



ESCR is a washer head structural screw designed for load-bearing timber structures. The ESCR screw has a milling thread to allow for smooth driving of the shank. The large washer head gives high head pull-through resistance while allowing the timber members to close up firmly.



[EN-ETA-13/0796](#), [UK-DoP-e13/0796](#)

FEATURES



Material

Heat Treated Carbon Steel

Finish: Electrogalvanised with Yellow Chromate and anti-friction coating. Zinc coating thickness $\geq 5\mu\text{m}$.

Warning: Industry studies show that hardened fasteners can experience performance problems in wet or corrosive environments. Accordingly, the ESCR wood screws should only be used in dry, interior and non-corrosive environments e.g. Service class 1 & 2.

Features

- ETA approved (ETA-13/0796)
- No pre-drilling required
- High withdrawal resistance
- Milling thread reduces insertion torque
- Washer head

APPLICATIONS

Suitable On

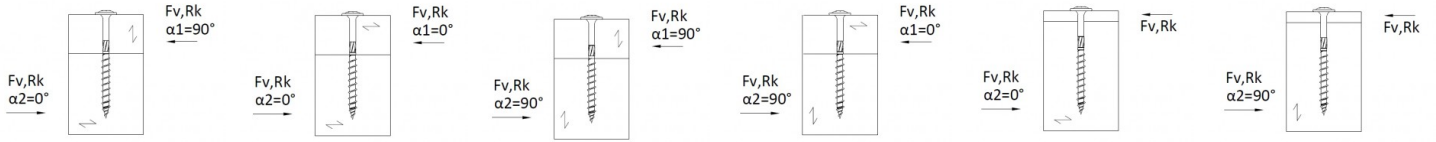
I-Joists, SIP Panels, Roof Trusses, Timber Frame Panels, Composite Panels, Engineered Timber, Metal Web Joists.

Common Applications

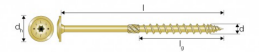
- Connection of multi-ply timbers
- I-Joists
- SIP Panels
- Roof Trusses

- Timber Frame Panels
- Composite Panels
- Engineered Timber
- Metal Web Joists

TECHNICAL DATA



Product Dimensions



ESCR8.0X80
ESCR8.0X100
ESCR8.0X120
ESCR8.0X140
ESCR8.0X160
ESCR8.0X180
ESCR8.0X200
ESCR8.0X220
ESCR8.0X240
ESCR8.0X260
ESCR8.0X280
ESCR8.0X300
ESCR8.0X320
ESCR8.0X340
ESCR8.0X360
ESCR8.0X400
ESCR10.0X120
ESCR10.0X140
ESCR10.0X160
ESCR10.0X180
ESCR10.0X200
ESCR10.0X220
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ESCR10.0X340
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Product characteristic capacities

ESCR8.0X80
ESCR8.0X100
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ESCR8.0X160
ESCR8.0X180

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ESCR10.0X320
ESCR10.0X340
ESCR10.0X360
ESCR10.0X400

a) The thickness of the secondary member is not sufficient according to ETA-13/0796 annex 7 table A6.9, so no values are given for these dimensions in case of wood to wood connection. For Steel to wood connection no minimal thickness is defined.

- The tension resistance of the thread have been calculated with an angle between 45° and 90° compared with the grain
- The geometry and mechanical properties are defined in ETA-13/0769.
- The values are for a timber class C24 $\rho = 350 \text{ kg/m}^3$.
- The thickness of the secondary member (AD) has been chosen equal to the length of the smooth part.
- All values have been calculated with a thread totally drawn in the primary member.
- For connection steel to timber, the thickness of the steel plate is equal to the diameter for calculation.
- Subject to setting and printing error
- The values given are available to help the design. Projects must be carried out exclusively by duly licensed professionals.

ABACUSES

INSTALLATION



Beam and column assembly



Ridge assembly.



I-Joist floor assembly