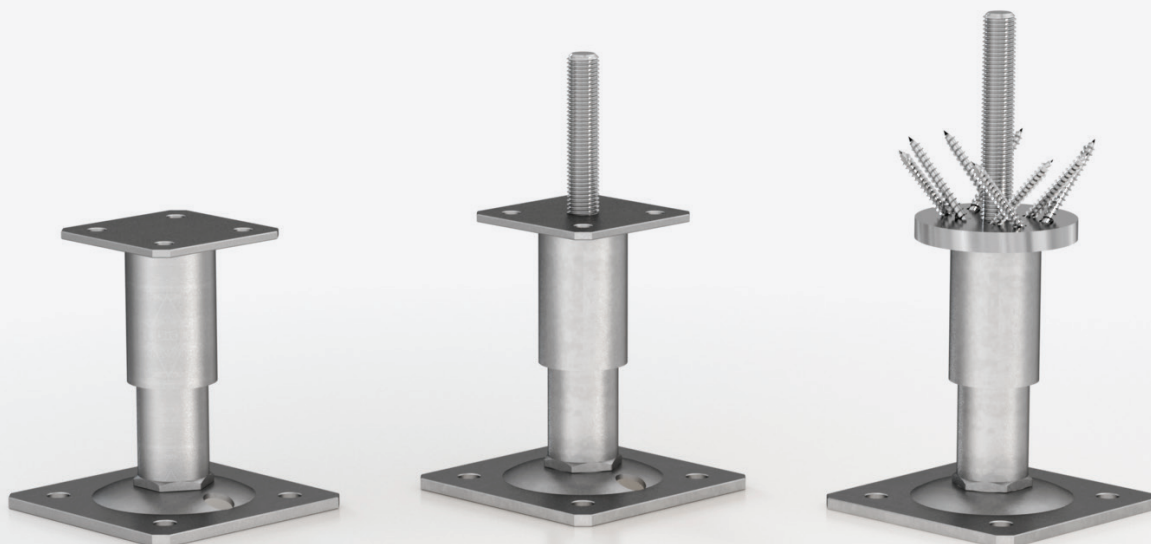


TYP R

Adjustable post base

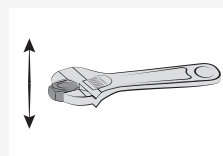
Galvanized carbon steel Dac Coat

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



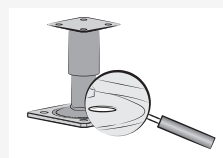
RAISED

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



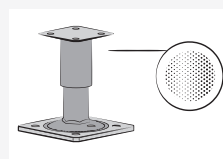
ATTENTION TO DETAILS

The base is characterized by an auxiliary hole allowing to assemble the screws HBS+evo (included in the box)



DAC COAT

Special high-quality coating, for optimal aesthetic result and improved impact strength

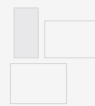
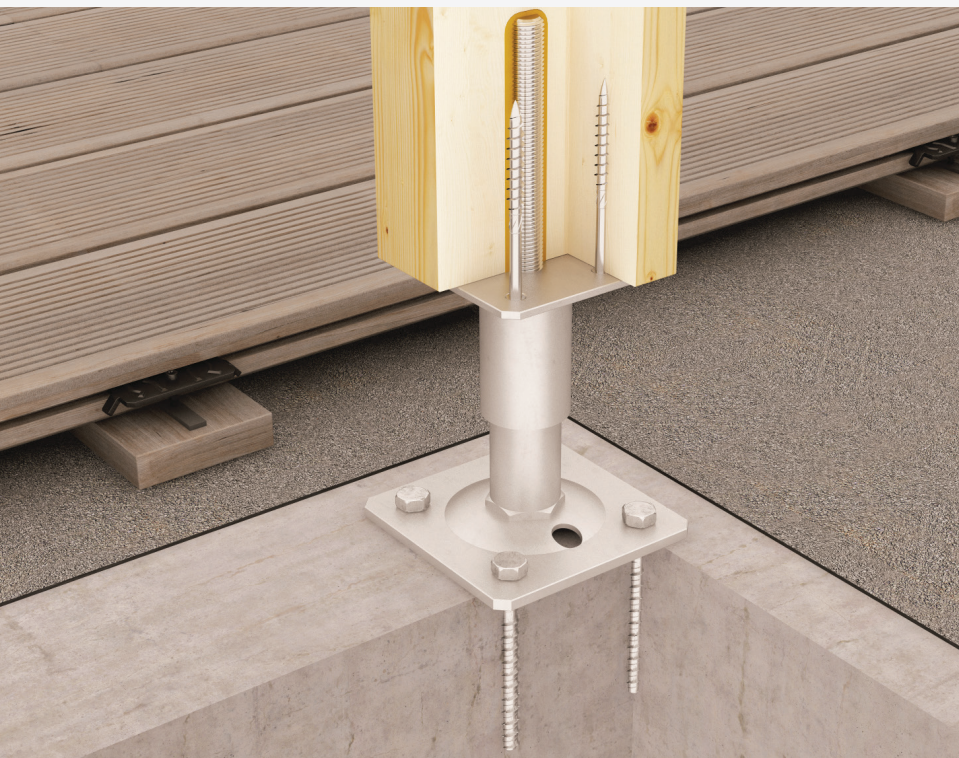
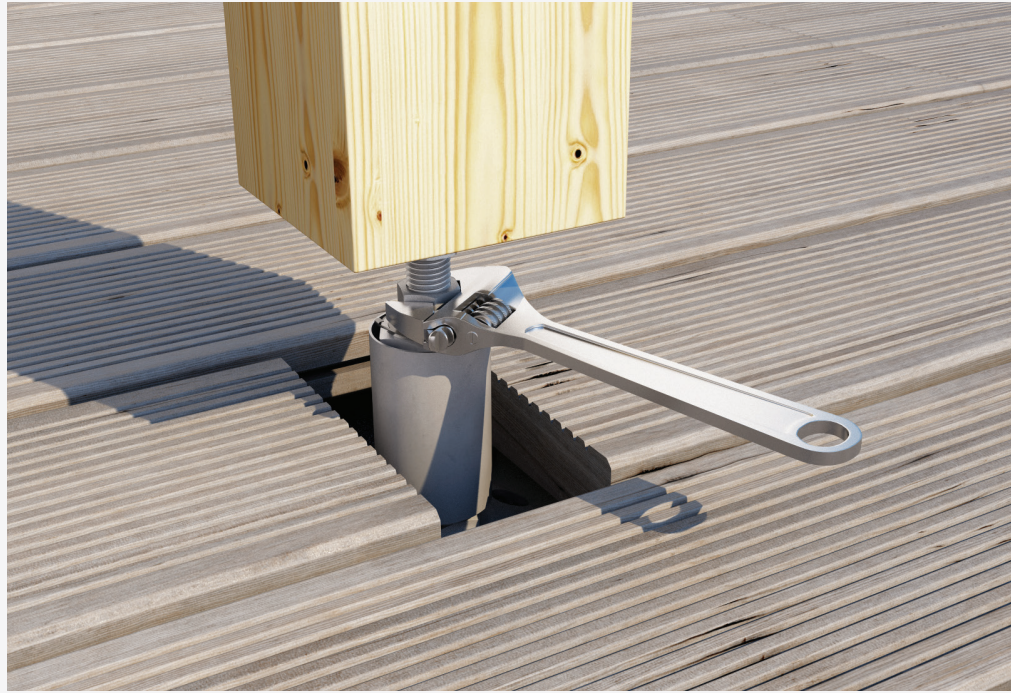


FIELD OF USE

Outdoor joints.

Suitable for Service class 1, 2 and 3.

- XLAM (Cross Laminated Timber)
- LVL (Laminated Veneer Lumber)
- solid timber
- glulam (Glued Laminated Timber)



AESTHETICS

Elegant joint with concealed fixings (not visible). It can be identified by its opaque and rough surface finishing, aesthetically pleasing



EFFICIENCY

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

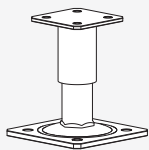


STATICS

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

CODES AND DIMENSIONS

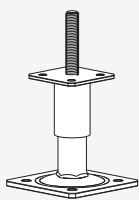
TYP R10



code	type	bottom plate [mm]	bottom holes [n. x mm]	H [mm]	screws	pcs/box
FE500450	R10_1	120 x 120 x 6	4 x Ø11,5	130 - 165	HBS+ evo Ø6 x 90	4
FE500455	R10_2	160 x 160 x 6	4 x Ø11,5	160 - 205	HBS+ evo Ø8 x 80	4
FE500460	R10_3	200 x 200 x 8	4 x Ø11,5	190 - 250	HBS+ evo Ø8 x 80	4

Screws included in the box

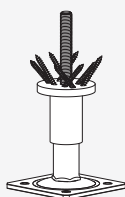
TYP R20



code	type	bottom plate [mm]	bottom holes [n. x mm]	H [mm]	bar Ø x L [mm]	screws	pcs/box
FE500485	R20_1	120 x 120 x 6	4 x Ø11,5	130 - 165	16 x 80	HBS+ evo Ø6 x 90	4
FE500490	R20_2	160 x 160 x 6	4 x Ø11,5	160 - 205	20 x 120	HBS+ evo Ø8 x 80	4
FE500495	R20_3	200 x 200 x 8	4 x Ø11,5	190 - 250	24 x 150	HBS+ evo Ø8 x 80	4

Screws included in the box

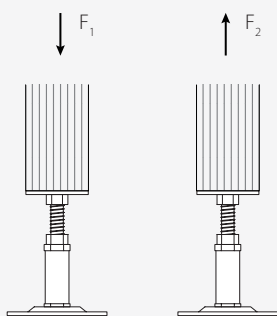
TYP R30



code	type	bottom plate [mm]	bottom holes [n. x mm]	H [mm]	bar Ø [mm]	screws	pcs/box
FE501700	R30_1	120 x 120 x 6	4 x Ø11,5	135-170	16	8 x screw DISC Ø6 x 60	4
FE501705	R30_2	160 x 160 x 6	4 x Ø11,5	165-210	20	16 x screw DISC Ø6 x 80	4

Screws included in the box

EXTERNAL LOADS



MATERIAL AND DURABILITY

TYP R: S235 carbon steel with special coating Dac Coat.
To be used in Service class 1, 2 e 3 (EN 1995:2008).

FIELD OF USE

Timber posts
Timber joists



ADDITIONAL PRODUCTS - FASTENERS

type	description		d [mm]	support	p.
HBS+ evo	screw for timber		6 - 8		included
DISC screw	screw for TYP R30		6		included
XEPOX 235.4	epoxy adhesive		-		116
AB1	metal anchor A1		10		334
SKR	screwed anchor		10		328
VINYLPPO	chemical anchor		M10		346
EPOPLUS	chemical anchor		M10		354

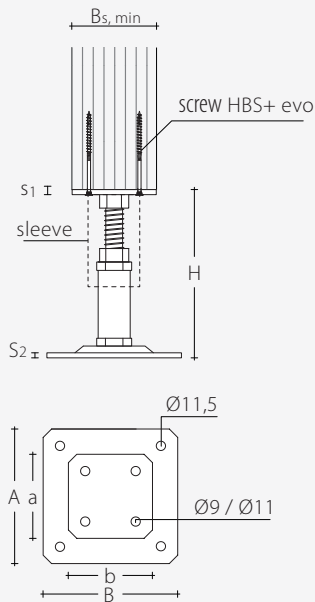
GEOMETRY AND INSTALLATION

type		bottom plate A x B x S ₂ [mm]	height H [mm]	range of adjustability [mm]	top plate a x b x s ₁ [mm]	post B _{s, min} [mm]	threaded bar	bar predrill Ø _b x L _b [mm]	nut ⁽¹⁾ (SW) [mm]
TYP R10	1	120 x 120 x 6	130 - 165	35	80 x 80 x 6	80	M 16	-	36
	2	160 x 160 x 6	160 - 205	45	100 x 100 x 6	100	M 20	-	46
	3	200 x 200 x 8	190 - 250	60	140 x 140 x 8	140	M 24	-	55
TYP R20	1	120 x 120 x 6	130 - 165	35	80 x 80 x 6	80	M 16	18 x 85	36
	2	160 x 160 x 6	160 - 205	45	100 x 100 x 6	100	M 20	22 x 125	46
	3	200 x 200 x 8	190 - 250	60	140 x 140 x 8	140	M 24	26 x 155	55

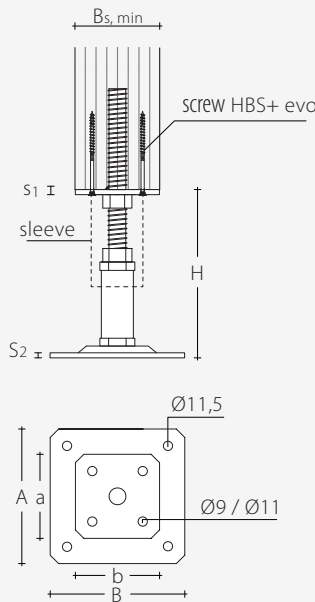
type		bottom plate A x B x S ₂ [mm]	height H [mm]	range of adjustability [mm]	top plate d x s ₁ [mm]	post B _{s, min} [mm]	threaded bar	bar predrill Ø _b x L _b [mm]	nut ⁽¹⁾ (SW) [mm]
TYP R30	1	120 x 120 x 6	135 - 170	35	Ø80 x 6	100	M 16	16 x 150	36
	2	160 x 160 x 6	165 - 210	45	Ø120 x 10	140	M 20	20 x 200	46

⁽¹⁾ Nuts according to DIN 934 (EN ISO 4032)

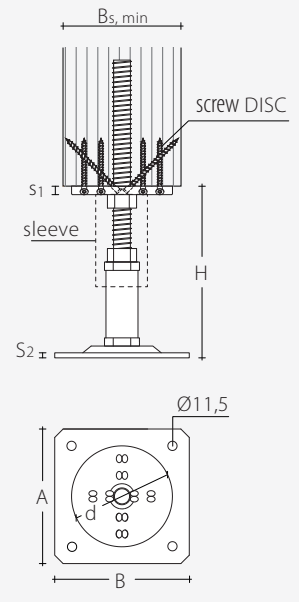
TYP R10



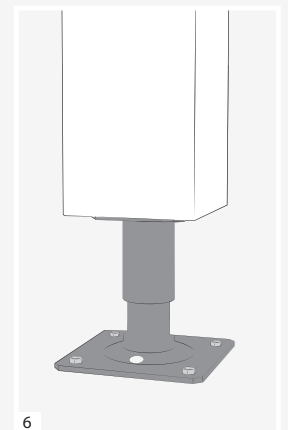
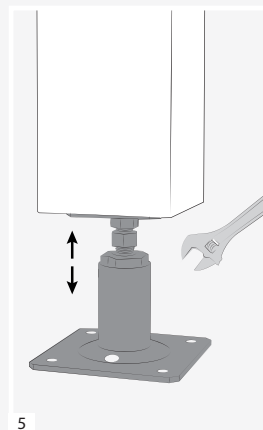
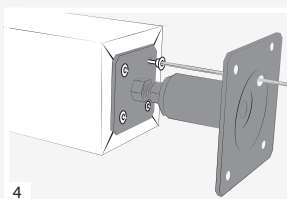
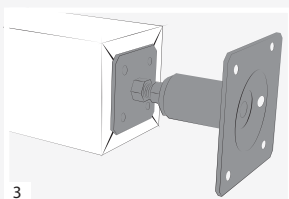
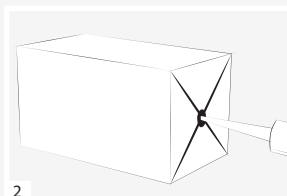
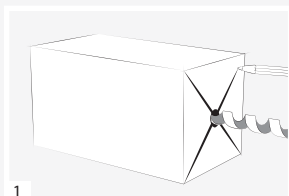
TYP R20



TYP R30

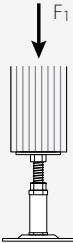


ASSEMBLING

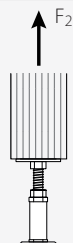


STATIC VALUES - COMPRESSIVE AND TENSILE STRENGTH

COMPRESSIVE STRENGTH

			CHARACTERISTIC VALUES			ADMISSABLE VALUES
external action	TYP R		fixing	$R_{1,k}$ timber [kN]	$R_{1,k}$ steel [kN] Y_{steel}	$N_{1,adm}$ [kg]
	R10	R10_1		71,20	48,30	2248
		R10_2		111,80	75,40	3827
		R10_3		222,80	108,60	4439
	R20	R20_1		55,80	48,30	2248
		R20_2		90,40	75,40	3827
		R20_3		189,00	108,60	4439
	R30	R30_1		-	48,30	2546
		R30_2		-	75,40	4012

TENSILE STRENGTH - POST

			CHARACTERISTIC VALUES			ADMISSABLE VALUES
external action	TYP R		fixing	$R_{2,k}$ timber [kN]	$R_{2,k}$ steel [kN] Y_{steel}	$N_{2,adm}$ [kg]
	R10	R10_1		-	-	-
		R10_2		-	-	-
		R10_3		-	-	-
	R20	R20_1		16,08 ⁽¹⁾	-	407 ⁽¹⁾
		R20_2		30,16 ⁽¹⁾	-	746 ⁽¹⁾
		R20_3		45,24 ⁽¹⁾	-	1103 ⁽¹⁾
	R30	R30_1		18,70	24,30	763
		R30_2		62,40	36,40	2444

TENSILE STRENGTH - BEAM

			CHARACTERISTIC VALUES			ADMISSABLE VALUES
external action	TYP R		fixing	$R_{2,k}$ timber [kN]	$R_{2,k}$ steel [kN] Y_{steel}	$N_{2,adm}$ [kg]
	R10	R10_1		15,57	-	660
		R10_2		19,60	-	832
		R10_3		19,60	-	832
	R20	R20_1		16,08 ⁽¹⁾	-	543 ⁽¹⁾
		R20_2		30,16 ⁽¹⁾	-	995 ⁽¹⁾
		R20_3		45,24 ⁽¹⁾	-	1470 ⁽¹⁾
	R30	R30_1		18,70	24,30	763
		R30_2		62,40	36,40	2444

GENERAL PRINCIPLES

- Characteristic values are consistent with EN 1995:2008 and in accordance with ETA-11/0422
- Design values can be obtained from characteristic values as follows:

$$R_d = \min \left\{ \begin{array}{l} \frac{R_{i,k} \text{ timber} \cdot k_{mod}}{Y_m} \\ \frac{R_{i,k} \text{ steel}}{Y_{steel}} \end{array} \right.$$

Coefficients k_{mod} and Y_m must be taken according to the current Standard adopted for the design.

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

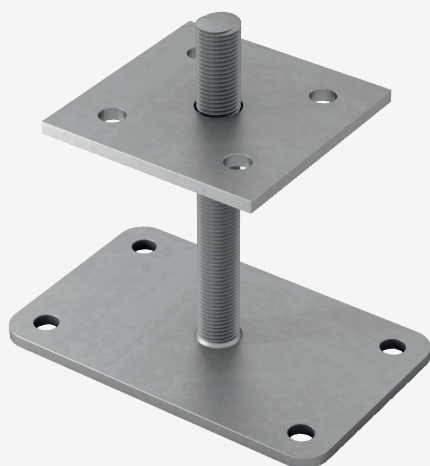
- Admissible values are obtained according to DIN 1052:1988.
- For the calculations, a timber density $\rho_k = 350 \text{ kg/m}^3$ has been considered.
- Dimensioning and verification of the timber elements must be carried out separately.

NOTES

- ⁽¹⁾ The pull out strength has been obtained by considering only the strength of the glued-in threaded rod (it is recommended to use the adhesive Xepox 235.4).
The characteristic pull out strength has been calculated according to DIN 1052:2004.
The admissible pull out strength values have been calculated by considering the admissible shear strength value of timber on the surface of the hole.

R40 R

Adjustable post base with through bar and rectangular base



- Anchors easy to install thanks to the rectangular base
- High quality surface coating (Dac Coat)



code	type	bottom plate [mm]	bottom holes [n. x mm]	top plate [mm]	top holes [n. x mm]	bar Ø x L [mm]	pcs/box
FE500280	R40_3	160 x 100 x 6	4 x Ø11,5	100 x 100 x 6	4 x Ø11	20 x 150	1
FE500285	R40_4	160 x 100 x 6	4 x Ø11,5	100 x 100 x 6	4 x Ø11	24 x 250	1

• admissible compressive strength: R40_3 - $N_{adm} = 2660$ kg; R40_4 - $N_{adm} = 3219$ kg

R40 q

Adjustable post base with through bar and square base



- Versatility of use and assembling
- High quality surface coating (Dac Coat)



code	type	bottom plate [mm]	bottom holes [n. x mm]	top plate [mm]	top holes [n. x mm]	bar Ø x L [mm]	pcs/box
FE500265	R40_1	100 x 100 x 6	4 x Ø11,5	70 x 70 x 6	2 x Ø6	16 x 99	1
FE500270	R40_2	100 x 100 x 6	4 x Ø11,5	80 x 80 x 6	4 x Ø11	20 x 99	1

• admissible compressive strength: R40_1 - $N_{adm} = 1479$ kg; R40_2 - $N_{adm} = 2276$ kg

R70

Concrete embedded post base with adjustable plate



- Hidden joint with adjustable height
- High quality surface coating (Dac Coat)



code	type	plate [mm]	holes [n. x mm]	bar Ø x L [mm]	pcs/box
FE500440	R70_1	100 x 100 x 8	4 x Ø11	20 x 350	1
FE500445	R70_2	140 x 140 x 8	4 x Ø11	24 x 450	1

R90

Adjustable post base with through screw



- Adjustable height
- Fast installation



code	type	bottom plate [mm]	bottom holes [n. x mm]	top plate [mm]	height [mm]	screw Ø x L [mm]	pcs/box
FE500335	R90_1	100 x 100 x 5	4 x Ø11,5	Ø80 x 6	130 - 170	16 x 90	1