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# **PRODUCT DATASHEET**

# **Bi Metal Standard Tek (Washered)**

## **Product Details**

| Purpose:                           | Fastening in aluminium sheeting and panels |
|------------------------------------|--|
| Head style:                        | Hexagonal Drive bit: 5/16" hexagonal       |
| Thread Form:                       | Coarse thread (Tek 3)/Fine thread (Tek 5)  |
| Coating:                           | Electroplated Zinc ≥ 5μm                   |
| Shank Material:                    | Stainless Steel                            |
| Shank Material Grade:              | EN 1.4301/ A2 (AISI 304)                   |
| Washer:                            | 16mm ø bonded EPDM                         |
| Washer Steel Material Grade:       | EN 1.4301/ A2 (AISI 304)                   |
| Drill Point Material:              | Carbon Steel                               |
| <b>Drill Point Material Grade:</b> | SAE C1022                                  |
| Recommended Drill Speed:           | 1,500 - 2,500 RPM                          |

#### Bi-Metal Standard TEK (Washered)- Products for use in Light Gauge Steel Applications (1.2mm to 4.0mm mild steel)

| SKU           | Nominal Dimensions,<br>d <sub>nom</sub> x L <sub>nom</sub><br>(mm) | Effective Thread Length<br>L <sub>thread</sub><br>(mm) | Drill Point | Drilling Capacity<br>H<br>(mm) |
|---------------|--|--|-------------|--------------------------------|
| BMBW5.5-25-3  | 5.5 x 25.0   | Fully Threaded   |             |                                |
| BMBW5.5-38-3  | 5.5 x 38.0   | Fully Threaded   |             |                                |
| BMBW5.5-50-3  | 5.5 x 50.0   | Fully Threaded   | TEK 3       | 1.2 - 4.0                      |
| BMBW5.5-75-3  | 5.5 x 75.0   | 60mm   |             |                                |
| BMBW5.5-100-3 | 5.5 x 100.0  | 75mm   |             |                                |

# Bi-Metal Standard TEK (Washered)- Products for use in Heavy Gauge Steel Applications (4.0mm to 12.0mm mild steel)

| SKU           | Nominal Dimensions,<br>d <sub>nom</sub> x L <sub>nom</sub><br>(mm) | Effective Thread Length<br>L <sub>thread</sub><br>(mm) | Drill Point | Drilling Capacity<br>H <sub>cap</sub><br>(mm) |
|---------------|--|--|-------------|---|
| BMBW5.5-38-5  | 5.5 x 38.0   | Fully Threaded   |             |   |
| BMBW5.5-50-5  | 5.5 x 50.0   | Fully Threaded   |             |   |
| BMBW5.5-65-5  | 5.5 x 65.0   | Fully Threaded   | TEK 5       | 4.0 - 12.0                                    |
| BMBW5.5-75-5  | 5.5 x 75.0   | Fully Threaded   |             |   |
| BMBW5.5-100-5 | 5.5 x 100.0  | Fully Threaded   |             |   |

# Ultimate Withdrawal Resistance, N<sub>Rk</sub>, from S355JR Steel (N)

|          | Drill Point |         |         | Nominal Substra | trate Thickness, t <sub>nom</sub> |         |         |
|----------|-------------|---------|---------|-----------------|-----------------------------------|---------|---------|
| Diameter |             | 1.2mm   | 1.6mm   | 2.0mm           | 2.5mm                             | 3.0mm   | 4.0mm   |
| 5.5      | TEK 3       | 1,700 N | 2,100 N | 2,500 N         | 3,200 N                           | 4,300 N | 5,500 N |

#### Ultimate Withdrawal Resistance, N<sub>pk</sub>, from S355JR Steel (N)

|          | Drill Point | Nominal Substrate Thickness, t <sub>nom</sub> |         |          |          |          |          |
|----------|-------------|---|---------|----------|----------|----------|----------|
| Diameter |             | 4.0mm   | 5.0mm   | 6.0mm    | 8.0mm    | 10.0mm   | 12.5mm   |
| 5.5      | TEK 5       | 6,500 N                                       | 7,800 N | 10,000 N | 11,500 N | 12,000 N | 12,400 N |

#### Ultimate Mechcnical Performance

| Property  | Magnitude |
|---|-----------|
| Tensile Capacity, (F <sub>ult</sub> ,R <sub>k</sub> ) | 10,600 N  |
| Shear Capacity, (VR.)                                 | 6.700N    |

### **Ultimate Pullover Performance**

| Nominal steel Thickness, $\mathbf{t}_{\text{\tiny nom}}$ | Magnitude |
|--|-----------|
| 0.6mm  | 2,700 N   |
| 1.2mm  | 8.400N    |

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.

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