

# VGZ EVO C5

## FULLY THREADED SCREW WITH CYLINDRICAL HEAD

### C5 ATMOSPHERIC CORROSIVITY

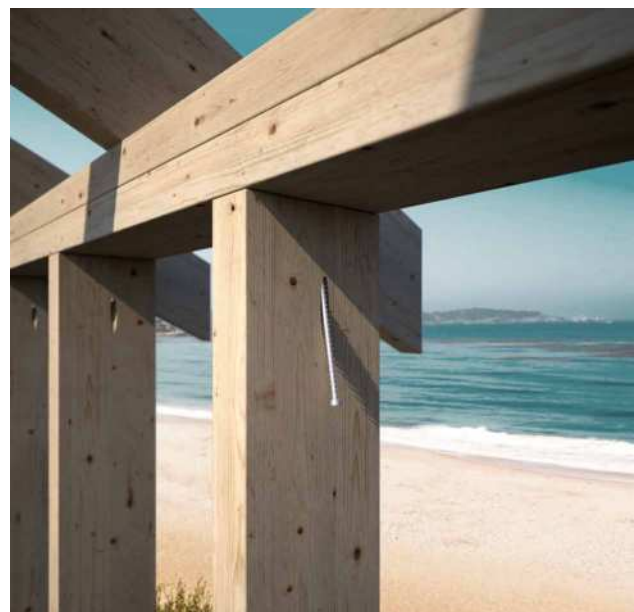
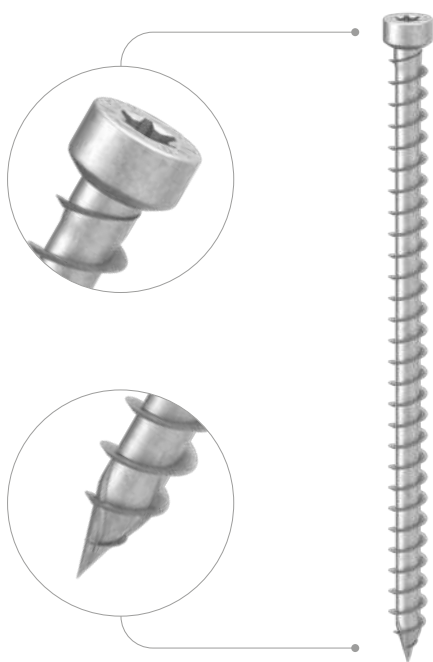
Multi-layer coating capable of withstanding outdoor environments classified C5 according to ISO 9223. Salt Spray Test (SST) with exposure time greater than 3000 h carried out on screws previously screwed and unscrewed in Douglas fir timber.

### 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. Costs and time for project implementation are reduced.

### MAXIMUM STRENGTH

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



MANUALS



BIT INCLUDED

#### DIAMETER [mm]

5 **7** 9 11

#### LENGTH [mm]

80 **140** 360 1000

#### SERVICE CLASS

**SC1** SC2 SC3

#### ATMOSPHERIC CORROSIVITY

C1 C2 C3 **C4** C5

#### WOOD CORROSIVITY

T1 T2 T3 T4

#### MATERIAL

**C5**  
EVO  
COATING

carbon steel with C5 EVO coating with very high corrosion resistance



## FIELDS OF USE

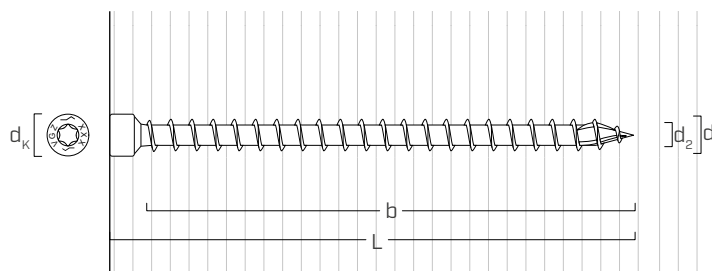
- timber based panels
- solid timber and glulam
- CLT and LVL
- high density woods

## CODES AND DIMENSIONS

| $d_1$<br>[mm] | CODE         | L<br>[mm] | b<br>[mm] | pcs |
|---------------|--------------|-----------|-----------|-----|
| 7<br>TX 30    | VGZEVO7140C5 | 140       | 130       | 25  |
|               | VGZEVO7180C5 | 180       | 170       | 25  |
|               | VGZEVO7220C5 | 220       | 210       | 25  |
|               | VGZEVO7260C5 | 260       | 250       | 25  |
|               | VGZEVO7300C5 | 300       | 290       | 25  |

| $d_1$<br>[mm] | CODE         | L<br>[mm] | b<br>[mm] | pcs |
|---------------|--------------|-----------|-----------|-----|
| 9<br>TX 40    | VGZEVO9200C5 | 200       | 190       | 25  |
|               | VGZEVO9240C5 | 240       | 230       | 25  |
|               | VGZEVO9280C5 | 280       | 270       | 25  |
|               | VGZEVO9320C5 | 320       | 310       | 25  |
|               | VGZEVO9360C5 | 360       | 350       | 25  |

## GEOMETRY AND MECHANICAL CHARACTERISTICS



### GEOMETRY

| Nominal diameter                          | $d_1$<br>[mm]  | 7    | 9     |
|-------------------------------------------|----------------|------|-------|
| Head diameter                             | $d_k$ [mm]     | 9,50 | 11,50 |
| Thread diameter                           | $d_2$ [mm]     | 4,60 | 5,90  |
| Pre-drilling hole diameter <sup>(1)</sup> | $d_{V,S}$ [mm] | 4,0  | 5,0   |
| Pre-drilling hole diameter <sup>(2)</sup> | $d_{V,H}$ [mm] | 5,0  | 6,0   |

<sup>(1)</sup> Pre-drilling valid for softwood.

<sup>(2)</sup> Pre-drilling valid for hardwood and beech LVL.

### CHARACTERISTIC MECHANICAL PARAMETERS

| Nominal diameter | $d_1$<br>[mm]                  | 7    | 9    |
|------------------|--------------------------------|------|------|
| Tensile strength | $f_{tens,k}$ [kN]              | 15,4 | 25,4 |
| Yield strength   | $f_{y,k}$ [N/mm <sup>2</sup> ] | 1000 | 1000 |
| Yield moment     | $M_{y,k}$ [Nm]                 | 14,2 | 27,2 |

|                                 |                                 | softwood<br>(softwood) | LVL softwood<br>(LVL softwood) | pre-drilled beech LVL<br>(beech LVL predrilled) |
|---------------------------------|---------------------------------|------------------------|--------------------------------|-------------------------------------------------|
| Withdrawal resistance parameter | $f_{ax,k}$ [N/mm <sup>2</sup> ] | 11,7                   | 15,0                           | 29,0                                            |
| Associated density              | $\rho_a$ [kg/m <sup>3</sup> ]   | 350                    | 500                            | 730                                             |
| Calculation density             | $\rho_k$ [kg/m <sup>3</sup> ]   | $\leq 440$             | 410 ÷ 550                      | 590 ÷ 750                                       |

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



## SEASIDE BUILDINGS

Ideal for fastening elements with small cross-sections close to the sea. Certified for application parallel to the grain and with reduced minimum distances.

## THE HIGHEST PERFORMANCE

The strength and robustness of a VGZ combined with the best anti-corrosion performance.