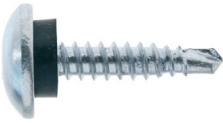


STITCHER SCREW

SELF DRILLING SCREW FOR STITCHING OF THIN GAUGE SHEETING



- CORONA™ head for an aesthetic finish
- #1 drill point for increased pull-out values
- Surface treated with zinc for good corrosion resistance
- EPDM washer for better load distribution and sealing abilities
- Available in more than 500 colours (QUALICOAT certified powder)



European Technical  
Assessment ETA-10/0021



Effective  
length



TX recess



Corrosion  
category C3



Hardened  
steel

PRODUCT RANGE

| MG/PG   | Item no. | Item name                         | Washer<br>[mm] | Thread<br>[mm] | Length<br>L [mm] | Effective length<br>L <sub>ef</sub> [mm] | Drill capacity<br>[mm] | Head<br>[mm]  | Unit<br>[pcs] |
|---------|----------|-----------------------------------|----------------|----------------|------------------|------------------------------------------|------------------------|---------------|---------------|
| 06 2330 | 10210    | CORONA 4.8 X 23 #1 TX20 EPDM-9.5B | EPDM<br>Ø9.5   | Ø4.8           | 23               | 15.5                                     | 2 x 0.5 - 2 x 1.0      | Ø13.8<br>TX20 | 250           |

TYPICAL APPLICATION

- Stitching of thin gauge sheeting

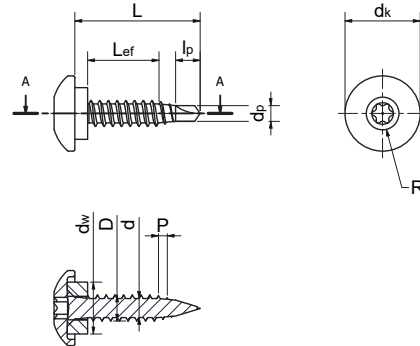


## INSTALLATION INSTRUCTIONS

For optimal drill performance, it is recommended that the rotational speed is 1800 - 2500 RPM.

## TECHNICAL DATA

|                             |      |       |
|-----------------------------|------|-------|
| Outer diameter, D           | [mm] | Ø4.8  |
| Inner diameter, d           | [mm] | Ø3.6  |
| Head diameter, $d_k$        | [mm] | Ø13.8 |
| Washer diameter, $d_w$      | [mm] | Ø9.5  |
| Drill point diameter, $d_p$ | [mm] | Ø2.9  |
| Drill point length, $l_p$   | [mm] | 4.5   |
| Pitch, P                    | [mm] | 1.6   |
| Drive type, R               | [-]  | TX20  |



## DESIGN RESISTANCE

The design resistance of the screw is determined in accordance with european technical assessment ETA-10/0021.

The resistance when loaded in tension,  $N_{Rd}$ , appears from the table on the right and is the minimum value of the pull-out resistance of the supporting object, the pull-through resistance of the fixed object, and the tension resistance of the screw.

The resistance when loaded in shear,  $V_{Rd}$ , appears from the table on the right and is the minimum value of the bearing resistance of the supporting object and the fixed object, and the shear resistance of the screw.

The theoretical values must be considered indicative since the conditions at the construction site may vary. Practical tests of the specific application are recommended for verification of the listed values.

Assumptions:

Fixed object: Steel S280GD - EN 10346

Supporting object: Steel S280GD - EN 10346

$t_I$  = Thickness of the fixed object [mm]

$t_{II}$  = Thickness of the supporting object [mm]

All resistances are stated in kN (1 kN  $\approx$  100 kg)

Safety factor:  $\gamma_M = 1.35$

MG/PG: 06 2330 CORONA 4.8 X L #1 TX20 EPDM-9.5B

| Design resistance when loaded in tension, $N_{Rd}$ [kN] |      |      |      |      |      |      |      |      |
|---------------------------------------------------------|------|------|------|------|------|------|------|------|
| $t_I \setminus t_{II}$                                  | 0.50 | 0.55 | 0.63 | 0.75 | 0.88 | 1.00 | 1.13 | 1.25 |
| 0.50                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.07 | 1.07 | 1.07 |
| 0.55                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.20 | 1.22 | 1.22 |
| 0.63                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.20 | 1.42 | 1.46 |
| 0.75                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.20 | 1.42 | 1.64 |
| 0.88                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.20 | 1.42 | 1.64 |
| 1.00                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.20 | 1.42 | 1.64 |
| 1.13                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.20 | 1.42 | 1.64 |
| 1.25                                                    | 0.42 | 0.46 | 0.53 | 0.78 | 0.99 | 1.20 | 1.42 | 1.64 |

| Design resistance when loaded in shear, $V_{Rd}$ [kN] |      |      |      |      |      |      |      |      |
|-------------------------------------------------------|------|------|------|------|------|------|------|------|
| $t_I \setminus t_{II}$                                | 0.50 | 0.55 | 0.63 | 0.75 | 0.88 | 1.00 | 1.13 | 1.25 |
| 0.50                                                  | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| 0.55                                                  | 0.79 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| 0.63                                                  | 0.79 | 0.96 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 |
| 0.75                                                  | 0.79 | 0.96 | 1.22 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 |
| 0.88                                                  | 0.79 | 0.96 | 1.22 | 1.64 | 1.94 | 1.94 | 1.94 | 1.94 |
| 1.00                                                  | 0.79 | 0.96 | 1.22 | 1.64 | 1.94 | 2.24 | 2.24 | 2.24 |
| 1.13                                                  | 0.79 | 0.96 | 1.22 | 1.64 | 1.94 | 2.24 | 2.64 | 2.64 |
| 1.25                                                  | 0.79 | 0.96 | 1.22 | 1.64 | 1.94 | 2.24 | 2.64 | 3.03 |

# DECLARATION OF PERFORMANCE

In compliance with 'REGULATION (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products' (the Construction Products Regulation or CPR), it is stated that the performance of the construction product identified below is in conformity with the declared performance.

## Product identification

**MG:06 PG:2330 | CORONA™ 4.8 X L #1 TX20 EPDM-9.5B**

(Main Group # Product Group # | Item name)

The screws mentioned above are packed in branded cartons clearly marked with CE according to ETA-10/0021. For specification of the intended use and declared performance of the product please refer to the technical data sheet.

## Placed on the market by:

**ASTON SWEDEN AB**

Hangarvägen 23

SE-691 35 Karlskoga, Sweden

(Name / address)

European Assessment Document: EAD 330046-01-0602

European Technical Assessment: ETA-10/0021

Technical Assessment Body: Deutsches Institut für Bautechnik

Notified Body no.: 0769

System of AVCP: 2+

This declaration of performance is issued under the sole responsibility of the manufacturer identified above.



Morten Johansen  
M.Sc., Engineering

**ASTON**

SWEDEN

Company stamp  
RED HORSE | dissing as

2018-04-23

Date of issue