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PRODUCT DATASHEET A4 BI-METAL TEK SCREW

Product Details

Designed for: Head style: Drive bit: Thread form: Material grade: Coating: Recommended drill speed:

Fastening in aluminium sheeting and panels Hexagonal 5/16" hexagonal Twin, coarse thread (Tek 3)/fine thread (Tek 5) A4 stainless Electroplated zinc 1500 – 2500 RPM

Tek 3 range – for light steel

Product Code	Size	Drill point	Effective thread length	Drilling Capacity	Washer	Steel thickness
A4BM25-3	5.5 x 25mm	Tek 3	14.0mm	1.2 - 3.5mm	N/A	1.2 - 3.5mm
A4BM38-3	5.5 x 38mm	Tek 3	27.0mm	1.2 – 3.5mm	N/A	1.2 – 3.5mm
A4BM50-3	5.5 x 50mm	Tek 3	38.0mm	1.2 – 3.5mm	N/A	1.2 – 3.5mm
A4BM75-3	5.5 x 75mm	Tek 3	60.0mm	1.2 – 3.5mm	N/A	1.2 – 3.5mm

Tek 3 range – for heavy steel

Product Code	Size	Drill point	Effective thread length	Drilling Capacity	Washer	Steel thickness
A4BM38-5	5.5 x 38mm	Tek 5	15.0mm	4.0 – 12.5mm	N/A	4.0 – 12.5mm

Technical Data

Hardness Rating (Vickers scale)				Ultimate Mechanical Performance			
Diameter	Surface Hardness	Core Hardness		Diameter	Tensile Strength	Shear Strength	
5.5mm	385.9HV0.3	309.7HV0.3		5.5mm	13.2kN	10.9kN	

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).

Technical Data continued...

Tek 3 range – Unfactored pull out values								
Diameter Drill	Drill Point	Steel Thickness						
	Dimronit	1.2mm	1.6mm	2.0mm	2.5mm	3.0mm	4.0mm	
5.5mm	Tek 3	1.8kN	2.2kN	2.5kN	3.4kN	4.3kN	6.2kN	

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	6.8kN	7.4kN	8.2kN	9.7kN	10.4kN	11.9kN	







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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 <i>"Metallic materials – tensile testing – Part 1: Method of test at room temperature".</i>
Ultimate Shear	MIL-STD-1312-13 "Military Standard: Fastener test method (Method 13) Double shear test".
Pull Out (Withdrawal Force)	EN 14566: 2009 <i>"Mechanical fasteners for gypsum plasterboard systems.</i> <i>Definitions, requirements and test methods".</i>
Pull Over	EN 14592: 2008 <i>"Timber structures. Dowel type fasteners. Requirements".</i>
Hardness	ISO 650 7-1: 2005 <i>"Metallic materials – Vickers hardness test – Part 1: Test method".</i>
Corrosion Resistance	EN ISO 9227: 2012 <i>"Corrosion tests in artificial atmospheres. Salt spray tests".</i>
Drilling Time Test	EN 14566: 2009 <i>"Mechanical fasteners for gypsum plasterboard systems.</i> <i>Definitions, requirements and test methods".</i>
Laboratory Contact Details	Evolution Testing & Analytical Services Units 2A & 2B Clyde Gateway Trade Park

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