

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 SUPERTEK 7

#### **Product Details**

Designed for: Fixing steel to steel

Head style: Hexagonal
Drive bit: 5/16" hexagonal
Drill point: Tek 7 spiral point

Thread form: Single, 24 threads per inch fine thread 'V' fluted

Coating: 1000hr Evoshield®

Shank material: Carbon steel
Material grade: AISI C1022
Recommended drill speed: 1500-2500 RPM
Steel thickness: 3.5 – 18.5mm



## SuperTek 7 Range – For Heavy Steel

Product Code	Size	Washer	Effective thread length	Drilling capacity
TSHW5.5-50-7	5.5x50mm	n/a	FULLY THREADED	3.5-18.5mm
TSBW5.5-50-7	5.5x50mm	16mmø bonded EPDM	FULLY THREADED	3.5-18.5mm
TSHW5.5-75-7	5.5x75mm	n/a	FULLY THREADED	3.5-18.5mm
TSHW5.5-100-7	5.5x100mm	n/a	FULLY THREADED	3.5-18.5mm
TSBWHT5.5-150-7	5.5x150mm	n/a	FULLY THREADED	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 D	Drill point	Steel Thickness					
		4.0mm	6.0mm	8.0mm	10.0mm	15.0mm	18.0mm
5.5mm	Tek 6	4.1kN	6.9kN	11.3kN	13.5kN	16.6kN	19.7kN

# **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.

#### **Testing Procedures**



7485

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** 

**Evolution Testing & Analytical Services** 

Units 2A & 2B Clyde Gateway Trade Park

Dalmarnock Road Rutherglen

South Lanarkshire

G73 1AN

T: (0141) 643 4125 F: (0141) 647 5100 E: sales@etasuk.com