"Our future is based on natural materials."

***slo**panel*	***slo**beam* H20	***super**beam* H20
shuttering panel	formwork beam	formwork beam with protective cap

Gozdno Gospodarstvo Postojna

slopanel | **slobeam H20** | **superbeam H20**

shuttering panel | formwork beam | formwork beam with protective cap

The **Slopanel** shuttering panels and the **Slobeam H20** and **Superbeam H20** formwork beams rank among the most reputable products of the Slovenian company GGP, Gozdno gospodarstvo Postojna, d.o.o..

Excellent wood quality, care and precision in production making, durability and possibility of multiple use are only some of the qualities that make them prominent and place them side by side to the best products of this particular kind. In order to produce shuttering panels and formwork beams of such excellent quality, we only use wood of Slovenian forests. The products are made in production plants, located in Stari trg pri Ložu.

Our products can be used for paneling all constructions made of concrete, such as bridges, tunnels, walls and similar types of formwork in all construction projects.

All the business partners worldwide are offered comprehensive dispatch and logistic services, including receiving orders, managing all the necessary documentation and delivery. Our team of expert workers provides every customer with the most affordable and the most efficient service, striving to meet all the customer's desires and demands.

Our production plant

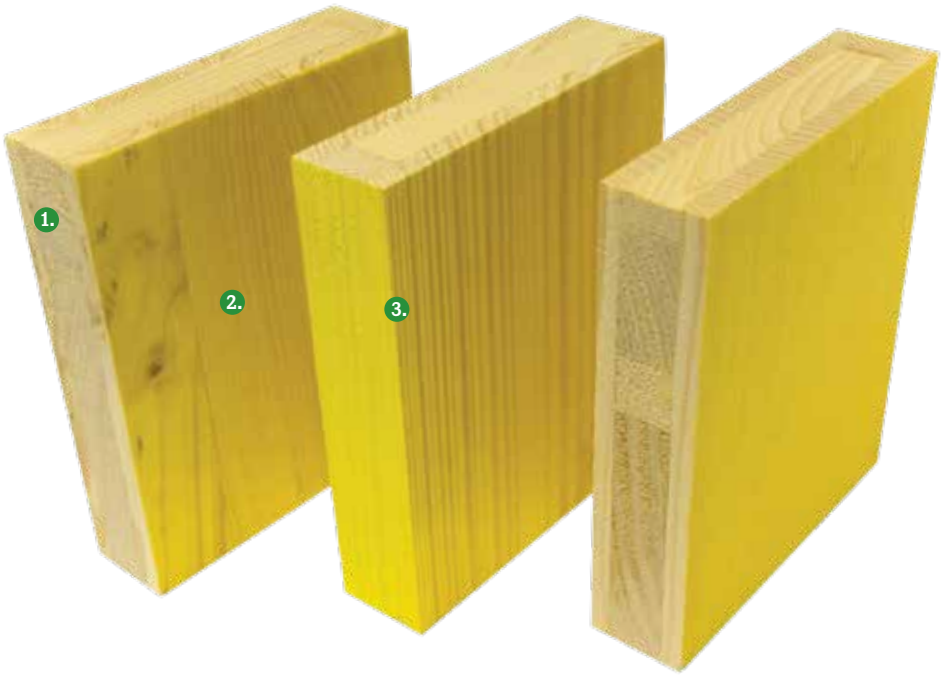
The quality of our products has been accepted by many customers worldwide.

ALGERIA
ALBANIA
AUSTRIA
AZERBAIJAN
BOSNIA AND HERZEGOVINA
BULGARIA
CROATIA
CYPRUS
EGYPT
FINLAND
FRANCE
GERMANY
GREECE
HUNGARY
INDIA
IRELAND
ISLAMIC REPUBLIC OF IRAN
ISRAEL
ITALY
KOSOVO
LIBYA
MALTA
MONTENEGRO
MOROCCO
POLAND
PORTUGAL
QATAR
REPUBLIC OF MACEDONIA
ROMANIA
SERBIA
SLOVAKIA
SLOVENIA
SPAIN
SWITZERLAND
TURKEY
UKRAINE
UNITED ARAB EMIRATES

slopanel

shuttering panel

Slopanel shuttering panels are high-quality, 3-ply wooden panels, made of spruce wood acquired from Slovenian forests. The panels are fully coated with a highly resistant melamine resin, giving them excellent protection. They are mostly used for paneling concrete constructions, but can also be used for other purposes due to their exceptional functionality. They are distinguished for their superior quality, durability and multiple use.



Qualities

1. The Slopanel shuttering panel is a high-quality 3-ply solid wood panel, made of spruce wood. It consists of the layers glued crosswise with perimeter frame in the middle layer.

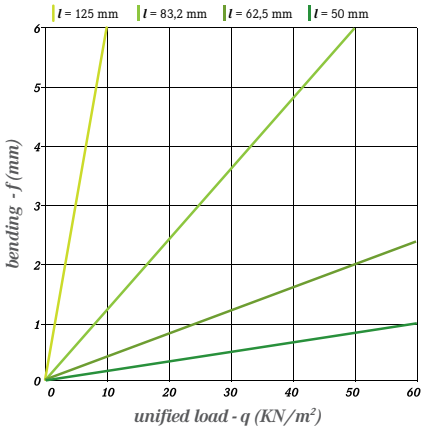
2. Its entire surface is protected and coated on both sides with highly resistant melamine resin, thus making it watertight and water-repelling, ensuring smooth surface of concrete constructions.

3. Edge band is also coated with a watertight cover, preventing moisture from penetrating into the middle, thus giving extra strength to the panel.

4. The important quality of our panel is its bending strength.

5. The quality of the panel fully complies with the DIN 68705 standard (this is approved by the test, made by the Slovenian National Building and Civil Engineering Institute) and is pursuant to the Austrian standard ÖN B 3023.

Bending strength*



The diagram shows how the panel reacts when loaded, considering the space intervals in between the supporting elements. Therefore q stands for uniform load (in KN/m² units), *l* stands for the space interval in between the supporting elements and f (bending) is stated in mm.

Technical specifications

PRODUCT	3-PLY SOLID WOOD PANEL, COATED WITH HIGHLY RESISTANT MELAMINE COATING
TYPES OF WOOD	SPRUCE
WOOD MOISTURE	12 % ± 2 %
THICKNESS	21, 27 mm
SURFACE QUALITY	HIGHLY RESISTANT MELAMINE COATING, EXTREMELY SMOOTH SURFACE
WEIGHT	21 mm ≅ 10 kg / m² 27 mm ≅ 12,3 kg / m²
PACKAGING	21 mm = 50 PIECES / PACKAGE 27 mm = 40 PIECES / PACKAGE ACCORDING TO CUSTOMER'S DESIRES IT IS POSSIBLE TO SECURE THE PRODUCT BY PLASTIC FOIL OR COVER AND REARRANGE PACKAGING UNITS.

Format specification

THICKNESS	27 mm	27 mm, OPTIONAL	21 mm, OPTIONAL
WIDTH	500 mm	200, 250, 300, 350, 400, 450 mm	500 mm
LENGTH	1000, 1500, 2000, 2500, 3000 mm	3000 mm	1000, 1500, 2000, 2500 , (3000) mm

*Optimal carrying capacity for thickness of 21 mm is achieved by support for every 300 mm, whereas for thickness of 27 mm, optimal capacity is achieved with support for every 500 mm.

slobeam H20

superbeam H20

formwork beam

formwork beam with protective cap

Slobeam H20 and **Superbeam H20** are formwork beams made of spruce wood, acquired from Slovenian forests and ensure high-quality paneling of concrete formwork constructions.

Our formwork beams are 20 cm high and are produced in various standard lengths. A special protective cap prevents the beam to be exposed to premature chipping on the chord ends. Furthermore, the wood chords of excellent quality are combined with triple laminated wood webs, thus ensuring sustainability of the product and exceptional durability.

Qualities

1. The **Superbeam H20** and **Slobeam H20** are made of spruce wood.

2. The chord is made of carefully selected wood of superior quality.

3. The web is made of 3-ply solid wood panel, ensuring high carrying capacity and durability in all climate zones.

4. The web and the chord are combined with a special finger joint, distinguished for its quality of inseparability.

5. A special shock-resistant, plastic protective cap at the beam's edges prevents mechanical injuries, and increases its durability*.

6. The formwork beam surface is covered with watertight coating, ensuring continuous use and long product life.

7. The length is printed on every formwork beam to ensure its simple use.

8. The quality of the formwork beam is certified by the HFB ENGINEERING GmbH, Germany and it is pursuant to SIST EN 13377 standard.

GGP
DIN EN 13377
P20
HFB


HFB ENGINEERING GMBH
CERTIFICATE OF CONFORMITY

*Superbeam H20 only

slobeam H20 **superbeam** H20

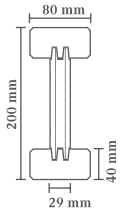
Technical specifications

formwork beam | formwork beam with protective cap

PRODUCT	WOODEN FORMWORK BEAM, GLUED
TYPES OF WOOD	SPRUCE
WOOD MOISTURE	12 % ± 2 %
WEIGHT	4,7 kg/m
GLUING	MELAMINE RESIN-BASED ADHESIVE, ADHESIVE TYPE I ACC. TO EN 301 APPROVED FOR GLUING LOAD-BEARING TIMBER COMPONENTS.
CHORD	MADE OF CAREFULLY SELECTED SPRUCE WOOD • FINGER-JOINTED, SOLID WOOD CROSS-SECTIONS WITH A DIMENSION OF 80 X 40 mm • FINGER-JOINTING OF THE CHORDS • WEB MILLING ON THE OPPOSING SIDE OF THE CORE (LEFT-SIDED CHORD SURFACE) • PLANED AND CHAMFERED TO APPROX. 0.4 mm
WEB	3-PLY SOLID WOOD PANEL, LAMINATED PRIMARILY SHOWING VERTICAL GROWTH RINGS.
DESIGN	CERTIFICATE OF HFB AND ZAG (SLOVENIAN NATIONAL BUILDING AND CIVIL ENGINEERING INSTITUTE), SIST EN 13377
SURFACE PROTECTION	THE COMPLETE BEAM IS WATERPROOFED USING A WATER-REPELLENT COLOR GLAZE.
SUPPORTS	THANKS TO THE 3-PLY SOLID WOOD WEBS, SLOBEAM H20 FORMWORK BEAMS CAN BE CUT INTO AND SUPPORTED AT ANY LENGTHS.

DIMENSIONS AND TOLERANCES

DIMENSION	VALUE[1]	TOLERANCE[2]
BEAM HEIGHT	200 mm	± 2 mm
CHORD HEIGHT	40 mm	± 0,6 mm
CHORD WIDTH	80 mm	+ 0,8 / - 1,2 mm
WEB THICKNESS	29 mm	± 0,87 mm



1) THESE VALUES APPLY AT A WOOD MOISTURE CONTENT OF 12 % ± 2%
2) ACCORDING TO STANDARD SIST EN 13377:2002

TECHNICAL SPECIFICATIONS OF THE PRODUCT

QUALITIES	DIN1052-1:1988-04	DIN1052:2008-12 / EUROCODE 5
STRAINS	PERMISSIBLE STRESS VALUES	CHARACTERISTIC LIMITS OF LOAD-BEARING CAPACITY
SHEARING FORCE	zul Q = 11,0 kN	V_K = 23,9 kN
BENDING MOMENT	zul M = 5,0 kNm	M_K = 10,9 kNm
SUPPORT	-	$R_{B,K}$ = 47,8 kN
SECTION MODULUS[1]	W_x = 461 cm³	
GEOMETRICAL MOMENT OF INERTIA[1]	I_x = 4.613 cm⁴	
ELASTICITY MODULUS	E = 10.000 N / mm²	
SHEARING MODULUS	G = 600 N / mm²	

1) THE 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.

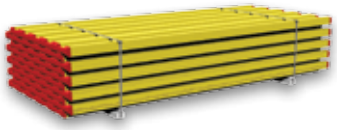
STANDARD LENGTHS

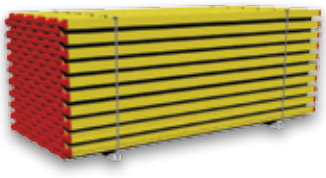
1,95 / 2,45 / 2,65 / 2,90 / 3,30 / 3,60 / 3,90 / 4,50 / 4,90 / 5,90 / MAX. 6 m LENGTH

PACKAGING

STANDARD PACKAGING: 50 PIECES PER PACKAGE.

CONTAINER PACKAGING: 100 PIECES PER PACKAGE.





THE PACKAGES ARE READY TO BE IMMEDIATELY USED AT THE CONSTRUCTION SITE.
THE PACKAGE IS PLACED ON SUPPORTING WOOD, PROTECTING THE FORMWORK BEAMS AND PROVIDES SIMPLE USE WITH FORKLIFT.

slopanel slobeam H20 superbeam H20 Span table

shuttering panel | formwork beam | formwork beam with protective cap

Table 1 Table 2

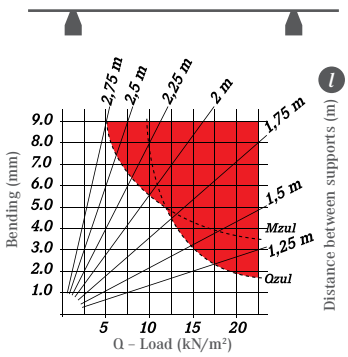
Floor thickness (cm)	Total load (kN/m²)	Max. permissible support width of the crossbeam (m) = distance between main beams (m) Distance between crossbeams (m) 0,50	0,625	0,667	0,75	Max. permissible support width = distance between supports (m) Selected distance between the main beams (m) 1,00	1,25	1,50	1,75	2,00	2,25	2,50	3,00	3,50
10	4,38	3,70	3,43	3,35	3,22	2,93	2,72	2,50	2,31	2,16	2,04	1,93	1,70	1,45
12	4,91	3,50	3,24	3,17	3,05	2,77	2,57	2,36	2,19	2,05	1,92	1,82	1,52	1,30
14	5,43	3,32	3,09	3,02	2,91	2,64	2,45	2,24	2,08	1,94	1,82	1,64	1,37	1,18
16	5,95	3,19	2,96	2,90	2,79	2,54	2,35	2,14	1,98	1,85	1,66	1,50	1,25	1,07
18	6,48	3,07	2,85	2,79	2,69	2,44	2,25	2,06	1,90	1,72	1,53	1,38	1,15	0,99
20	7,00	2,97	2,76	2,70	2,60	2,36	2,17	1,97	1,82	1,59	1,42	1,28	1,07	0,91
22	7,53	2,88	2,68	2,62	2,52	2,29	2,09	1,90	1,69	1,48	1,32	1,19	0,99	0,85
24	8,05	2,81	2,61	2,55	2,45	2,23	2,02	1,84	1,58	1,39	1,23	1,11	0,93	0,80
26	8,57	2,74	2,54	2,49	2,39	2,18	1,95	1,73	1,49	1,30	1,16	1,04	0,87	0,75
28	9,10	2,67	2,48	2,43	2,34	2,12	1,89	1,63	1,40	1,23	1,09	0,98	0,82	0,71
30	9,68	2,61	2,43	2,38	2,29	2,06	1,83	1,54	1,32	1,15	1,03	0,93	0,77	0,65
35	11,25	2,49	2,31	2,26	2,18	1,90	1,59	1,32	1,14	0,99	0,89	0,80	0,66	0,56
40	12,83	2,38	2,21	2,17	2,07	1,74	1,39	1,16	1,00	0,87	0,78	0,70	0,58	0,49
45	14,40	2,29	2,13	2,07	1,94	1,55	1,24	1,04	0,89	0,78	0,69	0,62	0,51	0,44
50	15,97	2,22	2,03	1,96	1,84	1,40	1,12	0,94	0,80	0,70	0,62	0,56	0,46	0,40
55	17,54	2,15	1,93	1,87	1,69	1,27	1,02	0,85	0,73	0,63	0,56	0,51	0,42	0,36
60	19,11	2,07	1,85	1,75	1,56	1,17	0,94	0,78	0,66	0,58	0,52	0,46	0,39	0,33
65	20,68	1,98	1,72	1,62	1,44	1,08	0,87	0,72	0,61	0,54	0,48	0,43	0,36	0,31
70	22,26	1,91	1,60	1,50	1,34	1,01	0,81	0,66	0,57	0,50	0,44	0,40	0,33	0,28
75	23,83	1,85	1,50	1,41	1,25	0,94	0,75	0,62	0,53	0,47	0,41	0,37	0,31	0,27
80	25,40	1,76	1,41	1,32	1,17	0,88	0,71	0,58	0,50	0,44	0,39	0,35	0,29	0,25
85	26,97	1,65	1,32	1,24	1,11	0,83	0,66	0,55	0,47	0,41	0,37	0,33	0,27	0,23
90	28,54	1,56	1,25	1,17	1,05	0,79	0,62	0,52	0,44	0,39	0,35	0,31	0,26	0,22
95	30,11	1,48	1,19	1,11	0,99	0,75	0,59	0,49	0,42	0,37	0,33	0,29	0,25	0,21
100	31,69	1,41	1,13	1,06	0,94	0,71	0,56	0,47	0,40	0,35	0,31	0,28	0,23	0,20

Example of calculation: Floor thickness: 20 cm, distance between crossbeams: 0,75 m; we are looking for the distance between the main beams and the supports.

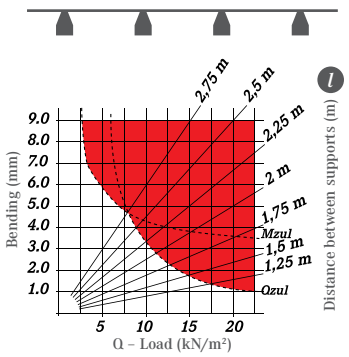
The permissible distance between main beams according to **table 1 = 2,60 m**. The identical or next smaller distance between main beams in **table 2 = 2,5 m**. Look for the permissible distance between supports in **table 2**, read downwards in column «2,50 m» and sideways in row «20 cm» floor thickness, the result is **1,28 m**. Caution! Examine the supports to ensure the corresponding carrying force.

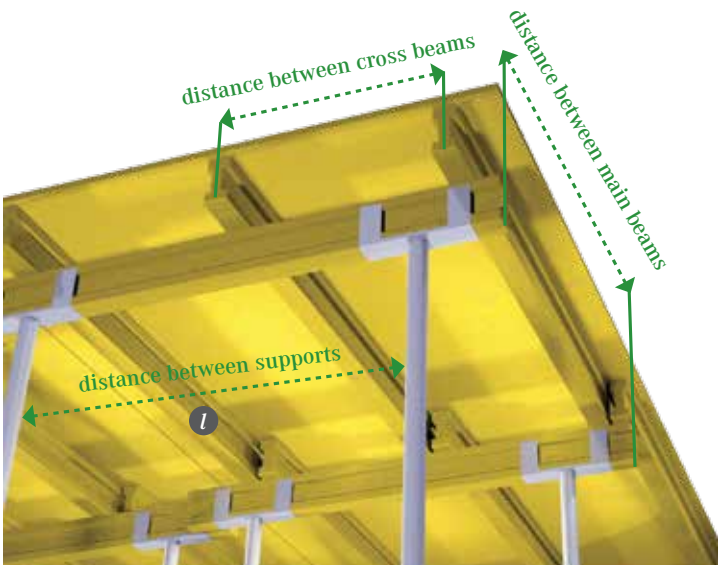
Bending, which takes place with formwork beams, loaded by particular force at different space intervals of support.

Single span beam



Multi span beam





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