

Head Restraints

These type of products are generally used to restrain the tops of free standing walls by tying them securely to an overhead structure, thus preventing sideways movement.



Product

VIR / VIRH Internal Head Restraints

The VIR / VIRH Head Restraints are designed to restrain the top of the inner of cavity walls. The VIR is the slotted variant with the VIRH being the holed version. Both products have the same performance

VIR allows vertical movement between inner leaf the structure by using a tubular sleeve which sits in the vertical joint and a tie section which is bolted to the soffit and slides within the sleeve. The foot of the tube section is built into the bed joint with the vertical joint being filled either side of the tube. The sliding section will accommodate gaps above the top course of up to 75mm.

Material – Manufactured from grade 304 stainless steel.

Behaviour in relation to fire – Non combustible (as defined in the national Building Regulations).

Durability – Excellent corrosion resistance and a service life of not less than 60 years.

Vista recommend using an M8 M.D. Anchor when fixing to concrete and either a M8 isolated setscrew (universal beams) or M8 H.S.M bolt (hollow sections) into structural steelwork.

Tightening Torque:	
M8 M.D. Anchor	15 Nm
M8 Isolated setscrew	14 Nm
M8 H.S.M. Bolt	25 Nm

Product

VIR Internal Head Restraint

VIR available in a variety of head options i.e. slotted, holed or notched (to suit cast-in channel). Capable of restraining loads up to 1.88 kN/m. Generally positioned at 450mm or 900mm centres depending on load at head of the wall.

Test Results			
	25mm Gap	50mm Gap	75mm Gap
Sheer Load Capacity (Declared Values)	0.85 kN	0.77 kN	0.52 kN
Mean Displacement at 1/3 Load Capacity	0.86 mm	1.17 mm	1.14 mm
Sheer Load Capacity at 450mm Centres	1.88 kN/m	1.7 kN/m	1.14 kN/m
Sheer Load Capacity at 900mm Centres	0.94 kN/m	0.85 kN/m	0.57 kN/m

NOTE: The figures in the table above are taken from testing completed by Lucideon in August 2022. The tests were carried out to a method based on BS EN 846-7 :2 012. In all testing the product did not reach its failure point with the failure mode given as "Head restrains pushing through mortar, flexural failure of AAC block"

Installation

1. Mark position of VIR, position tie, mark, then drill holes.
2. Build Inner leaf up to penultimate course.
3. Reposition assembled VIR and fix using the selected fixing ensuring the anchor is tightened to the correct torque.
4. Continue to build last course ensuring joints are filled with mortar.

Packaging

Code	Size	Units
VIR-215-STST	215 mm	50 Box
VIRH-215-STST	215 mm	50 Box

Safety Precautions

VIR Internal Head Restraints are manufactured from sheared plate and strip so may contain sharp edges. Suitable personal protection should always be used when handling/installing these products.