H20 FORMWORK BEAM

Description

H20 Beams are high-quality timber beams specifically designed for use in formwork systems to support concrete slabs during the curing process. They provide excellent strength and stability, ensuring the integrity of the construction.

Product specifications

Beam

Wooden beam for formwork, consisting of an upper and lower wing and featuring a central section consisting of 3-Ply pine board or phenolic plywood. The union is designed as a notched and glued joint.

Heads

Spruce wood of the highest quality, calibrated with levelled edges and with finger type joints along their length.

Web

Of a 3-ply pine board or phenolic plywood, with a thickness of 27 mm.

Joint

Notched, finger-type joint be-tween core and wings, throughout their length. High-frequency, high-strength gluing.

Advantages

High Strength: H20 Beams are made from high-quality timber, providing exceptional load-bearing capacity.

Durability: Treated to resist moisture and environmental stress, ensuring long-lasting performance.

Lightweight Design: Easy to handle and install, reducing labor costs and time on site.

Precision Manufacturing: Ensures consistent quality and performance across all beams.

Environmental Sustainability: Made from timber sourced from sustainably managed forests, minimizing environmental impact.

Versatility: Suitable for a wide range of construction applications, from formwork to scaffolding.

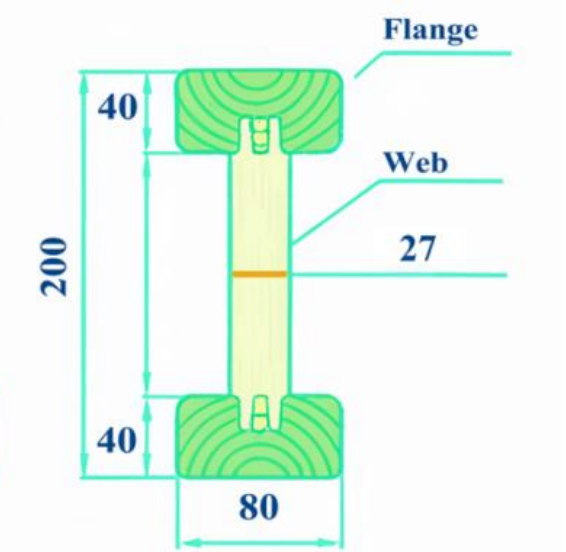
Cost-Effective: Combines high performance with ease of use, making these beams a cost-effective choice.

Safety: Enhances construction site safety by providing stable support structures.

Adaptability: Can be customized to meet specific project needs, ensuring flexibility in use.

Standard sizes

Hight (mm)	Width (mm)	Head Hight (mm)	Web Thickness (mm)	Length (mm)
200	80	40	27	1500 2000 2500 3000 3600 3900 4200 4500 4900 5900 6200



Technical Data

Shear Resistance (V)	42.96 kN
Bending Resistance (M)	22.34 kNm
Bearing Resistance (Rb)	80.32kN
Bending Stiffness (E_1)	460 kNm²

TEST REPORT

Test Method: With reference to EN 13377:2002 Annex A and Client's requirement

I. Sample Detail

Test Item	Sample nominal dimensions			
	Length of beam (L)	Flange width (b)	Depth of beam (H)	Depth of flange (h)
Shear Resistance (V)	1500mm	80mm	200mm	40mm
Bending Resistance (M)	3300mm	80mm	200mm	40mm
Bearing Resistance (R_b)	3000mm	80mm	200mm	40mm

II. Test Result

Test Item	Test Result	Failure Location
Shear Resistance (V)	42.96 kN	Close to the middle part
Bending Resistance (M)	22.34 kNm	Close to the middle part
Bearing Resistance (R_b)	80.32kN	Close to the support part
Bending Stiffness (E_I)	460 kNm^2	
Remark	Classification cannot be given based on single test result of each test item.	

TEST REPORT

III. Classification of panel web beams according to EN 13377:2002 Table 1 is cited below for reference:

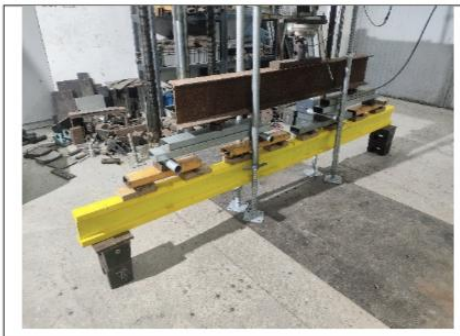
Table 1—Classification, dimensions and structural properties of panel web beams

1	2	3	4	5	6	7
Class	Beam depth H (mm)	Minimum flange width b (mm)	E_I (kNm^2)	V_k (kN)	$R_{b,k}$ (kN)	M_k (kNm)
P16	160	65	200	18.4	36.8	5.9
P20	200	80	450	23.9	47.8	10.9
P24	240	80	700	28.2	56.4	14.1

Test Photo(s):

Shear Resistance - In Test

The Failure Mode of Shear Resistance

	
Bending Resistance - In Test	The Failure Mode of Bending Resistance
	
Bearing Resistance - In Test	The Failure Mode of Bearing Resistance

TEST REPORT

Original Sample Photo(s):

Shear Resistance

Bending Resistance

Bearing Resistance/Bending Stiffness

Test project was carried out by other laboratory in SGS group.

The test report shall only be used for clients' scientific research, teaching, internal quality control, product research and development, etc... and just for internal reference.

********End of report********