R10 - R20 - R30

ADJUSTABLE POST BASE

S235 DAC COAT

VIDEO

CE ETA 10/0422

ADJUSTABLE
Adjustable height, also after the product has been assembled. The regulation system is concealed by the sleeve, for optimal aesthetics.

RAISED
Outdistanced from the ground to avoid water splash and stagnation and guarantee high durability. Concealed fastening on the timber element.

ATTENTION TO DETAILS
The base is characterized by an auxiliary hole allowing to insert the screws HBS PLATE EVO.

CHARACTERISTICS

FOCUS	adjustable height after assembly
COLUMNS	from 80 x 80 mm to 240 x 240 mm
HEIGHT	adjustable from 140 to 250 mm
FASTENERS	HBS PLATE EVO, SKR, VIN-FIX PRO

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

MATERIAL
Bright zinc plated carbon steel Dac Coat.

FIELDS OF USE
Outdoor joints. Suitable for service class 1, 2 and 3
- solid timber and glulam
- CLT, LVL

STATICS

High compressive strength from the bigger product-versions. The versions with the pass-through rod ensures high resistance to tensile and compressive loading.

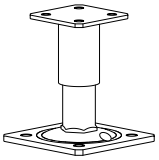
FUNCTIONALITY

Once the assembly is completed, the adjustable height allows to correct any possible unevenness occurred during the installation phase.

CODES AND DIMENSIONS

R10

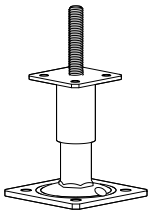
CODE	H [mm]	top plate [mm]	top holes [n. x mm]	bottom plate [mm]	lower holes [n. x mm]	screws HBS PLATE EVO*	pcs
R1080	140-165	80 x 80 x 6	4 x Ø9	120 x 120 x 6	4 x Ø11,5	4 x HBSPEVO690	4
R10100	170-205	100 x 100 x 6	4 x Ø11	160 x 160 x 6	4 x Ø11,5	4 x HBSPEVO8100	4
R10140	200-250	140 x 140 x 8	4 x Ø11	200 x 200 x 8	4 x Ø11,5	4 x HBSPEVO8100	4



*The HBS PLATE EVO screws are not included and can be ordered separately

R20

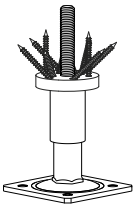
CODE	H [mm]	top plate [mm]	top holes [n. x mm]	bottom plate [mm]	lower holes [n. x mm]	rod Ø x L [mm]	screws HBS PLATE EVO*	pcs
R2080	140-165	80 x 80 x 6	4 x Ø9	120 x 120 x 6	4 x Ø11,5	16 x 80	4 x HBSPEVO690	4
R20100	170-205	100 x 100 x 6	4 x Ø11	160 x 160 x 6	4 x Ø11,5	20 x 120	4 x HBSPEVO8100	4
R20140	200-250	140 x 140 x 8	4 x Ø11	200 x 200 x 8	4 x Ø11,5	24 x 150	4 x HBSPEVO8100	4



*The HBS PLATE EVO screws are not included and can be ordered separately

R30 - DISC FLAT

CODE	H [mm]	top plate [mm]	bottom plate [mm]	lower holes [n. x mm]	rod Ø [mm]	DISC FLAT*	LBS screws*	pcs
R3080	150-170	Ø80 x 15	120 x 120 x 6	4 x Ø11,5	16	1 x DISCF80	10 x LBS760	4
R30120	180-210	Ø120 x 15	160 x 160 x 6	4 x Ø11,5	20	1 x DISCF120	18 x LBS780	4



*The LBS screws and DISC FLAT connector are not included in the package and can be ordered separately

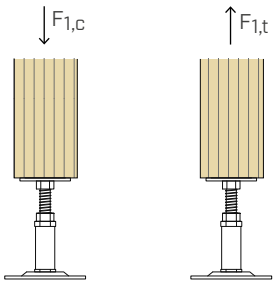
MATERIAL AND DURABILITY

TYP R: S235 carbon steel with special coating Dac Coat.
To be used in service classes 1, 2 and 3 (EN 1995-1-1).
Upper plate R30: bright zinc plated carbon steel.

FIELD OF USE

- Timber columns
- Timber beams

EXTERNAL LOADS

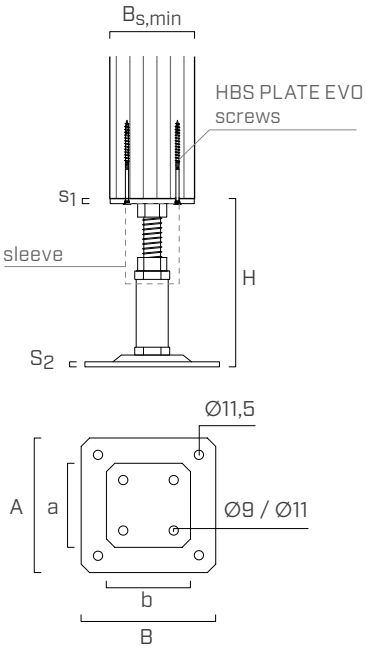


ADDITIONAL PRODUCTS - FASTENING

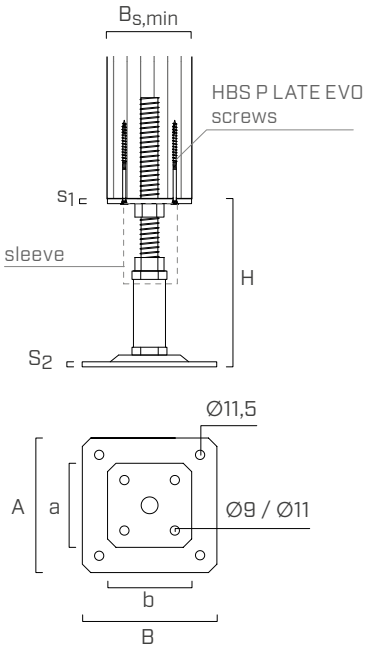
type	description	d [mm]	support	page
XEPOX D	epoxy adhesive	-		146
AB1 - AB1 A4	metal anchor	10		494 - 496
SKR	screw anchor	10		488
VIN-FIX PRO	chemical anchor	M10		509
EPO-FIX PLUS	chemical anchor	M10		517
HYB-FIX	chemical anchor	M10		-

GEOMETRY

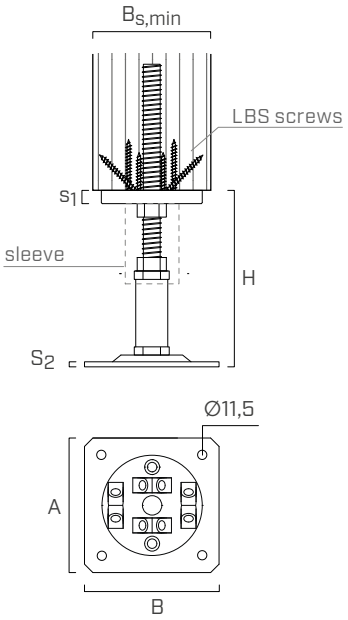
R10



R20



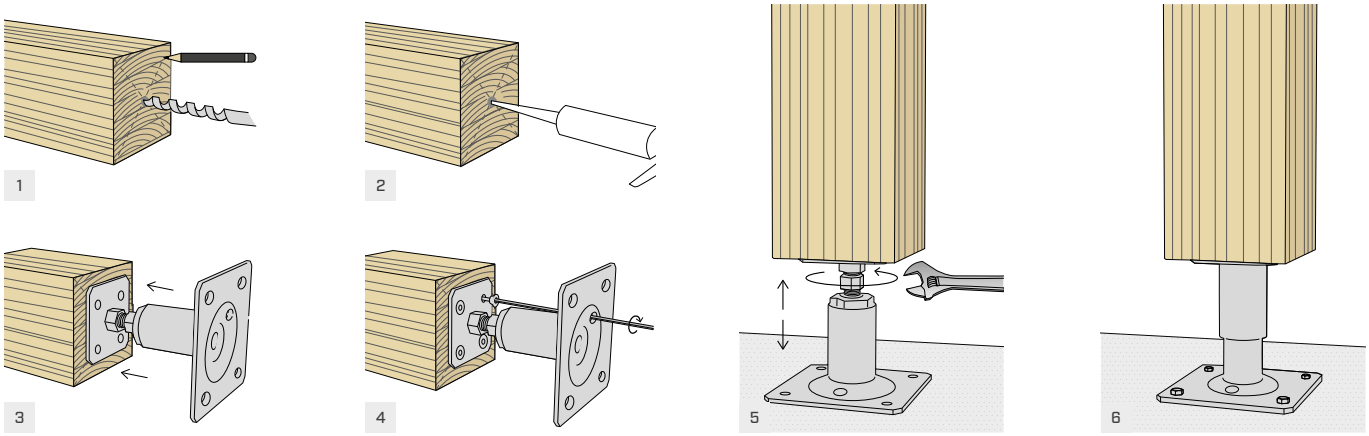
R30



	CODE	$B_{s,min}$	A x B x S_2	H	a x b x s_1
		[mm]	[mm]	[mm]	[mm]
R10	**R1080**	80	120 x 120 x 6	140-165	80 x 80 x 6
	R10100	100	160 x 160 x 6	170-205	100 x 100 x 6
	R10140	140	200 x 200 x 8	200-250	140 x 140 x 8
R20	**R2080**	80	120 x 120 x 6	140-165	80 x 80 x 6
	R20100	100	160 x 160 x 6	170-205	100 x 100 x 6
	R20140	140	200 x 200 x 8	200-250	140 x 140 x 8
R30	**R3080**	120	120 x 120 x 6	150-170	Ø80 x 15
	R30120	160	160 x 160 x 6	180-210	Ø120 x 15

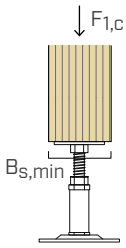
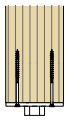
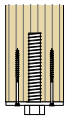
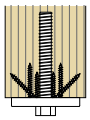
ASSEMBLY

VIDEO

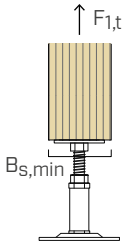
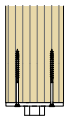
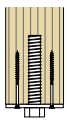


STATIC VALUES

COMPRESSION STRENGTH

stress	TYP R		fastening	column $B_{s,min}$ [mm]	$R_{1,c\ k\ timber}$ [kN]	γ_{timber} (1)	$R_{1,c\ k\ steel}$ [kN]	γ_{steel}
	R10	**R1080**		80	**71,2**	γ_{MT}	**48,3**	γ_{M1}
		R10100		100	**111,8**		**75,4**	
		R10140		140	**222,8**		**108,6**	
	R20	**R2080**		80	**55,8**		**48,3**	
		R20100		100	**90,4**		**75,4**	
		R20140		140	**189,0**		**108,6**	
	R30	**R3080**		120	**-**	-	**48,3**	
		R30120		160	**-**	-	**75,4**	

TENSILE STRENGTH

stress	TYP R		fastening	column $B_{s,min}$ [mm]	$R_{1,t\ k\ timber}$ [kN]	γ_{timber} (1)	$R_{1,t\ k\ steel}$ [kN]	γ_{steel}
	R10	**R1080**		100	**4,2**	γ_{MC}	-	-
		R10100		120	**5,3**		-	-
		R10140		160	**5,3**		-	-
	R20	**R2080**		100	**16,1**	γ_{MT}	-	-
		R20100		120	**30,2**		-	-
		R20140		160	**45,2**		-	-
	R30	**R3080**		120	**18,7**	γ_{MC}	**24,3**	γ_{M0}
		R30120		160	**62,4**		**36,4**	

NOTES:

(1) γ_{MT} partial coefficient of the timber; γ_{MC} partial coefficient for connections.

GENERAL PRINCIPLES:

- The characteristic values are in accordance with ETA-10/0422, except for the tensile values of R10 and R20 calculated as follows:
  - for R10 they are calculated considering the withdrawal resistance of HBS PLATE EVO screws parallel to the grain according to ETA-11/0030;
  - for R20 they are calculated considering only the withdrawal resistance of the threaded rod fixed with epoxy adhesive (XEPOXD400) and in accordance with DIN 1052: 2008.
- The design values are obtained from the characteristic values as follows:

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

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

- For the calculation process a timber density ρ_k = 350 kg/m^3 has been considered.
- Dimensioning and verification of timber and concrete elements must be carried out separately.