

# Declaration of Performance

1. Ref. No.	PM – 014 – 2020
2. Type	Spruce laminated veneer lumber
3. Purpose	Laminated veneer lumber according to EN 14374:2005-02 for load-bearing, stiffening and non-load-bearing elements.
4. Trade name	Pollmeier Spruce LVL S
Manufacturer	Pollmeier Furnierwerkstoffe GmbH Pferdsdorfer Weg 6 D-99831 Amt Creuzburg
5. Contact details	not relevant (see 4)
6. Constancy of performance	System 1
7. Certifying body	MPA Stuttgart 0672 Certificate of Constancy of Performance No. 0672-CPR-0415
8. Certifying body	not relevant

**9 Declared performance**

**9.1 Product description**

The laminated veneer lumber is made from glued, dried spruce veneer sheets with a width of up to H = 1850 mm and a length of up to L = 18 m.

*Table 1: Structure of Pollmeier Spruce LVL S (spruce LVL, parallel ply)*

<b>Element thickness B not sanded – nominal dimension in mm</b>	<b>Number of plies</b>	<b>Structure</b>
21	7	IIIIII
24	8	IIIIIII
27	9	IIIIIIII
30	10	IIIIIIIII
33	11	IIIIIIIIII
36	12	IIIIIIIIIII
39	13	IIIIIIIIIIII
42	14	IIIIIIIIIIII
45	15	IIIIIIIIIIIII
48	16	IIIIIIIIIIIIII
51	17	IIIIIIIIIIIIII
54	18	IIIIIIIIIIIIIII
57	19	IIIIIIIIIIIIIIII
60	20	IIIIIIIIIIIIIIII
63	21	IIIIIIIIIIIIIIII
66	22	IIIIIIIIIIIIIIII
69	23	IIIIIIIIIIIIIIII
72	24	IIIIIIIIIIIIIIII
75	25	IIIIIIIIIIIIIIII
78	26	IIIIIIIIIIIIIIII
81	27	IIIIIIIIIIIIIIII
I	ply parallel to long side	

**9.2 Application**

"Pollmeier Spruce LVL S" laminated veneer lumber according to EN 14374 is approved for the use in all load-bearing, stiffening and non-load-bearing elements dimensioned and produced according to EN 1995-1-1 in conjunction with EN 1995-1-1/NA.

"Pollmeier Spruce LVL S" laminated veneer lumber is approved for the use in service classes 1 and 2 according to EN 1995-1-1.

**9.3 Declared strength, stiffness and density characteristics**

Table 2: Characteristic strength and stiffness in N/mm<sup>2</sup>, and density in kg/m<sup>3</sup>

Type of load		Pollmeier Spruce LVL S
Nominal thickness in mm		21 ≤ B ≤ 81
<b>Characteristic strength values</b>		
<b>Flatwise load [N/mm<sup>2</sup>]</b>		
Bending	$f_{m,0,flat,k}$	50
Compression	$f_{c,90,flat,k}$	3,6
Shear	$f_{v,0,flat,k}$	2,6
<b>Edgewise load [N/mm<sup>2</sup>]</b>		
Bending <sup>a)</sup>	$f_{m,0,edge,k}$	44
Tensile    to grain	$f_{t,0,k}$	31
Tensile ⊥ to grain	$f_{t,90,edge,k}$	0,9
Compressive    to grain	$f_{c,0,k}$	40
Compressive ⊥ to grain	$f_{c,90,edge,k}$	7,3
Shear	$f_{v,0,edge,k}$	4,6
<b>Characteristic stiffness values [N/mm<sup>2</sup>]</b>		
Modulus of elasticity	$E_{0,mean}$	14000
	$E_{0,05}$	12000
Shear modulus edgewise	$G_{v,0,edge,mean}$	590
Shear modulus flatwise	$G_{v,0,flat,mean}$	570
<b>Density [kg/m<sup>3</sup>]</b>		
Mean density	$\rho_{mean}$	540
Charact. density	$\rho_k$	480
a) Values valid for H ≤ 300 mm. For 300 < H ≤ 1000 mm, the characteristic strength value must be multiplied with coefficient $k_h = (300/h)^{0,15}$ . H is the total cross section in mm relevant for the determination of the bending strength.		

**9.4 Fire safety**

According to Commission Delegated Regulation (EU) 2017/2293, the product "Pollmeier Spruce LVL S" is in class D-s1, d0.

For design values of the charring rates for laminated veneer lumber, see EN 1995-1-2.

**9.5 Moisture protection, sound insulation, thermal insulation**

For the required analyses with regard to moisture protection, sound insulation and thermal insulation of "Pollmeier Spruce LVL S", the existing regulations, standards and guidelines for glued laminated timber apply.

For shrinking and swelling values, see the national annex EN 1995-1-1/NA.

**9.6 Formaldehyde class**

With regard to formaldehyde emissions, "Pollmeier Spruce LVL S" conforms to class E1, in line with the requirements laid down in EN 14374.

**9.7 Declaration**

The performance of the products specified in 1 and 2 corresponds to the declared performance in 9. This Declaration of Performance has been issued at the sole responsibility of the manufacturer named in 4.

Signed on behalf of the manufacturer:

Creuzburg, 15 December 2020



Ralf Pollmeier

Managing Director