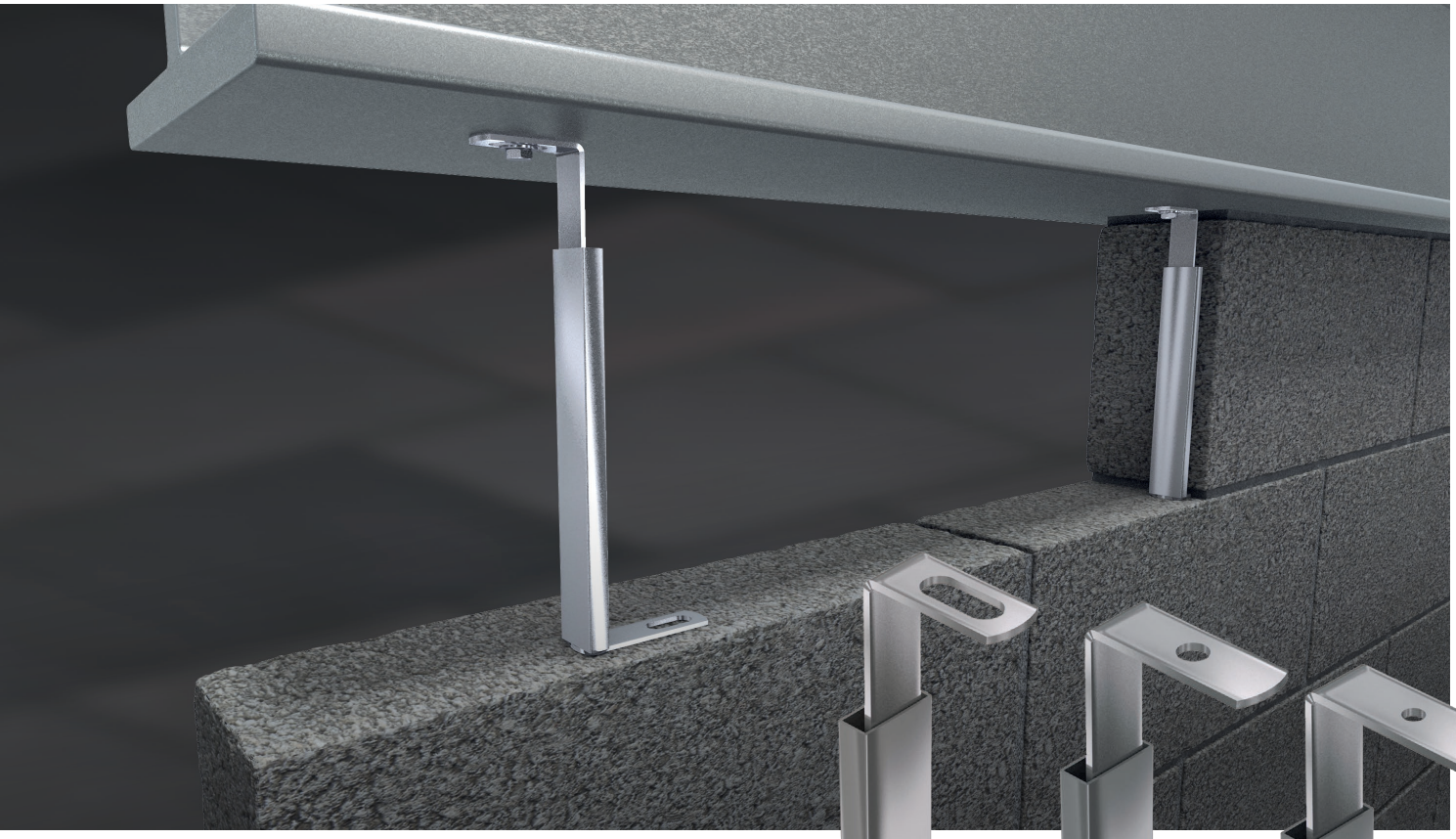
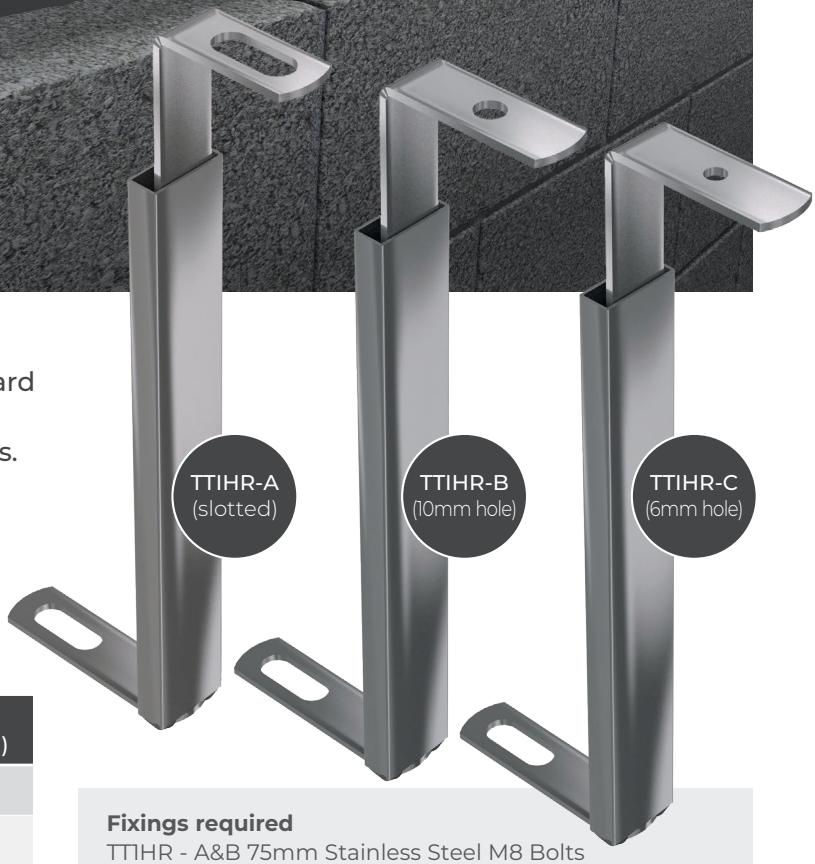
TECTIES
THE TANGLE FREE TIE COMPANY

DATASHEET/DECLARATION OF PERFORMANCE

TTIHR HEAD RESTRAINTS

TEC/DD/1009





The **TTIHR** is available with 3 head options i.e., slotted, 10mm hole and 6mm hole. The standard TTIHR is supplied to suit a standard block but specials can be made to suit site requirements.

Test results

The tests were carried out by Lucideon Ltd based on the method given in BS EN 846-7:2012. Determination of shear load capacity and load displacement characteristics of shear ties and slip ties.

Shear load capacity horizontally up to	Masonry unit strength (N)	Maximum declared value (N)
50mm gap	3.5N Acc concrete block	6970
75mm gap		4802
100mm gap		5182

Mortar mix proportions 1:1:6 cement : lime : sand.
In accordance with BS EN 998-2:-2010

Fixings required
TT1HR - A&B 75mm Stainless Steel M8 Bolts
TT1HRC - 38mm Stainless Steel Self tapping screws

MADE IN BRITAIN

Check that you are using the most up to date version of this product information, **scan the QR code.**

TECTIES
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DATASHEET/DECLARATION OF PERFORMANCE

TTIHR HEAD & TTFHR HEAD RESTRAINTS

TEC/DD/1009

TTIHR & TTFHR PRODUCT ATTRIBUTES

Product Category	Head Restraints
Product Description	Restraints for the top of the inner leaf of cavity walls
Product Code	TTIHR & TTFHR
Product Brand Name	TTIHR Head Restraint & TTFHR Head Restraint

	TTIHR-A	TTIHR-B	TTIHR-C	TTFHR
Product Finish	Mill Finish	Mill Finish	Mill Finish	Mill Finish
Material	Stainless Steel Grade 304			
Packaging	Boxed or sold individually			
Boxed Qty	100no.	100no.	100no.	50no.
Tag / Label	Label	Label	Label	Label
Individual Weight	0.19 KG	0.19 KG	0.19 KG	0.35 KG
Boxed Weight	19 KG	19 KG	19 KG	17.5 KG

Packaging Material 	Cardboard Box **Widely Recyclable - Check with your local council guidelines** Please visit the Environmental Commitment page **here**
Storage	Boxes of stainless steel products to be stored indoors, Individual Head Restraints can be stored outdoors provided they are protected from contamination. Regular checks should be carried out to ensure packaging remains intact, ties remain clean, and there are no signs of corrosion, damage, or foreign material that could affect product quality or performance.
Safe Handling	Please visit the Handling Safety Information page **here**
Fire Rating	Euroclass A1

Fixings required
TTIHR - A&B 75mm Stainless Steel M8 Bolts
TTIHRC - 38mm Stainless Steel Self tapping screws
TTFHR - 75mm Stainless Steel M8 expansion Bolts

TECTIES
THE TANGLE FREE TIE COMPANY

DATASHEET/DECLARATION OF PERFORMANCE

TTIHR HEAD & TTFHR HEAD RESTRAINTS

TEC/DD/1009

DECLARATION OF PERFORMANCE

TecTies Ltd hereby declares that the TTIHR HEAD & TTFHR Head Restraints are in conformity with the provisions of **ZA Annex of EN 845—1 : 2013+A1:2016**

Intended Use
Symmetrical Wall Tie Type 1 /Type B designed to connect two leaves of a cavity wall in masonry construction

Notified Body
Lucideon Limited, Queens Road, Penkhull, Stoke on Trent ST4 7LQ **Tel.** +44 (0)1782 764428

Notified Body Number 1289

Underwritten by TZUS – Prague

Notified Body Number 1020

The system of assessment and verification of constancy of performance for this construction product conforms to **System 3**

TTIS Essential Characteristics

CAVITY WALL TIE	TTIHR-A	TTIHR-B	TTIHR-C	TTFHR
Water Shedding Capability	Resistant			
Durability - Material Reference 3	Austenitic Stainless Steel			
Durability - Grade	304 18/8 comp. to BS EN 10088/1			
Minimum Mortar Designation	(iv)			
Conformity Assessment	UKCA/CE+UKNI marked			
Testing	The tests were carried out by Lucideon ltd based on the method given in BS EN 846-7:2012. Determination of shear load capacity and load displacement characteristics of shear ties and slip ties.			

All tested product information is available on request. Please contact us for more information.

Shear load capacity horizontally up to	Masonry unit strength (N)	Maximum declared value (N)
50mm gap	3.5N Acc concrete block	6970
75mm gap		4802
100mm gap		5182

Mortar mix proportions 1:1:6 cement : lime : sand.
In accordance with BS EN 998-2:-2010

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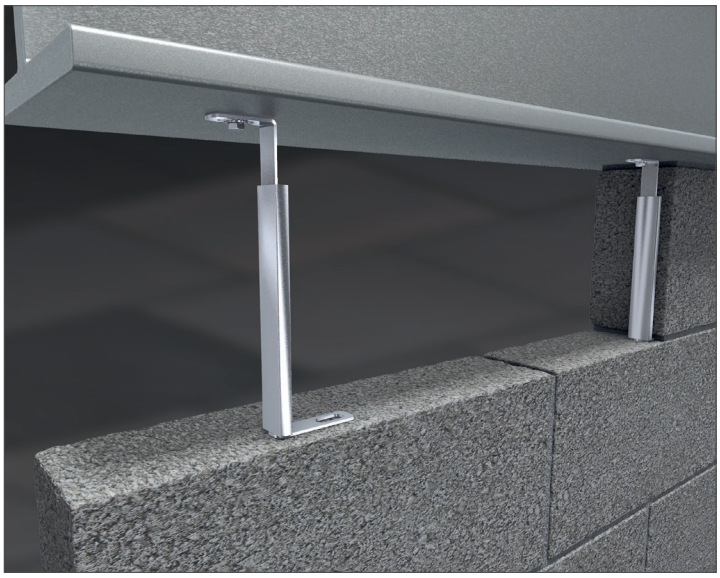
DATASHEET/DECLARATION OF PERFORMANCE

TTIHR HEAD RESTRAINTS

TEC/DD/1009

INSTALLATION GUIDANCE

The TTIHR Head Restraint is designed to restrain the top of the inner leaf of cavity walls. The TTIHR allows vertical movement between the inner leaf and the structure by using a rectangular sleeve which sits in the vertical joint and a top section fixed to the soffit, designed to slide within the sleeve.





Sliding Top Section

The TTIHR Sliding Top Section is available with three different heads to suit different fixing methods.

A Type – Slotted

B Type – 10mm Hole

C Type – 6mm Hole

The sliding top section will accommodate gaps from 25mm – 100mm.

Positioning

The horizontal leg at the bottom of the rectangular sleeve should be placed directly on top of the block below and bedded into mortar. The vertical joint should be filled with mortar each side of the stem.

The TTIHR should be positioned centrally in the width of the wall. Where this is not possible the stem should be no less than 50mm from the edge of the wall.

The TTIHR are generally positioned at 450mm and 900mm centres, depending on the expected load at the top of the wall. This should always be checked by a structural engineer.

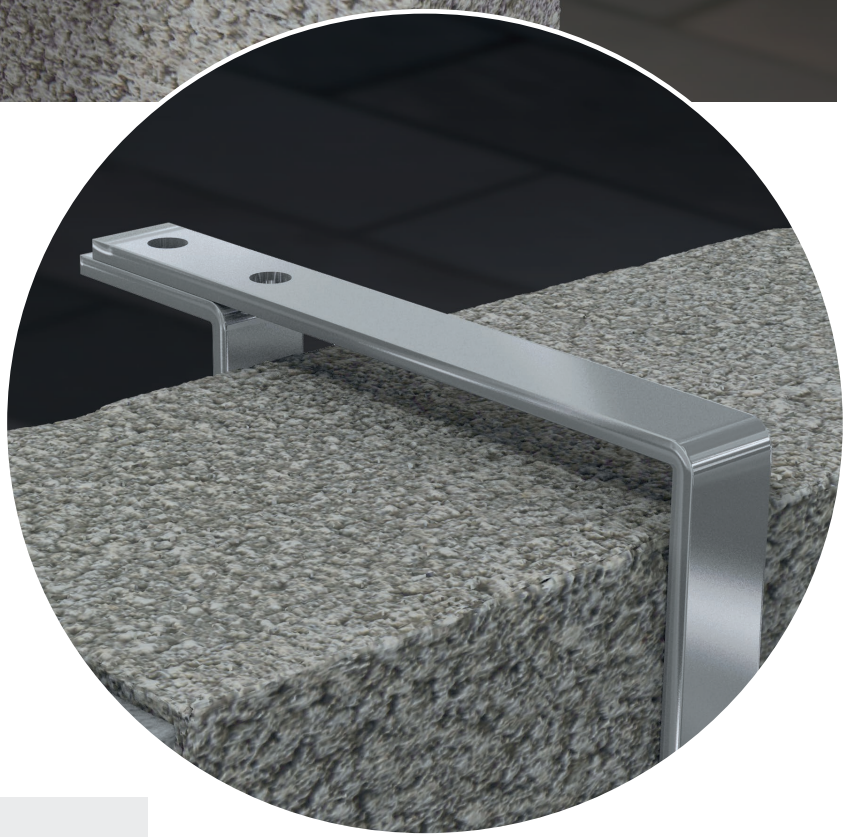
TECTIES
THE TANGLE FREE TIE COMPANY

DATASHEET/DECLARATION OF PERFORMANCE

TTFHR HEAD RESTRAINTS

TEC/DD/1009





The **TTFHR** Head Restraint is designed to restrain the top of the inner leaf of cavity walls. The restraint consists of two angles fixed using a single M8 bolt which effectively clamp the top of the wall.

FHR – Standard
to accommodate 100mm – 140mm concrete blockwork.

FHR – 215
to accommodate 215mm concrete blockwork available on request.

The fixings can be supplied to suit the full range of block thicknesses and are capable of restraining a 0.75kN load.

Fixings required
TTFHR - 75mm Stainless Steel M8 expansion Bolts