

# TIMBER 2025

**Product information** 





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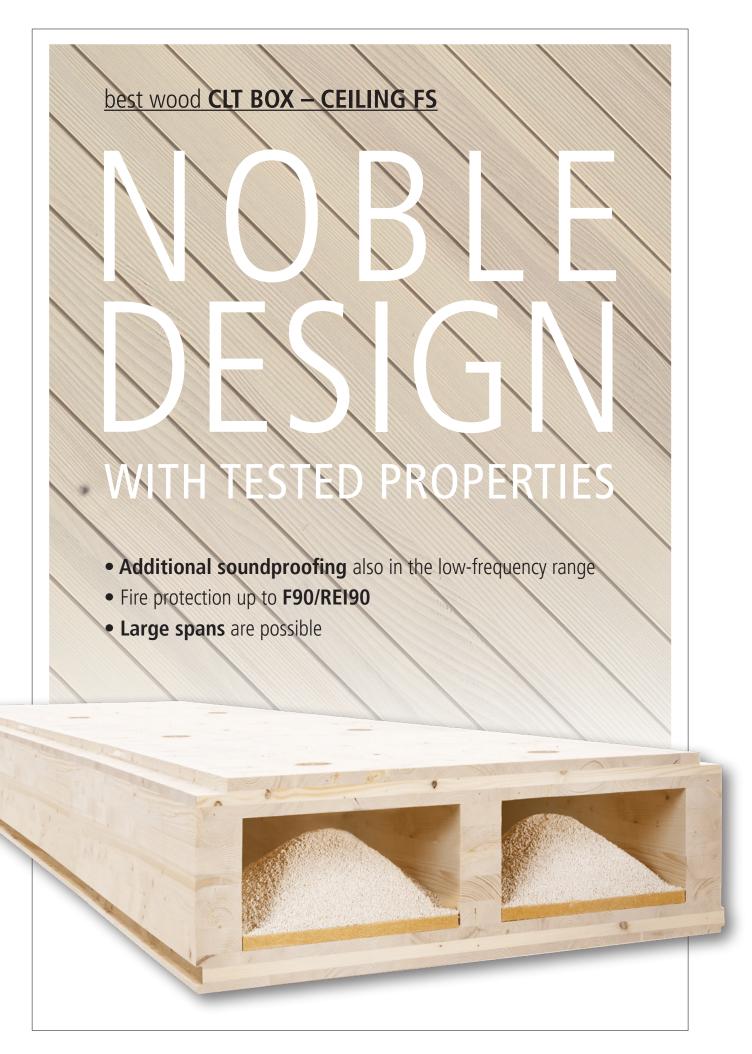
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Our **wood fiber insulation boards** can be found in our INSULATION 2025 product information.

Subject to technical modification. Errors excepted. Cover picture: RACK Fotografie, Bad Buchau



# best wood **STATICS**

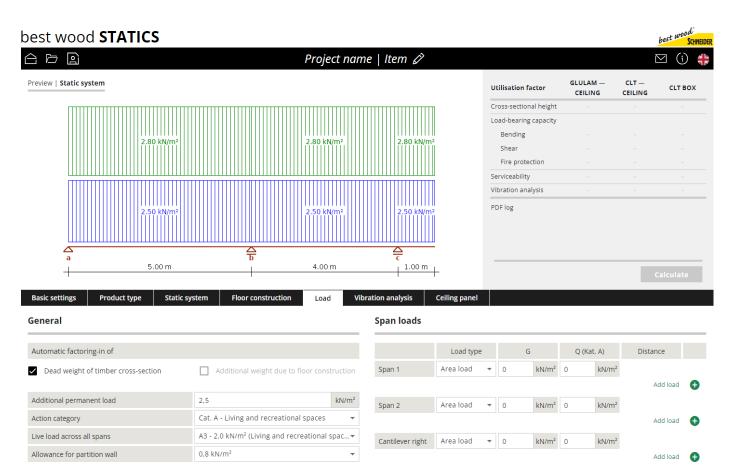
We have developed the statics software best wood STATICS to support you in your planning phase. Using best wood STATICS, designs with best wood Glulam, CLT and the best wood CLT BOX can be dimensioned simply, safely and quickly. Now even faster and uncomplicated with our brand new web version, without any program installation. Just do it!

- Measurement in the GZT and the GZG in accordance with Eurocode 5 with NA DE, NA FR or SIA 265
- Single to four span beams each with and without cantilever possible on the left and/or right end
- Entry of additional permanent and variable area loads possible
- Vibration verification in accordance with the EC 5 procedure or in accordance with Hamm/Richter
- Fire protection verification acc to DIN EN 1995-1-2 with NA DE, NA FR or SIA 265
- Calculation results are issued in the form of checkable static calculations.

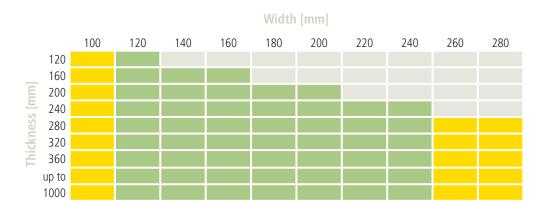
Free of charge as Web application at statics.schneider-holz.com



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# best wood **GLULAM**





Wood species	Quality	Strength
Local spruce	Industrial quality	GL 24h
Local spruce	Visual quality	GL 24h
Scandinavian spruce (max. width 240 mm)	Visual quality	GL 24h
Local spruce	Industrial quality	GL 28h
Local spruce (max. width 240 mm)	Visual quality	GL 28h
Scandinavian spruce (max. width 240 mm)	Visual quality	GL 28h
Local spruce (max. width 240 mm)	Industrial quality	GL 30h
Local spruce (max. width 240 mm)	Visual quality	GL 30h
Scandinavian spruce (max. width 240 mm)	Visual quality	GL 30h

Prices for quantities exceeding 5 m<sup>3</sup> – by request.

#### **Delivery options**

Length	2.30-18.00 m
Width	100-280 mm
Other cross sections	Available by request, production dimensions made on a base of 40 mm
Composite timber structures	Composite timber structures made of glued laminated timber with rectangular cross section,
	block gluing; max. length 7,50 m; max. thickness 900 mm; max. width 1200 mm; max. 2.5 t – available by request

#### Characteristics

Standard	EN 14080:2013
Strength class	GL 24h, GL 28h, GL 30h
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
General information	Planed on four sides, chamfered 4 mm (measured diagonally), trimmed precisely $\pm~1$ mm







# **GLUED WOOD PRODUCTS**

# best wood **GLULAM SEPARATED**





#### Remarks

The separated side is not usable for visible parts because of shrinkage cracks.

Wood species	Quality	Strength	
Local spruce	Industrial quality	GL 24hs	
Local spruce	Visual quality (on 3 sides)	GL 24hs	
Scandinavian spruce	Visual quality (on 3 sides)	GL 24hs	

Prices for quantities exceeding 5 m<sup>3</sup> – by request.

#### **Delivery options**

Length	2.30-18.00 m
Width	45–100 mm
Other cross sections	Available by request, production dimensions made on a base of 40 mm
Minimum production length	per width 5.00 m
Minimum order quantity	ordering in pairs, because of separation

#### Characteristics

Standard	EN 14080:2013
Strength class	GL 24hs
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
General information	Planed on four sides, chamfered 4 mm (measured diagonally), trimmed precisely $\pm$ 1 mm









# best wood **LAMELLAE RIBBED BEAMS**

approval procedure



			A STATE OF THE STA	
	60	80	100	120
120	45*	36	27	27
160	35	28	21	21
180	30	24	18	18
200	25	20	15	15
240	20	16	12	12
280	20	16	12	12
320	15	12	9	9
360	15	12	9	9
400	10	8	6	6



\* units per package (13.00 m)

Wood species	Quality
--------------	---------

Industrial quality **Purch. in pack. (exceed. 8 m³)** One cross section – one length Local spruce

#### **Delivery options**

Length	4.00-14.00 m
Width	60—120 mm
Other cross sections	Available by request

Minimum order quantity 60–100 mm Ordering in threes; 120 mm Ordering in pairs

#### Characteristics

Standard/approval	ETA in the approval procedure
Strength class	C 24
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 %
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
General information	Planed on four sides (levelled), chamfered $4\mathrm{mm}$ (measured diagonally), trimmed precisely $\pm~1\mathrm{mm}$









# best wood **DUO/TRIO WALL BEAMS**

Width [mm]				
	60 DUO	80 DUO	100 DUO	120 TRIO
80	60*			
100	55	44		
120	45	36		27
140	40	32	24	24
160	35	28	21	21
180	30	24	18	18
200	25	20	15	15
220	25	20	15	15
240	20	16	12	12
260	20	16		12
280	20	16		12

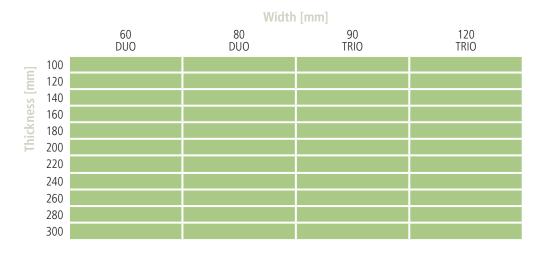


\* units per package (13.00 m)

Wood species	Quality			
Local spruce	Industrial quality	Purch. in pack. (exceed. 3 m	3) One cross section – one length	
Local spruce	Industrial quality	Lengths as per list	from 1 m <sup>3</sup> / one cross section	
Local spruce	Industrial quality	Single pieces	13.00 m / 6.50 m	

# Delivery optionsCharacteristicsLength2.30–18.00 mStandardEN 14080:2013Width60–120 mmStrength classWidths 80 and 120 mm: GL 24h; width 60 and 100 mm: C24Other cross sectionsAvailable by requestFurther characteristics see page 8

# best wood **DUO/TRIO RIBBED BEAMS**





Wood species	Quality	Purch. in pack. (exceed. 8 m³ / one cross section / one length)
Local spruce	Industrial quality	Width 60–120 mm

Delivery options		Characteristics		
Length	4.00-14.00 m	Standard	ETA-24/1119	
Width	60-120 mm	Strength class	C24	
Other cross sections	Available by request	Further characterist	cs see page 8	

# best wood **DUO/TRIO BEAMS/ LAMINATED BEAMS**

#### Width [mm]

	80 DUO	100 DUO	120 DUO/TRIO	140 DUO	150 TRIO	160 QUATTRO	180 TRIO	200 QUATTRO
100	GLULAM							
120	GLULAM		TRIO GLULAM					
140	GLULAM	C24	TRIO GLULAM		C24			
160	GLULAM	C24	TRIO GLULAM		C24	GLULAM		
180	GLULAM	C24			C24	GLULAM		
200	GLULAM	C24	DUO C24	C24	C24	GLULAM	C24	C24
220	GLULAM		TRIO GLULAM			GLULAM		
240	GLULAM	C24	TRIO GLULAM		C24	GLULAM		C24
260	GLULAM		TRIO GLULAM			GLULAM		
280	GLULAM		TRIO GLULAM			GLULAM		



Wood species	Quality			
Scandinavian spruce	Visual quality	Purch. in pack. (exceed. 3 m <sup>3</sup> )	One cross section — one length	
Scandinavian spruce	Visual quality	Lengths as per list	from 1 m <sup>3</sup> / one cross section	
Scandinavian spruce	Visual quality	Single pieces	13.00 m / 6.50 m	
Wood species				
Local spruce	Visual quality	Purch. in pack. (exceed. 3 m³)	One cross section — one length	
Local spruce	Visual quality	Lengths as per list	from 1 m³/ one cross section	
Local spruce	Visual quality	Single pieces	13.00 m / 6.50 m	
Delivery options				
Length	2.30–16.0	00 m; widths 80, 120 and 160 mm in 2	30–18.00 m	
Width	80-200 m	ım		
Other cross sections	Available	by request		
Characteristics				
Standard	EN 14080	:2013		
Strength class	GL 24h, C	24		
Application classes	Use in app	plication classes 1 and 2 according to E	N 1995-1-1	
Drying	Kiln dried,	wood moisture max. 15 % at delivery		
Bonding	Clear, wat	er-proof gluing with polyurethane adhe	sives (free of formaldehyde)	

Planed on four sides, chamfered 4 mm (measured diagonally), trimmed precisely  $\pm$  1 mm

Certificates (Download at www.schneider-holz.com)

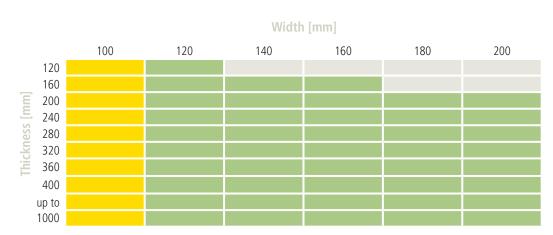


General information





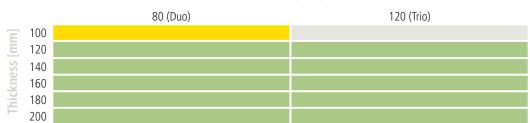
# best wood GLULAM LARCH





# best wood **DUO/TRIO BEAMS / THRESHOLDS LARCH**

Width [mm]



Wood species	Quality	Strength	
Larch (greenware with barely any splints, no furniture quality)	Larch	GL 24h	

Prices for quantities exceeding 5 m<sup>3</sup> – by request.

#### **Delivery options**

Length	2.30–16.00 m
Width	GLULAM: 100–200 mm; DUO/TRIO: 80/120 mm
Other cross sections	Available by request, production dimensions made on a base of 40 mm

#### Characteristics

Standard	EN 14080:2013
Strength class	GL 24h
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
General information	Planed on four sides, chamfered 4 mm (measured diagonally), trimmed precisely $\pm$ 1 mm









# best wood PLANKS FOR LOG HOUSES



#### Local spruce industrial quality

h.L.				Wall thickness				
60	80	100	120	140	160	180	200	240
2 x 30	2 x 40	2 x 50	3 x 40	5 x 40*	4 x 40	5 x 40*	5 x 40	6 x 40
GL 24h	GL 24h	C24	GL 24h	GL 24h	GL 24h	GL 24h	GL 24h	GL 24h

<sup>\*</sup> horizontally glued lamellae = profile size 200 mm

#### Scandinavian spruce, visual quality



PS 160 mm

Wood species	Quality	Strength	
Local spruce	Industrial quality	GL 24h, C24	
Scandinavian spruce	Visual quality	GL 24h, C24	
Mountain larch — available by request			

#### **Installation variants**

7, 8, 9, 10

Further information from page 46

#### **Delivery options**

Length 2.30–16.00 m

Wall thickness 60–240 mm

Profile/height Profile size 200 mm = production dimensions, profile depth 10 mm

Cover size 190 mm

Exceeding a wall thickness of 160 mm with triple tongue and groove

Other cross sections Available by request

Minimum order quantity 5 m³ / one cross section

#### Characteristics

Standard	EN 14080:2013
Strength class	GL 24h, C24
Application class	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
Lamellae	Vertically glued
General information	Planed on four sides, chamfered 4 mm (measured diagonally), trimmed precisely $\pm$ 1 mm; no joinery possible







# best wood **CEILING PLANKS**



#### Local spruce industrial quality

				eiling thickne	SS		3 3	
60	80	100	120	140	160	180	200	240
2 x 30	2 x 40	2 x 50	3 x 40	5 x 40*	4 x 40	5 x 40*	5 x 40	6 x 40
GL 24h	GL 24h	C24	GL 24h	GL 24h	GL 24h	GL 24h	GL 24h	GL 24h

<sup>\*</sup> vertically glued lamellae = profile size 200 mm

#### Scandinavian spruce, visual quality



Wood species	Quality	Strength
Local spruce	Industrial quality	GL 24h, C24
Scandinavian spruce	Visual quality	GL 24h, C24
Mountain larch – available by request		

#### **Installation variants**

7, 8, 9, 10

Further information from page 46

#### **Delivery options**

Minimum order quantity	5 m³ / one cross section
Other cross sections	Available by request
	from ceiling thickness of 160 mm with triple tongue and groove
	cover size 190 mm
Profile/width	Profile size 200 mm = production dimensions, profile depth 10 mm
Ceiling thickness	60-240 mm
Length	2.30-16.00 m

#### Characteristics

Standard	EN 14080:2013
Strength class	GL 24h, C24
Application class	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
Lamellae	Horizontally glued
General information	Planed on four sides, chamfered 4 mm (measured diagonally), trimmed precisely $\pm$ 1 mm; no joinery possible







# best wood KVH® SOLID STRUCTURAL TIMBER

#### Thickness [mm]

	Finger-jointed								
	45	50	6	0	80	100	120	140	160
60			90						
80			60	Dougl.	52				
100	77*	66	55	Dougl.	44	33			
120	63		45	Dougl.	36	27	27		
140			40	Dougl.	32	24	24	24	
145	56								
160		42	35	Dougl.	28	21	21	21	14 (DUO NSI)
180			30	Dougl.	24	18	18	18	12 (DUO NSI)
200	35	30	25	Dougl.	20	15	15	15	10 (DUO NSI)
220	35		25	Dougl.	20	15	15	15	10 (DUO NSI)
240			20	Dougl.	16	12	12	12	8 (DUO NSI)
260			20		16	12	12	12	8 (DUO NSI)
280			20		16	12	12	12	8 (DUO NSI)

<sup>\*</sup> units per 13 m package KVH®

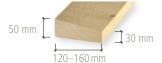
Wood species	Quality	<b>Delivery options</b>		
Loc. spruce	Ind. quality	Purch. in pack.	Length 5.00-14.00 m	
Loc. spruce	Ind. quality	Single pieces	13.00 m (entire beams), 6.50 m (half beams)	
Loc. spruce	Ind. quality	KVH® as per list	Length 5.00–14.00 m lengths under 5.00 m are available in multiple lengths	
Loc. spruce	Ind. quality	Fixed size ± 2 mm	Length 2.30–5.00 m; mind. 40 pieces / one cross section — one length	
			Length 5.00–14.00 m – single pieces possible	
Douglas fir	Ind. quality	KVH single pieces	Length 13.00 m	
		Other cross sections	Available by request	by request

#### Thickness [mm]

		Not finger-jointed				
	60	80				
60	108*					
80	84	91				
100	99	77				
120	81	63	126 scantlings			
140	72	56	112 scantlings			
160	63	49 98 scantlings				

×	units	per	package	KVH®
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Wood species	Quality	Delivery options						
Loc. spruce	Ind. qual.	KVH	Length 5.00 m					
Loc. spruce	Ind. qual.	<b>Scantlings</b> made from KVH	separated into 30/50 mm	 	 	 	 	 



#### Characteristics

Standard	EN 15497:2014
Strength class	C24
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 18 % at delivery
General information	Finger-jointed, planed on four sides (levelled), chamfered 4 mm (measured diagonally)
Sorting criteria see page 50	









# **STOCKED ITEMS**

# Spruce, fir

#### FLOORBOARDS: rough sawn, dried

Dimension	Length	Package size
45 x 250 mm	5.00 m	44 pieces

#### LATHS: rough sawn, dried, not sorted according to density

Dimension	Length	Package size
24 x 48 mm	4.00 and 5.00 m	360 pieces
30 x 48 mm	4.00 and 5.00 m	280 pieces

#### ROOF LATHS-S10: rough sawn, dried

Roof laths sorted according to density, sorting class \$10 with CE mark.

Dimension	Length	Package size
30 x 50 mm	5.00 m	330 pieces

#### FORMWORK GRADE II-III: rough sawn, dried, not sorted according to density

Dimension	Length	Width (sorted according to width)	Package size
23 mm	5.00 m	145 mm	192 pieces
33 mm	5.00 m	107-247 mm in 20 mm intervals	18 layers

#### SUBSTRUCTURE LATHS: levelled on 4 sides, dried, not sorted according to density



Dimension	Length	gth		Package size	
21 x 75 mm	4.00 m	without chamfer	350 pieces		
27 x 75 mm	4.00 m	without chamfer	280 pieces		

#### SUBSTRUCTURE LATHS: levelled on 4 sides, dried, not sorted according to density

Dimension	Length		Package size
21 x 45 mm	5.00 m	without chamfer	400 pieces
21 x 75 mm	5.00 m	without chamfer	240 pieces
27 x 45 mm	5.00 m	without chamfer	325 pieces
27 x 75 mm	5.00 m	without chamfer	195 pieces
27 x 120 mm	5.00 m	without chamfer	117 pieces
30 x 60 mm	5.00 m	without chamfer	180 pieces
30 x 80 mm	5.00 m	without chamfer	140 pieces
30 x 120 mm	5.00 and 13.00 m	without chamfer	90 pieces
30 x 160 mm	5.00 and 13.00 m	without chamfer	70 pieces
40 x 60 mm	5.00 m	with chamfer	162 pieces
40 x 80 mm	5.00 and 13.00 m	with chamfer	182 pieces
45 x 50 mm	5.00 m	with chamfer	220 pieces
50 x 60 mm	5.00 and 13.00 m	with chamfer	198 pieces

#### LATHS WITH FINGER JOINTS: planed on 3 sides, cut with fine buzz saw on one side, dried, gluing D4 according to EN 204

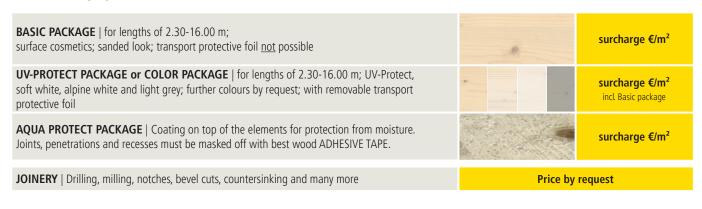
Dimension	Length		Package size
25 x 60 mm	5.00 m	without chamfer	360 pieces/pack
30 x 60 mm	5.00 m	without chamfer	288 pieces/pack
40 x 60 mm	5.00 m	without chamfer	216 pieces/pack
60 x 60 mm	5.00 m	without chamfer	144 pieces/pack

# best wood GLULAM - CEILING

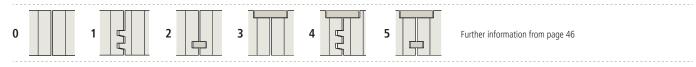
Glued laminated timber for solid ceiling structures

	Spruce industrial quality (planed)	Spruce visual quality  (planed)	
	local, GL 24h	local, GL 24h	Scandinavian, GL 24h
Thickness [mm]	by request	by request	by request
100			
120			
140			
160			
180			
200			
220			
240			
260			
280			
Vood species		Quality	Strength
ocal spruce		Industrial quality	GL 28h
ocal spruce, max. t	hickness 200 mm	Visual quality	GL 28h
candinavian spruce	e, max. thickness 200 mm	Visual quality	GL 28h

#### **Finishing options** (invoiced profile dimensions)



Installation variants – Invoiced profile dimensions for variant 1 and 4



Inlay board for forming the ceiling section: Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece Inlay board for forming the ceiling section: Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece Separate tongue: spruce 19/38 mm in 3.50 m / piece

#### **Delivery options**

Length	2.30-18.00 m
Width	500—1000 mm
Other cross sections	Available by request
Minimum production length	per element width 5.00 m



#### Characteristics

Standard	EN 14080:2013
Strength class	GL 24h, GL 28h
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
Lamellae	40 mm, sorted for quality and finger-jointed
General information	Planed on four sides, bottom side chamfered 4 mm (measured diagonally), upper side without chamfer, trimmed precisely $\pm$ 2 mm; visual quality only on the bottom side
Tolerance	Thickness: $\pm$ 1 mm; width: $\pm$ 2 mm; length: $\pm$ 2 mm; curvature at ceiling level: max. 20 mm per 18.00 m
Thermal conductivity	$\lambda = 0.13$ (W/m*K) according to EN ISO 10456
Shape change	Shrinkage and swelling dimensions per 1 % change in timber moisture: Length: 0.02 %, width/thickness: 0.24 % (DIN 1052:2008)
Fireproofing	Verification possible via the free best wood STATICS software

#### Description

The outstanding advantage of the best wood GLULAM CEILING is, that it can be installed simply and rapidly. The elements are immediately passable on foot after their installation. It provides stability and a pleasant appearance in one. With this organic solution, a very enjoyable room climate can be obtained. Installation, also subsequently, is possible without any problems.











# best wood **GLULAM – CEILING SEPARATED**

Glued laminated timber for smaller ceiling thicknesses

		Spru	ice industria (planed)		Spruce visual quality (planed)					
			local, GL 2	4hs		local, GI	_ 24hs		Scandina	vian, GL 24hs
Thickn. [mm]	max. width		by reque	est		by req	uest		by ı	request
45	360									
50	400									
55	440									
60	480									
65 70	520 560									
75	600									
80	640									
85	680									
90	720									
95	760									
Wood spe	ecies				-		(	<b>Quality</b>	Strength	
Mountain I	larch (gree	nware with b	arely any spli	ints, no furniture q	uality)			Larch	GL 24h	by request
UV-PROT soft white protective	ECT PACE , alpine wi foil	(AGE or COI nite and light	LOR PACKAC grey; further pating on top	GE   for lengths of colours by request of the elements for	2.30-16.00 n t; with remova or protection f	ible transport	ort			surcharge €/m² incl. Basic package  surcharge €/m²
Joints, per	netrations	and recesses	must be masl	ked off with best v	vood ADHESI\	/E TAPE.				Surcharge Cili
JOINERY	Drilling,	milling, notch	es, bevel cuts	s, countersinking a	nd many more	5			Price by re	equest
Installatio	on varian	<b>ts</b> – Invoiced	d profile dime	ensions for variant	6, 7 and 8					
0		2	3	3	6, 7, 8		Furthe	r information fr	om page 46	
		parate tong	<b>gue</b> see page	<u>:</u> 16						
Delivery o		parate tong								
<b>Delivery</b> (		parate tong	2.30–18.00	ım						
<b>Delivery (</b> Length Width	options	parate tong	2.30-18.00 360-760 mr	m, (< 500 mm prod						
<b>Delivery</b> ( Length Width Other cross	options s sections		2.30–18.00 360–760 mr Available by	nm m, (< 500 mm production						
<b>Delivery (</b> Length Width Other cross Minimum p	options s sections production	length	2.30–18.00 360–760 mr Available by per element	m, (< 500 mm prod request, production width 5.00 m	on dimensions					
Delivery of Length Width Other cross Minimum p	options s sections oroduction order quar	length	2.30–18.00 360–760 mr Available by per element	nm m, (< 500 mm production	on dimensions					
Delivery of Length Width Other cross Minimum of Minimum of Character	options s sections oroduction order quar	length	2.30–18.00 360–760 mr Available by per element Ordering in p	m, (< 500 mm productions of some state of some some some some some some some some	on dimensions					
Delivery of Length Width Other cross Minimum p	options s sections production order quar	length	2.30–18.00 360–760 mr Available by per element	m, (< 500 mm productions of some state of some some some some some some some some	on dimensions					

# best wood GLULAM - CEILING ACOUSTIC DESIGN

Glued laminated timber for solid ceiling structures with Acoustic design

	Spruce industrial quality (planed)	Spruce visual quality (planed)	
	local, GL 24h	local, GL 24h	Scandinavian, GL 24h
Thickn. [mm]	by request	by request	by request
100			
120			
140			
160			
180			
200			
220			
240			
260			
280			

Wood species	Quality	Strength
Local spruce	Industrial quality	GL 28h
Local spruce, max. thickness 200 mm	Visual quality	GL 28h
Scandinavian spruce, max. thickness 200 mm	Visual quality	GL 28h

#### **Finishing options** (invoiced profile dimensions)

GL 24h, GL 28h General information/certificates see best wood GLULAM – CEILING page 17

<b>BASIC PACKAGE</b>   for lengths of 2.30-14.00 m; surface cosmetics; sanded look; transport protective foil <u>not</u> possible	A	surcharge €/m²
<b>UV-PROTECT PACKAGE or COLOR PACKAGE</b>   for lengths of 2.30-16.00 m; UV-Protect, soft white, alpine white and light grey; further colours by request; with removable transport protective foil	*	surcharge €/m² incl. Basic package
JOINERY   Drilling, milling, notches, bevel cuts, countersinking and many more	Price by I	request

#### **Installation variants**

Strength class

0 2	3 5	Further information from page 46	Saw cut GLULAM CEILING ACOUSTIC DESIGN 40	5/11 mm, central in the adhesive joints Possible widths: 200/240/280/320/360/400
Inlay board and separate	tongue see page 16			
Delivery options				
Length	2.30-14.00 m			
Width	200–400 mm depending on t	he type of saw cut (production di	mensions made on a base of 40 mr	m)
Minimum production length	per element width 5.00 m			
Minimum order quantity	5 m <sup>3</sup>			
Characteristics				
Standard	EN 14080:2013			

## best wood **CLT** – **CEILING**

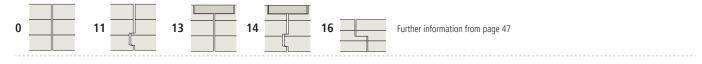
### Cross laminated timber for solid ceiling structures

			Spruce industrial quality (planed)								Spruce	visual (sanded)	quality			Silver fir KNOT- FREE/RIFT (sanded)
								Local							Scandi- navian	Local
	Thickn.			Laye	er struc	ture		by			Layer	structi	ure		by	by
	[mm]	Layers		L	Q	L		request	Layers		L	Q	L		request	request
	60	3		20	20	20			3		20	20	20			
layers	80	3		30	20	30			3		30	20	30			
ay	90	3		30	30	30			3		30	30	30			
$\sim$	100	3		40	20	40			4		20+20	20	40			
	120	3		40	40	40			4		20+20	40	40			
			L	Q	L	Q	L			L	Q	L	Q	L		
	140	5	40	20	20	20	40		6	20+20	20	20	20	40		
	160	5	40	20	40	20	40		6	20+20	20	40	20	40		
	180	5	40	30	40	30	40		6	20+20	30	40	30	40		
ers	200	5	40	40	40	40	40		6	20+20	40	40	40	40		
layers	220	7	40+40	20	20	20	40+40		8	20+20+40	20	20	20	40+40		
Ŋ	240	7	40+40	20	40	20	40+40		8	20+20+40	20	40	20	40+40		
	260	7	40+40	30	40	30	40+40		8	20+20+40	30	40	30	40+40		
	280	7	40+40	40	40	40	40+40		8	20+20+40	40	40	40	40+40		
	20	= lar	nella thick	ness in i	mm ; L =	lengthw	ays layer	; Q = lateral	layer							

#### **Finishing options** (invoiced profile dimensions)



Installation variants – Invoiced profile dimensions for variant 11, 14 and 16



**Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece **Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece

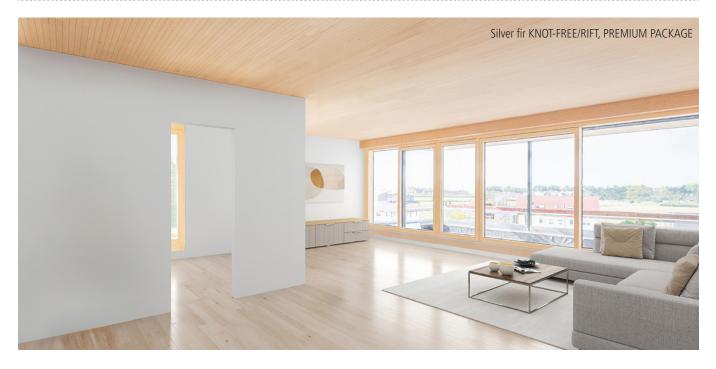


#### **Delivery options**

Length	2.30-16.00 m
Width	900–1200 mm, shiplap edge ≤1150 mm cover size
Minimum production length	per element width 8.00 m
Other cross sections	Available by request

#### Characteristics

Approval	ETA-21/0568
Strength class	C24
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
Lamellae	20, 30 and 40 mm, sorted for quality and finger-jointed
General information	Planed on four sides, bottom side chamfered 4 mm (measured diagonally), trimmed precisely $\pm$ 1 mm
Thermal conductivity	$\lambda = 0.12$ (W/m*K) according to ETA-21/0568
Specific heat capacity	1600 (J/kg*K) according to EN ISO 10456
CLT panel diffusion resistance	μ 20 (damp) / 50 (dry) in accordance with EN ISO 10456
Emission class	E1 according to DIN EN 717-1
Shape change	At board level $\approx$ 0.02 % per 1 % change in wood moisture perpendicular to board level $\approx$ 0.24 % per 1 % change in wood moisture
Reaction to fire	D-s2, d0 according to DIN EN 13501-1
Fireproofing	Verification possible via the free best wood STATICS software
Airtightness	Airtightness after testing in accordance with EN 12114 from 60 mm









# best wood **CLT BOX – CEILING FS**

Wooden box element for multi-storey wood construction with soundproofing and fire protection requirements



Soundproofing and fire protection up to F 60 / REI 60 Spruce and gual Spruce vis

	omig and me p.		- p - c - c -	, , ,,,	Spruce ind.qual. (planed)	Spruce visual quality (sanded)	(sanded)
	Ass	embly			Local	Scandinavian	Local
Thickness [mm]	GLULAM ribs width [mm]	GLULAM ribs height [mm]	Lower CLT panel [mm]	Upper CLT panel [mm]	by request	by request	by request
220*		100	60	60			
240*	Prices calculated	120	60	60			
260	to 100 mm.	140	60	60			
280	80 and 120 mm	160	60	60			
300	by request.	180	60	60			
320	80/100/120 mm depending on	200	60	60			
340		220	60	60			
360	statics.	240	60	60			
380	Dimensioning with	260	60	60			
400	Dimensioning with best wood <b>STATICS</b> . Information on page 4.	280	60	60			
420		300	60	60			
440**		320	60	60			
460**		340	60	60			
480**		360	60	60			

<sup>\*</sup>Clarify proof of fire protection and soundproofing; \*\* clarify limited joinery from 440 mm

#### Soundproofing and fire protection up to F 90 / REI 90

250*		100	90	60
270*	Prices calculated	120	90	60
290	to 100 mm.	140	90	60
310	80 and 120 mm	160	90	60
330	by request.	180	90	60
350	80/100/120 mm	200	90	60
370	depending on statics.	220	90	60
390	Dimensioning with best wood <b>STATICS</b> . Information on page 4.	240	90	60
410		260	90	60
430**		280	90	60
450**		300	90	60
470**		320	90	60
490**		340	90	60

<sup>\*</sup>Clarify proof of fire protection and soundproofing; \*\* clarify limited joinery from 430 mm

#### **Finishing options** (invoiced profile dimensions)

<b>UV-PROTECT PACKAGE or COLOR PACKAGE</b>   Surface cosmetics; sanded look; UV-Protect, soft white, alpine white and light grey; further colours by request; with removable transport protective foil		surcharge €/m²
<b>ACOUSTIC DESIGN PACKAGE</b>   Saw cuts 2/6 mm; distance between saw cuts 50 mm; coverage widths from 900 to 1200 mm at 50 mm intervals available; clarify proof of fire protection		surcharge €/m²
JOINERY   Drilling, milling, notches, bevel cuts, countersinking and mar	ny more	Price by request





#### **Filling wood**

- Filling wood can be glued on in the factory
- For passing through vertical loads

Additional cost by request

Installation variants – Invoiced profile dimensions for variant 31 and 34



#### **Delivery options**

Length	2.30–16.00 m, from 440 mm 8.00–16.00 m						
Width	900-1200 mm	900–1200 mm					
Number of ribs	3						
Specification	Acoustic board Drillings Chippings Chippings plan	placed in the rafter and glued to the lower CLT panel ex works (wood fiber acoustic board) ex works (for putting in the customer-provided chippings) supplied in the required quantity and in 25 kg PE bags and put in by the customer on site included in scope of delivery					
Minimum production length	per element width 8	3.00 m					

#### Inlay boards / Characteristics / Processing

see best wood CLT BOX page 24/25

#### Soundproofing

#### Description

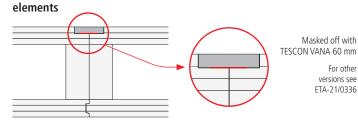
best wood CLT BOX – CEILING FS rafter soundproofing was developed in our own, standard-compliant construction acoustics ceiling test bench, and improves the impact sound insulation in the low-frequency range. Notes concerning possible floor construction on the CLT BOX – CEILING FS and the determined standard impact sound levels can be found at www.schneider-holz.com. Further information on page 5.

#### **Fireproofing**

#### Description

The fire safety technical certificate for F 60 and F 90 can be produced using our best wood STATICS software. General building regulations test certificates for F 60 and F 90 and classification reports REI 60 and REI 90 are available at www.schneider-holz.com.

### Fire protection detail in ceiling joint of the CLT BOX – CEILING FS



Certificates (Download at www.schneider-holz.com)







**Dimensioning tables** Ceiling and roof systems from page 51

# best wood **CLT BOX**

Wooden box element for large spans with fire protection requirements best wood CLT with three glued-on GLULAM ribs and a CLT cover board

Soundpro	ofing and fire pr	otection (	up to F60	REI60	Spruce ind. qual. (planed)	Spruce visual quality (sanded)	Silver fir KNOT-FREE/RIFT (sanded)
	Ass	embly			Local	Scandinavian	Local
Thickness [mm]	GLULAM ribs width [mm]	GLULAM ribs height [mm]	Lower CLT panel [mm]	Upper CLT panel [mm]	by request	by request	by request
220*		100	60	60			
240*		120	60	60			
260	Prices calculated	140	60	60			
280	to 100 mm. 80 and 120 mm	160	60	60			
300	by request.	180	60	60			
320		200	60	60			
340	80/100/120 mm depending on statics.	220	60	60			
360	depending on statics.	240	60	60			
380	Dimensioning with	260	60	60			
400	best wood <b>STATICS</b> . Information on page 4.	280	60	60			
420		300	60	60			
440**	риус т.	320	60	60			
460**		340	60	60			
480**		360	60	60			

<sup>\*</sup>Clarify proof of fire protection and soundproofing; \*\* clarify limited joinery from 440 mm

#### Other variants **CLT BOX with FIBRE** (surcharge per thickness) **Thickness** by request **CLT BOX with FIBRE** [mm] 220\*\* • Suitable for flat roofs 240\*\* • Blown out with best wood FIBRE ex works • INTELLO variable vapor barrier laid ex works 260 • Constructional calculation and approval with regard to moisture protection with pro clima 280 300 Surcharge see table 320 340 **Filling wood** 360 • Filling wood can be glued on in the factory 380 • For passing through vertical loads 400 420 Additional cost by request 440 460 Finishing options – description see page 22 480

Installation variants – Invoiced profile dimensions for variant 31 and 34



**Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece **Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece





#### **Delivery options**

Length	2.30-16.00 m, from 440 mm 8.00-16.00 m
Width	900–1200 mm
Number of ribs	3
Lower CLT panel	in 90 mm with increased fire protection requirements — surcharge by request
Minimum production length	per element width 8.00 m, chamfered on one side

#### Characteristics

Approval	ETA-21/0336
Strength class	Board C24; rib GL 24h
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
Lamellae	Board: 20, 30 mm; rib 40 mm
General information	Planed on four sides, bottom side chamfered 4 mm (measured diagonally)
Thermal conductivity	Rib: $\lambda = 0.13$ (W/m*K); board: $\lambda = 0.12$ (W/m*K) according to ETA-21/0336
Specific heat capacity	1600 (J/kg*K) according to EN ISO 10456
CLT panel diffusion resistance	$\mu$ 20 (damp) / 50 (dry) in accordance with EN ISO 10456
Emission class	E1 according to DIN EN 717-1
Reaction to fire	D-s2, d0 according to DIN EN 13501-1
Fireproofing	Verification possible via the free best wood STATICS software
Airtightness	Airtight after testing in accordance with EN 12114 from 60 mm

#### Description

best wood CLT BOX is a statically effective and at the same time space-creating wood element, which is suitable for all ceiling requirements thanks to its versatile dimensions and excellent construction characteristics. A high-performance and versatile building product is created by utilising the advantages of solid timber and wood frame construction.

The combination of CLT and ribbing planks produces a high static load-bearing capacity with a comparatively low weight. The crosswise assembly from high-quality raw material in combination with high-quality gluing of edges and surfaces guarantees a high degree of dimensional stability. A high degree of prefabrication of the best wood CLT BOX with downstream cut-off and the simplicity of joining the best wood CLT BOX elements ensures swift and cheap installation and guarantees dry construction.

#### **Advantages**

- High static load-bearing capacity and light weight
- Large spans and therefore prop-free rooms possible
- High degree of prefabrication and simple joining of the ceiling elements for swift and cheap installation
- Utilises advantages of solid timber and wood frame construction









Certificates (Download at www.schneider-holz.com)







**Dimensioning tables** Ceiling and roof systems from page 51

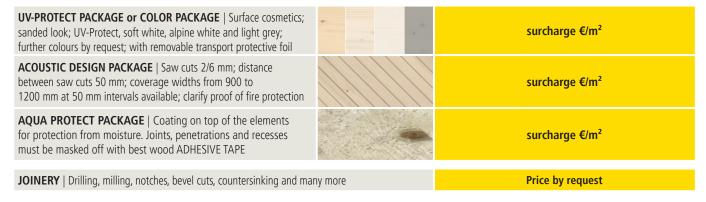
# best wood **CLT BOX – CEILING** open

Open wooden box element for easy installation routing best wood CLT with three glued-on GLULAM ribs

				Open at the TOP / BOTTOM	Open at the TOP	Open at the TOP
				Spruce industrial quality (planed)	Spruce visual quality (sanded)	Silver fir KNOT-FREE/RIFT (sanded)
	Assemb	ly		Local	Scandinavian	Local
Thickness [mm]	GLULAM ribs width [mm]	GLULAM ribs height [mm]	CLT panel [mm]	by request	by request	by request
160		100	60			
180		120	60			
200		140	60			
220	Prices calculated	160	60			
240	to 100 mm.	180	60			
260	80 and 120 mm by request.	200	60			
280	3) 129222	220	60			
300	80/100/120 mm	240	60			
320	depending on statics.	260	60			
340		280	60			
360	Dimensioning with	300	60			
380	best wood <b>STATICS</b> . Information on	320	60			
400	page 4.	340	60			
420		360	60			
440**		380	60			
460**		400	60			

<sup>\*\*</sup> clarify limited joinery from 440 mm

#### **Finishing options** (invoiced profile dimensions)



Installation variants – Invoiced profile dimensions for variant 41



**Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece **Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece







#### **Delivery options**

Length	2.30-16.00 m, from 440 mm 8.00-16.00 m
Width	900 –1200 mm
Number of ribs	3
Lower CLT panel	in 90 mm with increased fire protection requirements — surcharge by request
Minimum production length	per element width 8.00 m, chamfered on one side (only when open at the top)

#### Characteristics

Approval	ETA-21/0336
Strength class	Board C24; rib GL 24h
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
Lamellae	Board: 20, 30 mm; rib 40 mm
General information	Planed on four sides, bottom side chamfered 4 mm (measured diagonally) – only when open at the top
Emission class	E1 according to DIN EN 717-1
Reaction to fire	D-s2, d0 according to DIN EN 13501-1
Fireproofing	Verification possible via the free best wood STATICS software
Airtightness	Airtight after testing in accordance with EN 12114 from 60 mm

#### Description

best wood CLT BOX is a statically effective and at the same time space-creating wood element, which is suitable for all ceiling requirements thanks to its versatile dimensions and excellent construction characteristics. A high-performance and versatile building product is created by utilising the advantages of solid timber and wood frame construction.

The combination of CLT and ribbing planks produces a high static load-bearing capacity with a comparatively low weight. The crosswise assembly from high-quality raw material in combination with high-quality gluing of edges and surfaces guarantees a high degree of dimensional stability. A high degree of prefabrication of the best wood CLT BOX with downstream cut-off and the simplicity of joining the best wood CLT BOX elements ensures swift and cheap installation and quarantees dry construction.

#### **Advantages**

- High static load-bearing capacity and comparatively light weight
- High degree of prefabrication and simple joining of the ceiling elements for swift and cheap installation
- Utilises advantages of solid timber and wood frame construction
- Self-completion possible
- For inserting installations in the longitudinal direction









Certificates (Download at www.schneider-holz.com)







**Dimensioning tables** Ceiling and roof systems from page 51

# best wood **CLT BOX** – **ROOF**

Open box element for passive house construction

best wood CLT with two glued-on GLULAM ribs

				Spruce ind. quality (planed)	Spruce visual quality (sanded)	Silver fir KNOT-FREE/RIFT (sanded)
	Assem	oly		Local	Scandinavian	Local
Thickness [mm]	GLULAM ribs width [mm]	GLULAM ribs height [mm]	Lower CLT panel [mm]	by request	by request	by request
160		100	60			
180		120	60			
200		140	60			
220	Prices calculated	160	60			
240	to 80 mm.	180	60			
260	by request.	200	60			
280	00/400/400	220	60			
300	80/100/120 mm depending on statics.	240	60			
320		260	60			
340		280	60			
360	Dimensioning with	300	60			
380	best wood <b>STATICS</b> . Information on	320	60			
400	page 4.	340	60			
420	, 3	360	60			
440**		380	60			
460**		400	60			

<sup>\*\*</sup> clarify limited joinery from 440 mm

#### **Finishing options** (invoiced profile dimensions)



Installation variants – Invoiced profile dimensions for variant 26



**Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece **Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece

#### **Delivery options**

Length	2.30-16.00 m, from 440 mm 8.00-16.00 m
Width	1080—1200 mm, Shiplap edge ≤1150 mm cover size; smaller widths by request
Number of ribs	2
Lower CLT panel	in 90 mm with increased fire protection requirements – surcharge by request
Minimum production length	per element width 8.00 m





#### Characteristics

Approval	ETA-21/0336
Strength class	Board C24; rib GL 24h
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
Lamellae	Board: 20, 30 mm; rib 40 mm
General information	Planed on four sides, bottom side chamfered 4 mm (measured diagonally)
Emission class	E1 according to DIN EN 717-1
Reaction to fire	D-s2, d0 according to DIN EN 13501-1
Fireproofing	Verification possible via the free best wood STATICS software
Airtightness	Airtight after testing in accordance with EN 12114 from 60 mm

#### Description

The combination of CLT and ribbing planks produces a high static load-bearing capacity with a comparatively low weight. The crosswise assembly from high-quality raw material in combination with high-quality gluing of edges and surfaces guarantees a high degree of dimensional stability.

#### **Advantages**

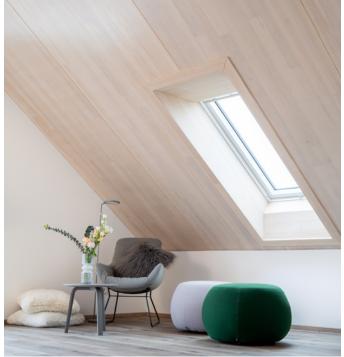
- high static load-bearing capacity and comparatively light weight
- large spans and therefore prop-free rooms possible
- high degree of prefabrication and simple joining of the ceiling elements for swift and cheap installation
- utilises advantages of solid timber and wood frame construction
- high resistance to fire
- outstanding insulation characteristics due to insulation of spaces for passive house construction











Certificates (Download at www.schneider-holz.com)







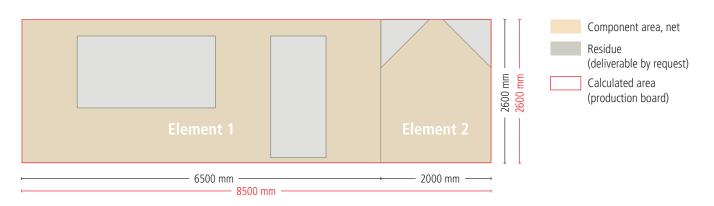
**Dimensioning tables** Ceiling and roof systems from page 51

# best wood **CLT** – **XL**

#### Characteristics

Approval	ETA-21/0568
Strength class	C24
Application classes	Use in application classes 1 and 2 according to EN 1995-1-1
Drying	Kiln dried, wood moisture max. 15 % at delivery
Bonding	CLT — XL CEILINGS: PU side bonding CLT — XL WALL: Hotmelt bonding
Lamellae	15, 20, 30 and 40 mm, sorted for quality and finger-jointed
General information	Planed along the long side/profiled and with planar calibration, bottom side chamfered 4 mm (measured diagonally), trimmed precisely $\pm$ 1 mm
Thermal conductivity	$\lambda = 0.12$ (W/m*K) according to ETA-21/0568
Specific heat capacity	1600 (J/kg*K) according to EN ISO 10456
CLT panel diffusion resistance	$\mu$ 20 (damp) / 50 (dry) in accordance with EN ISO 10456
Emission class	E1 according to DIN EN 717-1
Shape change	At board level $\approx 0.02\%$ per 1 % change in wood moisture perpendicular to board level $\approx 0.24\%$ per 1 % change in wood moisture
Reaction to fire	D-s2, d0 according to DIN EN 13501-1
Fireproofing	Verification possible via the free best wood STATICS software
Airtightness	Airtightness in accordance with EN 12114 from 44 mm

### Billing example for best wood CLT - XL



### Delivery and transport of best wood CLT - XL

The wooden elements must not be exposed to the external climate or extreme climate conditions (e.g. direct moisture impact) at any time.

- The components are protected by a film during transport.
- The customer is responsible for weather protection once the components are on the construction site. The elements / packages are not packed individually ex works.



	Horizontal transport best wood trailer	Horizontal transport best wood low loader with swap body	Vertical transport best wood low loader with swap body	Vertical transport best wood inloader with removable pallet
Length:	≤ 15.60 m	≤ 15.80 m	≤ 15.80 m	≤ 10.50 m
Width / height:	≤ 3.00 m	≤ 3.00 m	≤ 2.80 m	≤ 3.50 m

#### Elements which exceed the dimensions listed in the table are regarded as special transports!

These must be inquired about in good time, since we require a certain amount of advance notice to organise the transport.

# CEILING SYSTEM XL

# best wood **CLT** – **CEILING XL** INDUSTRIAL QUALITY

Cross laminated timber for solid ceiling structures

Width up to 3.50 m

										Spruce ind. quality (calibrated)
										Local
	Thickn.					Layer structure				
	[mm]	Layers			L	Q	L			by request
	45	3			15	15	15			
S	60	3			20	20	20			
layers	80	3			30	20	30			
$\sim$	100	3			40	20	40			
	120	3			40	40	40			
				L	Q	L	Q	L		
	100	5		20	20	20	20	20		
	120	5		30	20	20	20	30		
	140	5		40	20	20	20	40		
	160	5		40	20	40	20	40		
L/O	180	5		40	30	40	30	40		
layers	200	5		40	40	40	40	40		
5	220	7		40 + 40	20	20	20	40 + 40		
ш,	240	7		40 + 40	20	40	20	40 + 40		
	260	7		40 + 40	30	40	30	40 + 40		
	280	7		40 + 40	40	40	40	40 + 40		
	300	8		40 + 40	30	40 + 40	30	40 + 40		
	320	8		40 + 40	40	40 + 40	40	40 + 40		
			L	Q	L	Q	L	Q	L	
SI	340	9	40 + 40	30	40	40	40	30	40 + 40	
layers	360	9	40 + 40	40	40	40	40	40	40 + 40	
0	300	9	40 + 40	40	40	40	40	40	40 + 40	

20 = lamella thickness in mm ; L = lengthways layer ; Q = lateral layer

Further thicknesses and layer structures available by request.

#### **Finishing options** (invoiced profile dimensions)

**WET PROTECT PACKAGE** | Temporary protection during the construction period using foil application on top of the elements for protection from moisture.

Wetguard Wetgus

surcharge €/m²

JOINERY | Drilling, milling, notches, bevel cuts, countersinking and many more

Price by request

Installation variants – Invoiced profile dimensions for variant 11, 14 and 16







Further information from page 47

Including exact profiling and chamfer!

**Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece **Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece

#### **Delivery options**

Length	2.30-16.00 m
Width	up to 3500 mm
Minimum production length	per element width 8.00 m
Minimum production width	1800 mm
Other cross sections	Available by request

#### Transport / delivery

Transport costs (for transport options see page 30)	by request
Drill holes for lifting systems	by request

# best wood **CLT** — **CEILING XL** visual quality Visible cross laminated timber for solid ceiling structures Width up to 3.00 m and colour finishing up to max. 2.50 m

60 3 80 4 100 4 120 4 120 120 140 160 180 120 120 120 120 120 120 120 120 120 12	syers 3 4 4 4 5 6 6 6 6 8 8 8 9 9		$ \begin{array}{c} L \\ 20 \\ 15 + 15 \\ 20 + 20 \\ 20 + 20 \\ 20 + 20 \\ 20 + 20 \\ 20 + 20 + 40 \\ 20 + 20 + 40 \\ 20 + 20 + 40 \end{array} $	Layer str L 15 20 15 + 15 20 + 20 20 + 20 20 20 20 20 20 40 20 20	Pucture Q 15 20 20 40 L 20 20 40 40 40 40 40 40 40	L 15 20 30 40 40 Q 20 20 20 20 30 40 20	L 20 30 40 40 40 40		Visual industrial quality by request	Visual quality by request	by reque
[mm] Lay 45	3 3 4 4 4 5 6 6 6 6 6 8 8 8 8		$ \begin{array}{c} L \\ 20 \\ 15 + 15 \\ 20 + 20 \\ 20 + 20 \\ 20 + 20 \\ 20 + 20 \\ 20 + 20 + 40 \\ 20 + 20 + 40 \\ 20 + 20 + 40 \end{array} $	L 15 20 15+15 20+20 20+20 Q 20 20 20 20 20 20 20 20 20 20 20 20 20	Q 15 20 20 40 L 20 20 40 40 40 40	15 20 30 40 40 Q 20 20 20 20 30 40	20 30 40 40 40 40		by request	by request	by requ
45 3 60 3 60 100 4 120 4 120 140 160 180 120 120 120 120 120 120 120 120 120 12	3 3 4 4 4 5 6 6 6 6 6 8 8 8 8		20 $ 15 + 15 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40$	20 15+15 20+20 20+20 Q 20 20 20 20 30 40 20 20	15 20 20 20 40 L 20 20 40 40 40 40	15 20 30 40 40 Q 20 20 20 20 30 40	20 30 40 40 40 40		by request	by request	by requi
60 3 80 4 100 4 120 4 120 120 140 160 180 120 120 120 120 120 120 120 120 120 12	3 4 4 4 5 6 6 6 6 6 8 8 8 8		20 $ 15 + 15 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40$	20 15+15 20+20 20+20 Q 20 20 20 20 30 40 20 20	20 20 40 L 20 20 20 20 40 40 40	20 30 40 40 Q 20 20 20 20 20 40	20 30 40 40 40 40				
80 4 100 4 120 4 100 9 120 6 140 6 180 6 200 6 220 8 240 8 260 8 280 8 300 9	4 4 4 5 6 6 6 6 8 8 8 8 9		20 $ 15 + 15 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40$	15 + 15 20 + 20 Q 20 + 20 20 20 20 20 30 40 20 20	20 20 40 L 20 20 20 40 40 40	30 40 40 Q 20 20 20 20 20 40	20 30 40 40 40 40				
100 4 120 4 100 1 120 6 140 6 160 6 180 6 200 6 220 8 240 8 260 8 300 9	4 4 5 6 6 6 6 8 8 8 8 9		20 $ 15 + 15 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40$	20 + 20 20 + 20 Q 20 20 20 20 30 40 20 20	20 40 L 20 20 20 40 40 40	40 40 Q 20 20 20 20 30 40	20 30 40 40 40 40				
120 4 100 9 120 0 140 0 160 0 180 0 200 0 220 8 240 8 260 8 280 8 300 9	5 6 6 6 6 8 8 8 8		20 $ 15 + 15 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40$	20 + 20 Q 20 20 20 20 30 40 20	40 L 20 20 20 40 40 40	40 Q 20 20 20 20 20 30 40	20 30 40 40 40 40				
100 !! 120 (0 140 (0 180 (0 180 (0 220 (3 240 (3 280 (3 300 (9	5 6 6 6 6 8 8 8 8		20 $ 15 + 15 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40$	Q 20 20 20 20 30 40 20 20	L 20 20 20 40 40 40 20	Q 20 20 20 20 20 30 40	20 30 40 40 40 40				
120 (140 (140 (140 (140 (140 (140 (140 (14	6 6 6 6 8 8 8 8		20 $ 15 + 15 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40 $ $ 20 + 20 + 40$	20 20 20 20 30 40 20 20	20 20 20 40 40 40 20	20 20 20 20 20 30 40	20 30 40 40 40 40				
120 (140 (140 (140 (140 (140 (140 (140 (14	6 6 6 6 8 8 8 8		$     \begin{array}{r}       15 + 15 \\       20 + 20 \\       20 + 20 \\       20 + 20 \\       20 + 20 \\       20 + 20 \\       20 + 20 + 40 \\     \end{array} $	20 20 20 30 40 20	20 20 40 40 40 20	20 20 20 30 40	30 40 40 40 40				
140 (160 (160 (160 (160 (160 (160 (160 (16	6 6 6 8 8 8 8		20 + 20 $20 + 20$ $20 + 20$ $20 + 20$ $20 + 20 + 40$ $20 + 20 + 40$ $20 + 20 + 40$	20 20 30 40 20 20	20 40 40 40 20	20 20 30 40	40 40 40 40				
160 (6) 180 (7) 180 (8	6 6 8 8 8 8		20 + 20 $20 + 20$ $20 + 20$ $20 + 20 + 40$ $20 + 20 + 40$ $20 + 20 + 40$	20 30 40 20 20	40 40 40 20	20 30 40	40 40 40				
180 (0 200 (0 220 (3 240 (3 260 (3 280 (3 300 (9	6 8 8 8 8 9		20 + 20 $20 + 20$ $20 + 20 + 40$ $20 + 20 + 40$ $20 + 20 + 40$	30 40 20 20	40 40 20	30 40	40 40				
200 (220 8 240 8 260 8 300 9 9	6 8 8 8 8 9		20 + 20 $20 + 20 + 40$ $20 + 20 + 40$ $20 + 20 + 40$	40 20 20	40 20	40	40				
220 8 240 8 260 8 280 8 300 9	8 8 8 8 9		20 + 20 + 40 $20 + 20 + 40$ $20 + 20 + 40$	20 20	20						
240 8 260 8 280 8 300 9	8 8 8 9		20 + 20 + 40 20 + 20 + 40	20		20					
260 8 280 8 300 9	8 8 9		20 + 20 + 40		10		40 + 40				
280 8 300 9	8 9					20	40 + 40				
300	9			30	40	30	40 + 40				
			20 + 20 + 40	40	40	40	40 + 40				
220	u		20 + 20 + 40	30	40 + 40	30	40 + 40				
320	,	1	20 + 20 + 40	40	40 + 40	40	40 + 40	,			
240 1	10	L	Q	L 10	Q	L 40	Q	L 10 : 10			
	10 10	20 + 20 + 40 20 + 20 + 40	30 40	40	40 40	40 40	30 40	40 + 40 40 + 40			
<b>UV-PROTE(</b> Surface cosr request	ECT PA	CKAGE or COL ;; sanded look; U	OR PACKAGE   V-Protect, alpine	possible u	white and	light gre	y; further co		on westquard		rcharge €
top of the el	elemer	its for protection					g				rcharge €/
nstallation	n vari	ants – Invoiced	profile dimension	s for varia		nd 16 —				Includir	ng exact
		11	13	14		16 _		Further	information from pag	cha	mfer!
nlay board	d for		iling section: T				<del>-</del>			n in 5.00 m/piece n in 5.00 m/piece	
ransport /		rery r transport option									by re





#### Description

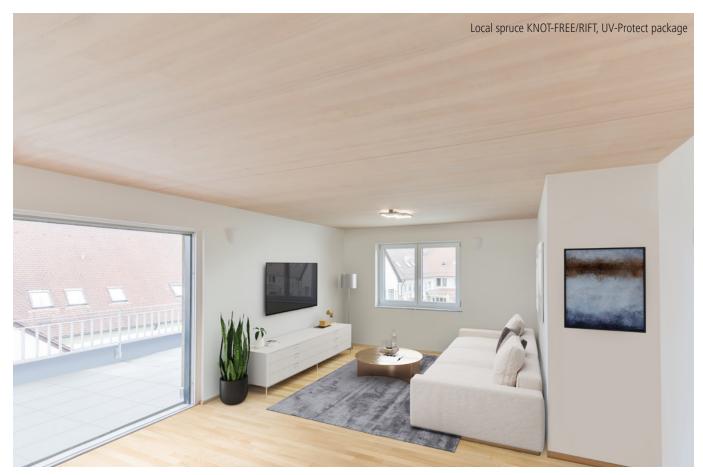
Cross laminated timber for solid ceiling structures up to a width of 3.00 m

best wood CLT is a load-bearing solid wood element, consisting of at least three layers of crossways glued solid wood boards, which is suitable for all building requirements thanks to its excellent construction characteristics.

The crosswise structure of high-quality raw material guarantees a high degree of dimensional stability, and leads to only small deformations from swelling and shrinking in the event of moisture changes in the panel level.

#### **Advantages**

- high static load-bearing capacity and comparatively light weight
- the cross-wise design makes two-axis load transferring possible
- high degree of prefabrication and simple joining of the wall and/or ceiling elements for swift and cheap installation
- airtight from just 3 layers
- high resistance to fire



\* KNOT-FREE/RIFT | The special cut in our new, state of the art sawmill from local spruce results in a surface with few knots.

Only a few, small knots are possible. This creates a calm and elegant visual overall appearance. Detailed information about the surface qualities can be found on page 49.







# best wood CLT - WALL XL

Cross laminated timber for solid wall structures

Height up to 3.50 m

	iicigii	t up to	3.30 III							Spruce ind. quality (calibrated)	Spruce visual ind. quality (sanded)
										Local	Local
	Thickn.					Layer struct	ure				
	[mm]	Layers			Q	L	Q			by request	by request
	45	3			15	15	15				
STS	60	3			20	20	20				
layers	80	3			30**	20	30				
$\sim$	100	3			40*	20	40				
	120	3			40*	40	40				
				Q	L	Q	L	Q			
	100	5		20	20	20	20	20			
	120	5		30**	20	20	20	30			
	140	5		40*	20	20	20	40			
	160	5		40*	20	40	20	40			
Ś	180	5		40*	30	40	30	40			
5 layers	200	5		40*	40	40	40	40			
5	220	7		40*+ 40	20	20	20	40 + 40			
	240	7		40*+ 40	20	40	20	40 + 40			
	260	7		40*+ 40	30	40	30	40 + 40			
	280	7		40*+ 40	40	40	40	40 + 40			
	300	8		40*+ 40	30	40 + 40	30	40 + 40			
	320	8		40*+ 40	40	40 + 40	40	40 + 40			
S			Q	L	Q	L	Q	L	Q		
layers	340	9	40*+ 40	30	40	40	40	30	40 + 40		
7 la	360	9	40*+ 40	40	40	40	40	40	40 + 40		

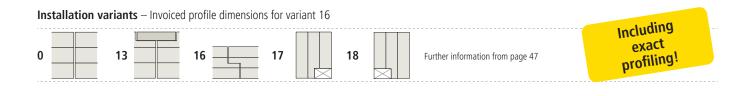
= lamella thickness in mm; L = lengthways layer; Q = lateral layer

Further thicknesses and layer structures available by request.

#### **Finishing options** (invoiced profile dimensions)

JOINERY | Drilling, milling, notches, bevel cuts, countersinking and many more

Price by request



Inlay board for forming the ceiling section: Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece Inlay board for forming the ceiling section: Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece

#### **Delivery options**

• •	
Length	2.30-16.00 m
Height	up to 3500 mm
Minimum production length	per element width 8.00 m
Minimum production width	1800 mm
Other cross sections	Available by request

 $<sup>^{\</sup>star}$  only with the visual industrial quality, the visual layer consists of 20 + 20 instead of 40

<sup>\*\*</sup> only with the visual industrial quality, the visual layer consists of 15 + 15 instead of 30

#### Description

Cross laminated timber for solid wall structures up to a height of 3.50 m

best wood CLT is a load-bearing solid wood element, consisting of at least three layers of crossways glued solid wood boards, which is suitable for all building requirements thanks to its excellent construction characteristics. The crosswise structure of high-quality raw material guarantees a high degree of dimensional stability, and leads to only small deformations from swelling and shrinking in the event of moisture changes in the panel level.

#### **Advantages**

- high static load-bearing capacity and comparatively light weight
- the cross-wise design makes two-axis load transferring possible
- high degree of prefabrication and simple joining of the wall and/or ceiling elements for swift and cheap installation
- airtight from just 3 layers
- high resistance to fire

For characteristics and billing see page 30

#### Transport / delivery

Transport costs (for transport options see page 30)	by request
Drill holes for lifting systems	by request

#### **CONNECTORS** — for quick construction of CLT walls

Wood connectors from Hilti and STEXON for quick and efficient construction of prefabricated best wood CLT XL – WALLS. The connectors are installed in the factory at best wood SCHNEIDER and then delivered to the construction site "ready for construction". **Price for drilling, installation and connectors always by request.** 

#### Hilti HCW connector













Item no.	Designation	UP
6250HILTI-HCW	Hilti HCW 37x45 M12 for shear and tensile loads, drilling diameter 37mm for the connector	Piece
6250HILTI-HCWS	Hilti HCW-S 37x45 for shear loads, drilling diameter 37mm for the connector	Piece
6250HILTI-HCWL	Hilti HCW-L 40x295 M12 heavy-duty anchor for high tensile loads	Piece
6251STEXONmk	STEXON mk S45-M12 for shear and tensile loads with drilling diameter 40 mm for the connector	Piece
6251STEXONok	STEXON ok S45-M12 for shear loads with drilling diameter 40 mm for the connector	Piece
6251STEXONL	STEXON L S40-M12 for shear and tensile loads with drilling diameter 40 mm for the connector	Piece

#### **LIFTING STRAP**

One or more straps per element can be led through the wall elements using drill holes, and used as attachment elements. The attachment variants, tilt angles and maximum load-bearing capacities which are possible must be clarified. The positions of the drill holes must be defined in consultation with the work scheduling department. **Further information and prices by request.** 



Item no.	Designation	PU	UP
6234HEBEBAND	Disposable lifting strap	1 strap	Piece

Certificates (Download at www.schneider-holz.com)







**Dimensioning tables** Ceiling and roof systems from page 51

# Lifting systems / Turning system

#### We can drill the holes for the following lifting systems in the factory.

You can speak to the respective manufacturer about the lifting system itself.

A detailed description of the lifting systems can be found in the Technical information CLT at www.schneider-holz.com/downloads.

Note: The usage instructions of the respective manufacturer (e.g. check drill hole) must be observed before lifting the elements using lifting/turning systems.







rothoblass WASP

**RAPID T-LIFT** 

WÜRTH **Transportation anchor** 

Other lifting systems on request

#### **WÜRTH LIFTING SYSTEM**

Minimum wood thickness: with planar lifting  $\geq$  120 mm, with frontal lifting  $\geq$  160 mm (with locking screw) The transport anchoring screw is installed countersunk in the element by approx. 10 mm using bit insert AW40.

Note: The usage instructions of the respective manufacturer (e.g. check drill hole) must be observed before lifting the elements using lifting/turning systems.

Item no.	Designation	PU	UP
6206TRANSPORTANKER	Transportation anchor	2 pieces	2 pieces
6203SCHRAUBE12x100/60	Transportation anchor screw 12x100/60	50 pcs./pack	pack
6203SCHRAUBE12x120/100	Transportation anchor screw 12x120/100	50 pcs./pack	pack
6203SCHRAUBE12x160/145	Transportation anchor screw 12x160/145	50 pcs./pack	pack
6204BITEINSATZ	Bit insert AW40 mm	1 pieces	Piece
6204WÜRTH-BOHRUNGEN	Drill hole Würth lifting systems	1 pieces	Piece





### **Fasteners**

#### X-fix® C

X-fix $^{\circ}$  C is a two-piece, self-tightening wood-wood connector for compression and tension-proof connection of CLT ceilings and walls. X-fix $^{\circ}$  C is a wedge-shaped dovetail wood-wood connector. The X-fix $^{\circ}$  C wedge shape even clamps large-format ceiling panels or wall parts in a self-tightening, form-fitting way. The advantages of X-fix $^{\circ}$  C: Fast installation, form-fitting connection is ideal for visible surfaces, no panel tighteners required for ceiling connections, and thanks to the wedge shape, X-fix $^{\circ}$  C even clamps large-format ceiling panels together in a self-tightening way, no metal in the pure wood-wood connection.



Item no.	Designation	PU	UP
6209X-FIX	X-fix® C 96/130/90	1 pieces	Piece
6209X-FIX-BOHRUNGEN	Drill hole for X-fix (both sides)	1 pieces	Piece



**Note:** Only with CLT in conjunction with a tongue & groove connection possible

### **HECO-TOPIX®** plus

Full-thread screw with cylinder head, ETA-19/0553 for a cross screw connection at the ceiling element joint creating a static ceiling section. Verification possible via best wood STATICS.

Item no.	Delivery form	PU	UP
6229ZK6/160	6 x 160 mm	100 pcs./pack	pack



### Soundproofing

#### best wood BOUNDSPLITT

best wood BOUNDSPLITT is a chippings binder for manufacturing a flexibly bound chippings filling for improving the soundproofing of wooden ceilings.

best wood BOUNDSPLITT remains flexible after drying, and is therefore acoustically comparable with the best wood CHIPPINGS in the best wood HONEYCOMB. Filling heights of

30 to 120 mm can be realised. Approximately 0.3 kg of binder

is needed with dry 5/8 chippings per m<sup>2</sup> and filling height of 10 mm. The drying time under optimum conditions and dry chippings is approx. 8 days for a filling height of 80 mm. The mixture of chippings binder and chippings can be applied with a screed pump.

best wood BOUNDSPLITT will keep for 12 months. The storage temperature must be no less than  $5^{\circ}$ C. The processing temperature is  $5^{\circ}$  C to  $35^{\circ}$  C.

More information about processing can be found in the technical data sheet at www.schneider-holz.com. Acoustically tested component structures with best wood BOUNDSPLITT can be found in the component database on our web site.

Transportation charges on request.





#### best wood CHIPPINGS

best wood CHIPPINGS consist of a grain made from natural calcium carbonate, which is manufactured using state-of-the-art grinding and drying systems and sieving machines. It is used for putting into the best wood CLT BOX — CEILING FS and as ballast in best wood ceiling elements.

Item no.	Designation	PU	UP
6220SCHUETTUNG	best wood CHIPPINGS bag	25 kg/bag, 40 bags/pallet	Bag
6220SCHUETTUNGBIGBAG	best wood CHIPPINGS Big Bag	1000 kg/Big Bag on pallet	Big Bag





### best wood EASY FILL

best wood EASY FILL makes easy and quick filling of best wood CHIPPINGS in a predefined quantity into the CLT BOX — CEILING FS possible.

Item no.	Designation	PU	UP
6231EASYFILLKAUF	best wood EASY FILL for buying	1 piece	Piece
6231EASYFILLPFAND	best wood EASY FILL deposit	1 piece	Piece



#### best wood HONEYCOMB 30/60

HONEYCOMB is a honeycomb board made from cardboard which prevents the best wood CHIPPINGS from moving or shifting. Laying the chippings directly on the honeycomb provides a consistent layer thickness.

Item no.	Designation	PU	UP
6221WABE30	best wood HONEYCOMB 30	1.5 m <sup>2</sup> /board, 30 boards/pallet	$m^2$
6221WABE60	best wood HONEYCOMB 60	1.5 m <sup>2</sup> /board, 15 boards/pallet	m <sup>2</sup>

Filling quantity of best wood CHIPPINGS in best wood HONEYCOMB 30/60: HONEYCOMB 30 approx. 42 kg/m $^2$  | HONEYCOMB 60 approx. 84 kg/m $^2$ 



# **Fireproofing**

### Hilti CFS-S ACR fire protection sealing compound

Acrylate-based fire protection sealing compound for sealing element joints with fire protection requirements for the best wood CLT BOX - CEILING FS

### Hilti CP 611A/CFS-IS fire protection sealing compound

Intumescent fire protection sealing compound for sealing individual cable entries and the Hilti cable sleeve CFS-SL GA in the best wood CLT BOX — CEILING FS

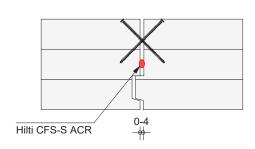
#### Advice and sale by HILTI

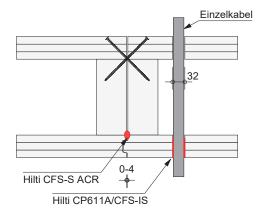
Hilti Germany Hiltistraße 2 86916 Kaufering Phone 0800-8885522 www.hilti.de Hilti Austria Gesellschaft m.b.H. Altmannsdorfer Straße 165 1230 Vienna Phone 0800-818100 www.hilti.at

Hilti Schweiz AG Soodstrasse 61 8134 Adliswil Phone 0844-848485 www.hilti.ch

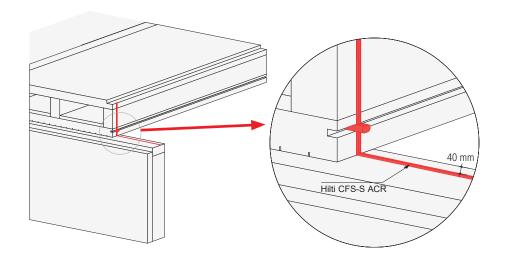


#### Example of element joints construction with fire resistance requirement up to F 60:





### Example support with fire resistance requirement up to F 60:



Other element joints constructions, leadthroughs through the element or installations with fire resistance requirements for CLT BOX can be found in ETA-21/0336 and for CLT in ETA-21/0568.

For the planning of the individual versions or details, please note the technical specifications with regard to fasteners and connection distances in ETA-21/0336 and ETA-21/0568.

# Vapor barrier and airtight sealing membrane / Adhesive tapes

### WETGUARD® 200 SA 390 or 1560 mm

Rain-proof and robust membrane that is self-adhesive over its entire surface for reliable moisture protection of wooden elements during transport, installation and construction time.

#### Field of application

Indoors and outdoors

#### **Advantages**

Fleece with non-slip coating and adhesive application over the entire surface. Transparent, robust and resistant to friction wear.





s, value	3.5 m
Reaction to fire	E
Outdoor weather exposure	3 months
Watertight	W1
Temperature resistance	-40°C to +80°C

Item no.	Roll length	Roll width	Area	Roll weight
6233SIGAWETGUARD390	50 m	390 mm	19.6 m <sup>2</sup> /roll	6.2 kg
6233SIGAWETGUARD1560	50 m	1560 mm	78 m²/roll	24.6 kg

#### **TESCON VANA**

Multi-purpose adhesive tape with fleece back

#### Field of application

Can be used to form a secure and permanent seal on overlaps between foil and fleece membranes (vapor barriers and airtight sealing membranes, roof underlays and wall membranes) and joins between them. It is also suitable for sealing butt joints between wood-based material panels.

#### **Advantages**

Long-lasting sealed bonds, indoors and outdoors; with pliable fleece backing; can be torn off by hand; for airtight bonds in accordance with DIN 4108-7, SIA 180 and ÖNorm B8110-2; high initial adhesiveness: extremely high final adhesion; waterproof adhesive.





by pro clima



Backing	Special PP fleece
Separating layer	Siliconized paper
Temperature resistance	Long term -40 °C to +90 °C
Processing temperature	From -10 °C
Outdoor weather exposure	6 months

Item no.	Roll length	Roll width	Contents	KG / PU
6102TESCONVANA60	30 m	60 mm	10 rolls/carton	6 kg
			1 roll	0.6 kg
6102TESCONVANA150	30 m	150 mm	2 rolls	3 kg

#### best wood ADHESIVE TAPE

Professional adhesive tape, self-adhesive on one side

#### Field of application

For masking the element joints and penetrations of all elements that are coated with AQUA PROTECT. The ADHESIVE TAPE is also used for all masking work on the best wood SEALING LEVEL FOR WINDOW SILLS.

#### **Advantages**

Permanently sealed bonding; strong adhesion, UV stable and ageing resistant.







Backing	LDPEco film, white
Separating layer	Siliconized paper
Temperature resistance	−30 °C to + 100 °C
Processing temperature	+5 °C
Outdoor weather exposure	2 years UV-resistant

Item no.	Roll length	Roll width	Contents	KG / PU
6235KLEBEBAND60	30 m	60 mm	10 rolls/carton	8.5 kg
6235KLEBEBAND100	30 m	100 mm	6 rolls/carton	8.5 kg
6235KLEBEBAND180	30 m	180 mm	4 rolls/carton	10.0 kg

# **Lighting systems**



#### Description

Nowadays the solution in many areas consists of LEDs, whose efficiency is enhanced by intelligent light controls and innovative operating devices. The new, dimmable LED lighting systems for our ceiling and roof systems are high quality, and impress with their timeless design. This guarantees that you will realize long-lasting lighting ideas. Suitable holes drilled in the factory make installation child's play, the lamps just need to be cabled and clipped in place.

#### RECESS MOUNTED LIGHTS

#### LED 170 round

The lighting systems are coordinated with our best wood GLULAM and CLT ceilings and CLT BOX, and can be supplied ready-drilled with the relevant holes at an additional cost.

Even light distribution over the entire light outlet surface. Dimmable with a trailing edge dimmer.

The lights are only suitable for indoors and for connecting to safety extra-low voltage.

Item no.	Designation	PU	UP
6222-170RW	LED 170 round white	1 pc.	Piece
6222-170RTM	LED 170 round matt titanium	1 pc.	Piece
6222-170R- BOHRUNGEN	Drill holes for LED 170	1 pc.	Piece



Wattage [Watt]	11
Connection voltage [Volts]	230
Lamp	SMD LED
Light colour	Warm white
Colour temperature [Kelvin]	Approx. 3000 K
Luminous flux [Lumen]	840 lm
Colour rendering	Ra > 80
Material	Aluminum/PMMA diffusor disk
Operating device (transformer)	Included (packaged separately)
Dimmable	yes
Degree of protection	IP20
Installation depth	55 mm with best wood ceiling systems
External diameter	170 mm

### LED 90 spot

The lighting systems are coordinated with our best wood GLULAM and CLT ceilings and CLT BOX, and can be supplied ready-drilled with the relevant holes at an additional cost.

The reflector is made from real glass, and the lighting system is dimmable with a trailing edge dimmer.

The lights are only suitable for indoors and for connecting to safety extra-low voltage.

Item no.	Designation	PU	UP
6222-90SPOTW	LED 90 Spot white	1 pc.	Piece
6222-90SPOTN	LED 90 Spot nickel brushed	1 pc.	Piece
6222-90SPOT- BOHRUNGEN	Drill holes for LED 90 Spot	1 pc.	Piece





/hite nickel brush

Wattage [Watt]	8
Connection voltage [Volts]	230
Lamp	COB LED
Light colour	Warm white
Colour temperature [Kelvin]	Approx. 3000 K
Luminous flux [Lumen]	850 lm
Colour rendering	Ra > 90
Material	Diecast aluminum/real glass reflector
Radiation angle, swivelling	38 degrees
Operating device (transformer	r) Included (packed with spot)
Dimmable	yes
Degree of protection	IP40
Installation depth	75 mm with best wood ceiling systems
External diameter	90 mm

### **LED 90 FireSpot**

Even demanding lighting tasks can be solved without problems with the LED 90 FireSpot, thanks to the high light output. Installation in the BS3700TC fire protection box fulfils the requirements for fire protection shielding in a best wood ceiling element with a fire resistance duration of 60 minutes.

The LED 90 FireSpot can only be purchased in combination with a BS3700TC fire protection box.

The lighting systems are coordinated with our best wood GLULAM, CLT and CLT BOX ceiling elements, and can be supplied ready-drilled with the relevant holes at an additional cost.

Item no.	Designation	PU	UP
6222-90FSPOTW-BS3700TC	LED 90 FireSpot, white, including BS3700TC fire protection box	1 pc.	Piece
6222-90FSPOTN-BS3700TC	LED 90 FireSpot, nickel brushed, including BS3700TC fire protection box	1 pc.	Piece
6222-90FSPOT-BOHRUNGEN	Drill holes for LED 90 FireSpot	1 pc.	Piece





White

nickel brushed

Wattage [Watt]	7
Connection voltage [Volts]	230
Lamp	LED
Light colour	Warm white
Colour temperature [Kelvin]	3000 K
Luminous flux [Lumen]	650 lm
Colour rendering	Ra > 80
Material	Aluminum
Operating device (transformer	) incl.
Dimmable	yes
Degree of protection	IP44
Installation depth	with fire protection box 62 mm
External diameter	90 mm

### **BS3500TC** fire protection box

The BS3700TC is a fire protection box which has been developed for installation in solid wood ceilings and walls, for fire protection shielding up to EI60.

Due to the newly developed and patented f-tronic® TC fastening system with claw, the box can be quickly and easily attached in the solid wood. The intumescent material seals the opening in the event of a fire.



### **SURFACE MOUNTED LIGHTS**

The surface mounted lighting systems are tailored to our best wood GLULAM, CLT and CLT BOX ceilings, and can be directly attached to the ceiling. Even light distribution over the entire light outlet surface and the lights are dimmable with a trailing edge dimmer. The lights are only suitable for indoors and for connecting to safety extra-low voltage.

- Very low installation height of just 15 mm
- Elegant design
- Different colour temperatures possible
- Integrated transformer

### **LED 165 | 217 Standard**

Available in colour temperatures of 3000 or 4000 Kelvin.

Item no.	Designation	PU	UP
6226-165STW3K	LED 165 Standard round white 3000 K	1 pc.	Piece
6226-165STW4K	LED 165 Standard round white 4000 K	1 pc.	Piece
6226-217STW3K	LED 217 Standard round white 3000 K	1 pc.	Piece
6226-217STW4K	LED 217 Standard round white 4000 K	1 pc.	Piece
6226-165STN3K	LED 165 Standard round nickel brushed 3000 K	1 pc.	Piece
6226-165STN4K	LED 165 Standard round nickel brushed 4000 K	1 pc.	Piece
6226-217STN3K	LED 217 Standard round nickel brushed 3000 K	1 pc.	Piece
6226-217STN4K	LED 217 Standard round nickel brushed 4000 K	1 pc.	Piece



White nickel brushed

Wattage [Watt]	12 (LED 165) or 18 (LED 217)
Connection voltage [Volts]	230
Lamp	SMD LED
Light colour	Warm white - neutral white
Colour temperature [Kelvin]	3000 or 4000 K
Luminous flux [Lumen]	with 3000 K: 1000 or 1550
	with 4000 K: 1100 or 1600
Colour rendering	Ra > 80
Material	Aluminum/plastic
Operating device (transformer	r) integrated
Dimmable	yes
Degree of protection	IP20
Installation height	15 mm
External diameter	165 mm or 217 mm

### **LED 165 | 217 Premium**

The colour temperature with all Premium models is adjustable between 3000, 4000 or 6500 Kelvin.



Item no.	Designation	PU	UP
6226-165PRW	LED 165 Premium round white	1 pc.	Piece
6226-217PRW	LED 217 Premium round white	1 pc.	Piece
6226-165PRN	LED 165 Premium round nickel brushed	1 pc.	Piece
6226-217PRN	LED 217 Premium round nickel brushed	1 pc.	Piece

Wattage [Watt]	12 (LED 165) or 18 (LED 217)
Connection voltage [Volts]	230
Lamp	SMD LED
Light colour	Warm white - neutral white
Colour temperature [Kelvin]	3000, 4000, 6500 K (adjustable)
Luminous flux [Lumen]	1000 or 1700 lm
Colour rendering	Ra > 80
Material	Aluminum/plastic
Operating device (transformer	) integrated
Dimmable	yes
Degree of protection	IP20
Installation height	15 mm
External diameter	165 mm or 217 mm

# **Colour finishing from the factory**

#### **COLOUR FINISHING + UV PROTECTION**

#### Description

Building elements with mineral paint or the colourless UV-protect paint applied, for internal application, are delivered ready picked to the construction site. The colours impress with their appealing look and longevity. All best wood glazes retain the diffusion-open characteristics of the wood and provide a good room and living climate. The natureplus-certified coated elements are available in a sanded look.

#### Characteristics

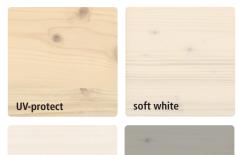
Water-based
Without solvents and plasticisers
Natureplus certified
Diffusion-open
Sustainable
For a good indoor and living climate

#### Remarks

The representations of colours and products may differ from the actual colouring. Wood is a natural product. Colour deviations due to differences in structure and grain are possible and typical.

Further colours available by request.

#### **Colour variants**







# Accessories for ceiling finishing

#### Soft wax

Soft wax for surface correction of the best wood painted ceilings for repairing scratches, cracks, holes and dents in the surface area. Coordinated with the best wood colour variants.

Item no.	Designation	PU	UP
6213WACHSF	Soft wax colourless	2 pcs./pack	pack
6213WACHSUV	Soft wax UV-protect	2 pcs./pack	pack
6213WACHSZW	Soft wax soft white	2 pcs./pack	pack
6213WACHSEW	Soft wax alpine white	2 pcs./pack	pack
6213WACHSLG	Soft wax light grey	2 pcs./pack	pack



### Soft wax spatula

Soft wax spatula for applying and modelling soft wax during surface correction.

Item no.	Designation	PU	UP
6214WACHSSPACHTEL	Soft wax spatula	1 pieces	Piece



#### best wood CEILING TAPE

Ceiling tape for masking all best wood painted ceilings. The ceiling tape is available with a width of 50 mm, and prevents adhesive residue on the varnished surfaces. 50 running metres per roll.

Item no.	Designation	PU	UP
6210DECKENTAPE	best wood ceiling tape	50 rmt/roll	Roll



# **Colours for processing at home**

#### **TIMBERBASE**

#### Primer for visible wooden elements indoors.

TIMBERBASE has been developed as an environmentally friendly industrial product for priming visible wooden elements indoors, such as cross laminated timber (CLT) or GLULAM (BSH), which are subsequently going to be treated with TIMBERCOLOR or UV-protect.





Item no.	Designation	PU	UP
6228TB1,0	TIMBERBASE	1.0	Litre
6228TB2,5	TIMBERBASE	2.5	Litre
6228TB5,0	TIMBERBASE	5.0	Litre
6228TB10,0	TIMBERBASE	10.0 l	Litre

#### **TIMBERCOLOR**

#### Timbercolor is used for finishing the ceiling elements in the interior.

Specially developed for materials such as cross laminated timber (CLT and CLT BOX) and glued laminated timber (GLULAM), Timbercolor provides an appealing and transparent finish which emphasizes the natural charm of the wood.

#### New improved formula:

**Robust:** The newly revised and improved TIMBERCOLOR ensures that the colour is durable and withstands the everyday requirements.

**Easy care:** TIMBERCOLOR can be wiped over and cleaned effortlessly, whereby the colours remain clean and appealing.

**Application:** For corrections to our ceiling elements and, thanks to the new formula, also for heavily used surfaces such as columns, pillars and purlins.

TIMBERBASE must be applied as the primer.





Item no.	Designation	PU	UP
6228TCUV1,0	TIMBERCOLOR - UV-protect	1.0	Litre
6228TCUV2,5	TIMBERCOLOR - UV-protect	2.5	Litre
6228TCUV5,0	TIMBERCOLOR - UV-protect	5.0	Litre
6228TCUV10,0	TIMBERCOLOR - UV-protect	10.0	Litre
6228TCZW1,0	TIMBERCOLOR - soft white	1.0	Litre
6228TCUZW2,5	TIMBERCOLOR - soft white	2.5	Litre
6228TCTZW5,0	TIMBERCOLOR - soft white	5.0	Litre
6228TCTZW10,0	TIMBERCOLOR - soft white	10.0	Litre
6228TCEW1,0	TIMBERCOLOR - alpine white	1.0	Litre
6228TCUEW2,5	TIMBERCOLOR - alpine white	2.5	Litre
6228TCEW5,0	TIMBERCOLOR - alpine white	5.0	Litre
6228TCEW10,0	TIMBERCOLOR - alpine white	10.0	Litre
6228TCLG1,0	TIMBERCOLOR - light grey	1.0	Litre
6228TCULG2,5	TIMBERCOLOR - light grey	2.5	Litre
6228TCLG5,0	TIMBERCOLOR - light grey	5.0	Litre
6228TCLG10,0	TIMBERCOLOR - light grey	10.0	Litre

# Installation variants best wood GLULAM

#### GLULAM - CEILING 100-280 mm



Variant 0 Square edge



Variant 1 2 cm double tongue and



Variant 2 19 x 38 mm separate tongue Standard rabbeting



23/51 mm alternatively 28/51 mm Special rabbeting max. 30/68 mm



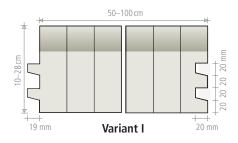
 $2\,\text{cm}$  double tongue and groove  $19\ \text{x}$  38 mm separate tongue Standard rabbeting 23/51 mm alternatively 28/51 mm Special rabbeting max. 30/68 mm

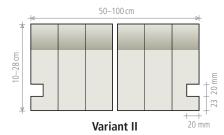


Variant 5

Standard rabbeting 23/51 mm alternatively 28/51 mm Special rabbeting max. 30/68 mm

#### GLULAM - CEILING 100-280 mm

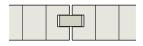




#### GLULAM - CEILING separated 45-95 mm



Variant 0 Square edge

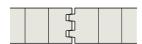


Variant 2 19 x 38 mm Thickness: 60-95 mm



Variant 3

standard rabbeting 23/51 mm alternatively 28/51 mm Thickness: 60–95 mm Special rabbeting up to max. 30/68 mm

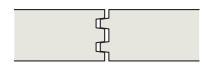


1cm double tongue and groove Variant 6 Thickness: 45-59 mm Variant 7 Thickness: 60-79 mm

Variant 8 Thickness: 80-99 mm

# **Installation variants** planks for log houses/ceiling planks





1 cm double tongue and groove

Variant 7 Thickness: 60–79 mm Variant 8 Thickness: 80–119 mm Variant 9 Thickness: 120-159 mm Variant 10 Thickness: 160-240 mm

GLULAM inlay boards / separate tongue

Inlay board for forming the ceiling section: Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece Inlay board for forming the ceiling section: Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece Separate tongue: spruce, 19/38 mm in 3.50 m/piece

### Installation variants best wood CLT - CEILING

#### CLT - CEILING 60-280 mm



Variant 0
Square edge



Variant 11

10 cm tongue and groove



Variant 13

Standard rabbeting 23/51 mm alternatively 28/51 mm Special rabbeting with 60 mm max. 23/59 mm from 80 mm max. 35/59 mm



Variant 14

10 cm tongue and groove Standard rabbeting 23/51 Thickness: 80–280 mm Special rabbeting with 80 mm max. 27/59 from 90 mm max. 35/59



Variant 16

Shiplap edge (half thickness/50 mm) Thickness: 60–180 mm

### Installation variants best wood CLT - CEILING XL

#### CLT - CEILING 45-360 mm



Variant 0

Square edge



Variant 11

10 cm tongue and groove



Variant 13

Standard rabbeting 23/51 mm alternatively 28/51 mm Special rabbeting max. 39/69 mm



Variant 14

Standard rabbeting 23/51 mm 10 cm tongue and groove Thickness: 80-360 mm alternatively 28/51 mm Thickness: 90–360 mm Special rabbeting max. 39/59 mm



Variant 16

Shiplap edge (half thickness/50 mm)

### Installation variants best wood CLT - WALL XL

#### CLT - WALL 45-360 mm



Variant 0

Square edge



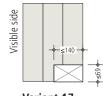
Variant 13

Standard rabbeting 23/51 mm alternatively 28/51 mm Special rabbeting max. 39/69 mm



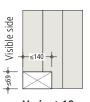
Variant 16

Shiplap edge (half thickness/50 mm)



Variant 17

Rebate threshold



Variant 18

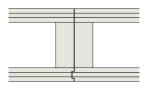
Rebate threshold

**CLT** inlay boards

**Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece **Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece

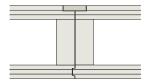
# Installation variants best wood CLT BOX

#### Installation variant best wood CLT BOX / CLT BOX - CEILING FS 220-490 mm



Variant 31

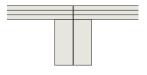
10 mm tongue and groove



#### Variant 34

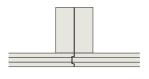
10 mm tongue and groove Standard rabbeting 23/51 mm alternatively 28/51 mm Special rabbeting max. 35/59 mm

#### Installation variant best wood CLT BOX - CEILING open160-490 mm



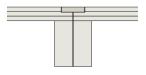
Variant 0

Square edge



Variant 41

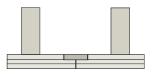
10 mm tongue and groove



#### Variant 43

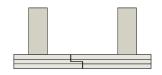
Standard rabbeting 23/51 mm alternatively 28/51 mm Special rabbeting max. 35/51 mm

#### Installation variant best wood CLT BOX - ROOF 160-490 mm



Variant 23

Standard rabbeting 23/51 mm



#### Variant 26

Shiplap edge (half thickness/50 mm)

**CLT BOX inlay boards** 

**Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 22/100 mm in 5.00 m/piece **Inlay board for forming the ceiling section:** Three-layer board SWP/2 S 3L according to EN 13353:2011, 27/100 mm in 5.00 m/piece

# Surface qualities best wood CLT, CLT BOX

Criteria	Local spruce industrial quality	Scandinavian spruce visual quality	Local silver fir KNOT-FREE/RIFT
1 Lamella width	≤ 240 mm	≤ 140 mm	≤ 140 mm
2 Wood moisture	max. 15 % at delivery	max. 15 % at delivery	max. 15 % at delivery
3 Wood species mixture	spruce/fir	not permissible	not permissible
4 Bonding	occasional open joints up to max. 3 mm width permissible	occasional open joints up to max. 1 mm width permissible	occasional open joints up to max. 1 mm width permissible
5 Blue stain	permissible	not permissible	not permissible
6 Discolouration (brownness etc.)	permissible	not permissible	not permissible
7 Resin pockets	permissible	no clusters, max. 3 x 50 mm	no clusters, max. 3 x 50 mm
8 Bark ingrowths	permissible	not permissible	not permissible
9 Drying cracks	permissible	permissible ≤ 1.5 mm	permissible ≤ 1.5 mm
10 Core – pith	permissible	allowed if occasional	not permissible
11 Insect infestation	burrows up to 2 mm allowed	not permissible	not permissible
12 Branches – healthy	permissible	permissible	ø max. 25 mm
13 Branches – black	permissible	ø max. 15 mm	ø max. 15 mm
14 Branches – hole	permissible	not permissible	not permissible
15 Wane	max. 2 x 500 mm	not permissible	not permissible
16 Surface	planed	sanded	sanded
17 Quality of the gluing of the narrow sides and of the end faces	occasional imperfections permissible	occasional imperfections permissible	occasional imperfections permissible
18 Surface cosmetics with correction of knotholes, Lamello, strips,	permissible	permissible	permissible

# Surface qualities best wood CLT XL

	Criteria	Local spruce Industrial quality	Local spruce visual industrial quality	Local spruce visual quality	Local spruce KNOT-FREE/RIFT
1	Lamella width	≤ 240 mm	≤ 240 mm	≤ 140 mm	≤ 140 mm
2	Wood moisture	max. 15 % at delivery			
3	Wood species mixture	spruce/fir	spruce/fir	not permissible	not permissible
4	Bonding	occasional open joints up to max. 3 mm width permissible	occasional open joints up to max. 2 mm width permissible	occasional open joints up to max. 1 mm width permissible	occasional open joints up to max. 1 mm width permissible
5	Blue stain	permissible	slight discolourations permissible	not permissible	not permissible
6	Discolouration (brownness etc.)	permissible	slight discolourations permissible	not permissible	not permissible
7	Resin pockets	permissible	permissible	no clusters, max. 3 x 50 mm	no clusters, max. 3 x 50 mm
8	Bark ingrowths	permissible	permissible	not permissible	not permissible
9	Drying cracks	permissible	permissible	permissible ≤ 1.5 mm	permissible ≤ 1.5 mm
10	Core – pith	permissible	permissible	permissible	not permissible
11	Insect infestation	burrows up to 2 mm allowed	not permissible	not permissible	not permissible
12	Branches – healthy	permissible	permissible	permissible	ø max. 25 mm
13	Branches – black	permissible	permissible	ø max. 15 mm	ø max. 15 mm
14	Branches – hole	permissible	permissible up to ø max. 30 mm	not permissible	not permissible
15	Wane	max. 2 x 500 mm	not permissible	not permissible	not permissible
16	Surface	calibrated	sanded	sanded	sanded
17	Quality of the gluing of the narrow sides and of the end faces	occasional imperfections permissible	occasional imperfections permissible	occasional imperfections permissible	occasional imperfections permissible
18	Surface cosmetics with correction of knotholes, Lamello, strips,	permissible	permissible	permissible	permissible

# Surface qualities best wood GLULAM, DUO, TRIO, CEILING PLANKS and PLANKS FOR LOG HOUSES

	Criteria	Local Industrial quality	Local visual quality	Scandinavian visual quality
1	Firm knots	permissible <sup>2,3,4</sup>	permissible <sup>2,3,4</sup>	permissible <sup>2,3,4</sup>
2	Knots that have fallen out	permissible <sup>2,3,4</sup>	$\emptyset \le 35 \text{mm}$ are permissible <sup>2,3,4</sup> $\emptyset > 35 \text{mm}$ are not permissible <sup>2,3,4</sup>	$\emptyset \le 35 \text{mm}$ are permissible <sup>2,3,4</sup> $\emptyset > 35 \text{mm}$ are not permissible <sup>2,3,4</sup>
3	Resin pockets	permissible <sup>3</sup>	permissible <sup>3</sup>	permissible up to a width of 5 mm <sup>3</sup>
4	Knots and imperfections improved by means of knot hole plugs or "ships"	permissible <sup>3</sup>	permissible <sup>3</sup>	permissible <sup>3</sup>
5	Knots, edges, and resin pockets improved using filler compounds	permissible <sup>3,6</sup>	permissible 3.6	permissible <sup>3,6</sup>
6	Insect infestation	burrows up to 2 mm are permissible <sup>3</sup>	burrows up to 2 mm are permissible <sup>3</sup>	not permissible
7	Pith	permissible <sup>3</sup>	permissible <sup>3</sup>	permissible if occasional
8	Width of shrinkage cracks 3,5,7	no limit	up to 5 mm	up to 4 mm
9	Discolouration as a result of blue stain and red/brown nail-resistant streaks	permissible	permissible if occasional	permissible if occasional
10	Mould infestation	not permissible <sup>5</sup>	not permissible 5	not permissible <sup>5</sup>
11	Soiling	not permissible <sup>5</sup>	not permissible 5	not permissible <sup>5</sup>
12	Wane	up to 10 mm depth and 10 mm width <sup>3</sup>	not permissible	not permissible
13	Lamellae partially not planed	isolated lamellae, depth up to 10 mm permissible	not permissible	not permissible
14	Processing of the surface	planed and chamfered, plane knocks up to 1 mm in depth permissible, places not planed up to 2 mm permissible	planed and chamfered, plane knocks up to 1 mm in depth permissible	planed and chamfered, plane knocks up to 0.5 mm in depth permissible

Deviations from the limits defined below in the lines 2,3,6–9,13 are to be tolerated in the following scope: Maximum three deviations/m² visible surface for the visual quality, maximum one deviation/m² visible surface for the Scandinavian quality.

<sup>2</sup> Permissible knot size according to DIN 4074.

<sup>3</sup> No limit on the number.

As-delivered condition

Filler compounds that can be painted over are to be explicitly requested.

# Solid structural timber (KVH®)

Sort keys

Technical regulation: DIN EN 15497:2014 Sort criterion	Demands on solid structural timber for industrial purposes (KVH NSI)	Comments
Wane	measured diagonally a max. of 10 % minor cross section side	increased demands compared to DIN 4074-1
Knots	A max. 2/5	equal to sorting class S 10
Condition of knots	not exceeding 70 mm	acc. to DIN 4074-1 permitted sorting characteristic for KVH
Annual ring width	up to 6 mm	equal to sorting class S 10 according to DIN 4074-1
Slope of the grain	up to 120 mm/m	equal to sorting class S 10 according to DIN 4074-1
Radial shrinkage cracks	permissible	increased demands compared to DIN 4074-1 for KVH-SI
(= seasoning cracks)		
Lightning/frost cracks,	not permissible	Equal to sorting class S10
ring peeling		according to DIN 4074-1
Discolouration: Blue stain	permissible	increased demands compared to DIN 4074-1 for KVH-SI
Nail-holding brown and red stripes	up to 2/5 of the cross section of the surface are permitted	increased demands compared to DIN 4074-1 for KVH-SI
Red and white rot	not permissible	
Compression wood	up to 2/5 of the cross section or	equal to sorting class S 10 according to DIN 4074-1
	the surface are permitted	
Insect damages	burrows up to 2 mm $\varnothing$ of fresh timber insects are permitted	increased demands compared to DIN 4074-1 for KVH-SI
Mistletoe infestation	not permissible	equal to sorting class S 10 according to DIN 4074-1
Bending (longitudinal bending,	Split-heart cutting	increased demands compared to DIN 4074-1 for
twist)	max. 8 mm/2 m	split-heart cut timber
Wood moisture	max. 18 %	additional sorting characteristic for KVH
Cutting class	split-heart	additional sorting characteristic for KVH
Dimensional stability of the cross section	± 1 mm	additional sorting characteristic for KVH
Bark pocket		additional sorting characteristic for KVH-SI
Resin pockets		additional sorting characteristic for KVH-SI
Surface condition	planed and chamfered	additional sorting characteristic for KVH
Conditioning of the ends	rectangular cross-cut	additional sorting characteristic for KVH

Measurement of the knot diameter analogous to the measurement of the diameters of individual knots with scantlings according to DIN 4074-1: 2021-06

Regardless of the surface quality, the crack depth in elements not subjected to transverse stress may be up to 1/6 of the element width, and up to 1/8 of the element width of each side.

# **Dimensioning aid** best wood GLULAM - CEILING



Perm. loads*	Live loads		Span len	gth of sing	Jle span b	eams [m]		Span lengths of double span beams [m]					
[kN/m <sup>2</sup> ]	[kN/m <sup>2</sup> ]	3.00	4.00	5.00	6.00	7.00	8.00	3.00	4.00	5.00	6.00	7.00	8.00
	1.00						200		100				
	1.50	100	100	140	180	200		100					200
1.00 → 2.00	<b>→</b> 2.00 <b>−</b>	100		140	100	200	220	100	100	140	180	200	200
	3.00		120										
	5.00	100	120	160	200	220	260	100	120				220
	1.00	100	120				240	100					180
	1.50	100		160	180	220		100			160	160	100
2.50	2.00			100		220	260		120	160	100		200
	3.00	100			200			100				180	200
	5.00		140	180	200	240	280				180	200	220
	1.00												200
	1.50	100			200	240	280		140	140	160	180	200
4.00	2.00	100	140	180		240	280	100					220
	3.00				220						200	220	
	5.00	120			220	260	-				180	200	240

<sup>\*</sup> The dead weight of the best wood GLULAM board has already been taken into account.

These tables are only intended for pre-dimensioning and are no substitute for structural analysis.

R60 Fire resistance:

Example for a GLULAM ceiling in a detached house: **Design values:** Result: Permanent load  $q = 1.0 \text{ kN/m}^2$ 

 $q = 2.0 \text{ kN/m}^2$ Live load

Demanded thickness of ceiling =

140 mm

I = 5.0 mSpan length Charring rate = R90

This pre-measuring is no substitute for structural verification.

#### The following parameters and certificates were taken into account in the calculations:

Certificate of load-bearing capacity according to DIN EN 1995-1-1:2010-12 with NA:2013-08

Certificate of structural fire design according to DIN EN 1995-1-2:2010-12 with NA:2010-12

Application class 1

Load duration class of the intermittent load: medium

 $\Psi_{2} = 0.3$ ;  $k_{def} = 0.60$ ; GL24h

Ultimate limit state; certificate of bending stress; certificate of (rolling) shear stress

Serviceability limit state; initial deflection  $\leq$  I/300; final deflection  $\leq$  I/200; total deflection  $\leq$  I/300

Verification of vibration: Width of the ceiling panel b = 1.2 \* span length; additional rigidity El,, from 5 cm screed slab;

modal damping ratio  $\zeta = 0.03$ ; limitation of acceleration a  $\leq 0.4$  m/s<sup>2</sup>

# Dimensioning aid best wood CLT – CEILING | CEILING XL

Perm.	Live		Span leng	gth of sing	gle span b	eams [m]		Span lengths of double span beams [m]												
loads* [kN/m²]	loads [kN/m²]	3.00	4.00	5.00	6.00	7.00	8.00	3.00	4.00	5.00	6.00	7.00	8.00							
	1.00	80						60												
	1.50		100	140	200	200	220		90		200	200	220							
(1.00)	<b>→</b> (2.00) —	80				220		80		160										
	3.00		110				240	30	100											
	5.00	100	130	160	220	220	260	80	110			220	220							
	1.00		130																	200
	1.50	90		160	200	220	260	80			170	170	200							
2.50	2.00					220	200	00	130	160	170		220							
	3.00	100			220							200	220							
	5.00	100	140	180	220	240	280	90			180	220	240							
	1.00						280													
	1.50	100	1.40	180		240				150	160	200	220							
4.00	2.00		140		220			90	140				220							
	3.00	110		200		260	-				170	220								
	5.00	110	160	200						160	200	220	240							

<sup>\*</sup> The dead weight of the best wood CLT panel has already been taken into account

These tables are only intended for pre-dimensioning and are no substitute for structural analysis.

R0 R30 R60 R90

Fire resistance:

Example for a CLT ceiling in a detached house:									
	Result:								
$g = 1.0 \text{ kN/m}^2$	Demanded thickness of ceiling =								
$q = 2.0 \text{ kN/m}^2$	140 mm								
l = 5.0 m	Charring rate = R60								
	$g = 1.0 \text{ kN/m}^2$ $q = 2.0 \text{ kN/m}^2$								

This pre-measuring is no substitute for structural verification.

#### The following parameters and certificates were taken into account in the calculations:

Certificate of load-bearing capacity according to DIN EN 1995-1-1:2010-12 with NA:2013-08

Certificate of structural fire design according to DIN EN 1995-1-2:2010-12 with NA:2010-12

Application class 1

Load duration class of the intermittent load: medium

 $\Psi_{2} = 0.3$ ;  $k_{def} = 0.60$ ; C24

Ultimate limit state; certificate of bending stress; certificate of (rolling) shear stress

Serviceability limit state; initial deflection  $\leq$  1/300; final deflection  $\leq$  1/200; total deflection  $\leq$  1/300

Verification of vibration: Width of the ceiling panel b = 1.2 \* span length; additional rigidity  $EI_{xy}$  from 5 cm screed slab;

modal damping ratio  $\zeta = 0.03$ ; limitation of acceleration a  $\leq 0.4 \text{ m/s}^2$ 

# **Dimensioning aid** best wood **CLT BOX**





Perm. loads*	Live loads		Span leng	gth of sing	gle span b	eams [m]		Span lengths of double span beams [m]						
[kN/m <sup>2</sup> ]	[kN/m <sup>2</sup> ]	6.00	7.00	8.00	9.00	10.00	11.00	3.00	4.00	5.00	6.00	7.00	8.00	
	1.00				260/80	300/80			220/80					
	1.50		220/80	240/80	200/80	300/60	340/80			220/80	220/80	240/80	240/100	
1.00	2.00	220/80			280/80	320/80		220/80				240/00	240/100	
3.00			260/80	300/80	340/80	380/80								
	5.00		260/80	300/80	340/80	380/80	420/100				220/100	240/100	260/100	
	1.00		240/80	280/80	320/80	360/80	400/80		220/80	220/80	220/80		220/80	
	1.50	220/80	240/00	200/00	320/60	360/100	400/120					220/80	220/00	
2.50	2.00		260/80	300/80	340/80	0 380/80	420/80	220/80					220/100	
	3.00_		200/60	300/60			420/100					220/100	240/100	
	5.00	240/80	280/80	320/80	360/100	420/80	460/100			220/100	220/120	240/120	280/100	
	1.00				360/80		460/100				220/00			
	1.50	240/00	280/80	320/80	360/120	420/80	460/100			220/00	220/80	220/100	240/100	
4.00	2.00	240/80			380/80		460/120	220/80	220/80	220/80	220/100			
	3.00		280/100	340/80	360/60	420/120	480/100				220/100	220/120	260/100	
	5.00	260/80	300/80	340/00	400/80	440/100	-			220/100	220/120	260/120	300/120	

<sup>\*</sup> The dead weight of the best wood CLT BOX has already been taken into account

These tables are only intended for pre-dimensioning and are no substitute for structural analysis.

R60 Fire resistance:

Example for a CLT BOX in a multi-family house:

**Design values:** 

Result: 340/80

Permanent load

 $g = 2.50 \text{ kN/m}^2$ 

Live load  $q = 3.00 \text{ kN/m}^2$  Thickness of ceiling = 340 mm

Rib width

 $=80\,\mathrm{mm}$ 

Span length I = 9.00 m Charring rate = R60

#### The following parameters and certificates were taken into account in the calculations:

Certificate of load-bearing capacity according to DIN EN 1995-1-1:2010-12 with NA:2013-08

Certificate of structural fire design according to DIN EN 1995-1-2:2010-12 with NA:2010-12

Upper CLT panel: 60 mm; lower CLT panel: 60 mm

Application class 1

Load duration class of the intermittent load: medium

 $\Psi_2 = 0.3$ ;  $k_{def} = 0.60$ ; C24

Ultimate limit state: Certificate of bending stress, certificate of (rolling) shear stress

Serviceability limit state: Initial deflection  $\leq$  I/300; final deflection  $\leq$  I/200; total deflection  $\leq$  I/300

Verification of vibration: Width of the ceiling panel  $b = 1.2^*$  l; additional rigidity El, from 5 cm screed slab; modal damping ratio  $\zeta = 0.03$ ; imitation of acceleration a  $\leq 0.4 \,\text{m/s}^2$ 

# **Dimensioning aid**best wood **CLT BOX – CEILING FS**



(lower CLT panel 60 mm)

Perm. loads*	Live loads		Span leng	gth of sing	gle span l	peams [m]		Span lengths of double span beams [m]						
[kN/m <sup>2</sup> ]	[kN/m <sup>2</sup> ]	6.00	7.00	8.00	9.00	10.00	11.00	3.00	4.00	5.00	6.00	7.00	8.00	
	1.00						340/80							
	1.50	240/80			280/80	320/80	360/80			220/80	240/80	300/80	360/80	
1.00	2.00	240/60	300/80	360/80			300/60	220/80	220/80	220/80	240/80	300/60	300/60	
	3.00				300/80	340/80	380/80							
	5.00	240/100		340	340/100	380/100	420/120			220/100	240/100	300/100	360/100	
	1.00		240/80	280/80	320/120		420/80	220/80	220/80		280/80		220/100	
	1.50	200/00		300/80	<b>\rightarrow</b>	380/80	420/00			220/80		220/100	220/100	
2.50	2.00	280/80			340/80		420/100		220/80				220/120	
	3.00 —					400/80	440/80			220/100		220/120	240/120	
	5.00	280/100	280/100	320/100	360/100	420/100	460/100		220/100	220/120	280/100	260/120	300/120	
	1.00			320/100	360/120	420/80	460/100							
	1.50	240/100	280/100	320/100	380/80	420/60	460/120		220/80	240/100	220/100	220/120	240/120	
4.00	2.00	240/100		340/80	300/00	420/100	480/100	220/80		240/100				
	3.00		300/100	340/100	380/100	440/100	480/100		220/100		220/120	240/120	280/120	
	5.00	260/100	300/100	340/120	400/100	440/120	-		220/100	240/120	260/120	300/120	340/120	

<sup>\*</sup> The dead weight of the best wood CLT BOX – CEILING FS and the chippings in the rafter has already been taken into account.

These tables are only intended for pre-dimensioning and are no substitute for structural analysis.

R60
Fire resistance:

# The following parameters and certificates were taken into account in the calculations for the dimensioning aid best wood CLT BOX – CEILING FS:

Element width: 1.25 m

Verification with 40 kg/m<sup>2</sup> chippings in the CLT BOX – CEILING FS

Certificate of load-bearing capacity according to DIN EN 1995-1-1:2010-12 with NA:2013-08

Certificate of structural fire design according to DIN EN 1995-1-2:2010-12 with NA:2010-12

Upper CLT panel: 60 mm; lower CLT panel: 60 mm

Application class 1

Load duration class of the intermittent load: medium

 $\Psi_{2} = 0.3$ ;  $k_{def} = 0.60$ ; C24

Ultimate limit state: Certificate of bending stress, certificate of (rolling) shear stress

Serviceability limit state: Initial deflection  $\leq$  I/300; final deflection  $\leq$  I/200; total deflection  $\leq$  I/300

Verification of vibration: Width of the ceiling panel  $b=1.2^*$  l; additional rigidity  $El_{xy}$  from 5 cm screed slab; modal damping ratio  $\zeta=0.03$ ; limitation of acceleration  $a \le 0.4 \, \text{m/s}^2$ 

# **Dimensioning aid** best wood CLT BOX - CEILING FS



(lower CLT panel 90 mm)

Perm.	Live loads [kN/m²]	Span length of single span beams [m]						Span lengths of double span beams [m]					
loads* [kN/m²]		6.00	7.00	8.00	9.00	10.00	11.00	3.00	4.00	5.00	6.00	7.00	8.00
1.00	1.00	250/80	310/80	310/120		310/80	350/80	250/80	250/80	250/80	250/80	310/80	310/120
	1.50				290/80	330/80	330/60						
	2.00						370/80						
	3.00				310/80	350/80	390/80						
	5.00	250/100			350/100	390/100	430/100			250/100	250/100	310/100	
2.50	1.00	290/80	250/80	290/80	330/80	370/80	410/80	250/80	250/80	250/80	290/80	250/100	250/100
	1.50						410/120						
	2.00				330/120	390/80	430/80						
	3.00 _		270/80	310/80	350/80	390/60						250/120	250/120
	5.00	290/100	290/100	330/100	370/100	410/100	450/120			250/100	290/100	270/120	310/120
4.00	1.00	250/80	290/80	330/80	370/80	410/100		250/80	250/80	250/100	250/100	250/120	250/120
	1.50					420/00	470/80						
	2.00				370/100	430/80							
	3.00		290/100	330/100	390/100	430/100	490/100				250/120		290/120
	5.00		310/100	350/100	390/100	450/100			250/100	250/120	270/120	310/120	350/120

<sup>\*</sup> The dead weight of the best wood CLT BOX — CEILING FS and the chippings in the rafter has already been taken into account.

These tables are only intended for pre-dimensioning and are no substitute for structural analysis.

Fire resistance:

Example for a CLT BOX- CEILING FS in a multi-family house:

**Design values:** 

Result: 350/80

Permanent load

 $q = 2.50 \text{ kN/m}^2$ 

Thickness of ceiling = 350 mm

Live load

Rib width

 $q = 3.00 \text{ kN/m}^2$ 

 $=80\,\mathrm{mm}$ 

Span length

I = 9.00 m

= R90Charring rate

#### The following parameters and certificates were taken into account in the calculations for the dimensioning aid best wood CLT BOX - CEILING FS:

Element width: 1.25 m

Verification with 40 kg/m<sup>2</sup> chippings in the CLT BOX – CEILING FS

Certificate of load-bearing capacity according to DIN EN 1995-1-1:2010-12 with NA:2013-08

Certificate of structural fire design according to DIN EN 1995-1-2:2010-12 with NA:2010-12

Upper CLT panel: 60 mm; lower CLT panel: 90 mm

Application class 1

Load duration class of the intermittent load: medium

 $\Psi_{2} = 0.3$ ;  $k_{def} = 0.60$ ; C24

Ultimate limit state: Certificate of bending stress, certificate of (rolling) shear stress

Serviceability limit state: Initial deflection  $\leq$  I/300; final deflection  $\leq$  I/200; total deflection  $\leq$  I/300

Verification of vibration: Width of the ceiling panel  $b = 1.2^*$  l; additional rigidity  $El_{xy}$  from 5 cm screed slab; modal damping ratio  $\zeta = 0.03$ ; limitation of acceleration a  $\leq 0.4 \,\mathrm{m/s^2}$ 



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