

EXTERNAL THERMAL INSULATION COMPOSITE SYSTEM

Installation guidelines best wood SCHNEIDER® ETICS



www.schneider-holz.com

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fast &
reliable –
the team of best
wood SCHNEIDER®
deals with your re-
quests.**

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Legal notice

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■ ■ For timber frame construction

Classic timber frame construction with insulation. OSB panel on the inside for stiffening and with stapled-on wood fiber insulation board as a possible service cavity as a vapor barrier or air sealant. best wood WALL 180 that can be plastered on the outside.

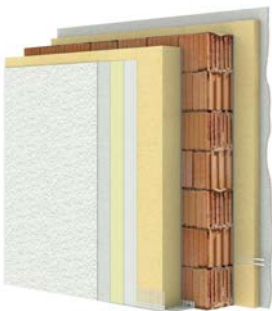
best wood external rendering	
best wood WALL 180	60 mm
best wood FLEX 50 between studs	140 mm
OSB panel	15 mm
best wood FLEX 50 between service cavity	60 mm
Fiber-reinforced plasterboard	



■ ■ For continuous and load-bearing solid timber substrates

Cross laminated timber wall as a static load-bearing structure and as a vapor barrier or air sealant. Stapled-on wood fiber insulation board as a possible service cavity on the inside. best wood WALL 140 that can be plastered on the outside.

best wood external rendering	
best wood WALL 140	160 mm
Cross laminated timber wall	120 mm
best wood MULTITHERM 140	60 mm
Internal rendering	



■ ■ For mineral substrates

Masonry with wood fiber insulation board glued on the inside as a possible service cavity. Bolted best wood WALL 140 that can be plastered on the outside.

best wood external rendering	
best wood WALL 140	160 mm
Brick masonry	240 mm
best wood MULTITHERM 140	60 mm
Internal rendering	

■ ■ best wood ETICS approvals

■ ■ European Technical Approvals (ETA) and type approvals (aBG)

■ ■ on wooden substrates



■ ■ on mineral substrates



■ ■ Approved render manufacturers



■ ■ Information:

The specifications and recommendations described in this processing guideline for the processing and fastening of the best wood WALL 140/180 wood fiber insulation boards apply independently of the render system that has been applied.

All specifications and recommendations with regard to the render structure and the processing of the render relate exclusively to the best wood render system. If a different render system is used, the structure and the processing must be clarified with the relevant render manufacturer.

A detailed overview of the render manufacturers and their approved components (in German) can be found at:

www.schneider-holz.com/de/service/das-plus-an-service-zubehor/downloads/download/zulassung-wdvs-putzsysteme-uebersicht-der-zugelassenen-putzhersteller/



■ ■ Wood fiber insulation boards

■ ■ best wood WALL 140

WALL 140 is a pressure-resistant wood fiber insulation board that can be plastered. It can be applied on entire surfaces such as masonry and solid wood in external walls.

Technical data

Denomination	WF-EN 13171-T5-DS(70,-)2-CS(10\Y)100-TR20-WS1,0-MU3-AFr75
Standard	EN13171
ETA/design approval	ETA-16/0997; ETA-15/0731; aBG Z-33.84-1674; aBG Z-33.84-1675
Density	140 [kg/m ³]
Nominal value of thermal conductivity λ_D	0.040 [W/mK]
Rated value of thermal conductivity λ_R	0.042 [W/mK]
Compressive stress at 10% compression	≥ 100 [kPa]
Tensile strength perpendicular to the plane of the board	≥ 20 [kPa]
Water vapor diffusion resistance μ	3
Linear flow resistance	> 75 [kPa·s/m ²]
E-module pressure E	≥ 1.45 [N/mm ²]
Reaction to fire according to DIN EN 13501-1	E or B-s1, d0 with best wood render system
Construction material class acc. to DIN 4102-1	B2
Materials	Wood fibers, PMDI gluing, paraffin
Specific heat capacity	2100 [J/kgK]
Fields of application according to DIN 4108-10	DEO-dh, WAB-dh, WAP-zh, WZ, WH, WI-zg, WTR



Delivery options

Edge profiles	Tongue and groove (wooden substrates), square edge (mineral substrates)
Thickness	40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240 mm
Length	1500, 2000 mm
Width	600 mm (square edge), 580 mm (tongue + groove)

■ ■ best wood PERIMETER INSULATION / REVEAL BOARD

The best wood perimeter insulation board is made from high quality polystyrene. The insulation boards are particularly characterized by a high grade of accuracy and a high degree of non-shrinking. This enables an efficient and no joints processing.

Technical data

Rated value of thermal conductivity λ_R	0.035 [W/mK]
Compressive stress at 10% compression	150 [kPa]
Fire index	B1 according to DIN 4102-1

Delivery options

Edge profiles	Square edge
Thickness	20*, 40, 60, 80, 100, 120, 140, 160, 180, 200 mm
Length	1000 mm
Width	500 mm
Delivery in pairs	



* only permissible as reveal board



■ ■ best wood WALL 180

WALL 180 is a high-pressure resistant wood fiber insulation board that can be plastered. It can be applied on timber frame constructions in external walls.

Technical data

Denomination	WF-EN 13171-T5-DS(70,-)3-CS(10\Y)150-TR30-WS1,0-MU3-AFr100
Standard	EN13171
ETA/design approval	ETA-16/0997; aBG Z-33.84-1674
Density	180 [kg/m ³]
Nominal value of thermal conductivity λ_{n0}	0.043 [W/mK]
Rated value of thermal conductivity λ_{R0}	0.045 [W/mK]
Compressive stress at 10% compression	≥ 150 [kPa]
Tensile strength perpendicular to the plane of the board	≥ 30 [kPa]
Water vapor diffusion resistance μ	3
Linear flow resistance	> 100 [kPa·s/m ²]
E-module pressure E	≥ 2.50 [N/mm ²]
Reaction to fire according to DIN EN 13501-1	E or B-s1, d0 with best wood render system
Construction material class acc. to DIN 4102-1	B2
Materials	Wood fibers, PMDI gluing, paraffin
Specific heat capacity	2100 [J/kgK]
Fields of application according to DIN 4108-10	DEO-ds, WAB-ds, WAP-zh, WZ, WH, WI-zg, WTR

Delivery options

Edge profiles	Tongue and groove
Thickness	40, 60, 80, 100, 120, 140, 160 mm
Length	1500, 2000, 2500 mm
Width	580 mm

■ ■ best wood WALL 180 REVEAL BOARD

best wood WALL 180 reveal board for paneling the window reveal.

Technical data see WALL 180.

Delivery options

Edge profiles	Square edge
Thickness	20, 40 mm
Length	1500, 2000, 2500 mm
Width	600 mm
Delivery in pairs	



■ best wood WALL 140/180 pre-plastered

WALL 140 can be installed on continuous and load-bearing solid timber substrates. WALL 180 can be applied on timber frame constructions. WALL 140/180 must not be applied on mineral substrates. An outdoor exposure of up to 5 months is possible and one working step on the building site can be omitted. Thanks to the machinery coating, the whole layer has the same thickness and the reinforcement fabric is correctly placed.

Delivery options

Edge profiles	only tongue and groove
Thickness	60, 80, 100, 120, 140, 160 mm
Length	1500, 2000 mm
Width	580 mm



■ best wood WALL 180 REVEAL BOARD pre-plastered

The reveal board is exclusively intended for covering the window reveals.

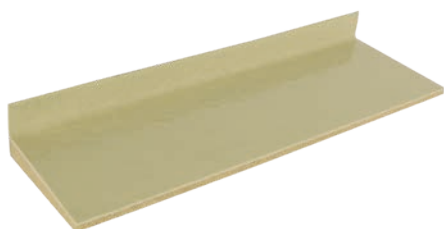
Delivery options

Edge profiles	Square edge
Thickness	20, 40 mm
Length	1500, 2000 mm
Width	600 mm
Delivery in pairs	



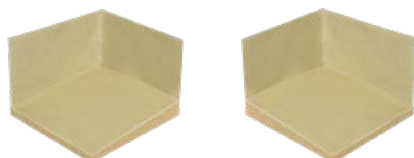
■ ■ best wood sealing level for window sills

The standard solution for water-tight sealing in the vicinity of the window sill. The sealing wedge can be cut using conventional circular saws and therefore providing maximum flexibility for the processor.



Delivery options

Depth	100, 150, 200, 250, 300 mm (further depths by request)
Thickness	25 mm; from 201 mm 35 mm
Width	1200 mm
Pitch	5°



Delivery options Sealing corners

Depth	100, 150, 200, 250, 300 mm (further depths by request)
Width	150 mm

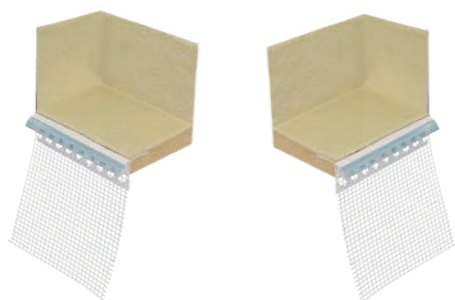
■ ■ best wood sealing level for window sills with render stop bead

The ready-made solution for water-tight sealing in the vicinity of the window sill. The sealing level is manufactured with the required depth in the factory and delivered. The render stop bead is already integrated, and enables quick and easy installation on the construction site.



Delivery options

Depth	60–200 mm; 201–300 mm (other depths by request)
Thickness	25 mm; from 201 mm 35 mm
Width	1200 mm



Delivery options Sealing corners

Depth	60–200 mm; 201–300 mm (other depths by request)
Width	150 mm

■ ■ Accessories for wood fiber insulation boards

■ ■ Stainless steel broad back staples

Stainless steel broad back staples for the fastening of best wood WALL 140/180 to continuous and load-bearing solid timber substrates and for use on timber frame constructions.



Length	75–200 mm
Effective penetration depth in solid timber substrates	≥ 30/36 mm
Version	stainless steel

■ ■ best wood Ejotherm STR H screw-in anchor for insulation boards (for timber constructions)

Screw-in anchor for insulation boards for a flush-mounted fastening on load-bearing solid timber substrates and timber frame constructions.



Screw-in plate with polystyrene cap	Ø 60 mm
Effective screw-in depth	≥ 35 mm
Available lengths Ø 6 mm	80, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280, 300 mm

■ ■ best wood Ejotherm STR U 2G screw-in anchor for insulation boards for concrete and masonry

Pre-assembled universal screw-in anchor for surface fixed installation in concrete and masonry. UV exposure from sunlight on unprotected anchor ≤ 6 weeks.



Screw-in plate with polystyrene cap	Ø 60 mm
Effective penetration depth in dependency on service class, see [pg. 29]	≥ 25 mm or ≥ 65 mm
Available lengths Ø 8 mm	115, 135, 155, 175, 195, 215, 325, 255, 275, 295 mm

■ ■ best wood screw-in anchor for insulation boards H35

Screw-in anchor for insulation boards Ø 6 mm with HP coating for permanent corrosion resistance to fasten insulation board WALL 140/180 and pre-plastered WALL 140/180 in timber frame constructions and on solid wooden substrates.



Screw-in anchor for insulation boards H35 not pre-assembled

Screw-in anchor for insulation boards with polystyrene cap	Ø 35 mm
Effective screw-in depth	≥ 35 mm
Available lengths Ø 6 mm	80, 100, 120, 140, 160, 180, 200, 220 mm



■ ■ best wood FDM WALL

Assembly adhesive for sealing butt joints of the 2nd sealing level for window sills and for attaching reveal boards, sealing wedges and sealing corners. And for sealing joints in the wall insulation with joint widths of 2–5 mm. The assembly adhesive can be plastered over. An air temperature and ambient temperature of $\geq +5^{\circ}$ is required for at least 24 hours during processing.

For joint widths from	2–5 mm
Cartridge 310 ml	470 g content



■ ■ best wood ADHESIVE TAPE

Adhesive tape for all masking work on the best wood SEALING LEVEL FOR WINDOW SILLS. Permanently sealed bonding; strong adhesion, UV stable and ageing resistant. An air temperature and ambient temperature of $\geq +5^{\circ}$ is required during processing.

Length	30 m
Width	60, 100, 180 mm



■ ■ best wood illmod 600 UV-resistant joint insulation tape

Pre-compressed expanding foam insulation tape to seal open joints and connections in facades against driving rain whilst permitting vapor diffusion. UV-resistant and watertight up to 600 Pa. Building material group BG1 according to DIN 18 542. Building material class B1 according to DIN 4102-1.

Type 12/3-7	Joint width	3–7 mm	8.00 rmt/roll	25 rolls/carton
Type 15/5-10	Joint width	5–10 mm	5.60 rmt/roll	20 rolls/carton
Type 20/10-18	Joint width	10–18 mm	4.50 rmt/roll	10 rolls/carton



■ ■ best wood sealing cord

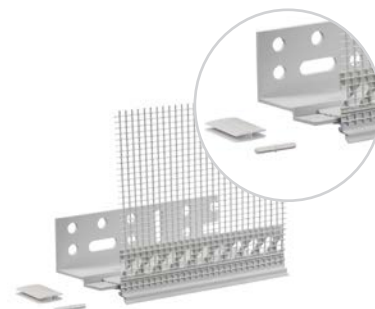
The butyl sealing cord is a universally deployable butyl cord with excellent properties. Tested in accordance with DIN 52455-4. Diameter 8 mm.

included with delivery	10.0 rmt/roll
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■ best wood plastic base profile

Plastic base rail system with base section and clip-on tissue strip.

Length	2.00 rmt/rail
Projection	60, 80, 100, 120, 140, 160 mm
Packing unit	25 connectors, butt joint connectors, 2 corner connecting profiles for outer corners, 1 corner connecting profile for inner corners



■ best wood base profile extension

Extension for the base profile, for an additional 40 mm of insulation material thickness. Base profile 160 mm + 40 mm base profile extension = 200 mm projection.

Length	2.00 rmt/rail
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■ best wood base connecting profile for outer corners

Corner connecting profile for perfect fitting of the base profile outer corners to the tissue strip with plastic and aluminum base profiles.

PU	10 pieces
----	-----------



■ best wood base connecting profile for inner corners

Corner connecting profile for perfect fitting of the base profile inner corners to the tissue strip with plastic and aluminum base profiles.

PU	10 pieces
----	-----------



■ best wood aluminum base profile

Base rail system from aluminum with integrated connector.
(tissue strip not included).
Not suitable for best wood WALL 140/180 pre-plastered.

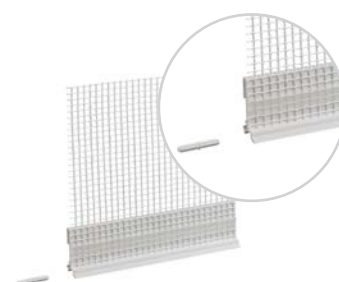
Length	2.50 rmt/rail
Projection	40, 60, 80, 100, 120, 140, 160, 180, 200



■ best wood tissue strip for aluminum base profile

Attachable plastic profile with tissue part for aluminum base profile, including 25 connectors per bundle (connecting profile for inner and outer corners not included).

Length	2.50 rmt/rail
--------	---------------





■ ■ Render system

■ ■ best wood adhesive and reinforcing mortar (UP)

best wood adhesive and reinforcing mortar with organic lightweight aggregates on a white cement base is a water vapor-permeable, water-repellent and fiber-reinforced adhesive and filling mortar which is easy to use and highly durable. It has high adhesive strength and excellent elasticity and as a filler it enhances the pressure resistance of the system as a whole. best wood Schneider adhesive and reinforcing mortar (UP) is highly suitable for machine processing.

Consumption: depending on processing, substrate and consistence	Bonding approx. 3.0–3.5 kg/m ²
	Reinforcing approx. 6.0–7.0 kg/m ²
s _d value	≈ 0.07 m
Mixing ratio	approx. 9.5 liters of water/bag
Suitable for machine processing	yes
Processing temperature	at least +5°C
Storage	dry, on pallets
Storage time	do not exceed 12 months
PU	film bag, 25 kg

■ ■ best wood mineral plaster (MOP)

best wood mineral plaster is a breathable, water-repellent and moisture regulating final render with a brilliant surface texture. The extremely high water retention capability guarantees a long open time, therefore making extremely simple and rational processing possible.



Consumption, scraped surface plaster texture	2 mm 2.5 kg/m ² 3 mm 3.5 kg/m ²
s _d value	≈ 0.11 m
Lightness coefficient	> 20 %
Mixing ratio	approx. 10.0–11.0 liters of water/bag
Suitable for machine processing	yes
Processing temperature	min. +5° C
Storage	dry, on pallets
Storage time	do not exceed 9 months
PU	paper bag, 25 kg

■ best wood silicone resin plaster (SOP)

best wood silicone resin plaster is weatherproof and watertight against driving rain and may be used for decorative finishing on exteriors. It is easy to process, highly adhesive and shockproof, watertight against driving rain, water-repellent, low in tension, vapor-permeable and resistant to alkalis.



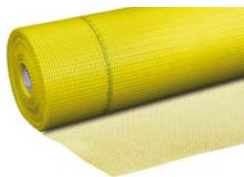
Consumption, scraped surface plaster texture	2 mm 3.0 kg/m ² 3 mm 4.0 kg/m ²
s _d value	≈ 0.16 m
Lightness coefficient	> 20 %
Processing temperature	at least +5°C
Storage	dry, on pallets
Storage time	do not exceed 24 months
PU	plastic bucket 25 kg

■ best wood silicone resin paint

best wood silicone resin paint is a water-repellent, full-bodied, extremely water vapor-permeable and dirt-repellent, fungicide adjusted, facade paint. It retains its color well, has a very high covering capacity and is easy to apply without lap marks. Maximum water repellence prevents marks even in heavy rain. The best wood silicone resin paint is also fungicide/algicide adjusted in the factory.



Bonding agent base	silicone-resin emulsion
Pigment base	titanium dioxide
Application	exterior
Surface	matt, smooth and tactile (similar to mineral paint)
Consumption per coat	150–200 ml/m ²
s _d value	≈ 0.21 m
Lightness coefficient	> 20 %
Mixing ratio	with max. 10% water
Processing	by brush, roller, airless spraying
Processing temperature	at least +5°C
Storage	cool, but in a frost-free place
Storage time	do not exceed 24 months
PU	plastic bucket 12.5 l



■ ■ Accessories for render system

■ ■ best wood reinforcement fabric

System-glass fiber fabric, alkali resistant and with a high tensile strength.

Consumption	1.00 rmt/m ²
Mesh width	4 x 4 mm
Width	1100 mm

■ ■ best wood reinforcing arrow

Corner bead with fiber mesh for diagonal reinforcement on building openings.

Mesh width	4 x 4 mm
------------	----------

■ ■ best wood reveal angle

For diagonal reinforcement at openings in buildings with additional rupture prevention in the corner of the window. Available for a reveal depth of up to 10 cm or for a reveal depth of up to 20 cm.

Mesh width	4 x 4 mm
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■ ■ best wood corner bead with fiber mesh

Plastic profile with integrated fiber mesh for corners and edges.

Length	2.50 rmt/rail
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■ ■ best wood architrave bead with telescope function

With a sealing lip for system connections on doors/windows, etc. High-quality architrave bead that is able to absorb horizontal or vertical movements of the facade. Including a plastic bar with adhesive strips for application of the cover membrane.

Length	1.40/ 2.40 rmt/rail
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■ ■ best wood primer stick

For architrave beads for improving adhesion on surfaces (such as paints, wood glazes, powder coatings and the like). It is essential to check compatibility on the previously cleaned subsurfaces and only apply the primer to the areas that are going to be directly bonded.

Sufficient for approx. 300 running metres of joint with a dust-free surface.

■ ■ best wood spiral anchor

Fastening solution for light attachments to ETICS facades.

PU	10 pieces
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■ best wood render stop bead

Profiles to form render ends with 6 mm edge.

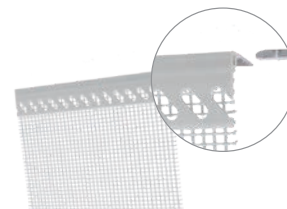
Length	2.00 rmt/rail
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■ best wood ATTIKA render stop bead

ATTIKA stop bead for ETICS with one-sided tissue part, drip edge and render removal edge including connector for a neat render stop and targeted water guidance below the attic covering.

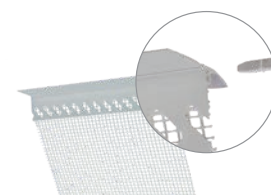
Length	2.00 rmt/rail
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■ best wood WINDOW SILL render stop bead

WINDOW SILL stop bead for ETICS with one-sided tissue part, drip edge and render removal edge including connector for a neat render stop and retrofitting of a second sealing level with sealing film.

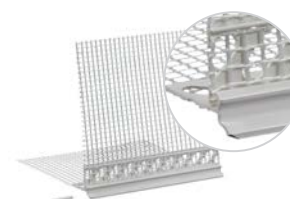
Length	2.00 rmt/rail
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■ best wood drip edge profile

Plastic profile with integrated fiber mesh for forming horizontal render end stops.

Length	2.00 rmt/rail
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■ best wood sheet metal connection profile

Clip-on profile and integrated tissue for forming render connections to sheet metal parts.

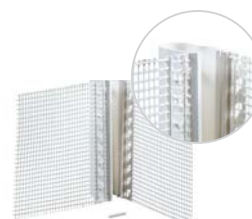
Length	2.00 rmt/rail
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■ best wood expansion joint profile for corners

Plastic profile to form movement joints on wall surfaces (inner corners).

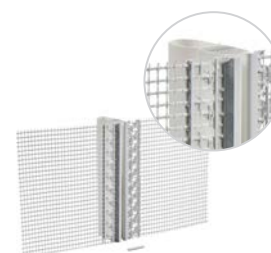
Length	2.00 rmt/rail
--------	---------------



■ best wood expansion joint profile for continuous surfaces

Plastic profile to form movement joints on continuous wall surfaces.

Length	2.00 rmt/rail
--------	---------------



■ best wood connector for render profiles

Secure connection between the profile ends. No slipping of the profile at the joints. This allows for a correctly aligned plug up.

PU	25 pieces
----	-----------



■ ■ Transportation and storage of best wood WALL 140 / 180 boards and best wood render system

For technical reasons and reasons relating to building regulations, as well as warranty considerations, it is important to ensure that only best wood system components or approved materials are used.

The system components should be checked during an incoming goods inspection on delivery arrival and delivery notes and packing specifications should be kept in a safe place for future reference.

Please ensure that there is sufficient weatherproof storage space at the place of delivery. The material must be stored in a dry place and be protected against UV rays and mechanical damage.

WALL 140/180 products are delivered stacked flat on pallets. The best wood sealing level for window sills is delivered in cardboard boxes. A fork-lift truck or crane with suitable lifting tools must be available on site at the time of delivery to unload the materials pallet by pallet. The materials should be transported further in the same way.

A maximum of two pallets of WALL 140/180 are allowed to be stacked on top of each other. Please make sure that there is a sufficient number of pieces of storage wood in order to prevent excessive pressure, as such pressure could cause dents in the WALL 140 / 180 boards at the top or bottom.

Pallets with FLEX 50 must not be stacked on top of each other.

Paste-like plastering components need to be protected from frost and direct sunlight both during transportation and while in storage. In addition the shelf-life given on the containers has to be observed.

Paper packs of plaster must not be stored at the building site without supports underneath and foil covering on top. The shelf-life of 6 months must not be exceeded.

Plastic packs of plaster do not need a foil support underneath. The shelf-life of 12 months must not be exceeded.

Board residue can be disposed of using our best wood take-back system. Pre-plastered and non-pre-plastered WALL 140/180 board residue must be returned separately from each other.

■ ■ General information and instructions for the installation of best wood SCHNEIDER wood fiber insulation boards

best wood WALL 140/180 wood fiber insulation boards must always be stored and installed in dry locations. Once installed the boards have to be protected from direct exposure to moisture.

For the bottom edge connection of the WALL 140/180 board, use a base rail. Ensure that a splash water zone of ≥ 30 cm above final ground level is provided in the area of the base unless other additional measures are taken. WALL 140/180 boards are not designed to be used in the ground. Regarding the base area, please observe the standard details [pg. 21].

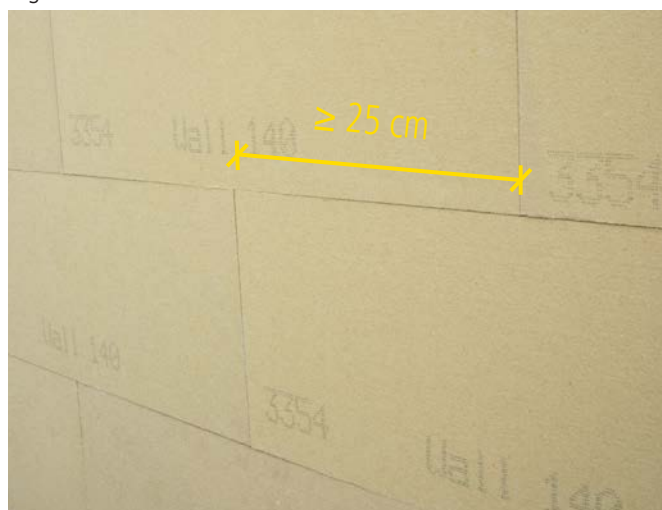


Splash water zone of ≥ 30 cm without any additional measures.

All of the most popular wood cutting tools such as bench-type circular saws and hand-held circular saws, can be used to cut WALL 140/180 boards to size. The pre-plastered WALL 140/180 boards are cut to size using suitable hand-held circular saws or sliding table saws fitted with hard-metal saw blades. The dust which is generated when cutting wood fiber insulation boards, should be extracted by means of a vacuum extractor.

Make sure that the groove of the board always faces downwards when installing Wall 140/180. This ensures that rainwater is able to run off effectively during construction and will not remain in the recess. WALL 140/180 boards can be used on both sides.

Avoid board edges at the corners of window openings, otherwise there is a risk of notch cracks in this area. Install the boards on a staggered basis with an vertical offset of at least 25 cm to each other (no cross joints). The edges of the board must be precisely fitted together at all joint areas and should be preferably pressed tightly together.



Offset of at least 25 cm.

Joints of up to 2 mm at the board edges can be plastered over. Joints of 2–5 mm are to be sealed with best wood FDM WALL. Joints bigger than 5 mm must be closed off with strips of best wood WALL 140/180 wood fiber insulation boards. For outer corners and window edges the WALL 140/180 boards must have a square edge. Any tongue and groove sections must be cut back before the installation of the boards.

All connections with adjoining elements of the building must be tightly sealed against driving rain and wind by means of render stop connection profiles and joint insulation tape.

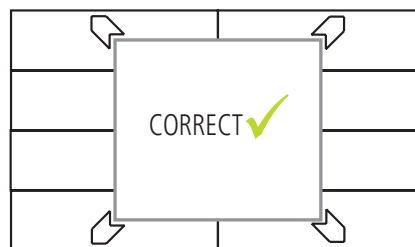
The installation of a second sealing level using watertight and heat-resistant film is mandatory for windows which are exposed to driving rain, and optional for windows which are not exposed to driving rain. The end pieces of the window sills must be capable to absorb movements in the rendered facade and the window sill. The installation of window sill end pieces with slide bearings is recommended. When installing the window sill, joint insulation tape must be applied to all the connection joints between the sill and the WALL 140/180 boards.

For an installation over vertically or horizontally changing substrates, movement/expansion joints must be used.

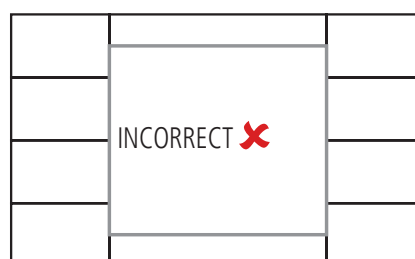
The render system must be installed not later than 8 weeks after the WALL 140/180 boards are installed. If this is not possible, the wall has to be covered with a tarpaulin. Make sure air can circulate behind the tarpaulin. Horizontal board edges such as at breast walls or parapet walls must also be protected from direct weathering with a suitable covering. At the breast wall this can be done by creating the second sealing layer, for example. The WALL 140/180 must be tested for moisture and surface stability before plastering. The board moisture content must not exceed 13 % of the weight (if the setting on the electronic moisture meter is for spruce/pine, the maximum permitted value is 19.5 %). Uneven surfaces at board level must be levelled out by grinding, e.g. with a K40 sanding board.

Countersink stainless steel broad back staples 1 mm into the boards. If screw-in anchors for insulation boards are used, the anchor plate must be flush-mounted to the surface of the board. An air injected insulation must be applied before plastering.

Installation elements and feedthroughs (e.g. for solar cables ...), for which temperatures $> 80^{\circ}$ have to be expected, must not be installed without further fire protection measures into the insulation material.



Avoid joints between boards at the corners of openings!



■ ■ Installation of WALL 180 in timber frame constructions

■ ■ Checking the substrate

Examine the substrate before the installation of WALL 180 boards. The timber frame construction must be dry (wood moisture content below 18 %), clean and level (no differences in height).

■ ■ Fastening the base rail

The base section of the base rail must be aligned horizontally and fastened to the wooden sill, leaving a space of approx. 30 cm and must be connected with butt joint connectors at all longitudinal ends.

Connect the base sections at the outer and inner corners with miter-cut joints. For the clip-on mesh strip, pre-assembled corner connecting profiles are available. Alternatively, they can also be miter-cut.

All butt joints on the base profiles must be sealed with durable, weatherproof and temperature-resistant adhesive tape, e.g. TESCON VANA. The best wood WALL 180 boards must be installed at a minimum of 30 cm above final ground level unless other additional measures are taken.



Wood moisture content $\leq 18\%$.



Base rail must be aligned and fastened horizontally.



Installation of butt joint connectors at all longitudinal ends.



Bonding of the joint by means of an adhesive tape.



Splash water zone of ≥ 30 cm without any additional measures.

■ Installing the first row of WALL 180 boards in the base area

The groove at the bottom of the boards in the first row of WALL 180 boards has to be cut off and the boards then have to be fitted fully into the base rail. It is recommended to use a marking chord to check that the top of the first row is horizontally aligned in the right way.



Cut off the groove side.



Horizontal alignment of the first row of panels by means of a marking chord.



■ Installation of the WALL 180

The WALL 180 or WALL 180 pre-plastered boards are attached using stainless steel broad back staples or screw-in anchors for insulation boards (WALL 180:Ejot STR H; WALL 180 pre-plastered: H35 (in the approval procedure)) directly on the timber stud that is at least 60 mm wide. The number of fasteners required must be distributed accordingly over the timber stud – see installation example for WALL 180 boards for timber-framed constructions. WALL 180 board must be fastened to at least two timber studs.

The edges of the boards must be precisely fitted in all joint areas and should be pressed tightly together if possible. In the area of storey joints it is essential that open joints are avoided, because they might cause the formation of creases. Alternatively, fitting pieces which are fastened to the sill and head rail may be used – see detail of the ceiling joint [pg. 76].

The fasteners need to be anchored in a sufficient depth in the timber stud. The effective minimum penetration depth of the stainless steel broad back staples is ≥ 30 mm and for the screw-in anchors for insulation boards it is ≥ 35 mm. With WALL 180 the insulating material plate is flush with the surface, and the stainless steel broad back staple must be countersunk by 1 mm.



Fastening by means of stainless steel broad back staples.

■ Installation of the WALL 180 pre-plastered

In addition to the details of laying the unplastered WALL 180, other information needs to be noted during the processing of the pre-plastered WALL 180.

Fastening can take place using stainless steel broad back staples or screw-in anchors for insulation boards H35 (in the approval procedure). Fasteners must be countersunk by the coat thickness of the plaster layer.

The best wood mounting tool H must be used to fasten with screw-in anchors for insulation boards H35 (in the approval procedure). The screw length must be at least the thickness of the insulating material + 20 mm.

With WALL 180 pre-plastered, the board length at the outer corner must remain by the thickness of the render so that the layer thicknesses can be adhered to when the corner bead with fiber mesh is embedded.

Horizontal board edges at breast walls or parapets must also be protected from direct weathering with a suitable covering. At the breast wall this can be done by creating the second sealing layer, for example.



■ Installation with screw-in anchors for insulation boards H35 (in the approval procedure)



1 Install screw-in anchor for insulation boards H35 (in the approval procedure) with the best wood mounting tool.

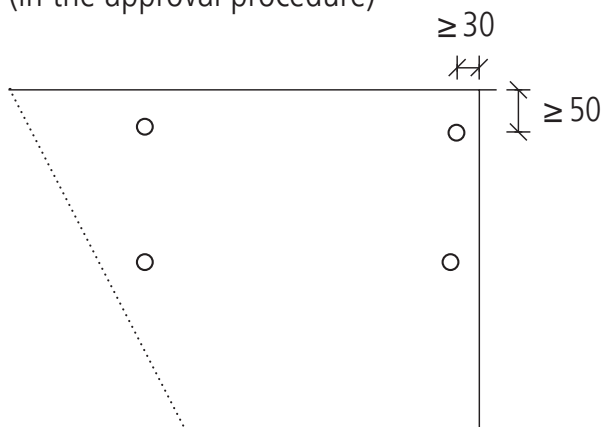


2 The screw-in plate has to be inserted by about the thickness of the plaster layer.



3 Push in the cap.

■ Minimum edge clearance with installation with screw-in anchors for insulation boards H35 (in the approval procedure)



■ ■ Maximum distance of fasteners for the installation of WALL 140 and WALL180 on wall and ceiling

■ ■ Maximum distance between studs for an application of WALL 180 in timber frame constructions

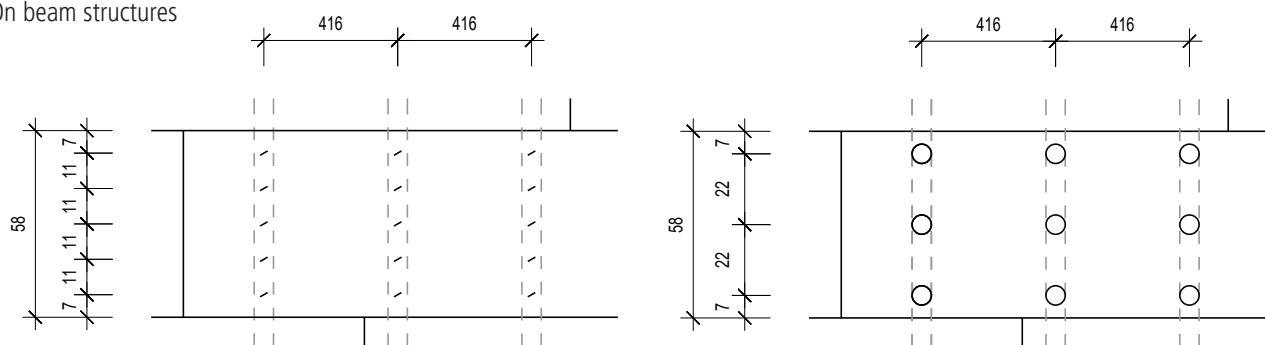
Board thickness [mm]	Max. distance between studs [mm]
40	625
60–160	833

■ ■ Maximum distance between beams for an application of WALL 180 under ceilings

Board thickness [mm]	Max. distance between beams [mm]
40–160	416

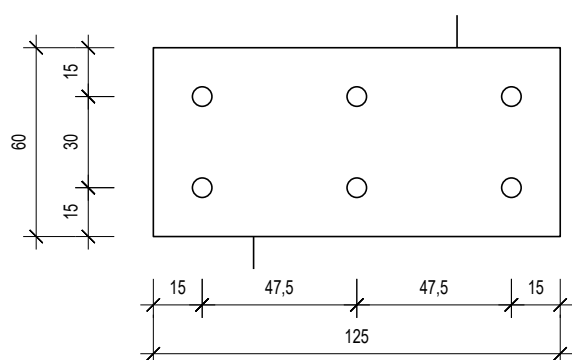
■ ■ Maximum distance of fasteners for an application of WALL 140 / WALL 180 on ceilings

On beam structures

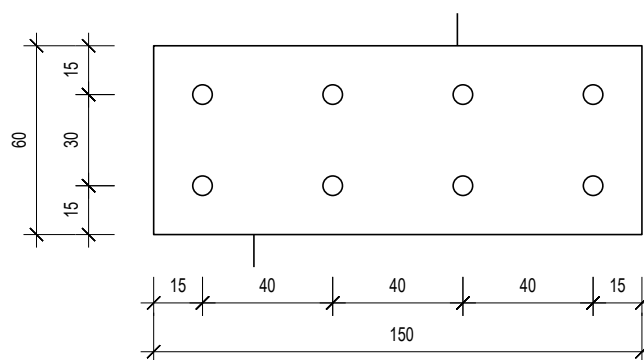


On solid wood

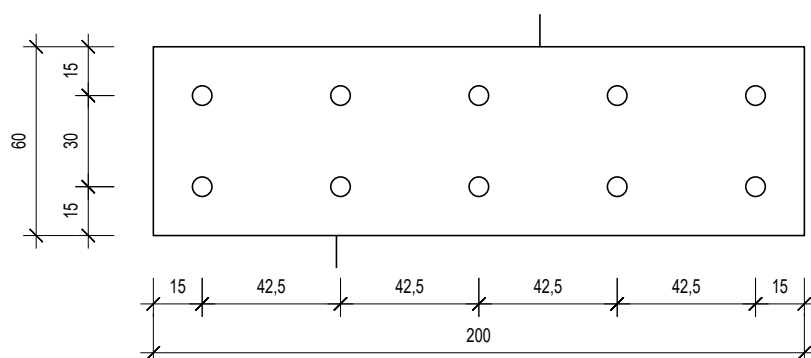
Board lengths 1250 mm



Board lengths 1500 mm



Board lengths 2000 mm



■ ■ Installation of WALL 140 on continuous and load-bearing solid timber substrates

■ ■ Checking the substrate

Examine the substrate before the installation of WALL 140 boards. The solid timber substrate must be dry (wood moisture content below 18%), clean and level (no differences in height).



Wood moisture content $\leq 18\%$.

■ ■ Fastening the base rail

The base section of the base rail must be aligned horizontally and fastened to the solid timber substrate, leaving a space of approx. 30 cm and must be connected with butt joint connectors at all longitudinal ends.

Connect the base sections at the outer and inner corners with miter-cut joints. For the clip-on mesh strip, pre-assembled corner connecting profiles are available. Alternatively, they can also be miter-cut.

All butt joints on the base profiles must be sealed with durable, weatherproof and temperature-resistant adhesive tape, e.g. TESCON VANA. The best wood WALL 140 boards must be installed at a minimum of 30 cm above final ground level unless other additional measures are taken.

■ ■ Installing the first row of WALL 140 boards in the base area

The groove at the bottom of the boards in the first row of WALL 140 boards has to be cut off and the boards then have to be fitted fully into the base rail. It is recommended to use a marking chord to check that the top of the first row is horizontally aligned in the right way.

■ ■ Installation of the WALL 140

Fasten the WALL 140 boards directly to the load-bearing solid timber substrate using stainless steel broad back staples or screw-in anchors for insulation boards. The number of fasteners required must be determined in accordance with DIN 1055-4 and they have to be distributed accordingly over the WALL 140 – see installation example for WALL 140 boards on load-bearing solid timber substrates [pg. 32/33].

Take care to ensure that the WALL 140 boards do not move apart when using screw-in anchors for insulation boards for fastening them at the butt joints.

The edges of the boards must be precisely fitted in all joint areas and should possibly be pressed tightly together.

The fasteners need to be anchored in a sufficient depth in the solid timber substrate. The minimum penetration depth of the stainless steel broad back staples is ≥ 30 mm and for the screw-in anchors for insulation boards it is ≥ 35 mm. With WALL 180 the insulating material plate is flush with the surface, and the stainless steel broad back staple must be countersunk by 1 mm. The boards have to be installed on a staggered basis with a minimum offset of 25 cm vertically to each other. The boards do not need to have indented joints at the outer corners, but they must be precisely fitted together. Joints must be avoided.

Alternatively to the WALL 140 board with a tongue and- groove edge, a WALL 140 board with a square edge can also be fastened to the solid timber substrate.

■ ■ Installation of the WALL 140 pre-plastered

In addition to the details of laying the unplastered WALL 140, other information needs to be noted during the processing of the pre-plastered WALL 140. These can be found on page 22.

■ ■ Installation of WALL 140 on solid mineral substrates

■ ■ Checking the substrate

Examine the substrate before the installation of WALL 140 boards. The substrate must be dry, clean and level. Remove all loose plaster and cover over the flaws with suitable material. Areas of unevenness in the substrate of up to 10 mm can be effectively smoothed out with best wood adhesive and reinforcing mortar. Larger areas of unevenness need to be smoothed out with leveling plaster or similar.



1 Remove all loose plaster.



2 Clean the substrate.



3 Closure of flaws.



4 Closure of flaws.

The wall temperature and ambient temperature must be a minimum of +5 °C. For renovation work on older buildings, the structural conditions of the building need to be investigated with particular regard to structural and physical considerations in relation to the planned ETICS. The masonry must be free of rising damp.

■ Fastening the base rail

The base section of the base rail must be aligned horizontally and fastened to the solid mineral substrate, leaving a space of approx. 30 cm and must be connected with butt joint connectors at all longitudinal ends. Every unevenness in the substrate has to be levelled out by means of a distance adjustment (e.g. plastic plate).

Connect the base sections at the outer and inner corners with miter-cut joints. For the clip-on mesh strip, pre-assembled corner connecting profiles are available. Alternatively, they can also be miter-cut.

All butt joints on the base profiles must be sealed with durable, weatherproof and temperature-resistant adhesive tape, e.g. TESCON VANA. The best wood WALL 140 boards must be installed at a minimum of 30 cm above final ground level unless other additional measures are taken.



Splash water zone of ≥ 30 cm without any additional measures.



Base rail must be aligned and fastened horizontally.



Distance adjustment at the base rail.



Installation of butt joint connectors at all longitudinal ends.



Bonding of the joint by means of an adhesive tape.

■ Bonding the first row of WALL 140 boards in the base area

The WALL 140 boards (only boards with square edge) are glued by means of the spot-and-bead method. Using this method, a bead of adhesive mortar of about 5 cm in width is applied all around the edge of the WALL 140 board. 2–3 additional spots of adhesive mortar are applied in the middle of the board. At least 40% of the board's surface have to be glued. This method of bonding prevents ventilation at the back of the insulation material and the convective entry of moisture to the ETICS.



Application by means of the spot-and-bead method.

■ Installation of the WALL 140

For the installation of the first row of boards, the WALL 140 board has to be fitted fully into the base rail. Particular care needs to be taken to ensure that no adhesive gets between the vertical edge of the base rail and the Wall 140 board.

It is recommended to use a marking chord to check that the top of the first row is horizontally aligned in the right way.



Horizontal alignment of WALL 140 boards by means of a marking chord.

The WALL 140 board is applied and fitted to the substrate by means of a light sliding movement. To ensure a firm contact with the wall, a rubber hammer can be used to tap the board against the wall. The boards have to be installed on a staggered basis with a minimum offset of 25 cm vertically to each other.



WALL 140 board has to be fitted fully into the base rail.



Application of WALL 140 by means of a light sliding movement.



Offset of at least 25 cm.

Any adhesive emerging from the sides must be removed immediately after the installation of the boards. Make sure that no adhesive gets between the butt joints of the boards. Also make sure that the boards are installed with a precise fit.



Remove any emerging adhesive.

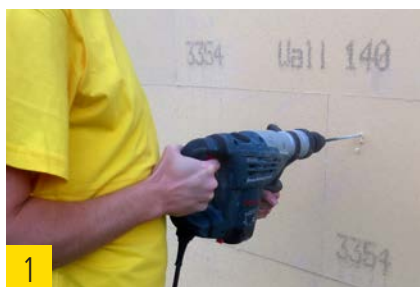


■ Fixing of the WALL 140 by means of fastening anchors

Additionally to the fixing by means of an adhesive, the WALL 140 boards also have to be fastened by means of screw-in anchors for insulation boards Ejotherrm STR U 2G. The adhesive has to be completely dry. The number of fasteners required must be determined in accordance with DIN 1055-4 and they have to be distributed accordingly over the WALL 140 – see installation example for WALL 140 boards on solid mineral substrates. The screw-in anchors for insulation boards have to be fastened in the surface area of the boards only, not in the joints between the boards.

The screw-in anchors for insulation boards Ejotherrm STR U 2G need to be anchored in a sufficient depth in the substrate. The minimum penetration depth of the screw-in anchors for insulation boards in service category A–D is ≥ 25 and for screw-in anchors for insulation boards in service category E it is ≥ 65 mm.

After the application of the screw-in anchors for insulation boards, the closing plug has to be flush-mounted with the anchor plate into the screw opening.



Pre-drilling by means of an impact drill.



Application of the screw-in anchor.



The anchor has to be flush-mounted to board.



Application of the closing plug.

■ ■ Minimum fastener length

Installation substrate	Timber frame constructions or solid timber substrates	Timber frame constructions or solid timber		Mineral substrates in new buildings ¹⁾		Mineral substrates in existing buildings ²⁾	
Thickness of insulation board WALL 140/180 in [mm]	Haubold or equivalent stainless steel broad back staples min. length in [mm]	Screw-in anchor for insulation boards Ejothrm STR H, min. length in [mm]	Screw-in anchor for insulation boards H35 min. length in [mm]	Screw-in anchor for insulation boards STR U 2 G, min. length in [mm]		Screw-in anchor for insulation boards STR U 2 G, min. length in [mm]	
40	75	80	60	–	–	–	–
60	90	100	80	115	135	115	155
80	110	120	100	115	155	135	175
100	130	140	120	135	175	155	195
120	150	160	140	155	195	175	215
140	180	180	160	175	215	195	235
160	200	200	180	195	235	215	255
180	–	220	200	215	255	235	275
200	–	240	220	235	275	255	295
220	–	260	240	255	295	275	315
240	–	280	260	275	315	295	335
Use category				A–D	E	A–D	E

¹⁾for a 10 mm layer of adhesive | ²⁾for a 10 mm layer of adhesive and for 20 mm of existing plaster or leveling plaster

Use category

A: Standard concrete and concrete facing layers

B: Bricks, solid bricks, concrete solid bricks and lightweight concrete solid bricks

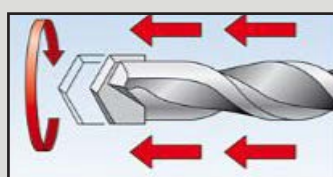
C: Vertically perforated bricks, perforated calcium-silicate bricks and lightweight concrete hollow blocks

D: Lightweight aggregate concrete with open structure, pumice

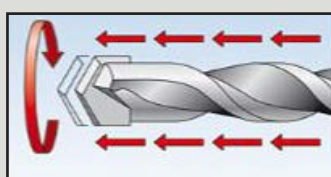
E: Porous concrete (e.g. Ytong)

The correct determination of the anchor length is essential to guarantee the highest possible fastening safety. The object specific conditions always have to be taken into consideration. The required anchor length depends on the effective anchoring depth + tolerance compensation + insulation material thickness. The tolerance compensation is based on the non-load-bearing layers (e.g. existing plaster, tile facings, etc.), the thickness of the adhesive mortar layer and the additional layer for smoothing out uneven areas on the wall.

Permissible drilling procedure in category A and B

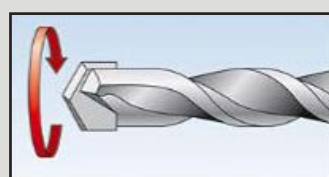


Hammer drilling



Percussion drilling

Permissible drilling procedure in category C, D and E

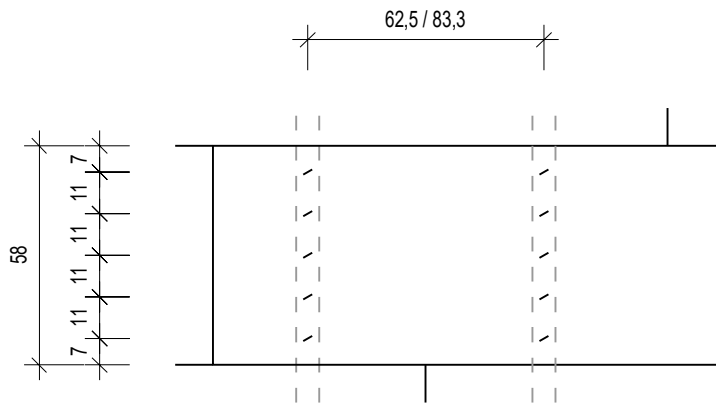


Rotation drilling

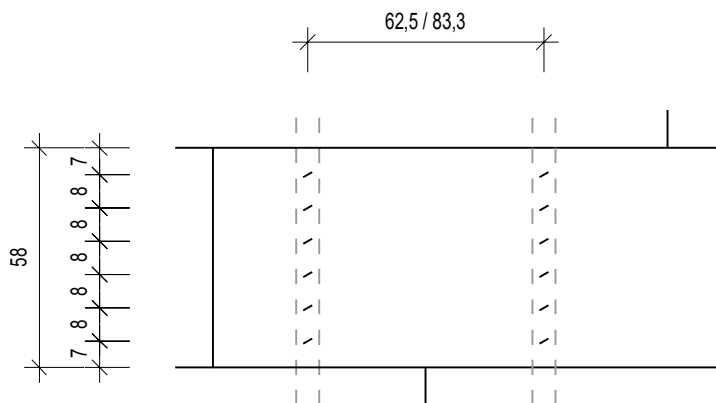
Picture source: fischerwerke GmbH & Co. KG

■ ■ Minimum quantity of fasteners, required for an installation of WALL 180 or WALL 180 pre-plastered in timber frame constructions

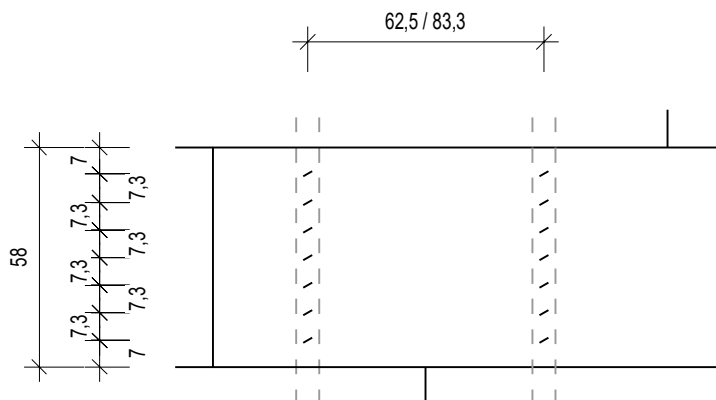
■ ■ Fastening by means of stainless steel broad back staples for axis spacing of 62.5 / 83.3 cm



Axis spacing	62.5 cm	83.3 cm
Max. permissible wind load	1.22 kN/m ²	0.91 kN/m ²
Quantity/stud and board height	5	
Quantity/m ²	13.8	10.3

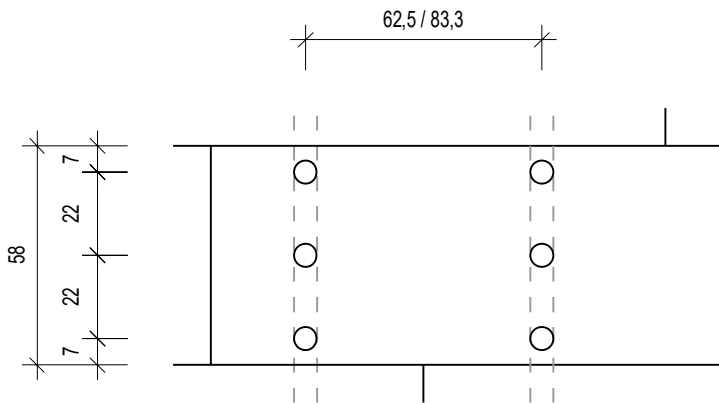


Axis spacing	62.5 cm	83.3 cm
Max. permissible wind load	1.47 kN/m ²	1.09 kN/m ²
Quantity/stud and board height	6	
Quantity/m ²	16.6	12.4

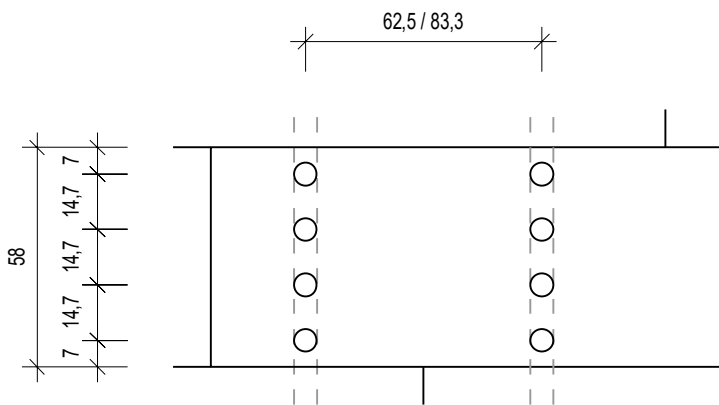


Axis spacing	62.5 cm	83.3 cm
Max. permissible wind load	1.60 kN/m ²	1.36 kN/m ²
Quantity/stud and board height	7	
Quantity/m ²	19.3	14.5

■ Fastening by means of screw-in anchors for insulation boards STR H or H35 (in the approval process)



Screw-in anchor for insulation boards	STR H	H35	STR H	H35
Axis spacing	62.5 cm		83.3 cm	
Max. permissible wind load	1.29 kN/m ²	1.05 kN/m ²	0.97 kN/m ²	0.77 kN/m ²
Quantity/stud and board height	3			
Quantity/m ²	8.3		6.2	



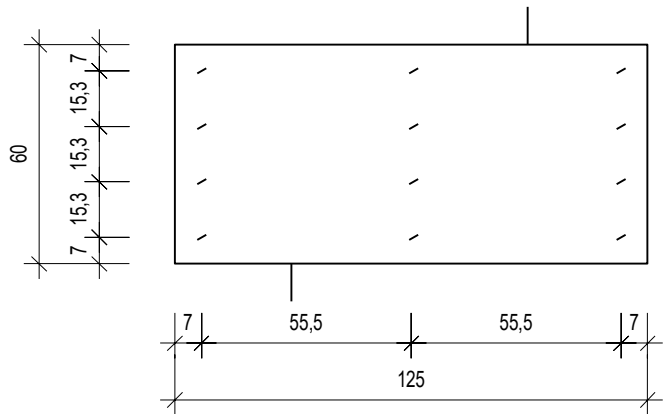
Screw-in anchor for insulation boards	STR H	H35	STR H	H35
Axis spacing	62.5 cm		83.3 cm	
Max. permissible wind load	1.60 kN/m ²	1.51 kN/m ²	1.36 kN/m ²	1.11 kN/m ²
Quantity/stud and board height	3			
Quantity/m ²	11.0		8.3	



■ ■ Minimum quantity of fasteners, required for an installation of WALL 140 or WALL 140 pre-plastered on solid wood

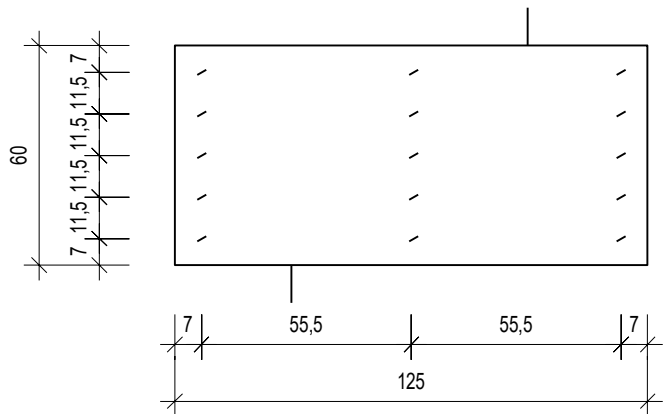
■ Fastening by means of stainless steel broad back staples

Board lengths 1250 mm



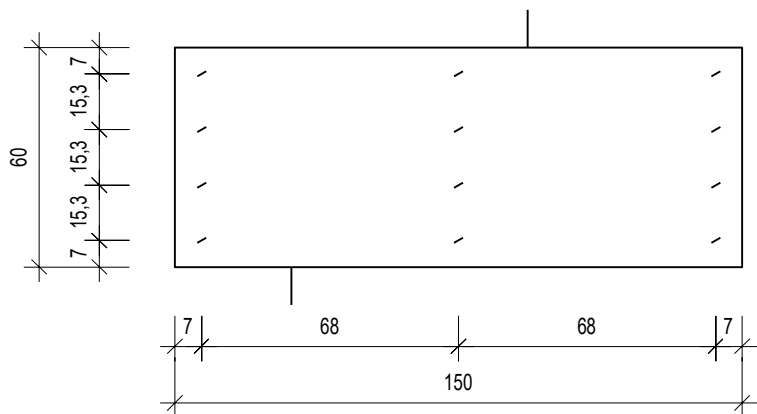
Max. permissible wind load	1.42 kN/m ²
Quantity/board	12
Quantity/m ²	16.0

Board lengths 1250 mm



Max. permissible wind load	1.60 kN/m ²
Quantity/board	15
Quantity/m ²	20.0

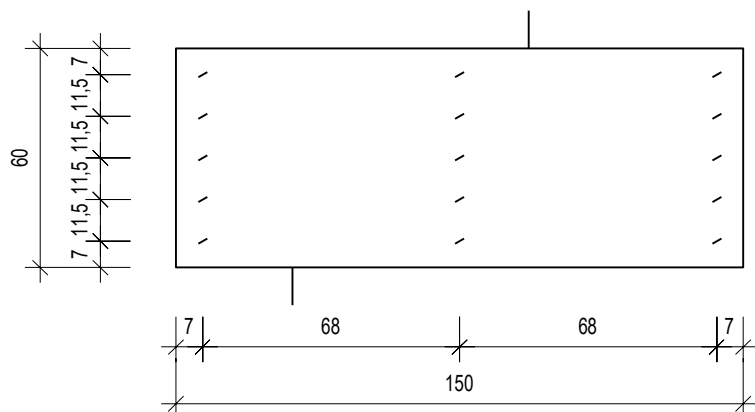
Board lengths 1500 mm



Max. permissible wind load	1.18 kN/m ²
Quantity/board	12
Quantity/m ²	13.3

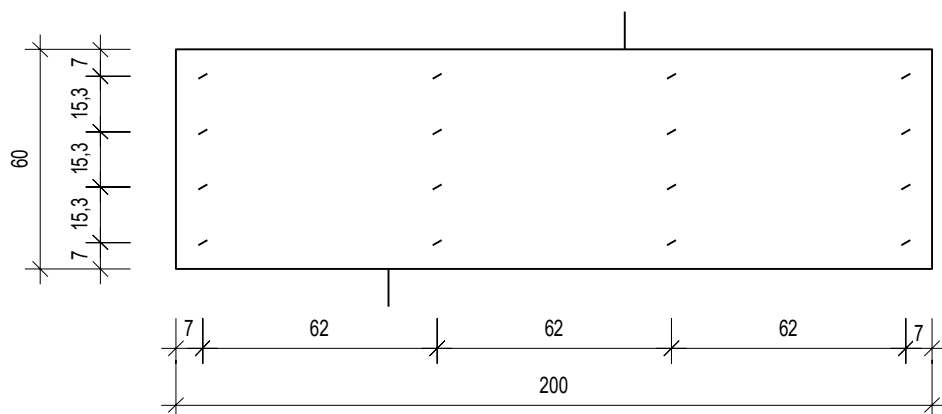
■ Fastening by means of stainless steel broad back staples

Board lengths 1500 mm



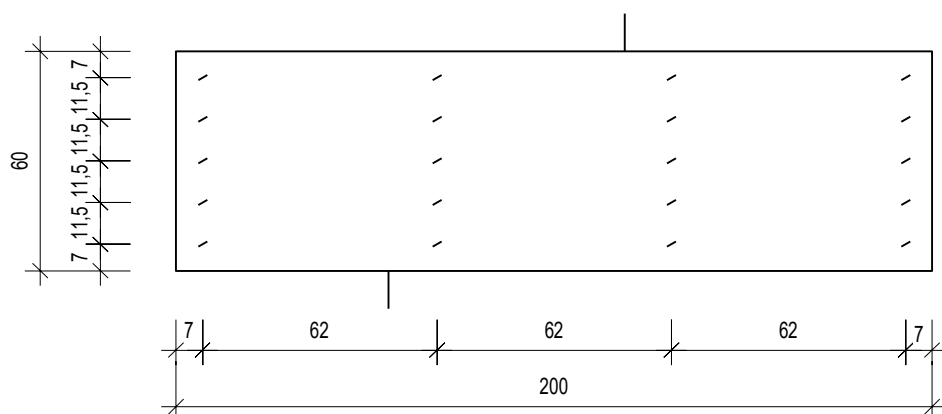
Max. permissible wind load	1.48 kN/m ²
Quantity/board	15
Quantity/m ²	16.7

Board lengths 2000 mm



Max. permissible wind load	1.18 kN/m ²
Quantity/board	16
Quantity/m ²	13.3

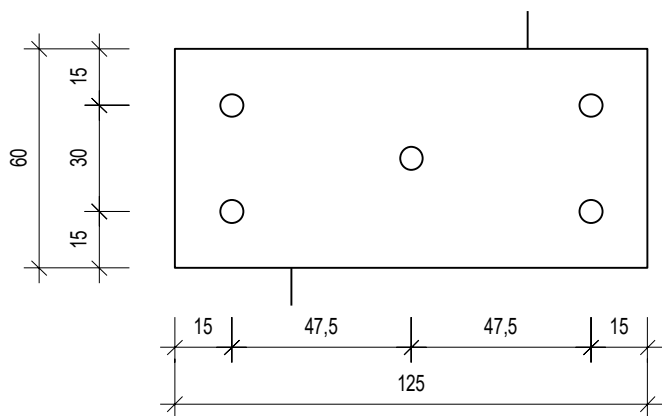
Board lengths 2000 mm



Max. permissible wind load	1.48 kN/m ²
Quantity/board	20
Quantity/m ²	16.7

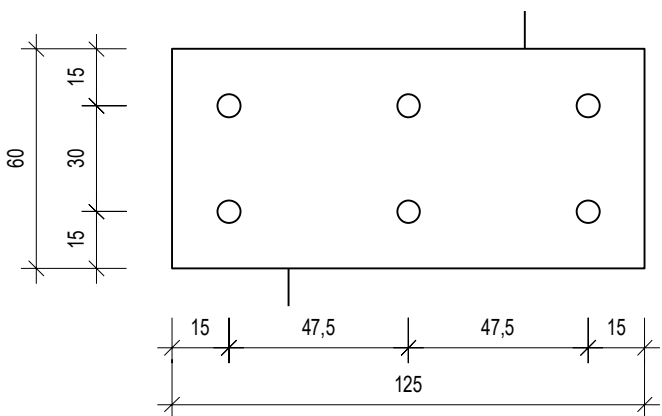
■ Fastening by means of screw-in anchors for insulation boards STR H or H35 (in the approval process)

Board lengths 1250 mm



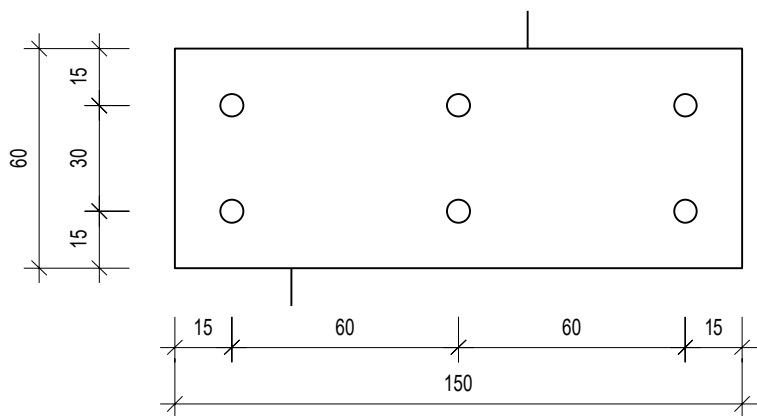
Screw-in anchor for insulation boards	STR H	H35
Max. permissible wind load	1.26 kN/m ²	1.02 kN/m ²
Quantity/board	5	
Quantity/m ²	6.7	

Board lengths 1250 mm



Screw-in anchor for insulation boards	STR H	H35
Max. permissible wind load	1.51 kN/m ²	1.23 kN/m ²
Quantity/board	6	
Quantity/m ²	8.0	

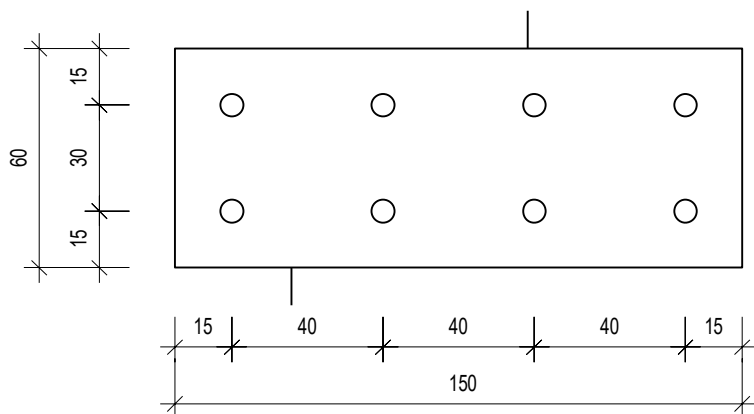
Board lengths 1500 mm



Screw-in anchor for insulation boards	STR H	H35
Max. permissible wind load	1.26 kN/m ²	1.02 kN/m ²
Quantity/board	6	
Quantity/m ²	6.7	

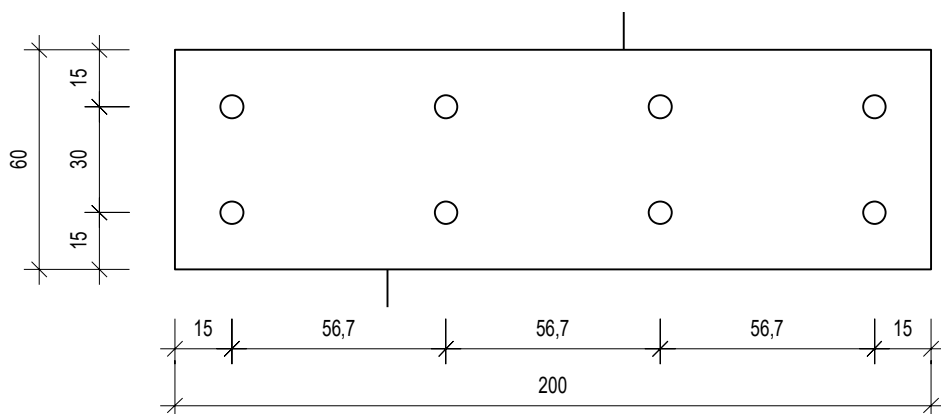
■ Fastening by means of screw-in anchors for insulation boards STR H or H35 (in the approval process)

Board lengths 1500 mm



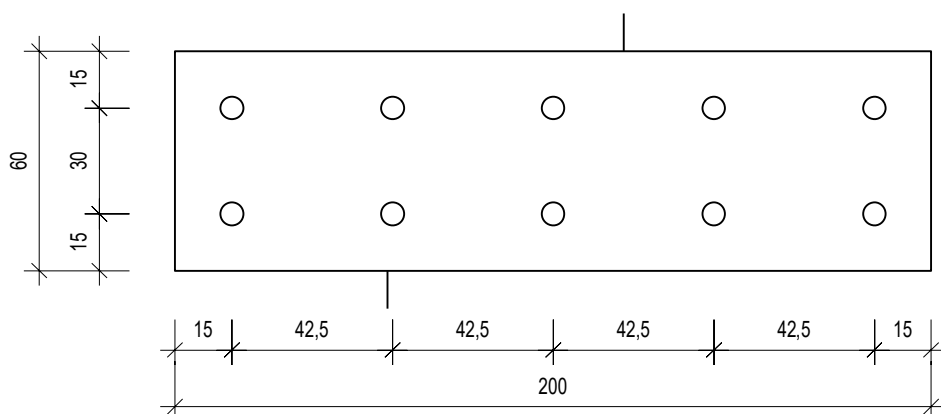
Screw-in anchor for insulation boards	STR H	H35
Max. permissible wind load	1.60 kN/m ²	1.38 kN/m ²
Quantity/board	8	
Quantity/m ²	8.9	

Board lengths 2000 mm

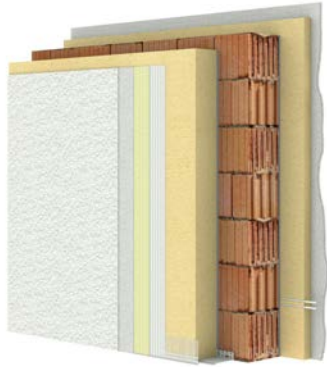


Screw-in anchor for insulation boards	STR H	H35
Max. permissible wind load	1.26 kN/m ²	1.2 kN/m ²
Quantity/board	8	
Quantity/m ²	6.7	

Board lengths 2000 mm



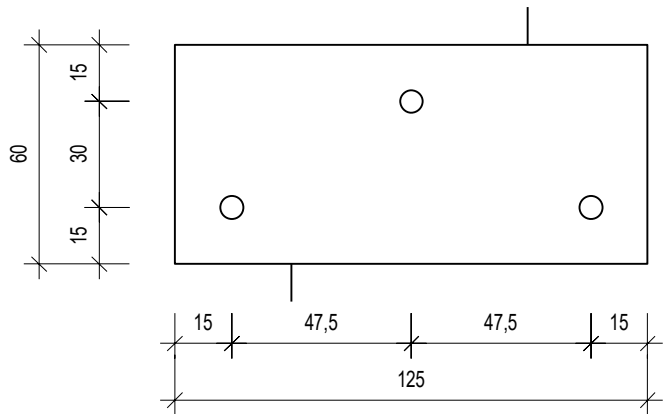
Screw-in anchor for insulation boards	STR H	H35
Max. permissible wind load	1.57 kN/m ²	1.28 kN/m ²
Quantity/board	10	
Quantity/m ²	8.3	



■ ■ Minimum quantity of fasteners, required for an installation of WALL 140 on mineral substrates

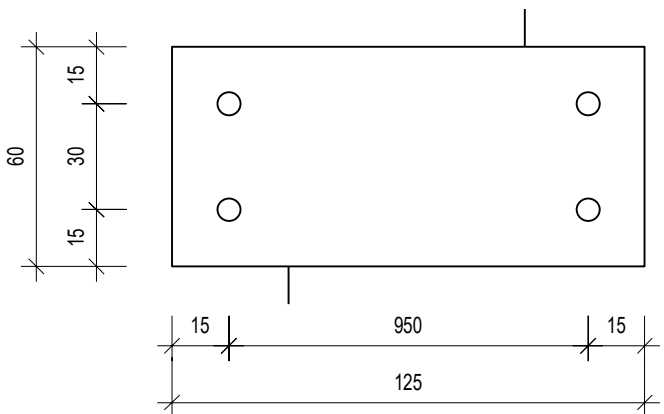
■ Fastening by means of screw-in anchor for insulation boards STR U 2G

Board lengths 1250 mm



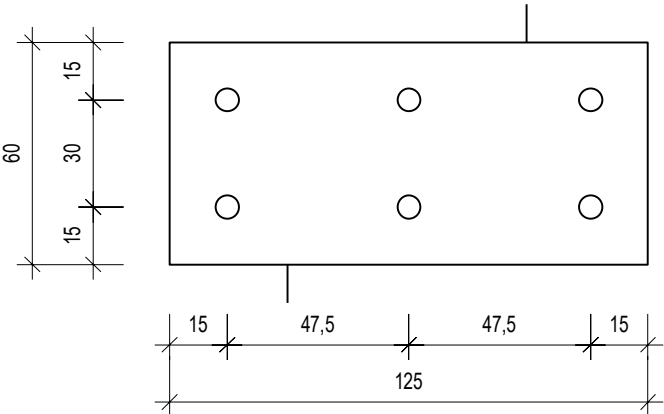
Max. permissible wind load	0.75 kN/m ²
Quantity/board	3
Quantity/m ²	4.0

Board lengths 1250 mm



Max. permissible wind load	1.01 kN/m ²
Quantity/board	4
Quantity/m ²	5.3

Board lengths 1250 mm



Max. permissible wind load	1.51 kN/m ²
Quantity/board	6
Quantity/m ²	8.0

■ ■ Window connection and window sill

■ ■ General information

In the window area, special attention must be paid to the correct connection of the reveal area and the window sill. This is very important with regard to the weather protection. The components of the complete system, consisting of facade, window, sun protection and window sill have to be optimally coordinated amongst each other. Therefore, a professional and detailed planning before the installation is essential. This is the only way to make sure, that inadequate or improvised "on site solutions" are avoided.

In the following, it is important to make sure that the window sill has a minimum overhang of 40 mm over the finished coating of plaster. Furthermore, it is necessary that the window sill slopes forward with a minimum gradient of 5°. Movements of the window sill (caused by thermal activity and effects of wind/suction) must not be transferred into the facade system, but they have to be absorbed by slide bearings in the end pieces of the window sill. The window sill systems must be suitable for ETICS accordingly.

The lateral sides of the window sill end pieces must be wide enough for the fitting of a joint insulation tape (minimum 22 mm). Hold-down devices for the window sill have to be installed depending on the range and length of the window sill. The recommendations of the manufacturer of the window sills have to be observed.

A second water-repellent sealing layer which removes water towards the outside must be installed for window sills which are exposed to driving rain, and is advisable for window sills which are not exposed to driving rain.

As a second water-removing sealing level, we recommend the best wood sealing level for window sills. However, other suitable systems can also be used.

The window sill must not be walked on unless suitable additional support is provided. The connection of the WALL 140/180 boards to the window as well as all connection joints to the window sill or window sill end pieces, do always have to be made watertight against driving rain by means of suitable architrave beads and joint insulation tape.

■ ■ Window connection and installation of the window sill

After the standardized installation of the window into the wall, the wood fiber insulation board has to be cut straight at the level of the crossbar in the window sill area.

At the lateral window connection the WALL 140/180 board needs to be set back by the thickness of the reveal board which is to be installed later.

The advantage of using reveal boards is, that joint insulation tape can be fitted easily and precisely (flush with the front edge).

For an installation of roller shutter boxes or Venetian blinds, the special details for application have to be observed – see detailed drawings.

■ ■ Installation instructions for the best wood sealing level for window sills

■ ■ Installation of the 2nd sealing level

After installing the WALL 140/180, the sealing level for window sills is installed. The depth and height of the parts of the best wood sealing level for window sill which have been prefabricated in the factory must be adapted to the respective window sill or window on site.



1 Measure depth of window sill.



2 Mark sealing corner with appropriate depth.



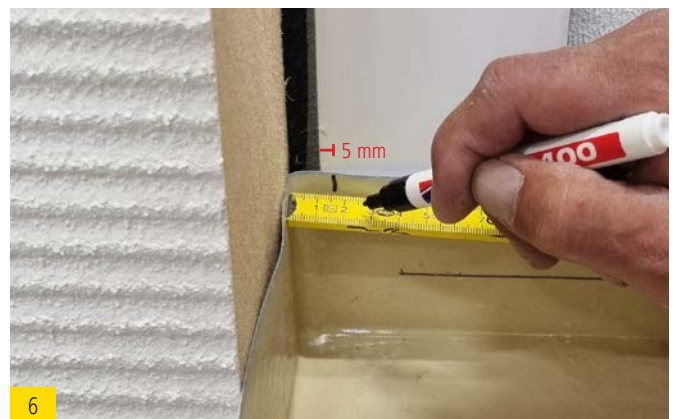
3 Mark sealing wedge with appropriate depth.



4 Saw off the sealing wedge and the two sealing corners to the required depth at the front edge.



5 Mark the height of the lip of the sealing corners at the lower edge of the window.



6 Mark the lip 5 mm inside the side edge of the window.



Adapt the sealing corners to the window corners.



In order to be able to correctly adapt the length of the sealing wedge (middle section), it is useful to temporarily press in the two sealing corners at the window sill check whether everything is sitting in the right place.



Insert both corner pieces and neatly press into the corner of the window sill using a tool (such as a wooden wedge).



The 5 mm projection of the lip must form a U between the edge of the window and the wood fiber board.



Measure the gap between the left and right sealing corners and shorten the sealing wedge (middle section) to the correct length.



12 Push in the sealing wedge beneath the window frame and then check that the installation is correctly seated.



13 The front edge should be flush with the wall / wood fiber board. Remove all three parts again after checking.



14 Fill the left and right corners with best wood FDM WALL.



15 Apply best wood FDM WALL to the front edge.



16 Apply a wavy line of best wood FDM WALL to the window sill.



17 Remove the adhesive tape from the rear of the sealing corners.



18 Position the sealing corners in both corners.



19 Apply best wood FDM WALL to the front. With the aid of a wedge, then press the sealing corner all the way in between the edge of the window and the wood fiber board.



20 Important: Make sure that a "U" is formed again between the window frame and the wood fiber board (see picture no. 10)



21 Pull off the adhesive tape from the sealing wedge which was cut to size previously



22 Push in the sealing wedge between the corners, fitting exactly



23 Also firmly press on the adhesive strip below the window frame using a tool (such as a wooden wedge)



The ready glued and adapted sealing edge is now sealed at the butt joints and the render stop bead is fitted.



Seal the joint between the sealing corners and the sealing wedge with best wood FDM WALL.



Affix a strip of TESCO VANA to the same joint.



Firmly press down the TESCO VANA - use the same procedure at both joints.



Shorten the best wood window sill render stop bead to the length of the window sill, including the end pieces.



Fit the best wood render stop bead between the reveals in a central position.



Affix the best wood window sill render stop bead to the sealing level with TESCON VANA.



Smoothen the adhesive tape with a squeegee.



Cut off 4 cm of the sealing cord.



Affix the sealing cord in the corners beneath the window frame in the cavity so that it is closed.

■ Window sill installation

On the back of the window sill connection profile a joint insulation tape illmod 12/3-7 is applied. The tape seals the joint between window frame and window sill against driving rain. It is important to make sure that the joint insulation tape is applied right at the very top of the vertical edge, otherwise a channel will be formed which will direct the water laterally to the window reveal.

Alternatively, a window sill system that is delivered already with sealing lip on the upstand of the window sills backside can be used. For this version no joint insulation tape between window frame and the upstand of the window sill is necessary.

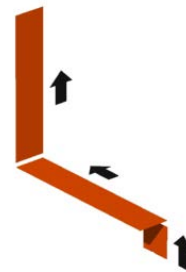
For the fastening of the window sill, only suitable fasteners (e.g. non-corrosive screws) which are compatible with the system have to be used.

Movements of the window sill caused by thermal activity need to be taken into consideration when fastening, e.g. elongated holes could be used. The window sill should be screwed to the window in such a way that the rear vertical edge of the window sill slots into the drip edge of the window frame.

On windows with aluminum facings in particular it is essential that the aluminum facing is backed, because water has to drain from it and the mitered joints onto a drip edge. Drainage openings on the window must not be blocked off by the installation of the window sill. It is not recommendable to install the window sill on the window frame with square edges. The side window frame grooves and the facing grooves should be sealed with suitable sealing compound on the bottom ends if they have not already been sealed by the window manufacturer by structural or prefabrication means. This work is the responsibility of the window fitter.

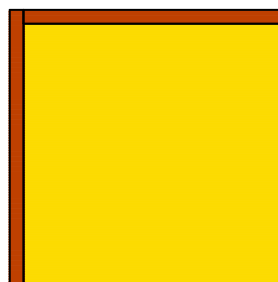
After the window sill has been installed, the side reveal boards can be installed. These should be cut to length with an angle-cut at the bottom to match the angle of the window sill. After the reveal board has been cut to length, apply joint insulation tape along the parts facing the window and window sill end profile.

Take particular care here to ensure that the joint insulation tape is expertly applied. The joint insulation tape must be fitted with square edges in the corners, with pressure, and must not be simply bent around the corners. As a general principle the joint installation must always be fitted with the application of pressure, not by pulling it, otherwise there is a risk of it re-setting to its original length later.

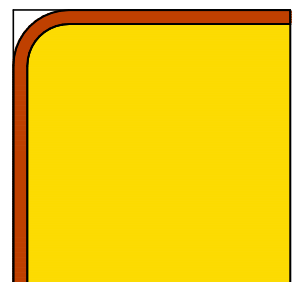


Laying direction of the joint insulation tape around the window sill and to the window.

CORRECT ✓



INCORRECT ✗



Application of the joint insulation tape around the edge.

■ ■ Processing with 20 mm pre-plastered reveal board

■ ■ Reveal board installation



1 Place sealing cord in the front area below 45° onto the 2nd sealing level as far as the window sill render stop bead.



2 Fit window sill. The window sill end piece and the render stop bead must be flush. Apply joint insulation tape to the window sill end piece.



3 Cut the reveal board to the slope of the window sill and apply best wood joint insulation tape type 12/3-7 to the short and long side.



4 Apply best wood FDM WALL to the side.



5 Place the reveal board on the window sill, press firmly against the window frame and fix in place with galvanised screws.



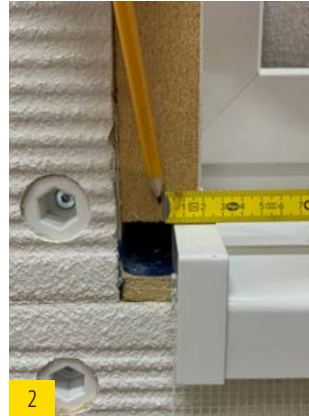
6 The lateral side of the window sill end piece should protrude by approx. 7 mm for additional plastering. This dimension should be approx. 10 mm with non-pre-plastered reveal boards.

■ ■ Processing with 40 mm pre-plastered reveal board

■ ■ Reveal board installation



1 Notching of the 40 mm reveal board.



2 Scribe 20 mm and mark what is to be cut out.



3 Cut out the marked area with a hand saw.



4 Saw out the marked area.



5 Measure 40 mm for notching the rear corner at the window.



6 Saw out the marked area.



Briefly position the 40 mm reveal board and check.



Place sealing cord beneath 45° at a distance of approx. 20 mm from rear edge of 2nd sealing level as far as window sill render stop bead.

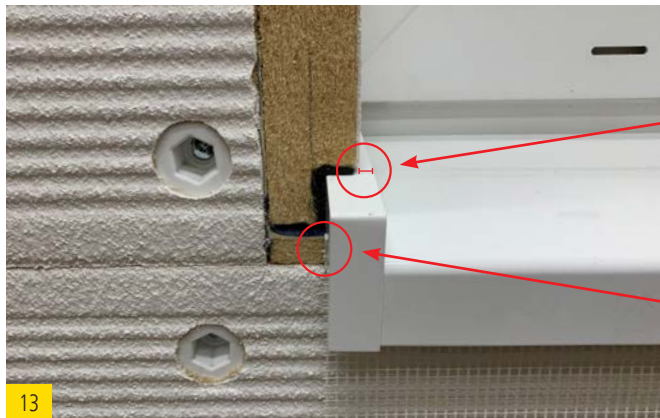
The sealing cord should now have sufficient room in the recessed corner.



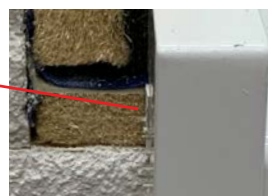
Apply best wood FDM WALL at the side and attach a piece of best wood joint insulation tape to the window sill, then slide window sill against the wall.



Attach best wood joint insulation tape to 40 mm of the short and long side of the reveal board. Adjust and firmly press on. Screw down the reveal board.



The lateral side of the window sill end piece should protrude by approx. 7 mm for additional plastering. This dimension should be approx. 10 mm with non-pre-plastered reveal boards.



The render stop bead and the window sill end piece must be flush.

■ ■ Installation instructions for the best wood sealing level for window sills with render stop bead

Installation always takes place at the same time as the installation of the sealing level without the render stop bead. However, before installing the corner bead, the render stop bead must be shortened to the length of the window sill including the window sill end pieces.



Mark window sill length on left and right sealing wedge.



Shorten render stop bead including mesh web to marked length.



Corner correctly shortened.



Render stop bead and window sill with same length.

■ ■ Caution! Avoid mistakes!



In this case the render stop bead protrudes beyond the window sill, and has not been shortened to the correct length. The effect is this is that the web of the render stop bead is in the plaster structure after the plastering work is complete, and moisture can therefore penetrate into the plaster system.

If the render stop bead has not been shortened to the correct length, it must be shortened to the length of the window sill before the plastering work takes place.

■ Important information

When installing the window sill, it is important to make sure that all joints and openings which are produced as a result of the construction are protected against water ingress. See, for example, the constructional joint between the bottom edge of the window frame and the top edge of the weather panel end piece.

INCORRECT ✗



Take particular care with mitered, welded synthetic windows. Here there is a risk of water ingress into the building structure through the miter-joint of the window frame.

This miter-joint should be sealed with suitable material or should be avoided at the outset by appropriate constructional measures.

INCORRECT ✗



Guide rails for solar protection elements and roller shutters must drain directly onto the window sill and must be positioned on the inside of the side vertical edges of the window sill end piece. The guide rails must finish approx. 8 mm before the top edge of the window sill.

CORRECT ✓



■ ■ Installation guidelines for the best wood render system

■ ■ General information

When the best wood WALL 140/180 wood fiber insulation boards have been installed, they can be left exposed to the weather for a period of up to 8 weeks thanks to their water repellent finishing. However, they do require permanent protection against UV exposure and moisture. If this cannot be guaranteed (small roof overhang, exposed location), we recommend that the facade should be protected with a diffusion-permeable underlay immediately after installation, or that the base coat of plaster be applied as fast as possible. Horizontal board edges such as at breast walls or parapet walls must also be protected from direct weathering with a suitable covering. At the breast wall this can be done by creating the second sealing layer, for example.

The ambient temperature and the temperature of the substrate must not be below +5° C at any time during the application and drying of the plastering and paint products. The air temperature must not exceed 30°. Frost should be avoided for at least four days. No other materials are allowed to be mixed in and appropriate measures should be taken to protect the fresh plaster from the influence of the weather (e.g. strong sunshine and heavy wind and rain). It is recommended to hang tarpaulins from the scaffolding. The substrates must be dry, absorbent and free of release agents, dust and loose particles.

Mineral types of plaster produce an alkaline reaction on contact with water and can therefore irritate the eyes and skin. The material must be kept away from children and contact with the eyes and skin must be avoided. Avoid generating dust. Suitable protective gloves, glasses and/or a face mask should always be used when working with the materials. If the materials do come into contact with eyes, the eyes of the affected person must be rinsed out thoroughly with water and a doctor should be consulted. It is prohibited to allow water-borne plasters to enter surface waters or the sewage system. Plaster which has fully hardened can be disposed of as building rubble.

■ ■ Checking the substrate

Immediately before the reinforcement layer is applied, the complete facade of best wood WALL 140/180 wood fiber insulation boards should be examined to check its suitability. The substrate must be flat, dry, stable and clean. The board moisture content must not exceed 13% of the weight (if the setting on the electronic moisture meter is for spruce/pine, the maximum permitted value is 19.5%).



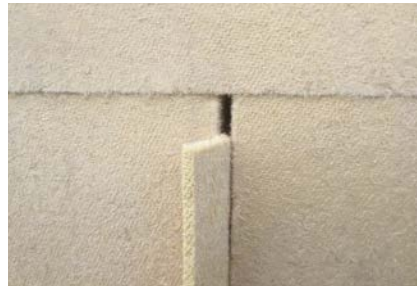
Board moisture content $\leq 19.5\%$ with setting spruce/pine.

It is essential that any differences in level at the butt joints between the boards are smoothed out by sanding, e.g. with a K40 sanding board. The sanding dust which is generated must be completely removed from the surfaces of the boards.

Gaps in the board joints of up to 2 mm can be plastered over, and gaps of 2–5 mm must be filled with best wood FDM WALL. Gaps bigger than 5 mm must be closed off with strips of best wood WALL 140/180.



Closing the installation joints by means of FDM WALL.



Closing the installation joints by means of strips from WALL 140/180.



Flush-mounting of screw-in anchors for insulation boards to the best wood WALL 140/180.



Stainless steel broad back staples have to be countersunk approx. 1 mm into the best wood WALL 180.

Screw-in anchors for insulation boards must be fitted flush with the surface of the best wood WALL 140/180 wood fiber insulation boards. Stainless steel broad back staples should be countersunk approx. 1 mm into the best wood WALL 140/180 wood fiber insulation boards.

■ Fitting additional reinforcement with WALL 140/180

Before the reinforcement for the entire surface is installed, corner beads with fiber mesh have to be embedded in the compound on all the outer corners.



Application of adhesive and reinforcing mortar (UP).



Application of corner bead with fiber mesh.



Embedding of the corner bead with fiber mesh.

Architrave beads with telescope function are embedded in filler in the vicinity of connections to windows and door frames.



1
Affix telescopic plastering strip.



2
Architrave bead with telescope function sits flush to the inner edge of the window sill end piece.



3
Architrave bead mitered in the edge.



4
Application of adhesive and reinforcing mortar (UP) to the window reveal and the outer edge.



5
Embedding of the architrave bead with telescope function.



6
Application of corner bead with fiber mesh.

■ ■ ATTENTION

The adhesion has to be checked before an application of the architrave bead with telescope function! Do install the beads only when an adequate adhesion is guaranteed. Do only use cleaning agents in coordination with the window manufacturer.



7
Horizontal and vertical alignment of the corner bead with fiber mesh.



8

At the same time, diagonal reinforcement arrows and reveal angles are embedded in filler at all facade openings in the surface.



Embedding of reinforcing arrow.



Embedding of reveal angle.

All special plaster profiles such as drip edge profiles, render stop beads, sheet metal connection profiles and expansion joint profiles for corners/surface are embedded beforehand.

■ Application of the base coat and fiber reinforcement mesh with WALL 140/180 in two steps

■ Application of the base coat

After completion of the preparation work of embedding the render stop connection profiles and the diagonal reinforcement, best wood adhesive and reinforcing mortar should be applied to the best wood WALL 140/180 wood fiber insulation boards either by machine or by hand with a 4–6 mm serrated trowel at an angle of approx. 45° to the surface of the boards, combing through the mortar to form a serrated layer. The resultant layer must be 3-4 mm thick. The serrated form of the mortar layer ensures that the reinforcement fabric is embedded in a layer which is of a sufficient thickness of at least 5 mm in the outer third of the reinforcement layer. Furthermore, the application and hardening of the serrated layer of mortar prevents lignin from bleeding through and ensures that the render baseboard is protected against the weather for up to 5 months. This requires as a precondition that the connections and joints are correctly sealed to ensure that the timber structure and best wood WALL 140/180 wood fiber insulation boards are effectively protected.



Application of adhesive and reinforcing mortar (UP).



Application of serrated layer of mortar.

■ Embedding the fiber reinforcement mesh

After the serrated mortar layer has dried, the reinforcement fabric can be embedded. In this case the mortar has to be applied crosswise using a trowel which is moved flat across the surface. The reinforcement fabric should be embedded in the crosswise mortar while it is still wet and the edges of the fiber fabric must overlap by a minimum of 10 cm.

The reinforcement fabric then has to be covered over with mortar on a wet on wet basis until the fiber fabric is completely covered at every point. Air inclusions must be avoided and filler ridges must be chipped off after drying. The total thickness of the serrated layer of mortar, including the embedded fiber reinforcement mesh, should be approx. 6–7 mm.



1 Application of vertical coating.



2 Application of best wood reinforcement fabric.



3 Wet embedding of the best wood reinforcement fabric.



4 Embedding of the best wood reinforcement fabric.

■ Application of the base coat and fiber reinforcement mesh with WALL 140/180 in a single step

It is possible to apply the base coat/serrated mortar layer and the fiber reinforcement mesh in one single step.

After completion of the preparation work of embedding the render stop connection profiles and the diagonal reinforcement, best wood adhesive and reinforcing mortar should be applied to the best wood WALL 140/180 wood fiber insulation boards either manually or with mixing pumps/plastering machines and combed through with a 10 mm serrated trowel. Attention must be paid to having homogeneous material distribution.

The best wood reinforcement fabric is embedded wet and filled over until the fabric is completely covered at every point. The fabric joints must overlap by at least 10 cm. Air inclusions must be avoided and filler ridges must be chipped off after drying. The total thickness of the layer, including the embedded fiber reinforcement mesh, should be approx. 6–7 mm.

■ INFORMATION

If the base coat/serrated mortar layer and the fiber reinforcement mesh is applied in a single step, the person doing the work must ensure that the thicknesses of the layers are adhered to and that the reinforcement fabric is positioned in the outer third of the coat.

■ ■ Additional plaster build-up on pre-plastered WALL 140/180: Apply additional reinforcement and serrated mortar layer

ETICS approval is only guaranteed if processing takes place with these best wood plastering products. A further plaster build-up with other plaster products is not permissible, and will lead to loss of the certification and guarantee from best wood SCHNEIDER.

If the pre-plastered wood fiber insulation board is sufficiently dry (at least 7 days without direct rain onto the pre-plastered wood fiber insulation board and humidity $\leq 65\%$), a corner bead with fiber mesh is embedded at all outer corners before applying the fiber reinforcement mesh.

Architrave beads with telescope function are embedded in filler in the vicinity of connections to windows and door frames. At the same time, diagonal reinforcement arrows and reveal angles are embedded in filler at all facade openings in the surface. All special plaster profiles such as drip edge profiles, render stop beads, sheet metal connection profiles and expansion joint profiles for corners/surface are embedded beforehand.

Following the preparatory embedding of the render stop beads and the diagonal reinforcement, the best wood adhesive and reinforcing mortar (UP) is evenly applied mechanically or by hand, so that the mortar webs of the pre-plastered board are covered by approx. 2 mm. Embed the best wood reinforcement fabric without creases and evenly plaster over "wet in wet" with approx. 2 mm of best wood adhesive and reinforcing mortar (UP). The reinforcement fabric must be embedded in the middle and be encapsulated over the entire area with best wood adhesive and reinforcing mortar (UP). The total layer thickness of the base coat (pre-plastered layer and reinforcing layer) must be approx. 7-8 mm.

The fabric joints must overlap by at least 10 cm. Air inclusions must be avoided and filler ridges must be chipped off after drying. The plaster application for the fabric plastering on the pre-plastered panel should be approx. 4 mm, and the reinforcement fabric should be in the middle of the base coat layer applied on the construction site.

This includes:

best wood adhesive and reinforcing mortar (UP)
best wood reinforcement fabric
best wood mineral plaster (MOP)
best wood silicone resin plaster (SOP)
best wood silicone resin paint

■ ■ For our Swiss customers a further plaster build-up with the following system partners is possible: Fixit, Granol, Greutol, Haga and Weber Saint-Gobain

Exact information can be found on our homepage at www.schneider-holz.com.



■ ■ For our Austrian customers a further plaster build-up with system partner Röfix is also possible

Exact information can be found on our homepage at www.schneider-holz.com.



■ Application of the final render

Before the final render is applied, the base coat must have hardened and dried. With darker facades it is advisable to color the final render accordingly before applying it. All of the material required for each area to be plastered has to be prepared in a single step.

To avoid overlapped edges in the surface of the plaster, a sufficient number of workers need to be deployed on each section of the scaffolding and the section of plaster should be completed from corner to corner in a single operation. Excess material should be removed by scraping it off with a trowel at a steep angle. All uneven areas which are created should be corrected straight away.

Silicone-resin final render, which comes in buckets, needs to be thoroughly stirred and have water added if necessary to achieve the right consistency. Use a stainless steel trowel to apply the plaster with a coat not exceeding the grain thickness, and then texture the surface afterwards.

Mineral final render comes in sacks and can be processed with all standard types of mixing pumps and plastering machines or by hand. This should be applied with a sponge float or plastic float. The mineral final render of a scraped surface plaster texture should be rubbed using a circular motion.



1 The final render is applied by means of a trowel and then skimmed to grain size.



3 Structuring of the final render by means of a trowel.



4 Ready structured plaster surface.

■ Structures and layer thicknesses in the best wood render system



1. best wood WALL 140/180
2. Serrated mortar layer
3. Fiber reinforcement mesh
4. Plaster and paint



■ Disposal of board residue

Board residue of the pre-plastered WALL 140/180 can be collected separately from unrendered wood fiber boards in best wood SCHNEIDER Big Bags. The best wood Big Bag is then collected from us with your next delivery.



■ Application of the leveling coat with best wood silicone resin paint

The application of a leveling coat is always recommended on all final render coats, because it lends surfaces a uniform appearance and also provides protection against the weather. Moreover, it helps slow down the rate at which material is lost from the render surface and also reduces the extent to which the surface is susceptible to the accumulation of dirt. Leveling coat is an essential requirement, particularly for mineral final render coats, because of their susceptibility to efflorescence or cloudiness when they dry. Coating with paint levels out this appearance while significantly improving water repellence at the same time. It is generally advisable to apply two coats.

For **approval-compliant processing** of the best wood ETICS, depending on the final render coat that is used and the load-bearing substrate to which the best wood wood fiber board has been fitted, attention must be paid to the following:

Mineral final render (MOP) with plaster baseboard on mineral substrates

- From a technical approval point of view, no painting is required.
- **One coat of paint** is an **essential requirement** from a visual and technical point of view, since patches of lime efflorescence may otherwise become apparent.

Mineral final render (MOP) with plaster baseboard on wooden substrates

- **One coat of paint is essential** from a technical approval point of view.

Silicone resin plaster (SOP) with plaster baseboard on wooden or mineral substrates

- From a technical approval point of view, no painting is required.
- **One coat of paint** is recommended to provide protection from algae (since it is biocide and fungicide adjusted) and from a visual and processing point of view.
- If no paint is applied, the silicone resin plaster **must** be “biocide and fungicide” adjusted.

In terms of the color scheme for the ETICS facade, the selected color must have a lightness value (LV) of $\geq 20\%$. Dark colors can lead to high levels of thermal stress and are therefore not permitted for the best wood external thermal insulation composite system. The final render must have thoroughly dried before the paint is applied. Silicone resin paint can be applied by hand (by brush or roller) or with an airless spray gun. Silicone resin paint should be diluted with a maximum of 10% water and should not be applied in direct sunlight. The silicone resin paint is fungicide/algicide adjusted. The use of this additive inhibits or retards algae and fungal attack. On the basis of

the current state-of-the-art in technology it is not possible to guarantee permanent protection because, among other things, the resistance of biocidal treatment systems has to be time-limited in order to meet environmental biodegradability requirements.

■ Maintenance of the facade

Facade surfaces are permanently exposed to the weather and therefore need to be inspected and maintained at regular intervals. Particular attention needs to be given to all the connections between different components of the facade (e.g. window reveal connection, window sill connection, etc.).

This weather-related ageing varies considerably depending on the alignment and location of the building and on design measures taken to reduce the stress on the facade (roof overhang, protection by trees and bushes).

With regard to maintenance intervals, there is no difference between wood fiber ETICS and other types of ETICS facades or other rendered facades. All best wood final renders provide effective resistance to the influence of the weather. This is further enhanced with the application of the leveling coat. The amount of time before the first maintenance coat is required can therefore be considerably extended as a result. The products used for maintenance coats must be compatible with the system.

■ best wood spiral anchor

Fastening solution for light attachments to ETICS facades. The minimum board thickness is 60 mm. Recommended load: max. 5 kg per fixing point. Free of thermal bridges; a subsequent installation through the plaster layer is possible. Pre-drill with an 8mm drill trough the covering plaster, apply best wood FDM WALL under anchor plate and screw in (TORX T40). Spiral anchor should be sealed to the plaster facade with FDM WALL. Afterwards the screw (4–5 mm) has to be screwed in and the attachment has to be fixed.



■ Installation instructions for unrendered wood fiber insulation boards best wood WALL 140, WALL 180 and MULTITHERM 140



1 Pre-drilling of the unrendered wood fiber insulation board by means of an 8 mm wood drill.



2 Insertion of the spiral anchor by means of a TORX T40 into the unrendered wood fiber insulation board.

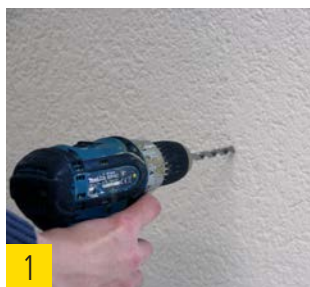


3 Flush-mounting of the spiral anchor.



4 Fastening of the attachment piece by means of a 4–5mm screw.

■ Installation instructions for rendered wood fiber insulation boards best wood WALL 140, WALL 180 and MULTITHERM 140



1 Pre-drilling of the rendered wood fiber insulation board by means of an 8 mm



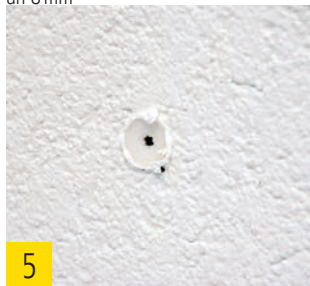
2 Application of best wood FDM WALL under the anchor plate.



3 Application of best wood FDM WALL for sealing purpose.



4 Flush insertion of the spiral anchor by means of a TORX T40 into the rendered wood fiber insulation board.



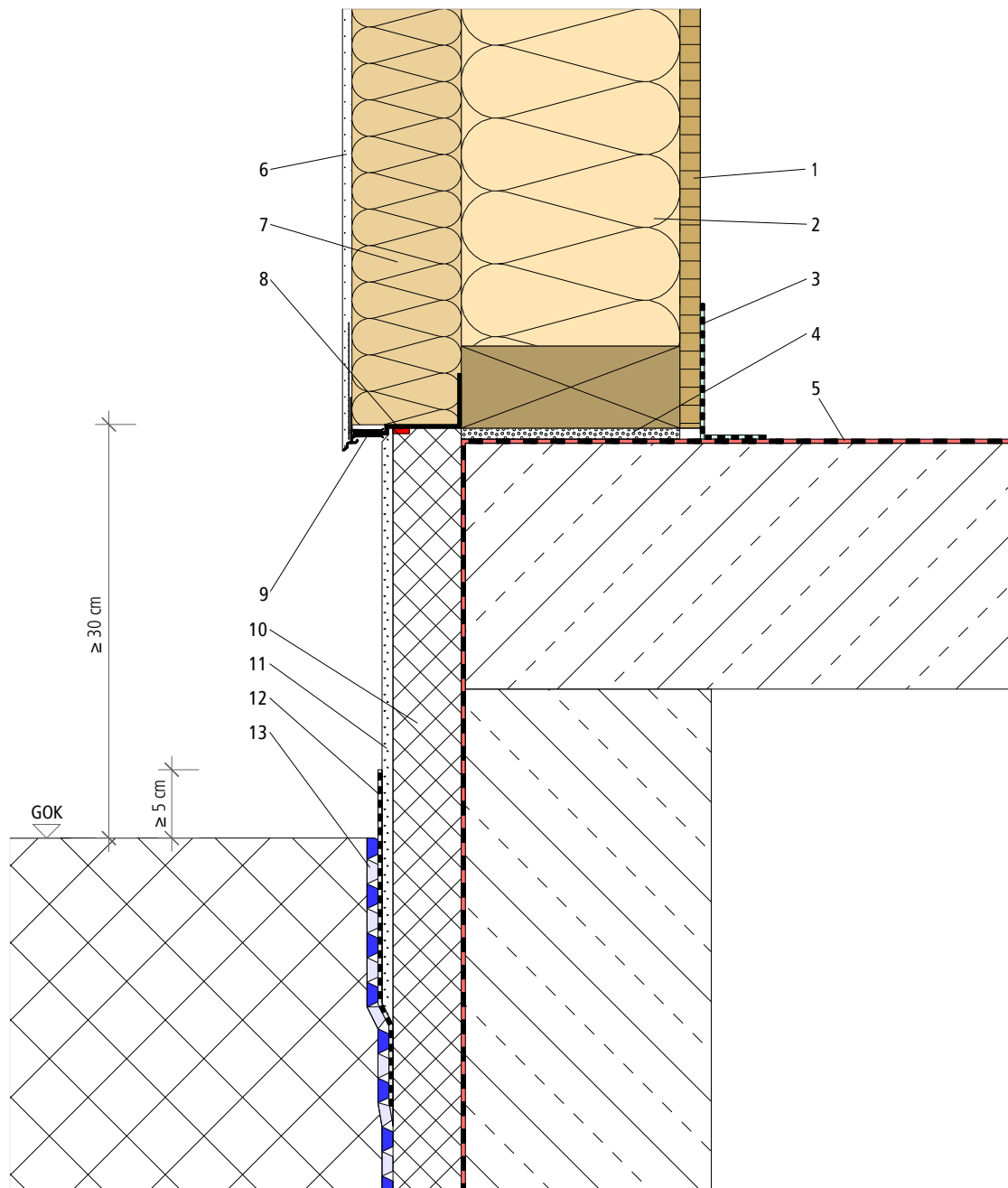
5 Remove any excess FDM WALL between plaster and spiral anchor.



6 Fastening of the attachment piece by means of a 4–5 mm screw.

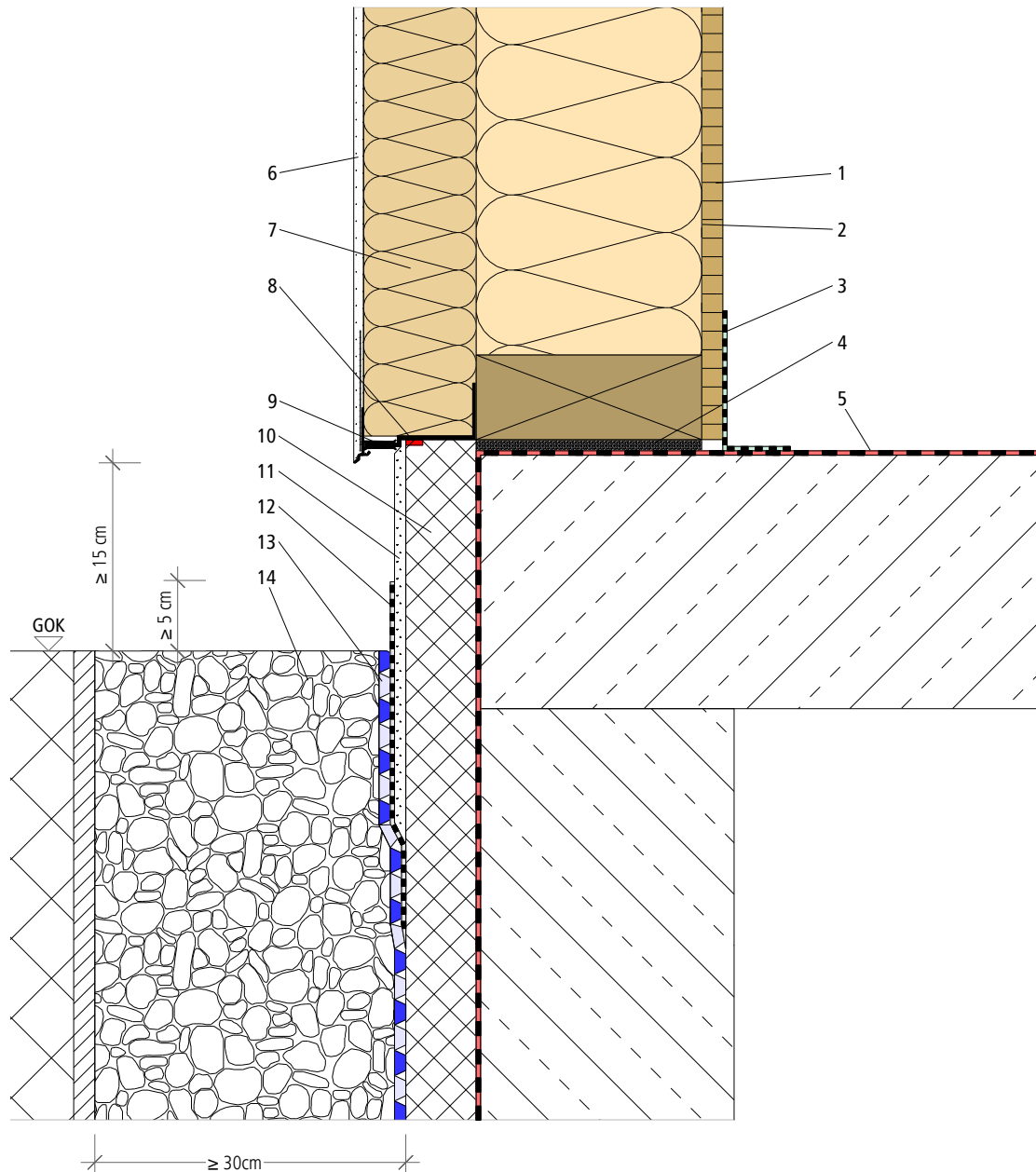
■ ■ Base point

- ■ Outside splash water range with ≥ 30 cm between ground surface and base point



- | | | |
|--|--|---|
| 1 Wood-based panel, e.g. OSB | 5 Sealing according to DIN 18533-1 | 10 Base insulation board/perimeter insulation |
| 2 Timber frame construction with best wood FLEX 50 | 6 best wood render system | 11 Base reinforcing mortar |
| 3 Airtightness/vapor check at base | 7 best wood WALL 180 | 12 Mineral seal |
| 4 Swelling mortar bedding | 8 Joint insulation tape Illmod 15/5-10 | 13 Knob-protection film |
| | 9 best wood base rail | |

- Splash area on the gravel and ≥ 15 cm distance between ground edge and lower edge

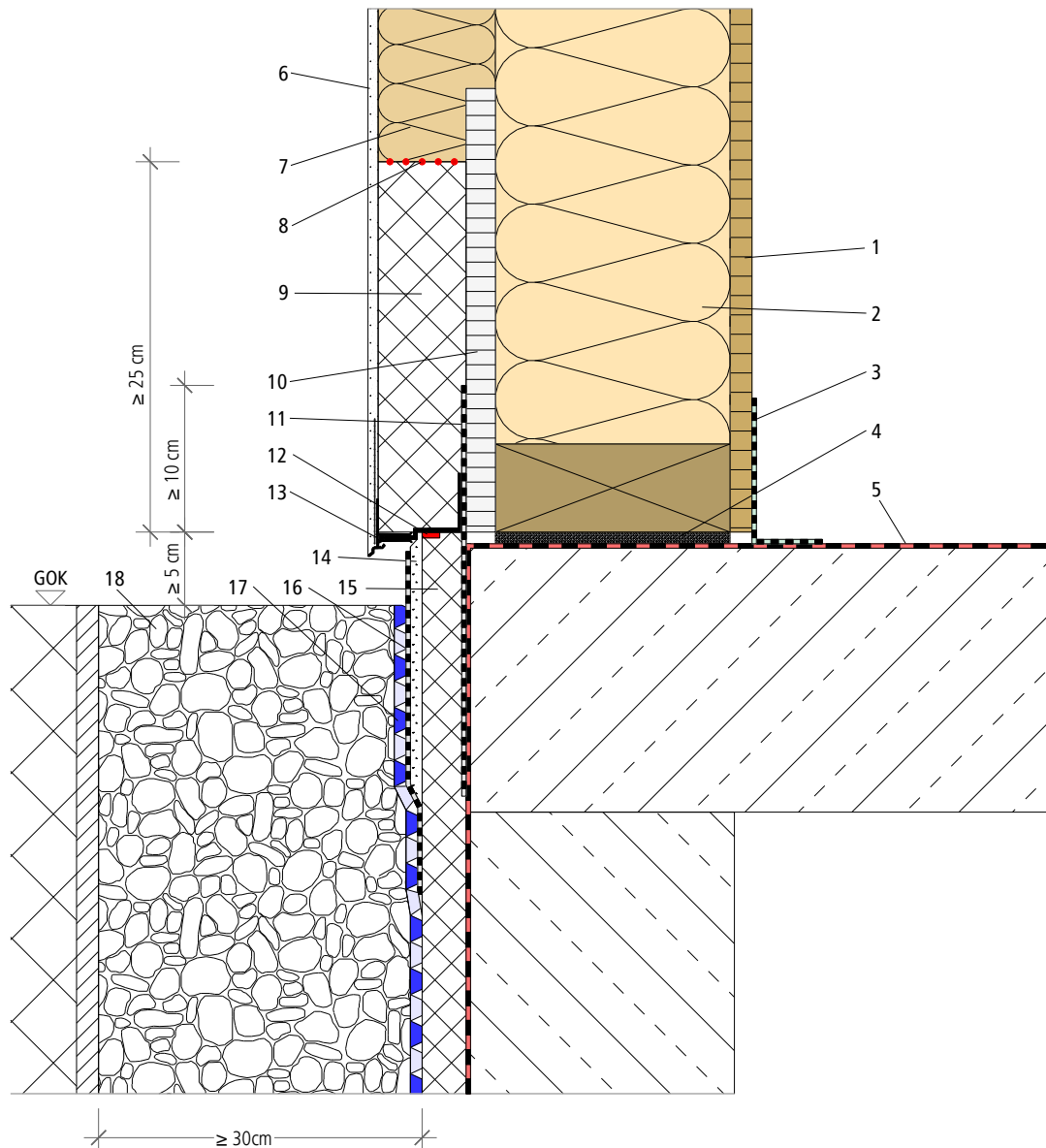


- | | | |
|--|---|----------------------------|
| 1 Wood-based panel, e.g. OSB | 6 best wood render system | 11 Base reinforcing mortar |
| 2 Timber frame construction with best wood FLEX 50 | 7 best wood WALL 180 | 12 Mineral seal |
| 3 Airtightness/vapor check at base | 8 Joint insulation tape Illmod 15/5-10 | 13 Knob-protection film |
| 4 Swelling mortar bedding | 9 best wood base rail | 14 Gravel with drainage |
| 5 Sealing according to DIN 18533-1 | 10 Base insulation board/perimeter insulation | |

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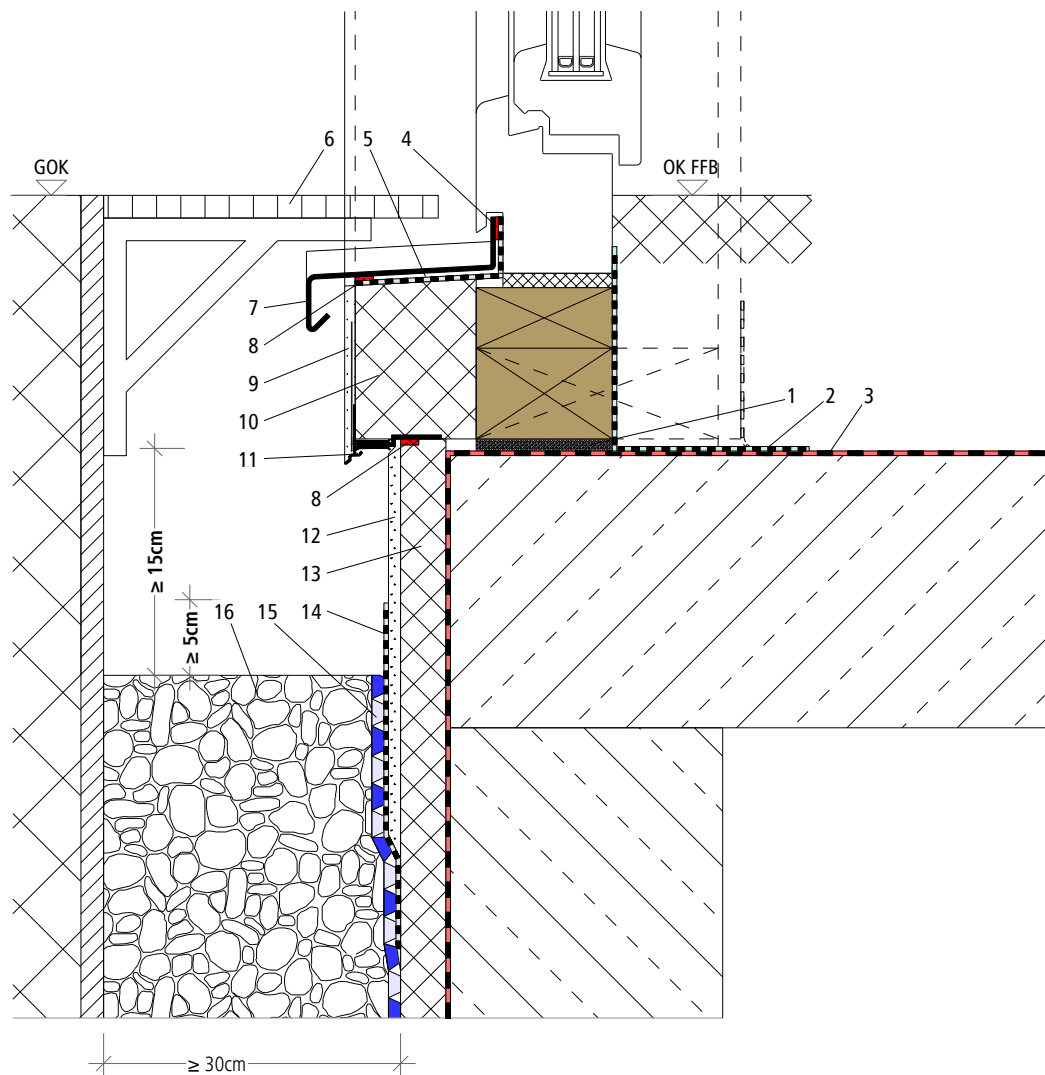
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■ Splash area on the gravel and ≥ 5 cm distance between ground edge and lower edge



- | | | |
|--|---|---|
| 1 Wood-based panel, e.g. OSB | 8 Front sides glued with best wood | 14 Base reinforcing mortar |
| 2 Timber frame construction with best wood FLEX 50 | FDM WALL | 15 Base insulation board/perimeter insulation |
| 3 Airtightness/vapor check at base | 9 best wood perimeter insulation board | 16 Mineral seal |
| 4 Swelling mortar bedding | 10 Cement-bound chipboard | 17 Knob-protection film |
| 5 Sealing according to DIN 18533-1 | 11 Vertical sealing according to DIN 18533-1, e.g. FRANKOSIL® 1K Plus | 18 Gravel with drainage |
| 6 best wood render system | 12 Joint insulation tape Illmod 15/5-10 | |
| 7 best wood WALL 180 | 13 best wood base rail | |

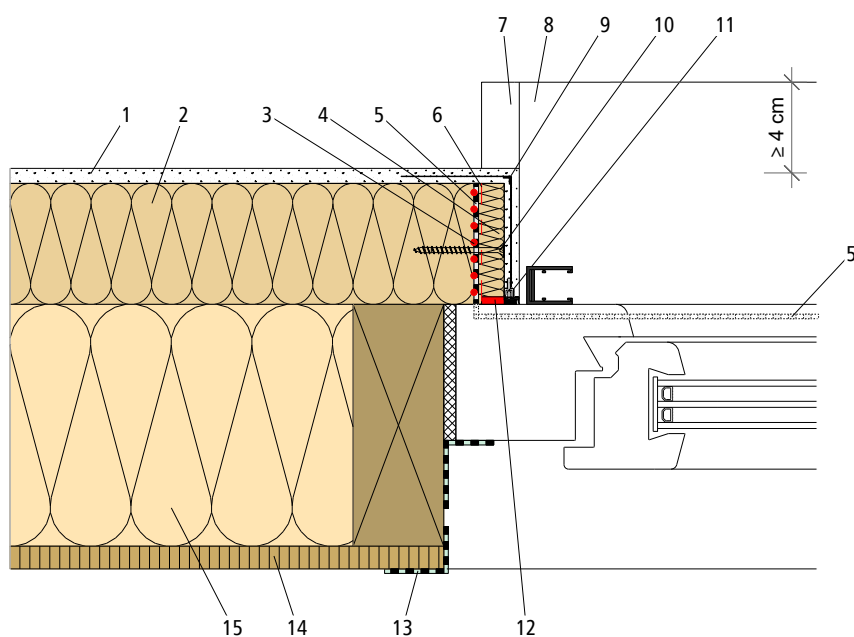
■ Base point; patio door level with grating



- | | | |
|--|---|---|
| 1 Swelling mortar bedding | 6 Grating | 12 Base reinforcing mortar |
| 2 Airtightness/vapor check at base | 7 Window sill | 13 Base insulation board/perimeter insulation |
| 3 Sealing according to DIN 18533-1 | 8 Joint insulation tape III mod 15/5-10 | 14 Mineral seal |
| 4 Joint insulation tape III mod 12/3-7 | 9 best wood render system | 15 Knob-protection film |
| 5 Second sealing layer beneath window sill | 10 best wood perimeter insulation board | 16 Gravel with drainage |
| | 11 best wood base rail | |

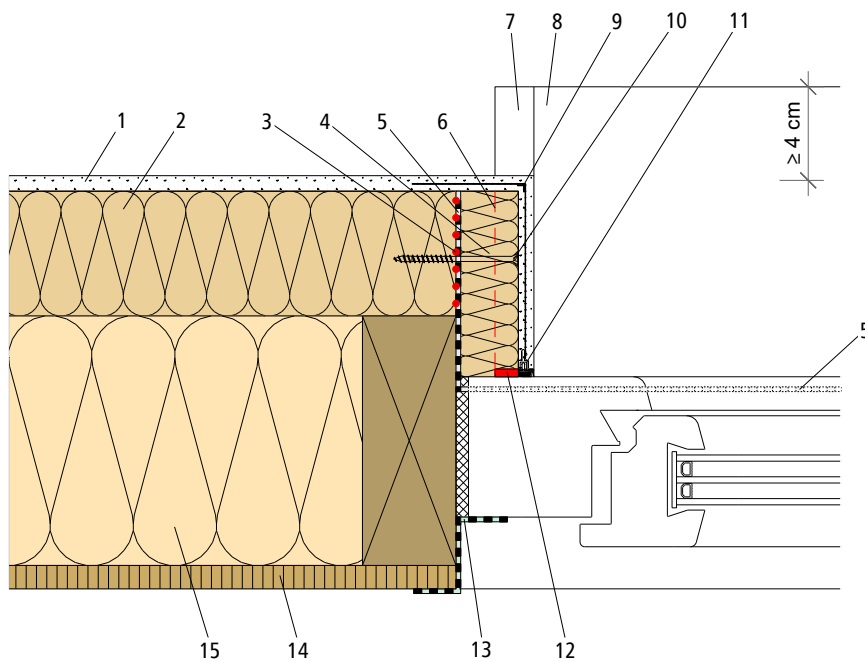
■ ■ Window connection

■ ■ Window connection with 20 mm reveal board



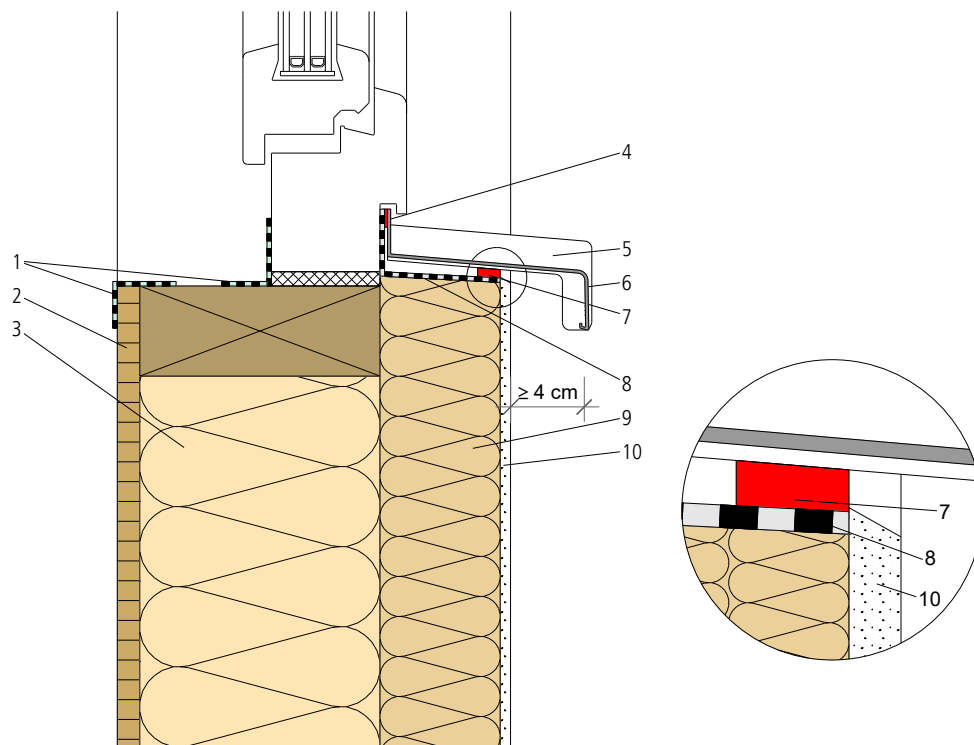
- | | | |
|--|--|--|
| 1 best wood render system | 6 Joint insulation tape Illmod 15/5-10 | function |
| 2 best wood WALL 180 | 7 Window sill end profile with slide bearing | 12 Joint insulation tape Illmod 12/3-7 |
| 3 best wood reveal board bonded with
best wood FDM WALL glued to WALL 180 | 8 Window sill | 13 Airtightness |
| 4 best wood reveal board | 9 best wood corner bead with fiber mesh | 14 Wood-based panel, e.g. OSB |
| 5 Second sealing layer beneath window sill | 10 Stainless steel screw | 15 Timber frame construction with best wood
FLEX 50 |
| | 11 best wood architrave bead with telescope | |

■ Window connection with 40 mm reveal board



- | | | |
|--|---|--|
| 1 best wood render system | 6 Joint insulation tape IIImod 15/5-10 | 12 Joint insulation tape IIImod 12/3-7 |
| 2 best wood WALL 180 | 7 Window sill end profile with slide bearing | 13 Airtightness |
| 3 best wood reveal board bonded with
best wood FDM WALL glued to WALL 180 | 8 Window sill | 14 Wood-based panel, e.g. OSB |
| 4 best wood reveal board in the area of
the window sill end profile | 9 best wood corner bead with fiber mesh | 15 Timber frame construction with best wood
FLEX 50 |
| 5 Second sealing layer beneath window sill | 10 Stainless steel screw | |
| | 11 best wood architrave bead with telescope
function | |

■ Window connection on window sill with second sealing layer

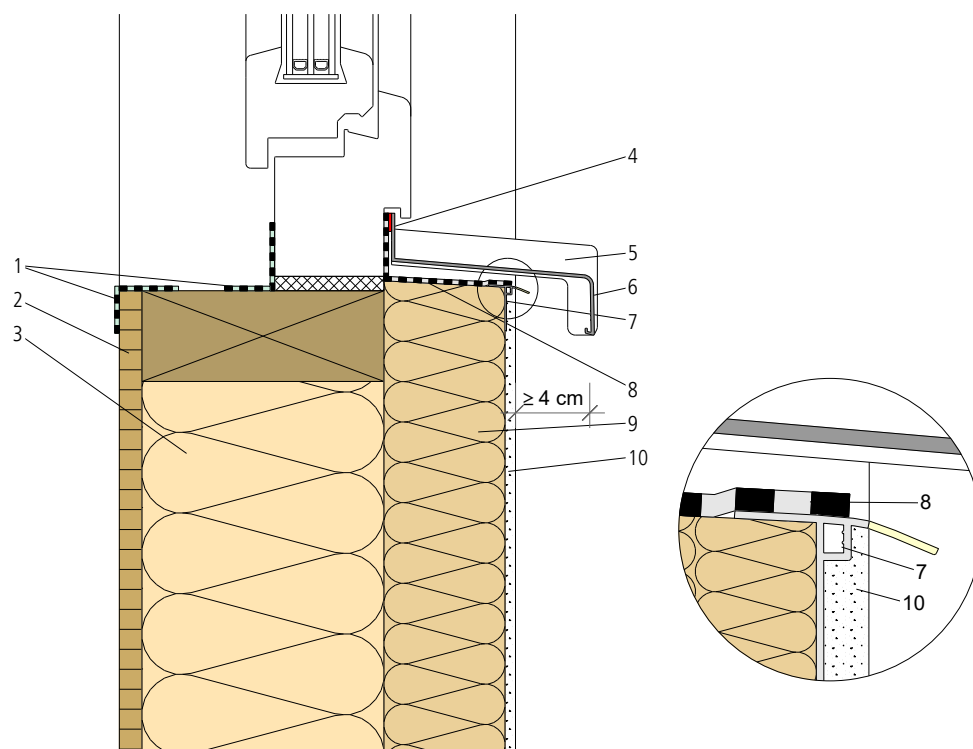


- | | | |
|--|--|----------------------------|
| 1 Airtightness | 5 Window sill end profile with slide bearing | 9 best wood WALL 180 |
| 2 Wood-based panel, e.g. OSB | 6 Window sill | 10 best wood render system |
| 3 Timber frame construction with best wood FLEX 50 | 7 Joint insulation tape Illmod 15/5-10 | |
| 4 Joint insulation tape Illmod 12/3-7
Alternative: Window sill with sealing lip | 8 Second sealing layer beneath window sill | |

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■ Window connection to window sill with second sealing layer and window sill render stop bead

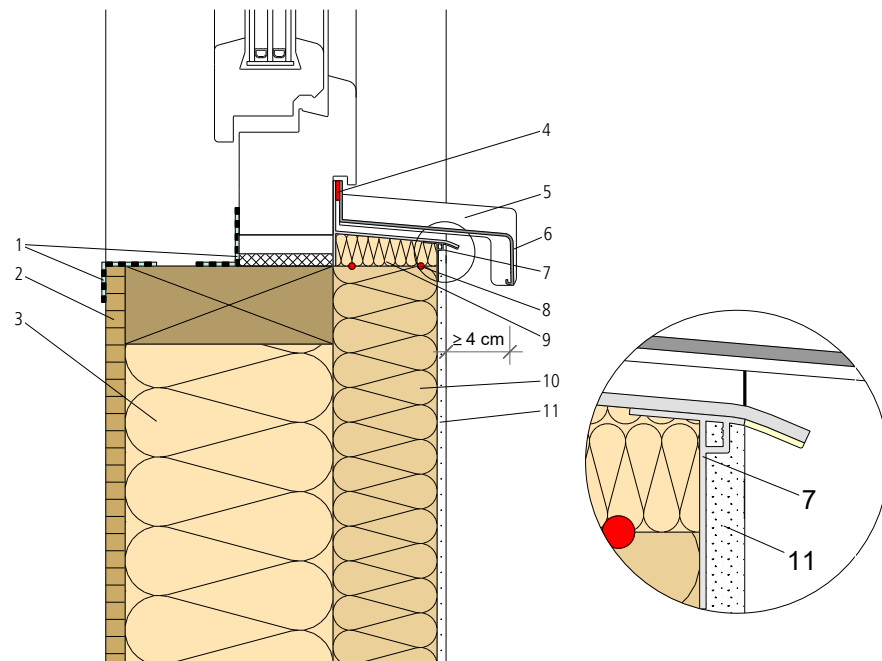


- | | | |
|--|--|----------------------------|
| 1 Airtightness | 5 Window sill end profile with slide bearing | 9 best wood WALL 180 |
| 2 Wood-based panel, e.g. OSB | 6 Window sill | 10 best wood render system |
| 3 Timber frame construction with best wood FLEX 50 | 7 best wood window sill render stop bead | |
| 4 Joint insulation tape Illmod 12/3-7
Alternative: Window sill with sealing lip | 8 Second sealing layer beneath window sill | |

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■ Window connection to window sill with second sealing layer and window sill render stop bead

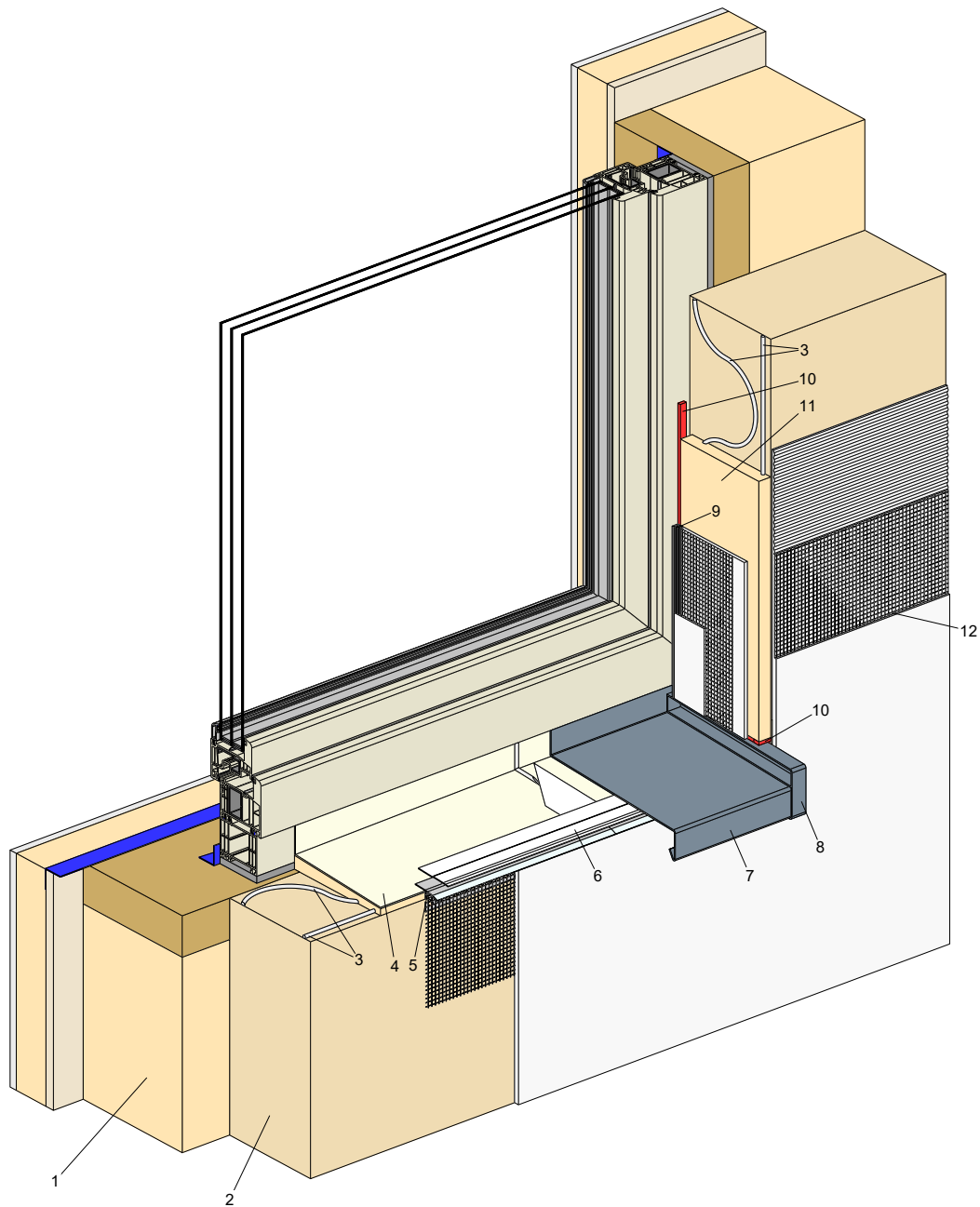


- | | | |
|--|--|--|
| 1 Airtightness | 5 Window sill end profile with slide bearing | 9 best wood sealing level for window sills |
| 2 Wood-based panel, e.g. OSB | 6 Window sill | 10 best wood WALL 180 |
| 3 Timber frame construction with best wood FLEX 50 | 7 best wood window sill render stop bead | 11 best wood render system |
| 4 Joint insulation tape Illmod 12/3-7
Alternative: Window sill with sealing lip | 8 best wood FDM WALL | |

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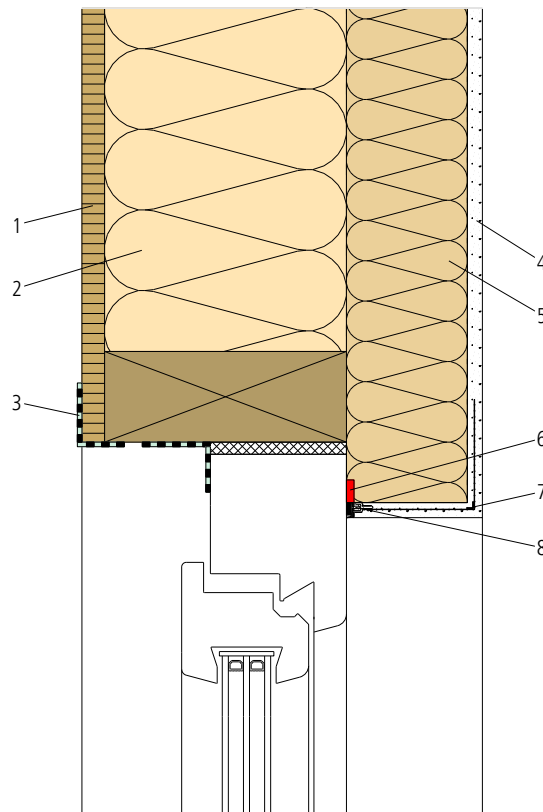
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■ Window connection on window sill with second sealing layer – 3D view



- | | | | |
|--|-------------------------------------|--|---|
| 1 Timber frame construction with best wood FLEX 50 | 3 best wood FDM WALL | 6 best wood adhesive tape | 9 best wood architrave bead with telescope function |
| 2 best wood WALL 180 | 4 best wood sealing level | 7 Window sill | 10 Joint insulation tape Illmod 12/3-7 |
| 3 best wood FDM WALL | 5 best wood window sill render stop | 8 Window sill end profile with slide bearing | 11 best wood reveal board |
| | | | 12 best wood render system |

■ Window connection – window lintel



- 1 Wood-based panel, e.g. OSB
- 2 Timber frame construction with best wood FLEX 50
- 3 Airtightness

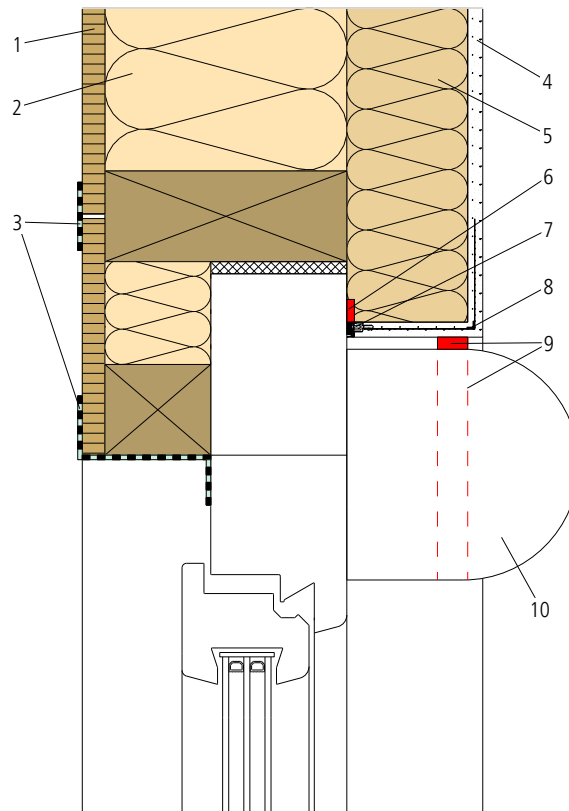
- 4 best wood render system
- 5 best wood WALL 180
- 6 Joint insulation tape Illmod 12/3-7
- 7 best wood corner bead with fiber

- mesh
- 8 best wood architrave bead with telescope function

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■ Window connection to exposed projecting roller shutter housing – version 1

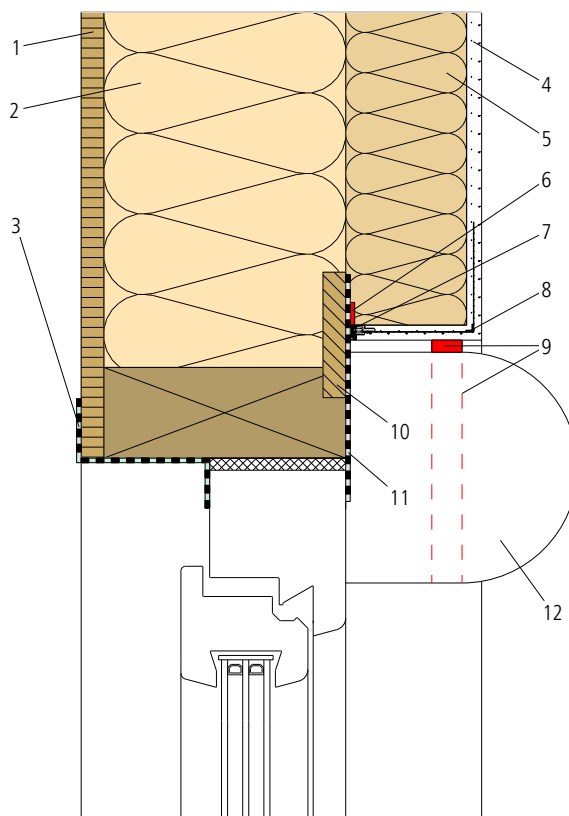


- 1 Wood-based panel, e.g. OSB
- 2 Timber frame construction with best wood FLEX 50
- 3 Airtightness
- 4 best wood render system

- 5 best wood WALL 180
- 6 Joint insulation tape Illmod 12/3-7
- 7 best wood architrave bead with telescope function
- 8 best wood corner bead with fiber

- mesh
- 9 Joint insulation tape Illmod 20/10-18
- 10 Exposed projecting roller shutter housing

■ Window connection to exposed projecting roller shutter housing – version 2

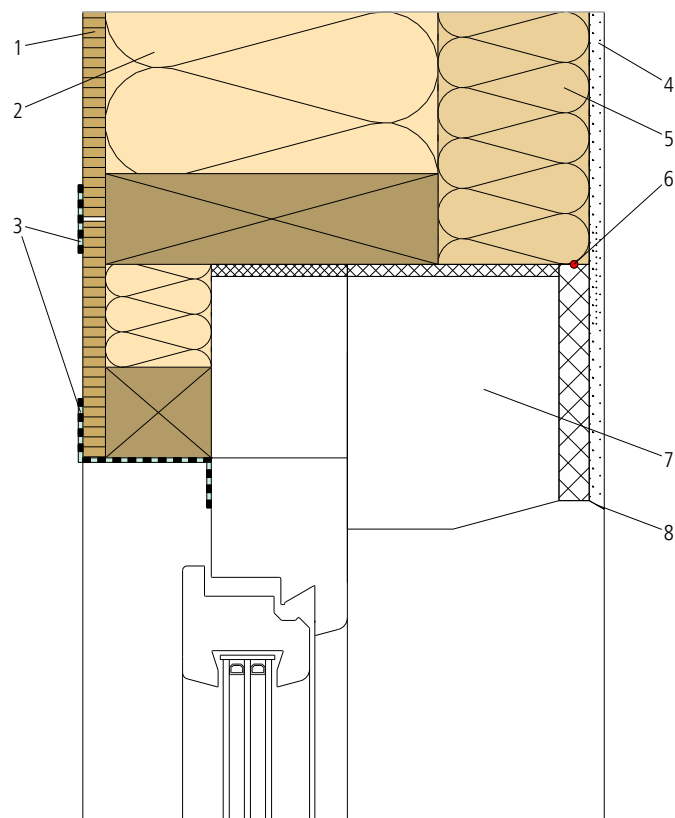


- 1 Wood-based panel, e.g. OSB
- 2 Timber frame construction with best wood FLEX 50
- 3 Airtightness
- 4 best wood render system
- 5 best wood WALL 180

- 6 Joint insulation tape Illmod 12/3-7
- 7 best wood architrave bead with telescope function
- 8 best wood corner bead with fiber mesh
- 9 Joint insulation tape Illmod 20/10-18

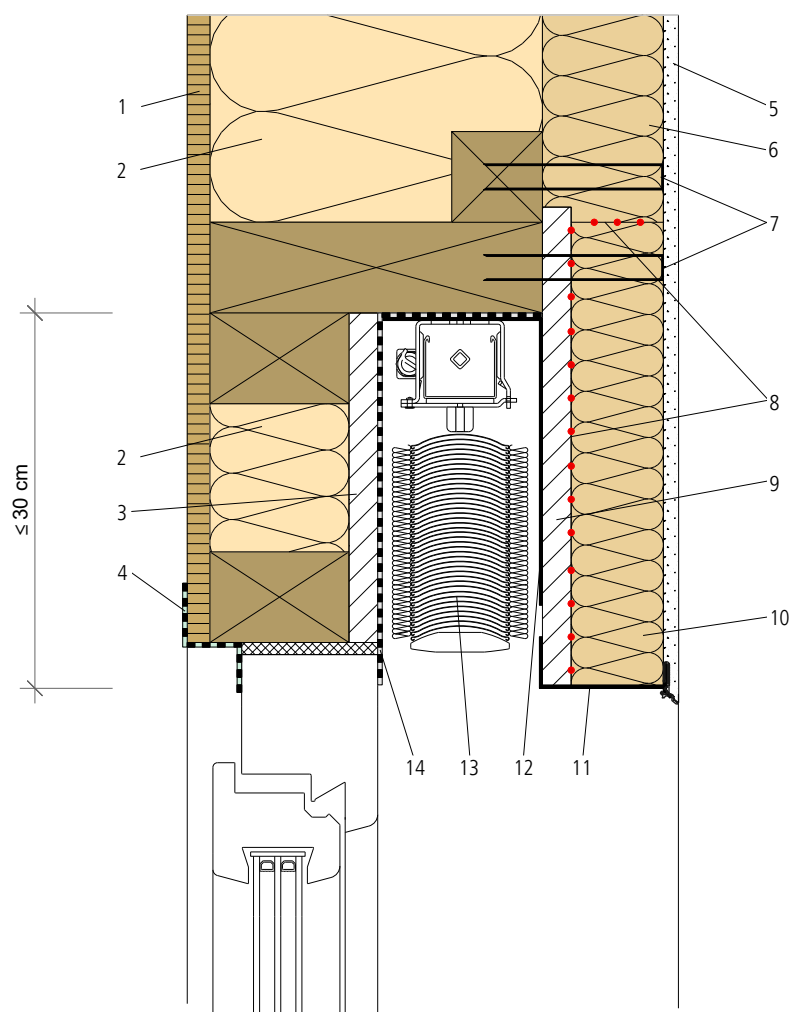
- 10 Glued timber board
- 11 Diffusion-permeable membrane e. g. SOLITEX FRONTA PENTA
- 12 Exposed projecting roller shutter housing

■ Window connection to projecting roller shutter housing for plastering over



- | | | |
|--|--|---|
| 1 Wood-based panel, e.g. OSB | 5 best wood WALL 180 | board |
| 2 Timber frame construction with best wood FLEX 50 | 6 Seal occurring installation joints with best wood FDM WALL | 8 Drip edge profile integrated in exposed projecting roller shutter housing |
| 3 Airtightness | 7 Exposed projecting roller shutter housing with suitable render base- | |
| 4 best wood render system | | |

■ Window connection to Venetian blind facing



- 1 Wood-based panel, e.g. OSB
- 2 Timber frame construction with best wood FLEX 50
- 3 Glued timber board
- 4 Airtightness
- 5 best wood render system
- 6 best wood WALL 180
- 7 Broad back staples
- 8 Bonding with

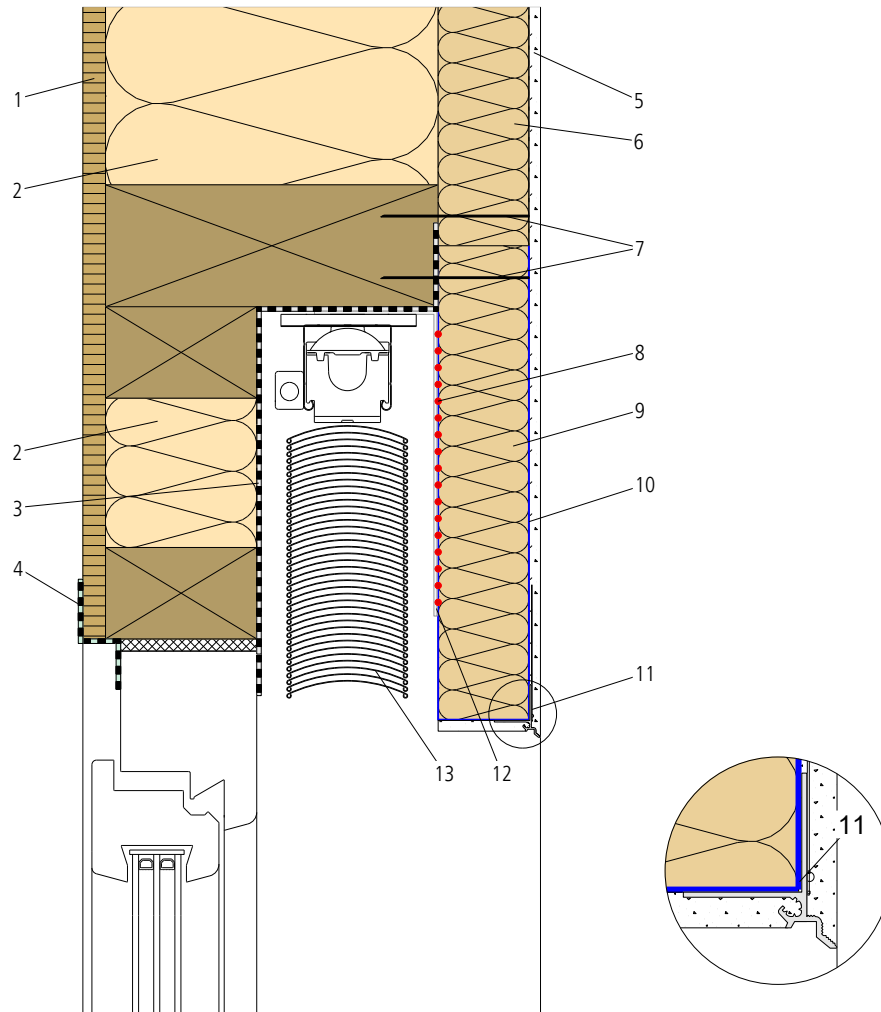
- best wood FDM WALL
- 9 Wood-based panel, e.g. three-layer board with support on three sides
- 10 best wood WALL 180 set in the base rail and also bonded on the facing sides to 6 and over the complete surface to 9 using best wood FDM WALL
- 11 Metal base profile with clip-on render

- profile
- 12 Metal angle for reinforcement with spacing of ≤ 1.0 m
- 13 Venetian blind
- 14 Diffusion-permeable wall lining membrane, e.g. Solitex WA, bonded to the window frame

■ Vertical wall cross-section through COVER PANEL FOR WINDOW LINTELS

■ INFORMATION

A detailed description of the individual installation steps can be found in the processing guidelines best wood COVER PANEL FOR WINDOW LINTELS.



1 Wood-based panel, e.g. OSB

2 Timber frame construction with best wood FLEX 50

3 Diffusion-permeable wall lining membrane e.g. SOLITEX FRONTA PENTA, bonded to the window frame

4 Airtightness

5 best wood render system

6 best wood WALL 180

7 Stainless steel broad back staples

8 Bonding with best wood FDM WALL

9 best wood cover panel for window lintels

10 Coating the best wood cover panel

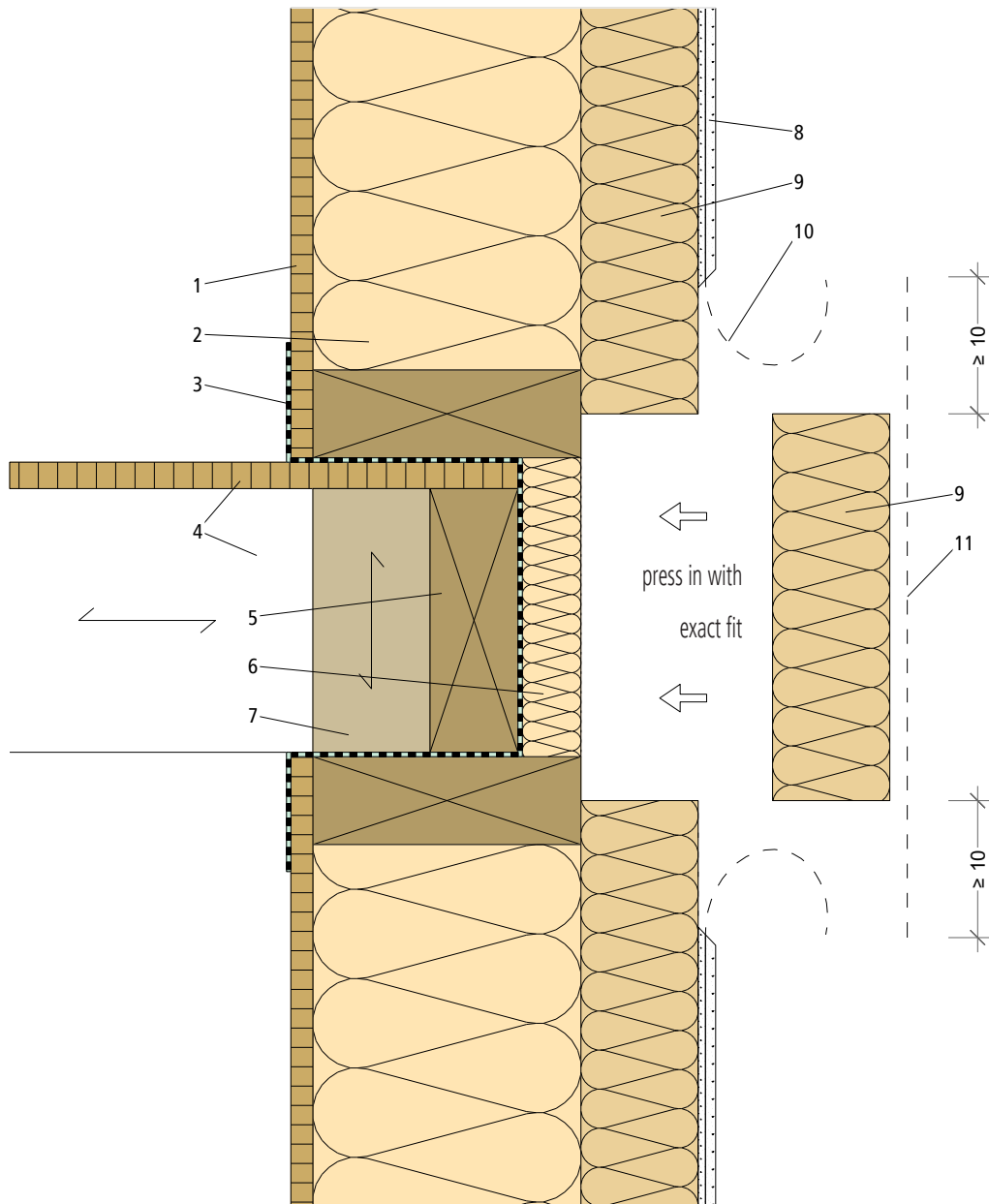
for window lintels

11 best wood drip edge profile

12 Metal angle for reinforcement with spacing of ≤ 1.0 m bonded to cover panel for window lintels

13 Venetian blind

■ ■ Storey transitions for pre-fabricated components



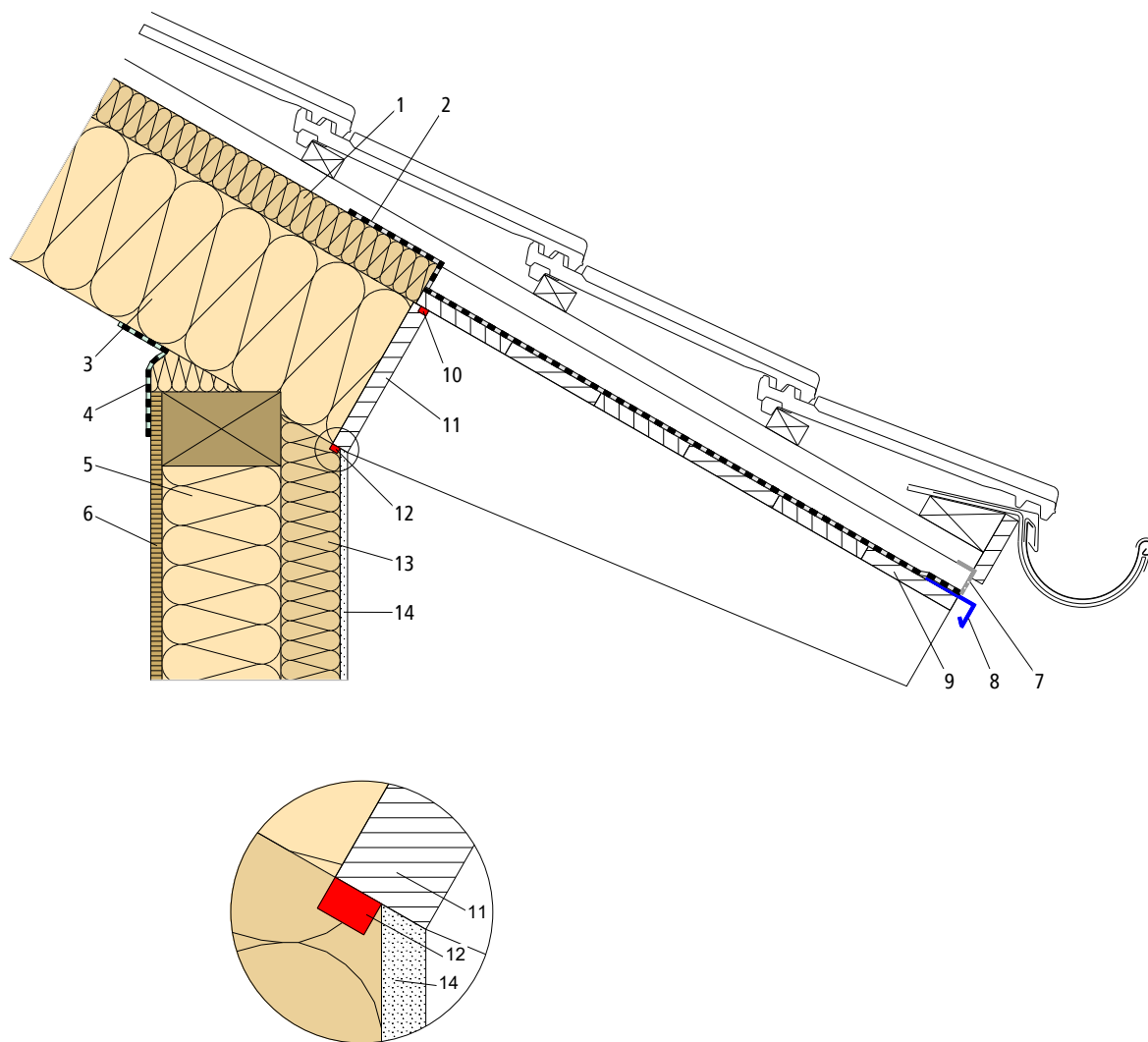
- 1 Wood-based panel, e.g. OSB
- 2 Timber frame construction with best wood FLEX 50
- 3 Vapor barrier/airtight sealing
- 4 System of timber binders and joists with OSB panel

- 5 Edge planking
- 6 Edge insulation best wood FLEX 50
- 7 Upright timbers for protection against settling
- 8 best wood render system
- 9 best wood WALL 180

- 10 Reinforcement fabric with min. 10 cm projection
- 11 On-site application of serrated mortar and embedding of fiber mesh elements

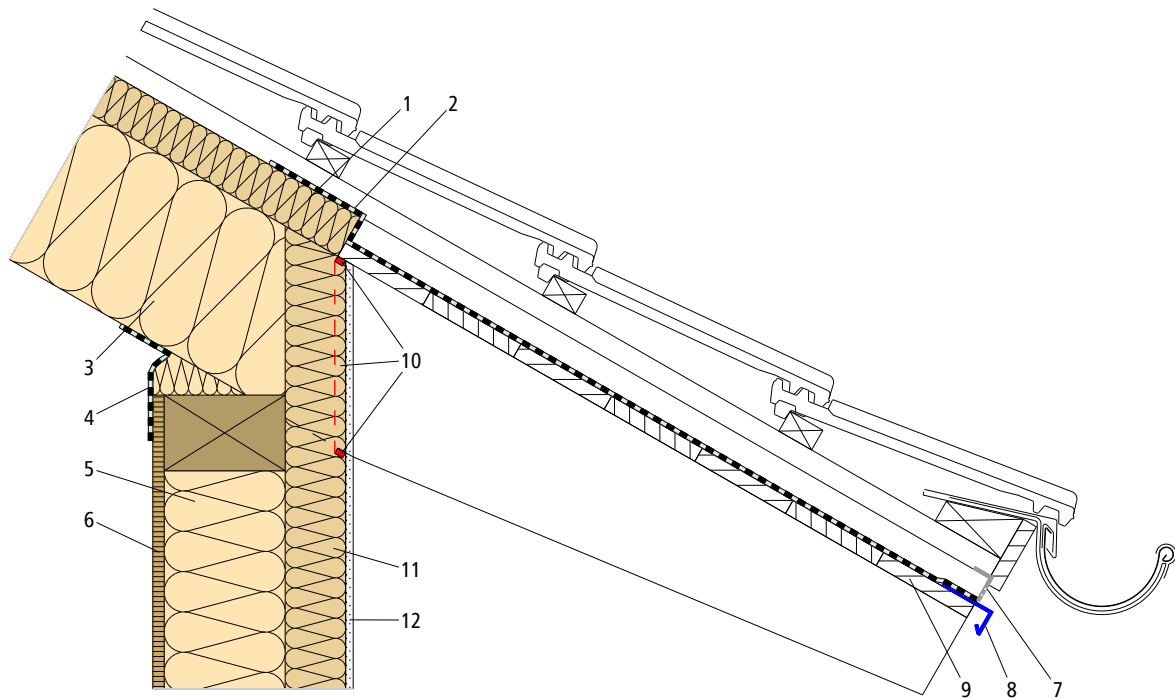
■ ■ Roof connection

■ ■ Eaves with adjustable hanger



- | | | |
|---|------------------------------|---|
| 1 best wood TOP 180 on-roof insulation | wood FLEX 50 | 11 Adjustable hanger slotted into grooves in the rafter |
| 2 Underlay bonded to on-roof insulation board | 6 Wood-based panel, e.g. OSB | 12 Joint insulation tape Illmod 15/5-10 |
| 3 Rafters with best wood FLEX 50 | 7 Insect screen | 13 best wood WALL 180 |
| 4 Airtightness/vapor check | 8 Drip plate | 14 best wood render system |
| 5 Timber frame construction with best | 9 Visible planking | |
| 10 Joint insulation tape Illmod 15/3-7 | | |

■ Eaves without adjustable hanger

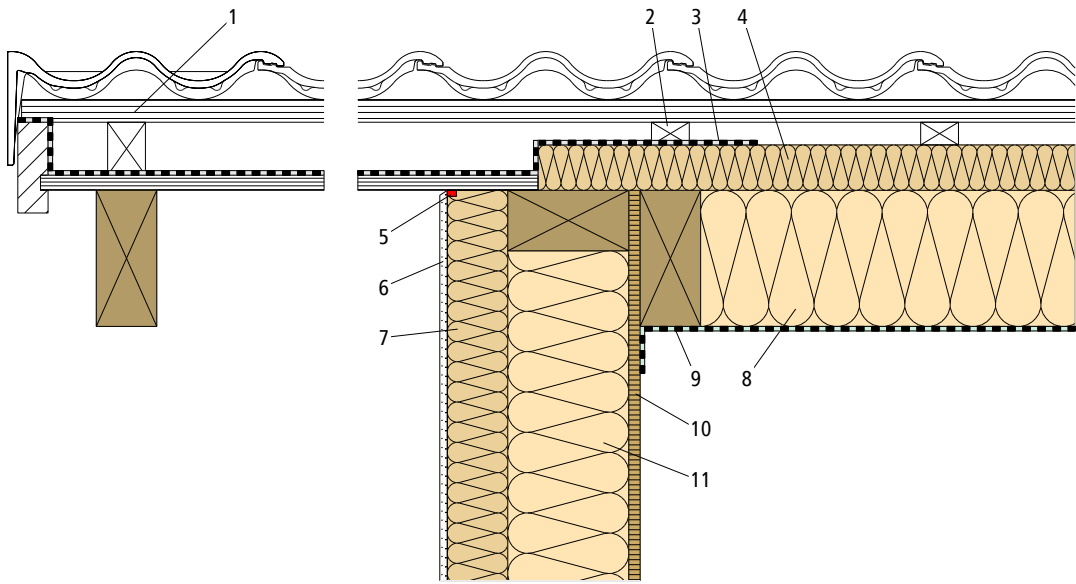


- 1 best wood TOP 180 on-roof insulation
- 2 Underlay bonded to on-roof insulation board
- 3 Rafters with best wood FLEX 50
- 4 Airtightness/vapor check

- 5 Timber frame construction with best wood FLEX 50
- 6 Wood-based panel, e.g. OSB
- 7 Insect screen
- 8 Drip plate

- 9 Visible planking
- 10 Joint insulation tape Illmod 15/5-10
- 11 best wood WALL 180
- 12 best wood render system

■ Roof connections to verges

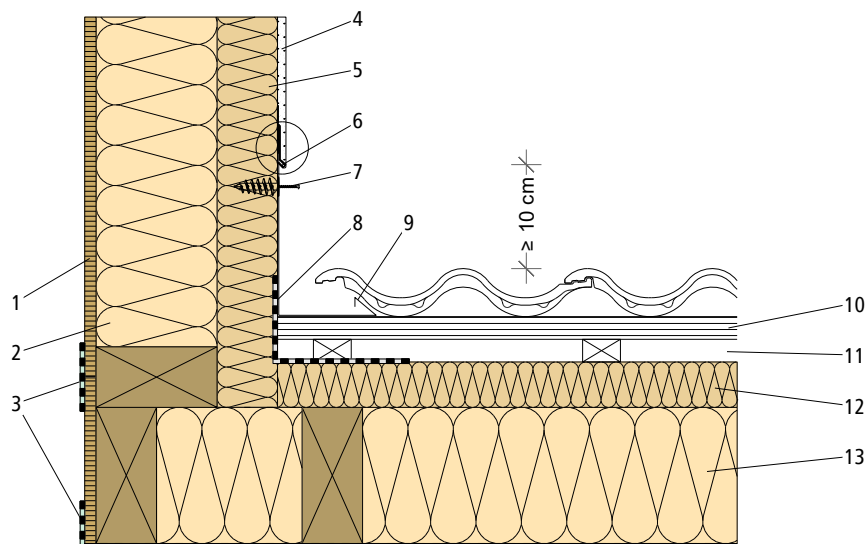
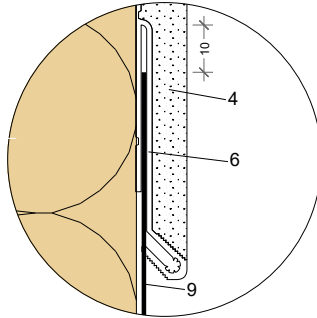


- | | | |
|---|--|---|
| 1 Load-bearing batten | 5 Joint insulation tape Illmod 15/5-10 | 10 Wood-based panel, e.g. OSB |
| 2 Counter battens | 6 best wood render system | 11 Timber frame construction with best wood FLEX 50 |
| 3 Underlay bonded to on-roof insulation board | 7 best wood WALL 180 | |
| 4 best wood TOP 180 on-roof insulation | 8 Rafters with best wood FLEX 50 | |
| | 9 Airtightness/vapor check | |

■ Roof connections to dormer cheeks

■ INFORMATION:

Implementation of sheet metal work in accordance with the guideline for metal connections to render, external heat insulation and external thermal insulation composite systems.



- | | | |
|--|---|---|
| 1 Wood-based panel, e.g. OSB | 6 best wood sheet metal connection | board |
| 2 Timber frame construction with best wood FLEX 50 | 7 Screw-in anchor for insulation boards (e.g. best wood spiral anchor) and stainless steel screw with suitable seal | 9 Sheet metal flashing* |
| 3 Airtightness/vapor check | 8 Underlay bonded to on-roof insulation | 10 Load-bearing batten |
| 4 best wood render system | | 11 Counter battens |
| 5 best wood WALL 180 | | 12 best wood TOP 180 on-roof insulation |
| | | 13 Rafters with best wood FLEX 50 |

* with connection lengths of more than 3.00 m a two-piece metal connection with a flashing strip must be implemented.

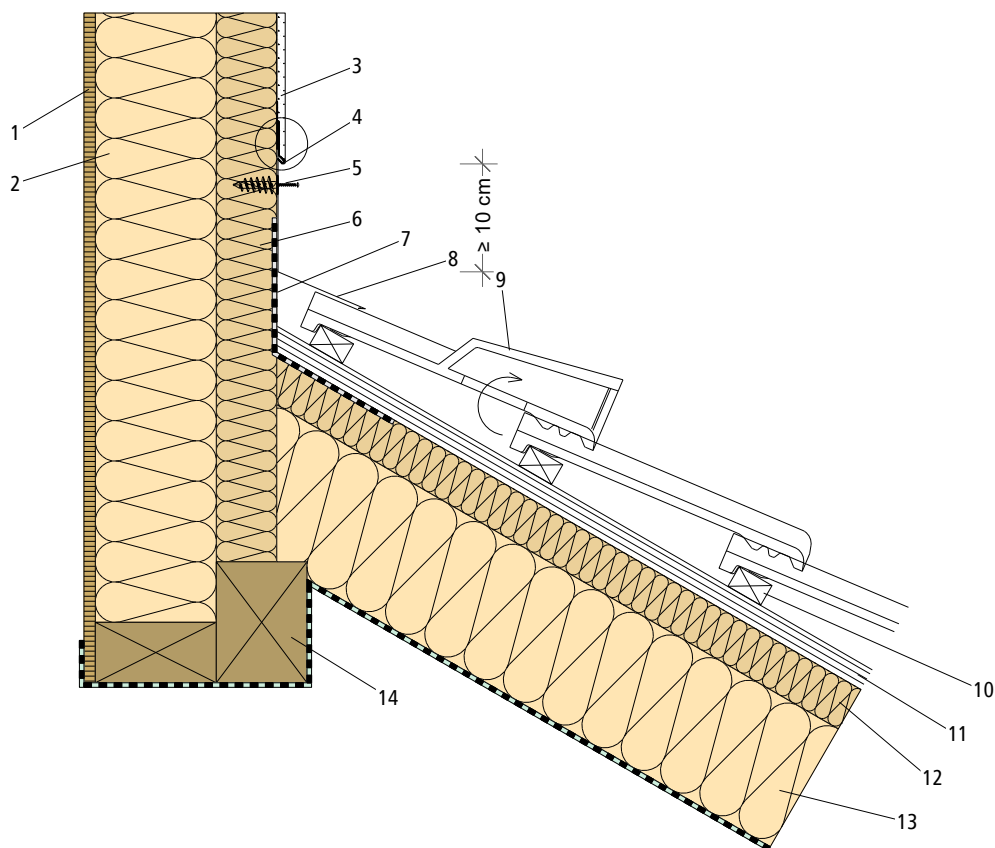
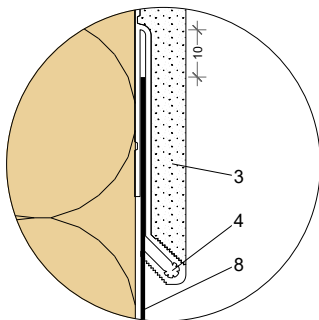
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Roof connection for a monopitch roof on an exterior wall

INFORMATION:

Implementation of sheet metal work in accordance with the guideline for metal connections to render, external heat insulation and external thermal insulation composite systems.



- | | | |
|--|---|---|
| 1 Wood-based panel, e.g. OSB | (e.g. best wood spiral anchor) and | 10 Load-bearing batten |
| 2 Timber frame construction with best wood FLEX 50 | stainless steel screw with suitable seal | 11 Counter battens |
| 3 best wood render system | 6 best wood WALL 180 | 12 best wood TOP 180 on-roof insulation |
| 4 best wood sheet metal connection profile | 7 Underlay bonded to on-roof insulation board | 13 Rafters with best wood FLEX 50 |
| 5 Screw-in anchor for insulation boards | 8 Sheet metal flashing* | 14 Airtightness/vapor check |
| | 9 Roof tile with ventilation tile | |

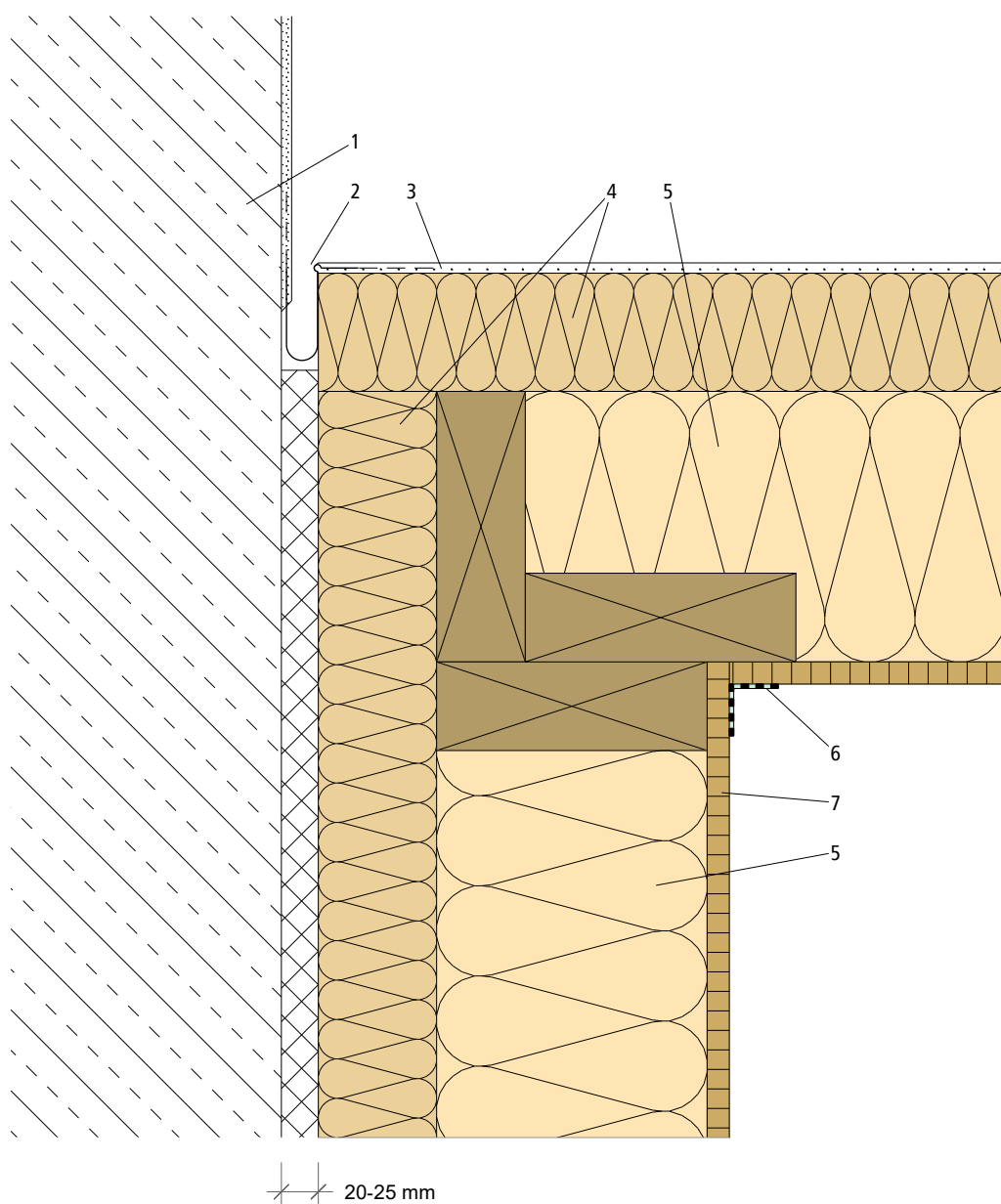
* with connection lengths of more than 3.00 m a two-piece metal connection with a flashing strip must be implemented.

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■ ■ Structural expansion joints

■ ■ Corner joints on existing buildings



1 Existing building

2 best wood expansion joint profile for corners

3 best wood render system

4 best wood WALL 180

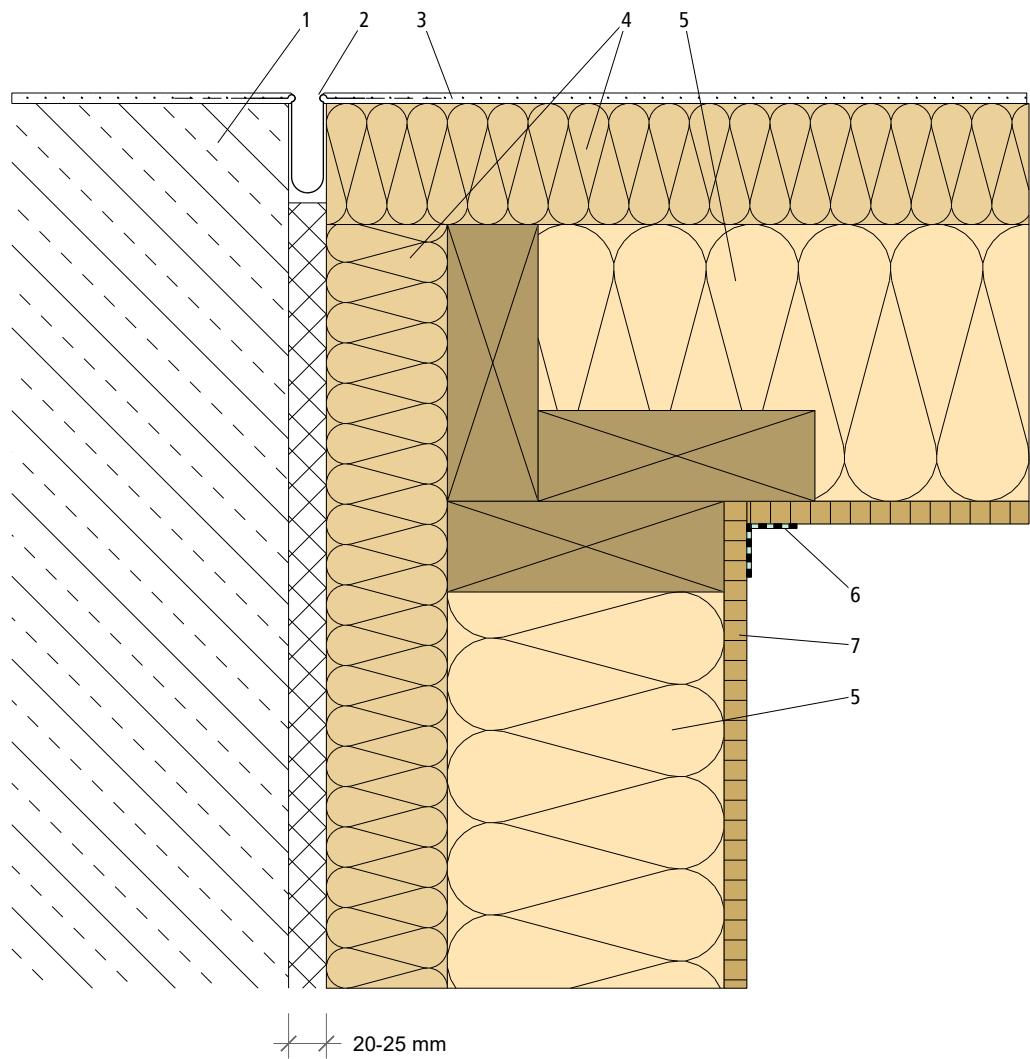
5 Timber frame construction with best

wood FLEX 50

6 Airtightness/vapor check

7 Wood-based panel, e.g. OSB

■ Continuous joints on existing buildings



- | | | |
|---|---------------------------------------|------------------------------|
| 1 Existing building | 3 best wood render system | wood FLEX 50 |
| 2 best wood expansion joint profile for continuous surfaces | 4 best wood WALL 180 | 6 Airtightness/vapor check |
| | 5 Timber frame construction with best | 7 Wood-based panel, e.g. OSB |

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