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# PRODUCT DATASHEET

## ZINC COATED WING DRILL TEK SCREW

### Product Details

Designed for: Fixing timber or composites to steel  
 Head style: Countersunk or countersunk with nibs  
 Drive bit: Phillips 3  
 Thread form: Twin, coarse thread (Tek 3)/fine thread (Tek 5)  
 Shank material: Carbon steel  
 Material grade: AISI C1022  
 Coating: Zinc - 12µm (Cr6)



### Tek 3 range – for light steel

Product Code	Size	Drill point	Drilling Capacity	Recommended drill speed
ZWDP4.2-38-3	4.2x38mm	Tek 3	1.2-3.5mm	1500-2500 RPM
ZWDP32-3	4.8 x 32mm	Tek 3	1.2-3.5mm	1500-2500 RPM
ZWDP38-3	4.8x38mm	Tek 3	1.2-3.5mm	1500-2500 RPM
ZWDP50-3	4.8x50mm	Tek 3	1.2-3.5mm	1500-2500 RPM
ZWDP62-3	5.5x62mm	Tek 3	1.2-3.5mm	1500-2500 RPM
ZWDP80-3	5.5x80mm	Tek 3	1.2-3.5mm	1500-2500 RPM
ZWDP100-3	5.5x100mm	Tek 3	1.2-3.5mm	1500-2500 RPM

### Wing drill Tek 5 range – for heavy steel

Product Code	Size	Drill point	Drilling Capacity	Recommended drill speed
ZWDP65-5	5.5x65mm	Tek 5	4.0 – 12.5mm	1500-2500 RPM
ZWDP85-5	5.5x85mm	Tek 5	4.0 – 12.5mm	1500-2500 RPM
ZWDP110-5	5.5x110mm	Tek 5	4.0 – 12.5mm	1500-2500 RPM

### Technical Data

Hardness Rating (Vickers scale)			Ultimate Mechanical Performance		
Diameter	Surface Hardness	Core Hardness	Diameter	Tensile Strength	Shear Strength
4.2mm	560.0HV	480.0HV	4.2mm	7.1kN	10.0kN
4.8mm	570.0HV	490.0HV	4.8mm	11.9kN	17.4kN
5.5mm	590.0HV	480.0HV	5.5mm	18.6kN	26.6kN

**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).

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## Technical Data

Tek 3 range – Ultimate pull out values							
Diameter	Drill point	Steel Thickness					
		1.2mm	1.6mm	2.0mm	2.5mm	3.0mm	4.0mm
4.2mm	Tek 3	1.1kN	1.3kN	1.7kN	2.9kN	4.7kN	6.9kN
4.8mm	Tek 3	1.2kN	1.6kN	2.2kN	3.8kN	4.5kN	7.2kN
5.5mm	Tek 3	1.2kN	2.8kN	4.1kN	5.8kN	6.3kN	8.9kN

Tek 5 range – Ultimate pull out values							
Diameter	Drill point	Steel Thickness					
		4.0mm	5.0mm	6.0mm	8.0mm	10.0mm	12.5mm
5.5mm	Tek 5	8.7kN	9.5kN	10.9kN	12.3kN	13.6kN	16.5kN

Pull Over Values in C16 Timber			
Diameter	4.2mm	4.8mm	5.5mm
	2.34kN	2.69kN	3.38kN

# 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

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	<b>MIL-STD-1312-13</b> "Military Standard: Fastener test method (Method 13) Double shear test".
Pull Out (Withdrawal Force)	<b>EN 14566: 2009</b> "Mechanical fasteners for gypsum plasterboard systems. Definitions, requirements and test methods".
Pull Over	<b>EN 14592: 2008</b> "Timber structures. Dowel type fasteners. Requirements".
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> "Corrosion tests in artificial atmospheres. Salt spray tests".
Drilling Time Test	<b>EN 14566: 2009</b> "Mechanical fasteners for gypsum plasterboard systems. Definitions, requirements and test methods".



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