

Declaration of Performance

| | |
|-----------------------------|--|
| 1. Ref. No. | PM – 012 – 2019 |
| 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 Q |
| Manufacturer | Pollmeier Furnierwerkstoffe GmbH Pferdsdorfer Weg 6 D-99831 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 Q ((spruce LVL, cross ply)

| Element thickness B not sanded – nominal dimension in mm | Number of plies | | | Structure |
|--|----------------------------------|-------|-------|-----------------------|
| | parallel | cross | total | |
| 21 | 5 | 2 | 7 | I-III-I or II-I-II |
| 24 | 6 | 2 | 8 | II-II-II |
| 27 | 7 | 2 | 9 | II-III-II |
| 30 | 8 | 2 | 10 | II-III-II |
| 33 | 9 | 2 | 11 | II-III-II |
| 36 | 10 | 2 | 12 | III-III-III |
| 39 | 10 | 3 | 13 | III-II-II-III |
| 42 | 12 | 2 | 14 | III-III-III-III |
| 45 | 12 | 3 | 15 | III-III-III-III |
| 48 | 14 | 2 | 16 | III-III-III-III |
| 51 | 14 | 3 | 17 | III-III-III-III |
| 54 | 16 | 2 | 18 | III-III-III-III-III |
| 57 | 15 | 4 | 19 | III-II-III-III-II-III |
| 60 | 16 | 4 | 20 | III-II-III-III-II-III |
| 63 | 16 | 5 | 21 | III-II-III-III-II-III |
| 66 | 18 | 4 | 22 | III-II-III-III-II-III |
| I | ply parallel to long side | | | |
| - | ply at right angles to long side | | | |

9.2 Application

"Pollmeier Spruce LVL Q" 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 Q" 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/mm², and density in kg/m³

| Type of load | | Pollmeier Spruce LVL Q | |
|--|----------------------------|------------------------|-------------|
| Nominal thickness in mm | | 21 | 24 ≤ B ≤ 66 |
| Characteristic strength values | | | |
| Flatwise load [N/mm²] | | | |
| Bending | f _{m,0,flat,k} | 32 | 36 |
| | f _{m,90,flat,k} | 8 | 8 |
| Compression | f _{c,90,flat,k} | 4 | |
| Shear | f _{v,0,flat,k} | 1,3 | |
| Edgewise load [N/mm²] | | | |
| Bending ^{a)} | f _{m,0,edge,k} | 30 | 32 |
| | f _{m,90,edge,k} | 10 | 7 |
| Tensile to grain | f _{t,0,k} | 19 | 25,5 |
| Tensile ⊥ to grain | f _{t,90,edge,k} | 7 | 3,5 |
| Compressive to grain | f _{c,0,k} | 26 | 30 |
| Compressive ⊥ to grain | f _{c,90,edge,k} | 11 | 9 |
| Shear | f _{v,0,edge,k} | 4,1 | |
| Characteristic stiffness values [N/mm²] | | | |
| Modulus of elasticity | E _{0,mean} | 10000 | 10600 |
| | E _{0,05} | 9000 | 9000 |
| | E _{90,edge,mean} | 3500 | 2300 |
| Shear modulus edgewise | G _{v,0,edge,mean} | 590 | |
| Shear modulus flatwise | G _{v,0,flat,mean} | 150 | |
| Density [kg/m³] | | | |
| Mean density | ρ _{mean} | 530 | |
| Charact. density | ρ _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 Q" is in class D-s2, d0.

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

9.5 Formaldehyde class

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

9.6 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, 09 January 2019



Ralf Pollmeier

Managing Director