolt is correctly inserted the notch in the shank of the bolt will be perpendicular to the channel. The pressure plate must be supported on the structure as shown on the job drawings. The design relationship between the support and the fixing to the structure is dimension x shown on the job drawing.



- Final levelling/adjustment is made with the 'U' washer in place and the fixing nut finger tight. Carefully tap the adjuster wedge to ensure that;
  - the top of the notch in the back leg is bearing fully on the top of the wedge adjuster
  - the top of the slot in the wedge adjuster is bearing fully on the top of the bolt.



- When the brackets are lined and level, tighten the fixings to the required torque. (Torque figures for 'T' head bolts used with cast in channels can be found in the 'Cast in channels' catalogue. For site drilled bolts, refer to the bolt supplier's data sheets)

- In some cases local cutting of the brickwork may be required around the projecting 'T' head bolt and/or bracket gusset.

- Where the HK4 G bracket angle system is used with M12 bolts some angles may have three or four brackets, in which case a plastic clip is provided as a temporary assistance during assembly.

- Shims should be avoided as far as possible but if required placed at bolt and pressure plate level and kept to a minimum.

