



NEW!
PU-bonded
Beam

Form-on smartBEAMplus 20N

-  exclusively available from specialized traders
-  durable due to PU-bonded end of the beam
-  secured high load capacity according to EN 13377

Form-on[®] based in the USA

Form-on smartBEAMplus 20N

Your advantages:

- durable due to an one-piece PU-bonded end of the beam
- PU-bonded beam end protects against moisture penetration and does not splinter
- exclusively available from specialized traders
- all beam flanges are proof-loaded



Technical specifications:

Web: height = 20 cm

Flange: height = 4.0 cm, width = 8.0 cm

Moment (M): 5 kNm

Shear force (Q): 11 kN

Regidity (E x J): 450 kNm²

Certification: EN 13377

Form-on smartBEAMplus 20N	PU	kg/lbs.	Art. no.
Form-on smartBEAMplus 20N 180 (5'10")	100	8.5/18.7	620122000
Form-on smartBEAMplus 20N 245 (8')	100	11.5/25.4	620123000
Form-on smartBEAMplus 20N 265 (8'3")	100	12.5/27.6	620124000
Form-on smartBEAMplus 20N 290 (9'6")	100	13.6/30.0	620125000
Form-on smartBEAMplus 20N 330 (10'9")	100	15.5/34.2	620126000
Form-on smartBEAMplus 20N 360 (11'9")	100	16.9/37.3	620127000
Form-on smartBEAMplus 20N 390 (12'9")	100	18.3/40.3	620128000
Form-on smartBEAMplus 20N 450 (14'9")	100	21.2/46.7	620129000
Form-on smartBEAMplus 20N 490 (16')	100	23.0/50.7	620130000
Form-on smartBEAMplus 20N 590 (19'4")	60	27.7/61.1	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 ≤ 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 thick-ness (cm)	Floor load * (kN/m ²)	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	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	—	—	—	—		

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.

