

PRODUCT DATASHEET

BI-METAL COMPOSITE PANEL FASTENER



Purpose:	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 and drive:	Hexagonal, 5/16" hexagonal
High Thread Form:	Coarse thread
Primary Thread form:	Coarse thread (Tek 3) / Fine thread (Tek 5)
Shank Material:	AISI A304
Material Grade:	AISI A304
Drilling Point Material Grade:	SAE C1022
Recommended Drill Speed:	1500 - 2500RPM

Bi-Metal Composite Panel Fastener Range - Products for use in Light Gauge Applications (1.2mm to 3.5mm mild steel)

Product Code	Size	Washer	Insulation Thickness Range	Drilling Capacity
BMTSBWHT5.5-80-3	5.5 x 80mm	16mm	25mm-60mm	1.2 - 3.5mm
BMTSBWHT5.5-105-3	5.5 x 105mm	16mm	50mm-85mm	1.2 - 3.5mm
BMTSBWHT5.5-115-3	5.5 x 115mm	16mm	40mm-95mm	1.2 - 3.5mm
BMTSBWHT5.5-135-3	5.5 x 135mm	16mm	60mm-115mm	1.2 - 3.5mm
BMTSBWHT5.5-150-3	5.5 x 150mm	16mm	75mm-130mm	1.2 - 3.5mm
BMTSBWHT16-5.5-165-3	5.5 x 165mm	16mm	90mm-145mm	1.2 - 3.5mm
BMTSBWHT16-5.5-185-3	5.5 x 185mm	16mm	110mm-165mm	1.2 - 3.5mm
BMTSBWHT5.5-185-3	5.5 x 185mm	19mm	110mm-165mm	1.2 - 3.5mm
BMTSBWHT5.5-235-3	5.5 x 235mm	19mm	160mm-215mm	1.2 - 3.5mm
BMTSBWHT5.5-275-3	5.5 x 275mm	19mm	200mm-255mm	1.2 - 3.5mm

Bi-Metal Composite Panel Fastener Range - Products for use in Heavy Gauge Applications (4.0mm to 12.5mm mild steel)

Product Code	Size	Washer	Insulation Thickness Range	Drilling Capacity
BMTSBWHT5.5-105-5	5.5 x 105mm	16mm	30mm-75mm	4.0 - 12.5mm
BMTSBWHT5.5-125-5	5.5 x 125mm	16mm	50mm-95mm	4.0 - 12.5mm
BMTSBWHT5.5-150-5	5.5 x 150mm	16mm	75mm-120mm	4.0 - 12.5mm
BMTSBWHT5.5-185-5	5.5 x 185mm	19mm	110mm-150mm	4.0 - 12.5mm
BMTSBWHT5.5-245-5	5.5 x 245mm	19mm	170mm-210mm	4.0 - 12.5mm

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					
		4.0mm	5.0mm	6.0mm	8.0mm	10.0mm	12.5mm
5.5mm	Tek 5	6.4kN	7.7kN	10.1kN	11.4kN	12.3kN	12.8kN

Hardness Rating (Vickers scale)

Diameter	Surface Hardness	Core Hardness
5.5mm	465.6 HV0.3	323.7 HV0.3

Pullover Performance

Diameter	In 0.6mm steel	In 1.2mm steel
5.5mm	2.4kN	8.1kN

Ultimate Mechanical Performance

Diameter	Tensile Strength	Shear Strength
5.5mm	13.3kN	9.9kN

NOTE: The results expressed in this document are determined from empirical testing. Specifiers, end-users and other third parties should make their own decision(s) on what safety factors to use relevant to their design(s)/ application(s). This document is provided, strictly: without prejudice, without recourse, without liability, non-assumpsit, no assured value, errors and omissions excepted, subject to change without notice and all rights reserved.
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