11/2023 en-GB

Compliant with EN 13377

Form-on smartBEAM 20

- reliably high load capacity
- long lifespan
- high dimensional stability

FORM-ON®

Form-on smartBEAM 20

Your benefits:

- reliably high load capacity across the entire beam length thanks to homogeneous web material
- secured component load capacity, as all of the flanges are machine stress-graded and load-tested
- consistent product characteristics owing to high dimensional stability
- multiple savings compared to squared timber due to improved load capacity combined with lower weight

Example:
❶ Floor thickness: 20 cm | ❷ Secondary beam spacing: 0.75 m | ❸ equals primary beam spacing as per Table 1: 2.61 m
❹ Select primary beam spacing ≤ 2.61 in Table 2 (= 2.50 m) | ❺ permissible prop spacing at 20 cm floor thickness in Table 2: 1.19 m

Form-on smartBEAM 20	P.U.	kg	Art.–Nr.
Form-on smartBEAM 20N 180	100	7.9	620019000
Form-on smartBEAM 20N 245	100	10.8	620020000
Form-on smartBEAM 20N 265	100	11.7	620022000
Form-on smartBEAM 20N 290	100	12.8	620023000
Form-on smartBEAM 20N 330	100	14.5	620024000
Form-on smartBEAM 20N 360	100	15.8	620025000
Form-on smartBEAM 20N 390	100	17.2	620026000
Form-on smartBEAM 20N 450	100	19.8	620027000
Form-on smartBEAM 20N 490	100	21.6	620028000
Form-on smartBEAM 20N 590	60	26.0	620029000
Form-on smartBEAM 20P 180	100	9.4	620038000
Form-on smartBEAM 20P 245	100	12.7	620039000
Form-on smartBEAM 20P 265	100	13.8	620032000
Form-on smartBEAM 20P 290	100	15.1	620033000
Form-on smartBEAM 20P 330	100	17.2	620034000
Form-on smartBEAM 20P 360	100	18.7	620035000
Form-on smartBEAM 20P 390	100	20.3	620036000
Form-on smartBEAM 20P 450	100	23.4	620037000
Form-on smartBEAM 20P 490	100	25.5	620040000
Form-on smartBEAM 20P 590	60	30.7	620041000

Technical specifications:

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

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	2.37	2.18	1.99	1.70	1.49	1.33	1.19	1.08	—	—
22	7.2	2.90	2.69	2.63	2.53 ❸	2.30	2.11	1.85	1.59	1.39	1.24	1.11 ❺	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	—	—	—	—

1) In accordance with EN 12812, this allows for a service load of 0.75 kN/m² and a variable load of 10% of a massive concrete floor-slab, totalling at least 0.75 kN/m² but no more than 1 .75 kN/m² (assuming a fresh-concrete density of 2 500 kg/m³). Mid-span deflection has been limited to l/500. In the case of cavity flat-slab floors, significantly lower slab loads occur.
2) Form-on beam to EN 13377. 3) Form-on prop with a permitted loading capacity of ≥ 20 kN.
** Space the secondary beams in accordance with the type of formwork sheeting (load-bearing capacity and sheet format) that has been chosen.

form-on®

Form–on GmbH
Josef Umdasch Platz 1
3300 Amstetten,
Austria

T: +43 7472 23153
F: +43 7472 23153 3225
office@form-on.com
www.form-on.com