form-on®

smartBEAMplus 20N

Dimensionally stable with a high load capacity.

- Lightweight for effortless handling
- Lower transport costs due to less weight
- Unmatched durability due to P-beam end
- Secured high load capacity according to EN 13377

BIG RIVER

1300 88 19 58 bigrivergroup.com.au

Form-on smartBEAMplus 20N

YOUR ADVANTAGES

- **INNOVATION:** Incredible lightweight due to reduction of web thickness with usual strong performance.
- **STABILITY:** High stability due to optimized finger-jointing.
- **EFFORTLESS HANDLING:** 4,4 kg/rm for easier handling on the construction site and during transport.
- **DURABILITY:** Reduction of damage to the beam end due to high-quality polyurethane end reinforcement.
- **SUSTAINABILITY:** Saving resources in production and transport, thereby improving the ecological footprint.

High-quality PU-bonded Beam

TECHNICAL SPECIFICATIONS

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

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 smartBEAMplus 20	PU	Kg	Art.-no.
Form-on smartBEAMplus 20N 180	100	7.9	620122000
Form-on smartBEAMplus 20N 245	100	10.8	620123000
Form-on smartBEAMplus 20N 265	100	11.7	620124000
Form-on smartBEAMplus 20N 290	100	12.8	620125000
Form-on smartBEAMplus 20N 330	100	14.5	620126000
Form-on smartBEAMplus 20N 360	100	15.8	620127000
Form-on smartBEAMplus 20N 390	100	17.2	620128000
Form-on smartBEAMplus 20N 450	100	19.8	620129000
Form-on smartBEAMplus 20N 490	100	21.6	620130000
Form-on smartBEAMplus 20N 590	60	26.0	620131000

Table 1						Table 2									
Floor Thick-ness (cm)	Floor Load* (kN/m²)	Max. Perm. Primary Beam Spacing (m) for Secondary Beam Spacing (m) of				Max. Perm. Prop Spacing (m) for Selected Secondary Beam Spacing (m) of									
		0.500	0.625	0.667	❷ 0.750	1.00	1.25	1.50	1.75	2.00	❹ 2.25	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	—	—
❶ 20	6.7	2.98	2.77	2.71	❸ 2.61	2.37	2.18	1.99	1.70	1.49	1.33	❺ 1.19	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	—	—	—	—

* Based on EN 12812, numbers refer to solid concrete floor slabs with live loads of 0.75 kN/m² and min. variable loads of 10%, min. 0.75 kN/m² but not to exceed 1.75 kN/m² (with 2.5 kN/m² fresh concrete slab bulk density). The mid-span deflection has been limited to l/500. Significantly lower floor loads are produced in hollow floor slabs.