



PRODUCT DATASHEET

A4 BI-METAL COMPOSITE PANEL FASTENER

Product Details

Designed for:	<i>Fastening to aluminium sheeting and panels</i>
Head style:	<i>Hexagonal</i>
Drive bit:	<i>5/16" hexagonal</i>
Thread form:	<i>Twin, high thread</i>
Drill Point:	<i>Tek 3</i>
Material grade:	<i>A4 stainless steel</i>
Coating:	<i>Electroplated zinc</i>
Washer:	<i>16mmø bonded EPDM</i>

A4 range – for light steel

Product code	Size	Insulation Thickness Range	Drilling Capacity	Recommended drill speed	Steel Thickness
A4BMHT105-3	5.5 x 105mm	55 - 90mm	1.2 - 3.5mm	1500-2500 RPM	1.2 - 3.5mm
A4BMHT135-3	5.5 x 135mm	60 – 120mm	1.2 – 3.5mm	1500-2500 RPM	1.2 - 3.5mm
A4BMHT150-3	5.5 x 150mm	75 – 135mm	1.2 – 3.5mm	1500-2500 RPM	1.2 - 3.5mm
A4BMHT185-3	5.5 x 185mm	120 – 170mm	1.2 – 3.5mm	1500-2500 RPM	1.2 - 3.5mm

Technical Data

Hardness Rating (Vickers scale)		
Diameter	Surface Hardness	Core Hardness
5.5mm	383.5 HV0.3	318.6 HV0.3

Ultimate Mechanical Performance		
Diameter	Tensile Strength	Shear Strength
5.5mm	12.3kN	9.9kN

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	1.8kN	2.0kN	2.4kN	3.3kN	4.4kN	6.1kN

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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ABOUT OUR TESTING



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All test results were derived from empirical testing performed by ETAS (Evolution Testing & Analytical Services), a UKAS (United Kingdom Accreditation Service) accredited testing laboratory (Accreditation No. 7485). The following tests were performed to the following standards.

Testing Procedures

Test/ Parameter	Standard/ Method/ Procedure
Ultimate Tensile	ISO 6892-1: 2009 "Metallic materials – tensile testing – Part 1: Method of test at room temperature".
Ultimate Shear	MIL-STD-1312-13 "Military Standard: Fastener test method (Method 13) Double shear test".
Pull Out (Withdrawal Force)	EN 14566: 2009 "Mechanical fasteners for gypsum plasterboard systems. Definitions, requirements and test methods".
Pull Over	EN 14592: 2008 "Timber structures. Dowel type fasteners. Requirements".
Hardness	ISO 650 7-1: 2005 "Metallic materials – Vickers hardness test – Part 1: Test method".
Corrosion Resistance	EN ISO 9227: 2012 "Corrosion tests in artificial atmospheres. Salt spray tests".
Drilling Time Test	EN 14566: 2009 "Mechanical fasteners for gypsum plasterboard systems. Definitions, requirements and test methods".

Laboratory Contact Details

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