

VGS EVO C5

FULL THREAD CONNECTOR WITH COUNTERSUNK HEAD

C5 ATMOSPHERIC CORROSIVITY

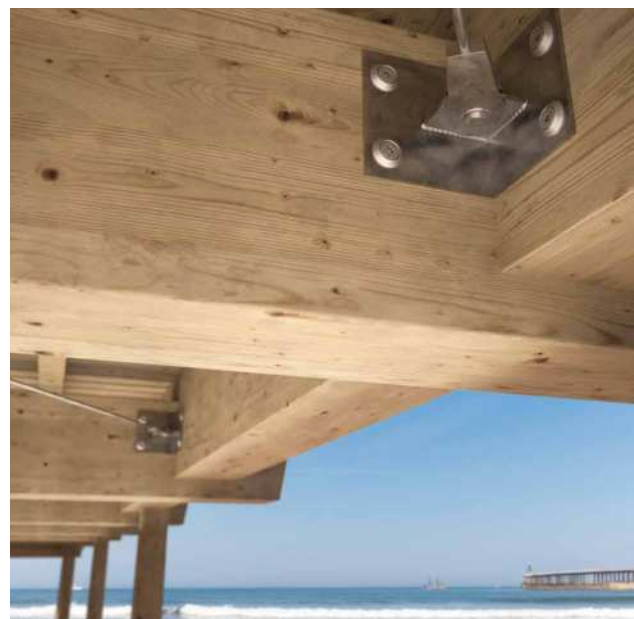
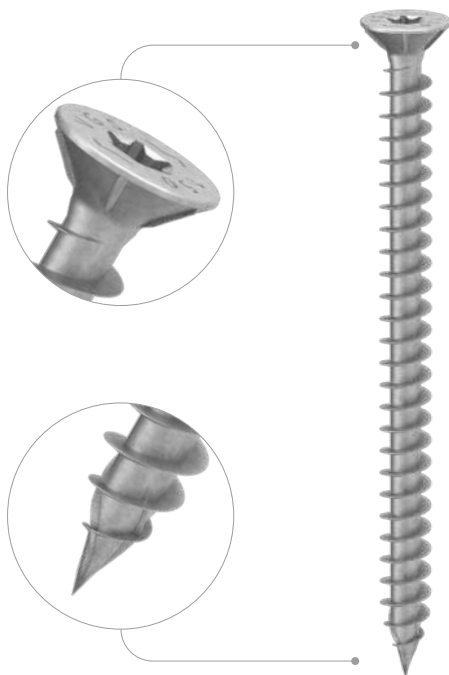
Multi-layer coating capable of withstanding outdoor environments classified C5 according to ISO 9223. Salt Spray Test (SST) with exposure time greater than 3000 h carried out on screws previously screwed and unscrewed in Douglas fir timber.

3 THORNS TIP

Thanks to the 3 THORNS tip, minimum installation distances are reduced. More screws can be used in less space and larger screws in smaller elements.

MAXIMUM STRENGTH

It is the screw of choice if high mechanical performance is required under very adverse environmental and wood corrosive conditions. The cylindrical head makes it ideal for concealed joints, timber couplings and structural reinforcements.



DIAMETER [mm]

9 13

LENGTH [mm]

80 1500

SERVICE CLASS

☒ SC1 ☐ SC2 ☐ SC3

ATMOSPHERIC CORROSIVITY

☒ C1 ☐ C2 ☐ C3 ☐ C4 ☐ C5

WOOD CORROSIVITY

☐ T1 ☐ T2 ☐ T3 ☐ T4

MATERIAL



carbon steel with C5 EVO coating with very high corrosion resistance



FIELDS OF USE

- timber based panels
- solid timber and glulam
- CLT and LVL
- high density woods

CODES AND DIMENSIONS

d ₁ [mm]	CODE	L [mm]	b [mm]	pcs
9 TX 40	VGSEVO9200C5	200	190	25
	VGSEVO9240C5	240	230	25
	VGSEVO9280C5	280	270	25
	VGSEVO9320C5	320	310	25
	VGSEVO9360C5	360	350	25

RELATED PRODUCTS

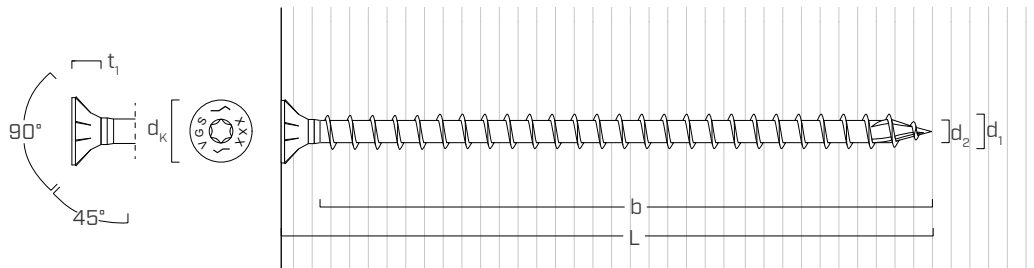


VGU EVO
page 190



TORQUE LIMITER
page 408

GEOMETRY AND MECHANICAL CHARACTERISTICS



GEOMETRY

Nominal diameter	d ₁	[mm]	9
Countersunk head diameter	d _K	[mm]	16,00
Countersunk head thickness	t ₁	[mm]	6,50
Thread diameter	d ₂	[mm]	5,90
Pre-drilling hole diameter ⁽¹⁾	d _{V,S}	[mm]	5,0
Pre-drilling hole diameter ⁽²⁾	d _{V,H}	[mm]	6,0

⁽¹⁾ Pre-drilling valid for softwood.

⁽²⁾ Pre-drilling valid for hardwood and beech LVL.

CHARACTERISTIC MECHANICAL PARAMETERS

Nominal diameter	d ₁	[mm]	9
Tensile strength	f _{tens,k}	[kN]	25,4
Yield moment	M _{y,k}	[Nm]	27,2
Yield strength	f _{y,k}	[N/mm ²]	1000

			softwood (softwood)	LVL softwood (LVL softwood)	pre-drilled beech LVL (beech LVL predrilled)
Withdrawal resistance parameter	$f_{ax,k}$	[N/mm²]	11,7	15,0	29,0
Associated density	ρ_a	[kg/m³]	350	500	730
Calculation density	ρ_k	[kg/m³]	≤ 440	410 ÷ 550	590 ÷ 750

For applications with different materials please see ETA-11/0030.



HYBRID STEEL-TIMBER STRUCTURES

VGS EVO C5 is the ideal solution for steel structures where high-strength ad hoc connections are required, particularly in adverse climatic contexts such as the marine environment.

SWELLING OF TIMBER

The application of VGS EVO C5 in combination with polymeric interlayers such as XYLOFON WASHER gives the joint a certain adaptability to mitigate stresses resulting from shrinkage/swelling of the wood.