Declaration of Performance

No.: DOP_KLH_K_2026_v01_en

1	Unique identification code of the product-type:	KLH® - CLT
2	Intended use:	Solid wood slab elements to be used as load-bearing or non-load-bearing structural elements in buildings.
3	Name, registered trade name or trademark and contact address of the manufacturer:	KLH Massivholz GmbH 8842 Teufenbach-Katsch, Gewerbestraße 4 Austria
4	Authorised representative:	KLH Massivholz GmbH 8842 Teufenbach-Katsch, Gewerbestraße 4 Austria
5	System of assessment and verification of constancy of performance:	System 1
6	European Assessment Document:	EAD 130005-00-0304
	European Technical Assessment:	ETA-06/0138 issued on 18.01.2021
	Technical Assessment Body:	Austrian Institute of Construction Engineering (OIB)
	Notified body:	Holzforschung Austria No. 1359

7 Declared performances:

Essential characteristic	**Performance of the construction product**	
Wood species	European spruce (PCAB) or equivalent softwood (ABAL - fir, PNSY - pine)	
Product dimensions		
Widths to	2 980	mm
Lengths to	16 500	mm
Thicknesses from	60 to 360	mm
The actual product dimensions can be obtained from the accompanying documents		
1. Mechanical resistance and stability		
Plate actions		
Modulus of elasticity		
parallel to the grain of the boards $E_{0,mean}$	12 000	MPa
normal to the grain of the boards $E_{90,mean}$	450	MPa
Shear modulus		
parallel to the grain of the boards $G_{0,mean}$	690	MPa
normal to the grain of the boards, rolling shear modulus $G_{90,mean}$	50	MPa
Bending strength		
parallel to the grain of the boards $f_{m,k}$	24	MPa

Tensile strength		
normal to the grain of the boards $f_{t,90,k}$	0.12	MPa
Compressive strength		
normal to the grain of the boards $f_{c,90,k}$	2.7	MPa
Shear strength		
parallel to the grain of the boards $f_{v,k}$	2.7	MPa
normal to the grain of the boards (rolling shear strength) $f_{v,R,k}$	1.2	MPa
Membrane actions		
Modulus of elasticity		
parallel to the grain of the boards $E_{0,mean}$	12 000	MPa
Shear modulus		
parallel to the grain of the boards $G_{0,mean}$	500	MPa
Bending strength		
parallel to the grain of the boards $f_{m,k}$	24	MPa
Tensile strength		
parallel to the grain of the boards $f_{t,0,k}$	16.5	MPa
Compressive strength		
global, parallel to the grain of the boards $f_{c,0,k}$	24	MPa
Shear strength		
regardless of loading direction, per glue line $f_{v,K,k}$ shear flow	90	N/mm
parallel to the grain of the boards $f_{v,k}$ shear stress	3.9 to 8.4	MPa

Other mechanical actions	
Embedment strength	According to EN 1995-1-1
Creep and duration of the load	Modification factors k_{mod} and deformation factors k_{def} according to EN 1995-1-1
Dimensional stability as tolerances based on EN 336 for thickness and width	For elements with side lengths > 1 m: ± 2 mm, related to standard cutting and wood moisture content of 12 %
Dimensional stability as wood moisture content after production	u = 12 ± 2 %
Coefficient of thermal expansion according to EN 1995-1-1	$\alpha = 5 \times 10^{-6}$/K
Service classes according to EN 1995-1-1	1 and 2
Bond integrity according to EAD 130005-00-0304	Passed
Surface bonding and finger jointing	Comply with EN 15425
Glue line integrity as delamination test according to EN 14080, Annex C, Method B	Delamination requirements fulfilled

2. Safety in case of fire	
Reaction to fire	D-s2, d0
Resistance to fire	Fire resistance duration from REI 30 to REI 240 depending on the panel build-up and/or possible fire protection claddings

Bonding with standard PUR adhesive	Bond line integrity not tested Parameters for fire design according to Annex 5, Table 6 of ETA-06/0138
Bonding with heat-resistant PUR adhesive	Bond line integrity remains intact Tested adhesive: Loctite HB XE or equivalent Tested according to FprEN 1995-1-2:2026, Annex B.3 Parameters for fire design according to FprEN 1995-1-2:2026, Figure 5.1: Basic design charring rate: β_o = 0.65 mm/min Gap factor: k_g = 1.0

3. Hygiene, health and the environment	
Content, emission and/or release of hazardous substances as formaldehyde emission	Formaldehyde emission class E1 according to EN 14080, formaldehyde-free adhesive
Other hazardous substances	NPD
Water vapour diffusion resistance as water vapour diffusion resistance factor μ of the surface, including joints, according to EN ISO 12572	μ = 300 (dry) to 46 (wet)

4. Safety and accessibility in use	
Impact resistance with a soft body according to EAD 130005-00-0304	Fulfilled

5. Protection against noise	
Airborne sound insulation according to EN 10140-2	ETA-06/0138, Annex 6
Impact sound insulation according to EN 10140-3	ETA-06/0138, Annex 6

6. Energy efficiency and thermal insulation	
Thermal conductivity according to EN ISO 10456	λ = 0.12 W/(m K)
Air permeability according to EN 12114	Class 4 (tight) according to EN 12207
Thermal inertia as specific heat capacity c_p according to EN ISO 10456	c_p = 1 600 J/(k_g K)

The performance of the product identified above is in conformity with the declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

KLH MASSIVHOLZ GMBH
8842 Teufenbach-Katsch | Gewerbestraße 4
Tel +43 (0)3588 8835 | Fax +43 (0)3588 8835 415
office@klh.at | www.klh.at

Mag. Marco Huter, Managing Director

Ing. Johann Hochegger MSc, Managing Director

Teufenbach-Katsch, 14.10.2026

Declaration of Performance

No.: DOP_KLH_W_2026_v01_en

1	Unique identification code of the product-type:	KLH® - CLT
2	Intended use:	Solid wood slab elements to be used as load-bearing or non-load-bearing structural elements in buildings.
3	Name, registered trade name or trademark and contact address of the manufacturer:	KLH Massivholz GmbH 8842 Teufenbach-Katsch, Gewerbestraße 4 Austria
4	Authorised representative:	KLH Massivholz Wiesenau GmbH 9462 Bad St. Leonhard, Wiesenau 2 Austria
5	System of assessment and verification of constancy of performance:	System 1
6	European Assessment Document:	EAD 130005-00-0304
	European Technical Assessment:	ETA-06/0138 issued on 18.01.2021
	Technical Assessment Body:	Austrian Institute of Construction Engineering (OIB)
	Notified body:	Holzforschung Austria No. 1359

7 Declared performances:

Essential characteristic	**Performance of the construction product**	
Wood species	European spruce (PCAB) or equivalent softwood (ABAL - fir, PNSY - pine)	
Product dimensions		
Widths to	3 500	mm
Lengths to	16 500	mm
Thicknesses from	60 to 360	mm
The actual product dimensions can be obtained from the accompanying documents		
1. Mechanical resistance and stability		
Plate actions		
Modulus of elasticity		
parallel to the grain of the boards $E_{0,mean}$	12 000	MPa
normal to the grain of the boards $E_{90,mean}$	450	MPa
Shear modulus		
parallel to the grain of the boards $G_{0,mean}$	690	MPa
normal to the grain of the boards, rolling shear modulus $G_{90,mean}$	50	MPa
Bending strength		
parallel to the grain of the boards $f_{m,k}$	24	MPa

Tensile strength		
normal to the grain of the boards $f_{t,90,k}$	0.12	MPa
Compressive strength		
normal to the grain of the boards $f_{c,90,k}$	2.7	MPa
Shear strength		
parallel to the grain of the boards $f_{v,k}$	2.7	MPa
normal to the grain of the boards (rolling shear strength) $f_{v,R,k}$	1.2	MPa
Membrane actions		
Modulus of elasticity		
parallel to the grain of the boards $E_{0,mean}$	12 000	MPa
Shear modulus		
parallel to the grain of the boards $G_{0,mean}$	500	MPa
Bending strength		
parallel to the grain of the boards $f_{m,k}$	24	MPa
Tensile strength		
parallel to the grain of the boards $f_{t,0,k}$	16.5	MPa
Compressive strength		
global, parallel to the grain of the boards $f_{c,0,k}$	24	MPa
Shear strength		
regardless of loading direction, per glue line $f_{v,K,k}$ shear flow	90	N/mm
parallel to the grain of the boards $f_{v,k}$ shear stress	3.9 to 8.4	MPa

Other mechanical actions	
Embedment strength	According to EN 1995-1-1
Creep and duration of the load	Modification factors k_{mod} and deformation factors k_{def} according to EN 1995-1-1
Dimensional stability as tolerances based on EN 336 for thickness and width	For elements with side lengths > 1 m: ± 2 mm, related to standard cutting and wood moisture content of 12 %
Dimensional stability as wood moisture content after production	u = 12 ± 2 %
Coefficient of thermal expansion according to EN 1995-1-1	$\alpha = 5 \times 10^{-6}$/K
Service classes according to EN 1995-1-1	1 and 2
Bond integrity according to EAD 130005-00-0304	Passed
Surface bonding and finger jointing	Comply with EN 15425
Glue line integrity as delamination test according to EN 14080, Annex C, Method B	Delamination requirements fulfilled

2. Safety in case of fire	
Reaction to fire	D-s2, d0
Resistance to fire	Fire resistance duration from REI 30 to REI 240 depending on the panel build-up and/or possible fire protection claddings

Bonding with standard PUR adhesive	Bond line integrity not tested Parameters for fire design according to Annex 5, Table 6 of ETA-06/0138
Bonding with heat-resistant PUR adhesive	Bond line integrity remains intact Tested adhesive: Loctite HB XE or equivalent Tested according to FprEN 1995-1-2:2026, Annex B.3 Parameters for fire design according to FprEN 1995-1-2:2026, Figure 5.1: Basic design charring rate: β_o = 0.65 mm/min Gap factor: k_g = 1.0

3. Hygiene, health and the environment	
Content, emission and/or release of hazardous substances as formaldehyde emission	Formaldehyde emission class E1 according to EN 14080, formaldehyde-free adhesive
Other hazardous substances	NPD
Water vapour diffusion resistance as water vapour diffusion resistance factor μ of the surface, including joints, according to EN ISO 12572	μ = 300 (dry) to 46 (wet)

4. Safety and accessibility in use	
Impact resistance with a soft body according to EAD 130005-00-0304	Fulfilled

5. Protection against noise	
Airborne sound insulation according to EN 10140-2	ETA-06/0138, Annex 6
Impact sound insulation according to EN 10140-3	ETA-06/0138, Annex 6

6. Energy efficiency and thermal insulation	
Thermal conductivity according to EN ISO 10456	λ = 0.12 W/(m K)
Air permeability according to EN 12114	Class 4 (tight) according to EN 12207
Thermal inertia as specific heat capacity c_p according to EN ISO 10456	c_p = 1 600 J/(k_g K)

The performance of the product identified above is in conformity with the declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

KLH MASSIVHOLZ GMBH
8842 Teufenbach-Katsch | Gewerbestraße 4
Tel +43 (0)3588 8835 | Fax +43 (0)3588 8835 415
office@klh.at | www.klh.at

Mag. Marco Huter, Managing Director

Ing. Johann Hochegger MSc, Managing Director

Bad St. Leonhard, 14.10.2026