S50

HIGHLY-RESISTANT POST BASE

VIDEO

CE
ETA-10/0422

MIGHTY
Characteristic compression strength of more than 300 kN. Ideal for large columns.

RAISED
It ensures spacing from the ground to avoid water splashing or stagnation and provides high durability. Hot-dip galvanisation ensures durability in outdoor contexts.

ATTENTION TO DETAILS
The base features four auxiliary holes for inserting screws using a long bit.

USA, Canada and more design values available online.

SERVICE CLASS SC1 SC2 SC3

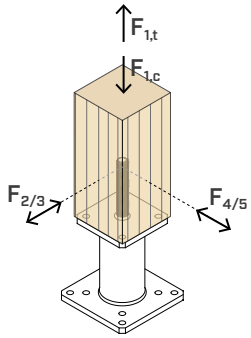
MATERIAL

S235 HDG55 — S235 carbon steel with hot galvanising 55 µm

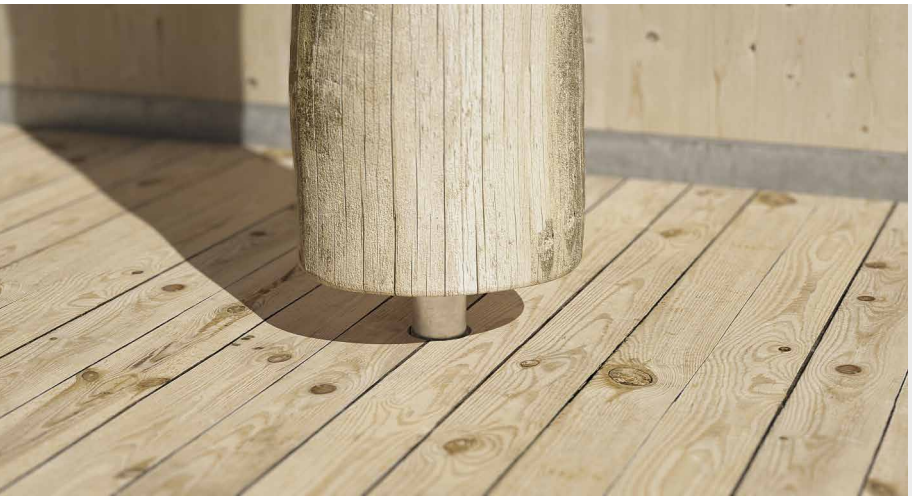
GROUND CLEARANCE

from 144 to 272 mm

EXTERNAL LOADS



VIDEO
Scan the QR Code and watch the video on our YouTube channel



FIELDS OF USE

Ground joints for compressed columns.
Canopies, columns supporting roofs or floors.

Suitable for columns in:
- solid timber softwood and hardwood
- glulam, LVL

HEAVY STRUCTURES

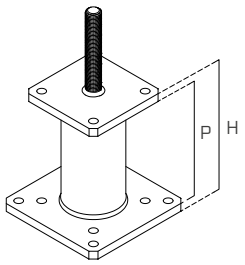
Ideal for transferring high compression forces deriving from large columns.
Excellent durability of the column thanks to the tubular that generates the riser.

TOLERANCE

The height can be adjusted with a nut and lock nut system, adding bedding grout after installation.

CODES AND DIMENSIONS

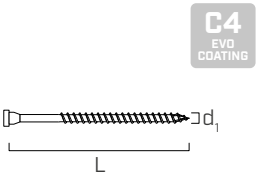
CODE	H [mm] [in]	P [mm] [in]	top plate [mm] [in]	top holes [n. x mm] [n. x in]	bottom plate [mm] [in]	lower holes [n. x mm] [n. x in]	rod Ø x L [mm] [in]	pcs
S50120120	144 *5 11/16*	120 *4 3/4*	120 x 120 x 12 *4 3/4 x 4 3/4 x 0.47*	4 x Ø12 *4 x Ø0.47*	160 x 160 x 12 *6 1/4 x 6 1/4 x 0.47*	4 x Ø13 *4 x Ø0.51*	M20 x 120 *0.79 x 4 3/4*	1
S50120180	204 *8 1/16*	180 *7 1/8*	120 x 120 x 12 *4 3/4 x 4 3/4 x 0.47*	4 x Ø12 *4 x Ø0.47*	160 x 160 x 12 *6 1/4 x 6 1/4 x 0.47*	4 x Ø13 *4 x Ø0.51*	M20 x 120 *0.79 x 4 3/4*	1
S50160180	212 *8 3/8*	180 *7 1/8*	160 x 160 x 16 *6 1/4 x 6 1/4 x 0.63*	4 x Ø12 *4 x Ø0.47*	200 x 200 x 16 *8 x 8 x 0.63*	4 x Ø13 *4 x Ø0.51*	M24 x 150 *0.79 x 6*	1
S50160240	272 *10 11/16*	240 *9 1/2*	160 x 160 x 16 *6 1/4 x 6 1/4 x 0.63*	4 x Ø12 *4 x Ø0.47*	200 x 200 x 16 *8 x 8 x 0.63*	4 x Ø13 *4 x Ø0.51*	M24 x 150 *0.79 x 6*	1



FASTENERS

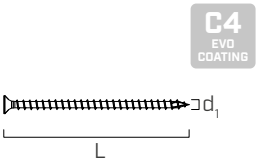
HBS PLATE EVO - C4 EVO pan head screw

CODE	d_1 [mm]	L [mm]	b [mm]	TX	pcs
HBSPLEVO880	8	80	55	TX 40	100



VGS EVO - C4 EVO fully threaded screw with countersunk head

CODE	d_1 [mm]	L [mm]	b [mm]	TX	pcs
VGSEVO11100	11	100	90	TX 50	25



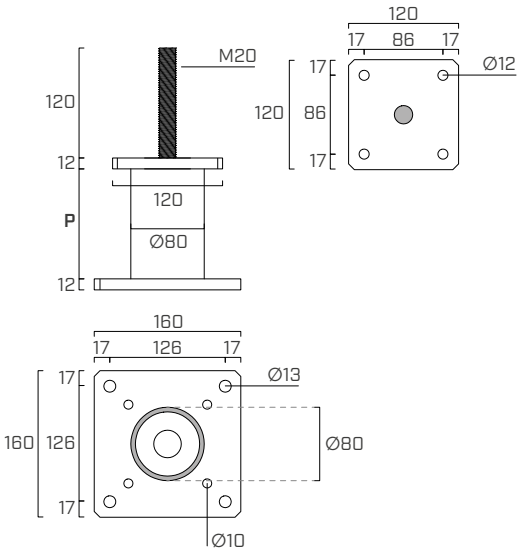
HUS A4 - C4 EVO turned washer

CODE	$d_{VGS\ EVO}$ [mm]	pcs
HUS10A4	11	50

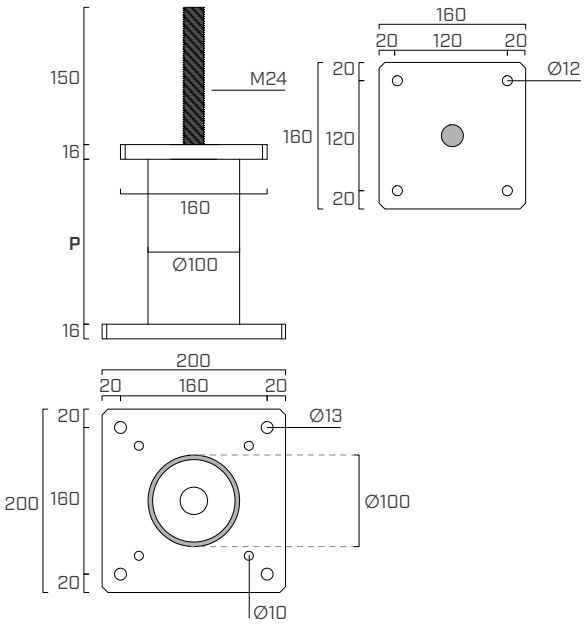
type	description		d [mm]	support	page
HBS PLATE EVO	C4 EVO pan head screw		8		573
SKR/SKR EVO	screw-in anchor		12		528
AB1	CE1 expansion anchor		12		536
ABE A4	CE1 expansion anchor		M12		534
VIN-FIX	vinyl ester chemical anchor		M12		545

GEOMETRY

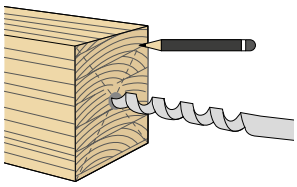
S50120120
S50120180



S50160180
S50160240



MOUNTING



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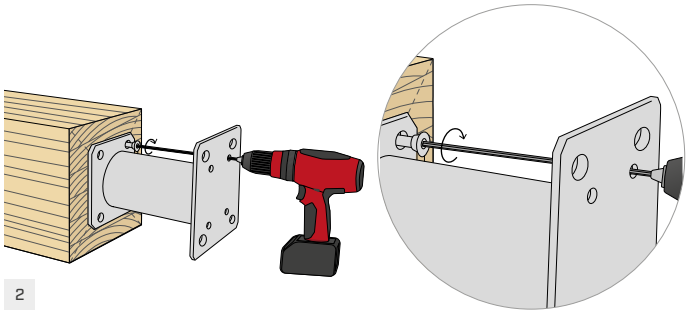
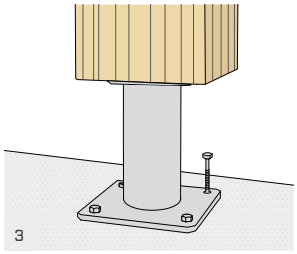
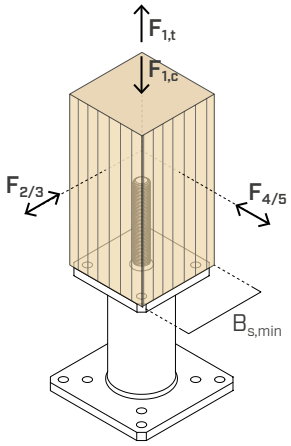


2



3

STRUCTURAL VALUES



		COMPRESSION			
CODE	$B_{s,min}$	$R_{1,c\ k\ timber}$		$R_{1,c\ k\ steel}$	
	[mm]	[kN]	γ_{timber}	[kN]	γ_{steel}
S50120120	120 x 120	**200,0**	γ_{MT} [1]	**157,0**	γ_{M0}
S50120180		**200,0**		**157,0**	
S50160180	160 x 160	**334,0**		**268,0**	
S50160240		**334,0**		**268,0**	

			TENSION		SHEAR	
CODE	fasteners for timber		$R_{1,t\ k\ timber}$		$R_{2/3\ k\ timber} = R_{4/5\ k\ timber}$	
	type	pcs - Ø x L [mm]	[kN]	γ_{timber}	[kN]	γ_{timber}
S50120120 **S50120180** **S50160180** **S50160240**	HBS PLATE EVO Ø8	4 - Ø8x80	**6,2**	γ_{MC} [2]	**9,7**	γ_{MC} [2]
	VGS EVO Ø11+HUS10A4	4 - Ø11x150 [3]	**21,6**		**20,9**	

NOTES

[1] γ_{MT} partial coefficient of the timber.

[2] γ_{MC} partial coefficient for connections.

[3] Screw not compatible with post base S50120120.

GENERAL PRINCIPLES

- Characteristic values are consistent with EN 1995-1-1:2014 and in accordance with ETA-10/0422.
- Design values can be obtained from characteristic values as follows:

$$R_d = min \begin{cases} \frac{R_{i,k\ timber} \cdot k_{mod}}{\gamma_M} \\ \frac{R_{i,k\ steel}}{\gamma_{Mi}} \end{cases}$$

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

The verification of the fastener-to-concrete connection must be carried out separately.

- A timber density of ρ_k = 350 kg/m^3 was considered for the calculation process.
- Dimensioning and verification of timber and concrete elements must be carried out separately.

UK CONSTRUCTION PRODUCT EVALUATION

- UKTA-0836-22/6374.