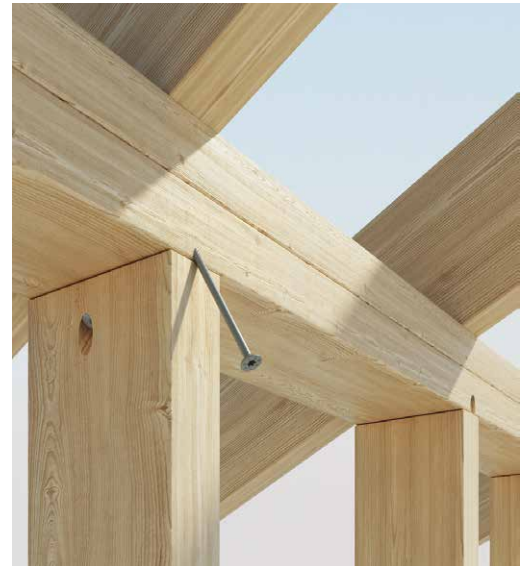


SNK EVO



SCREW WITH C4 EVO COATING AND COUNTERSUNK HEAD

- The mechanical performance of SNKs and the corrosion resistance of the EVO coating based on epoxy and aluminium flakes
- No rust after 1440 hours of salt spray exposure (ISO 9227), best-in-class performance
- For outdoor use in service class 3 and atmospheric corrosivity class C4 (coastal and industrial areas)

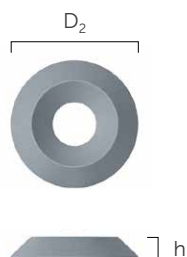
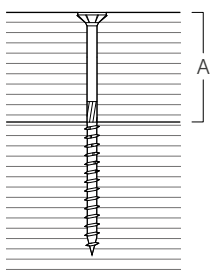


MATERIAL: carbon steel, with a 20 µm coating, highly resistant to corrosion



d ₁ [mm]	d _k [mm]	CODE	L [mm]	b [mm]	A [mm]	pcs
5 TX 25	10,00	SNKEVO550	50	24	26	200
		SNKEVO560	60	30	30	200
		SNKEVO570	70	35	35	100
		SNKEVO580	80	40	40	100
		SNKEVO590	90	45	45	100
		SNKEVO5100	100	50	50	100
		SNKEVO5120	120	60	60	100
6 TX 30	12,00	SNKEVO650	50	35	15	100
		SNKEVO660	60	30	30	100
		SNKEVO670	70	40	30	100
		SNKEVO680	80	40	40	100
		SNKEVO690	90	50	40	100
		SNKEVO6100	100	50	50	100
		SNKEVO6120	120	60	60	100
		SNKEVO6140	140	75	65	100
		SNKEVO6160	160	75	85	100
		SNKEVO6180	180	75	105	100
8 TX 40	14,50	SNKEVO8120	120	60	60	100
		SNKEVO8140	140	60	80	100
		SNKEVO8160	160	80	80	100
		SNKEVO8180	180	80	100	100
		SNKEVO8200	200	80	120	100
		SNKEVO8240	240	80	160	100
		SNKEVO8300	300	100	200	100

A maximum fastening thickness

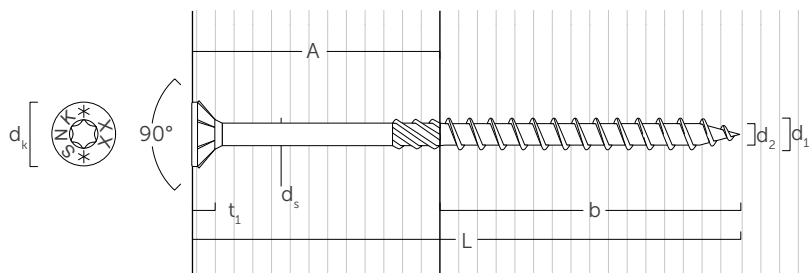


SHT EVO

TURNED WASHER WITH C4 EVO COATING

d ₁ SNK EVO [mm]	CODE	D ₂ [mm]	h [mm]	pcs
6	SHTEVO6	20	4,5	100
8	SHTEVO8	25	5,5	50
10	SHTEVO10	30	6,5	50

GEOMETRY AND MECHANICAL CHARACTERISTICS



nominal diameter	d_1	[mm]	5	6	8
head diameter	d_k	[mm]	10	12	14,5
thread diameter	d_2	[mm]	3,40	3,95	5,40
shank diameter	d_s	[mm]	3,65	4,30	5,80
head thickness	t_1	[mm]	3,10	4,50	4,50
pre-drilling hole diameter ⁽¹⁾	d_v	[mm]	3,0	4,0	5,0
characteristic yield moment	$M_{y,k}$	[Nm]	5,4	9,5	20,1
characteristic withdrawal-resistance parameter ⁽²⁾	$f_{ax,k}$	[N/mm ²]	11,7	11,7	11,7
characteristic head-pull-through parameter ⁽²⁾	$f_{head,k}$	[N/mm ²]	10,5	10,5	10,5
characteristic tensile strength	$f_{tens,k}$	[kN]	7,9	11,3	20,1

⁽¹⁾ Pre-drilling valid for softwood.

⁽²⁾ Valid for softwood - maximum density 440 kg/m³. Associated density $\rho_a = 350$ kg/m³.
For applications with different materials or with high density please see ETA-11/0030.

STRUCTURAL VALUES

				SHEAR		TENSION	
geometry				timber-to-timber	thread withdrawal ⁽¹⁾	head pull-through ⁽²⁾	
d ₁	L	b	A	R _{v,k}	R _{ax,k}	R _{head,k}	
[mm]	[mm]	[mm]	[mm]	[kN]	[kN]	[kN]	
5	50	24	26	1,29	1,52	1,13	
	60	30	30	1,46	1,89	1,13	
	70	35	35	1,46	2,21	1,13	
	80	40	40	1,46	2,53	1,13	
	90	45	45	1,46	2,84	1,13	
	100	50	50	1,46	3,16	1,13	
	120	60	60	1,46	3,79	1,13	
6	50	35	15	1,53	2,65	1,63	
	60	30	30	1,78	2,27	1,63	
	70	40	30	1,88	3,03	1,63	
	80	40	40	2,08	3,03	1,63	
	90	50	40	2,08	3,79	1,63	
	100	50	50	2,08	3,79	1,63	
	120	60	60	2,08	4,55	1,63	
	140	75	65	2,08	5,68	1,63	
	160	75	85	2,08	5,68	1,63	
8	120	60	60	3,28	6,06	2,38	
	140	60	80	3,28	6,06	2,38	
	160	80	80	3,28	8,08	2,38	
	180	80	100	3,28	8,08	2,38	
	200	80	120	3,28	8,08	2,38	
	240	80	160	3,28	8,08	2,38	
	300	100	200	3,28	10,10	2,38	

NOTES

- ⁽¹⁾ The axial thread withdrawal resistance was calculated considering a 90° angle between the grain and the connector and for a fixing length of b.
- ⁽²⁾ The axial resistance to head pull-through was calculated using timber elements.

GENERAL PRINCIPLES

- Characteristic values comply with the EN 1995:2014 standard in accordance with ETA-11/0030.
- Design values can be obtained from characteristic values as follows:

$$R_d = \frac{R_k \cdot k_{mod}}{\gamma_M}$$

The coefficients γ_M and k_{mod} should be taken according to the current regulations used for the calculation.

- For the mechanical resistance values and the geometry of the screws, reference was made to ETA-11/0030.
- For the calculation process a timber characteristic density $\rho_k = 385 \text{ kg/m}^3$ has been considered.
- Values were calculated considering the threaded part as being completely inserted into the wood.
- Dimensioning and verification of the timber elements must be carried out separately.
- The characteristic shear strength are calculated for screws inserted without pre-drilling hole.