

# Declaration of performance

DOP CLT 20\_0023  
In acc. with (EU) no. 305/2011

1. Unique identification code of the product type: Pfeifer CLT Glue-Laminated Timber

2. Envisaged purpose of use: load-bearing and non-load-bearing element in buildings and timber constructions

3. Manufacturer:  
Pfeifer Timber GmbH  
Mühlenstraße 7  
86556 Unterbernbach  
Germany

4. Authorised representative: no extern authorised representative

5. System for the evaluation and verification of the constancy of performance:  
System 1

6. b) European Assessment: EAD 130005-00-0304, version march 2015

European Technical Assessment ETA-20/0023 of 04.08.2023

Technical Assessment Body Österreichisches Institut für Bautechnik, Schneckenstraße 4,  
1010 Wien – AT

Identification number of the notified body: Holzcert Austria 1359

Certificate of conformity no.: 1359-CPR-0800

7. Declared product performance:

Number of layers 3 – 15, symmetric assembly

Dimension Thickness 57 – 320mm, width  $\leq 3,1m$ , length  $\leq 14,5m$

Wood species spruce - PCAB or equivalent softwood

Adhesive PUR, EN 15425-1-70-PG-0,3-w

Maximum number of adjacent layers arranged in the same direction 2 for  $n = 5$ ; 3 for  $n > 5$

Maximum width of joints between boards within one layer  $\leq 5mm$ , mean value 2mm

Moisture of wood according to EN 13183-2 6 – 15% <sup>1)</sup>

Finger joints EN 14080

strength class Cover layer C24, Inner layer  $\leq 10\%$  C16  $\geq 90\%$  C24

Board width 72 – 300mm

Ratio width to thickness  $\geq 4:1$

Board Thickness (planned dimension) 18 – 45mm

<sup>1)</sup> See ETA document



8. Declared performance:

Essential characteristics	Level / Class / Description	Assessment method
<b>Mechanical resistance and stability as strength class C24:</b>		
<b>1. Mechanical actions perpendicular to cross laminated timber</b>		
Modulus of elasticity		
- parallel to the grain of the boards $E0, mean$	11000 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
- perpendicular to the grain of the boards $E90, mean$	370 N/mm <sup>2</sup>	EN 338
Shear modulus		
- parallel to the grain of the boards $G090, mean$	690 N/mm <sup>2</sup>	EN 338
- perpendicular to the grain of the boards (rolling shear modulus) $G9090, mean$	50 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
Bending strength		
- parallel to the grain of the boards $f_{m, k}$	24 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
Tensile strength		
- perpendicular to the grain of the boards $f_{t, 90, k}$	0,12 N/mm <sup>2</sup>	EN 338, reduced
Compressive strength		
- perpendicular to the grain of the boards $f_{c, 90, k}$	2,5 N/mm <sup>2</sup>	EN 338
Shear strength		
- parallel to the grain of the boards $f_{v, 090, k}$	3,7 N/mm <sup>2</sup>	EN 338
- perpendicular to the grain of the boards (rolling shear strength) $f_{v, 9090, k}$	1,3 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
<b>2. Mechanical actions in plane of cross laminated timber</b>		
Modulus of elasticity		
- parallel to the grain of the boards $E0, mean$	11000 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
Sear modulus		
- parallel to the grain of the boards $G090, mean$	450 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
Bending strength		
- parallel to the grain of the boards $f_{m, k}$	24 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
Tensile strength		
- parallel to the grain of the boards $f_{t, 0, k}$	14,5 N/mm <sup>2</sup>	EN 338
Compressive strength		
- parallel to the grain of the boards $f_{c, 0, k}$	21 N/mm <sup>2</sup>	EN 338
Shear strength		

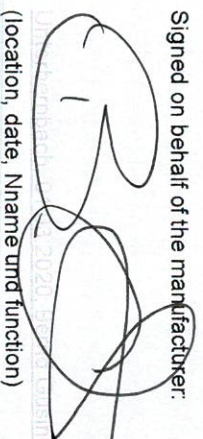


- parallel to the grain of the boards $f_v$ , 090, K	3,5 N/mm <sup>2</sup>	EAD 130005-00-0304, 2.2.1.1
<b>3. Other mechanical actions</b>		
Fasteners	EN 1995-1-1, the direction of grain of the cover layer shall be taken as reference	
Creep and duration of load	$k_{mod}$ and $k_{def}$ according to EN 1995-1-1 for glued laminated timber	
Dimensional stability	Moisture content during service shall not change to such an extent that adverse deformation will occur.	
Bond integrity	Pass	EAD 130005-00-0304
<b>4. Reaction to fire</b>		
Glued laminated timber products	Mean density of wood $\geq 380$ kg/m <sup>3</sup> Euroclass D-s2, d0	Commission Decision 2005/610/EC
Fire resistance	Charring Rate	EAD 130005-00-0304
<b>5. Hygiene, health and environment</b>		
Vapour permeability, $\mu$ , including joints within the layers	50 (dry) to 20 (wet)	EN ISO 10456
Release of hazardous substances	No release of hazardous substances	EAD 130005-00-0304
<b>6. Safety and accessibility in use</b>		
Impact resistance	Soft body resistance is assumed to be fulfilled for walls with a minimum of 3 layers and minimum thickness of 60 mm.	
<b>7. Energy economy and heat retention</b>		
Thermal conductivity $\lambda$ , of wood $\lambda$	0,12 W/(m*K)	EN ISO 10456
Air permeability	Class 4 according to EN 12207	EN12114
Thermal inertia, specific heat capacity $c_p$ of wood	1600 J/(kg*K)	EN ISO 10456
<b>8. Sound protection</b>		
Airborne sound insulation	NPD <sup>1</sup>	
Footfall sound insulation	NPD <sup>1</sup>	
Sound absorption	NPD <sup>1</sup>	

<sup>1</sup> NPD= No Performance Determined

The product performance in accordance with the declared performance. The manufacturer is solely responsible for the drafting of this declaration of performance in accordance with (EU) no. 305/2011

Signed on behalf of the manufacturer:



 **PFEIFER**  
Pfeifer Timber GmbH  
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(location, date, Nname und function)