SKALA

2023 BROCHURE

H20 WOODEN BEAMS

High Longevity
Excellent Dimensional Constancy
Consistently Large Load Capacity

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H20 BEAMS	P.U.	WEIGHT (KG)
H20 BEAM 20N 180	100	8.5
H20 BEAM 20N 245	100	11.5
H20 BEAM 20N 265	100	12.5
H20 BEAM 20N 290	100	13.6
H20 BEAM 20N 330	100	15.5
H20 BEAM 20N 360	100	16.9
H20 BEAM 20N 390	100	18.3
H20 BEAM 20N 450	100	21.2
H20 BEAM 20N 490	100	23.0
H20 BEAM 20N 590	60	27.7
H20 BEAM 20P 180	100	9.4
H20 BEAM 20P 245	100	12.7
H20 BEAM 20P 265	100	13.8
H20 BEAM 20P 290	100	15.1
H20 BEAM 20P 330	100	17.2
H20 BEAM 20P 360	100	18.7
H20 BEAM 20P 390	100	20.3
H20 BEAM 20P 450	100	23.4
H20 BEAM 20P 490	100	25.5
H20 BEAM 20P 590	60	30.7

ADVANTAGES:

Homogenous web materialensures high beam-wide load capacity.

Machine stress-graded and load-tested flanges ensure component load capacity.

Dimensional stability ensures product consistency

Compared to squared wood, load capacity and weight increase cost savings.

TECHNICAL DESCRIPTIONS:

WEB: width = 20 cm
Flange: width = 4.0 cm, height = 8.0 cm
Moment (M): 5 kNm
Rigidity (E x J): 450 kNm2
Shear force (Q): 11kN
Certification: EN 13377

Client-specific tagging!

DATA & SPECIFICATIONS

e.g.:
(1) Floor thickness: 20 cm |**(2)** Secondary beam spacing: 0.75 m |**(3)** equals primary beam spacing as per Table 2.61 :1 m |**(4)** Select primary beam spacing ≤ 2.61 in Table 2 (= 2.50 m) |**(5)** permissible prop spacing at 20 cm floor thickness in Table :2 1.19 m

Table 1						Table 2									
Floor thickness (cm)	Floor load * (kN/m²)	Max. perm. primary beam spacing (m) for secondary beam spacing** (m) of				Max. perm. prop spacing (m) for selected primary beam spacing (m) of									
		0.500	0.625	0.667 ❷	0.750	1.00	1.25	1.50	1.75	2.00	2.25 ❹	2.50	2.75	3.00	3.50
10	4.3	3.69	3.43	3.35	3.22	2.93	2.72	2.50	2.32	2.17	2.04	1.88	1.71	1.57	1.34
12	4.7	3.49	3.24	3.17	3.05	2.77	2.57	2.37	2.20	2.05	1.87	1.69	1.53	1.41	—
14	5.2	3.33	3.09	3.03	2.91	2.65	2.46	2.26	2.09	1.91	1.70	1.53	1.39	1.27	—
16	5.7	3.20	2.97	2.91	2.79	2.54	2.36	2.16	2.00	1.75	1.55	1.40	1.27	1.16	—
18	6.2	3.08	2.86	2.80	2.69	2.45	2.27	2.07	1.84	1.61	1.43	1.29	1.17	—	—
20 ❶	6.7	2.98	2.77	2.71	2.61 ❸	2.37	2.18	1.99	1.70	1.49	1.33	1.19 ❺	1.08	—	—
22	7.2	2.90	2.69	2.63	2.53	2.30	2.11	1.85	1.59	1.39	1.24	1.11	1.01	—	—
24	7.7	2.82	2.61	2.56	2.46	2.24	2.04	1.73	1.49	1.30	1.16	1.04	0.95	—	—
26	8.2	2.75	2.55	2.49	2.40	2.18	1.96	1.63	1.40	1.22	1.09	0.98	—	—	—
28	8.7	2.68	2.49	2.44	2.34	2.13	1.85	1.54	1.32	1.15	1.03	0.92	—	—	—
30	9.2	2.62	2.44	2.38	2.29	2.08	1.75	1.46	1.25	1.09	0.97	0.87	—	—	—
35	10.5	2.50	2.32	2.27	2.18	1.91	1.52	1.27	1.09	0.95	0.85	—	—	—	—

A) As per EN 12812, the aforementioned specifications permit a service load of 0.75 kN/m2 and a variable load of 10% of a solid concrete floor-slab, with a minimum total load of 0.75 kN/m2 and a maximum of 1.75 kN/m2 (considering a density of fresh concrete as 2,500 kg/m3). The mid-span deflection has been restricted to l/500. Cavity flat-slab floors result in considerably reduced slab loads.

B) The project requires the use of an H20 beams that complies with EN 13377 standards. Additionally, a prop with a minimum permitted loading capacity of 20 kN is necessary. It is recommended to space the secondary beams based on the load-bearing capacity and sheet format of the chosen formwork sheeting.

SKALA
SOLUTIONS

H2O WOODEN BEAMS

THANK YOU

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