

Declaration of Performance

No. SEWPVARDOP 06

LVL by Stora Enso, X grade

1. Construction product

Structural laminated veneer lumber which fulfills the requirements according to EN 14374:2004. For further or more detailed information on the delivered product, in addition to what is given below, see information on the packaging or in possible accompanying commercial document.

2. Type

LVL by Stora Enso, X grade. Dimensions: Thickness 24-75 mm, Width 45-2500 mm

3. Intended use of the construction product

Buildings and bridges.

4. Producer

Company: Stora Enso Wood Products Oy Ltd, Varkaus LVL – mill
Address: Taipaleentie 15
78201 Varkaus
Finland
Telephone: +358 2046 111
E-mail: jaakko.huovinen@storaenso.com
Web site: www.storaenso.com

5. System of assessment and verification of constancy of performance of the construction product
System 1

6. Certification

The notified body VTT Expert Services Oy (identification number 0809) has performed an initial inspection of the manufacturing plant and of the factory production control and performs continuous surveillance, assessment and evaluation of our factory production control. VTT Expert Services has issued CE Certificate of constancy of performance 0809-CPR-1214.

**7. Declared performance**

Performance for LVL in conformity with the harmonized European standard EN 14374:2004 Timber Structures – Structural laminated veneer lumber – Requirements.

| Property | Performance | |
|---|--------------------------|---------------|
| Thickness | 24–75 mm | EN 14374:2004 |
| Strength | | |
| Bending strength | | |
| Edgewise, parallel to grain | 32 N/mm ² | |
| Size effect parameter | 0,12 | |
| Flatwise, parallel to grain | 36 N/mm ² | |
| Flatwise, perpendicular to grain | 8 N/mm ² | |
| Tension strength, | | |
| Parallel | 26 N/mm ² | |
| Perpendicular, edgewise | 6 N/mm ² | |
| Compression strength, | | |
| Parallel | 26 N/mm ² | |
| Perpendicular, edgewise | 9 N/mm ² | |
| Perpendicular, flatwise | 2,2 N/mm ² | |
| Shear strength, | | |
| edgewise, parallel to grain | 4,5 N/mm ² | |
| flatwise, parallel to grain | 1,3 N/mm ² | |
| flatwise, perpendicular to grain | 0,6 N/mm ² | |
| Modulus of elasticity | | |
| Parallel to grain, mean | 10 500 N/mm ² | |
| Parallel to grain, 5 %-fractile | 8 800 N/mm ² | |
| perpendicular to grain, edgewise, mean | 2 400 N/mm ² | |
| perpendicular to grain, edgewise, 5 %-fractile | 2 000 N/mm ² | |
| perpendicular to grain, flatwise, mean | 2 000 N/mm ² | |
| perpendicular to grain, flatwise, 5 %-fractile | 1 700 N/mm ² | |
| Shear modulus, | | |
| edgewise, mean | 600 N/mm ² | |
| edgewise, 5 %-fractile | 400 N/mm ² | |
| flatwise, mean | 120 N/mm ² | |
| flatwise, 5 %-fractile | 100 N/mm ² | |
| Density | | |
| Mean | 510 kg/m ³ | |
| 5 % - fractile | 480 kg/m ³ | |
| Reaction to fire | D-s1, d0 | |
| Release of formaldehyde | E1 | |
| Natural durability against biological attack | 4 | |

8. The performance for our construction product LVL by Stora Enso, X grade, product thicknesses (24-75) mm, is in accordance with the declared performance given in point 7. The manufacturer mentioned in point 4 is solely responsible for this declaration of performance.

Varkaus, 21.02.2020

Jaakko Huovinen
Operations Director

Stora Enso Wood Products Varkaus Unit