

Technical Sheet

SIMPSON
Strong-Tie

PBWS

PBWS Folded postbase

PBWS is single-piece, non-welded post base for connecting timber to concrete. An engineered solution, this connector requires up to 45% less steel than a traditionally designed post base.

Features

Material

Steel:

S250GD + ZPRO

Corrosion protection:

ZPRO coating - corresponding to a zinc layer of approx. 55 µm

Advantages

- Light and easy to handle
- No pre-drilling required
- Reduced environmental impact due to material reduction
- Flexible fastening options
-

Features

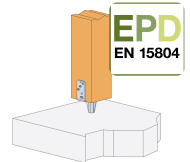
Built to last, the surface of the PBWS is protected using our ZPRO coating for improved resistance to corrosion compared with conventionally coated galvanised steel. This makes the PBWS a good choice for a wide variety of outdoor projects including pergolas, decking, car ports, fencing and sheds. Optional hole patterns mean it can be fastened to the timber post using either 4 x CSA connector screws or 2 x SSH Hex Head screws, no pre-drilling is required.

Reduced Environmental Impact

PBWS offers the same load-rated capacity as standard post bases, yet due to it's unique folded build, requires up to half as much steel material to produce, making it better for the environment and easier to handle.

Extend the life of outdoor structures

Our innovative ZPRO coating provides additional corrosion resistance for structural steel connections typically used in outdoor settings such as car ports and gardens. It provides the same protection against the elements as a hot dip galvanised coating (corrosion category C3 EN ISO 12944) however ZPRO has a much neater, shinier finish.

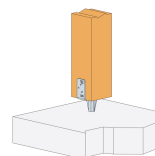


PBWS installed using 4 x CSA connector screws.

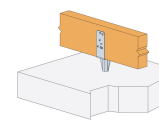


PBWS installed using 2 x SSH hex head screws.

PBWS post installation using 4 x CSA connector screws.



PBWS post installation using 2 x SSH hex head screws.



PBWS beam installation.



PBWS installed using 4 x CSA connector screws.



PBWS installed using 2 x SSH hex head screws.

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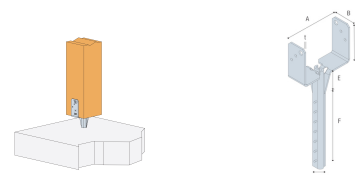
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Technical Data



Product dimensions

Reference	Connector Dimensions										
	Other		Product Dimensions[mm]							Top plate holes	
	Qty per box	Weight[kg]	A[mm]	B[mm]	C[mm]	E[mm]	F[mm]	G[mm]	t[mm]	Round	
										Ø5[mm]	Ø8.5[mm]
PBWS45Z	20	0.5	45	40	99.5	50	150	22	3	4	2
PBWS48Z	20	0.5	48	40	98	50	150	22	3	4	2
PBWS70Z	20	0.5	70	40	87	50	150	22	3	4	2
PBWS73Z	20	0.5	73	40	85.5	50	150	22	3	4	2
PBWS90Z	20	0.5	90	40	77	50	150	22	3	4	2
PBWS98Z	20	0.5	98	40	73	50	150	22	3	4	2
PBWS100Z	20	0.5	100	40	72	50	150	22	3	4	2

Product capacities

Reference	Post base capacity			
	Product capacities - Timber to Concrete			
	Number of Fasteners		Characteristic capacities - Timber C24[kN]	
	On post		R _{1,k}	R _{2,k}
	Qty	Type		
PBWS45Z	4	CSA5,0x40Z	20.2	2.5
PBWS48Z	4	CSA5,0x40Z	20.2	2.5
PBWS70Z	4	CSA5,0x40Z	20.2	2.5
PBWS73Z	4	CSA5,0x40Z	20.2	2.5
PBWS90Z	4	CSA5,0x40Z	20.2	2.5
PBWS98Z	4	CSA5,0x40Z	20.2	2.5
PBWS100Z	4	CSA5,0x40Z	20.2	2.5

*Minimum concrete strengt C12/15

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Product capacities - Ø8 Connector screw

Reference	Post base capacity			
	Product capacities - Timber to Concrete - Ø8 Connector screw			
	Number of Fasteners		Characteristic capacities - Timber C24[kN]	
	On post		R _{1,k}	R _{2,k}
	Qty	Type		
PBWS45Z	2.0	SSH8x40	20.2	2.5
PBWS48Z	2.0	SSH8x40	20.2	2.5
PBWS70Z	2.0	SSH8x40	20.2	2.5
PBWS73Z	2.0	SSH8x40	20.2	2.5
PBWS90Z	2.0	SSH8x40	20.2	2.5
PBWS98Z	2.0	SSH8x40	20.2	2.5
PBWS100Z	2.0	SSH8x40	20.2	2.5

*Minimum concrete strengt C12/15

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Installation

Fixing

On timber :

- CNA4.0 ring shank nails,
- CSA5.0 screws,
- Ø8 mm SSH screws,
- Bolts Ø8 mm.

On concrete :

- Chemical resin AT-HP

The distance between the plate and the concrete must be 50 mm maximum.

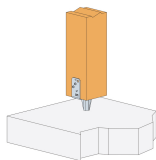
Installation

Upper part :

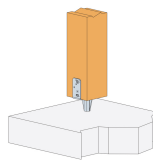
1. Place the post in the postbase,
2. Secure the post base to the post.

Lower part :

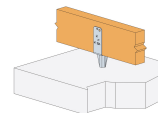
1. Secure the post base to the post,
2. Drill the support vertically, to the recommended diameter and depth,
3. Position the post and finalize the fixing to the ground using adhesive,
4. The column base can also be embedded in the concrete when the latter is poured.



PBWS post installation using 4 x CSA connector screws.



PBWS post installation using 2 x SSH hex head screws.



PBWS beam installation.

