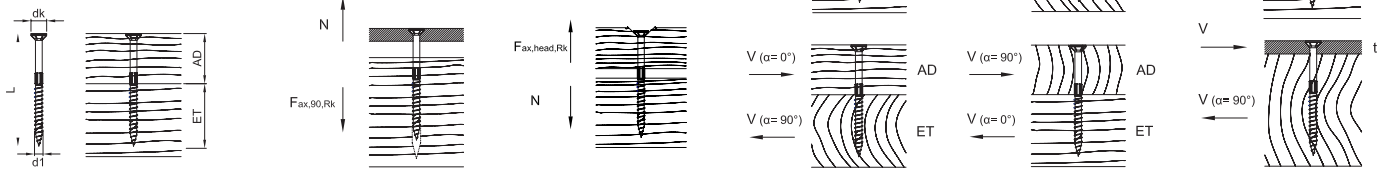
TECHNICAL INFORMATION

LBS CONSTRUCTION SCREW, COUNTERSUNK HEAD, BLUE GALVANIZED STEEL

Dimensions	Extraction resistance	Head pull-through resistance	Wood / wood shearing	Steel / wood shearing



d1 x L [mm]	dk [mm]	AD [mm]	ET [mm]	$F_{ax,90,Rk}$ [kN]	$F_{ax,head,Rk}$ [kN]	$F_{Ia,Rk}$ [kN]	$F_{Ia,Rk}$ [kN]	$F_{Ia,Rk}$ [kN]	$F_{Ia,Rk}$ [kN]	t [mm]	$F_{Ia,Rk}$ [kN]	$F_{Ia,Rk}$ [kN]
								α_{AD}= 0°	α_{AD}= 90°			
						α= 0°	α=90°	α_{ET}= 90°	α_{ET}= 0°		α= 0°	α= 90°
8.0 x 80	15.0	40	40	9.60	9.93	9.58	8.37	9.58	8.37	3	9.58	8.37
8.0 x 100	15.0	40	60	14.40	9.93	9.66	8.46	9.66	8.46	3	10.78	9.57
80 x 120	15.0	40	80	19.20	9.93	9.66	8.46	9.66	8.46	3	11.98	10.77
8.0 x 140	15.0	60	80	19.20	9.93	9.66	8.46	9.66	8.46	3	11.98	10.77
8.0 x 160	15.0	80	80	19.20	9.93	9.66	8.46	9.66	8.46	3	11.98	10.77
8.0 x 180	15.0	100	80	19.20	9.93	9.66	8.46	8.46	9.66	3	11.98	10.77
8.0 x 200	15.0	120	80	19.20	9.93	9.66	8.46	8.46	9.66	3	11.98	10.77
8.0 x 220	15.0	140	80	19.20	9.93	9.66	8.46	8.46	9.66	3	11.98	10.77
8.0 x 240	15.0	160	80	19.20	9.93	9.66	8.46	8.46	9.66	3	11.98	10.77

Dimensioning according to ETA-11/0024. Gross density hardwood laminated veneer lumber ρk= 730 kg/m³ (not pre-drilled).
All mechanical values provided should be viewed as subject to the assumptions that have been made and represent example calculations.
All values are calculated minimum values. Typesetting and printing errors are excepted.
a) The characteristic values of the load-bearing capacity R_k should not be treated as equivalent to the max. possible load (the max. force). Characteristic values of the load-bearing capacity R_k are to be reduced to the design values R_d as regards the service class and class of the load duration: $R_d = R_k \cdot k_{mod} / \gamma_M$. The design values of the load-bearing capacity R_d should be compared to the design values of the loads E_d ($R_d \geq E_d$).

Example:
Characteristic value for constant load (dead load) G_k= 2.00 kN and variable load (e.g. snow load) Q_k= 3.00 kN. k_{mod}= 0.9. γ_M= 1.3.
→ design value of the load E_d= 2.00 · 1.35 + 3.00 · 1.5= 7,20 kN.
Load-bearing capacity of the connection is proved if $R_d \geq E_d$. → min $R_k = R_d \cdot \gamma_M / k_{mod}$
That is, the characteristic minimum value of the load-bearing capacity is calculated as: min $R_k = R_d \cdot \gamma_M / k_{mod}$ → R_k= 7.20 kN · 1.3/0.9= 10.40 kN → Aligned with table values.

Attention: These are planning aids. Projects must only be calculated by authorised persons.

CERTIFICATION

ETA CE
Europ. Techn. Bewertung
European Technical Assessment
ETA-11/0024

If you are not familiar with this product's application, and particularly with the product's intended use, please contact our Application Technology department (technik@eurotec.team).

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