Kerto® LVL
S-beam



Kerto® LVL S-beam combines excellent technical performance with ease of use. Its essential qualities include strength, dimensional stability and light weight. It is an ideal choice for all types of construction projects – renovation, new buildings, pre-fabricated houses and elements.

Kerto LVL S-beam is made of 0.12 inches thick strength graded softwood veneers. The grain direction of all the veneers is the same. The veneers are bonded with weather- and boil-resistant phenol formaldehyde adhesive.

S-beams can be used both as horizontal and vertical bearers in various construction applications. S-beam has excellent strength-to-weight ratio which allows long spans with minimal deflection. Installation can be carried out without any heavy machinery, even in confined spaces.

APPLICATIONS

Structural applications:
- Beams and headers
- Floor joists
- Rafters and ridge beams
- Truss chords
- Studs and columns
- Portal frames
- Components for roof, floor and wall elements

Industrial applications:
- Industrial and heavy duty door frames
- Concrete formwork
- Scaffolding

MAJOR ADVANTAGES

- **Strong and rigid**
- **Excellent strength-to-weight ratio**
- **Long spans with minimal deflection**
- **Dimensional stability improved against warp and twist**
- **Great workability and quick to install**
- **Easy to fasten, staple, screw, nail and drill using conventional woodworking tools**
- **Ensures material efficiency with customised product dimensions**
- **Easy to design with CSD iStruct® software**
- **Made of sustainable northern wood and PEFC (PEFC/02-31-03) certified**
- **Kerto LVL (1 ft³) contains on average stored carbon equivalent to 48.88 lbs CO_2**

Metsä

Kerto® LVL
S-beam

APPROVALS AND DESIGN PROPERTIES

Kerto LVL S-beam has ICC-ES evaluation report ESR-3633 and the allowble design values are stated in this report. Quality and performance testing is carried out under a quality control program by ICC-ES with regular inspections and audits by Eurofins Expert Services Oy.

Kerto LVL production is managed according to principles of standard ISO 9001.

OVERALL DIMENSIONS

	MINIMUM	MAXIMUM
Thickness	1 1/16"	3"
Width/height	2"	98" **
Length	78" *	82' **

* Short lengths are available on request (< 78")
** For products wider than 72", maximum length is 66'. For lengths of more than 52' please confirm with logistics first.

STANDARD TOLERANCES

	SIZE	MINIMUM	MAXIMUM
Thickness	≤ 1 1/16"	- 0.04 in	+ 0.04 in
	1 1/16" to 2 1/4"	- 0.08 in	+ 0.08 in
	> 2 1/4"	- 0.12 in	+ 0.12 in
Width/height	< 16"	- 0.08 in	+ 0.08 in
	≥ 16"	- 0,5%	+ 0,5%
Length	All	- 0.20 in	+ 0.20 in

In moisture content of 10 ±2%. Special tolerances are available on request.

SANDING OF KERTO LVL AFFECTS PRODUCT THICKNESSES

- Optical sanding reduces the original nominal thickness by approximately 0.04 in. The standard thickness tolerances apply to the sanded nominal thickness. Structural design shall be made according to the sanded nominal thickness.
- Calibrated sanding reduces the original nominal thickness by approximately 0.12 in. The thickness tolerance of calibrated sanded products is +/- 0.02 in from the target thickness. The dark glue line may become visible as it is allowed to sand through the face veneers. Structural design shall be made according to the sanded nominal thickness.

BONDING

Kerto LVL is bonded with a weather- and boil-resistant phenol formaldehyde adhesive. The gluing meets the requirements of the standard EN 14374. The face veneer scarf joints on the front side of the product are glued with colourless adhesive.

During hot pressing the adhesive cures as thermoset plastic, and therefore is inert and non-hazardous to humans and animals.

FORMALDEHYDE EMISSIONS

Determined according to EN 717-1, the formaldehyde emitted by Kerto LVL falls far below the Class E1 requirement of ≤ 0.100 ppm and fulfils also the most stringent requirements in the world (≤ 0.030 ppm). The formaldehyde emission of Kerto LVL is approximately 0.018 ppm.

FURTHER PROCESSING

Kerto LVL S-beam can be further processed in various ways according to end-use requirements.

Sanding	Optical sanding, 2 sided only Calibrated sanding, 2 sided only
Machining	Special sizes and shapes, notches and holes
Multiple-gluing (GLVL)	See separate product data sheet for GLVL
Temporary weather protection	WeatherGuard - up to width 24"
End painting	Protective painting for the ends of the beams
Treatment against mould	MouldGuard
Treatment against termites	H2S treatment (Australia only)

PACKAGING

Products are packed in moisture-resistant plastic wrapping or packing hoods. Packages can be stored outside only temporarily. Longer-term storage is recommended under cover in dry conditions.

FURTHER INFORMATION

- ICC-ES Evaluation Report ESR-3633 (www.icc-es.org)
- Kerto LVL S-beam brochure (USA)

This leaflet is provided for information purposes only and no liability or responsibility of any kind is accepted by Metsä Wood or their representatives, although Metsä Wood has used reasonable efforts to verify the accuracy of any advice, recommendation or information. Metsä Wood reserves the right to alteration of its products, product information and product range without any notice.

10/2026

METSÄ WOOD USA
301 Merritt 7, 2nd Floor
Norwalk, CT 06851 USA
Tel. 203-939-8703

PEFC/02-31-381