

The Formwork Experts.

# Doka beam H20 eco

## Data Sheet



Timber formwork beam H20 eco is a solid-web beam in accordance with EN 13377 with proven end reinforcement in the form of bevelled beam ends and extra plastic rivet in the beam flange.

## 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
- End reinforcement in the form of bevelled ends with plastic rivet in the beam flange.
- 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.

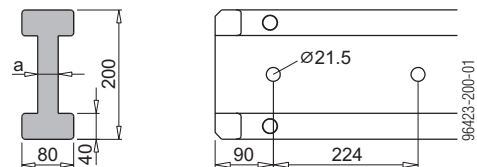
## Technical data

### Note:

All values in the tables are based on a wood moisture content of  $12 \pm 2\%$  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 eco 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 <sup>1)</sup>	23.3	4.4
N <sup>2)</sup>	29.4	4.7
P	22.0	5.3

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

### Lengths:

Length [m]	
< 1.80	trimmed off straight
1.80 - 9.00	with end reinforcement
> 9.00 - 12.00	trimmed off straight

For details, see article list.

### Tolerances:

	Tolerance
Height	$\pm 1.0$ mm
Length up to 6 m	+ 0 / - 2,0 mm
Length > 6 m	$\pm 3.0$ 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 [kNm <sup>2</sup> ]	450
Permitted span [m]	4.00

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

- Fire behaviour: D - s2, d0

## Use

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

**Note:**

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

## Notes on use

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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

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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](http://www.doka.com/timber-formwork-beams)