

## Installation Guide Internal Head Restraints

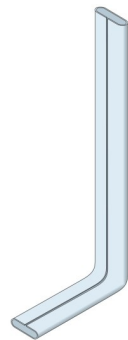
### IHR Internal Head Restraints

The Ancon IHR is designed to restrain the top of internal walls or the top of the inner leaf of a cavity wall. It comprises an L-shaped channel stem and a top section available in a variety of designs to suit different fixing methods and substrates; the top section slides in the channel to accommodate vertical movement between the blockwork and the structure.

#### Channel Stem

The channel stem is closed at the front to prevent mortar ingress.

The standard height of an IHR will suit a 190mm block. Other stem lengths are also available to suit smaller cut blocks down to a minimum height of 150mm.



#### Sliding Top Section

The IHR sliding top section is available in two standard lengths; one length to accommodate a gap of up to 50mm, and another to accommodate gaps of 51-75mm.

#### Positioning

The horizontal leg of the lower section, should be placed directly on top of the block below. The vertical joint should be filled with mortar each side of the stem. IHR's should ideally be positioned centrally in the width of the wall, where this is not possible the centre of the stem should be at least 50mm from the edge of the wall.

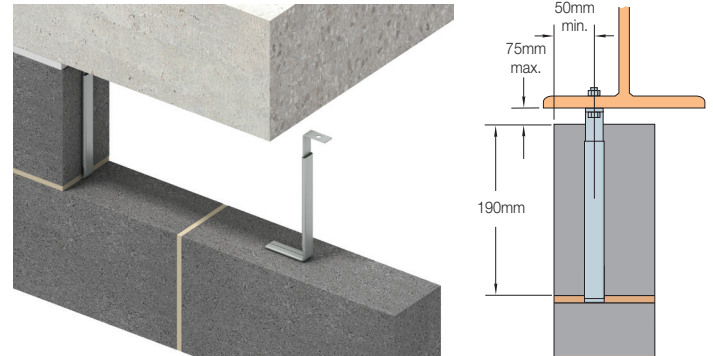
IHR Head Restraints will typically be positioned at 400mm or 800mm centres depending on the expected load at the top of the wall. The table provides the design resistance per metre for the IHR range when installed with a 25mm, 50mm and 75mm gap.

#### Design Resistance for IHR Range with 190mm block

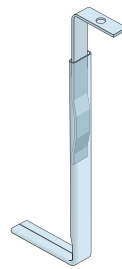
Spacing (mm)	25mm Gap	50mm Gap	75mm Gap
each	1.30 kN	0.89 kN	0.77 kN
at 800 crs	1.63 kN/m	1.11 kN/m	0.96 kN/m
at 400 crs	3.25 kN/m	2.23 kN/m	1.93 kN/m

#### Safety Precautions

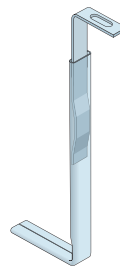
Ancon stainless steel products are produced from sheared plate. As with all such industrial fabrications, these may present sharp edges. **Suitable personal protective equipment should be worn at all times during handling and installation.**



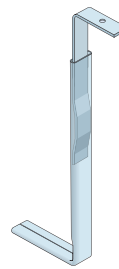
Ancon IHR-B  
with 9mm  
dia. hole



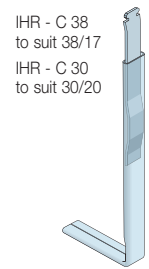
Ancon IHR-V  
with 9mm x  
25mm slot



Ancon IHR-S  
with 6mm  
dia. hole



Ancon IHR-C  
to suit cast-in  
channel



IHR - C 38  
to suit 38/17  
IHR - C 30  
to suit 30/20

#### Fixings

The sliding tie is provided with either a hole (IHR - B) or slot (IHR - V) to suit M8 bolts, a hole (IHR-S) to suit a self-tapping screw or a notch end (IHR-C) to fix directly into a 38/17 or 30/20 cast-in channel.

Where IHR-B or IHR-V are used, the head of the fixing bolt will reduce the amount of possible vertical movement. Bolt projections should be kept to a minimum, the top of the block may need to be cut back locally to accommodate the fixing head.

#### Before Installation

Check that the IHR ordered and supplied meets the dimensions and performance specifications of your application.