LVL by Stora Enso

S grade



Laminated Veneer Lumber (LVL) is an advanced wood product suitable for a wide range of structural applications, from new build to repair. LVL as a material is light but exceptionally strong with a great load bearing capacity – not forgetting the homogeneous quality and good workability.

- Most modern production technology
- High strength properties
- Dimensional stability and accuracy
- · Effortless processing
- Efficiency throughout the value chain
- The wood supply chains are certified according to PEFC[™] and/or FSC[®] Chain of Custody system

The essential benefits of LVL are derived from the choice of raw material used and the manner of production: logs are rotary peeled into 3mm thick veneers and bonded together under heat and pressure. Every sheet of veneer is individually measured in terms of density, moisture content and modulus of elasticity to optimise the product performance. Sheets are then re-glued into a continuous billet on the

most advanced production line built to

With the S grade all the veneers run in the same direction enhancing the strength properties of the material that along with its light weight and ease of re-working, make it the ideal choice for the construction industry in a wide range of applications – from framing to beams and from roof components to formwork.

Standard dimensions (mm)

Thicknesses

27/30/33/39/45/51/57/63/69/75

Widths

200/240/250/300/350/360/400/ 450/500/600

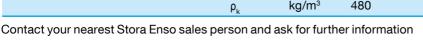
Lengths

min 2 500, max 24 000

Other dimensions upon request.

Produced and monitored according to the harmonised standard EN 14374

Property	Symbol	Unit	Target design values (45mm)
Bending strength edgewise	$f_{m,0,k}$	N/mm²	44
Size effect parameter	s		0,15
Bending strength flatwise	$\mathbf{f}_{m,flat,k}$	N/mm ²	50
Tension, parallel	$f_{t,0,k}$	N/mm ²	35
Tension, perpendicular	$\mathbf{f}_{\mathrm{t,90,edge,k}}$	N/mm ²	0,8
Compression parallel	$f_{c,0,k}$	N/mm ²	35
Compression perpendicular	$f_{c,90,edge,k}$	N/mm ²	6
Shear strength edgewise	$f_{v,o,edge,k}$	N/mm ²	4,1
Shear strength flatwise	$\mathbf{f}_{v,0,\text{flat},k}$	N/mm ²	2,3
Modulus of elasticity	E _{0,mean}	N/mm ²	13,800
	$E_{\scriptscriptstyle 0,k}$	N/mm²	11,600
Shear modulus, edgewise	$G_{_{edge,mean}}$	N/mm ²	600
	$\boldsymbol{G}_{\text{edge},k}$	N/mm ²	400
Shear modulus, flatwise	$\boldsymbol{G}_{\text{flat,mean}}$	N/mm ²	600
	$\boldsymbol{G}_{\text{flat},k}$	N/mm²	400
Density	ρ_{mean}	kg/m³	510
	ρ_{k}	kg/m³	480





www.storaenso.com/lvl