







Now available:  
**Incredibly  
light**

# Form-on smartBEAMplus 20N

-  lightweight for effortless handling
-  lower transport costs due to less weight
-  unmatched durability due to PU-beam end
-  secured high load capacity according to EN 13377

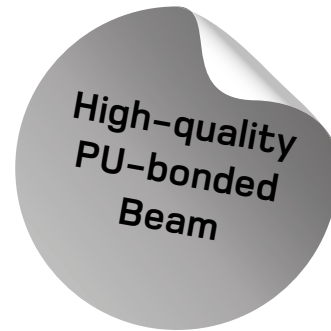
**FORM-ON**<sup>®</sup>



# 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.



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

### Example:

- 1 Floor thickness: 20 cm |
- 2 Secondary beam spacing: 0.75 m |
- 3 equals primary beam spacing as per Table 1: 2.61 m |
- 4 select primary beam spacing  $\leq$  2.61 in Table 2 (= 2.50 m) |
- 5 permissible prop spacing at 20 cm floor thickness in Table 2: 1.19 m

## Technical specifications:

**Web:** height = 20 cm

**Flange:** height = 4.0 cm, width = 8.0 cm

**Moment (M):** 5 kNm

**Shear force (Q):** 11 kN

**Rigidity (E x J):** 450 kNm<sup>2</sup>

**Certification:** EN 13377

Floor thickness (cm)	Floor load * (kN/m <sup>2</sup> )	Table 1 Max. perm. primary beam spacing (m) for secondary beam spacing (m) of					Table 2 Max. perm. prop spacing (m) for selected secondary beam spacing (m) of								
		0.500	0.625	0.667	0.750	1.00	1.25	1.50	1.75	2.00	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	—	—
20	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	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/m<sup>2</sup> and min. variable loads of 10%, min. 0.75 kN/m<sup>2</sup> but not to exceed 1.75 kN/m<sup>2</sup> (with 2.5 kN/m<sup>2</sup> 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.

