

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



-

# PRODUCT DATASHEET ZINC COATED TEK SCREW



#### **Product Details**

Designed for:

Head style: Drive bit: Thread form: Shank material: Material grade: Coating: *R*ecommended drill speed: Fastening where a high end corrosion resistant coating is not required Hexagonal 5/16" hexagonal Twin, coarse thread (Tek 3)/fine thread (Tek 5) Carbon steel AISI C1022 Zinc 1500 - 2500 RPM



Product Code	Size	Drill point	Effective thread length	Drilling Capacity	Washer
BWZP25-3	5.5 x 25mm	Tek 3	16.0mm	1.2 – 3.5mm	16mmø bonded EPDM
BWZP32-3	5.5 x 32mm	Tek 3	18.0mm	1.2 – 3.5mm	16mmø bonded EPDM
BWZP38-3	5.5 x 38mm	Tek 3	26.0mm	1.2 – 3.5mm	16mmø bonded EPDM
BWZP50-3	5.5 x 50mm	Tek 3	37.0mm	1.2 – 3.5mm	16mmø bonded EPDM
BWZP75-3	5.5 x 75mm	Tek 3	61.0mm	1.2 – 3.5mm	16mmø bonded EPDM
BWZP100-3	5.5 x 100mm	Tek 3	90.0mm	1.2 – 3.5mm	16mmø bonded EPDM
BWZP19-25-3	5.5 x 25mm	Tek 3	16.0mm	1.2 – 3.5mm	19mmø bonded EPDM
BWZP19-38-3	5.5 x 38mm	Tek 3	26.0mm	1.2 – 3.5mm	19mmø bonded EPDM
BWZP19-50-3	5.5 x 50mm	Tek 3	37.0mm	1.2 – 3.5mm	19mmø bonded EPDM
BWZP19-75-3	5.5 x 75mm	Tek 3	61.0mm	1.2 – 3.5mm	19mmø bonded EPDM
BWZP19-100-3	5.5 x 100mm	Tek 3	90.0mm	1.2 – 3.5mm	19mmø bonded EPDM
	•				
HWZP19-3	5.5 x 19mm	Tek 3	10.0mm	1.2 – 3.5mm	n/a
HWZP25-3	5.5 x 25mm	Tek 3	16.0mm	1.2 – 3.5mm	n/a
HWZP32-3	5.5 x 32mm	Tek 3	18.0mm	1.2 – 3.5mm	n/a
HWZP38-3	5.5 x 38mm	Tek 3	28.0mm	1.2 – 3.5mm	n/a
HWZP50-3	5.5 x 50mm	Tek 3	40.0mm	1.2 – 3.5mm	n/a
HWZP75-3	5.5 x 75mm	Tek 3	65.0mm	1.2 – 3.5mm	n/a
HWZP100-3	5.5 x 100mm	Tek 3	90.0mm	1.2 – 3.5mm	n/a

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.

### Tek 5 range – for heavy steel

Product Code	Size	Drill point	Effective thread length	Drilling Capacity	Washer
BWZP38-5	5.5 x 38mm	Tek 5	18.0mm	4.0 – 12.5mm	16mmø bonded EPDM
BWZP50-5	5.5 x 50mm	Tek 5	34.0mm	4.0 – 12.5mm	16mmø bonded EPDM
BWZP75-5	5.5 x 75mm	Tek 5	60.0mm	4.0 – 12.5mm	16mmø bonded EPDM
BWZP100-5	5.5 x 100mm	Tek 5	85.0mm	4.0 – 12.5mm	16mmø bonded EPDM
HWZP38-5	5.5 x 38mm	Tek 5	18.0mm	4.0 – 12.5mm	n/a
HWZP50-5	5.5 x 50mm	Tek 5	33.0mm	4.0 – 12.5mm	n/a
HWZP75-5	5.5 x 75mm	Tek 5	60.0mm	4.0 – 12.5mm	n/a
HWZP100-5	5.5 x 100mm	Tek 5	85.0mm	4.0 – 12.5mm	n/a

#### **Technical Data**

Hardness	Rating (Vic	kers scale)	Unfactored Mechanical Performance			
Diameter	Surface Hardness	Core Hardness	Diameter	Tensile Strength	Shear Strength	
5.5mm	423.0HV	570.0HV	5.5mm	14.9kN	9.4kN	

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	2.0kN	2.2kN	4.1kN	5.1kN	6.0kN

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	6.3kN	7.4kN	8.7kN	10.9kN	14.2kN	16.7kN

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





7485

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	<b>ISO 6892-1: 2009</b> "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)	<b>EN 14566: 2009</b> <i>"Mechanical fasteners for gypsum plasterboard systems.</i> <i>Definitions, requirements and test methods".</i>
Pull Over	<b>EN 14592: 2008</b> <i>"Timber structures. Dowel type fasteners. Requirements".</i>
Hardness	<b>ISO 650 7-1: 2005</b> "Metallic materials – Vickers hardness test – Part 1: Test method".
Corrosion Resistance	<b>EN ISO 9227: 2012</b> <i>"Corrosion tests in artificial atmospheres. Salt spray tests".</i>
Drilling Time Test	<b>EN 14566: 2009</b> <i>"Mechanical fasteners for gypsum plasterboard systems.</i> <i>Definitions, requirements and test methods".</i>
Laboratory Contact Details	<b>Evolution Testing &amp; Analytical Services</b> Units 2A & 2B Clyde Gateway Trade Park Dalmarnock Road Rutherglen

South Lanarkshire

G73 1AN

**T:** (0141) 643 4125

**F**: (0141) 647 5100