Technical data sheet

ESCR - STRUCTURAL WOOD SCREW

The ESCR is a washer head screw designed to connect two or more timber members together.

EN-ETA-13/0796, UK-DoP-e13/0796

FEATURES

CL.2 EZGJ INDOOR

Material

Heat Treated Carbon Steel

Finish: Electrogalvanised with Yellow Chromate and anti-friction coating. Zinc coating thickness ≥ 5µm.

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.

Benefits

The ESCR screw has a reamer 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.

APPLICATIONS

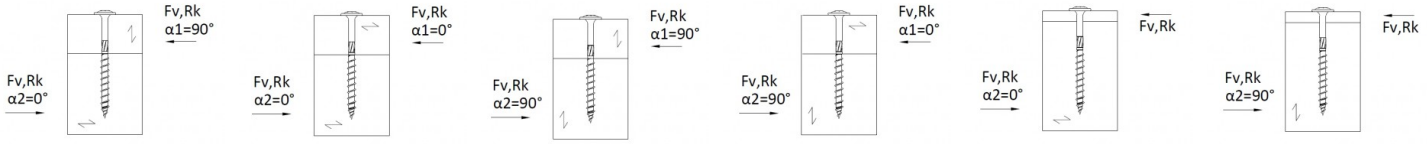
Suitable On

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

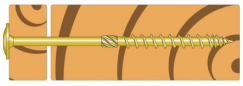
When to Use

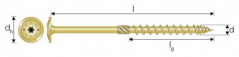
Connection of multi-ply timbers.

TECHNICAL DATA



Product Dimensions





References	Product Dimensions [mm]					
	l	l_g	d_1	d	d_h	Driver Bit
ESCR8.0X80	80	54	5.3	8	20	T-40
ESCR8.0X100	100	54	5.3	8	20	T-40
ESCR8.0X120	120	54	5.3	8	20	T-40
ESCR8.0X140	140	84	5.3	8	20	T-40
ESCR8.0X160	160	84	5.3	8	20	T-40
ESCR8.0X180	180	100	5.3	8	20	T-40
ESCR8.0X200	200	100	5.3	8	20	T-40
ESCR8.0X220	220	100	5.3	8	20	T-40
ESCR8.0X240	240	100	5.3	8	20	T-40
ESCR8.0X260	260	100	5.3	8	20	T-40
ESCR8.0X280	280	100	5.3	8	20	T-40
ESCR8.0X300	300	100	5.3	8	20	T-40
ESCR8.0X320	320	100	5.3	8	20	T-40
ESCR8.0X340	340	100	5.3	8	20	T-40
ESCR8.0X360	360	100	5.3	8	20	T-40
ESCR8.0X400	400	100	5.3	8	20	T-40
ESCR10.0X120	120	60	6.2	10	25	T-50
ESCR10.0X140	140	60	6.2	10	25	T-50
ESCR10.0X160	160	100	6.2	10	25	T-50
ESCR10.0X180	180	100	6.2	10	25	T-50
ESCR10.0X200	200	100	6.2	10	25	T-50
ESCR10.0X220	220	100	6.2	10	25	T-50
ESCR10.0X240	240	100	6.2	10	25	T-50
ESCR10.0X260	260	100	6.2	10	25	T-50
ESCR10.0X280	280	100	6.2	10	25	T-50
ESCR10.0X300	300	100	6.2	10	25	T-50
ESCR10.0X320	320	100	6.2	10	25	T-50
ESCR10.0X340	340	100	6.2	10	25	T-50
ESCR10.0X360	360	100	6.2	10	25	T-50
ESCR10.0X400	400	100	6.2	10	25	T-50

Structural Parameters - hEN14592

Table "Structural Parameters - hEN14592" cannot be displayed : no references available.

Product characteristic capacities

References	Product characteristic capacities - Timber C24 [kN]						
	$R_{ax,k}$ config [1]	Timber to timber – $R_{lat,k}$				Steel to timber – $R_{lat,k}$	
		α_1=90° and α_2=0° config [2]	α_1=0° et α_2=0° config [3]	α_1=90° et α_2=90° config [4]	α1=0° et α2=90° config [5]	α_2 = 0° config [6]	α_2 = 90° config [7]
ESCR8.0X80	4.62	a)	a)	a)	a)	6.18	5.3
ESCR8.0X100	4.62	4.14	4.71	3.96	4.35	6.18	5.3
ESCR8.0X120	4.62	4.35	4.71	4.09	4.35	6.18	5.3
ESCR8.0X140	7.19	4.96	5.31	4.69	4.96	6.82	5.94
ESCR8.0X160	7.19	4.96	5.31	4.69	4.96	6.82	5.94
ESCR8.0X180	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X200	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X220	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X240	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X260	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X280	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X300	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X320	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X340	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X360	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR8.0X400	8.56	4.96	5.31	4.69	4.96	7.17	6.28
ESCR10.0X120	5.7	5.67	6.17	5.3	5.67	8.14	6.91
ESCR10.0X140	5.7	5.67	6.17	5.3	5.67	8.14	6.91
ESCR10.0X160	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X180	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X200	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X220	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X240	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X260	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X280	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X300	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X320	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X340	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X360	9.5	6.62	7.12	6.25	6.62	9.09	7.86
ESCR10.0X400	9.5	6.62	7.12	6.25	6.62	9.09	7.86

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 ρ = 350 kg/m³.
- 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 drown 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.

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