



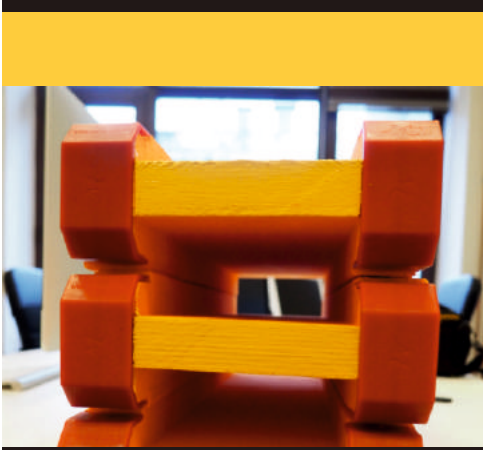
I-BEAMS

H-20



Monolit Company

CONSTRUCT SAFE



Beam

Wooden beam for formwork, consisting of a three-layer central section and an upper and lower wing. The union is designed as a notched and glued joint.

Webs

A web of a three-layer board with thickness of 27 mm or a web of a plywood with thickness of 24 or 27 mm.

Heads

Heads of the highest quality fir wood with levelled edges and finger type joints along their length.

Joint

Finger-type notched joint between core and wings, throughout their length. High-frequency, high-strength gluing.

Anti-humidity treatment

Beam is covered with anti-humidity paint.

Standard sizes

Lengths: from 1900 to 5900 mm
Width: 200 mm
Thickness: 80 mm

Packaging

50-piece package

Weight

Per linear meter: 4,7 kg.

Advantages

Durability and Safety

Dimensional stability and recovery capacity upon load application. High load capacity throughout beam length. Impact-proof, humidity-proof and splinter-proof.

Simplicity

Minimal weight, quick assembly and easy handling.

Economic benefit

Good quality-to-price ratio. Reusable and easily stored.

Use in building

Perfect for use with three-layer board and in any kind of formwork. Supports can be placed between beams at any point as well as the beam can be cut at any point.

Dimensions and tolerances

Dimensions ¹	Beam H-20	Tolerances
Beam height (mm)	200	(+/- 2 mm)
Head height (mm)	40	(-1,5 %)
Head width (mm)	80	(-1,5 %)
Web thickness (mm)	26,8	(+/- 0,5 mm)

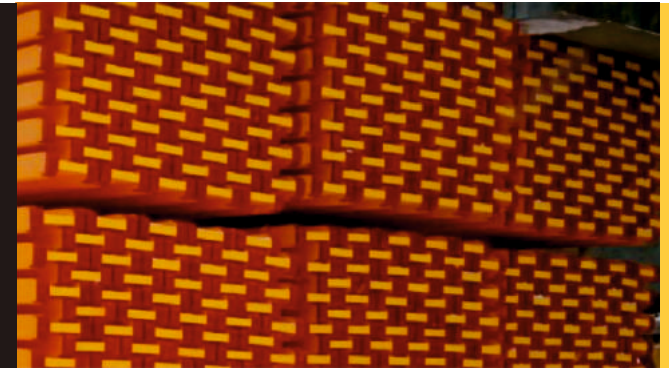
¹ these values apply at a wood moisture content of 12%

Permissible Bending Moment: M=5.0 kNm
Permissible Transversal Strength: Q=11.0 kN

Technical specifications

Beam H-20	
Permissible modulus (kNm)	5
Permissible shearing force Q (kN)	11
Section modulus ¹ Wx (cm ³)	461
Geometrical moment of inertia ¹ Jx (cm ⁴)	4613

¹the values of the section modulus and the geometrical moment of inertia apply to new or used concrete formwork beams. An analogously increased factor of safety needs to be added for severely worn beams.



Applications

Reticular formwork • Flat main beam • Walls • Civil Works

SLAB THICKNESS	TOTAL LOAD	CROSS BEAMS			MAIN BEAMS									
		distance between crossbeams (m)			selected distance between main beams (m)									
cm	KN/m ²	0,5	0,625	0,75	1	1,25	1,5	1,75	2	2,25	2,5	2,75	3	
		Max.permissible support distance = distance between main beams			Max.permissible support distance = distance between supports									
10	4,35	3,20	2,98	2,80	2,54	2,36	2,22	2,11	2,02	1,94	1,87	1,82	1,68	
12	4,87	3,09	2,87	2,70	2,45	2,27	2,14	2,03	1,94	1,87	1,80	1,64	1,50	
14	5,39	2,98	2,77	2,61	2,37	2,20	2,07	1,97	1,88	1,81	1,63	1,48	1,36	
16	5,91	2,89	2,69	2,53	2,30	2,13	2,01	1,91	1,82	1,65	1,48	1,35	1,24	
18	6,43	2,81	2,61	2,46	2,23	2,07	1,95	1,85	1,71	1,52	1,36	1,24	1,14	
20	6,95	2,74	2,55	2,39	2,18	2,02	1,90	1,81	1,58	1,40	1,26	1,15	1,05	
22	7,47	2,68	2,48	2,34	2,12	1,97	1,86	1,68	1,47	1,30	1,17	1,07	0,98	
24	7,99	2,62	2,43	2,29	2,08	1,93	1,81	1,57	1,37	1,22	1,10	1,00	0,91	
26	8,51	2,56	2,38	2,24	2,03	1,89	1,72	1,47	1,29	1,14	1,03	0,94	0,86	
28	9,03	2,51	2,33	2,19	1,99	1,85	1,62	1,39	1,21	1,08	0,97	0,88	0,81	
30	9,55	2,47	2,29	2,15	1,96	1,83	1,53	1,31	1,15	1,02	0,92	0,83	0,76	
32	10,07	2,42	2,25	2,12	1,92	1,74	1,45	1,24	1,09	0,97	0,87	0,79	0,72	
34	10,59	2,38	2,21	2,08	1,89	1,66	1,38	1,18	1,03	0,92	0,83	0,75	0,69	
36	11,11	2,34	2,18	2,05	1,86	1,58	1,31	1,13	0,99	0,88	0,79	0,72	0,66	
38	11,63	2,31	2,14	2,02	1,83	1,51	1,26	1,08	0,94	0,84	0,75	0,68	0,63	
40	12,15	2,28	2,11	1,99	1,81	1,44	1,20	1,03	0,90	0,80	0,72	0,65	0,60	
45	13,45	2,20	2,04	1,92	1,63	1,30	1,09	0,93	0,81	0,72	0,65	0,59	0,54	
50	14,75	2,13	1,98	1,86	1,49	1,19	0,99	0,85	0,74	0,66	0,59	0,54	0,49	
55	16,05	2,07	1,93	1,81	1,37	1,09	0,91	0,78	0,68	0,60	0,54	0,49	0,45	
60	17,35	2,02	1,88	1,77	1,26	1,01	0,84	0,72	0,63	0,56	0,50	0,46	0,42	

Max. deflection of the beam
Live load
Permissible strength of the supports

$L / 500$
1,5 kN/m² or 20% of the concrete weight
A = min. 22 kN

Technical specification, security workload
Permitted bending moment
Permitted shear force

Q = 11 kN
M = 5 kNm



The certificate of a participant of the System
"MOSSTROYSERT" No. RU.ACK.Л.001.

GOST 20850-2014 «Wooden glued load bearing
structures. General specifications»; GOST 26433.1-89,
«Rules of implementation of measurements. Elements
of shop fabrication».

Our contacts:



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