

## **TECHNICAL DATA**

Product Large sized solid wood boards with crosswise glued lamellas

Product name/Trade mark KLH

Further product name Cross laminated Timber (CLT), X - Lam

Use Structural elements for walls, floors (ceilings) and roofs

Durability Service class 1 and 2 according to EN 1995-1-1

Wood species Spruce (Pine, Fir, Swiss stone pine and others on request)

Layers 3, 5, 7 or more layers according to structural requirements

Lamellas Thickness 10 to 40 mm, kiln-dried, sorted in grade and fingerjointed

Grade C 24 according to EN 338, maximum 10% C 16 permitted (see ETA-06/0138)

Bonding adhesive Formaldehyde-free adhesive for finger jointing and surface bonding

according to EN 301

Moisture Content 12% (+/- 2%)

Maximum dimensions Length 16.50 m / Width 2.95 m / Thickness 0.50 m

Produced widths 2.40, 2.50, 2.72, 2.95 m

Surfaces Non visible quality, Industrial visible quality, Domestic visible quality

Special surfaces on request

Weight 5,0 kN/m³ according to EN 1991-1-1:2002 for structural analysis

471 kg/m³ for determination of transport weight

Change in shape in panel plane ~0,01% change in length per % change in timber moisture content

perpendicular to panel plane ~0,20% per % change in timber moisture content

Thermal conductivity  $\lambda = 0.13 \text{ W/(m*K)}$  according to EN 12524

Specific heat capacity  $c_p = 1600 \text{ J/(kg*K)}$  according to EN 12524

Water vapour diffusion resistance  $\mu$  = 25 to 50 according to EN 12524

Airtightness Panels with 3 layers in ISI- or WSI-Quality or Panels with 5 or more layers can be

used as airtight layers; connections to other components or between the panels,

break-throughs etc. must be sealed in the right way

Reaction to fire Euroclass D-s2, d0

Resistance to fire Charring rate 0.67mm/min at charring of the top layer only or charring rate

0.76mm/min at charring of more layers than the top layer