The Formwork Experts.

Doka beam H20 top

Data Sheet

Timber formwork beam H20 top is a solid-web beam in accordance with EN 13377 with innovative polyurethane end reinforcement for increased resistance to mechanical stresses and strains.

Basic design concept

- Solid-web beam made of wood and wood-based materials to EN 13377.
- Wood for the flanges is spruce, automatically machine-graded, and 100 % of the beam flanges are tested by the tensile loading test method (proof-loading).
- Web
  - H20 P: special flat compressed particle board.
  - H20 N: three-ply sheet.
- Polyurethane end reinforcement
- 2 system holes at each beam end

Glue-bonding

Glues/adhesives used are tested and approved systems for load-bearing applications indoors and outdoors.

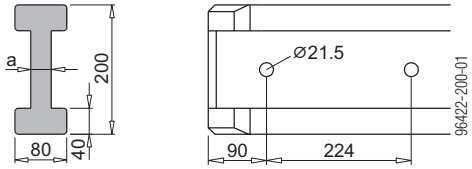
Surfaces

Yellow varnish without wood preservatives.

Technical data

Note:
All values in the tables are based on a wood moisture content of 12 ± 2% on delivery.
Changes in the wood's moisture content can have effects on the weight, dimensions and mechanical properties of the beam.
Doka beams H20 top are designed for loading in the direction of the height of the beam.

Dimensions:



Figures given in mm

Type of beam	Thickness of web a [mm]	Weight [kg/lin.m]
N[1)]	**23.3**	**4.4**
N[2)]	29.4	4.7
P	**22.0**	**5.3**

1) ... manufactured from 2023 onwards
2) ... manufactured until 2022

Lengths:

Length [m]	
1.80 - 5.90	with end reinforcement

For details, see article list

Tolerances:

	Tolerance
Height	± 1.0 mm
Length	+ 0 / - 3.0 mm

Mechanical properties (permissible values from EN 13377 Annex E):

Permitted shear force Q [kN]	11.0
Permitted moment M [kNm]	5.0
Flexural stiffness EI [kNm²]	450
Permitted span [m]	4.00

These values allow for a γ_F = 1.5, a k_{mod} of 0.9 and a γ_M = 1.3.
Under different conditions of use and/or with moisture content > 20%, the values have to be modified accordingly.

Use

For use in wall-formwork and slab-formwork systems, tunnel formwork, automatic climbing formwork, etc. Beam-flange markings in a 50 cm grid for Dokaflex and Dokaflex 30 tec systems.

The innovative polyurethane end reinforcement leads to a significant reduction in damage to the beam ends.

Note:
The beams can be labelled with the client's name if desired.

Notes on use

This formwork beam is intended for use in load-bearing towers and formwork.

- Prudent handling is important in order to achieve maximum service life, and this applies in particular when stripping out slabs.
- Protect stacked beams from extreme climatic influences such as exposure to sunshine or moisture by roofing them over or covering them with breathable tarpaulins. This reduces cracking, fungal attack and mould.
- Only cover them – never envelope them completely.

General information

The data stated here are guide values.

Note:
Follow the directions in the 'Timber formwork beams' User Information booklet!
You can download it here:

www.doka.com/timber-formwork-beams