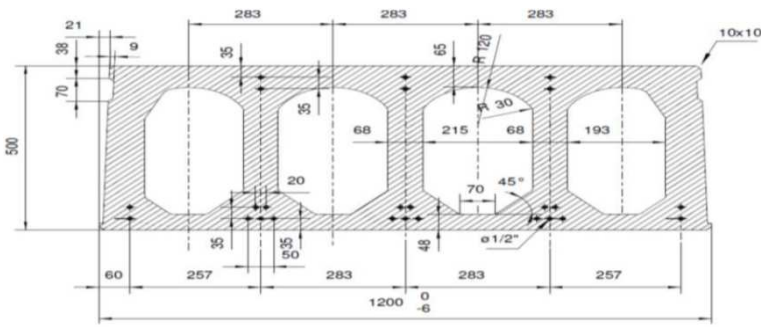


**TECHNICAL SPECIFICATION: PRE-STRESSED HOLLOW PANEL, PARTEK, thickness 500mm**

panel identification: **PSP 500**

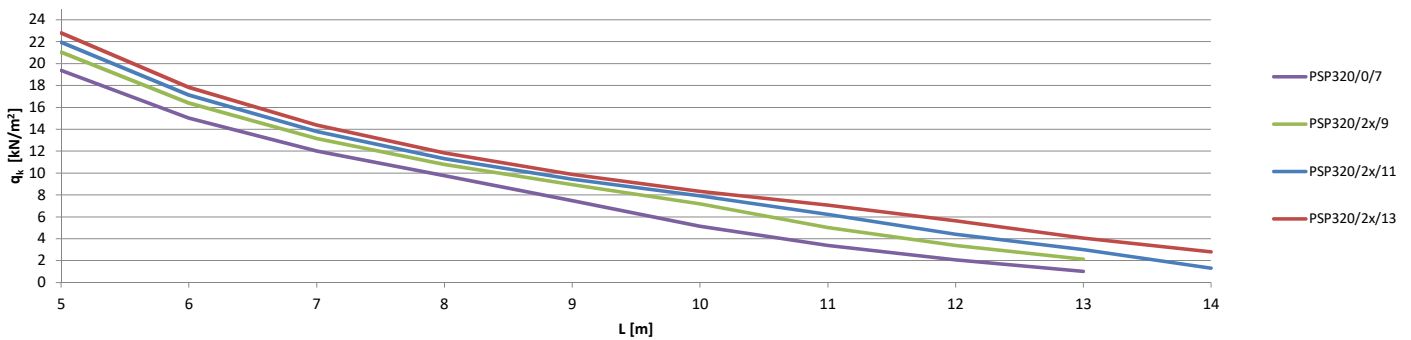


Width of panel taper in mm
390 - 455
670 - 740
955 - 1020

**Basic Technical Data**

Thickness	500 mm	Ambient environment class	XC1,S1
Section area	0,3 m <sup>2</sup>	Concrete class	C40/50
Weight of poured ceiling	6,36 kN/m <sup>2</sup>	Pre-stressing steel class	ST 1570 /1770N/mm <sup>2</sup> - Relax 2 ST 1660 /1860N/mm <sup>2</sup> - Relax 2
Hollow panel weight	6 kN/m <sup>2</sup>	Applied standards	ČSN EN 1992-1-1 ČSN EN 1168+A2
Minimum supporting length	L/100, min.100mm	Fire resistance (standard)	REI 60
Joint fill concrete need	14,5 l/m <sup>2</sup>		
Thermal resistance	0,26 m <sup>2</sup> K/W		

Permitted usable load of pre-stressed ceiling panels PARTEK PSP500



Note: The values shown in the table do not substitute for static calculation.

TYPE OF REINFORCEMENT	Cross-sectional characteristics					Ceiling part span L [m]										
	A <sub>p</sub> Top mm <sup>2</sup>	A <sub>p</sub> Bottom mm <sup>2</sup>	M <sub>cr</sub> * [kNm/1,2]	M <sub>Rd</sub> [kNm/1,2]	V <sub>Rd</sub> [kN/1,2]	10	11	12	13	14	15	16	17	17		
<b>PSP 200mm</b>						Permitted load in characteristic values [kN/m <sup>2</sup> ]										
PSP500 - 2x/9	104	837	381,1	481,7	228,8	14,33	10,61	7,79	5,59	3,84	2,44	1,28				
PSP5000 - 2x/11	104	1023	429,4	584,7	236,6	18,91	14,40	10,97	8,30	6,18	4,47	3,07				
PSP500 - 3x/14	156	1302	488,6	722,8	249,9	22,45	19,47	15,23	11,93	9,24	7,07	5,30	3,84	2,61		
PSP500 - 3x/16	156	1488	527,9	813,6	256,8	23,60	20,34	17,22	13,56	10,66	8,32	6,40	4,81	3,48		
PSP500 - 3x/18	156	1674	566,0	903,0	263,3	24,03	21,04	18,57	15,16	12,04	9,53	7,47	5,76	4,33		

Reinforcement values: top reinforcement / bottom reinforcement (number without identification - rope Ø 12.5)  
(number with identification X - rope Ø 9.3)

The specified values of permitted usable load are reduced by the weight of the ceiling panel and permanent load  $g=1.5 \text{ kN/m}^2$ .