

# PRODUCT DATASHEET

## SELF DRILLING INSULATION SCREW

### EVO-DS-IF-SD-0099-I



#### PRODUCT DETAILS

|                          |  |
|--------------------------|--|
| Purpose:                 | Fixing insulation to light gauge steel or timber substrates. |
| Head Style:              | Bugle  |
| Recess Type:             | Philips No.2   |
| Thread Form:             | Coarse thread  |
| Material Grade:          | SAE C1022 Carbon steel                                       |
| Drilling Capacity:       | 0.6 - 2.0mm  |
| Coating:                 | 500hr EvoShield ® Coating                                    |
| Recommended Drill Speed: | 1500 - 2500RPM®  |

#### GENERAL PHYSICAL CHARACTERISTICS

| SKU   | Nominal Dimensions<br>$d_{nom} \times L_{nom}$<br>(mm) | Insulation Capacity (mm) |                 |
|-------|--|--------------------------|-----------------|
|       |  | Timber Substrate         | Steel Substrate |
| IS60  | 4.8 x 60.0   | 5.0 - 25.0               | 5.0 - 45.0      |
| IS80  | 4.8 x 80.0   | 25.0 - 45.0              | 25.0 - 65.0     |
| IS100 | 4.8 x 100.0  | 45.0 - 65.0              | 45.0 - 85.0     |
| IS110 | 4.8 x 110.0  | 55.0 - 75.0              | 55.0 - 95.0     |
| IS120 | 4.8 x 120.0  | 65.0 - 85.0              | 65.0 - 105.0    |
| IS130 | 4.8 x 130.0  | 55.0 - 95.0              | 55.0 - 115.0    |
| IS140 | 4.8 x 140.0  | 65.0 - 105.0             | 65.0 - 125.0    |
| IS150 | 4.8 x 150.0  | 75.0 - 115.0             | 75.0 - 135.0    |
| IS160 | 4.8 x 160.0  | 85.0 - 125.0             | 85.0 - 145.0    |
| IS170 | 4.8 x 170.0  | 95.0 - 135.0             | 95.0 - 155.0    |
| IS180 | 4.8 x 180.0  | 105.0 - 145.0            | 105.0 - 165.0   |
| IS190 | 4.8 x 190.0  | 115.0 - 155.0            | 115.0 - 175.0   |
| IS200 | 4.8 x 200.0  | 125.0 - 165.0            | 125.0 - 185.0   |
| IS220 | 4.8 x 220.0  | 145.0 - 185.0            | 145.0 - 205.0   |
| IS240 | 4.8 x 240.0  | 165.0 - 205.0            | 165.0 - 225.0   |
| IS260 | 4.8 x 260.0  | 185.0 - 225.0            | 185.0 - 245.0   |
| IS280 | 4.8 x 280.0  | 205.0 - 245.0            | 205.0 - 265.0   |
| IS300 | 4.8 x 300.0  | 225.0 - 265.0            | 225.0 - 285.0   |

#### TECHNICAL DATA

| Ultimate Pull Out Values In Steel(N) |             |                 |       |       |
|--------------------------------------|-------------|-----------------|-------|-------|
| Diameter                             | Drill Point | Steel Thickness |       |       |
|                                      |             | 0.6mm           | 1.2mm | 2.0mm |
| 4.8mm                                | TEK 2       | 850             | 2,250 | 4,380 |

| Ultimate Pull Out Values In Timber(N) |             |                 |       |
|---------------------------------------|-------------|-----------------|-------|
| Diameter                              | Drill Point | Embedment Depth |       |
|                                       |             | 25mm            | 35mm  |
| 4.8mm                                 | TEK 2       | 1,900           | 4,000 |

#### GENERAL MECHANICAL PERFORMANCE

| Diameter | Ultimate tensile capacity, $F_{ult}, R_k$ (N) | Ultimate shear capacity, $F_{ult}, R_k$ (N) |
|----------|---|---|
| 4.8mm    | 11,200  | 7,700                                       |

NOTE: The results expressed in this document, unless stated otherwise, are determined from empirical testing in our UKAS accredited testing laboratory. Use of this document does not dispel nor alleviate designers and users of their statutory obligations pursuant to the Construction (Design and Management) Regulations 2015 or the Building Safety Act 2022. This document is provided, strictly: errors and omissions excepted, subject to change without notice and all rights reserved.  
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