binderholz **•**



PROCESSING MANUAL
BINDERHOLZ CLT BBS

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Processing Manual binderholz CLT BBS

PURPOSE

In this Processing Manual you will find everything you need to know about the further processing of binderholz CLT BBS. The information ensures that skilled personnel can professionally and properly erect solid wood structures even without CLT BBS experience.

This Processing Manual and all the details and hints presented in it have been kept as simple as possible.

TARGET GROUP

The target group of this Processing Manual are all direct processors of binderholz CLT BBS.















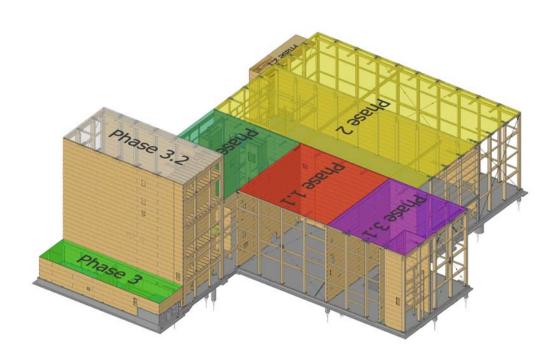
WORK PREPARATION - PROJECT PLANNING

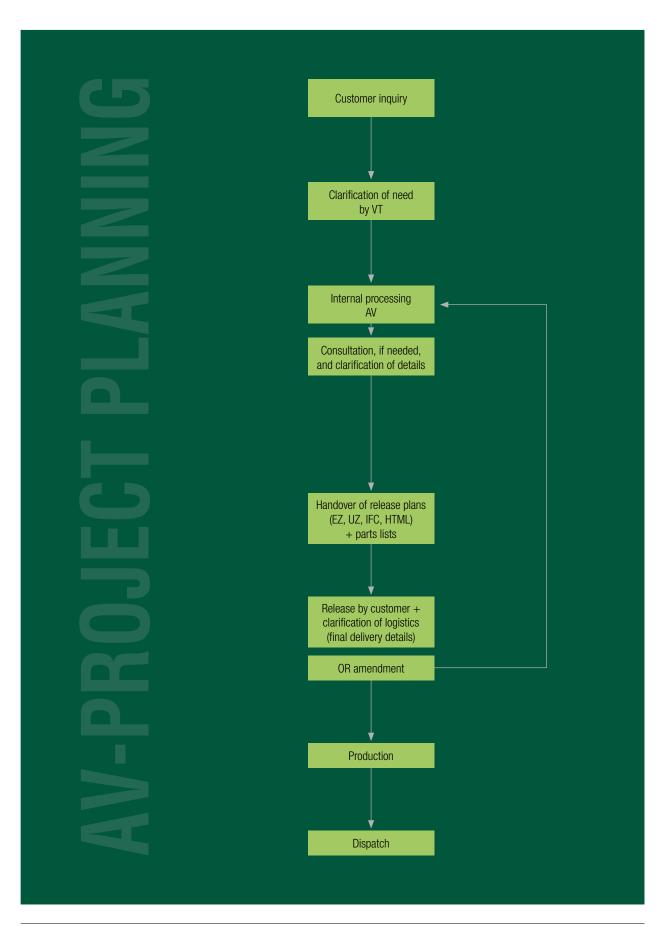
The Work Preparation department (AV_Projektierung) prepares the plans for production.

All plans that are processed by us are created with the program Cadwork. Cadwork is a 3D CAD/CAM software for the timber construction industry. The following interfaces enable import of data. Depending on the imported file format and the quality of the plans, it calculates the in-house effort and thus the time needed for processing.

Interfaces from the drawing program Cadwork - Import I Export

Processable	file formats
Import	Export
Cadwork 3D	IFC
SAT	DXF
IFC	ACIS
BTL	RHINO
STEP	STEP
RVT	IGES
SEMA	Viewer
Dietrichs	
HSB	
DXF	
DWG	
PDF	





PLAN PRESENTATION

CLT BBS

Qualities AB - Residential visible

BC - Industrial visible

C - Non-visible

Wood types Spruce (F), Fir antique (TG), Larch (L), Swiss pine (Z), Douglas fir (D), Pine (K), Mixed conifers (NH)

Top layer ESP - Prefabricated single-layer panel

EKG - Fingerjointed lamellas

MHP - 3-layer solid wood panel

Examples F-AB_ESP - Residential visible quality, top layer spruce, single-layer panel

F-BC_EKG - Industrial visible quality, top layer spruce, with finger joint

Formats CLT BBS 125 - System format panel



CLT BBS XL - Large format panel

DL = Top layer longitudinal



DQ = Top layer transverse



Glulam GLT

Setup combined (c), homogenous (h)

Strength classes GL24, GL28, GL30, GL32

Qualities SI (visible quality), NSI (non-visible quality)

Wood types Spruce (FI), Larch (LA)

Example BSH GL24c NSI FI (glulam GL24 combined non-visible quality spruce)

Presentation of planThe section lining in the cross-section indicates the direction of the lamellas.

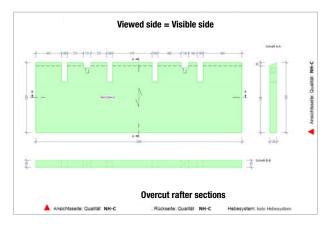


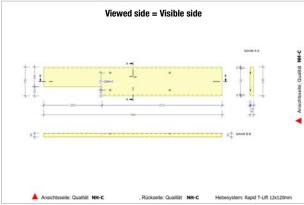


PLAN ISSUANCE

Single-part drawing (EZ)

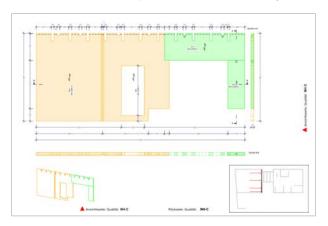
The EZ always shows a single component. Two cross-sections are issued per part, whose position is indicated by the section lines. The viewed side is always the visible side. The single-part drawing is a detailed drawing for production and is primarily not used for customer review or plan release.

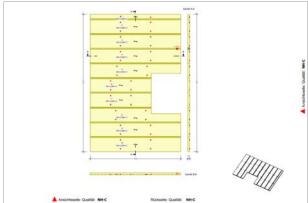




Overview drawing (UZ)

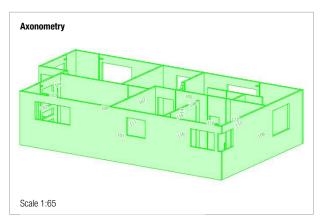
Representation of several components of an entire wall or ceiling or a wall or ceiling section. It serves for plan review and plan release by the customer.

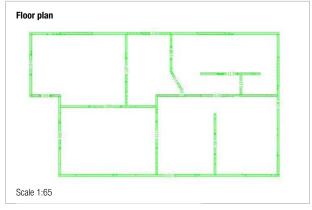




Axonometry (AXO) + floor plan

The axonometry shows a three-dimensional representation of a floor or a ceiling or roof section incl. component numbers. For each axonometry, the corresponding floor plan is created.

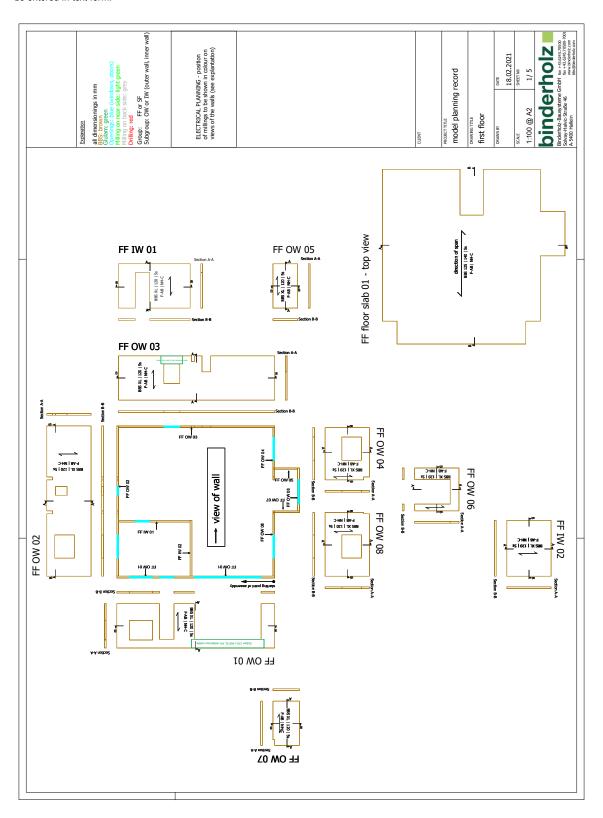




TEMPLATE PLANNING RECORD

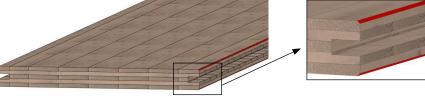
All information on the individual CLT BBS components in a 2D plan file is required for the targeted processing of the CLT BBS components and the creation of production drawings.

In the 2D view drawings of the CLT BBS elements, important additional information such as, e.g., component thickness and CLT BBS structure must be entered in text form.

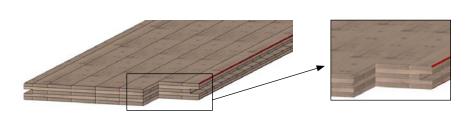


EDGE PROCESSING CLT BBS

CLT BBS 125



During longitudinal profiling, CLT BBS 125 is chamfered as a standard on all four longitudinal edges (width of the chamfer is approx. 3 mm) before the cutting process is started.



Edges created by machining remain sharp-edged.

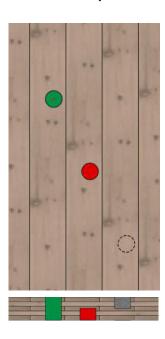
CLT BBS XL



In CLT BBS XL components, the edges are not chamfered.

PRESENTATION OF DRILLHOLES

Drillholes on the top surface



Green drillhole

Drillhole extends through the entire strength of the component

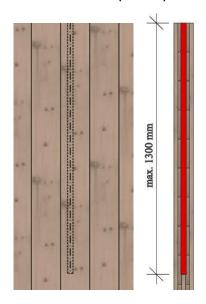
Red drillhole

Drillhole on the viewed side, does NOT extend through the entire strength of the component

Dashed drillhole

Drillhole on the rear side, does NOT extend through the entire strength of the component

Drillholes on the face (Ø 28 mm)



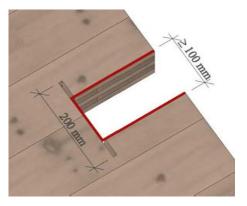
- Applies only for CLT BBS XL
- Length max. 1300 mm
- Manual machining

When positioning the drillholes deviations in measurements may occur.

PRESENTATION OF CUTOUTS

Cutout at 90° to the board surface

Non-visible area

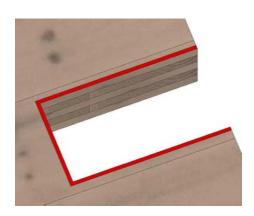


Cutouts < 100 mm: Corners are executed with sharp edges

Cutouts ≥ 100 mm: Corners are overcut

(Execution as in visible area)

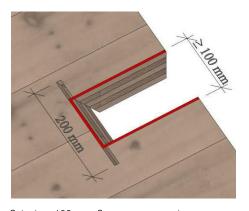
Visible area



Corners are executed with sharp edges

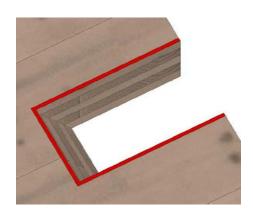
Cutout bevel to the board surface

Non-visible area



Cutouts ≥ 100 mm: Corners are overcut Cutouts < 100 mm: Corners are executed with sharp edges

Visible area



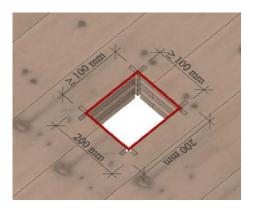
Corners are executed with sharp edges

The red line shows the section as it is drawn up in the plans. The images show the actual machining.

PRESENTATION OF BREAK-THROUGHS

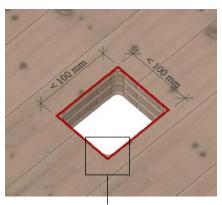
Non-visible area

Execution 1

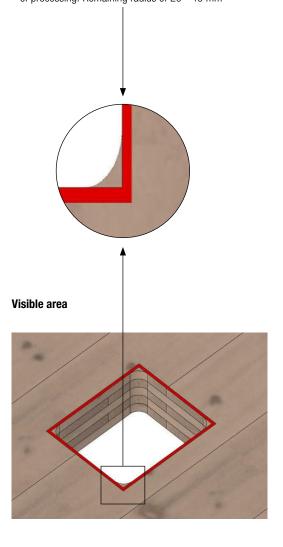


Corners are overcut Cutout is smaller than 200 x 200 mm, but larger than $100 \times 100 \text{ mm}$

Execution 2



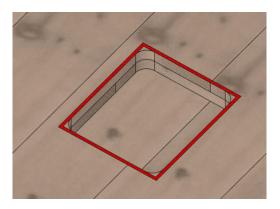
The remaining radius depends on the diameter of the milling cutter which in turn depends on the depth the of processing. Remaining radius of 20 - 40 mm



The red line shows the section as it is drawn up in the plans. The images show the actual machining.

PRESENTATION OF POCKET MILLING

Non-visible area



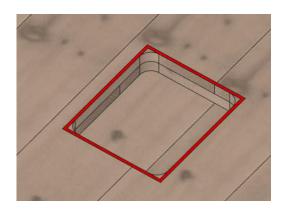
Remaining radius stays the same.

The remaining radius depends on diameter of the milling cutter which in turn depends on the depth of processing.

Remaining radius of 20 - 40 mm.

Subject to a surcharge, the corners can be reworked with sharp edges or, upon consultation, milled over.

Visible area



Remaining radius stays the same.

Remaining radius of 20 - 40 mm.

PRESENTATION OF A CUTOUT WITH AN ANGLE OF $< 90^{\circ}$

Non-visible area Visible area

The red line shows the section as it is drawn up in the plans. The images show the actual machining.

MACHINING TOLERANCES

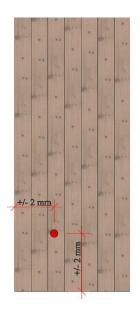
Openings

Position $\pm 2 \text{ mm}$ Dimension $\pm 2 \text{ mm}$

+/- 2 mm +/- 2 mm

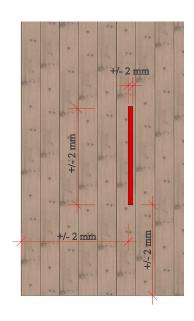
Drillholes

Position \pm 2 mm Depth in limited drillings \pm 2 mm



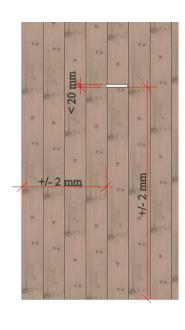
Millings

Position \pm 2 mm Dimension \pm 2 mm Depth \pm 2 mm



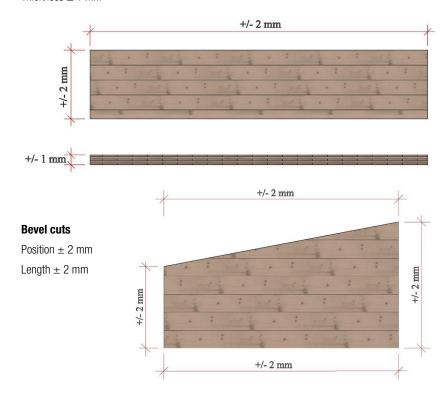
Slots

Position $\pm 2 \text{ mm}$ Dimension $\pm 2 \text{ mm}$



Dimensions of building elements

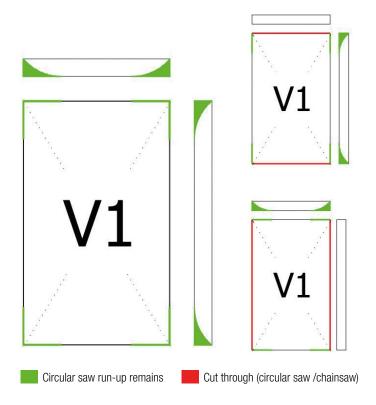
Length \pm 2 mm Width \pm 2 mm Thickness \pm 1 mm



PRESENTATION OF CUTOUT VARIANTS

V1

Cutout section remains in the building element and is held merely by the circular saw run-ups (green).

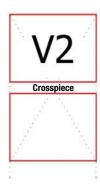


Board thickness	Minimum cutout dimensions
60 mm	480 x 480 mm
80 mm	550 x 550 mm
100 mm	610 x 610 mm
120 mm	660 x 660 mm
140 mm	700 x 700 mm
160 mm	740 x 740 mm
180 mm	770 x 770 mm
200 mm	800 x 800 mm
220 mm	830 x 830 mm
240 mm	860 x 860 mm
260 mm	880 x 880 mm
280 mm	900 x 900 mm
300 mm	920 x 920 mm
320 mm	940 x 940 mm
340 mm	950 x 950 mm

V2

Cutout section does NOT remain in the building element.

A transport crosspiece reinforces the weakened cross-section of the building element.



Board thickness	Cutout dimensions
60 - 340 mm	min. 200 x 200 mm

V3

Cutout section remains in the building element and is held by multiple crosspieces.

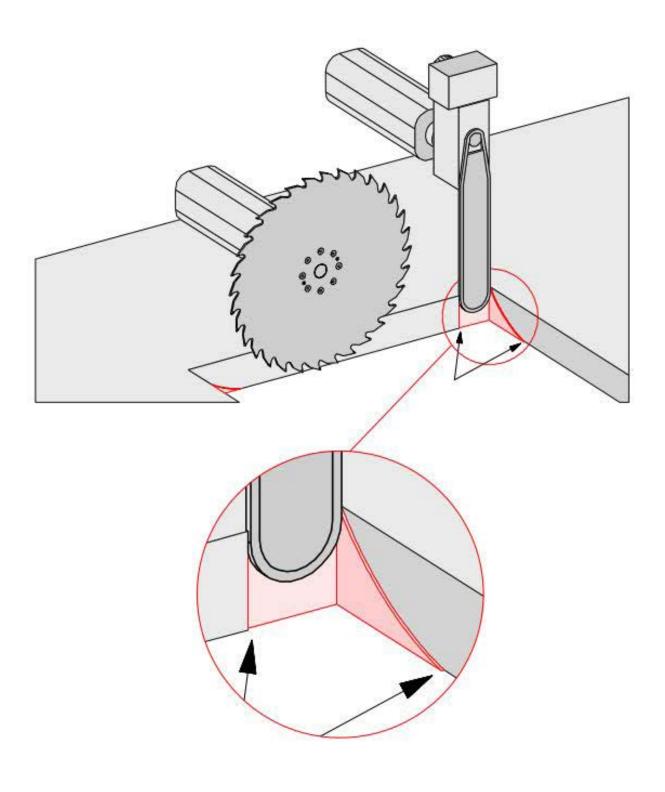


Board thickness	Cutout dimensions		
60 - 340 mm	min. 550 x 550 mm		

OFFSET IN CUTOUTS

Cutouts larger than $800 \times 800 \text{ mm}$ are cut with the circular saw and the chainsaw.

This can result in an offset between circular saw and chainsaw of up to 3 mm.



EXAMPLE I CHECKLIST FOR CLT BBS DELIVERIES

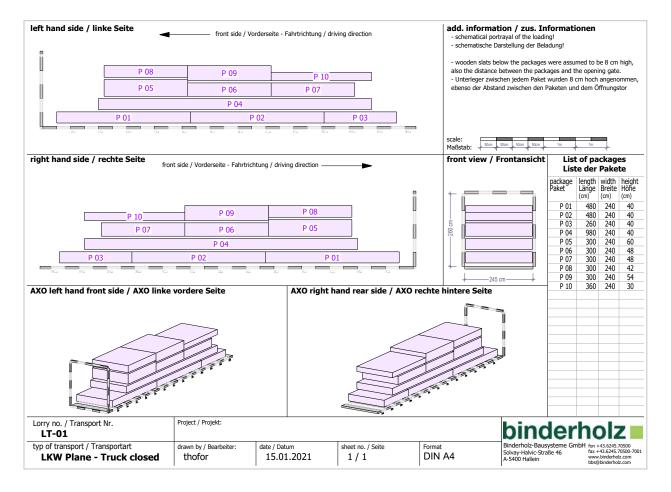
Customer's information on unloading, accessways and assembly sequence.

	BBS DELIVERIES binderhol	
Project Number:	123.456	
Project Name:	HAUS BERGBLICK	
Please complete the point	ts below and return it to us within 2 days:	
Max. weight of packages	s (kg) (Standard: 4.000 kg, Minimum: 3.000 kg, Maximum: 5.000 kg)	
□ Forklift truck□ Crane□ Delivery to storage, T&C	will be used for unloading? C see below railer (on request, higher cost may occur due to longer unloading time, delivery times and tolerances also on	
	ning plans for details of the assembly sequence (e.g.: Element 1, Elements 3,). ific information from you, we will define the assembly sequence.	
How should the elements	s be packaged?	
with standard panels: □ visible side up □ visible side down, excep	tor lowest element	
	l panels, secure packaging:	
□ Wall elements: visible si	side up le side down, except for lowest element and/or rebate up with non-visible elements	
□ yes □ no, I would prefer delive Your contact on site:	ery by:	
Name:		
Phone number:		
Delivery address:		
Site (Name):		
•		
Site (Name): Street, House number:		
Site (Name):	:	
Site (Name): Street, House number: Postcode, Delivery addres Requested delivery date: (The precise delivery date The following applies: The ground conditions and	ess:e e can only be provided on receipt of approved plans and/or with the confirmation of order) nd space requirements must be suitable for a semi-trailer. Tolerances:	
Site (Name): Street, House number: Postcode, Delivery addres Requested delivery date: (The precise delivery date: The following applies: The ground conditions and Distances up to 500 km: + Distances up to 1500 km: Ostances up to 1500 km: Stances up to 1500 km: Solivery Overseas (Ferry, For further information of §4. 2 full hours are provide	ess:e e can only be provided on receipt of approved plans and/or with the confirmation of order)	
Site (Name): Street, House number: Postcode, Delivery addres Requested delivery date: (The precise delivery date The following applies: The ground conditions and Distances up to 500 km: + Distances up to 1500 km: Distances up to 1500 km: Delivery Overseas (Ferry, For further information on §4, 2 full hours are provide started. This check-list forms an in	e can only be provided on receipt of approved plans and/or with the confirmation of order) and space requirements must be suitable for a semi-trailer. Tolerances: +/- 2 hours to agreed delivery time : +/- 4 hours to agreed delivery time : +/- 8 hours to agreed delivery time : +/- 8 hours to agreed delivery time ; -/- 8 hours to agreed delivery time ; -/- 8 hours to agreed delivery time the deliveries and tolerances please take a closer look at our General Terms and Conditions	
Site (Name): Street, House number: Postcode, Delivery addres: (The precise delivery date: (The following applies: The ground conditions and Distances up to 500 km: + Distances up to 1500 km: Distances up to 1500 km: Delivery Overseas (Ferry, For further information of \$4. 2 full hours are provide started. This check-list forms an in at latest, however, with the	e can only be provided on receipt of approved plans and/or with the confirmation of order) and space requirements must be suitable for a semi-trailer. Tolerances: +/- 2 hours to agreed delivery time : +/- 4 hours to agreed delivery time : +/- 8 hours to agreed delivery time (Cargo vessel, Boat,) are excluded of above mentioned tolerances. The deliveries and tolerances please take a closer look at our General Terms and Conditions and free of charge for unloading. Additional standing time is charged at €65/hour net plus tax for every hour antegral part of our Confirmation of Order and we would ask for it to be returned to us as quickly as possible,	

LOADING PLANS

- Loading plans are drafted specifically for the project and the type of loading, separately for container, rail or loading under tarps
- The loading plan shows the exact location of the individual packages to the customer
- Space optimisation allows for freight reductions
- Optimal loading safety can be exactly defined

Example for loading in containers



TYPES OF LOADING I TRUCK

Standard open semitrailer

- Fast loading and unloading
- More loading volume possible



Enclosed truck

- If the dimensions of the CLT BBS elements permit it, delivery can be provided in enclosed trucks
- Weather protection



Packages

- Various format sizes such as CLT BBS 125 & CLT BBS XL elements are wrapped separately in foil
- Boards of similar dimensions are wrapped in foil to form packages
- Intermediate storage of these packages at the construction site is possible
- The foil acts as UV and weather protection
- Unloading is possible by forklift or crane
- Transported in a lying position (exception: loading in containers)



The final sequence of loading the packages is subject to loading safety rules according to the general road traffic regulations (StVO).

Tight up = the boards are stapled on top of each other without intermediate layers

- Loading CLT BBS elements directly on top of each other is possible only with the CLT BBS XL format
- The whole truck load is wrapped in foil once
- Observe weather conditions during unloading
- Unloading by means of a crane





TYPES OF LOADING I RAIL

- Suitable for long-distance transport
- Environmentally friendly
- Larger load volumes are possible
- Enclosed railway waggon: additional weather protection

Open railway waggon



Enclosed railway waggon



TYPES OF LOADING I CONTAINERS

- Overseas
- Possible with CLT BBS XL and CLT BBS 125
- Small load volumes are possible
- The load is protected from the weather





Interior dimensions depend on loading method

Truck						
Type of transport	max. width	max. length				
Standard transport < 2,55 m		< 13,60 m (with overhang in AT. DE: 15.10 m – precondition: not dividable goods)				
Special transport without escort 2,55 m - 3,00 m		13,60 m - 18,80 m				
Special transport with escort	3,01 m - 3,50 m	18,80 m - 21,00 m				
Standard semitrailer open	2,49 m - 2,55 m	13,40 m - 13, 60 m				
Mega trailer open	2,49 m - 2,55 m	13,30 m - 13,60 m				
Rigid truck with trailer	2,49 m - 2,55 m	6,00 m + 7,00 m				
Steered semitrailer	2,49 m - 2,55 m	12,00 m - 13,60 m				
Low-loader 2,49 m - 2,55 m		12,00 m - 13,60 m (7,00 m - 9,00 m load area lowered throughout)				
Inloader < 1,50 m		9,00 m - 9,50 m				
Tarp < 2,45 m		< 13,60 m				
Container						
Type of transport	max. width	max. length				
Container 40 feet high cube	< 2,33 m	< 11,90 m				
Container 40 feet open top - in/out of gauge < 2,34 m		< 11,90 m				
Rail						
Type of transport	max. width	max. length				
Railway wwaggon open	< 2,64 m	< 21 m				
Railway waggon closed	< 2,84 m	< 22 m				

Loading guideline





CLT BBS 125

Execution

Transport always in a lying position. Exception: loading in containers

Packages wrapped in foil

Underlays with anti-slip mats are used between the layers

CLT BBS XL

Execution

The whole shipment is, or the individual packages, are wrapped in foil

Observe weather conditions when unloading

Underlays with anti-slip mats are used between the layers

The final sequence of loading the packages is subject to loading safety rules according to the general road traffic regulations (StVO).

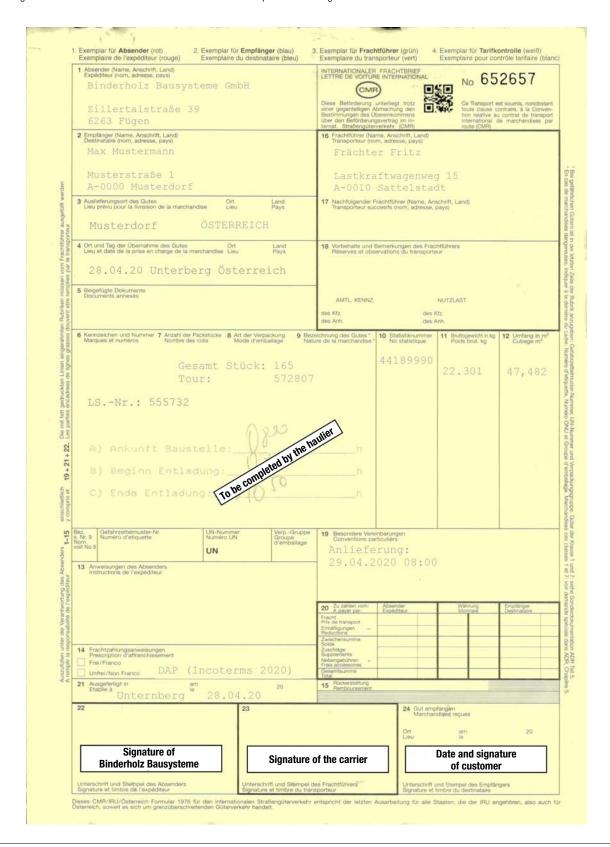
CAUTION!

- The access road to the construction must be approved for a 40t truck
- Check whether the truck can make the trip to the construction site (maneuverability and curve radius)

CONSIGNMENT NOTE - CMR

The consignment note is an agreement on the contract of carriage in international road freight transport (available for all countries accessible via truck, i.e., all EU countries + Morocco, Russia, Iran etc.)

The signatures serve to record the transfer of risk between the parties in writing.



EXAMPLE OF DELIVERY NOTE



Zimmerei GmbH Musterstraße 7 A-1234 Musterdorf Rechnungsempfänger Max Mustermann Musterstraße 1 A-1234 Musterdorf

LIEFERSCHEIN

Nr. 561607 vom 14.01.21 rhs

11559 Kunde Vertreter 5162 Ihre USt-ID-Nr. ATU65952524 Unsere USt-ID-Nr. ATU62322711

zu Auftrag Nr. 254747

254747 LT 01 Spedition Frächtername

Lieferung: DAP (Incoterms 2020) A-1234 Musterdorf

Bezeichnung	Holz	Qualität	Länge	Breite	Stärke	Stück	Menge in	
BBS			8.000	1.250	100	1	10 m²	
Profil	ohne Profilieru	ına	6.000	1.230	100	'	10 111	
10000	Office 1 Tollicie	ang						
100% PEFC ZERTIFIZIE	RT Cert.Nr. HFA-	COC-0211						
Frachtkosten*						1	1	
Kombinationslieferung BI	3S max. 2,50 m x	13,50 m (Bx	L), max. 10r	n³/Auftrag, 2	Zeitfenster	für die Anli	eferung ca. 3 Tage	
				Zwische	ensumme			

Gewicht in kg: 480 Gesamt m³: 1,000 Menge m²: 10

Gelieferte Waren bleiben bis zur Bezahlung unser Eigentum!

Holz stammt aus Nutzungen, die den jeweiligen gesetzlichen Vorgaben entsprechen.
Wenn nicht anders ausgewiesen, stammen alle Waren aus PEFC kontrollierten Quellen -- HFA-CoC-0211 --. Ausgenommen mit (*)

warkierte Positionen. Verkauf in Übereinstimmung mit den Anforderungen der europäischen Holzhandelsrichtlinie (EUTR) 995/2010.

Ware übernommen



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Firmensitz: Zillertalstraße 39 · A-6263 Fügen · fon +43 5288 601 · fax +43 5288 601-121 · Eingetragen Landesgericht Innsbruck · FN 275228 y · UID-Nr.: ATU62322711

Unloading





Execution

Short-term interim storage of wrapped packages is possible

Unloading by crane or forklift

Underlays with anti-slip mats are used between the layers

Lifting anchor



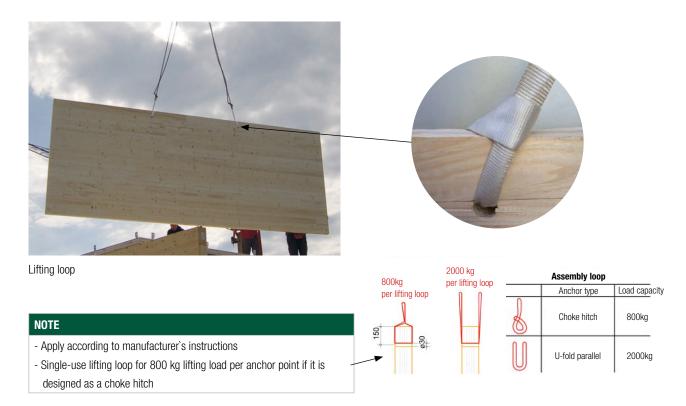


Lifting anchor

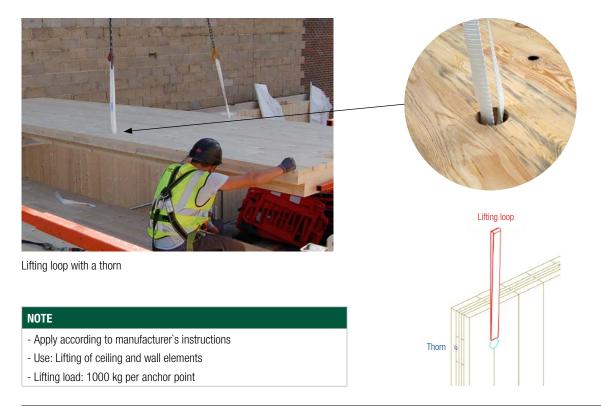
NOTE

- Apply according to manufacturer's instructions and approval of the lifting anchor

Lifting loop



Lifting loops + bolt/thorn



Lifting loops for non-visible quality

Choke hitch per lifting loop 800 kg

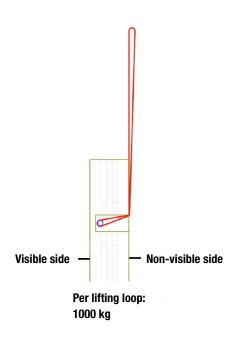


Folded over / parallel per lifting loop 2000 kg



Lifting loops with a thorn

Applicable from a thickness of 80 mm: Top layer lengthwise from a 3-layer setup Top layer traverse from a 5-layer setup





Lifting loops double hole



Assy/T-lift screws



Packages with premounted lifting loops

- Facilitates faster unloading and immediate lifting of packages at the construction site







Other lifting options (to be provided by the customer)

e.g. Sigha Pick, Pitzl PowerClamp

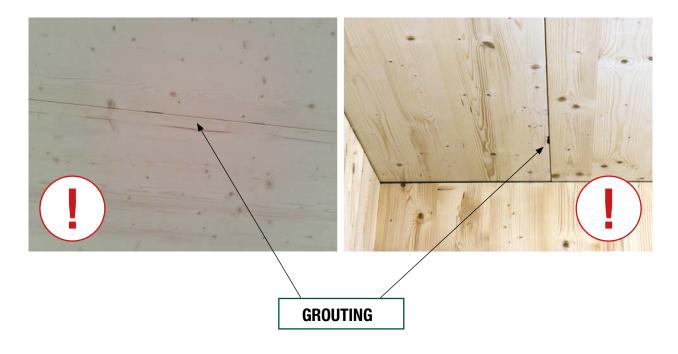




NOTE

- Not included in the delivery scope of Binderholz Bausysteme GmbH

Consequences of usage of wrong lifting systems by the customer



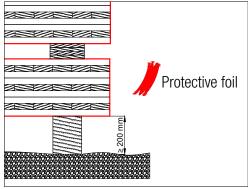
CAUTION!

- Grouting due to missing edge protector
- Grouting due to too narrow lifting loops

MANIPULATION I STORAGE

Intermediate storage at the construction site







CAUTION!

- Maintain at least 20 cm distance between the package and solid, dry ground
- Make sure to cover up CLT BBS XL elements not wrapped in foil
- Practice increased caution in case of visible quality
- Make sure to cover rips in the foil with sticky tape

Checking of the floor plate



Execution

Check floor plate together with the master builder (re-measure on site and check the height)

Bituminous sealing against humidity





Execution

Bituminous sealing (scorching) on the finished floor plate (after the drying time)

Lay bituminous sealing against humidity according to the manufacturer's instructions - if appropriate, lay two layers (observe structural physics)

LEGAL NOTE

All presentations, explanations, dimensions and selected materials are only recommendations and examples provided by binderholz.

Setting up the walls



Execution

Starting out from established reference axes

- Tear open longitudinal axes
- Determine the angle with a laser measuring device (cross-line laser)

Draw lines with a chalk line

Setting of angles





Execution

Fasten angle bracket on the marked line

Maintain angle distance as required by statics

LEGAL NOTE

All presentations, explanations, dimensions and selected materials are only recommendations and examples provided by binderholz.

Compensation plates for levelling





Execution

Compensation plates - adjust to the height and fixate every 1 m or 0.8 m

Apply sufficiently thick layer of expansive mortar between compensation plates along the full width of the wall and exceeding the length on the sides

Foot thresholds





Larch wood threshold and sealing against ascending humidity

Options

Threshold preassembled by wood construction company

Mounting of threshold at the construction site

LEGAL NOTE

All presentations, explanations, dimensions and selected materials are only recommendations and examples provided by binderholz.

Erection of first wall



Execution

Set the first wall, adjust to position and ensure true balance

Screw on with the pegged angle brackets at the footpoint

Fasten with the assembly supports (distance ca. 3 m)

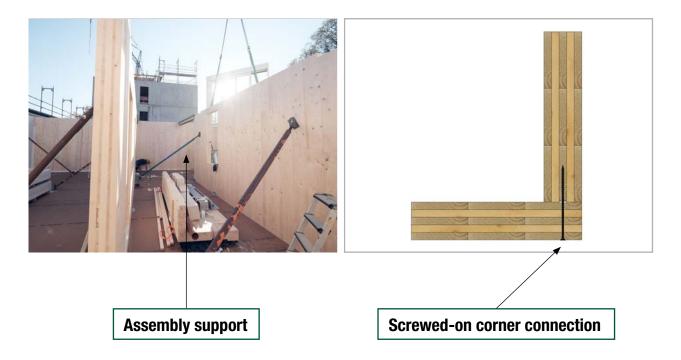
A fter that, disattach from the lifting equipment

Practice increased caution with visible quality

LEGAL NOTE

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Erection of second wall



Execution

Set up the second wall transverse to the first wall, to build a solid corner

Establish true balance

Screw on with the pegged angle brackets at the footpoint

Screw the corner connection together

LEGAL NOTE

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ASSEMBLY I WALLS GROUND FLOOR

Outer wall - inner wall





Execution

Screw together outer wall with inner wall

In case of a blunt joint or tongue & groove joint, insert sealing tape

Erection of remaining walls





Execution

Set up the remaining walls

Longitudinal connections should be screwed together using a connection board

LEGAL NOTE

All presentations, explanations, dimensions and selected materials are only recommendations and examples provided by binderholz.

ASSEMBLY I CEILINGS

Application of sealing tape





Execution

Attach sealing tape to the narrow sides (faces) of already standing walls

Use selfadhesive tapes

Avoid fastening them with clamps for reasons of noise protection

The sealing plane must be from wall to wall

Mounting of the ceiling





Mounting a ceiling with a magazine screwdriver

Execution

Place first ceiling element on the already standing walls

Screw the ceiling elements onto the walls

LEGAL NOTE

All presentations, explanations, dimensions and selected materials are only recommendations and examples provided by binderholz.

ASSEMBLY I CEILINGS

Second ceiling element





Execution

Place second ceiling element and pull it towards the first ceiling element with several beam pulls

Screw the ceiling elements together with the walls

Connect the longitudinal joint of the elements with a connection board

Remaining ceiling elements





Fall protection

Execution

Connect as with the previous ceiling elements

Create fall protection for ceiling notches

After setting up the remaining ceiling elements, apply sealing (flame cardboard) (apply according to manufacturer's instructions)

LEGAL NOTE

All presentations, explanations, dimensions and selected materials are only recommendations and examples provided by binderholz.

ASSEMBLY I CEILINGS

Execution detail of longitudinal joint of elements



Execution

If necessary, balance out the ceiling element from underneath

Below, raise/lower with assembly support, before screwing on the cover plate

Execution detail: Longitudinal joint of elements in the wall axes I jetty (e.g. balcony)



Execution

Sealing of the longitudinal element connections

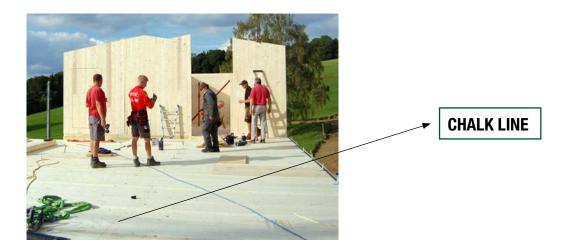
Noise protection in the interior area

Creation of the airtight plane for the outside area

ASSEMBLY I WALLS UPPER FLOOR

These are binderholz suggestions, hints, examples

Setting up the walls on the first upper floor



Execution

Starting out from the established reference axes

- Tear up the longitudinal axes
- Place angles to measure, using a laser measuring device (cross-line laser)

Add chalk lines

Setting of angles



Execution

Attach angle pieces on the predrawn line

Maintain angle distance as required by statics

ASSEMBLY I PROTECTION

These are binderholz suggestions, hints, examples

Weather protection





Execution

CLT BBS may get wet during the construction phase, but avoid waterlogging

Before mounting further layers (e.g. ceiling extension, roof structures), make sure wood moisture is reduced to a maximum of 18% (check with a wood moisture measuring device)

Permanently cover narrow areas (end grain) (use binderholz foil from the packages), install windows as fast as possible

Caution with surfaces in visible quality: avoid optical defects caused by water stains and dirt pollution

Temporary construction time sealing

On request, a full-surface temporary construction time sealing can be applied on our CLT BBS elements at the factory. This can be temporarily used during the construction time for up to 4 weeks on ceilings and roofs and can be exposed to the weather (including driving rain and UV light). The processing instructions of the manufacturer of the sealing membrane as well as the binderholz instructions on the temporary construction time sealing, must be observed at any time. For further details, please ask our sales representatives.







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SHELL CONSTRUCTION DETAILS I SYMBOLS

Symbol	Denomination	Function	Dimension (Examples)
12 x 178	Concrete anchor	For fastening on mineral substrate (concrete, stone)	Ø 12 x 178 mm
16 x 220	screw anchor		Ø 16 x 220 mm
8 x 140	Fully threaded screw	Selfdrilling screw for wood For the transmission of high tensile forces, e.g. in suspender beams	Ø 8 x 140 mm
4 x 60	Comb nail	For fastening angle connectors, joist hangers, metal plates and for the execution of cross-type screw fittings	Ø 4 x 60 mm
6 x 80	Wood screw	Selfdrilling partially threaded screw for wood Increase of the head pull-through value by means of using washers	Ø 6 x 80 mm
8 x 100			Ø 8 x 100 mm
8 x 160			Ø 8 x 160 mm
8 x 200	Washer head screw	Selfdrilling partially threaded screw for wood Large screw head for high head pull-through values	Ø 8 x 200 mm
10 x 240			Ø 10 x 240 mm
10 x 360			Ø 10 x 360 mm

LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

SHELL CONSTRUCTION DETAILS I SYMBOLS

Symbol	Denomination	Function	Dimension (Examples)
	Angle connector	For fastening of wooden walls on substrate (wood, reinforced concrete)	100 x 100 mm
	Perforated metal plate	For transmission of tensile forces	80 x 600 mm
	3-layer panel	For transmission of tensile forces	Thickness 19 mm or 27 mm
	Tie rod	Rod for tension connection between a wooden wall and substrate from reinforced concrete	Height 540 mm
	Glue tape	To create an airtight plane Recommended for wood-wood connections	Width 60 mm
	Wall barrier from butyl	Protection of the wood against ascending moisture Variable width	Width 500 mm
	EPDM sealing tape	Sealing to create an airtight plane Fasten with clamps	
	Noise protection bearing	Sealing to create an airtight plane Decouples in case of increased requirements for noise protection	Colour division in different pressure strengths Application of different bearings depending on actual line load
	EPDM zigzag band	Sealing to create an airtight plane Decouples in case of normal requirements for noise protection	Depending on the construction object, specific calculation is recommended
	Glue	Sealing to create an airtight plane	PU glues, mounting glue
	Insulation		Mineral wool, cellulose, EPS/XPS

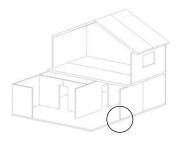
LEGAL NOTE

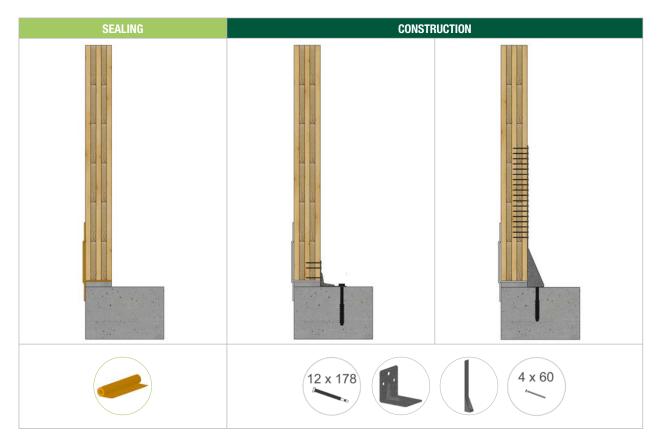
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 1 - without threshold

binderholz **•**





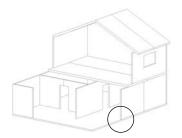


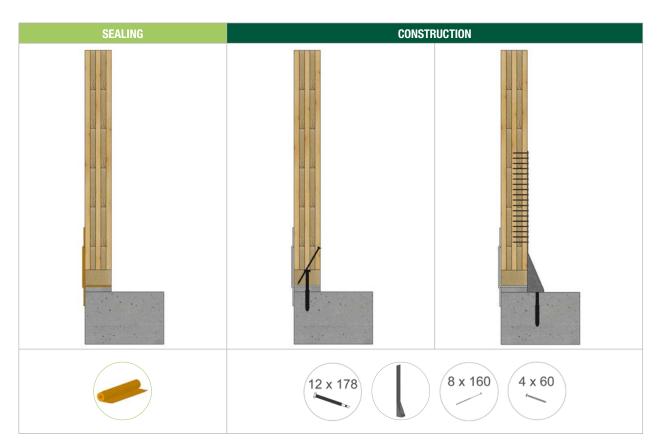
LEGAL NOTE

Variant 2 - with threshold







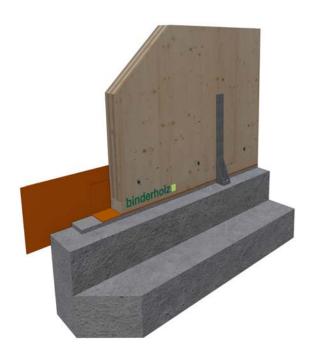


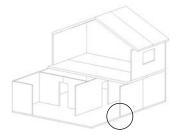
LEGAL NOTE

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Variant 3 - with concrete base and threshold





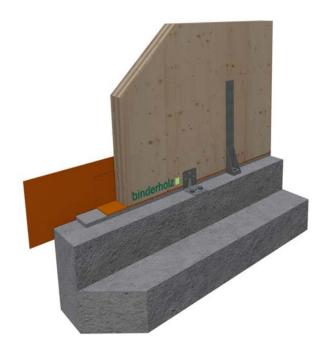


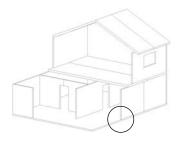


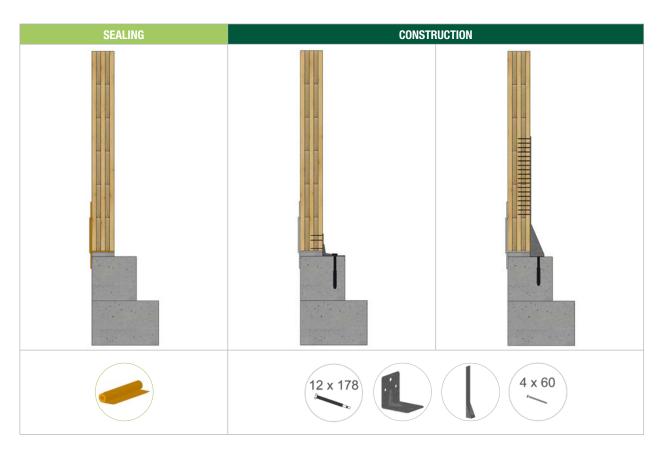
LEGAL NOTE

Variant 4 - with concrete base









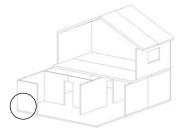
LEGAL NOTE

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Variant 1 - without threshold

binderholz **•**





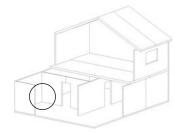


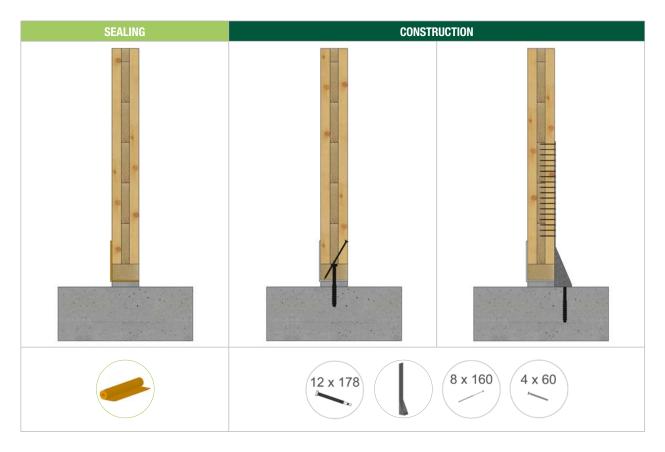
LEGAL NOTE

Variant 2 - with threshold









LEGAL NOTE

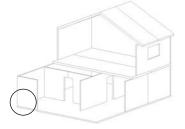
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS OUTER WALL - CLT BBS OUTER WALL

Variant 1 - with sealing tape

binderholz =







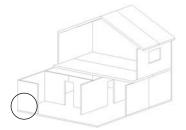
LEGAL NOTE

CLT BBS OUTER WALL - CLT BBS OUTER WALL

Variant 2 - with glue tape









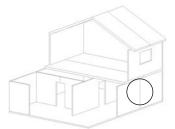
LEGAL NOTE

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Variant 1 - rebate I sealing membrane







SEALING	CONSTRUCTION
	6 x 80

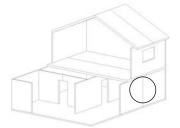
LEGAL NOTE

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Variant 2 - tongue | sealing membrane







SEALING	CONSTRUCTION
	6 x 80

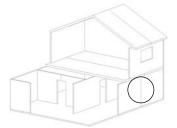
LEGAL NOTE

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Variant 3 - rebate I glue tape







SEALING	CONSTRUCTION
	6 x 80

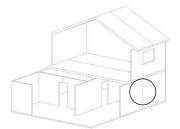
LEGAL NOTE

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Variant 4 - tongue I glue tape







SEALING	CONSTRUCTION
	6 x 80

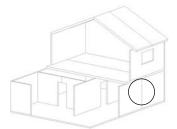
LEGAL NOTE

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Variant 5 - stepped rebate I glue tape

binderholz =





SEALING	CONSTRUCTION
	6 x 80

LEGAL NOTE

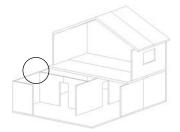
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CLT BBS OUTER WALL - CLT BBS INNER WALL

with sealing tape









LEGAL NOTE

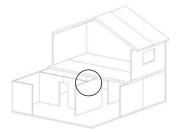
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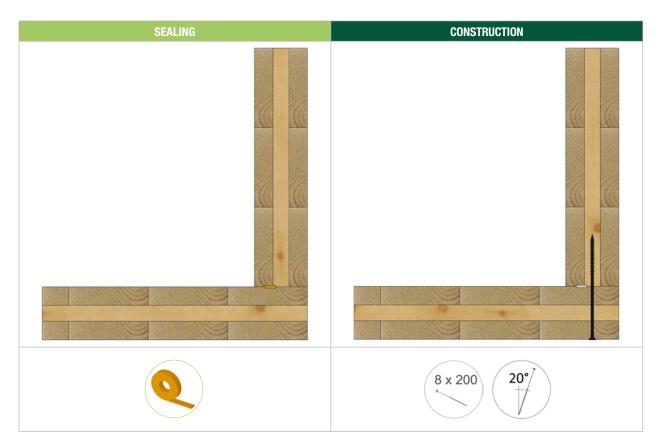
CLT BBS INNER WALL - CLT BBS INNER WALL

with sealing tape I with threshold

binderholz =





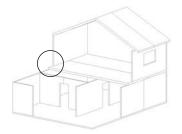


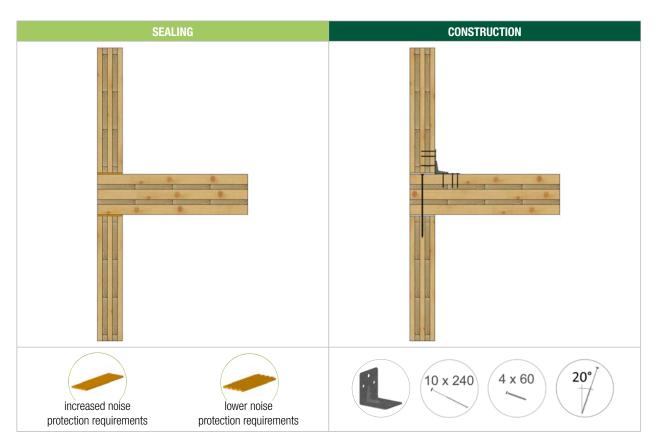
LEGAL NOTE

Variant 1 - angle connection









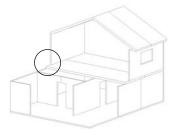
LEGAL NOTE

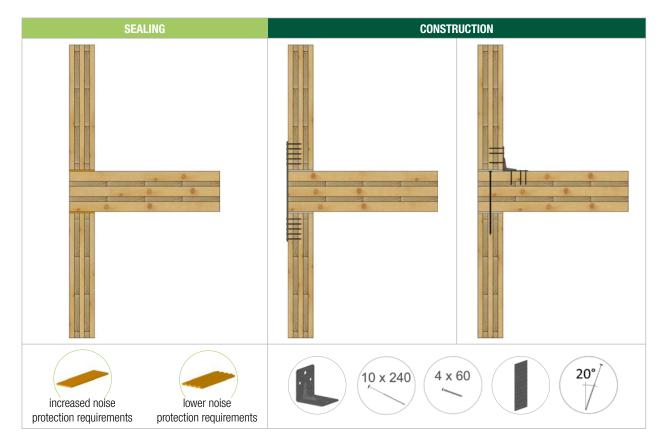
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Variant 2 - perforated metal plate connection









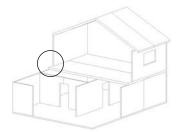
LEGAL NOTE

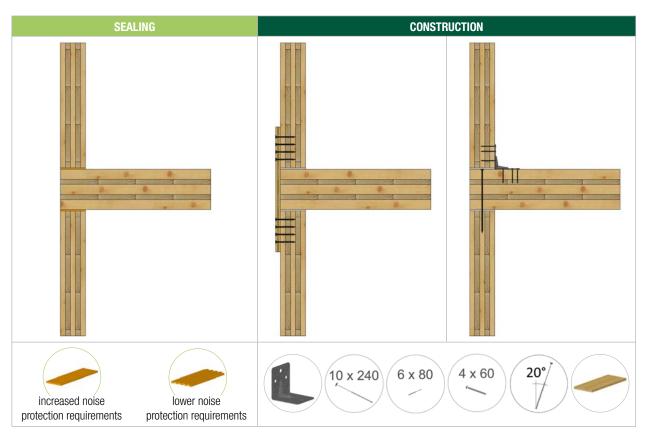
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 3 - solid wood plate









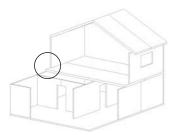
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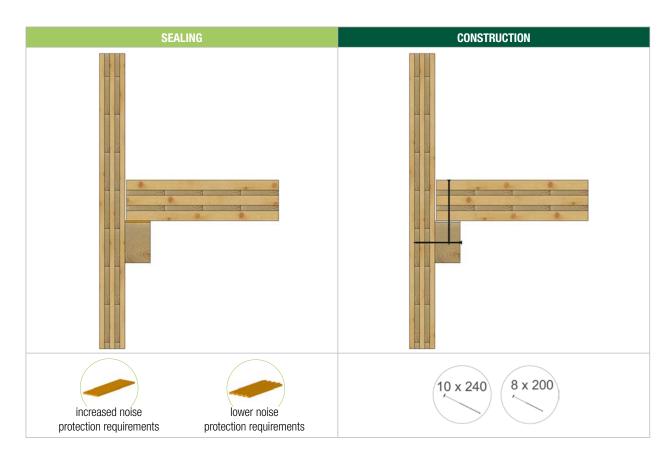
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

binderholz =

Variant 4 - continuous outer wall I bearing trimmer beam





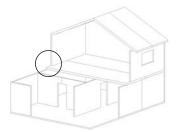


LEGAL NOTE

Variant 5 - continuous outer wall I bearing T-square







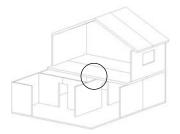


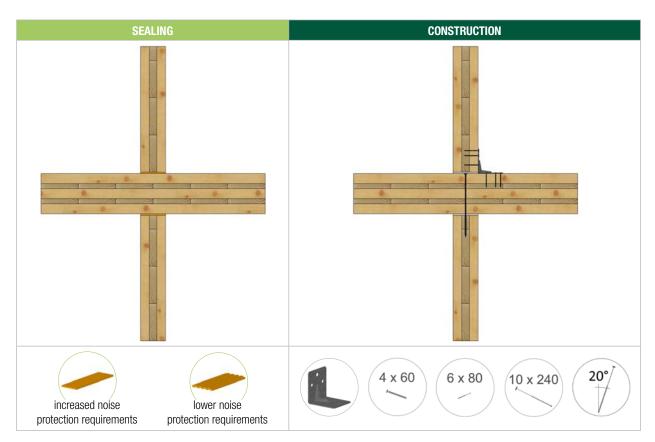
LEGAL NOTE

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binderholz =







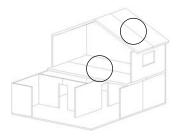
LEGAL NOTE

CLT BBS CEILING/ROOF - CLT BBS CEILING/ROOF

Variant 1 - rebate | glue tape







SEALING	CONSTRUCTION
	6 x 80

LEGAL NOTE

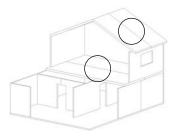
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING/ROOF - CLT BBS CEILING/ROOF

Variant 2 - rebate | glue







SEALING	CONSTRUCTION
	6 x 80

LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING/ROOF - CLT BBS CEILING/ROOF

Variant 3 - stepped rebate I glue tape





SEALING	CONSTRUCTION
	6 x 80

LEGAL NOTE

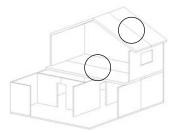
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING/ROOF - CEILING/ROOF

Variant 4 - screwed crosswise | glue tape







SEALING	CONSTRUCTION
	8 x 140

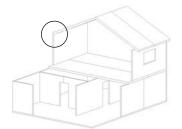
LEGAL NOTE

CLT BBS OUTER WALL - CLT BBS ROOF

Variant 1 - sealing tape

binderholz =







LEGAL NOTE

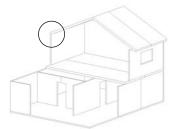
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS OUTER WALL - CLT BBS ROOF

Variant 2 - glue tape

binderholz **•**





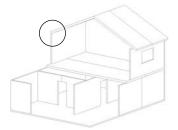


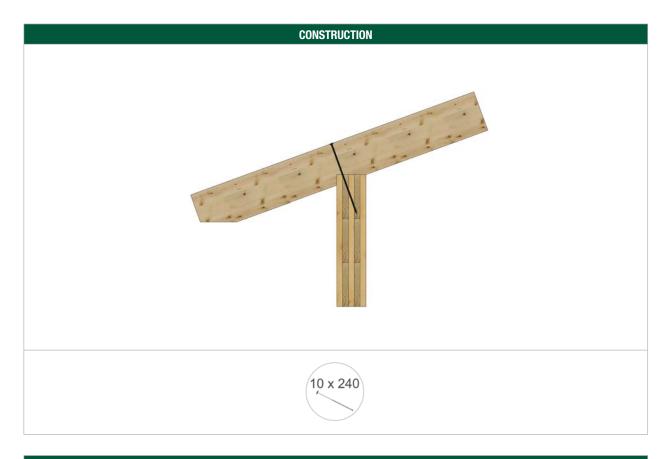
LEGAL NOTE

Variant 1 - without glue tape









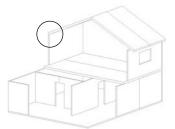
LEGAL NOTE

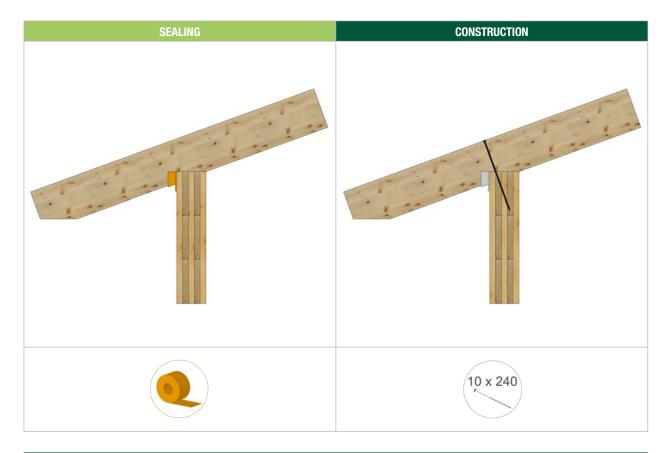
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 2 - with glue tape







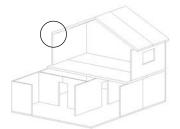


LEGAL NOTE

Variant 3 - rafter inserted | glue tape









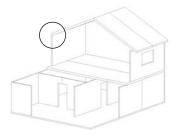
LEGAL NOTE

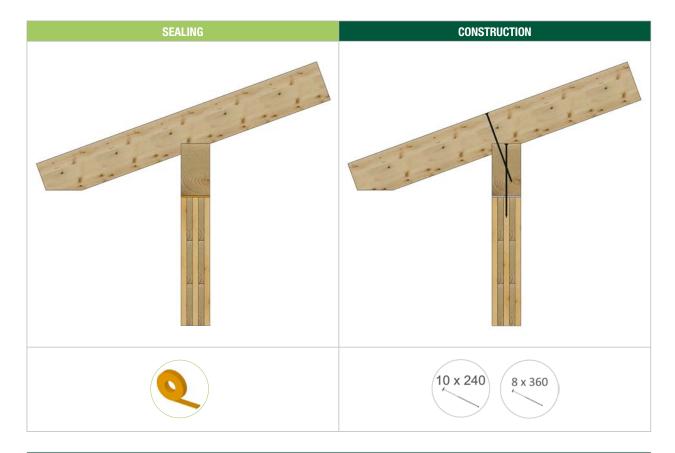
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 4 - rafter on BSH

binderholz **•**







LEGAL NOTE

Variant 1 - with stringer I sealing tape

binderholz **•**





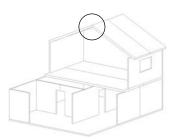
LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 2 - with stringer I glue tape

binderholz





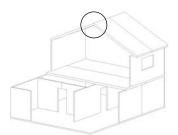
SEALING	CONSTRUCTION
	10 x 240

LEGAL NOTE

Variant 3 - within stringer I sealing tape







SEALING	CONSTRUCTION
	10 x 240

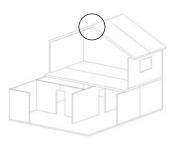
LEGAL NOTE

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Variant 4 - within stringer I glue tape

binderholz



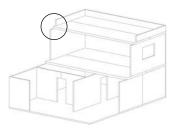


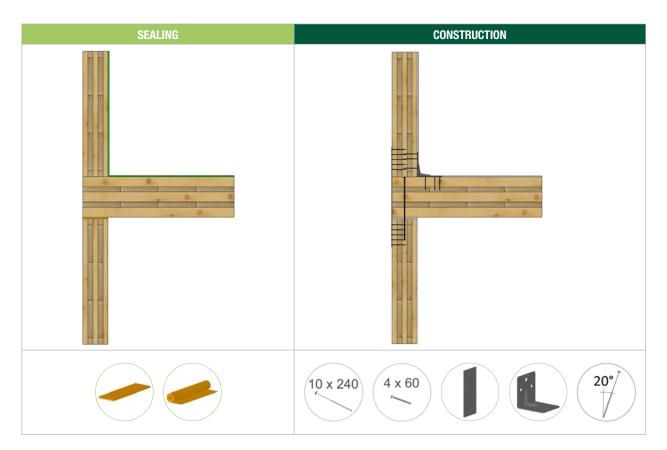
SEALING	CONSTRUCTION
	10 x 240

LEGAL NOTE

binderholz =







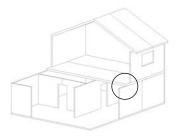
LEGAL NOTE

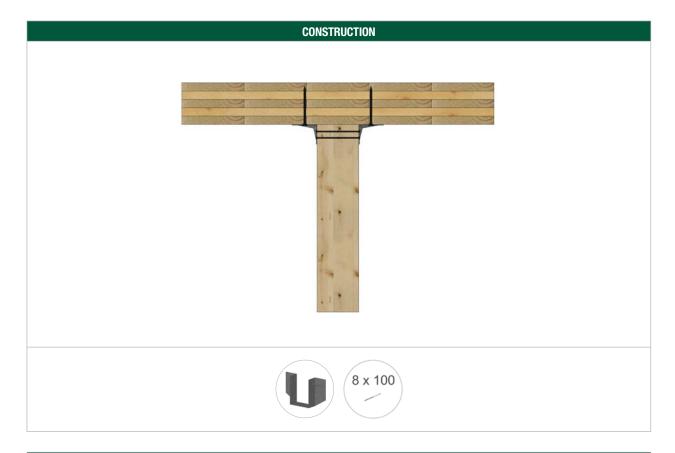
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 1 - joist hanger

binderholz **•**





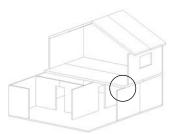


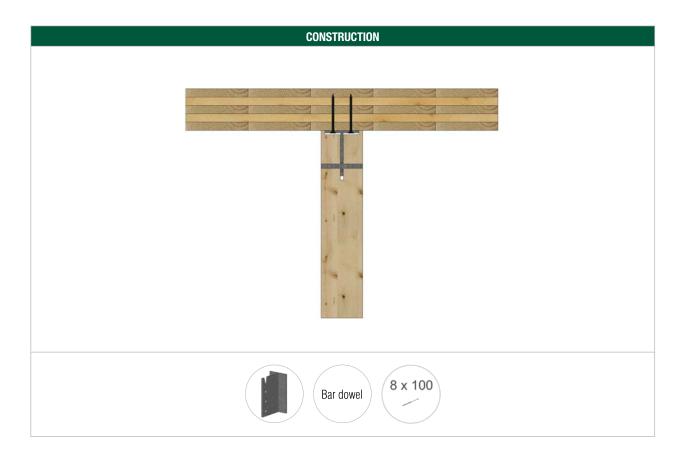
LEGAL NOTE

Variant 2 - summer

binderholz =







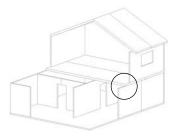
LEGAL NOTE

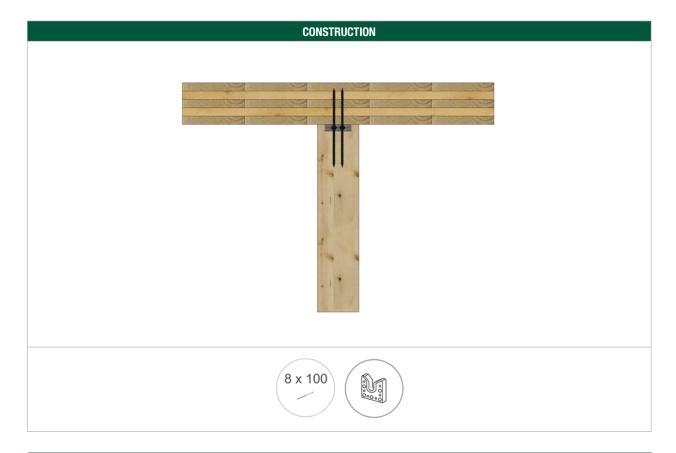
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 3 - push-in connection







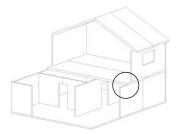


LEGAL NOTE

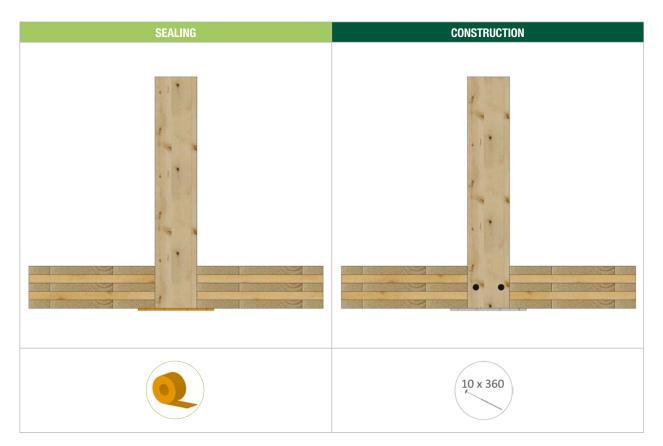
Variant 4 - glue tape

binderholz =





For protection of the BSH the BSH front can be completely covered with glue tape.

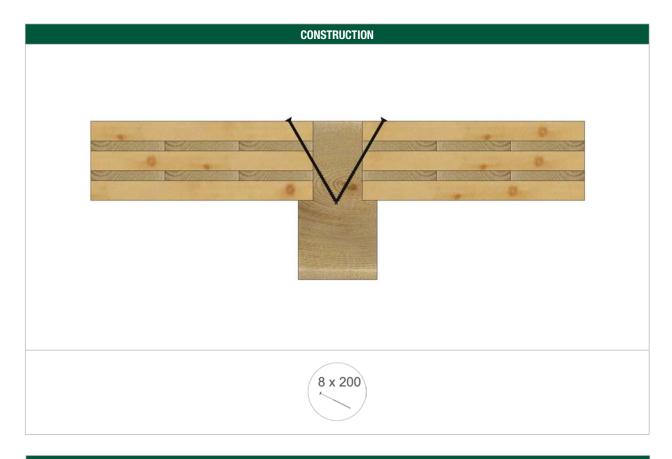


LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.







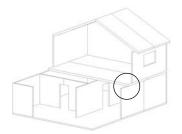
LEGAL NOTE

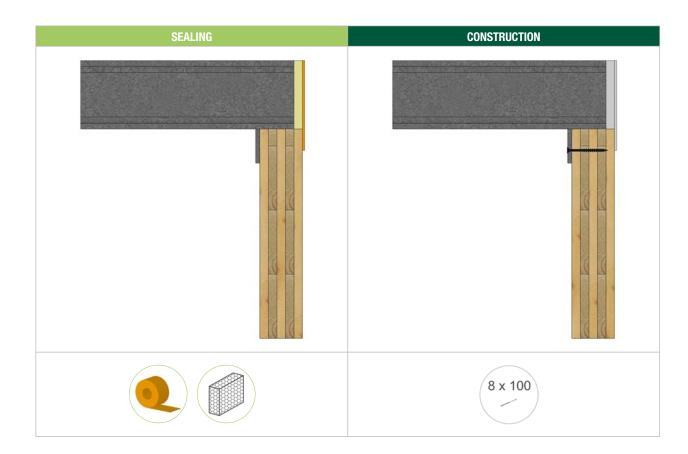
STEEL GIRDER - CLT BBS OUTER WALL

Variant 1 - with insulation

binderholz =







LEGAL NOTE

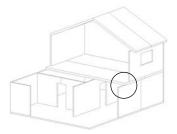
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

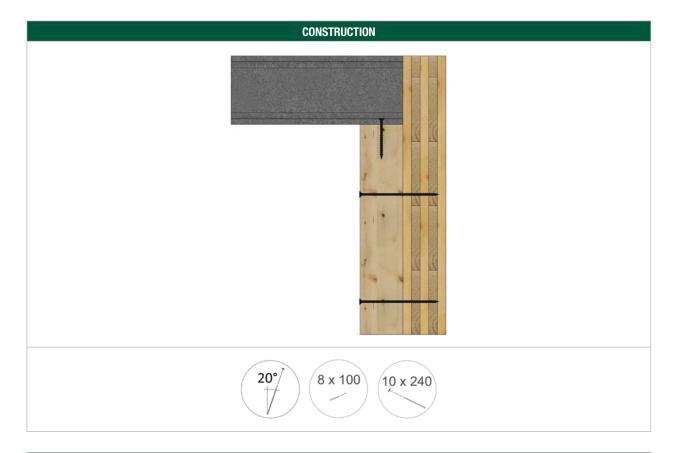
STEEL GIRDER - CLT BBS OUTER WALL

Variant 2 - BSH support









LEGAL NOTE

CEILING-LEVEL STEEL GIRDER - CLT BBS CEILING

Variant 1 - with noise protection







LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CEILING-LEVEL STEEL GIRDER - CLT BBS CEILING

Variant 2 - CLT BBS milled



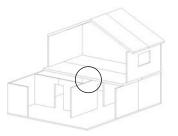


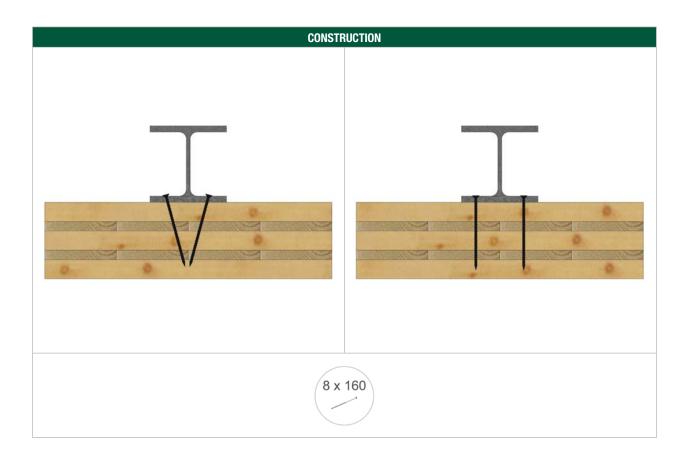


LEGAL NOTE









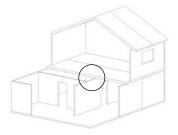
LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING WITH BUTT JOINT - CLT BBS INNER WALL









LEGAL NOTE

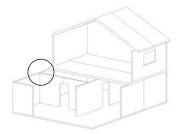
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

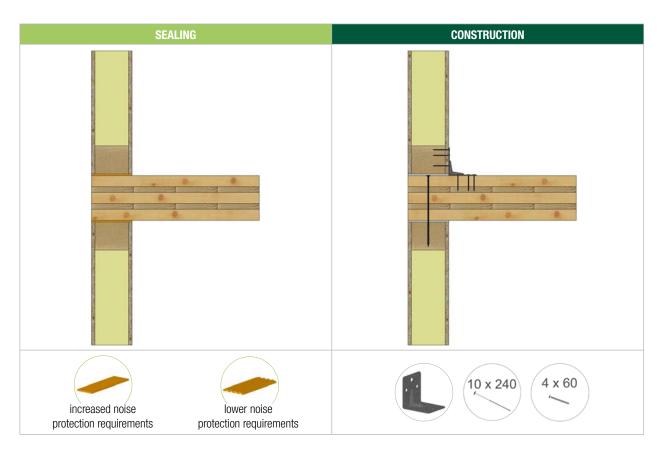
CLT BBS CEILING - WOODEN FRAME WALL (OUTER WALL)

Variant 1 - without glue tape









LEGAL NOTE

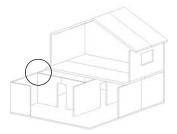
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING - WOODEN FRAME WALL (OUTER WALL)

binderholz **•**

Variant 2 - glue tape inside/outside

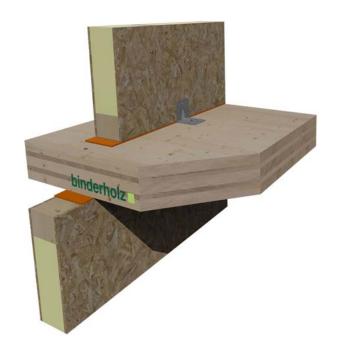


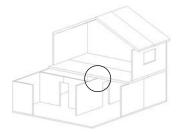


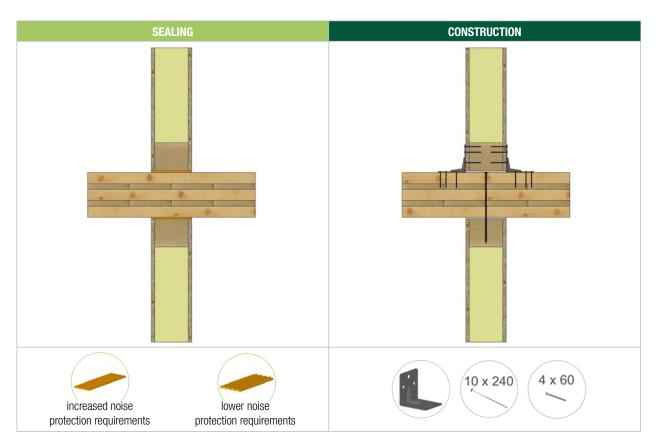


LEGAL NOTE

binderholz **•**







LEGAL NOTE

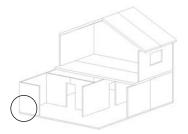
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS WALL - WOODEN FRAME WALL (OUTER WALL)

binderholz **•**

Variant 1 - sealing tape







LEGAL NOTE

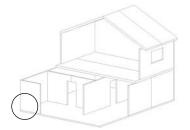
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS WALL - WOODEN FRAME WALL (OUTER WALL)

Variant 2 - glue tape inside (in CLT BBS NH-C)









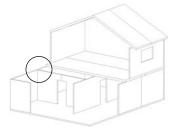
LEGAL NOTE

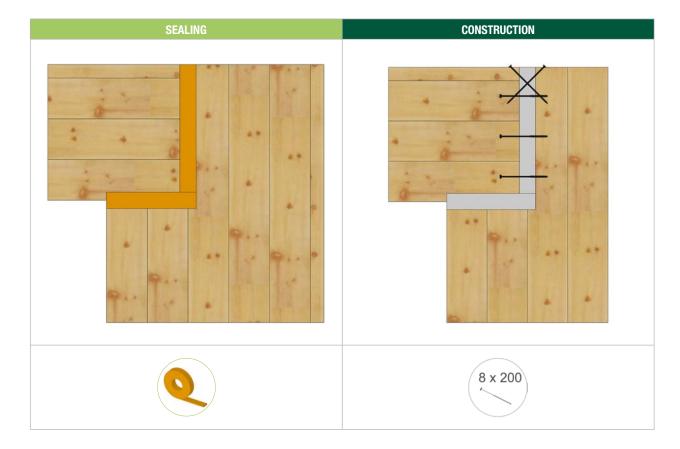
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 1 - fitted end-to-end

binderholz **•**







LEGAL NOTE

Variant 2 - stepped rebate





SEALING	CONSTRUCTION
	6 x 80

LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

Variant 3 - rebate

binderholz =



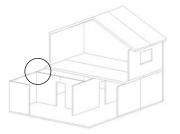
SEALING	CONSTRUCTION
	6 x 80

LEGAL NOTE

Variant 4 - BSH support







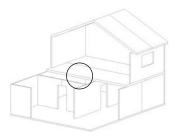


LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

binderholz **•**



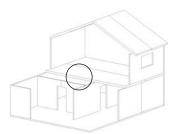


CONSTRUCTION

LEGAL NOTE

binderholz =





CONSTRUCTION 8 x 100

LEGAL NOTE

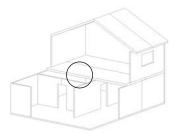
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

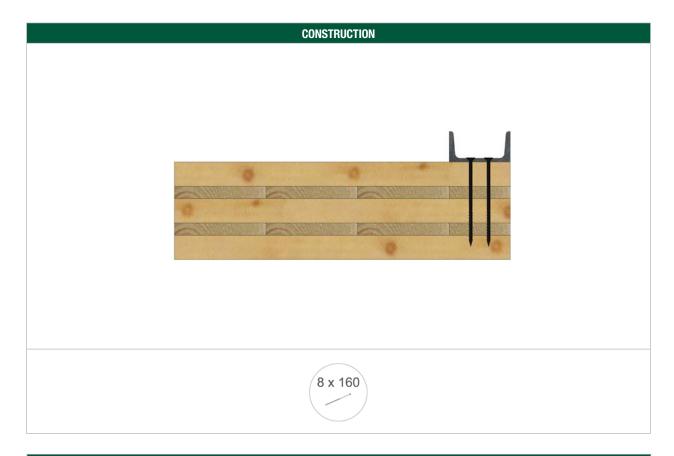
STAIRWELL

Variant 3 - U-profile

binderholz







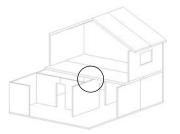
LEGAL NOTE

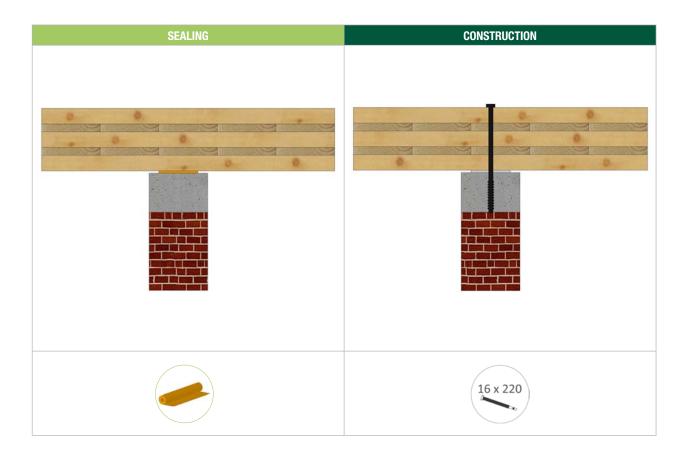
CLT BBS CEILING - BRICKWALL

Variant 1 - inner wall I continuous ceiling









LEGAL NOTE

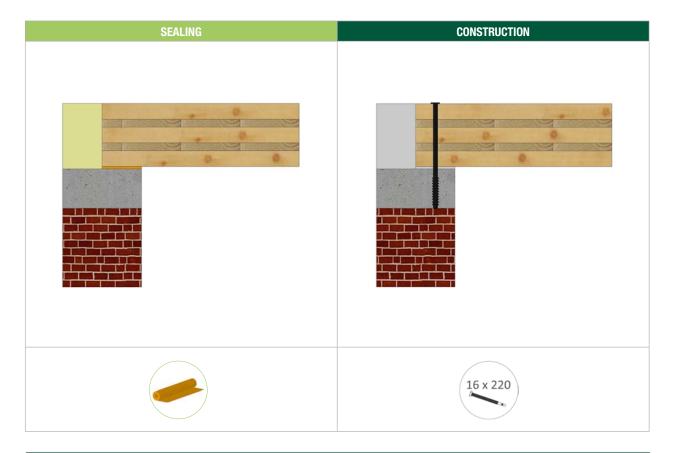
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING - BRICKWALL

Variant 2 - with insulation

binderholz =





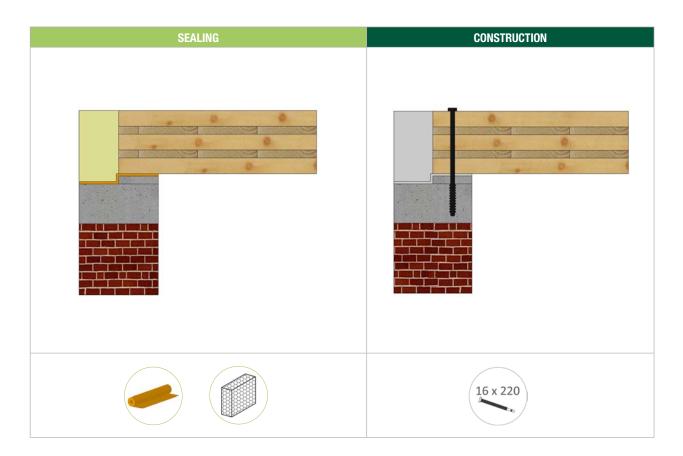
LEGAL NOTE

CLT BBS CEILING - BRICKWALL

Variant 3 - with expansive mortar

binderholz =





LEGAL NOTE

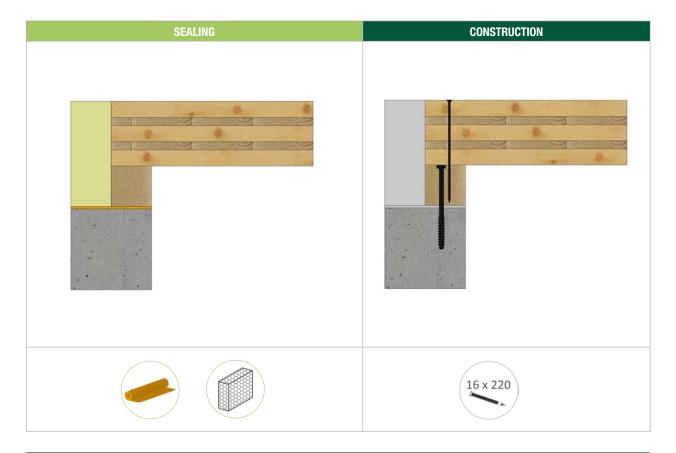
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING - CONCRETE WALL

Variant 1 - without expansive mortar

binderholz =





LEGAL NOTE

CLT BBS CEILING - CONCRETE WALL

Variant 2 - with expansive mortar







LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

CLT BBS CEILING - CONCRETE WALL



Variant 3 - concrete rear wall I without expansive mortar





LEGAL NOTE

CLT BBS CEILING - CONCRETE WALL

binderholz =

Variant 4 - concrete rear wall I with expansive mortar





LEGAL NOTE

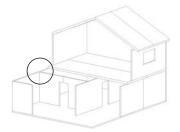
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

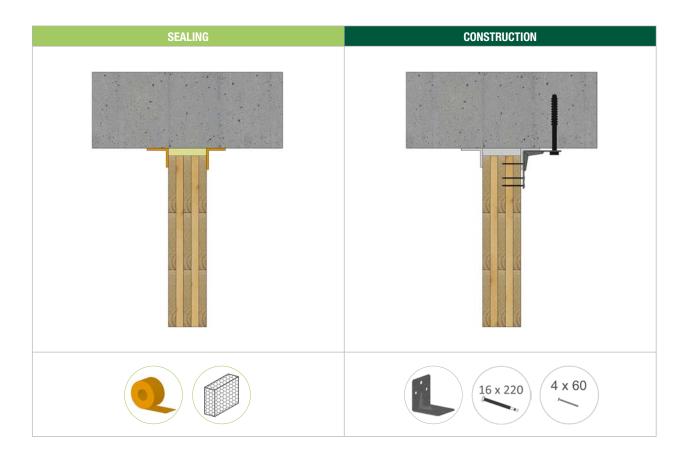
CLT BBS WALL - CONCRETE WALL

Variant 1 - precompressed insulation strip









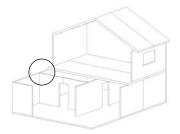
LEGAL NOTE

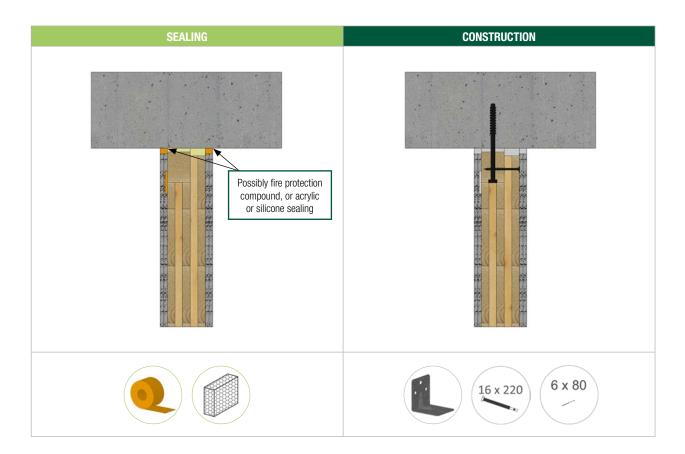
CLT BBS WALL - CONCRETE WALL

Variant 2 - planked I solid wood









LEGAL NOTE

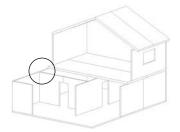
The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

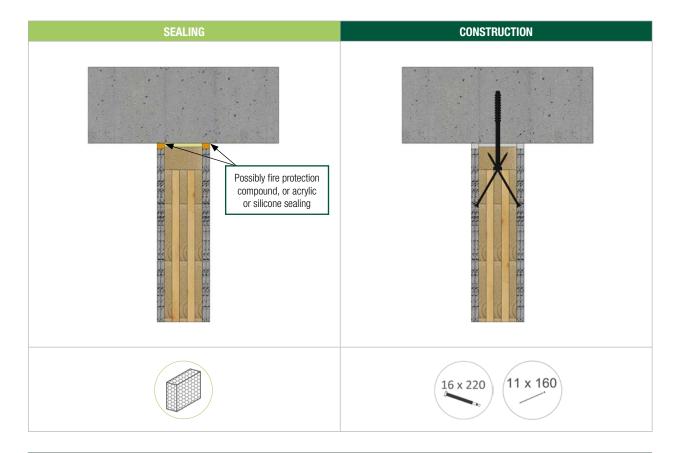
CLT BBS WALL - CONCRETE WALL

Variant 3 - planked | solid wood full CLT BBS strength





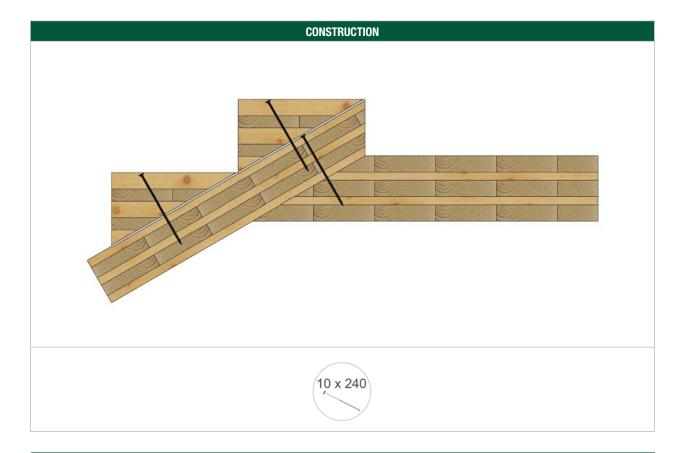




LEGAL NOTE

binderholz =



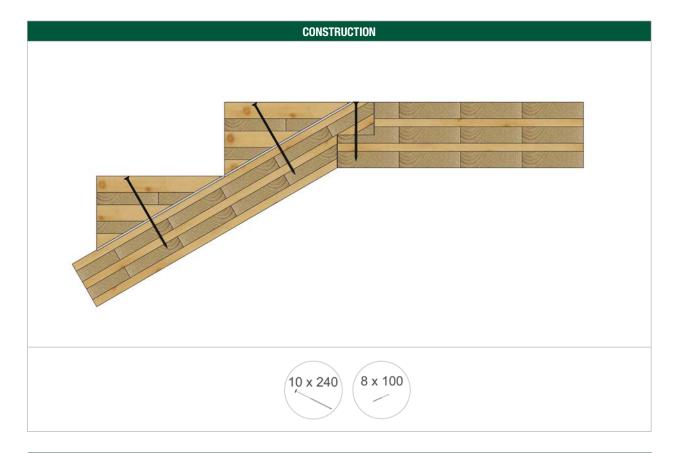


LEGAL NOTE

The presented dimensions (especially connecting means) and symbol images are to be understood as examples and do not replace subject specific or project-specific static and physical calculation.

binderholz

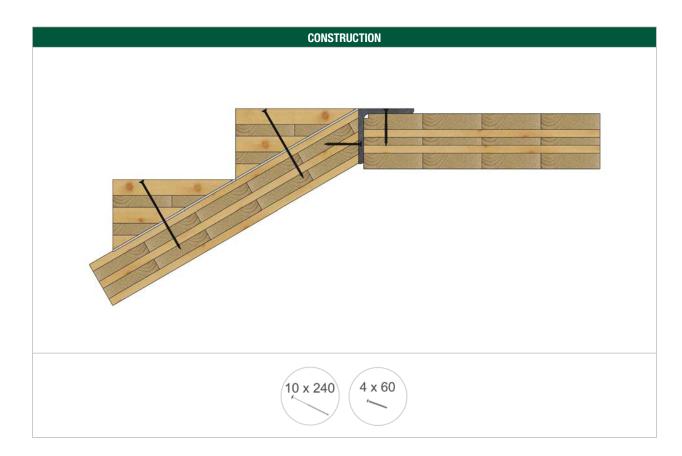




LEGAL NOTE

binderholz =





LEGAL NOTE

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SAFETY ON THE CONSTRUCTION SITE

Personal protection equipment









Fall protection

Combisafe





Scaffolding



Rope protection



LEGAL NOTE

All presentations, explanations, dimensions and selected materials are only recommendations and examples provided by binderholz.

NOTE I CONTACT

Important note

The information is intended exclusively for professionals who have the appropriate skill and expertise (in wood construction, building industry) and are capable, qualified and authorised for the appropriate handling and processing and/or planning.

The information in this brochure is intended to help them to understand the proper handling of binderholz CLT BBS which is always subject to the applicable legal regulations, standards as well as state-of-the-art. The dimensions and symbol images provided are examples only and serve as technical and/or optical references for obtaining materials. The actual dimensions of fastening materials as well as sealing and protection materials (screws, angles, sealing tapes, etc.) are specific to each project and to be agreed individually with the customer and, if necessary, with the assistance of professional counsel. It is expressly pointed out that each construction project must be subjected to a static, physical and fire-technical assessment and corresponding calculations executed by experts in those fields. Any liability or warranty of Binderholz Bausysteme GmbH on the basis of this brochure or information is hereby excluded.

Eager to find out more?

You can contact us in person by calling +43 6245 70500 or by email to bbs@binderholz.com.

We will be happy to send you detailed information material on request.



Binderholz Bausysteme GmbH · CLT BBS

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