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# PRODUCT DATASHEET

## BI-METAL COMPOSITE PANEL FASTENER

### Product Details

Designed for: *Fixing cladding/roofing applications to hot/cold purlins/rails. Fastening liner panels and general components to steel. Fastening brick-tie channel through Insulation to SFS.*

Head style: *Hexagonal*  
 Drive bit: *5/16" hexagonal*  
 Thread form: *Coarse thread*  
 Shank material: *AISI A304*  
 Material grade: *AISI A304*  
 Recommended drill speed: *1500 – 2500RPM*



### Bi-Metal Composite Panel Fastener Range

Product Code	Nominal Dimensions	Washer Diameter	Insulation Thickness Range
Products for use in Light Gauge Applications (1.2mm to 4.0mm mild steel)			
BMTSBWHT5.5-80-3	5.5 x 80mm	16mm	10 – 60mm
BMTSBWHT5.5-105-3	5.5 x 105mm	16mm	35—85mm
BMTSBWHT5.5-135-3	5.5 x 135mm	16mm	45—115mm
BMTSBWHT5.5-150-3	5.5 x 150mm	16mm	60—130mm
BMTSBWHT5.5-165-3	5.5 x 165mm	16mm	70 – 140mm
BMTSBWHT16-5.5-185-3	5.5 x 185mm	16mm	95 – 165mm
BMTSBWHT5.5-185-3	5.5 x 185mm	19mm	95 – 165mm
BMTSBWHT5.5-235-3	5.5 x 235mm	19mm	155 – 220mm
BMTSBWHT5.5-275-3	5.5 x 275mm	19mm	185– 255mm
Products for use in Heavy Gauge Applications (4.0mm to 12.5mm mild steel)			
BMTSBWHT5.5-105-5	5.5 x 105mm	16mm	25 – 85mm
BMTSBWHT5.5-125-5	5.5 x 125mm	16mm	40 – 105mm
BMTSBWHT5.5-150-5	5.5 x 150mm	19mm	50 – 130mm
BMTSBWHT5.5-185-5	5.5 x 185mm	19mm	85 – 165mm
BMTSBWHT5.5-245-5	5.5 x 245mm	19mm	135 – 215mm

**NOTE:** The results expressed in the datasheet are taken as mean loads from a range of empirical tests and are ultimate unfactored loads. Each specifier or end user should make his/ her own decision on what safety factors to use relevant to their design application (such as BS 5950, EN 1991, etc).

Errors and Omissions Excepted.

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## Technical Data

Tek 3 range – unfactored pull out values							
Diameter	Drill point	Steel Thickness					
		1.2mm	1.6mm	2.0mm	2.5mm	3.0mm	4.0mm
5.5mm	Tek 3	1.7kN	2.1kN	2.5kN	3.3kN	4.1kN	5.4kN

Tek 5 range – unfactored pull out values							
Diameter	Drill point	Steel Thickness					
		4mm	5mm	6mm	8mm	10mm	12.5mm
5.5mm	Tek 5	6.4kN	7.7kN	10.1kN	11.4kN	12.3kN	12.8kN

Hardness Rating (Vickers scale)			Pullover Performance			Ultimate Mechanical Performance		
Diameter	Surface Hardness	Core Hardness	Diameter	In 0.6mm steel	In 1.2mm steel	Diameter	Tensile Strength	Shear Strength
5.5mm	465.6 HV0.3	323.7 HV0.3	5.5mm	2.4kN	8.1kN	5.5mm	13.3kN	9.9kN