

# PERI PS100 100kN Shoring System

Product Brochure – Issue 01/2023



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#### Important notes

All current safety regulations and guidelines must be observed.

The photos shown in this brochure feature construction sites in progress. For this reason, safety and anchor details in particular cannot always be considered as conclusive or final. These are subject to the risk assessment carried out by the contractor.

In addition, computer graphics are used which are to be understood as system representations. For ensuring a better understanding, these and the detailed illustration shown have been partially reduced to certain aspects. The safety installations which have possibly not been shown in these detailed descriptions must nevertheless be available.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required in case of changes and deviations.

The information contained herein is subject to technical changes in the interests of progress. Errors and typographical mistakes reserved.

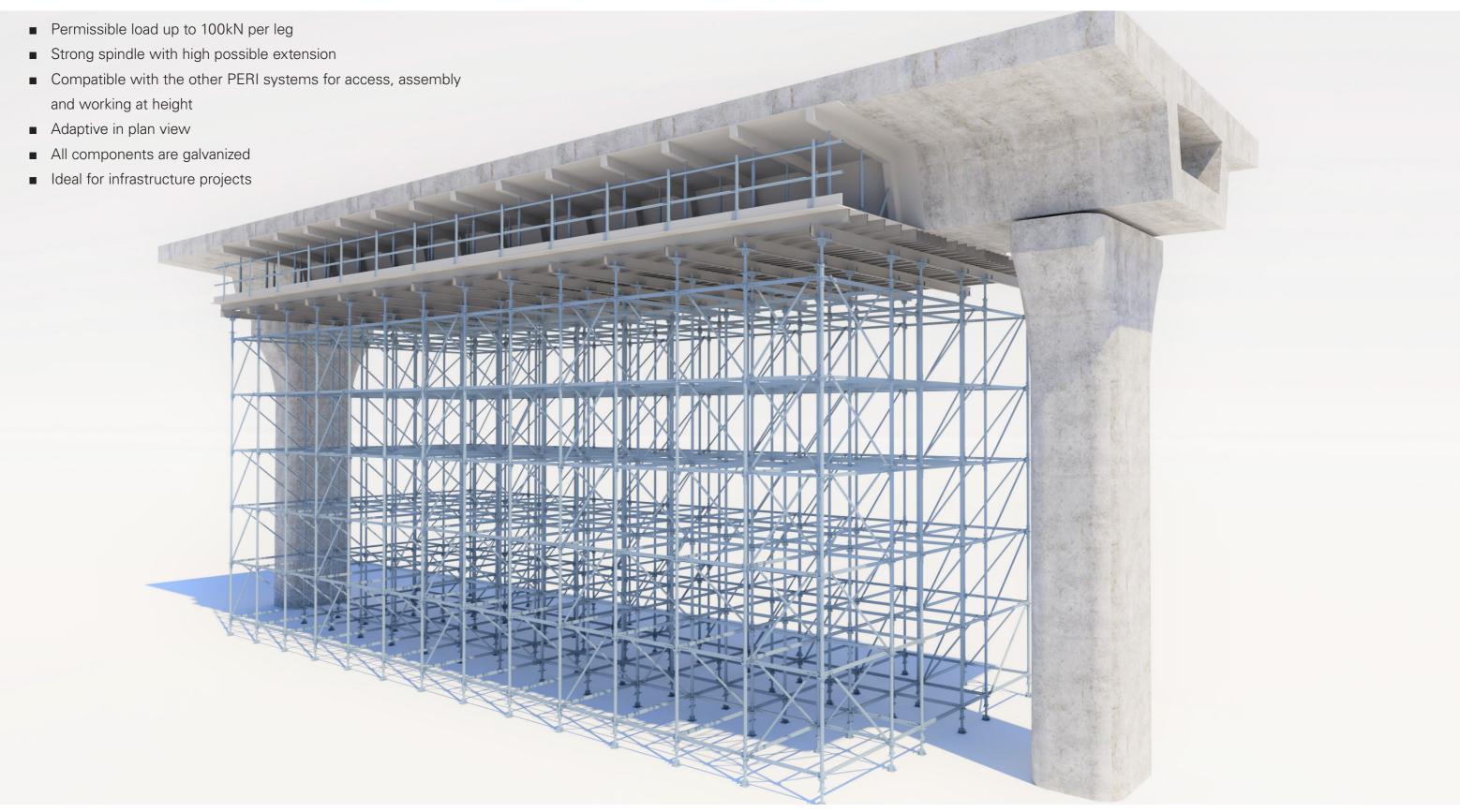
# **PERI** Formwork Malaysia Sdn Bhd **Formwork Scaffolding Engineering**

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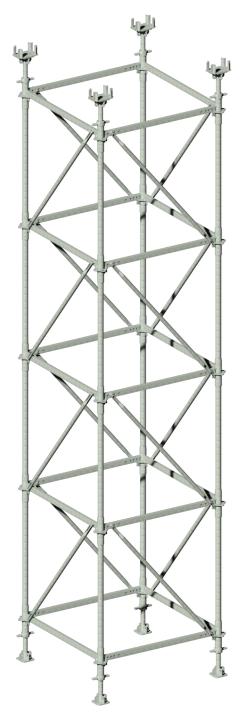
Chapter 1

# **PERI PS100 Shoring system**

# Stable and flexible shoring system with a high load-bearing capacity

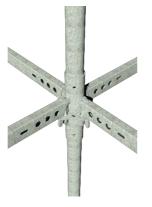


### **Product features**

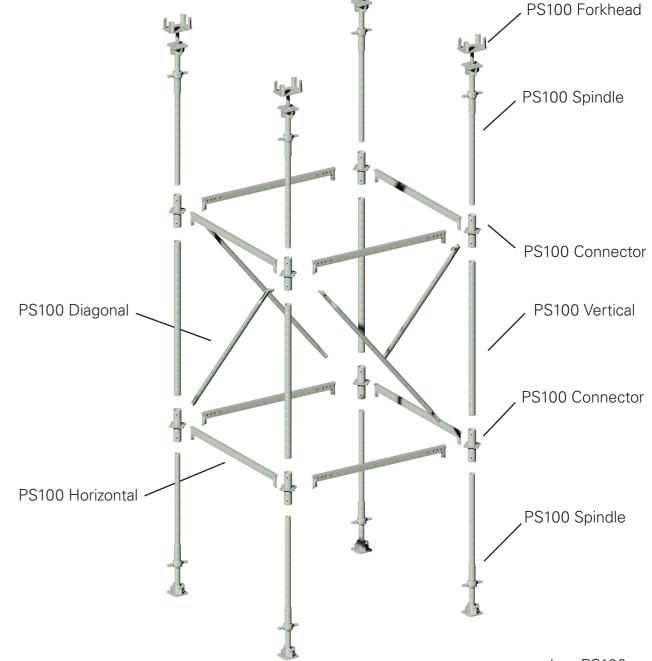


- Only one type of vertical element (CHS 60.4 x4 mm) for the bottom, middle and top of the tower. Therefore, the assembly of PS100 system is fast and optimised from the logistics side.
- PS100 Connector is used for all joints between vertical elements. It combines a base standard, spigot and nodal connecting ring, all into one piece.
- PS100 Horizontal has a gravity lock for quick assembly and provides high connection rigidity with a "knee-type" connection. Two diagonals can be installed in one PS100 Horizontal.
- PS100 Diagonal is a light and easy to install diagonal.
- PS100 Spindle can be used with extension up to 525 mm without additional bracing due to high-load bearing capacity.









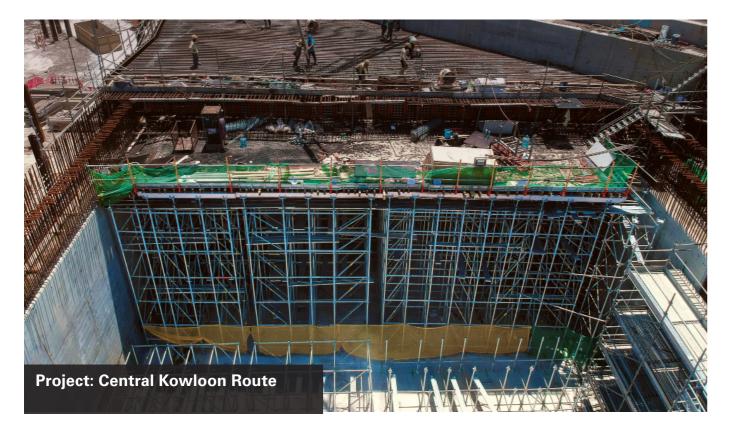
explore PS100 in 3D:

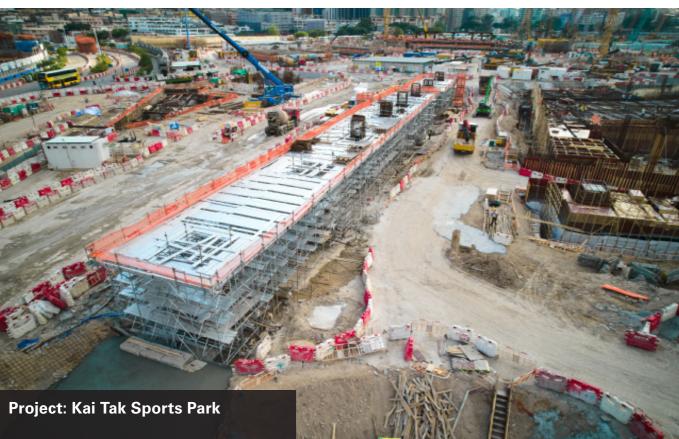


Chapter 1

# **PERI PS100 Shoring system**

# **Reference projects**









Chapter 2

# **PERI PS100 Shoring system**

### **Technical Data**

#### ■ PS100 Vertical

Cross-section: CHS 60.3 x 4.0 mm

Characteristic value of yield strength: 355 N/mm<sup>2</sup>

Permissible load for Vertical 500 /1000 / 1500 in PS100 Tower (every node is

restrained by horizontals): 100 kN (FOS = 2.0)

Permissible load for Vertical 2000 in PS100 tower (every node is restrained by

horizontals: 58.5 kN (according to Eurocode 3)

#### **■ PS100 Horizontal**

Cross-section: RHS 60x30x2.0 mm

Characteristic value of yield strength: 355 N/mm<sup>2</sup>

Permissible bending moment (in the middle):  $M_v = 1.349 \text{ kNm}$ 

Permissible reaction force: V = 10 kN

Permissible normal force for the connection point between PS100 Diagonal (or UBL)

and PS100 Horizontal (or UH Plus / UH-2):  $N_v = 8.2 \text{ kN}$ 

#### ■ PS100 Spindle

Cross-section: CHS 48.3x6.0mm

Characteristic value of yield strength: 355 N/mm<sup>2</sup>

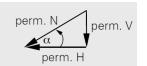
Base plate: 150x150x10 mm

#### **■ PS100 Diagonals**

Cross-section: CHS 42.4x2.0 mm

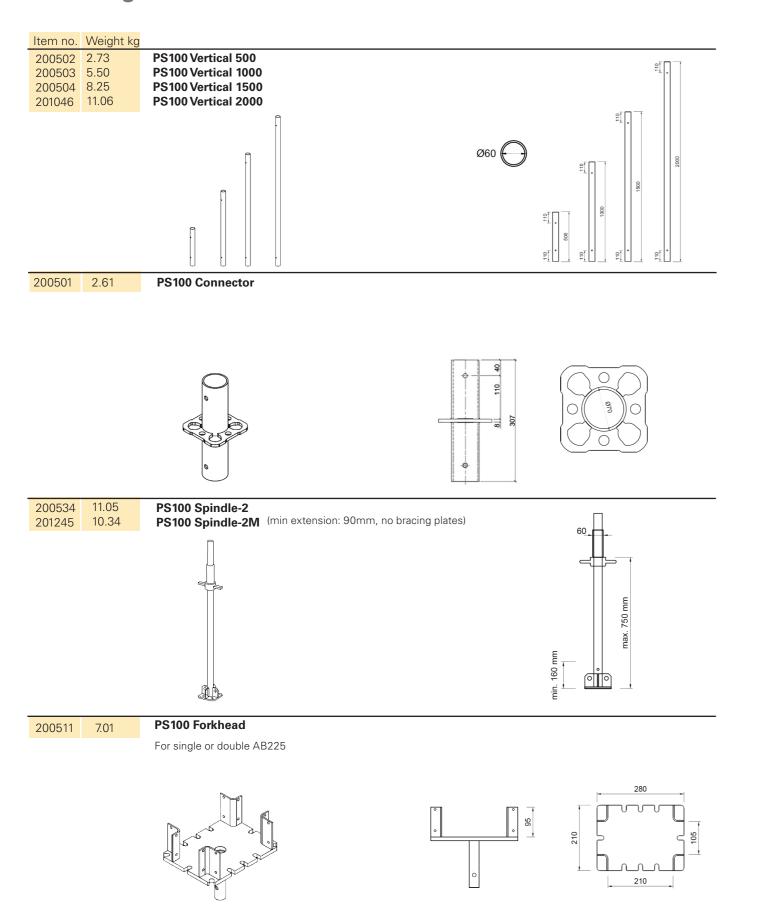
Characteristic value of yield strength: 355 N/mm<sup>2</sup>

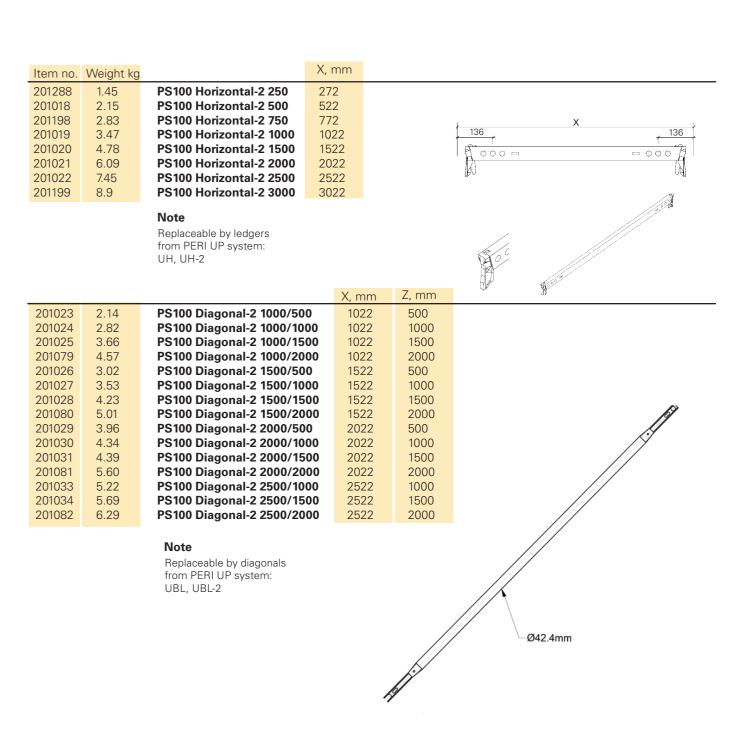
Permissible loads for PS100 Diagonals:

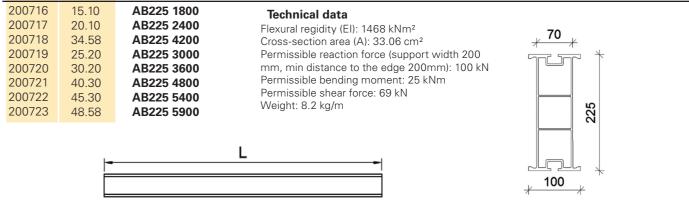


						1	
		Compression (-)			Tension (+)		
L / H, mm	angle	perm.N, kN	perm. H, kN	perm.V, kN	perm.N, kN	perm. H, kN	perm.V, kN
1000/500	33.7	8.2	6.82	4.55	8.2	6.82	4.55
1000/1000	53.2	8.2	4.91	6.57	8.2	4.91	6.57
1000/1500	63.4	7.73	3.46	6.91	8.2	3.67	7.33
1000/2000	69.4	6.87	2.42	6.43	8.2	2.89	7.68
1500/500	21.8	8.2	7.61	3.05	8.2	7.61	3.05
1500/1000	38.7	7.87	6.14	4.92	8.2	6.4	5.13
1500/1500	50.2	7.27	4.65	5.58	8.2	5.25	6.3
1500/2000	58	6.37	3.38	5.4	8.2	4.35	6.95
2000/500	15.9	7.47	7.18	2.05	8.2	7.89	2.25
2000/1000	29.7	7.13	6.2	3.53	8.2	7.12	4.06
2000/1500	40.6	6.52	4.95	4.24	8.2	6.23	5.34
2000/2000	48.8	5.4	3.56	4.06	8.2	5.4	6.17
2500/500	12.5	6.29	6.14	1.36	8.2	8.01	1.77
2500/1000	24	6.03	5.51	2.45	8.2	7.49	3.34
2500/1500	33.7	5.27	4.38	2.92	8.2	6.82	4.55
2500/2000	41.6	4.05	3031	2.69	8.2	6.13	5.44

### Catalogue





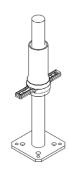


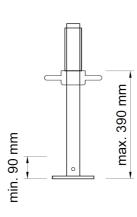
### Catalogue

Item no. Weight kg

201069 7.61

PS100 Spindle-2S

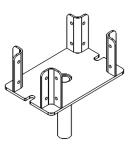


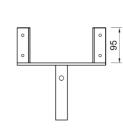


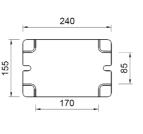
201070 2.81

2.81 PS100 VT20 Forkhead

For single or double VT20 Girder







200842 0.066 200050 0.060 200013 0.010

Hex Bolt ISO 4017 M10x90-8.8 Hex Bolt ISO 4014 M10x70- 8.8 Hex Nut ISO 4032 M10

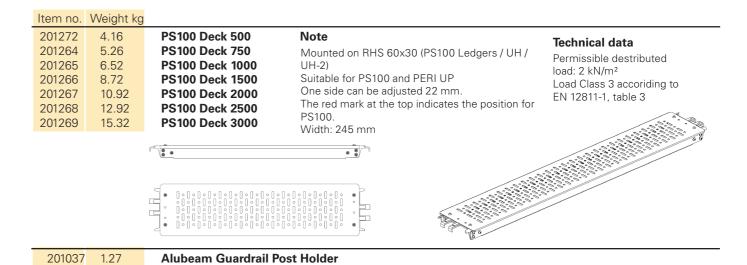
M10x90 - tension connection between PS100 Connector and PS100 Vertical. M10x70 - tension connection between PS100 Forkhead and PS100 Spindle

200848 0.368 018060 0.010 200344 Spindle Safety Strap Cotter Pin 4/1

To prevent spindles from failing out during moving with a crane.





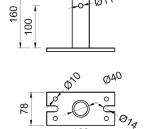




- Mounted on AB225 with T-Bolt M12x45 (200770) x 2 pc. and Nut M12 (200047) x 2 pc.



- Use tube guardrail post CHS 48.3x3.2



200770	0.100
200047	0.017

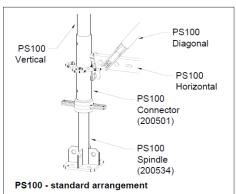
For connection of different accessories to AB225

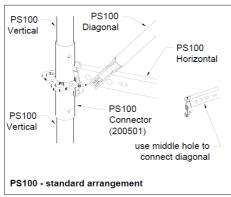
Hex Nut ISO4032 M12-8

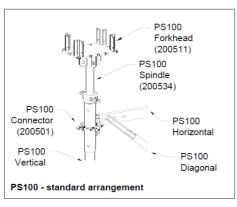
T-Bolt M12x45-8.8

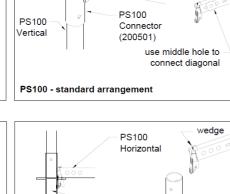


# **Typical details**









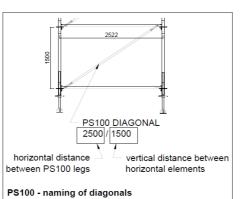
PS100 Connector (200501)

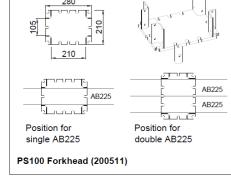
The gravity lock allows easy and safe assembly. When inserting the wedge head into the connector,

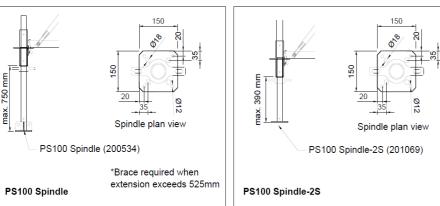
the wedge drops through the force of gravity into the

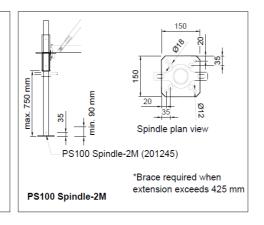
hole and locks. Secure wedge by light hammering.

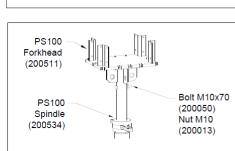
PS100 - gravity lock



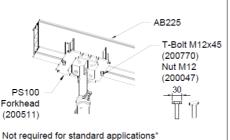






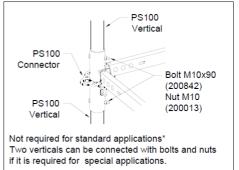


Not required for standard applications\* Forkhead can be connected with bolt and nut if it is required for special applications. PS100 - connection of Forkhead and Spindle



AB225 can be connected with T-bolt and nut if it is required for special applications.

PS100 - connection of AB220 and Forkhead



PS100 - connection of two verticals

