



# PRODUCTS

2021/22



# CROSS LAMINATED TIMBER

## THE URL 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





<b>OPTICAL QUALITY</b>	Suitable for visible surfaces Enhanced industrial quality Industrial quality	
<b>NARROW SIDE ADHESION</b>	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.	
<b>SURFACE PROCESSING</b>	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.	
<b>JOINERY</b>	Millimeter precision with 5-axis CNC joinery machine	
<b>SUPPLY RANGE</b>	Type of wood	Spruce, fir and pine
	Wood moisture content	10 - 12 % (+/- 2 %)
	Panel structure	3, 5, 7 or 8 layers  Single-layer panels bonded cross-wise on the surface side and narrow siden
	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	C	
C3	60	20	20	20					<b>Structure</b> Top layer in spruce Central layer in spruce, fir, pine   C3
	80	30	20	30					
	90	30	30	30					
	100	30	40	30					
	120	40	40	40					
C5	100	20	20	20	20	20			 C5
	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			

### 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					 L3
	80	30	20	30					
	90	30	30	30					
	100	30	40	30					
	120	40	40	40					
L5	100	20	20	20	20	20			 L5
	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					 L5 · 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			 L7 · 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/mm<sup>2</sup>.

### THEURL inside coding

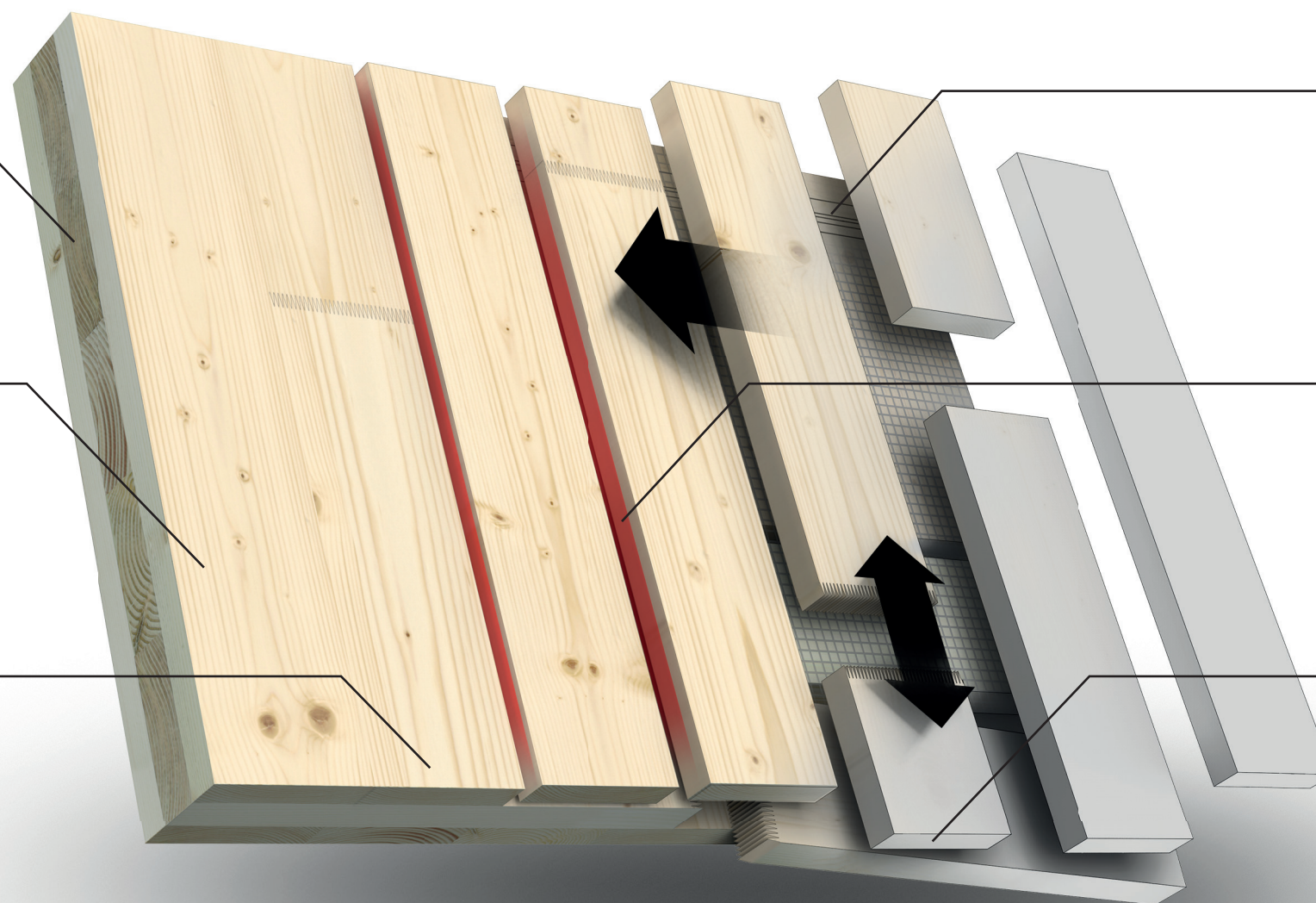
Each timber layer receives an individual code which is invisible from the outside. This makes the origin of each component traceable for life.

### 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



# CAD JOINERY: A VIRTUAL DATA FRAMEWORK

Our internal technical timber construction team works closely with our customers so that the components are manufactured exactly according to plan. Our systems support all common CAD programs such as SEMA, Dietrich's, cadwork and hsbcad. This enables us to communicate in the "mother



### CAD / CAM expertise

We design on all standard CAD programmes – SEMA, Dietrich`s, cadwork und hsbcad.

### Panel dimensions

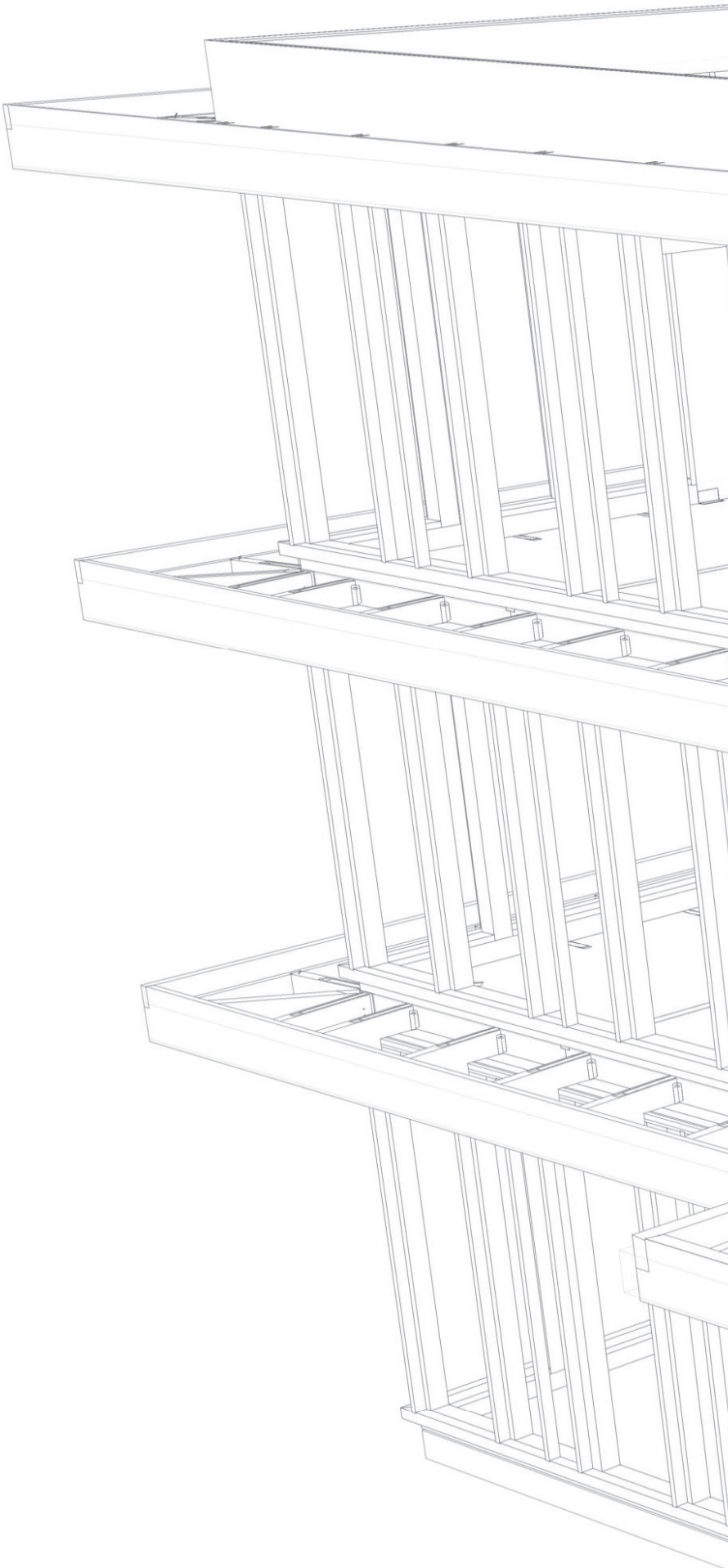
Length 8 - 16 m · Width 2,5 - 3,50 m · Thickness 60 - 320 mm

### Joinery machine

Hundegger PBA-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



# LOAD SPACE OPTIMIZATION

Also when it comes to logistics, we don't leave anything to chance. 3D Load Space Optimization (LSO) is a software - tool that is unique in the industry and solves several problems at once. Our logistics partners are optimally utilised and loaded in the assembly sequence. That means less stress and above all, saves valuable time.

With access to the LSO tool, THEURL customers can check the load, including the product information for each component, in a 3D view and then approve it digitally. The LSO tool also improves the ecological balance and is a prime example of interlocking THEURL teamwork across several departments.

# SMART BENEFITS EXCLUSIVELY FOR THEURL CUSTOMERS.



