



ENTERPRISE SYSTEM<sup>TM</sup>  
FOR BRICK-TIE CHANNELS

# + Product Range



1. Enterprise System Product Brochure







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# ONE SIZE DOES NOT FIT ALL.

ENTERPRISE SYSTEM<sup>TM</sup>  
FOR BRICK-TIE CHANNELS



On Type 1 projects, fixing spacings should never be assumed. They must be determined by wind loading calculations and the elevation of the building.

That's why Evolution now offers **225mm or 337.5mm** spacings, determined by wind load calculations.

Please contact our Technical team for further information:  
[technical@evofas.com](mailto:technical@evofas.com)

**This service is free of charge.**

## What We Offer:

### Free Wind Load Analysis -

Send our Technical Team your external wall details and elevations, and we'll conduct the analysis.

### Full Specification / Re-Specification -

We'll issue a tailored specification for fixings, ties, sleeves, and channel, confirming the correct spacings required.

### Substantial Cost Savings -

Precise calculations mean no over-specification, helping to reduce unnecessary project costs.

### Free U-Value Calculations -

Ensuring compliance with energy performance requirements.

## The Evolution Difference

Does your current brick tie channel provider offer this level of technical support?

With Evolution, you're not just buying a channel system, you're investing in engineering expertise, compliance, and long-term safety.

# EVERY PROJECT DESERVES PRECISION.



# The Main Components Of The Enterprise System

**GOLDEN  
THREAD  
READY.®**

Our new Enterprise Brick-tie channel system™ is designed to be golden thread ready, aligning with best practices in modern construction.

This means that our system is fully compliant with the highest standards of transparency, traceability, and accountability throughout its life-cycle.

By integrating the Enterprise Brick-tie channel system™ into your projects, you ensure a seamless flow of information and a robust, reliable construction process that meets the rigorous demands of today's building industry.

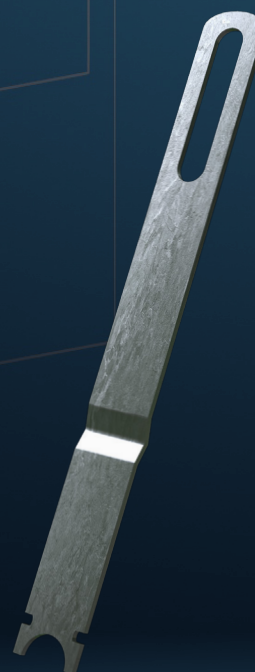
**60  
YEAR WARRANTY.**

Our new Enterprise Brick-tie channel system™ comes with an impressive 60-year warranty, underscoring our confidence in its durability and performance. This extensive warranty ensures long-term reliability and peace of mind, reflecting our commitment to delivering high-quality, dependable products.

**PROJECT-  
SPECIFIC  
TEST.**

With every order of our new Enterprise Brick-tie channel system™, you will receive a test report from our UKAS-accredited laboratory, along with video footage as proof of the testing process.

This comprehensive documentation ensures that you have verifiable evidence of the system's performance and reliability, demonstrating our commitment to quality and transparency.





# Golden Thread – Gateways 2 and 3

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Our comprehensive technical documentation and calculation packages streamline compliance with the Building Safety Act's golden thread gateway requirements, significantly reducing the regulatory burden on designers and contractors working on Higher-Risk Residential Buildings.

By providing complete, digitally-integrated packages that align with Building Safety Regulator (BSR) submission requirements across Gateways 2 and 3, we eliminate the time-consuming process of collating disparate technical information from multiple sources.

This consolidated approach ensures designers can confidently demonstrate regulatory compliance with the detailed plans, specifications, and schedules required by the BSR, whilst contractors benefit from having all necessary as-built documentation, fire and emergency files, and compliance statements readily formatted for gateway submissions.

With nearly 30% of current gateway applications being rejected for insufficient detail or missing information, our integrated approach significantly reduces project delays and the risk of costly resubmissions.

## U-Value modelling and calculation

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Using industry-leading modelling software, our Engineering Team can assist you with your u-value modelling and calculations.

## Laboratory Testing

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We employ a risk-based assessment methodology to determine whether laboratory testing is required to underpin the warranty provision for your project.

Our approach ensures that testing protocols are proportionate to the identified risks whilst maintaining rigorous quality assurance standards.

All High-Risk Buildings (HRBs) typically receive comprehensive laboratory testing as standard - a complimentary service designed to provide additional assurance through bespoke test suites conducted within our UKAS-accredited testing facility.

This targeted testing regime validates material performance characteristics and installation integrity, offering enhanced confidence in long-term system reliability.

For projects where our risk assessment indicates laboratory testing may not be essential, clients retain the flexibility to commission testing services independently. This ensures that regardless of project classification, comprehensive material characterisation and performance validation remain accessible when required for specific warranty or compliance obligations.



# Bi-metal™ Composite Panel Range (LIGHT SECTION)

FULL RANGE FROM:  
5.5mm-80mm to 350mm

|                  |                  |
|------------------|------------------|
| BMHT12-5.5-80-3  | BMHT12-5.5-105-3 |
| BMHT12-5.5-135-3 | BMHT12-5.5-150-3 |
| BMHT12-5.5-165-3 | BMHT12-5.5-185-3 |
| BMHT12-5.5-200-3 | BMHT12-5.5-225-3 |
| BMHT12-5.5-235-3 | BMHT12-5.5-250-3 |
| BMHT12-5.5-275-3 | BMHT12-5.5-300-3 |
| BMHT12-5.5-325-3 | BMHT12-5.5-350-3 |

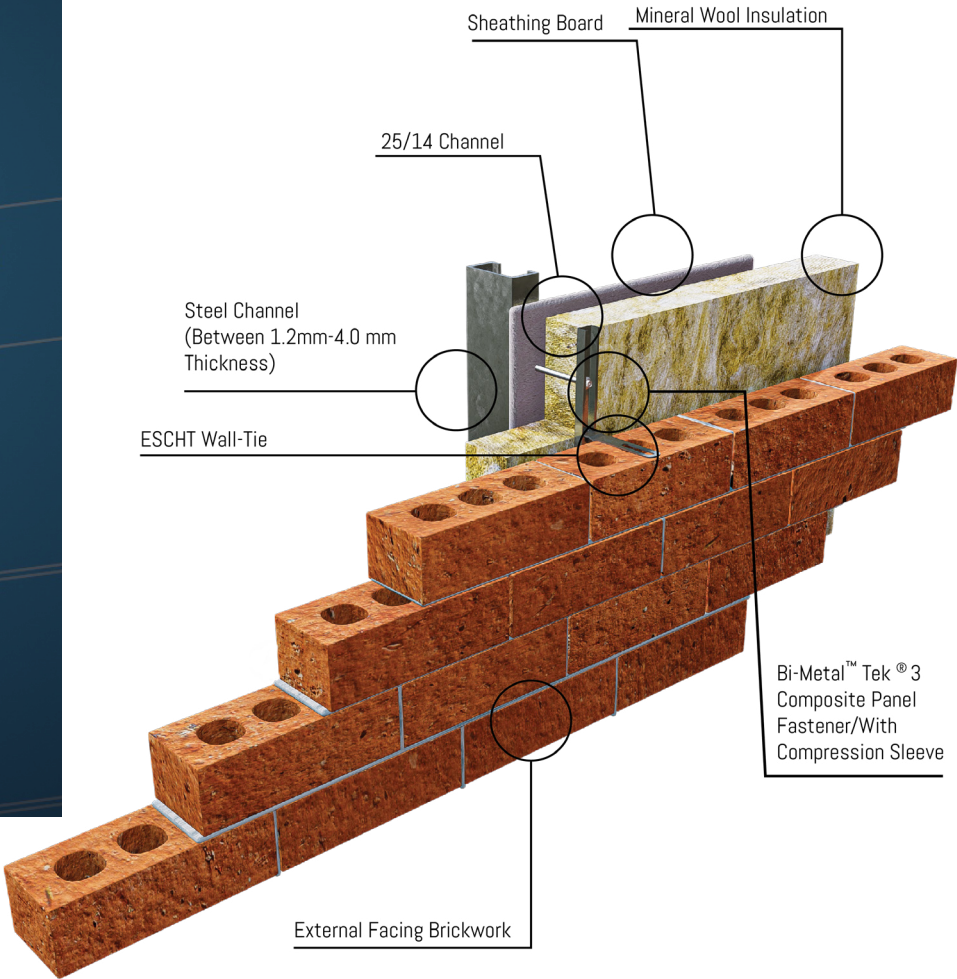
## BMHT12\* RANGE

Perfect Choice  
For Our  
Brick Tie channel  
System Through Light  
Gauge Steel.

TEK 3® POINT  
FOR  
1.2 -4.0mm  
STEEL  
THICKNESS

FOR LIGHT  
STEEL

WITH  
12mm  
WASHER



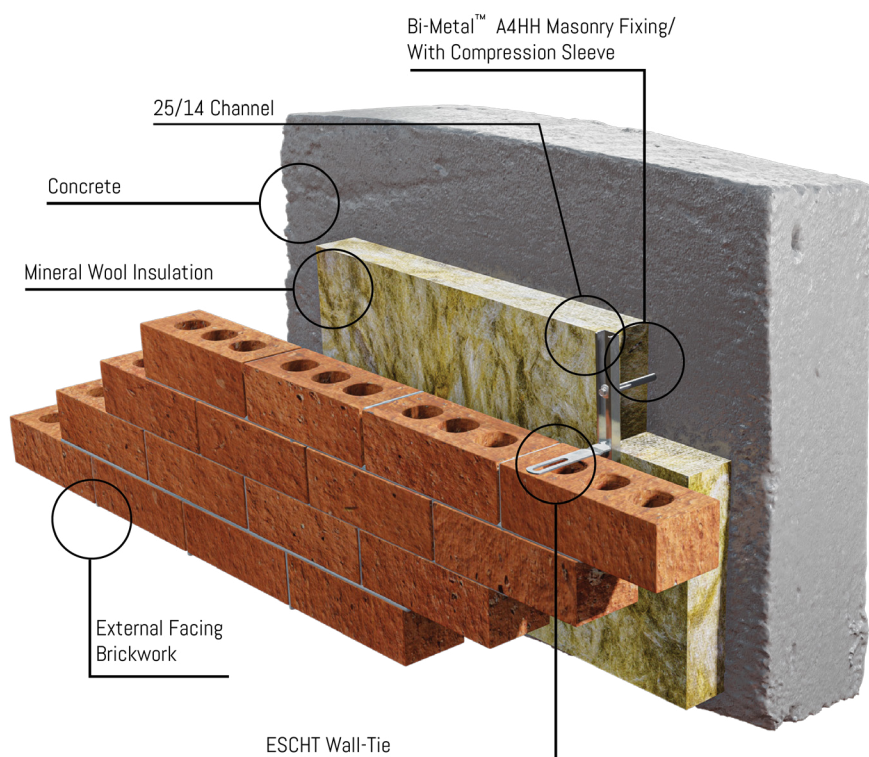
ENTERPRISE SYSTEM™  
FOR BRICK-TIE CHANNELS

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Department of Engineering and Laboratory Services



FULL RANGE FROM:  
6.3mm-32mm to 350mm

|                |                |
|----------------|----------------|
| A4HH6.3-32-GP  | A4HH6.3-45-GP  |
| A4HH6.3-57-GP  | A4HH6.3-70-GP  |
| A4HH6.3-82-GP  | A4HH6.3-100-GP |
| A4HH6.3-125-GP | A4HH6.3-140-GP |
| A4HH6.3-160-GP | A4HH6.3-180-GP |
| A4HH6.3-200-GP | A4HH6.3-225-GP |
| A4HH6.3-250-GP | A4HH8.0-275-GP |
| A4HH8.0-300-GP | A4HH8.0-350-GP |



## Bi-Metal Masonry Range

### \* A4HH range

Perfect Choice  
For Our  
Brick Tie channel  
System  
Through Concrete

Epdm 16.0mm  
A4 Stainless  
Steel Bonded  
Washers  
Required

FOR  
CONCRETE

A4 GRADE

\* FIXTURE BUILD-UP DATA  
ON PAGE 21



# Tie Lengths

| Wall-Tie SKU | Size  |
|--------------|-------|
| TTCH-100     | 100mm |
| TTCH-125     | 125mm |
| TTCH-150     | 150mm |
| TTCH-175     | 175mm |
| TTCH-200     | 200mm |
| TTCH-225     | 225mm |
| TTCH-250     | 250mm |
| TTCH-275     | 275mm |
| TTCH--300    | 300mm |
| TTCH-325     | 325mm |
| TTCH-350     | 350mm |
| TTCH-375**   | 375mm |

| CHANNEL TIE CAVITY KEY |          |
|------------------------|----------|
| 35-59mm                | TTCH-100 |
| 60-84mm                | TTCH-125 |
| 85-109mm               | TTCH-150 |
| 110-134mm              | TTCH-175 |
| 135-159mm              | TTCH-200 |
| 160-184mm              | TTCH-225 |
| 185-209mm              | TTCH-250 |
| 210-234mm              | TTCH-275 |
| 235-259mm              | TTCH-300 |
| 260-284mm              | TTCH-325 |
| 285-309mm              | TTCH-350 |

Recommended Wall Tie and Fixing Screw Vertical Centres, based on 25/14 Channel at 600mm Horizontal Centres

| Tie Type | Insulation Thickness (mm) | Vertical Tie Spacing (mm) | Vertical Fixing Spacing (mm) |
|----------|---------------------------|---------------------------|------------------------------|
| 1        | Max 300                   | 300                       | 225/ 337.5*                  |
| 2        | Max 300                   | 450                       | 337.5                        |
| 3        | Max 300                   | 450                       | 337.5/450*                   |
| 4        | Max 300                   | 450                       | 337.5/450*                   |

**337.5mm** spacings/centres may be used subject to wind load calculations – please contact [technical@evofas.com](mailto:technical@evofas.com) for assistance with calculations.

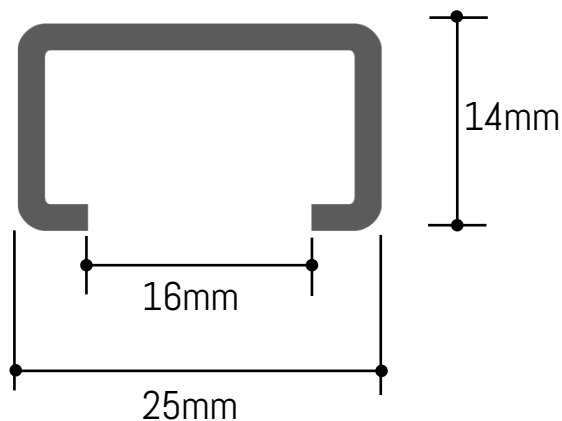
\*\*Coming Soon



# 25/14 channel

The channel features fixing holes for stainless steel screws, and ties should be installed at the recommended vertical intervals for the specific system type.

Ensure the correct hole size is used according to the application. Standard lengths are 2700mm.



The 25/14 channel is available in 2700mm lengths and features closely spaced pre-punched holes to ensure a fixing position is always near the end, even when cut on-site.

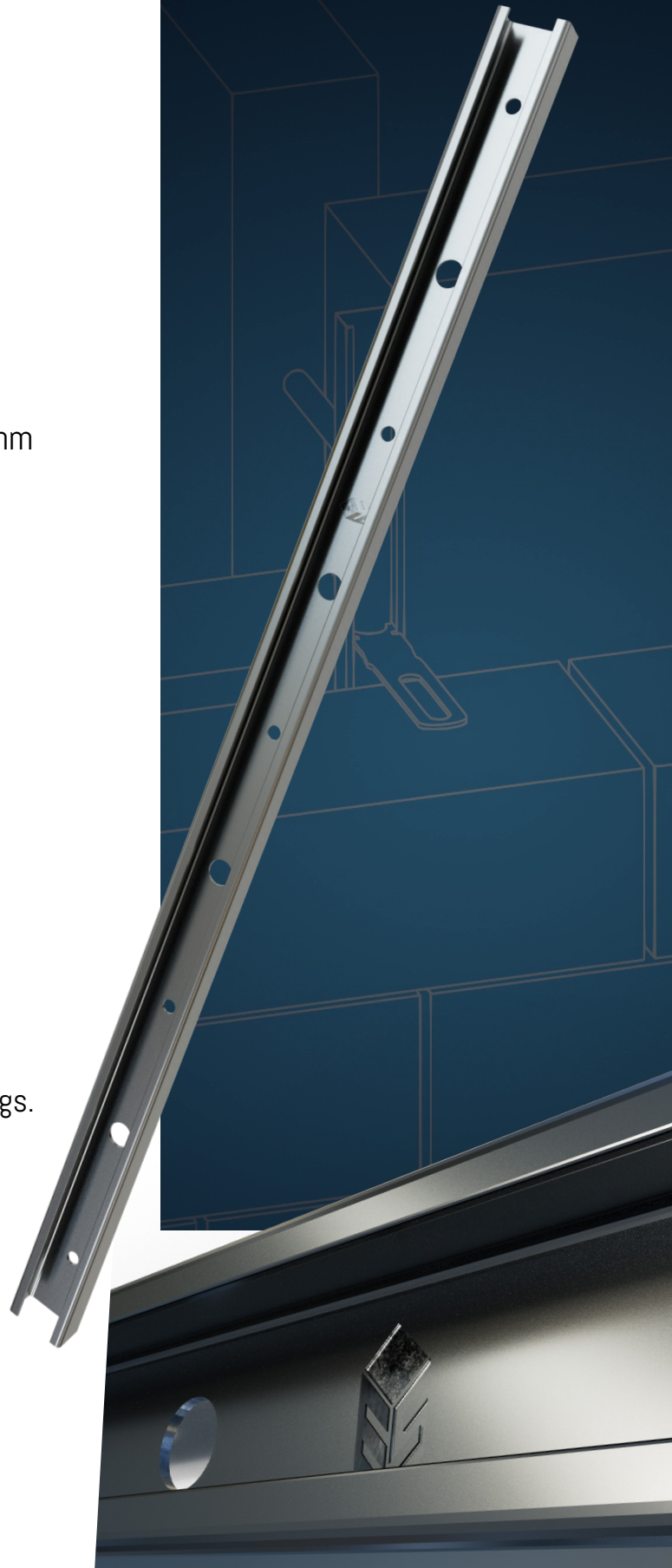
The channel has a 16mm opening to easily accommodate washers and fixings.

The 25/14 channel includes alternating 9.7mm and 5.75mm diameter holes to accept different fixings.

Use the smaller diameter holes for fixing to steel or timber, and the larger diameter holes for concrete fixings.

Grade 316 stainless steel is available on request for high corrosion areas.

Note: Using the incorrect hole and fixing screw combination will compromise system performance and irredeemably invalidate the system warranty.



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# Application Guide

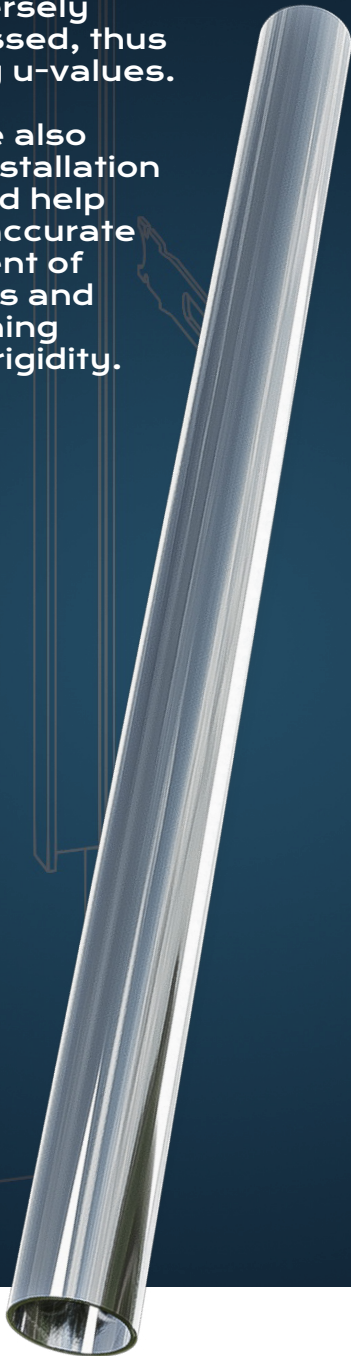
This section details the correct size of stainless-steel compression sleeve to use in conjunction with your application's nominal thickness of insulation as well as the correct fastener to use for such thickness (and a 12.5mm sheathing board).

- The information provided is intended as a quick reference tool only, the designer must satisfy themselves that the solution they choose for any particular application is suitable.
- When in doubt, or where further assistance is required, please seek further advice by e-mailing [technical@evofas.com](mailto:technical@evofas.com). Not that parts noted with "\*" are by special request only to [technical@evofas.com](mailto:technical@evofas.com).
- A4 stainless-steel variants of fasteners with pancake/ low-profile heads are available upon special request to [technical@evofas.com](mailto:technical@evofas.com).

## Compression Sleeves

Compression sleeves are used to ensure insulation is not adversely compressed, thus reducing u-values.

They are also useful installation aides and help ensure accurate placement of fasteners and maintaining system rigidity.



| SKU        | Size  |
|------------|-------|
| SSCS10-50  | 50mm  |
| SSCS10-60  | 60mm  |
| SSCS10-75  | 75mm  |
| SSCS10-80  | 80mm  |
| SSCS10-85  | 85mm  |
| SSCS10-90  | 90mm  |
| SSCS10-100 | 100mm |
| SSCS10-110 | 110mm |
| SSCS10-120 | 120mm |
| SSCS10-125 | 125mm |
| SSCS10-130 | 130mm |
| SSCS10-135 | 135mm |
| SSCS10-140 | 140mm |
| SSCS10-150 | 150mm |
| SSCS10-160 | 160mm |
| SSCS10-170 | 170mm |
| SSCS10-180 | 180mm |
| SSCS10-190 | 190mm |
| SSCS10-200 | 200mm |
| SSCS10-220 | 220mm |
| SSCS10-230 | 230mm |
| SSCS10-240 | 240mm |
| SSCS10-250 | 250mm |
| SSCS10-260 | 260mm |
| SSCS10-270 | 270mm |
| SSCS10-280 | 280mm |
| SSCS10-290 | 290mm |
| SSCS10-300 | 300mm |

### Structural Framing System (SFS) substrates:

Compression sleeves are required for certain types of rainscreen insulation 180mm & thicker. For full installation details, please refer to Page 11 of our User Installation Guide.

### Concrete Substrates:

A compression sleeve is required for all applications, regardless of insulation thickness.



## Light Gauge Mild Steel And Aluminium Sections And Sub-Structures

(1.2mm to 4.0mm Thicknesses)

Washers available in 12/16 mm sizes.

## Fastening Insulation To Light Gauge Mild Steel Or Aluminium Substrates

| Application                            |   |                                     | Fastener Solution  |                         |                    |
|--|---|-------------------------------------|--------------------|-------------------------|--------------------|
| Insulation Thickness, $t_{insul}$ (mm) | Sheathing Board Thickness, $t_{board}$ (mm) | Substrate Thickness, $t_{sub}$ (mm) | Compression Sleeve | Fastener by Corrosivity |                    |
|  |   |                                     |                    | C3                      | C4                 |
| $\leq 50.0$                            | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-50          | BMHT5.5-105-3           | A4BMHT105-3        |
| $\leq 60.0$                            | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-60          | BMHT5.5-105-3           | A4BMHT105-3        |
| $\leq 75.0$                            | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-75          | BMHT5.5-135-3           | A4BMHT135-3        |
| $\leq 80.0$                            | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-80          | BMHT5.5-135-3           | A4BMHT135-3        |
| $\leq 85.0$                            | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-85          | BMHT5.5-135-3           | A4BMHT135-3        |
| $\leq 90.0$                            | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-90          | BMHT5.5-135-3           | A4BMHT135-3        |
| $\leq 100.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-100         | BMHT5.5-150-3           | A4BMHT150-3        |
| $\leq 110.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-110         | BMHT5.5-150-3           | A4BMHT150-3        |
| $\leq 120.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-120         | BMHT16-5.5-165-3        | A4BMHT185-3        |
| $\leq 125.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-125         | BMHT16-5.5-165-3        | A4BMHT185-3        |
| $\leq 130.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-130         | BMHT16-5.5-185-3        | A4BMHT185-3        |
| $\leq 135.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-135         | BMHT16-5.5-185-3        | A4BMHT185-3        |
| $\leq 140.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-140         | BMHT16-5.5-185-3        | A4BMHT185-3        |
| $\leq 150.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-150         | BMHT16-5.5-200-3        | A4BMHT12-5.5-200-3 |
| $\leq 160.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-160         | BMHT16-5.5-200-3        | A4BMHT12-5.5-200-3 |
| $\leq 170.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-170         | BMHT16-5.5-225-3        | A4BMHT12-5.5-235-3 |
| $\leq 180.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-180         | BMHT16-5.5-225-3        | A4BMHT12-5.5-235-3 |
| $\leq 190.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-190         | BMHT16-5.5-235-3        | A4BMHT12-5.5-235-3 |
| $\leq 200.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-200         | BMHT16-5.5-250-3        | -                  |
| $\leq 220.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-220         | BMHT16-5.5-275-3        | -                  |
| $\leq 230.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-230         | BMHT16-5.5-275-3        | -                  |
| $\leq 240.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-240         | BMHT16-5.5-300-3        | -                  |
| $\leq 250.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-250         | BMHT12-5.5-300-3        | -                  |
| $\leq 260.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-260         | BMHT12-5.5-300-3        | -                  |
| $\leq 270.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-270         | BMHT12-5.5-325-3        | -                  |
| $\leq 280.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-280         | BMHT12-5.5-325-3        | -                  |
| $\leq 290.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-290         | BMHT12-5.5-350-3        | -                  |
| $\leq 300.0$                           | $0.0 \leq 12.5$                             | $1.2 \leq 4.0$                      | SSCS10-300         | BMHT12-5.5-350-3        | -                  |

The Enterprise Brick-tie channel system™ is designed to Connect the outer leaf of a cavity wall to a light steel frame through mineral wool using an appropriate fixing.

This system comprises several components that work together to form a robust structural restraint assembly.

For light gauge steel frames, the smaller holes are intended for use with high-thread self-drilling fixings.

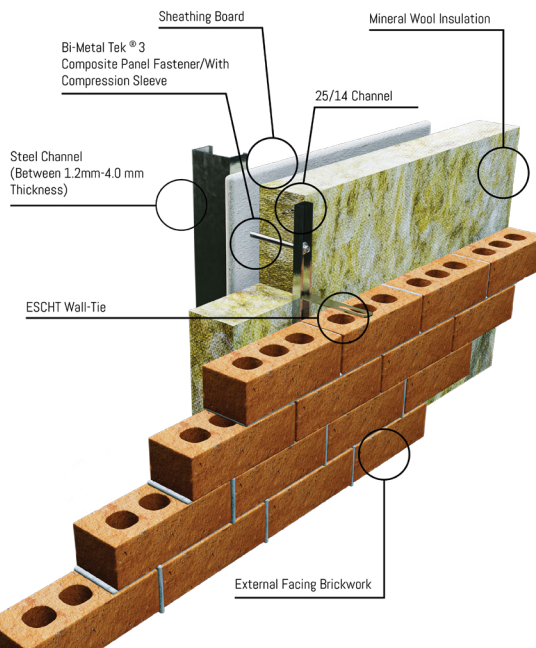
All fixings used with the Enterprise Brick-tie channel system™ are made of stainless steel.

At each fixing point, a compression sleeve with high compressive strength ensures a high-capacity fixing detail, accommodating even the thickest insulation used in modern construction.

### Important Note:

When fixing into aluminium a stainless-steel fastener MUST be used to avoid electrogalvanic accelerated corrosion.

To avoid the negative effects of deformation of the insulation battens, boards and panels, Evolution recommends using a stainless-steel compression sleeve.



For full details on the compression sleeve requirement, please refer to page 11 of our User Installation Guide



# Heavy Gauge Mild Steel And Aluminium Sections And Sub-Structures

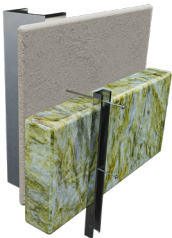


(4.0mm to 12.0mm thicknesses)

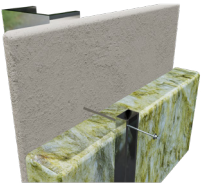
## Fastening Insulation To Heavy Gauge Mild Steel Or Aluminium Substrates

| Application                            |   |                                     | Fastener Solution  |                         |                    |
|--|---|-------------------------------------|--------------------|-------------------------|--------------------|
| Insulation Thickness, $t_{insul}$ (mm) | Sheathing Board Thickness, $t_{board}$ (mm) | Substrate Thickness, $t_{sub}$ (mm) | Compression Sleeve | Fastener by Corrosivity |                    |
|  |   |                                     |                    | C3                      | C4                 |
| $\leq 50.0$                            | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-50          | BMTSBWHT5.5-125-5       | POA                |
| $\leq 60.0$                            | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-60          | BMTSBWHT5.5-125-5       | POA                |
| $\leq 70.0$                            | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-75          | BMTSBWHT5.5-150-5       | POA                |
| $\leq 80.0$                            | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-80          | BMTSBWHT5.5-150-5       | POA                |
| $\leq 85.0$                            | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-85          | BMTSBWHT5.5-150-5       | POA                |
| $\leq 90.0$                            | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-90          | BMTSBWHT5.5-150-5       | POA                |
| $\leq 100.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-100         | BMTSBWHT5.5-185-5       | A4BMHT16-5.5-185-7 |
| $\leq 110.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-110         | BMTSBWHT5.5-185-5       | A4BMHT16-5.5-185-7 |
| $\leq 120.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-120         | BMTSBWHT5.5-185-5       | POA                |
| $\leq 125.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-125         | BMTSBWHT5.5-185-5       | POA                |
| $\leq 130.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-130         | POA                     | POA                |
| $\leq 135.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-135         | POA                     | POA                |
| $\leq 140.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-140         | POA                     | A4BMHT16-5.5-235-7 |
| $\leq 150.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-150         | POA                     | A4BMHT16-5.5-235-7 |
| $\leq 160.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-160         | BMTSBWHT5.5-245-5       | A4BMHT16-5.5-235-7 |
| $\leq 170.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-170         | BMTSBWHT5.5-245-5       | A4BMHT16-5.5-250-7 |
| $\leq 180.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-180         | BMTSBWHT5.5-245-5       | A4BMHT16-5.5-275-7 |
| $\leq 190.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-190         | POA                     | A4BMHT16-5.5-275-7 |
| $\leq 200.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-200         | POA                     | A4BMHT16-5.5-275-7 |
| $\leq 220.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-210         | POA                     | A4BMHT16-5.5-300-7 |
| $\leq 230.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-230         | POA                     | POA                |
| $\leq 240.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-240         | POA                     | POA                |
| $\leq 250.0$                           | $0.0 \leq 12.5$                             | $4.0 \leq 12.5$                     | SSCS10-250         | POA                     | POA                |

1.OFFER UP CHANNEL TO MATCH SLEEVE LOCATIONS.



2. INSTALL FIXING THROUGH CHANNEL AND SLEEVE BACK TO INTERNAL STRUCTURE.



3. ROTATE ESCHT WALL TIE INTO CHANNEL LIPS.



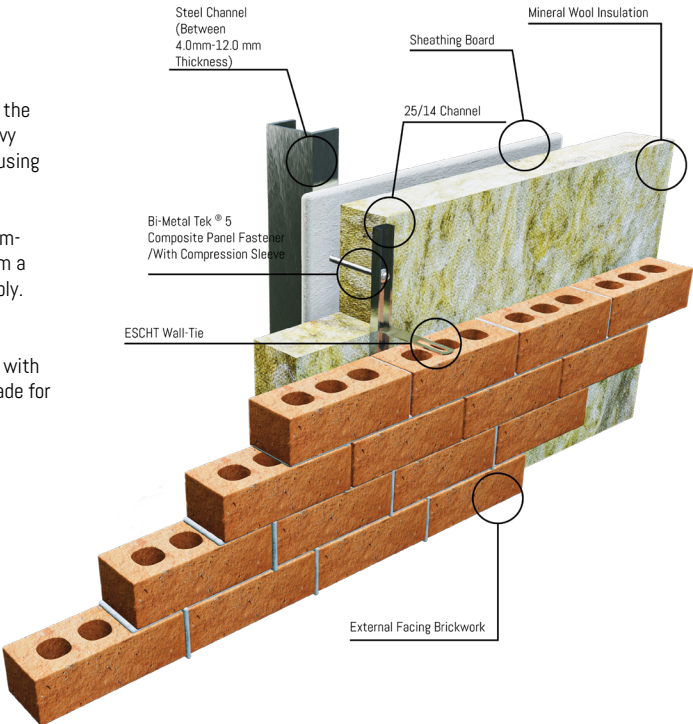
4. EMBED TIE INTO MORTAR JOINT.



The Enterprise Brick-tie channel system™ is designed to connect the outer leaf of a cavity wall to a heavy steel frame through mineral wool using an appropriate fixing. This system comprises several components that work together to form a robust structural restraint assembly.

For heavy gauge steel frames, the smaller holes are intended for use with high-thread self-drilling fixings, made for heavy steel.

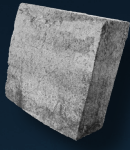
\*Re-washing available on request.





## Concrete And Masonry Substrates

A Stainless Steel Compression Sleeve, The Same Depth As The Insulation, Is Required And The Screw Is Installed Through The Channel And The Compression Sleeve, Located In The Insulation, And Into The Pilot Hole In The Concrete Frame.



To avoid the negative effects of deformation of the insulation battens, boards and panels, Evolution recommends using a stainless-steel compression sleeve.



For full details on the compression sleeve requirement, please refer to page 11 of our User Installation Guide

1. DRILL PILOT HOLE  
(SEE TABLE ON NEXT PAGE).



2. INSTALL FIXING THROUGH CHANNEL AND SLEEVE BACK TO INTERNAL STRUCTURE.



3. ROTATE ESCHT WALL TIE INTO CHANNEL LIPS.



4. EMBED TIE INTO MOTAR JOINT.



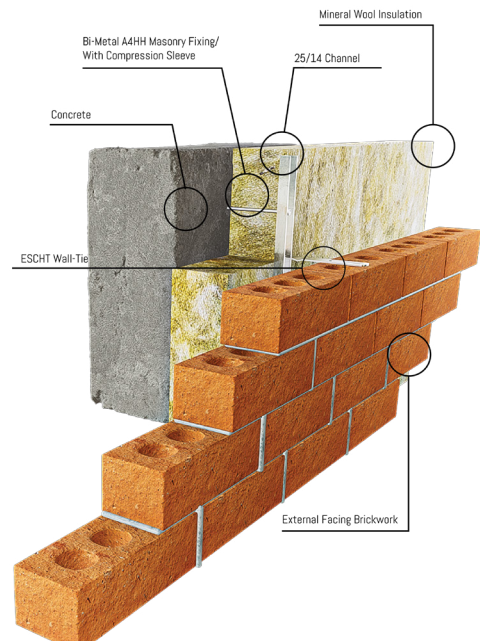
The Enterprise Brick-tie channel system™ is designed to connect an outer leaf of a masonry cavity wall to a concrete frame or another structural element through mineral wool using an appropriate fixing. This system comprises several components that work together to form a robust structural restraint assembly.

It features numerous pre-punched holes spaced closely together, allowing for flexible fixing points based on the application. For concrete applications, the larger holes are intended for use with stainless steel masonry fixings.

At each fixing point, a compression sleeve with high compressive strength ensures a high-capacity fixing detail, accommodating even the thickest insulation used in modern construction.

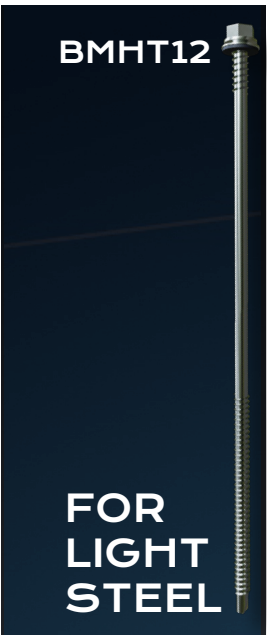
## Fastening Insulation To Concrete Substrates

| Application                            |   |                                | Fastener Solution  |                         |                |
|--|---|--------------------------------|--------------------|-------------------------|----------------|
| Insulation Thickness, $t_{insul}$ (mm) | Sheathing Board Thickness, $t_{board}$ (mm) | Embedment Depth $t_{sub}$ (mm) | Compression Sleeve | Fastener by Corrosivity |                |
|  |   |                                |                    | C3                      | C4             |
| $\leq 50.0$                            | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-50          | A4HH6.3-100-GP          | A4HH6.3-100-GP |
| $\leq 60.0$                            | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-60          | A4HH6.3-125-GP          | A4HH6.3-125-GP |
| $\leq 75.0$                            | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-75          | A4HH6.3-140-GP          | A4HH6.3-140-GP |
| $\leq 80.0$                            | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-80          | A4HH6.3-140-GP          | A4HH6.3-140-GP |
| $\leq 85.0$                            | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-85          | A4HH6.3-160-GP          | A4HH6.3-160-GP |
| $\leq 90.0$                            | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-90          | A4HH6.3-160-GP          | A4HH6.3-160-GP |
| $\leq 100.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-100         | A4HH6.3-160-GP          | A4HH6.3-160-GP |
| $\leq 110.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-110         | A4HH6.3-180-GP          | A4HH6.3-180-GP |
| $\leq 120.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-120         | A4HH6.3-180-GP          | A4HH6.3-180-GP |
| $\leq 125.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-125         | A4HH6.3-180-GP          | A4HH6.3-180-GP |
| $\leq 130.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-130         | A4HH6.3-200-GP          | A4HH6.3-200-GP |
| $\leq 135.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-135         | A4HH6.3-200-GP          | A4HH6.3-200-GP |
| $\leq 140.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-140         | A4HH6.3-200-GP          | A4HH6.3-200-GP |
| $\leq 150.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-150         | A4HH6.3-200-GP          | A4HH6.3-200-GP |
| $\leq 160.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-160         | A4HH6.3-200-GP          | A4HH6.3-200-GP |
| $\leq 170.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-170         | A4HH6.3-250-GP          | A4HH6.3-250-GP |
| $\leq 180.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-180         | A4HH6.3-250-GP          | A4HH6.3-250-GP |
| $\leq 190.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-190         | A4HH6.3-250-GP          | A4HH6.3-250-GP |
| $\leq 200.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-200         | A4HH6.3-250-GP          | A4HH6.3-250-GP |
| $\leq 220.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-220         | A4HH8.0-275-GP          | A4HH8.0-275-GP |
| $\leq 230.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-230         | A4HH8.0-275-GP          | A4HH8.0-275-GP |
| $\leq 240.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-240         | A4HH8.0-275-GP          | A4HH8.0-275-GP |
| $\leq 250.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-250         | A4HH8.0-300-GP          | A4HH8.0-300-GP |
| $\leq 260.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-260         | A4HH8.0-300-GP          | A4HH8.0-300-GP |
| $\leq 270.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-270         | A4HH8.0-350-GP          | A4HH8.0-350-GP |
| $\leq 280.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-280         | A4HH8.0-350-GP          | A4HH8.0-350-GP |
| $\leq 290.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-290         | A4HH8.0-350-GP          | A4HH8.0-350-GP |
| $\leq 300.0$                           | $0.0 \leq 12.5$                             | $\geq 25.0 \leq 45.0$          | SSCS10-300         | A4HH8.0-350-GP          | A4HH8.0-350-GP |



Primary Fixings & Technical Data by Substrate Type

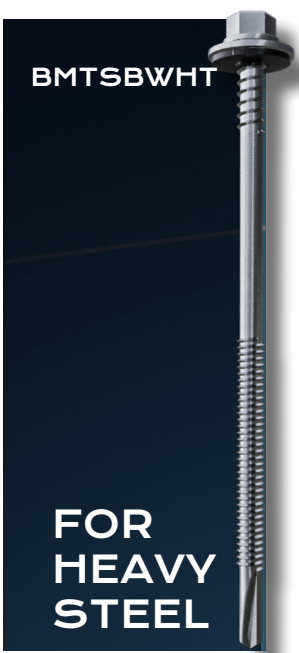
Light Steel • Heavy Steel • Concrete



| CHARACTERISTIC WITHDRAWAL RESISTANCE, $N_{Rk}$ (N) |                     |                 |   |       |       |       |       |       |
|--|---------------------|-----------------|---|-------|-------|-------|-------|-------|
| Fastener Properties                                |                     | Substrate Grade | Substrate Nominal Thickness, $t_{sub}$ (mm) |       |       |       |       |       |
| MATERIAL   | NOM DIA.. $d_{nom}$ |                 | 1.20  | 1.60  | 2.00  | 2.50  | 3.00  | 4.00  |
| EN 1.4301/ EN 1.4401                               | 5.50                | S320GD          | 1,700                                       | 2,100 | 2,500 | 3,300 | 4,100 | 5,400 |
| EN 1.4301/ EN 1.4401                               | 5.50                | S450JR          | 2,300                                       | 2,900 | 3,500 | 4,600 | 5,700 | 7,500 |

| CHARACTERISTIC MECHANICAL PROPERTIES (N) |           |
|--|-----------|
| CHARACTERISTIC                           | MAGNITUDE |
| Tensile capacity, $F_{u,Rk}$             | 13,300    |
| Shearing resistance, $V_{u,Rk}$          | 7,900     |

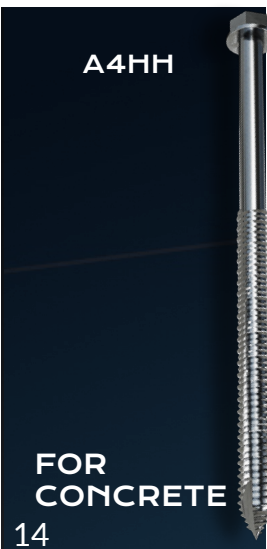
| CHARACTERISTIC PULL-OVER RESISTANCE, $N_{Rk,WASHER}$ (N) |           |
|--|-----------|
| WASHER DIAMETER, $d_{washer}$                            | MAGNITUDE |
| 12.0   | 8,100     |
| 16.0   | 8,400     |



| CHARACTERISTIC WITHDRAWAL RESISTANCE, $N_{Rk}$ (N) |                     |                 |   |        |        |        |        |        |
|--|---------------------|-----------------|---|--------|--------|--------|--------|--------|
| Fastener Properties                                |                     | Substrate Grade | Substrate Nominal Thickness, $t_{sub}$ (mm) |        |        |        |        |        |
| MATERIAL   | NOM DIA.. $d_{nom}$ |                 | 4.00  | 5.00   | 6.00   | 8.00   | 10.00  | 12.00  |
| EN 1.4301  | 5.50                | S320GD          | 6,400                                       | 7,700  | 10,100 | 11,400 | 12,300 | 13,300 |
| EN 1.4301  | 5.50                | S450JR          | 8,300                                       | 10,000 | 12,800 | 13,300 | 13,300 | 13,300 |

| CHARACTERISTIC MECHANICAL PROPERTIES (N) |           |
|--|-----------|
| CHARACTERISTIC                           | MAGNITUDE |
| Tensile capacity, $F_{u,Rk}$             | 13,300    |
| Shearing resistance, $V_{u,Rk}$          | 7,900     |

| CHARACTERISTIC PULL-OVER RESISTANCE, $N_{Rk,WASHER}$ (N) |           |
|--|-----------|
| WASHER DIAMETER, $d_{washer}$                            | MAGNITUDE |
| 12.0   | 8,100     |
| 16.0   | 8,400     |



| CHARACTERISTIC WITHDRAWAL RESISTANCE, $N_{Rk}$ (N) |                   |               |                |
|--|-------------------|---------------|----------------|
| Embedment Depth, $t_{sub}$ (mm)                    | Substrate Type    |               |                |
|  | CONCRETE (35 MPa) | BLOCK (7 MPa) | BRICK (75 MPa) |
| 25.0   | 3,900             | 2,700         | 4,200          |
| 40.0   | 5,700             | 3,900         | 5,900          |

| CHARACTERISTIC MECHANICAL PROPERTIES (N) |           |
|--|-----------|
| CHARACTERISTIC                           | MAGNITUDE |
| Tensile capacity, $F_{u,Rk}$             | 14,100    |
| Shearing resistance, $V_{u,Rk}$          | 8,500     |

| CHARACTERISTIC PULL-OVER RESISTANCE, $N_{Rk,WASHER}$ (N) |           |
|--|-----------|
| WASHER DIAMETER, $d_{washer}$                            | MAGNITUDE |
| 16.0   | 8,400     |



Evolution provides a wide range of fastener options which vary depending on the critical contributing factor of substrate thickness.



ENTERPRISE SYSTEM™  
FOR BRICK TIE CHANNELS

## Bi-metal™ Composite Panel Range

(LIGHT SECTION)



BMTSBWHT



A4BMHT

## Bi-metal™ Composite Panel Range

(HEAVY SECTION)



BMTSBWHT

|                 |                  |   |
|-----------------|------------------|---|
| FOR LIGHT STEEL | WITH 16mm WASHER | FULL RANGE FROM:<br>5.5mm-<br>80mm to 300mm |
|-----------------|------------------|---|

|                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|
| BMTSBWHT5.5-80-3  | BMTSBWHT5.5-105-3 | BMTSBWHT5.5-115-3 | BMTSBWHT5.5-135-3 |
| BMTSBWHT5.5-150-3 | BMTSBWHT5.5-165-3 | BMTSBWHT5.5-185-3 | BMTSBWHT5.5-200-3 |
| BMTSBWHT5.5-225-3 | BMTSBWHT5.5-235-3 | BMTSBWHT5.5-275-3 | BMTSBWHT5.5-300-3 |

|                 |                            |  |
|-----------------|----------------------------|--|
| FOR LIGHT STEEL | WITH<br>*12/16mm<br>WASHER | RANGE FROM<br>5.5mm -<br>105mm - 235mm |
|-----------------|----------------------------|--|

|                     |                     |             |             |
|---------------------|---------------------|-------------|-------------|
| A4BMHT105-3         | A4BMHT135-3         | A4BMHT150-3 | A4BMHT185-3 |
| *A4BMHT12-5.5-200-3 | *A4BMHT12-5.5-235-3 |             |             |

|                 |                           |  |
|-----------------|---------------------------|--|
| FOR HEAVY STEEL | WITH<br>12/16mm<br>WASHER | RANGE FROM<br>5.5mm-<br>105mm to 245mm |
|-----------------|---------------------------|--|

|                      |                      |
|----------------------|----------------------|
| BMTSBWHT12-5.5-185-5 | BMTSBWHT12-5.5-245-5 |
|----------------------|----------------------|

12mm washers

|                   |                   |
|-------------------|-------------------|
| BMTSBWHT5.5-105-5 | BMTSBWHT5.5-125-5 |
|-------------------|-------------------|

|                   |                      |
|-------------------|----------------------|
| BMTSBWHT5.5-150-5 | BMTSBWHT16-5.5-185-5 |
|-------------------|----------------------|

|                      |
|----------------------|
| BMTSBWHT16-5.5-245-5 |
|----------------------|

16mm washers

# BI-METAL™ SuperTEK® 7 COMPOSITE PANEL RANGE (SUPER-HEAVY SECTION)

A4BMHT16  
RANGE

FOR  
SUPER-HEAVY  
STEEL

A4 GRADE

RANGE FROM:  
6.3mm -  
185mm to 300mm

CODE:

A4BMHT16-6.3-185-7\*

A4BMHT16-6.3-235-7\*

A4BMHT16-6.3-250-7\*

A4BMHT16-6.3-275-7\*

A4BMHT16-6.3-300-7\*

Especially suited to fixing brick ties, components, bracketry and secondary frame elements/ sections to primary and secondary steel framing where a weather sealing washer is required.

1.06mm (24 TPI) fine thread pitches ensure that maximum positive thread engagement with substrates is achieved.

Note that parts noted with "\*" are by special request only to [technical@evofas.com](mailto:technical@evofas.com).

## CHARACTERISTIC WITHDRAWAL RESISTANCE, $N_{Rk}$ (N)

| Fastener Properties |                    | SUBSTRATE GRADE | SUBSTRATE NOMINAL THICKNESS, $t_{sub}$ (mm) |        |        |        |        |        |
|---------------------|--------------------|-----------------|---|--------|--------|--------|--------|--------|
| MATERIAL            | NOM DIA. $d_{nom}$ |                 | 4.00  | 5.00   | 6.00   | 8.00   | 10.00  | 12.00  |
| EN 1.4301           | 5.50               | S320GD          | 6,400                                       | 7,700  | 10,100 | 11,400 | 12,300 | 13,300 |
| EN 1.4301           | 5.50               | S450JR          | 8,300                                       | 10,000 | 12,800 | 13,300 | 13,300 | 13,300 |

## CHARACTERISTIC MECHANICAL PROPERTIES (N)

| Characteristic                  | Magnitude |
|---------------------------------|-----------|
| Tensile capacity, $F_{u,Rk}$    | 13,300    |
| Shearing resistance, $V_{u,Rk}$ | 7,900     |

## CHARACTERISTIC PULL-OVER RESISTANCE, $N_{Rk, WASHER}$ (N)

| WASHER DIAMETER, $d_{washer}$ | MAGNITUDE |
|-------------------------------|-----------|
| 16.0                          | 8,400     |



ENTERPRISE SYSTEM™  
FOR BRICK-TIE CHANNELS

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Errors & Omissions Excepted. Warranty Questionnaire (REV B).  
Department of Engineering and Laboratory Services



# QUALITY ASSURANCE AND LABORATORY TESTING

We operate a UKAS accredited testing laboratory, uniquely designed to test all aspects of construction fixings and fasteners as well as other tests suited to the aerospace, automotive, oil & gas, and marine industries.

## Our Most Sought After Services:

TENSILE, SHEAR, FATIGUE  
AND DEFLECTION TESTING

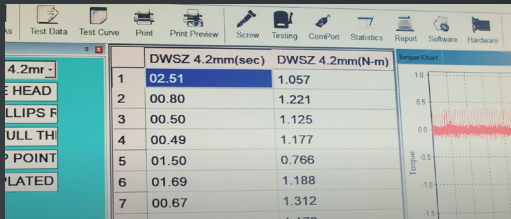
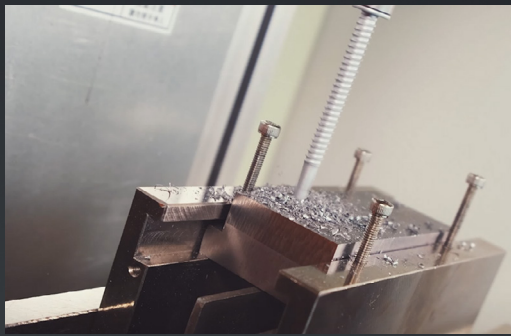
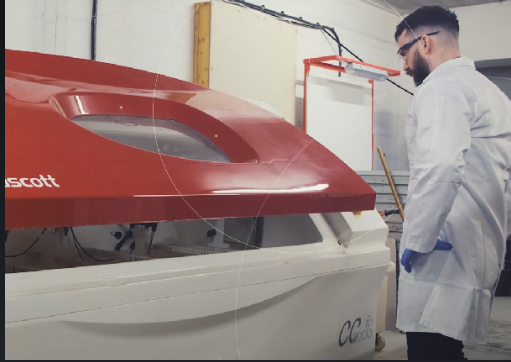
TORQUE TESTING

FAILURE ANALYSIS  
(hydrogen embrittlement, stress  
corrosion etc)

METALGRAPHY  
(hardness - vickers/  
rockwell, HAZ etc)

MICROSCOPY  
(light, metallographic etc)

CORROSION TESTING  
(neutral salt spray,  
cyclic corrosion etc)



Premium quality is something we take very seriously at Evolution and our ISO 9001 certification demonstrates this. We are dedicated to ensuring quality in everything we do, from our products to our Customer Services and Marketing Support.







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# Product Range<sup>+</sup>



ENTERPRISE SYSTEM<sup>TM</sup>  
FOR BRICK-TIE CHANNELS



[www.enterprisesystem.co.uk](http://www.enterprisesystem.co.uk)