

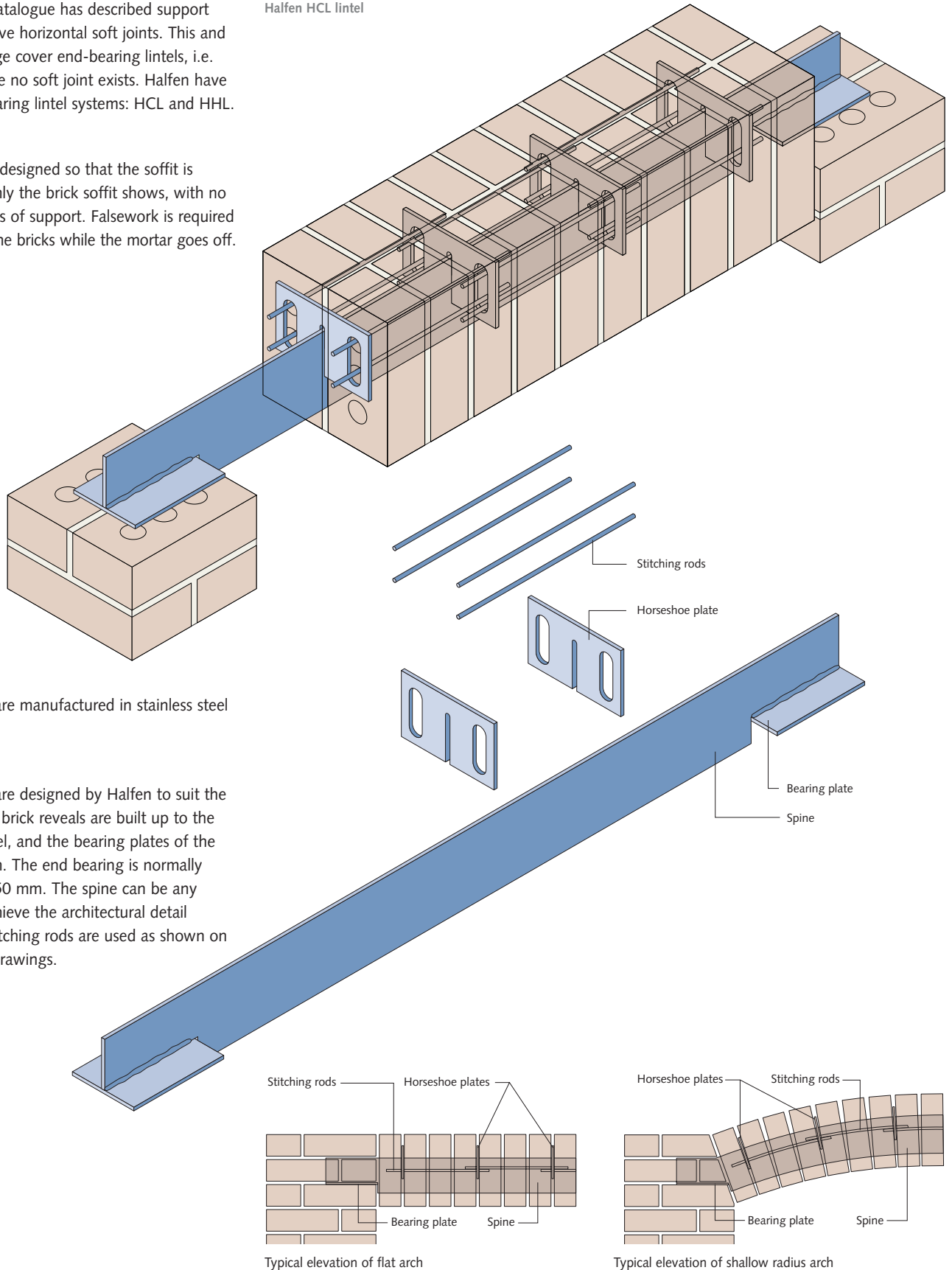
# End-bearing lintels

So far this catalogue has described support systems above horizontal soft joints. This and the next page cover end-bearing lintels, i.e. details where no soft joint exists. Halfen have two end-bearing lintel systems: HCL and HHL.

## HCL lintel

This lintel is designed so that the soffit is clean, i.e. only the brick soffit shows, with no visible means of support. Falsework is required to support the bricks while the mortar goes off.

Halfen HCL lintel



### Materials

HCL lintels are manufactured in stainless steel Grade 304.

### Design

HCL lintels are designed by Halfen to suit the project. The brick reveals are built up to the required level, and the bearing plates of the spine built in. The end bearing is normally minimum 150 mm. The spine can be any shape to achieve the architectural detail required. Stitching rods are used as shown on Halfen job drawings.

## HHL folded angle lintels

This is a range of end-bearing lintels with a conventional steel soffit, which may be either exposed or concealed by the window head or trim. All webs are insulated with polystyrene.

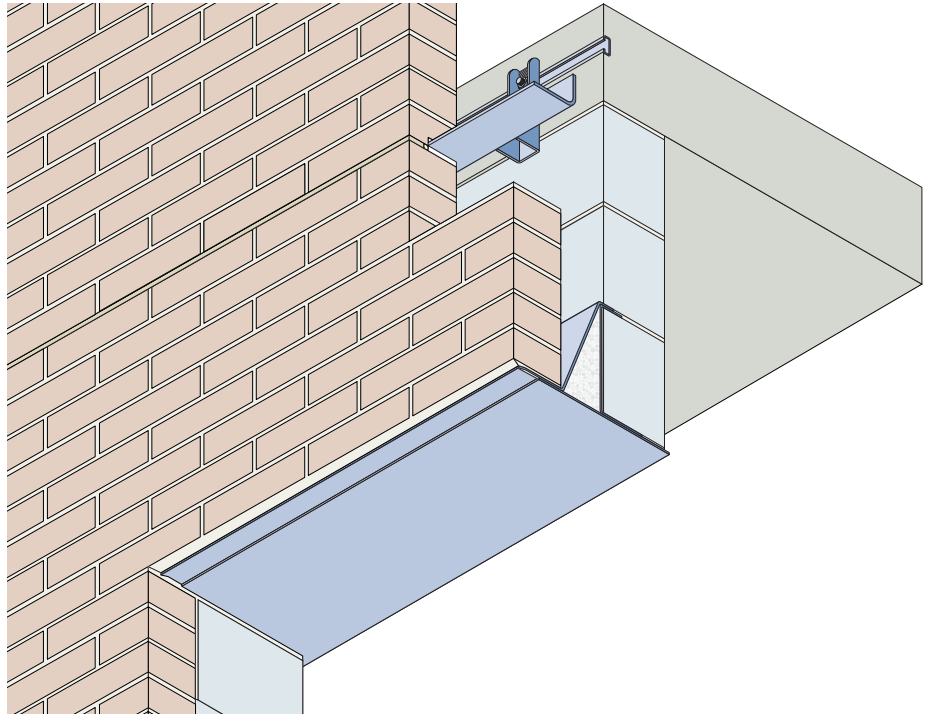
### The range

There are three designs:

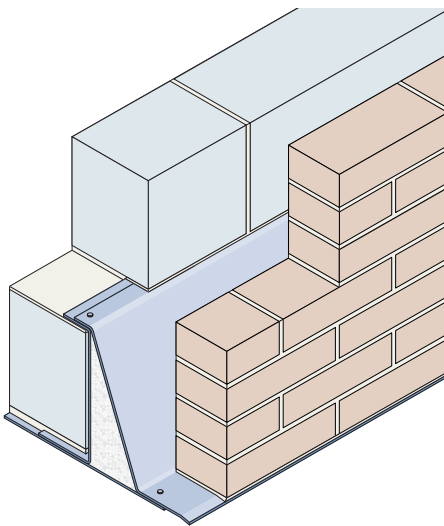
**MC 100** is the universal and most common type. It has very high load capacity. The block inner skin has to be cut as necessary to fit in the web. This lintel is normally used when the inner skin is to be plastered.

**SC 100.** The main structure of this lintel is in the cavity, so the block inner skin can be fairface.

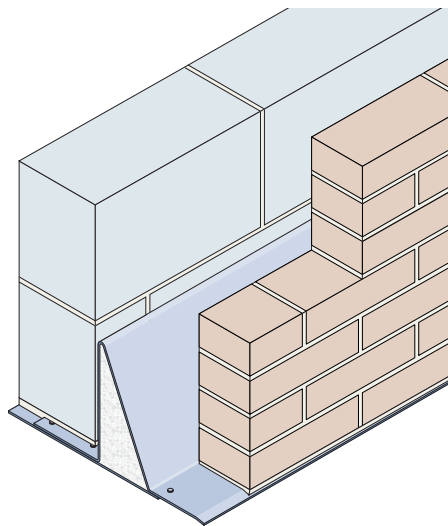
**TF 3.** This lintel supports the outer skin only. the inner skin may be supported by concrete or timber. The top of the lintel is clipped to the inner skin to provide restraint.



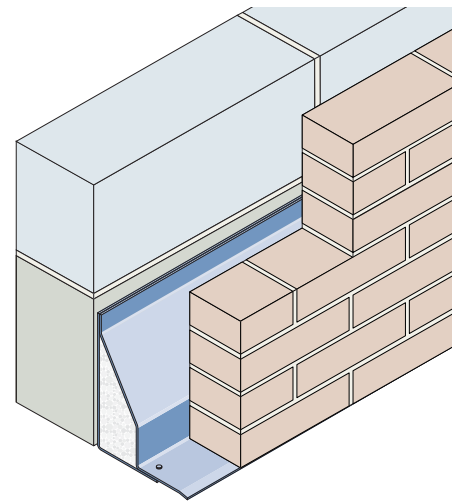
HHL Type MC 100 lintel viewed from below



Type MC 100  
Block inner skin.



Type SC 100  
Inner skin may be fairface.



Type TF 3  
For outer skin only.  
Inner skin may be supported by concrete or timber.

### Dimensions

All lintels are designed to suit a 103 mm outer skin. The inner skin may be 100 or 140 mm. The cavity range is 75 to 100 mm. The lintels are made in lengths from 900 to 3600 mm in 150 mm increments. The end bearing is normally minimum 150 mm.

### Materials

HHL lintels are manufactured in stainless steel Grade 304.

### DPC detailing

The lintels form a cavity tray, so a separate DPC is not normally required.

### Lintel calculation table

Lintel type	MC 100	SC 100	TF 3
Normal max. opening (m):	3.3	3.3	3.3
Normal max. length (m):	3.6	3.6	3.6
Safe UDL (kN)	59	28	27
Ratio (outer : inner)	1:19	1:5	n/a
Cavity (mm):	75/100	75/100	75/100
Height (mm)	232	192	228