



Jednostka Notyfikowana Nr 2310
„CERTBUD” Sp. z o.o.
ul. Mokotowska 46 lok. 8, 00-543 Warszawa



AC 158

Certificate of conformity of the factory production control

2310-CPR- Z747

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

Strength graded structural timber with rectangular cross section

Product parameters (performance of the product and classes) are described in the appendix hereto.
Strength graded structural timber (PNSY, PCAB, LADC, ABAL) with rectangular cross section, intended for load-bearing wooden structures of buildings and bridge structures.

placed on the market under the name or trade mark of:

FORENDA Sp. Jawna
34-452 Ochotnica Dolna, os. Hologówka 193A

and produced in the manufacturing plant:

FORENDA Sp. Jawna
34-452 Ochotnica Dolna, os. Hologówka 193A

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard:

EN 14081-1:2005+A1:2011

under system 2+ are applied and that

the factory production control is assessed to be in conformity with the applicable requirements

This certificate was first issued on 29.08.2014 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

This certificate replaces the certificate issued on 05.11.2020

Warsaw, 15 November 2022



Director
„CERTBUD” Sp. z o.o.

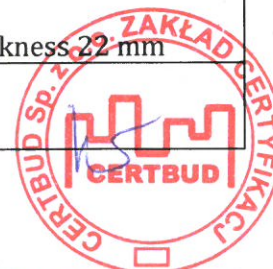
K. Pawłowski
Kamil PAWŁOWSKI

Annex to
Certificate of conformity of the factory production control
2310-CPR- Z747

Performance characteristics:

Pinus sylvestris – Scots pine				
		C20	C24	C35
Strength properties in N/mm²				
Bending	$f_{m,k}$	20	24	35
Tension parallel	$f_{t,0,k}$	11,5	14,5	22,5
Tension perpendicular	$f_{t,90,k}$	0,4	0,4	0,4
Compression parallel	$f_{c,0,k}$	19	21	25
Compression perpendicular	$f_{c,90,k}$	2,3	2,5	2,8
Shear	$f_{v,k}$	3,6	4,0	4,0
Stiffness properties in kN/mm²				
Mean modulus of elasticity parallel bending	$E_{0,mean}$	9,5	11	13
5 percentile modulus of elasticity parallel bending	$E_{0,05}$	6,4	7,4	8,7
Mean modulus of elasticity perpendicular	$E_{90,mean}$	0,32	0,37	0,43
Mean shear modulus	G_{mean}	0,59	0,69	0,81
Reaction to fire				
D-s2, d0, for minimum mean density 350 kg/m ³ and minimum overall thickness 22 mm				
Durability				
3-4F, SH _Y , S _A , S _T , 3-4, 1, S-m				

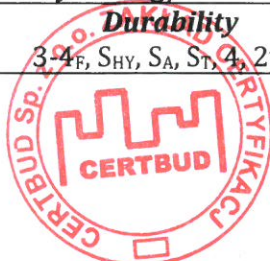
Picea abies – Norway spruce				
		C18	C24	C30
Strength properties in N/mm²				
Bending	$f_{m,k}$	18	24	30
Tension parallel	$f_{t,0,k}$	10	14,5	19
Tension perpendicular	$f_{t,90,k}$	0,4	0,4	0,4
Compression parallel	$f_{c,0,k}$	18	21	23
Compression perpendicular	$f_{c,90,k}$	2,2	2,5	2,7
Shear	$f_{v,k}$	3,4	4,0	4,0
Stiffness properties in kN/mm²				
Mean modulus of elasticity parallel bending	$E_{0,mean}$	9,0	11	12
5 percentile modulus of elasticity parallel bending	$E_{0,05}$	6,0	7,4	8,0
Mean modulus of elasticity perpendicular	$E_{90,mean}$	0,30	0,37	0,40
Mean shear modulus	G_{mean}	0,56	0,69	0,75
Reaction to fire				
D-s2, d0, for minimum mean density 350 kg/m ³ and minimum overall thickness 22 mm				
Durability				
4F, SH _{HY} , SH _A , S _T , 3-4, 3v, x				



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Larix deciduas – European larch				
		C24	C30	C35
Strength properties in N/mm²				
Bending	$f_{m,k}$	24	30	35
Tension parallel	$f_{t,0,k}$	14,5	19	22,5
Tension perpendicular	$f_{t,90,k}$	0,4	0,4	0,4
Compression parallel	$f_{c,0,k}$	21	23	25
Compression perpendicular	$f_{c,90,k}$	2,5	2,7	2,8
Shear	$f_{v,k}$	4,0	4,0	4,0
Stiffness properties in kN/mm²				
Mean modulus of elasticity parallel bending	$E_{0,mean}$	11	12	13
5 percentile modulus of elasticity parallel bending	$E_{0,05}$	7,4	8,0	8,7
Mean modulus of elasticity perpendicular	$E_{90,mean}$	0,37	0,40	0,43
Mean shear modulus	G_{mean}	0,69	0,75	0,81
Reaction to fire				
D-s2, d0, for minimum mean density 350 kg/m³ and minimum overall thickness 22 mm				
Durability				
3-4 _F , S _{HY} , S _A , S _T , 4, 2v, s				

Abies alba – Fir				
		C24	C30	C35
Strength properties in N/mm²				
Bending	$f_{m,k}$	14	18	22
Tension parallel	$f_{t,0,k}$	7,2	10	13
Tension perpendicular	$f_{t,90,k}$	0,4	0,4	0,4
Compression parallel	$f_{c,0,k}$	16	18	20
Compression perpendicular	$f_{c,90,k}$	2,0	2,2	2,4
Shear	$f_{v,k}$	3,0	3,4	3,8
Stiffness properties in kN/mm²				
Mean modulus of elasticity parallel bending	$E_{0,mean}$	7,0	9,0	10
5 percentile modulus of elasticity parallel bending	$E_{0,05}$	4,7	6,0	6,7
Mean modulus of elasticity perpendicular	$E_{90,mean}$	0,23	0,30	0,33
Mean shear modulus	G_{mean}	0,44	0,56	0,63
Reaction to fire				
D-s2, d0, for minimum mean density 350 kg/m³ and minimum overall thickness 22 mm				
Durability				
3-4 _F , S _{HY} , S _A , S _T , 4, 2v, s				



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