

T THEURL
AUSTRIAN PREMIUM TIMBER®

CLTPLUS

7 · 2020

CROSS LAMINATED TIMBER

THEURL THE FUTURE BEGINS WITH CLTPLUS

Energy-efficient, durable, recyclable, extremely resistant and CO2 neutral: Could a construction material be any more versatile? At least three layers of cross-laminated board make CLTPLUS an almost universally applicable, particularly stable product: the large-format solid wood CLTPLUS boards are used to form wall, ceiling or roof elements. The high level of pre-fabrication permits short construction times without drying phases. CLTPLUS in a quality that does not require masking also creates a comfortable atmosphere and high room quality.

CLT

CLTPLUS

CLTPLUS is a stable and reliable construction material prefabricated to measure individually and precisely in the factory. The high degree of pre-fabrication make it a high-tech construction material which is both economical, stable and natural at the same time. Its good ecobalance and ability to store CO2 really set it apart from its competitors.



COMPONENTS FOR WALL, CEILING AND ROOF

OPTICAL QUALITY

Suitable for visible surfaces
Enhanced industrial quality
Industrial quality

NARROW SIDE ADHESION

The individual timber layers are first glued to form a one-layer board to create high air density. At the same time, this procedure increases the stability and enhances the shear stiffness and earthquake protection.

SURFACE PROCESSING

We sand our CLTPLUS elements in the grain direction to emphasise the natural structure of the high-quality mountain timber. In visible components, this procedure optimally emphasises the qualities of the surface.

JOINERY

Millimeter precision with 5-axis CNC joinery machine

SUPPLY RANGE

Type of wood	Spruce, fir and pine
Wood moisture content	12 % +/- 2,5 %
Panel structure	3, 5, 7 or 8 layers <small>Single-layer panels bonded cross-wise on the surface side and narrow siden</small>
Thickness	60 - 320 mm
Length	8 - 16 m (in 10 cm increments)
Width	2,25 - 3,50 m
Grid dimensions	225 cm 245 - 295 cm (in 10 cm increments) 310, 330 and 350 cm

STANDARD STRUCTURES

C-panel · wall

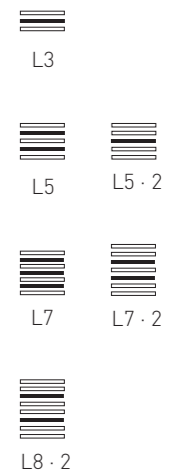
Element type	Thickness (mm)	Element structure/lamellae thickness (mm)					
		C	L	C	L	C	L
C3	60	20	20	20			
	80	30	20	30			
	90	30	30	30			
	100	30	40	30			
C5	120	40	40	40			
	100	20	20	20	20	20	
	120	30	20	20	20	30	
	140	30	30	20	30	30	
	160	40	20	40	20	40	
	180	40	30	40	30	40	
200	40	40	40	40	40		

Structure
Top layer in spruce
Central layer in spruce, fir, pine



L-panel · ceilings and roofs

Element type	Thickness (mm)	Element structure/lamellae thickness (mm)							
		L	C	L	C	L	C	L	
L3	60	20	20	20					
	80	30	20	30					
	90	30	30	30					
	100	30	40	30					
L5	120	40	40	40					
	100	20	20	20	20	20			
	120	30	20	20	20	30			
	140	40	20	20	20	40			
	160	40	20	40	20	40			
	180	40	30	40	30	40			
200	40	40	40	40	40				
L5 · 2	160	30 · 2	40	30 · 2					
L7	180	30	20	30	20	30	20	30	
	200	20	40	20	40	20	40	20	
	220	40	20	40	20	40	20	40	
	240	30	40	30	40	30	40	30	
L7 · 2	180	30 · 2	20	20	20	30 · 2			
	200	30 · 2	30	20	30	30 · 2			
	220	40 · 2	20	20	20	40 · 2			
	240	40 · 2	20	40	20	40 · 2			
	260	40 · 2	30	40	30	40 · 2			
	280	40 · 2	40	40	40	40 · 2			
L8 · 2	300	40 · 2	30	40 · 2	30	40 · 2			
	320	40 · 2	40	40 · 2	40	40 · 2			



Alternative formats possible upon request. The double-length layers are suitable for particularly stringent, static requirements.

THE NEW CLTPLUS TECHNOLOGY

The high-performance construction material with great potential. At least three layers of cross-laminated board make CLTPLUS an almost universally applicable stand-out product.

High stability

The timber layers are pressed with alternating core sides in the central positions. This means that higher form stability and dimensional accuracy is obtained for the elements.

Surface processing

We sand our CLTPLUS elements in the grain direction to emphasise the natural structure of the high-quality mountain timber. In visible components, this procedure optimally emphasizes the qualities of the surface.

Pressing power

For an optimal and even pressing result, our CLTPLUS components are manufactured by using the latest pressing technology with a pressing power of 1 N/mm².

THEURL inside coding

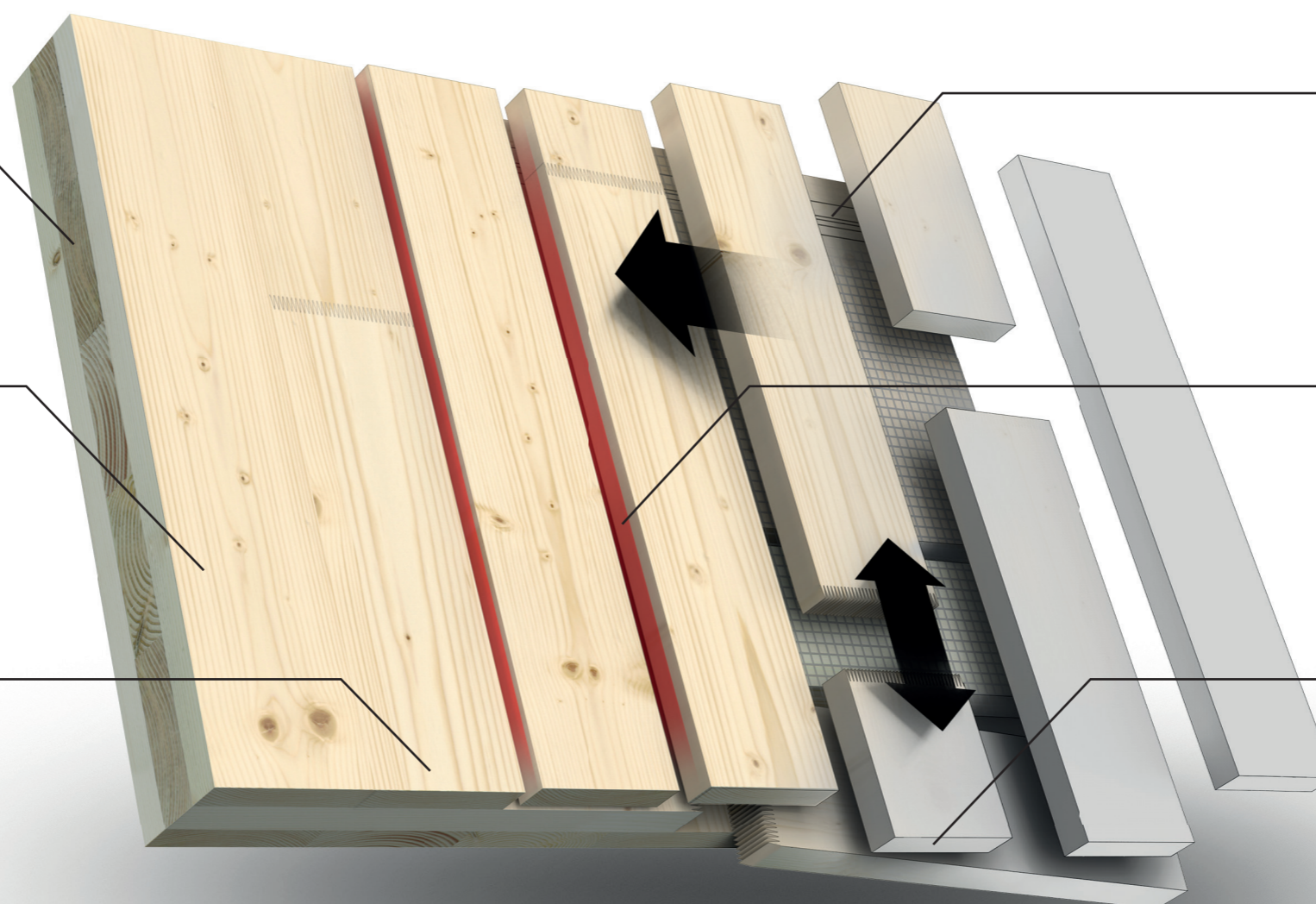
Each timber layer receives an individual code which is invisible from the outside. This makes the origin of each component traceable for life.

Narrow side adhesion

The individual timber layers are first glued to form a one-layer board to create high air density. At the same time, this procedure increases the stability and enhances the stiffness and earthquake protection.

Bending stiffness

Various timber layer thicknesses in the layer structure adapt the bearing capacity of the component to the requirements of the statics. The component structure, which is specifically adapted to the load, reliably absorbs the forces.



+ Production batch size 1

+ minimal waste

+ X-rayed raw timber layers

+ Timber framing precision-cut to the millimetre

+ Various timber layer thicknesses with a layer structure

+ Panel width: 2,45 – 3,50 m

STRUCTURAL TIMBER SOLUTIONS FOR ALL COMPONENTS

Together, CLTPLUS and cross-laminated timber are an unbeatable team. Theurl offers both products as a complete system from a single source. In this way, interfaces can be optimally coordinated from as early on as in the planning phase, and nothing is in the way of the millimetre-precision connection of the components. This leads to high-tech complete timber construction solutions which are technically and economically convincing. We offer our customers one timber construction solution – from technical knowledge and design to production and logistics. The shared willingness to shift the limits of the feasible makes us a strong industrial partner for timber construction.

+ Precision

+ Time savings

+ One contact person philosophy

+ CAD expertise



OUR JOINERY SERVICES

Thanks to our cutting-edge joinery machines, CLTPLUS elements can be quickly and precisely transformed into every planned shape imaginable. Together with our customers, we aspire to achieve new dimensions in timber construction..



CAD / CAM expertise

We design on all standard CAD programmes – SEMA, Dietrich's, CADwork und HSB.

Panel dimensions

Max. length 16 m · Max. width 3,50 m · Max. thickness 320 mm

Joinery machine

Hundegger Gantry Machining Centre for Industry
5-axis universal milling unit
5-axis circular saw
5-axis chain saw

Joinery services

- + Formatting at right angles to the panel surface
- + Ceiling and wall timber framing – cut at right angles for the panel surface
- + Machined on both sides
- + Outlets and openings for beams, purlins and rafters
- + Deep-hole drilling electrical installation
- + Post-machining of corner curves

