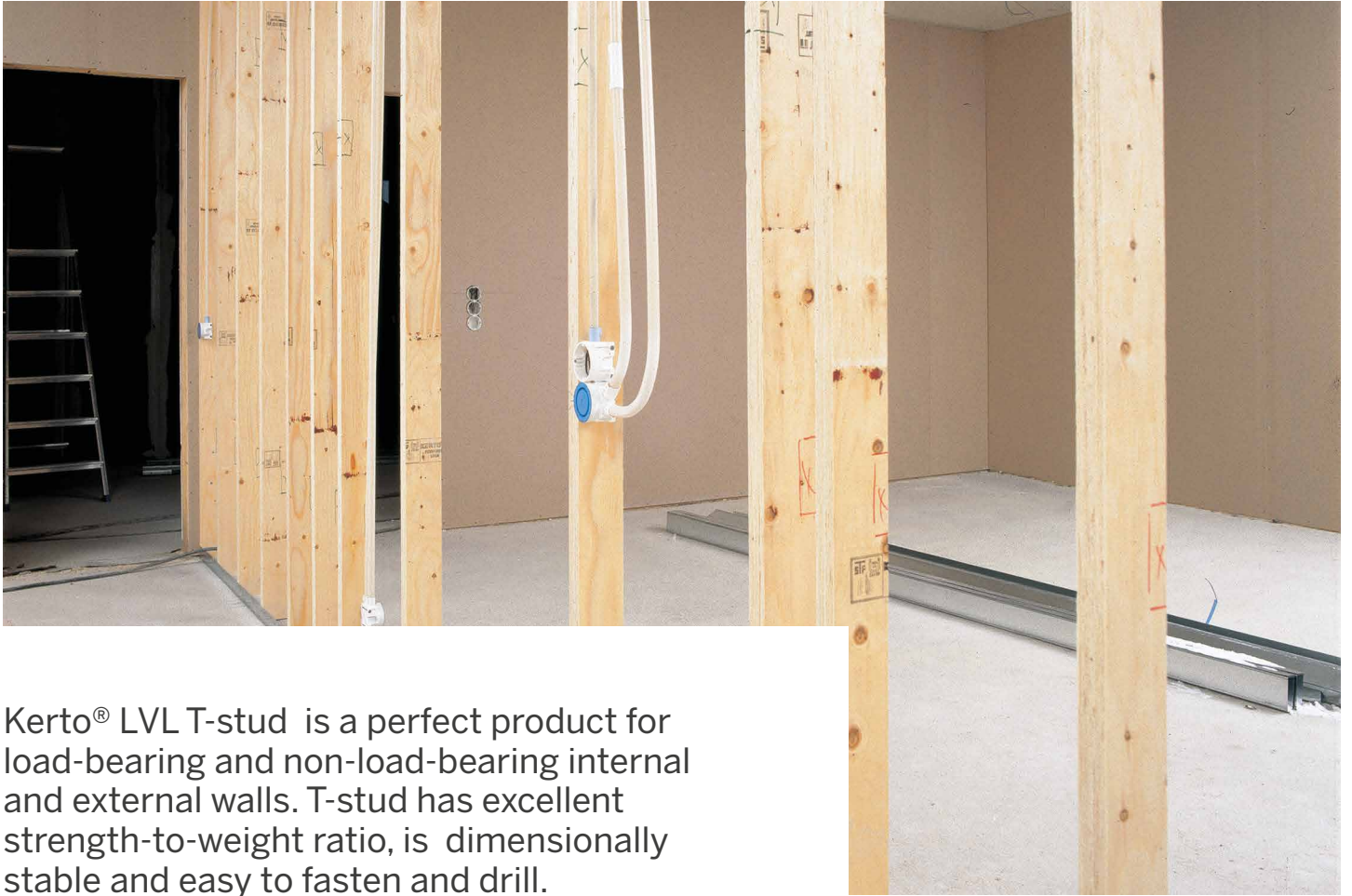


Kerto® LVL

T-stud



Kerto® LVL T-stud is a perfect product for load-bearing and non-load-bearing internal and external walls. T-stud has excellent strength-to-weight ratio, is dimensionally stable and easy to fasten and drill.

Kerto LVL T-stud is made of 3 mm thick light-weight softwood veneers. The veneers bonded with weather- and boil-resistant adhesive. The grain direction of all the veneers is the same. The light-weight product is easy to handle at construction site.

Applications

Structural applications:

- Wall studs for internal walls
- Wall studs for external walls
- Secondary joist for floors

Industrial applications:

- Door and window frames
- Furniture
- Support structures for concrete formwork
- Packaging industry

Major advantages

- **Light-weight product, easy to handle and lift manually at construction site**
- **Excellent strength-to-weight ratio**
- **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**
- **Made of sustainable northern wood and PEFC certified**
- **Kerto LVL (1 m³) contains stored carbon equivalent to 685 kg CO₂**

Approvals and design properties

Kerto LVL T-stud is CE marked and the design properties are determined according to standard EN 14374. The design properties given in the Declaration of Performance (DoP) are to be used for structural calculations with EN 1995 (Eurocode 5). The DoP documents can be downloaded from www.metsawood.com/dop.

T-stud has also approvals in Norway and Germany.

Kerto production is managed according to the principles of standard ISO 9001. The quality and the constancy of performance of the product are controlled by means of regular third party inspections and audits.

Overall dimensions

| | MINIMUM (mm) | MAXIMUM (mm) |
|--------------|--------------|--------------|
| Thickness | 27 | 75 |
| Width/height | 40 | 200* |
| Length | 2,000 | 16,000* |

* Special widths and lengths are available on request.

Standard tolerances

| | SIZE | MINIMUM | MAXIMUM |
|--------------|----------------|---------|---------|
| Thickness | ≤ 27 mm | -1.0 mm | +1.0 mm |
| | 27 < t ≤ 57 mm | -2.0 mm | +2.0 mm |
| | t > 57 mm | -3.0 mm | +3.0 mm |
| Width/height | < 400 mm | -2.0 mm | +2.0 mm |
| | ≥ 400 mm | -0.5 % | +0.5 % |
| Length | Alle | -5.0 mm | +5.0 mm |

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 2 mm. 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 3 mm. The thickness tolerance of calibrated sanded products is +/- 0.5 mm 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 amount of formaldehyde emitted by Kerto LVL falls far below the Class E1 requirement of ≤0.100 ppm, and also fulfils the most stringent requirements in the world (≤0.030 ppm). The formaldehyde emissions of Kerto LVL are approximately 0.018 ppm.

Further processing

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

| | |
|--|---|
| Sanding | Optical sanding, 2 sided only Calibrated sanding, 2 sided only |
| Edge profiling | Tongue and groove, half-lap |
| Machining | Machined to special size and shape, notches and holes |
| Temporary weather protection - up to width 610 mm | WeatherGuard |
| Treatment against mould | MouldGuard |
| Treatment against termites (Australia only) | H2S treatment |

Packing

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.

On request the products can be delivered without plastic wrapping. In this case products shall not be exposed to weather.

Further information

- Kerto LVL T-stud Declaration of Performance (www.metsawood.com/dop)
- Kerto LVL Manual (www.metsawood.com/kertomanual)
- Kerto LVL for Load Bearing Applications brochure