



PRODUCT DATASHEET

BI-METAL WING DRILL SCREW FOR LIGHT STEEL

Product Details

Purpose:	Fastening when stainless steel product is required e.g. in conjunction with aluminium sheeting/ panels and steel substrates
Head style:	Countersunk
Material Grade:	AISI A304
Coating:	Electroplated Zinc
Thread Form:	Coarse Thread
Recess Type:	Phillips 3
Recommended Drill Speed:	1500-2500 RPM

Bi-Metal Wing Drills TEK Screw Range- Products for use in Light Gauge Applications (1.2mm to 4.0mm mild steel)

SKU	Nominal Dimensions, dnom x Lnom (mm)	Effective Thread Length, Lthread (mm)	Drilling Point	Drilling Capacity
BMWD4.8-38-3	4.8 x 38.0mm	FULL	TEK 3	1.2 - 4.0mm
BMWD5.5-50-3	5.5 x 50.0mm	FULL	TEK 3	1.2 - 4.0mm
BMWD5.5-62-3	5.5 x 62.0mm	FULL	TEK 3	1.2 - 4.0mm
BMWD5.5-80-3	5.5 x 80.0mm	60	TEK 3	1.2 - 4.0mm
BMWD5.5-100-3	5.5 x 100.0mm	60	TEK 3	1.2 - 4.0mm
BMWD5.5-120-3	5.5 x 120.0mm	75	TEK 3	1.2 - 4.0mm

Ultimate Withdrawal Resistance, N_{Rk} , from S355JR Steel (N)

Diameter	Drill Point	Nominal Substrate Thickness, t_{nom} (mm)					
		1.2mm	1.6mm	2.0mm	2.5mm	3.0mm	4.0mm
4.8mm	TEK 3	1,900 N	2,700 N	3,500 N	4,500 N	5,000 N	6,300 N
5.5mm	TEK 3	2,000 N	2,400 N	3,600 N	4,300 N	5,100 N	6,700 N

Ultimate Mechanical Performance

Property	Magnitude (N)	
	4.8mm	5.5mm
Tensile Capacity, $F_{ult,Rk}$	9,800 N	11,600 N
Shear Capacity, $V_{ult,Rk}$	8,200 N	9,800 N

Pullover Performance In 50mm of C16 Timber

Diameter (mm)	Magnitude (N)
4.8 mm	1,600 N
5.5 mm	3,000 N

NOTE: The results expressed in this document are determined from empirical testing. Specifiers, end-users and other third parties should make their own decision(s) on what safety factors to use relevant to their design(s)/ application(s). This document is provided, strictly: without prejudice, without recourse, without liability, non-assumpsit, no assured value, errors and omissions excepted, subject to change without notice and all rights reserved. ©Evolution Fasteners UK Ltd, 2021.