



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 |
| Drilling Point: | TEK 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) |
|---------------|--------------------------------------|---------------------------------------|
| BMWD4.8-38-3 | 4.8 x 38.0 | FULL |
| BMWD5.5-38-3 | 5.5 x 38.0 | FULL |
| BMWD5.5-50-3 | 5.5 x 50.0 | FULL |
| BMWD5.5-62-3 | 5.5 x 62.0 | FULL |
| BMWD5.5-80-3 | 5.5 x 80.0 | 60.0 |
| BMWD5.5-100-3 | 5.5 x 100.0 | 60.0 |
| BMWD5.5-120-3 | 5.5 x 120.0 | 75.0 |

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.