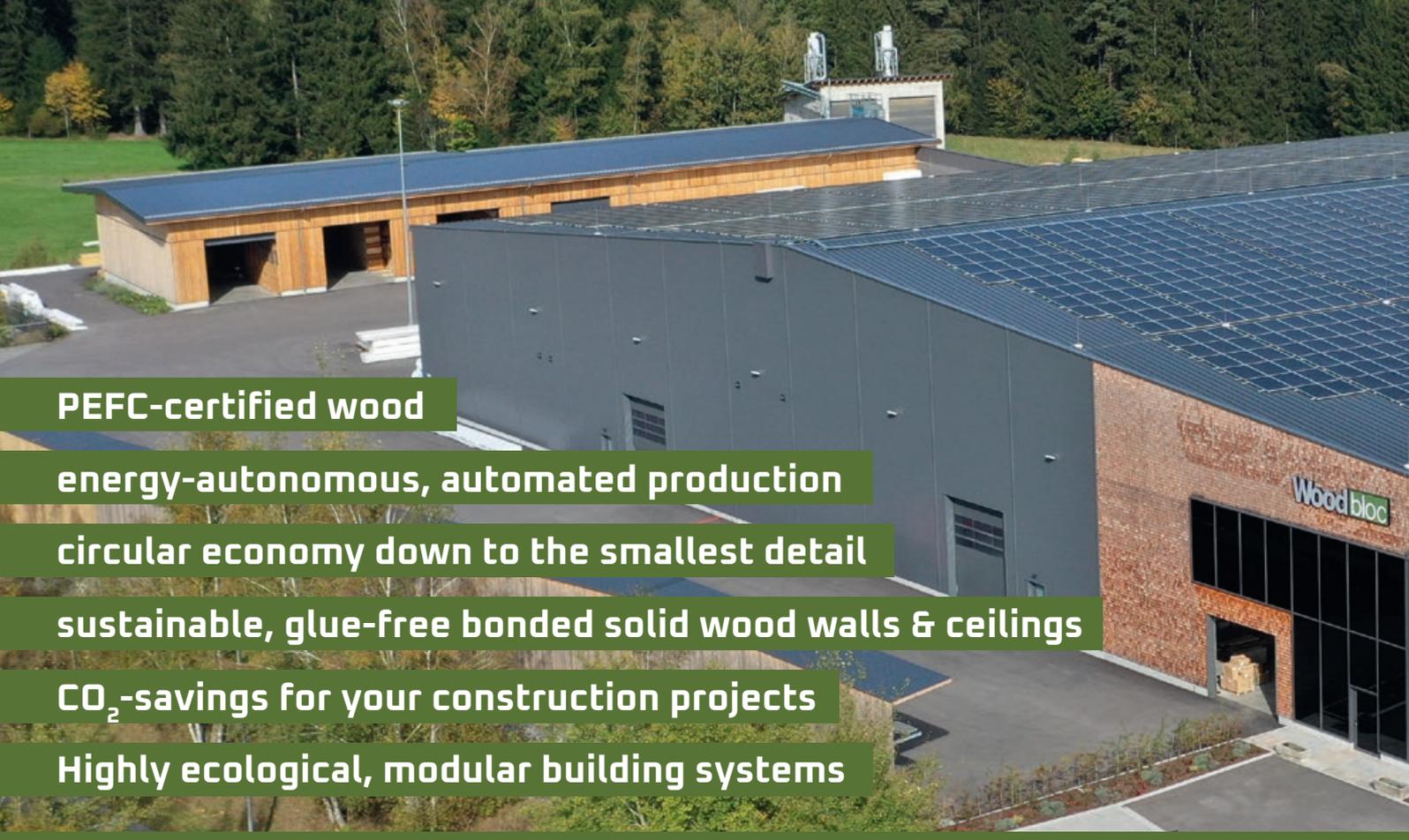


WOOD.
Extra-sustainably made.



Now scan the QR code & download
texts for your tender documents!

Woodbloc



PEFC-certified wood

energy-autonomous, automated production

circular economy down to the smallest detail

sustainable, glue-free bonded solid wood walls & ceilings

CO₂-savings for your construction projects

Highly ecological, modular building systems



SUSTAINABLE. BAVARIAN.

We are passionate about sustainable construction, the resource of wood, and our home - the Bavarian Forest, the largest contiguous forest area in Central Europe. We are Woodbloc from Regen, your strong partner from Lower Bavaria for innovative solid wood construction. Your walls and ceilings are manufactured in our new and one of the largest production halls in

the region, built using solid wood construction methods. On approximately 6,000 m² of space, we produce your walls and ceilings, sustainably and energy-efficiently - with experienced carpenters and state-of-the-art technology, such as modern wood drying chambers, a four-sided planer, a cutting center, and a high-performance panel processing portal.

WOOD.

Through and through.



**pure wood solid,
untreated spruce wood**

- Lignoloc beech wood nails
- beech wood dowels

**Natural. Regional.
Perfectly processed.**



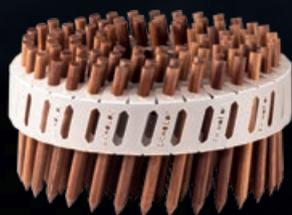
TO GET TO KNOW US:

Feel free to visit our showroom or production facilities.
We are happy to arrange a guided tour!

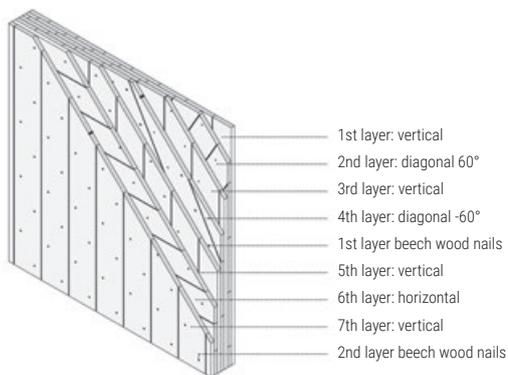


Approvals, certifications and test reports can be found at www.woodbloc.de

SOLID WOOD WALLS



Processing with LIGNOLOC
beech wood nails



WOODBLOC - THE NATURAL SOLID WOOD WALL

- cross-laminated solid wood wall with
- mit LIGNOLOC beech wood nails
- wall thickness: 9,0 cm (4 layers), 11,5 cm (5 layers),
16,0 cm (7 layers), 20,5 cm (9 layers); 25,0 cm (11 layers),
29,5 cm (13 layers) 34,0 cm (15 layers); 9,0 cm & 11,5 cm
walls are non-load-bearing walls without diagonal nailing
- wall dimensions: 0,75 m x 0,75 m bis 8,0 m x 4,0 m
- raw material: spruce wood C16
- application: Interior and exterior walls, visible and non-visible; for
visible surfaces, with selected board materials or the first layer as
panel material; other visible surface options include white fir, larch,
Swiss pine, or reclaimed woodh
- projects: residential houses, apartment buildings, multi-story
residential construction, commercial buildings, public buildings

PLANNING EXAMPLE WALL STRUCTURE (exterior wall):

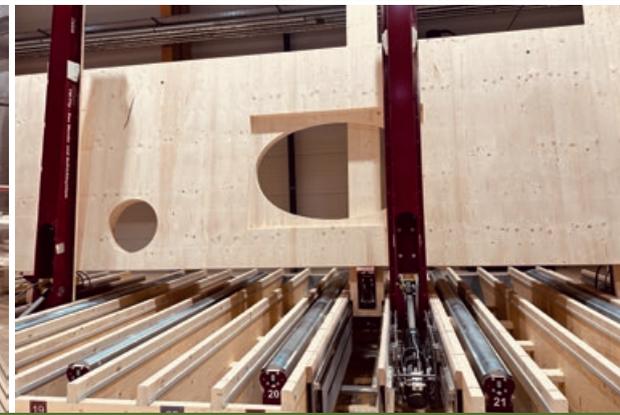
Woodbloc solid wood wall, 16 cm
+ softwood fiber insulation, 12 cm = GEG

Woodbloc solid wood wall, 16 cm
+ softwood fiber insulation, 18 cm
= Efficiency House 40

U-Values [W/(m²K)]	Wall thickness [cm]				
	Dämmung [cm]	160	205	250	295
10	0,252	0,231	0,212	0,197	0,183
12	0,225	0,208	0,193	0,18	0,168
14	0,203	0,189	0,177	0,166	0,156
16	0,185	0,173	0,163	0,153	0,145
18	0,170	0,16	0,151	0,143	0,136
20	0,158	0,149	0,141	0,134	0,127
22	0,147	0,139	0,132	0,126	0,12
24	0,137	0,13	0,124	0,119	0,114

GEG New Building Standard · 0,23 [W/(m²K)]

Efficiency House 40 · 0,176 [W/(m²K)]



KEY DATA SOLID WOOD WALL

wood moisture	12 - 15 %
thermal protection	thermal conductivity according to EN ISO 10456: $\lambda = 0,12 \text{ W/mK}$, specific heat capacity: $c = 1.600 \text{ J/kgK}$, U-values see separate table
air tightness	Creation of an airtightness concept required
usage class	1 (heated indoor spaces) + 2 (covered, open structures) according to EN 1995-1-1

FIRE PROTECTION

The Woodbloc solid wood walls have been tested for fire resistance durations of 30, 60, and 90 minutes. In combination with additional layers such as insulation materials and gypsum boards, wooden walls can be utilized up to Building Class V.

Fire behavior: D-s2, d0 (EN 13501)

Fire resistance of walls:

REI-30 with a wall thickness of 160 mm (load 90 kN/m)

REI-60 with a wall thickness of 160 mm (load 40 kN/m)

REI-90 with a wall thickness of 160 mm (load 40 kN/m)

SOUND INSULATION

DIN 4109 (Sound Insulation in Building Construction) differentiates between minimum requirements (Part 1) and higher requirements (Part 5). The „Informationsdienst Holz“ defines various sound insulation levels, with „Basic Level“ aligning largely with DIN 4109-1 (minimum requirements) and „Basic+“ aligning with DIN 4109-5 (higher requirements).

The required sound insulation level can be achieved through a layered construction of components. The targeted arrangement of hard and soft as well as heavy and light component layers enables components with excellent airborne and impact sound insulation. This is referred to as the spring-mass principle.

Woodbloc ceilings and walls have been measured with various constructions (values available on request).

SURFACE QUALITIES

Visible Quality Si

wood type	spruce (other types on request)
surface	smooth planed/tongue-and-groove boards with or without chamfer no visible nails
boards widths	18,5 cm

Non-Visible Quality Nsi

wood type	spruce/fir/pine/douglas fir
surface	milled
boards widths	18,5 cm

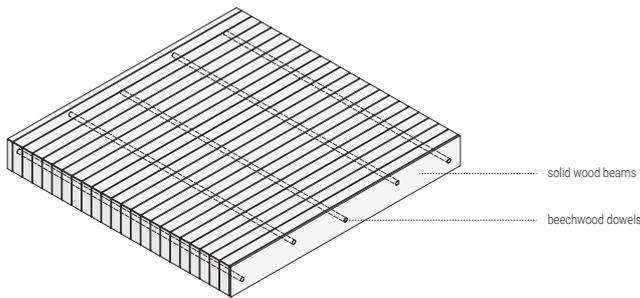


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CEILING



joined with
beechwood dowels



WOODBLOC - THE DURABLE DOWELLED WOOD CEILING

- solid wood plank ceiling connected with beech wood dowels
- ceiling thickness: 100 mm to 300 mm
- ceiling dimensions: 30 cm to 240 cm in wide & 1 m to 13 m in length
- raw material: spruce wood 40 mm or 60 mm wide C16
- application: Ceilings and walls (alternative to concrete ceilings or in combination with wood and concrete)
- projects: Residential houses, apartment buildings, multi-story residential construction, commercial buildings, public buildings
- ETA-25/0635



Now scan the QR code &
download texts for your
tender documents!

SURFACE QUALITIES

	Visible quality Si	Non-visible quality Nsi
wood type	spruce, fir (other types available on request)	spruce/fir/pine/douglas fir
lamella thickness	40 mm, 59 mm	varies / 59 mm



SPAN LENGTHS

permanent loads* [kN/m ²]	live load [kN/m ²]	maximum length of single-span beam [m]										
		2,50	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50
2,00	3,20	80	100	120	120	140	160	180	180	200	220	240
3,00	3,20	80	100	120	140	160	160	180	200	220	240	

permanent loads* [kN/m ²]	live load [kN/m ²]	maximum length of two-span beam [m]											
		2,50	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00
2,00	3,20	80	80	100	120	120	140	140	180	180	200	220	240
3,00	3,20	80	80	100	120	140	160	160	180	200	220	240	240

permanent loads* [kN/m ²]	live load [kN/m ²]	maximum length of HBV ceiling [m]							
		6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50
2,00	3,20	160//70	160//80	180//80	200//90	200//110	220//90	220//110	240//110
		230	240	260	290	310	310	333	350
3,00	3,20	160//70	180//80	200//80	200//100	220//90	220//110	240//110	260//110
		230	260	280	300	310	330	350	370

* The self-weight of the dowel wood ceiling is considered.
This table is for preliminary sizing only and does not replace a structural calculation.

Fire resistance: R60 R90

The following parameters and verifications were considered for the calculation: Use class 1 ■ Duration of load effect class KLED: medium
■ $k_{mod} = 0,8$; $k_{def} = 0,60$ ■ Glulam GL24c ■ Serviceability limit state; initial deflection $\leq l/300$; final deflection $\leq l/200$, total deflection $\leq l/300$ ■ Vibration verification: For DKL I ■ Fire resistance verification: 3-sided char rate (left, right, bottom)

KEY DATA FOR DOWEL WOOD CEILING

wood moisture	12 - 15 %
sound insulation	see separate component constructions; measurements with various constructions are carried out (measurements available upon request) · more detailed information, see page 5
fire protection	D-s2, d0 · burning rate (EN 1995-1-2): $\beta_0 = 0,65$ mm/min, $\beta_n = 0,7$ mm/min
usage class	1 (heated indoor spaces) + 2 (covered, open load-bearing structures) according to EN 1995-1-1

DOWELLED WOOD CEILINGS – profiles and structures (selection)

Solid wood ceiling, visible surface, Acoustics+, slats 60 mm



Description

- Woodbloc acoustic milling - DH60_HWF 30-40_ÖA23

Solid wood ceiling, visible surface, Acoustics+, 60 mm slats



Description

- Woodbloc acoustic milling - DH60_HWF 30-60_ÖA23

Solid wood ceiling, visible surface, Acoustic+, 40 mm slats



Description

- Woodbloc acoustic milling - DH40_HWF 20-40_ÖA20

Solid wood ceiling, visible surface, Chamfered, 40 mm slats



Description

- visible width 40 mm
- micro bevel

Solid wood ceiling, visible surface, Acoustic, 40 mm slats



Description

- visible width 40 mm
- with milled grooves

Solid wood ceiling, visible surface, Acoustic, 60 mm slats



Description

- visible width 60 mm
- with milled grooves

Solid wood ceiling, visible surface, bonded crushed stone fill



Flooring

- screed ($m \geq 120 \text{ kg/m}^2$)
- impact sound insulation board (Knauf TPT 01, $s' \leq 7 \text{ MN/m}^3$)
- gravel fill (bound with Köhnke K102, 60/100 mm)
- Woodbloc dowelled wood ceiling
- $R_w = 74 \text{ dB}$, $L_{n,w} = 46 \text{ dB}$ (with 60 grit fill)
- $R_w = 77 \text{ dB}$, $L_{n,w} = 41 \text{ dB}$ (with 100 grit fill)

Solid wood ceiling, bonded crushed stone fill, suspended ceiling with direct suspension system



Flooring

- screed ($m \geq 120 \text{ kg/m}^2$)
- impact sound insulation board (Knauf TPT 01, $s' \leq 7 \text{ MN/m}^3$)
- gravel fill (bound with Köhnke K102, 60 mm)
- Woodbloc dowelled wood ceiling
- direct suspension, with Knauf Mineral Plus HB 034 in between
- plasterboard fire protection board (Knauf Diamant, $m \geq 15.6 \text{ kg/m}^2$)
- $R_w = 82 \text{ dB}$, $L_{n,w} = 30 \text{ dB}$

Solid wood ceiling with visible surface, wood-concrete composite ceiling



Flooring

- screed ($m \geq 120 \text{ kg/m}^2$)
- impact sound insulation board (Knauf TPT 01, $s' \leq 7 \text{ MN/m}^3$)
- concrete topping ($m \geq 200 \text{ kg/m}^2$)
- Woodbloc dowelled wood ceiling
- $R_w = 72 \text{ dB}$, $L_{n,w} = 47 \text{ dB}$

ROOM MODULE

BATHROOM & ROOM MODULE

» Your room, ready to go as a module. «



Module dimensions: according to requirements or wishes, limited only by logistics.

Module example:
Width: 2,20 m | Height: 2,46 m | Depth: 2,00 m

Sustainable cube

Floors & ceilings

Woodbloc dowelled wood ceilings/stacked board elements for a natural atmosphere and the best component quality.

Walls

Woodbloc solid wood walls ensure high stability.

High-quality interior design

Electrical, heating & plumbing installation:

Well-designed, modern systems for comfort and energy efficiency.

Brand-name sanitary facilities:

Floor-level showers and high-quality fittings.

Individual upgrades & designs:

Tailor-made solutions, tailored to your needs.

Modern wall and floor coverings:

Easy-care surfaces, durable materials.

Special accents:

Ceilings with acoustic profiles, LED light strips on request.

Elegant appearance & high functionality:

Aesthetic design meets well-thought-out practicality.

Advantages

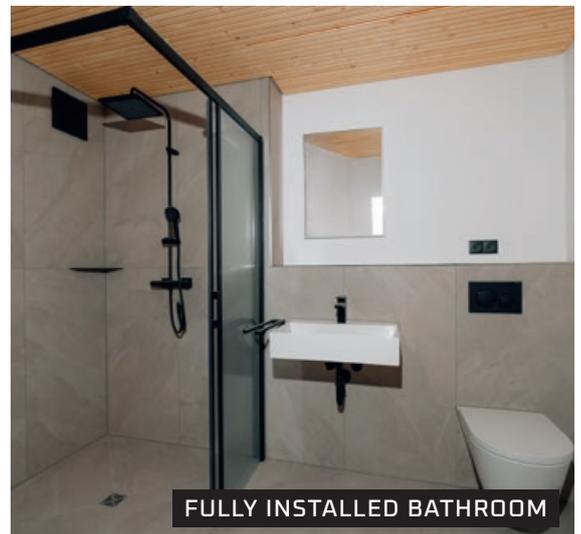
- Completely finished bathroom & room modules, including all milling and recesses.
- No storage times thanks to 'just-in-time' delivery.
- Easier work for employees on the construction site – less lifting, carrying and processing.
- Up to 1.5 months shorter construction time compared to conventional bathroom construction in multi-storey residential buildings.
- Module assembly approx. 1,5 hours (conventional bathroom installation approx. 5 days).
- Less/no time required for interior work/follow-up work.



PERFECTLY PACKAGED



FAST INSTALLATION



FULLY INSTALLED BATHROOM

SAMPLE PROJECTS



GutsAlm Harlachberg, Bodenmais – Tourism

View meets architecture – and natural construction Nature

- 4 chalets in a mountain location
- built using sustainable solid wood construction methods
- Woodbloc solid wood walls
- traditional wooden cladding for the façade, combined with anthracite-coloured accents
- details such as exclusive bathrooms with a wellness character or spacious living rooms
- special offer for holiday guests in the Bavarian Forest



Landshuter Haus, Oberbreitenau – Tourism/Gastronomy

Solid wood power for the summit construction site at 1,018 metres

- renovation/conversion of hiking lodge
- approximately 900 m² of usable space on several floors
- tenant's flat, catering area, accommodation
- Woodbloc solid wood walls & ceilings
- popular meeting place for holidaymakers and locals in the Bavarian Forest





Langlebenhof II, Passau – Residential construction

Sustainable building materials for a sustainable living concept

- residential home for people with disabilities
- 10 places
- 920 m² usable floor space
- Woodbloc solid wood walls & ceilings
- one of the largest projects to date with walls in visible quality/ partially visible on both sides
- currently under construction
- planned completion only approx. 1 year after start of construction



Multi-family house , Bischofsmais – Residential building/apartment construction

Indoor climate, sound insulation and a feel-good atmosphere – wood makes it possible

- 340 m² living space
- 3 apartments
- Woodbloc solid wood walls & ceilings
- KfW 40
- high-quality sound insulation & ceilings with attractive visible surfaces
- only approx. 8 months construction time from excavation to moving in



Goldsteig Quartier, Plattling – Multi-storey residential construction/ neighbourhood development

Sustainability and speed – the perfect combination for large-scale projects

- 7 apartment buildings
- 72 owner-occupied flats
- entire neighbourhood constructed using timber
- Woodbloc solid wood walls & ceilings
- KfW QNG
- only approx. 2 years of construction time from excavation to move-in
- living space for all generations



Detached houses Gießhübl, Gotteszell – residential/apartment construction

Pure nature, indoors and outdoors – living with Woodbloc

- 5 detached houses
- 4 rooms each
- 132 m² living space
- Woodbloc solid wood walls & ceilings
- Woodbloc stairs
- KfW QNG



YOUR CONTACT PERSONS:

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Feel free to contact us!

The extra power in solid timber construction.

NATURAL WOOD

FOR YOUR CLIENTS:

- boards made of 100% solid, untreated wood
- pure nature: no foils in the wooden wall, glue-free connection, no metallic connections
- diffusion-open construction: walls & ceilings that breathe
- pleasant indoor climate (ideal for allergy sufferers)
- excellent natural thermal insulation
- natural balancing of humidity & temperature
- healthy & ecological living environment
- high fire and sound protection
- sustainable, glue-free connected solid wood walls & ceilings
- fully finished wall and ceiling elements, including pre-milled installation layers

LOCAL WOOD

FOR ENVIRONMENT & ECONOMY:

- construction with renewable resources
- spruce wood from our own forest and from local forestry within a 30 km radius
- utilization of storm-damaged or beetle wood
- processed at sawmills within a 20 km radius
- dried directly on the Woodbloc company premises
- short transport routes & processing by local wood experts
- significantly improved CO₂ balance & energy-autonomous production
- climate-friendly construction with solid wood
- cost-effective & energy-efficient building
- high planning reliability & adherence to schedules

PERFECTLY PROCESSED WOOD

FOR YOUR PROJECTS:

- multiple layers of wood for exceptional stability & strength
- biologically valuable and durable building material
- wood that does not „sweat“
- 100% dismantlable & recyclable
- simple, clean installation
- high flexibility for diverse projects
- more independence from weather conditions
- industrial prefabrication with consistent quality
- shorter construction times & sustainable solid wood construction

