



Evolution Fasteners (UK) Ltd
 Units 2A & 2B Clyde Gateway Trade Park
 Dalmarnock Road, Rutherglen, Glasgow G73 1AN
 Tel: +44 (0)141 647 7100 / Fax: +44 (0)141 647 5100
 Email: technical@evolutionfasteners.co.uk



www.evolutionfasteners.co.uk



PRODUCT DATASHEET

COMPOSITE PANEL

SUPERTEK 7



Product Details

Designed for:	<i>Fixing steel to steel</i>
Head style:	<i>Hexagonal</i>
Drive bit:	<i>5/16" hexagonal</i>
Drill point:	<i>Tek 7 spiral point</i>
Thread form:	<i>Single, 24 threads per inch fine thread 'V' fluted</i>
Coating:	<i>1000hr Evoshield®</i>
Shank material:	<i>Carbon steel</i>
Material grade:	<i>AISI C1022</i>
Recommended drill speed:	<i>1500-2500 RPM</i>
Steel thickness:	<i>3.5 – 18.5mm</i>

SuperTek 7 Range – For Heavy Steel

Product Code	Size	Washer	Effective thread length	Drilling capacity
TSBWHT5.5-150-7	5.5x150mm	16mm	70mm (50mm Thread)	3.5-18.5mm

Technical Data

Hardness Rating (Vickers scale)		
Diameter	Surface Hardness	Core Hardness
5.5mm	372.0HV	580.0HV

Ultimate Mechanical Performance		
Diameter	Tensile Strength	Shear Strength
5.5mm	13.9kN	10.3kN

Tek 7 range – Unfactored pull out values							
Diameter	Drill point	Steel Thickness					
		4.0mm	6.0mm	8.0mm	10.0mm	15.0mm	18.0mm
5.5mm	Tek 7	4.1kN	6.9kN	11.3kN	13.5kN	16.6kN	19.7kN

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.



ABOUT OUR TESTING



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.



7485

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 <i>"Military Standard: Fastener test method (Method 13) Double shear test".</i>
Pull Out (Withdrawal Force)	EN 14566: 2009 <i>"Mechanical fasteners for gypsum plasterboard systems. 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. Definitions, requirements and test methods".</i>

Laboratory Contact Details

Evolution Testing & Analytical Services

Units 2A & 2B Clyde Gateway Trade Park
Dalrnock Road
Rutherglen
South Lanarkshire
G73 1AN

T: (0141) 643 4125

F: (0141) 647 5100

E: sales@etasuk.com