

RP IG UK / 202502 / UK / 1.0

Facade cladding. Installation Guide.

MADE FROM STONE.



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1 The ventilated facade and its many advantages

A ventilated facade is a facade construction with an air gap between the insulation and the facade cladding. This gap is open at the top and bottom and the cladding has small open joints. This creates a way for natural ventilation of the facade.

A ventilated facade can be viewed as a raincoat: it protects a building against the weather, while at the same time creating a healthy indoor climate. This is why the building technique of ventilated facades is often referred to as rainscreen cladding.



Protects the building against weather



The ventilation effect through behind and through the joint of the cladding

Natural ventilation

A ventilated facade protects the building against weather influences and has natural ventilation. Most of rain water will run down the outer surface of cladding boards. Small rain drops which enter the cavity or any condense water will drain off. With a well-designed and well-constructed ventilated facade, negative effects of condensation can be prevented, Vapour will escape quickly thanks to the ventilation flow within the cavity. Algae and moisture problems do not occur and mold cannot grow because of this 'self-breathing' effect of the facade.



A stone wool insulation effectively works against temperature and noise

Healthy indoor climate

Using a ventilated facade construction helps creating a healthy indoor climate. A ventilated facade reduces the direct solar impact on the building. Walls do not heat up as much during summer, thanks to the constant air flow in the cavity which is constantly cooling the construction.

Insulating effect and protection

Ventilated facades provide great insulation and contribute to energy efficiency and cutting down exterior noise. The Rockpanel façade cladding effectively protects the insulation against weather influences such as rain, snow and wind.





Rockpanel designs make buildings unique



Freedom of design

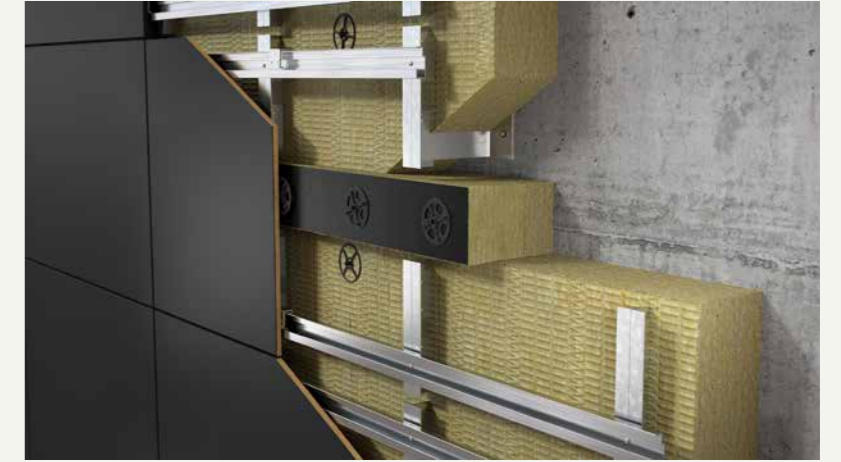
Architects are very flexible in their design choices, with a wide range of colours and designs available for exterior Rockpanel cladding. It's also easy to replace the cladding at any point, providing even more flexibility in aesthetics. Rockpanel facade boards are available in over 200 colours and designs – and customizations are possible as well.



Ventilated facade construction can be demounted individually, which enables reusing and/or recycling them

Easy disassembly and recycling

All parts of a ventilated facade construction can be demounted individually, which enables reusing and/or recycling them. As Rockpanel boards are endlessly recyclable. They are the best choice for exterior cladding in your ventilated facade when it comes to sustainability and circularity.



Safe construction with an effective fire barrier behind the cladding

Fire safety

Rockpanel exterior cladding also stands out because of its excellent fire resilient qualities. The core material basalt can withstand extremely high temperatures by nature. Rockpanel cladding is available in Euroclass A2-s1,d0 and can be perfectly combined with stone wool insulation from ROCKWOOL.

Lower construction and maintenance costs

Compared to a brick cavity wall, a ventilated facade is lighter, which can lower the construction costs. Rockpanel facade claddings offer a certified service life of at least 50 years. All Rockpanel products are characterised by outstanding colour stability. They offer even a self-cleaning effect in the rain. Rockpanel facade panels with ProtectPlus coating make it easy to remove even graffiti.

Easy access

With a ventilated facade, there is easy access to the facade and to the construction behind it. It is also possible to hide rain water drainage pipes and other elements behind cladding boards. This comes in handy when any maintenance or refurbishment is required.



**VENTILATED
FACADES.**

1.1 Types of cladding installations

Ventilated facade construction

Rockpanel serves as the cladding material in a ventilated facade system. This type of facade, also referred to as a rainscreen, acts as a secondary defence system. It features a ventilation cavity behind the cladding, allowing airflow that aids in the evaporation of moisture from condensation and rainwater.

Ventilation openings are necessary at both the bottom and top of the facade to allow for free airflow, with a ventilation cavity depth of minimum 20 mm required. Whether the facade features open or closed joints, it must include adequate ventilation openings and cavity depth.

For effective ventilation, the cavity must have ventilation openings of at least 5000 mm² per meter of length. Rockpanel recommends openings between 5 and 10 mm in width.

Additionally, it is recommended to apply an anti-insect mesh to deter insects and rodents from entering the ventilation cavity. (Please check your local regulations for any specific requirements)

Non-ventilated constructions

It is also possible to apply Rockpanel to a non-ventilated facade. Please visit our website for more information and preconditions.

Ventilated facades with Rockpanel cladding help to:

- Counterbalance the effects of moisture
- Reduce energy consumption year-round
- Enhance quality of living with aesthetic designs
- Prolong the lifespan of the facade
- Provide excellent climate and fire resilient properties

There are two types of constructions with specific demands:

Open facade construction

Page 11-13

Closed facade construction

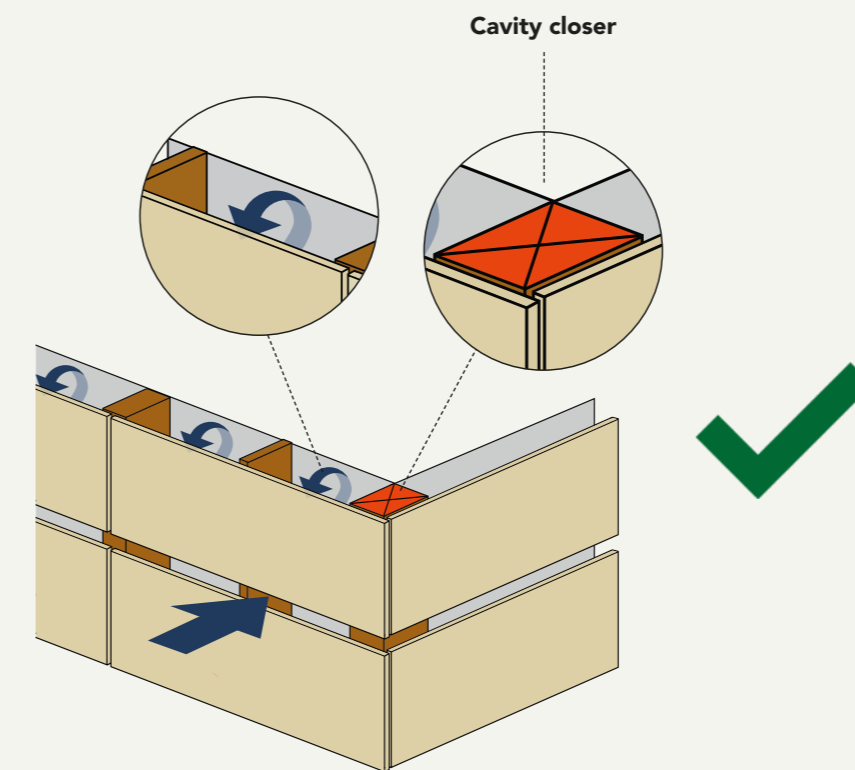
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Open facade construction

An open facade system is applied with open joints. Therefore, there is a possibility of some rainwater entering the cavity behind the panels. Any water that penetrates needs to be guided out of the facade and drain away. Furthermore, it's important to close off air cavities at the corners of the building using cavity closers, helping to prevent any increase in wind load.

Cavity closers need to be correctly applied (1) & (2).

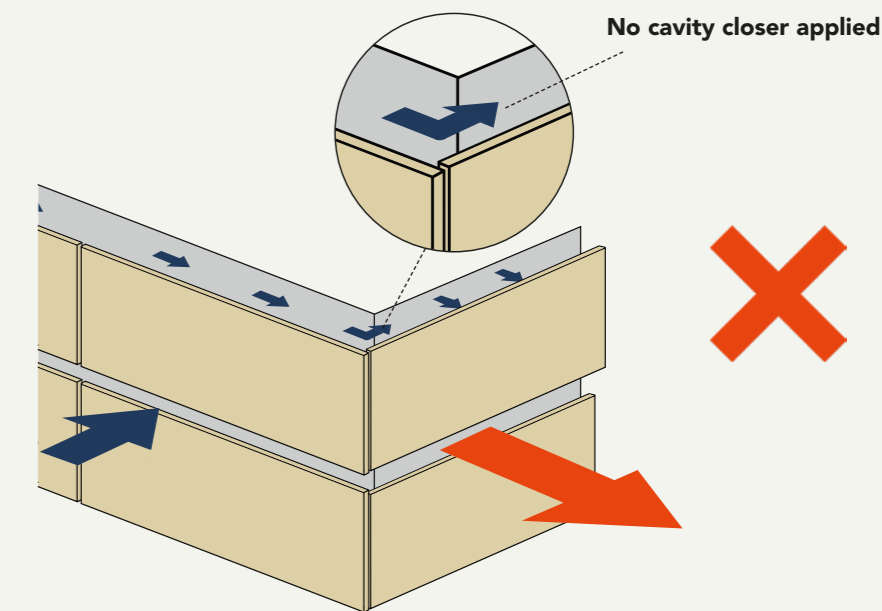


1. Cavity closer correctly applied

Pressure Equalization

To calculate the correct fixing distances with pressure equalization, aimed at reducing wind load and achieving wider fixing distances, application must adhere to be the following preconditions:

- Horizontal open joints of 5-10mm
- Open joints represent $\geq 0,10$ % of the total surface
- Cavity closers should be used to prevent accumulation of wind loads (see also drawing)
- The depth of the ventilation cavity should be at least 40 mm deep (maximum 100 mm)
- UV-resistant breathable membrane (in case of timber sub-construction).



2. Cavity closers missing will lead to wind load issues

Open facade construction - Horizontal joints

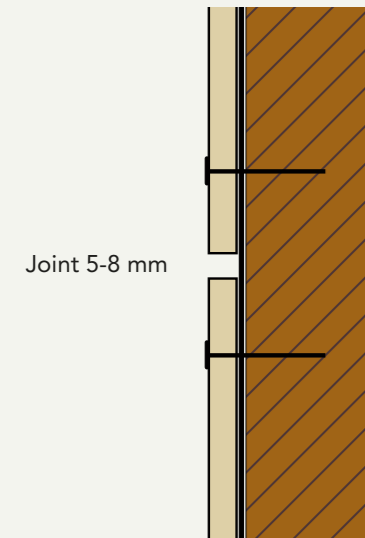
In an open facade, horizontal joints should have a minimum width of 5 mm.

Timber sub-construction (1)

For a timber sub-construction the maximum width can be 8 mm.

In a timber sub-construction with open joints, the structure behind the vertical batten should be protected with a breathable, water-repellent, and UV resistant membrane.

The cavity between the Rockpanel board and the breathable membrane should be minimum 25 mm or greater to accommodate the required thickness of the battens.

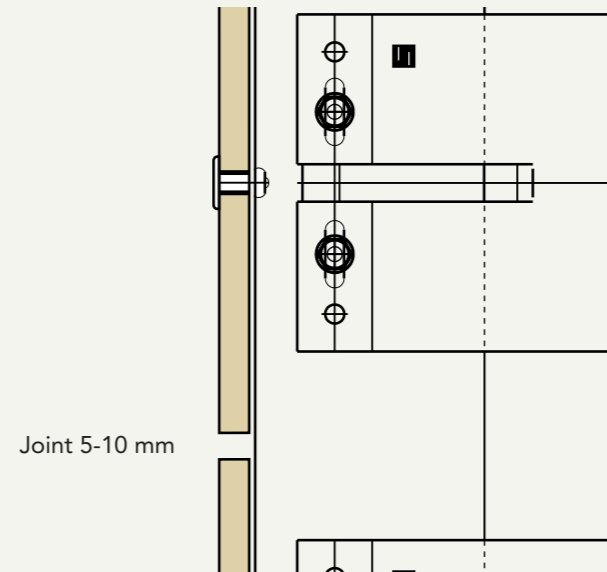


1. Timber sub-construction, open horizontal joint

Metal sub-construction (2)

For a metal sub-construction the maximum width of open horizontal joints can be 10 mm.

The minimum cavity depth is 20 mm, but Rockpanel recommends a cavity depth of 40 - 100 mm, to ensure adequate pressure equalisation and to prevent of excessive rainwater penetration.



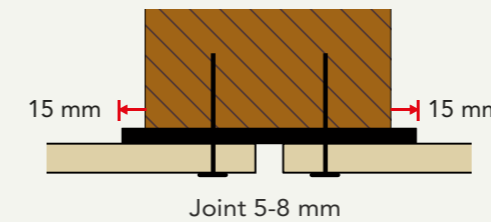
2. Metal sub-construction, open horizontal joint.

Open facade construction - Vertical joints

Vertical joints in this type of construction are closed by the backing of the vertical sub-construction.

Timber sub-construction (3)

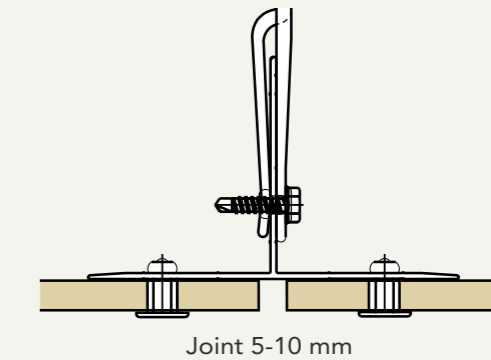
To ensure the durability of a timber sub-construction, the vertical battens require adequate protection against rainwater. This can be achieved by using a UV- and weather-resistant EPDM gasket that extends 15 mm wider on both sides than the framework.



3. Timber sub-construction vertical joint with gasket

Metal sub-construction (4)

The vertical joints of a metal sub-construction are closed with an aluminium or galvanized steel profile, here is no EPDM gasket needed.



4. Metal sub-construction, open vertical joint.

Closed facade construction

In a closed facade system, the supporting structure must be well ventilated. This entails maintaining a cavity of at least 20 mm behind the cladding, with minimum continuous opening of 5 (or equivalent slots) at top and bottom. For timber sub-construction, a cavity of 25 mm is necessary, considering the minimal thickness of the batten.

Timber subconstruction (1 & 2)



1. Timber sub construction with closed horizontal joint

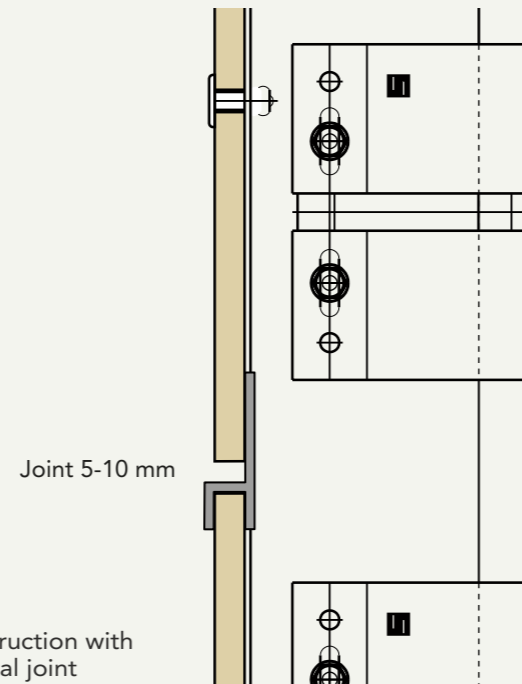
2. Timber sub construction with semi-closed horizontal joint

Horizontal joints

In a closed facade the horizontal joints are closed with a profile, usually a chair shaped profile ((1/3) Rockpanel Profile A) or bird nose shaped ((2) Rockpanel Profile B) - semi-closed.

This ensures that rainwater is effectively drained away on the outer side of the cladding.

Metal subconstruction (3)



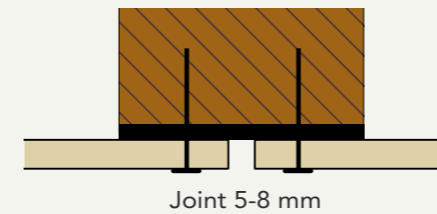
3. Metal sub-construction vertical joint

Closed facade construction - Vertical joints

In this construction type, vertical joints are sealed by the the vertical sub-construction.

Timber sub-construction (4)

To enhance the durability of a timber sub-construction , the vertical battens must be well protected against rainwater. This can be achieved using a UV- and weather-resistant EPDM gasket. In the case of a closed horizontal joint, the gasket does not need to protrude.

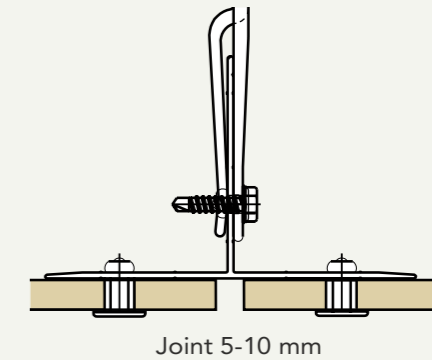


4. Timber sub-construction, vertical joint solution with EPDM gasket.

For further technical support regarding these types of constructions or other alternative applications, please see our website or contact Rockpanel for advice. info@rockpanel.co.uk

Metal sub-construction (5)

The vertical joints of a metal sub-construction are closed with an aluminium or galvanized steel profile, here is no EPDM gasket needed.



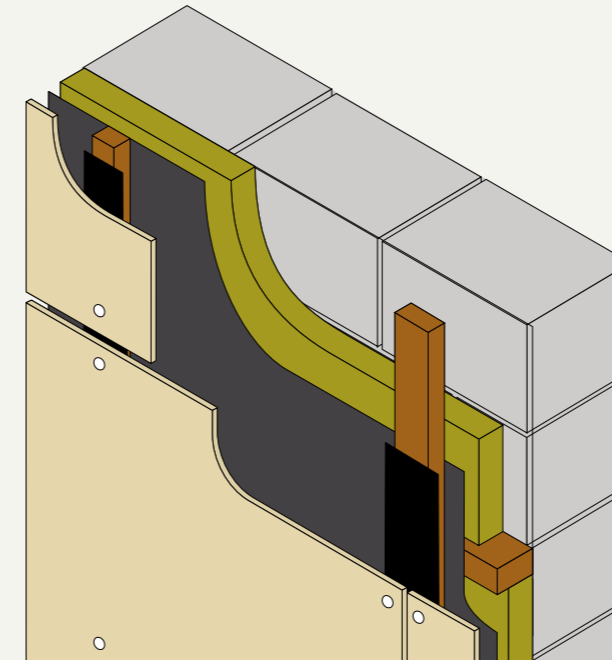
5. Metal sub-construction vertical joint solution



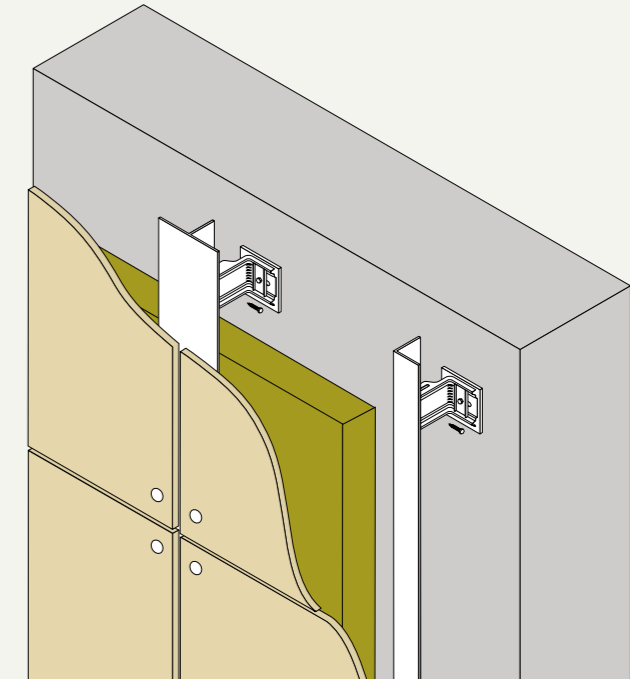
1.2 Specifications for sub-construction

Rockpanel can be applied to sub-constructions made of either timber, aluminium or steel. For detailed information about sub-construction materials, please consult the European Technical Assessment (ETA) of the relevant Rockpanel product and your sub-construction supplier.

Timber



Metal (Aluminium, steel)

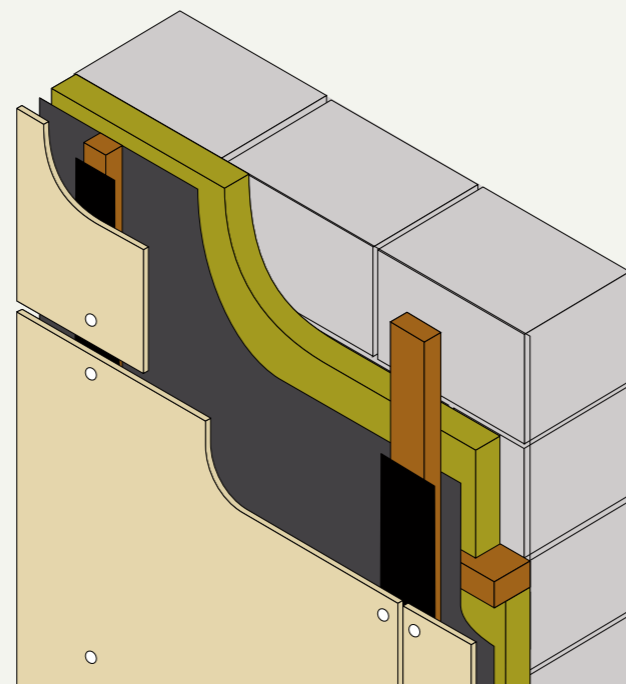


Quality of sub-constructions

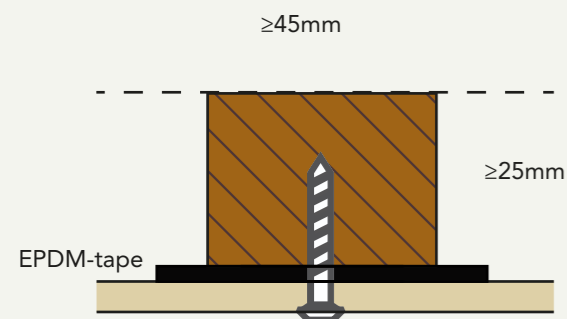
Timber sub-construction (1 & 2)

Timber stud walls and timber battens fixed to inner leaf walls should be constructed in accordance with EN 1995-1-1 for design of timber structures. It is important to use suitable preservative treatments in compliance with EN 335 and local buildings standards and local regulations. Studding and framing must be adequately reinforced by noggings to guarantee rigidity.

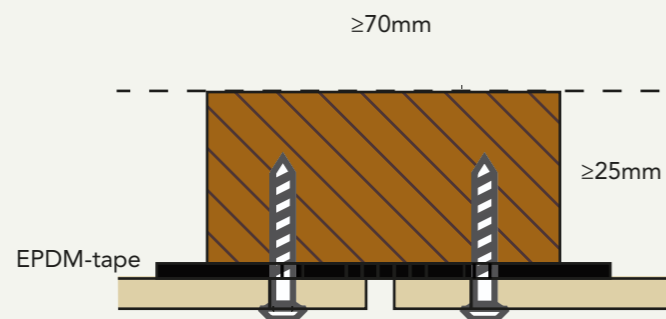
In instances where timber stud walls or battens are treated with cuprous preservatives, it is crucial to allow sufficient time for the preservative to adequately condition before fixing the cladding.



Timber sub-construction



1. Fixing on supporting batten (min. 45x25mm)



2. Fixing on board batten (min. 70x25mm) behind a joint

Aluminium sub-construction

When Rockpanel boards are applied to an aluminium sub-construction, the sub-construction needs to fulfil the following minimum requirements:

- The aluminium alloy is AW-6060 according to BS EN 755-2:
 - Rm/Rp0,2 value is $\geq 170/140$ for profile T6
 - Rm/Rp0,2 value is $\geq 195/150$ for profile T66
- The minimum thickness of the profile is 1.5 mm for rivets and 1.8 mm for screws.

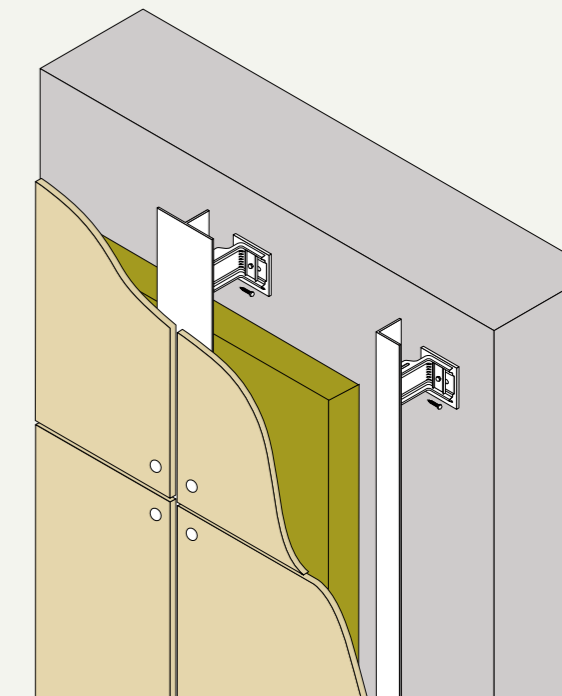
Steel sub-construction

The minimum thickness of the vertical steel profiles is either:

- 1.0 mm (for steel quality according ETA +Z EN 10346 number 1.0250, or equivalent for cold forming) or
- 1.5 mm (for steel quality EN 10025-2:2004 S235JR number 1.0038)

The minimum coating thickness (Z or ZA) is determined by the corrosion rate, which varies based on the corrosion loss in thickness per year, depending on the specific outdoor atmospheric environment. The International Zinc association can be consulted for more information.

The coating designation, which determines the coating mass, should be agreed upon between the contractor and the building owner. Alternatively, a hot-dip galvanized coating according to EN ISO 1461 can be used.



Metal sub-construction (aluminium, steel)

1.3 Joints and jointless applications

The purpose of joints in a ventilated facade construction

Dimensional stability, or resistance to changes in length and width, is determined by a material's tendency to expand as a result of temperature and/or moisture (moisture absorption). The unique composition of Rockpanel means that the boards are virtually immune to dimensional change caused by temperature or relative humidity.

Thanks to the source material basalt, Rockpanel is dimensionally stable. Extreme temperature or humidity fluctuations cause practically no change to the length or width of the panels. Since the coefficient of expansion is even lower than that of concrete, Rockpanel boards undergo hardly any dimensional change.

It is possible to work with narrow joints of 5-6 mm, and in some applications, joint-free assembly is even possible.

- Take into account that boards, installation and building tolerances play an important role in the detailing of joints.
- The joints should be equal to or bigger than 5 mm, to ensure proper drainage.
- In wooden sub-constructions apply weather- and UV-resistant EPDM gasket on the battens behind the joints to protect the sub-construction against weather influences.

Low expansion, thinner joints

Due to the low expansion abilities of Rockpanel thinner joints are possible compared to alternative materials.

This allows to realize facades with a more closed, harmonic appearance. With Rockpanel the minimum joint width starts from 5mm, for other materials joints below 10mm are not applicable due to the risk of damages due to expansion.



1. Rockpanel: High dimensional stability allows narrow joints between boards.



2. HPL and fibre cement boards: Joints need to be at least 10 mm wide.

Jointless installations

Rockpanel board material retains its shape as it is able to withstand moisture and changes in temperature. This allows it to be used seamlessly under certain conditions:

- Only for the use around the roofline, such as to finish guttering, for fascias and barge boards.
- Up to a maximum length of 12 metres
- Only when a timber subframe is used with vertical battens to prevent the subframe from warping
- The timber subframe has to be protected by using EPDM foam gaskets for all joints on the subframe
- Expansion joints are used throughout the Rockpanel construction. If there are expansion joints in the structure, the façade panels must also have expansion joints
- Only applicable with light colours



For further technical support regarding these types of constructions or other alternative applications, please see our website or contact Rockpanel for advice.
Info@rockpanel.co.uk



2 Working with Rockpanel

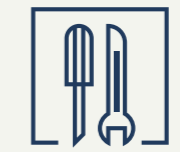
Your building concept lays the foundation

Beyond just colour and material, the facade design defines your building's identity, impacts its surroundings and follows function. With Rockpanel, you are in control – enjoy maximum design freedom at a lower cost.



Rockpanel offers flexibility

Should a specific panel format suit your facade design, we make it – customised to your needs. Thanks to the innovative production process, Rockpanel is available in all lengths between 1700 and 3050 mm. You decide which lengths are best for your particular design.



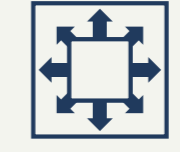
Working with standard tools

Rockpanel offers the robustness of stone but can be handled effortlessly. With quick and easy cutting, finishing and detailing, our boards can be prepared on site, saving you time and money during installation. Conventional tools such as high-quality hand saws, circular saws or jigsaws are all suitable.



The facade fits into your vision and budget

Rockpanel is quick and easy to install. Due to its unique format, it is virtually waste-free and highly cost-effective. You will always find the solution that is exactly right for your building. Because it simply fits – into your design, your schedule and your budget.



Non-directional

Most Rockpanel facade panels are nondirectional, ensuring a consistent appearance regardless of how they are installed. This guarantees more efficient and swifter installation since fitting is simplified and waste is reduced. Therefore during processing there is no marking of installation direction required. This applies to all Rockpanel Colours, as well as Rockpanel Metals Elemental Grey Aluminium and White Aluminium. All other Metals, Woods, Chameleon and Stones designs are considered to be directional. Colour deviations may become visible on the surface if panel directionality is not observed. To ensure proper orientation, observe the direction of the text on the protective film on the front side of the panels.



Easy does it

Ensuring safe, efficient and fast handling of building materials is paramount in facade cladding. Rockpanel offers the durability of stone and is as easy to work with as wood. They are lightweight and can be machined quickly and easily. This saves installation time and makes your building more economical, without compromising on design, and functionality.



Shine with detailed solutions

Rockpanel boards enables swift and effortless implementation of any design and solution. They can be quickly and easily applied with screws, rivets, nails and concealed fixing. Simply cut the facade panels to size and secure them in place.



2.1 Sawing

Standard tools can be used for sawing Rockpanel or creating penetrations and cut-outs in the material. Generally, it is recommended to saw the boards with the decorative side facing upwards and with the protective film still in place. However when using a hand-held circular saw, it is advised to have the decorative side facing downwards. It is recommended to test different tooling to achieve the desired result. Experiment with machine settings and blades on a sample of Rockpanel before sawing larger amounts of boards. Different coatings will behave differently as to sawing with different tools. Additionally, sawing multiple layers at once might affect the quality of the cut.

Always ensure there is a clean workplace with a horizontal, flat and stable surface supporting the board.

Suitable equipment



- Hand saw, e.g. a hard point saw
- Fretsaw, e.g. a fine-toothed saw blade for metal or a saw blade with tungsten coating
- Circular saw, e.g. a fine-toothed Widia/Tungsten Carbide saw blade, for example a blade with 48 teeth and a diameter of 300 mm. Or a diamond blade for best results.
- CNC-machines
- Mitre saw for special edge solutions

Indoor sawing

Use dust-reducing sawing equipment in combination with an extraction hood in a well-ventilated room.

Outdoor sawing

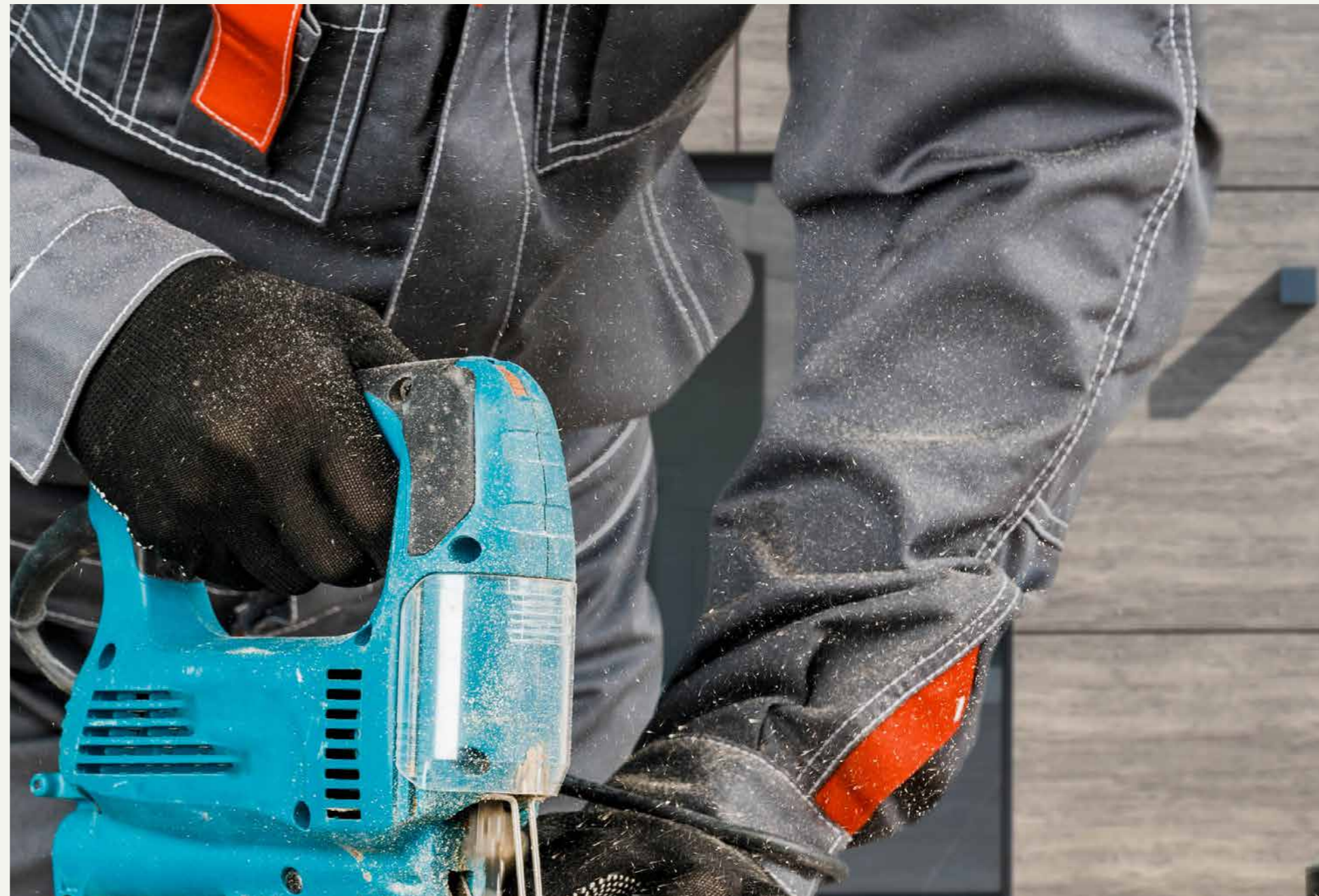
Position the saw installation so that the wind blows away any dust from the sawing. Use dust-reducing sawing equipment if possible. Always immediately clean the dust after sawing and drilling.

Safety guidelines

- Use a dust mask (type FFP1)
- Use standard safety spectacles to protect the eyes from dust
- Wear gloves during sawing
- Always check special safety guidelines related to the tools you are using as well as the environment of your construction site

Rockpanel safe use instruction sheet can be provided on request

We like to support your design. In case you need an optimized cutting plan for your project, please contact Rockpanel for an advice. info@rockpanel.co.uk



2.2 Edge solutions and profiles

Corners and edges as design elements

Joints and corners give the facade design a definite emphasis and are a clear, formal statement – for a special material. With Rockpanel, there is no necessity to treat the edges to protect them from moisture. Consider corner solutions for a more aesthetic appeal, adding depth and unique flair to your design. Maintain creative freedom in your facade design – right down to the smallest details. Enhance the edges with profiles in the panel colour or finish the edges with matching colour paint, further enhancing the overall look.

Untreated edge (1)

With Rockpanel, there is no need to protect edges from moisture. Left unfinished, the edges will naturally age within several weeks to a natural dark brown hue due to outdoor exposure.

Chamfering them is simple; you can use fine-grade sandpaper or the reverse (non-decorative) side of a leftover Rockpanel strip to lightly sand the edge.

Painted edge (2)

If required for aesthetic reasons edges can be painted in the corresponding RAL/NCS colour with Rockpanel edge paint. Please refer to the instructions delivered with the edge paint or on our website.

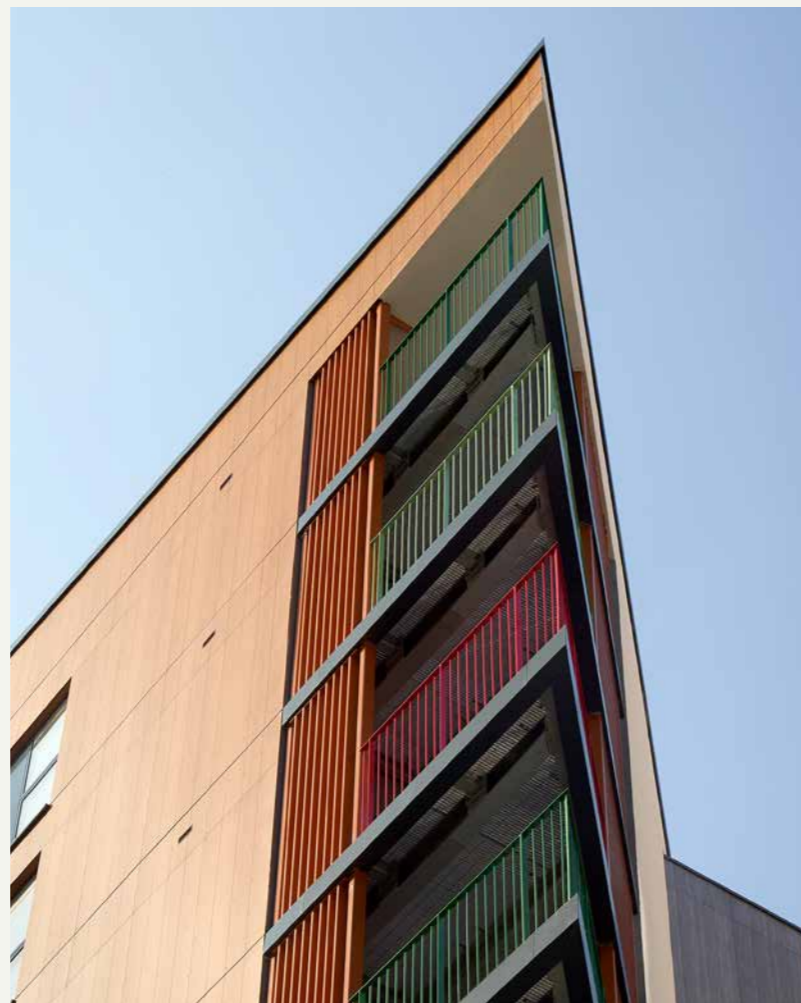
Mitre joint (3)

For the highly skilled installer, a mitre joint can be achieved with Rockpanel, thereby creating a precise and uniform finish. Important: the minimum panel thickness for this solution is 8 mm.

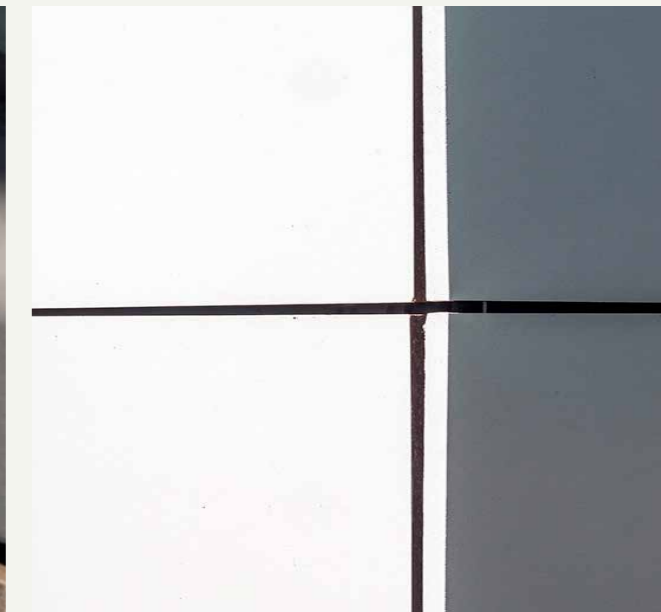
Aesthetical profile (4)

Trims and profiles made of high-quality aluminium are available in nearly all RAL/NCS colours to suit your design. Depending on the product and fixing method, you can choose joint, corner and connecting profiles.

Profiles available from Rockpanel see page 86.



1. Untreated edge



2. Painted edge



3. Mitre edge



4. Aesthetical profiles

2.3 Fixing technology

2.3.1 Types of fixings

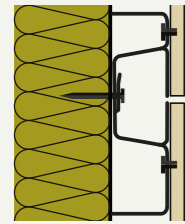
Rockpanel can be mounted in various ways including, screws, rivets and invisible fixing. You are free to choose. These can be matched to help blend with the facade colour or deliberately contrast it. Invisible fixing is also an option: with our adhesive system as specified in our certification. Lastly, our concealed fixing system enables you to easily create a flawless facade with invisible mechanical fixing.

Always ensure with the fixings supplier the suitability of their fixings to meet the technical requirements of Rockpanel as documented in the Declaration of Performance (DoP). Please check that fixings are suitable for the design and its associated performance requirements. It is further recommended to use only coloured fixings with a durable finish. Working with fixings from other manufacturers should be carried out according to their recommendations and supervision.

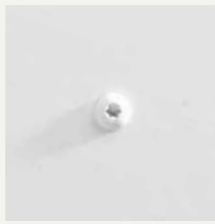
Screw fixed to timber



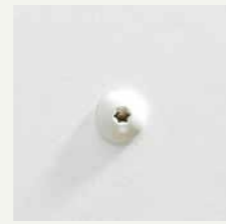
PlankClip on timber (with insulation)



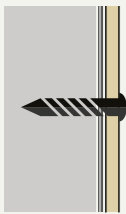
Rockpanel screw - small head



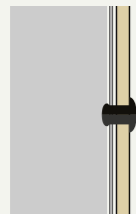
Standard screw head used with other cladding materials



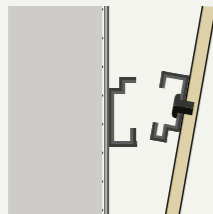
Screw fixed to metal



Rivet fixed to metal



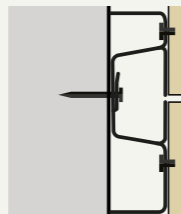
Concealed fixing



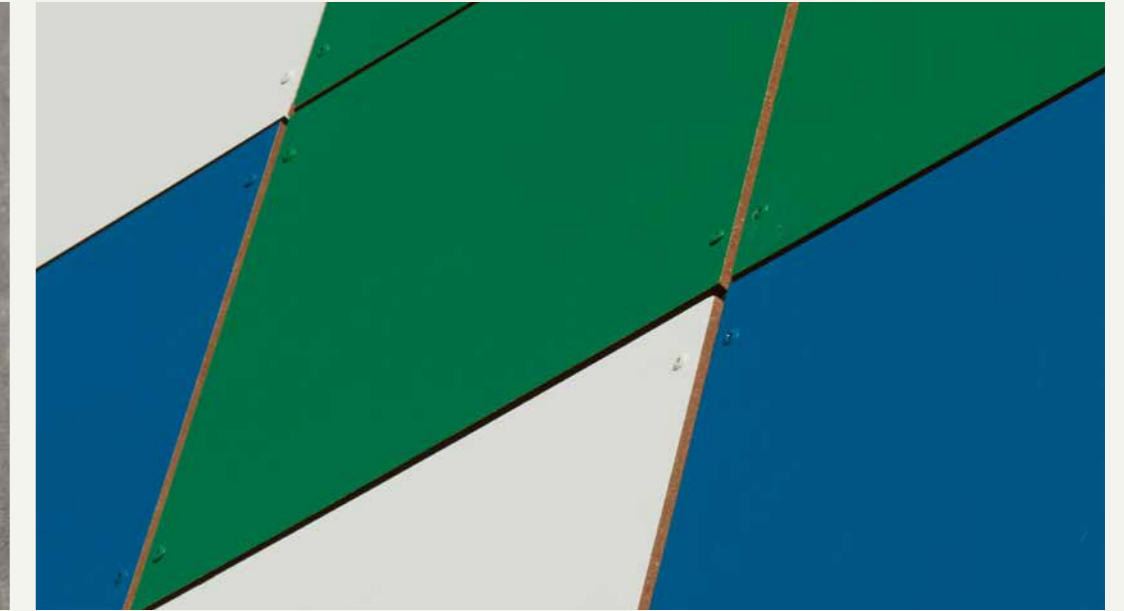
Adhesive system on Aluminium



PlankClip on aluminium



Nails with matching colour



Screws with matching colour



Concealed fixing - not visible from the outside



Rivets in matching colour

2.3.2 Drilling

Pre-drilling of Rockpanel (when applied on timber sub-construction) is recommended by ETA. Holes for screws and nails should be pre-drilled with an HSS-steel drill.

Diameter of the holes for fixed points, moving points and slotted holes needs to be according ETA.

Pre-drilling of Rockpanel (when applied on metal sub-construction) is always required. With rivets, fixed anchorages are advised to be drilled at Ø 5.2 mm and a moving point with Ø 8 mm. Pre-drilling can be done with a HSS-steel drill.

Rockpanel screws, nails and rivets are available perfectly fitting to the board designs



Mechanical fasteners, gaskets, adhesives with primers, strips for bonding, and sub-construction profiles are specified by the ETA-holder. For more information please refer to the Product Data Sheet or consult the appropriate ETA, available on our website www.rockpanel.co.uk

Drill hole diameter (mm) according to ETA					
Type of fastener	Rockpanel A2 8 mm			Rockpanel A2 11 mm	
Fastener	Rivet	Screws for aluminium (a)	Screws for steel	Screws for timber	Rivet
Fixed point	5,1	5,8	4,3	3,2	5,1
Moving point	8,0	10,0 (b)	8,0	6,0	8,0
Slotted hole	2,8 x 8,0	3,4 x 6,0	4,3 x 8,0	3,4 x 6,0	5,1 x 8,0

2.3.3 Fixing on timber sub-constructions

Mechanical fixing to timber can be carried out with nails or screws. For a perfect match to the board material, the nail and screw heads can be provided with matching colours.



Screws for timber sub-construction

Rockpanel Torx screws - 4.5 x 35 mm.
stainless steel material number 1.4401 or 1.4578.
Screw Ø 9.6 mm (head diameter)

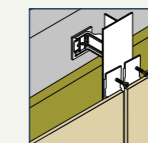


Adhesive fixing for timber sub-construction

Rockpanel is suitable for bonded application, there is over 25 years good experience with the bonding of Rockpanel Durable onto aluminium and also onto timber sub-constructions (with intermediate Rockpanel strip); the certification can be found in ETA07/0141.

For the latest information about the extension of this certification to the Rockpanel A2 8 mm board, in accordance with the applicable European Assessment Document, please visit the Rockpanel website and check the applicable ETA.

If you wish to use an alternative bonding system, always verify with the system supplier whether this is technically approved and guaranteed for bonding Rockpanel boards. If using another bonding system, the bonding supplier is responsible for certification and guarantee. The quality of the bonded installation is partly determined by the weather conditions during application. For more information, refer to the bonding supplier.

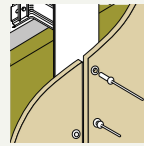


PlankClip on timber sub-construction

The concealed, mechanical fixing system for horizontal or vertical planks / lamellas offers you exceptional design freedom thanks to a wide range of offset options on the façade. With narrow joints of 6 mm, you can create a modern appearance that meets the highest aesthetic demands. The system allows the installation of 9 mm thick panels in heights from 100 mm to 300 mm, whereby different panel-lengths can be combined to create a visually appealing laying pattern. The PlankClip is suitable for both timber and aluminium subconstructions, resulting in an A2-s1,d0 end-use fire class rating.

The fixing system is available as a kit, consisting of RCLIP (h 100 mm x d 40 mm x w 36 mm), RCLIP-SHORT (h 60 mm x d 42 mm x w 36 mm), TU-S anchor (6x9 mm) and SDAW fastener (4.5 x 34 mm).

2.3.4 Fixing on aluminium sub-constructions



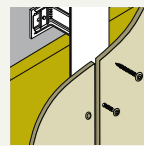
Rivets for aluminium sub-construction

For mounting on an aluminium load-bearing sections the following aluminium rivets should be used: For Rockpanel A2 8 mm, please use SFS AP14-50180-S or MBE FN-AL5-5x18 K14. For Rockpanel Premium A2 11 mm, please use SFS AP14-50210-S or MBE FN-AL5-5x21 K14 Aluminium rivets, according to ETA.

With the following specifications:

- Head of the rivet: Ø 14 mm flat-topped
- Body of the rivet aluminium EN AW-5019 (AIMg5) in accordance with EN 755-2
- Mandrel stainless steel material number 1.4541 in accordance with EN 3506-1

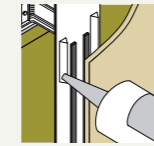
For correct fixing, a riveting tool with rivet spacer and centre tool must be used. When installing Rockpanel boards on aluminium load-bearing sections, fixed points, slotted holes and moving points should be applied.



Screws for aluminium sub-construction

For the installation of Rockpanel A2 8 mm on aluminium load-bearing sections, aluminium self-drilling centre screws must be used: SFS screw code: SDA4-D15-CS10/8-5.8x29-A4. Center screw with centering sleeve.

Screw head: 15 mm flat-topped. Body of screw: Stainless steel A4 in accordance with EN ISO 3506

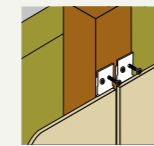


Adhesive fixing on aluminium sub-construction

Rockpanel is suitable for bonded application, there is over 25 years good experience with the bonding of Rockpanel Durable onto aluminum and also onto timber sub-constructions (with intermediate Rockpanel strip); the certification can be found in ETA07/0141. For the latest information about the extension of this certification to the Rockpanel A2 8 mm

board, in accordance with the applicable European Assessment Document, please visit the Rockpanel website and check the applicable ETA.

If you wish to use an alternative bonding system, always verify with the system supplier whether this is technically approved and guaranteed for bonding Rockpanel boards. If using another bonding system, the bonding supplier is responsible for certification and guarantee. The quality of the bonded installation is partly determined by the weather conditions during application. For more information, refer to the bonding supplier.

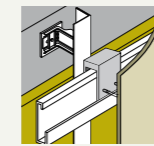


PlankClip for aluminium sub-construction

The concealed, mechanical fixing system for horizontal or vertical planks / lamellas offers you exceptional design freedom thanks to a wide range of offset options on the façade. With narrow joints of 6 mm, you can create a modern appearance that meets the highest aesthetic demands. The system allows the installation of 9 mm thick panels in heights from 100 mm to 300

mm, whereby different panel-lengths can be combined to create a visually appealing laying pattern. The PlankClip is suitable for both timber and aluminium subconstructions, resulting in an A2-s1,d0 end-use fire class rating.

The fixing system is available as a kit, consisting of RCLIP (h 100 mm x d 40 mm x w 36 mm), RCLIP-SHORT (h 60 mm x d 42 mm x w 36 mm), TU-S anchor (6x9 mm) and SDAW fastener (4.5 x 34 mm).



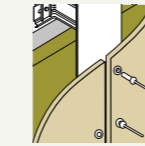
Concealed fixing on aluminium sub-construction

For mounting of Rockpanel Premium with invisible concealed fixing on aluminium load-bearing sections TU-S 6x13 blind fastener is used for the secret fixing clip in thickness of 5 mm or TU-S-6x11 blind fastener for fixing clip in thickness of 3 mm. The Body of the blind fastener is made of stainless steel material number 1.4401 in accordance with EN 10088,

with electro-galvanised carbon steel mandrel.

See ETA or contact Rockpanel for more information.

2.3.5 Mechanical fixing on steel sub-constructions



Rivets for steel sub-construction

For mounting Rockpanel on steel load-bearing sections the following stainless steel rivets should be used; Rockpanel A2 8 mm boards, SSO-D15 50180 or MBE FN-A4-5x18 K15. For Rockpanel Premium A2 11 mm, please use SSO-D15 50210 or MBE FN-A4-5x21K15. Stainless steel rivets should be used according to ETA.

With the following specifications:

- Head of the rivet: Ø 15 mm flat-topped
- Body of the rivet stainless steel material number 1.4578 in accordance with EN 10088
- Mandrel stainless steel material number 1.4541 in accordance with EN 3506-1

For correct fixing, a riveting tool with rivet spacer and centre tool must be used. When installing Rockpanel boards on steel loadbearing sections, fixed points, slotted holes and moving points should be applied.



Screws for steel sub-construction

For the mounting of Rockpanel A2 8 mm on steel load-bearing sections, steel EJOT screws JT6-FR-3-5,5x35 and JT6-FR-3-5,5x25 can be used.



2.4 Fixing guidelines

2.4.1 Tension free fixing

Cladding boards must be mounted without tension. Regardless of the type of the sub-construction, fixings should be applied according to good building practices, avoiding overtightening. If tension occurs for instance due to differences in elongation between a sub-construction and the cladding boards, fixed points, slotted holes, and moving points must be applied. Fixed point, slotted hole and moving points can be applied in several ways.

Principle

Each panel, regardless of size, will have either two fixed points or one fixed point combined with one or two slotted points. These fixed points and slotted points support the weight of the panel and ensure it remains securely in position. All others will be moving points.

Key fixing possibilities:

MP = Moving point, Ø according to ETA

FP = Fixed point or fixed point created by sleeve, Ø according to ETA,

SP = Slotted point or slotted point created by sleeve, dimensions according to ETA.

Correct application of the slotted point and moving point:

- Preventing clamping of the fastener: To avoid clamping of the fastener caused by over-tight rivets, it is needed to use a rivet spacer. The rivet spacer ensures a 0,3 mm distance between the head of the rivet and the surface of the Rockpanel board, allowing the rivet to move freely in the moving points.
- Ensuring fastener movement: Fasteners located in slotted holes or moving points must be able to move. Position the fastener exactly in the middle of the slotted hole or moving point. To ensure the fastener is exactly in the middle, a centre tool or centre drill should be used.
- Arranging fixed points: Whenever possible, fixed points should be placed in the centre of the facade panel, ideally symmetrically and always close to a horizontal centre line of the board.

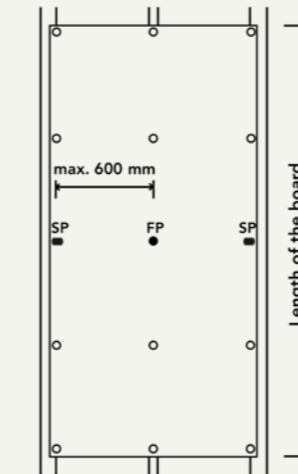
Helpful tips for a simple and speedy installation

You can drill holes directly into the board for fixed points, moving points, and slotted points. For slotted holes, you can create them using a router. Alternatively, you can drill all the holes as moving points, after which a sleeve can be used to narrow the hole to create the fixed points or slotted points. Different sleeves are available for fixed points and slotted points. In the event of using sleeves it should be considered that the maximum distance between a fixed point and a side sleeve (sleeve used in the slotted point) is limited to 600 mm. For correct application of the sleeves a proper positioning tool should be used

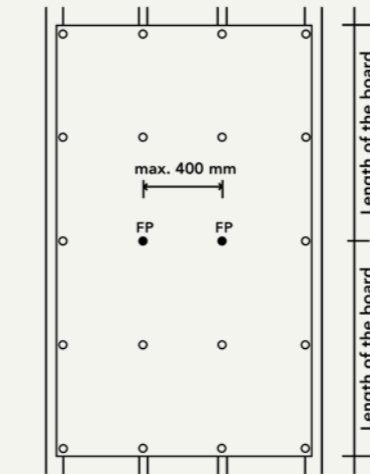
Examples for a correct vertical or horizontal orientated application.

Examples for vertically orientated boards ≥ 8 mm:

1. Combination fixed point and slotted points

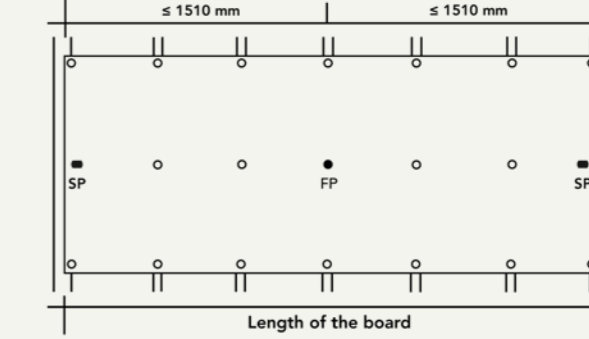


2. Combination of 2 fixed points

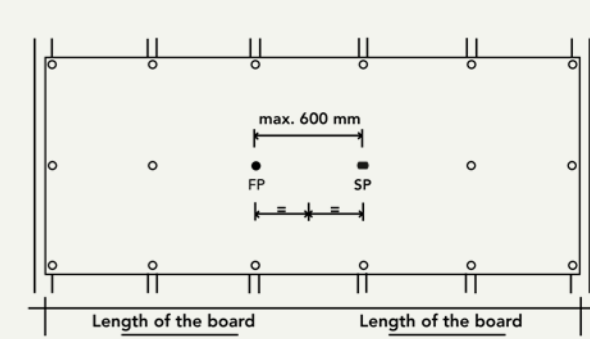


Examples for horizontally orientated boards ≥ 8 mm:

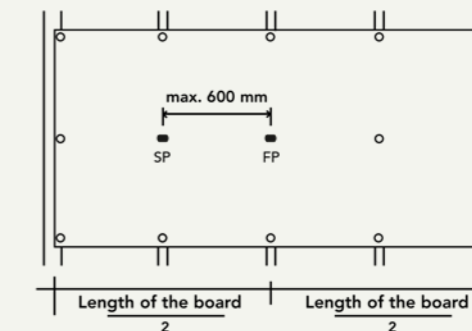
3. Combination fixed point and slotted points in a symmetric way



4. Combination fixed points and slotted point in a symmetric way



5. Combination of fixed and slotted point in an asymmetric way



MP = Moving point, Ø according ETA



FP = Fixed point or fixed point created by sleeve, Ø according ETA



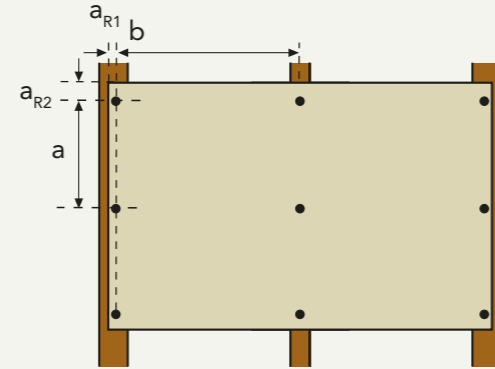
SP = Slotted point or slotted point created by sleeve, Ø according ETA

2.4.2 Guidelines and fixing distances

In this section the mounting guidelines and maximum fixing distances are indicated for facade panels A2 8mm on timber support structures and for facade elements on aluminium support structures on the basis of boundary conditions, data and material properties.

Maximum fixing distances between fastening points according to ETA: The table below shows the maximum fixing distances at a vertical timber sub-construction or aluminium sub-construction in accordance with

- ETA-24/0910: Rockpanel Colours, Nordic, and ProtectPlus A2 8mm
- ETA-18/0833: Rockpanel Premium A2 11 mm



Edge distance a_{R1} For A2 8mm
 Timber: ≥ 15 mm
 Metal: ≥ 20 mm

Edge distances a_{R2} ≥ 50 mm

For all medium and high rise buildings, we recommend the use of our A2 grade boards (A2-s1,d0). Project specific calculations are available on request.

Maximum fixing distances acc ETA A2 8 mm				
Rockpanel board	Sub-construction	Fastener	Maximum span (b)	Maximum vertical distance between fasteners (a)
Premium A2 11 mm	Metal	Rivets	750 mm	750 mm
	Metal	MSF Clips	750 mm	600 mm
	Wood/steel/aluminium	Screw	600 mm	600 mm
	Steel/Aluminium	Rivet	600 mm	600 mm
	Wood/Aluminium	Adhesive system	600 mm	Continuous application of adhesive

Ceiling applications

If applying Rockpanel for a ceiling application, the specific weight of the board must be taken into account in the calculation of the fixing distances. As a general guideline, you can multiply the fixing distances by 0.75.



2.4.3 Determining the fixing distances

The following steps should be followed to determine the fixing distances:

Determine the design wind load

- 1. Define wind zone (Step 1)**
Find the place where the project is located on the country map and note the relevant wind speed zone
- 2. Define terrain category (Step 2)**
Find the relevant terrain type in the overview of various terrain categories
- 3. Define area on the façade: (Step 3)**
Define the area on the façade, Zone A or B. Zone A is decisive for keeping the fixing distances the same over the entire façade.

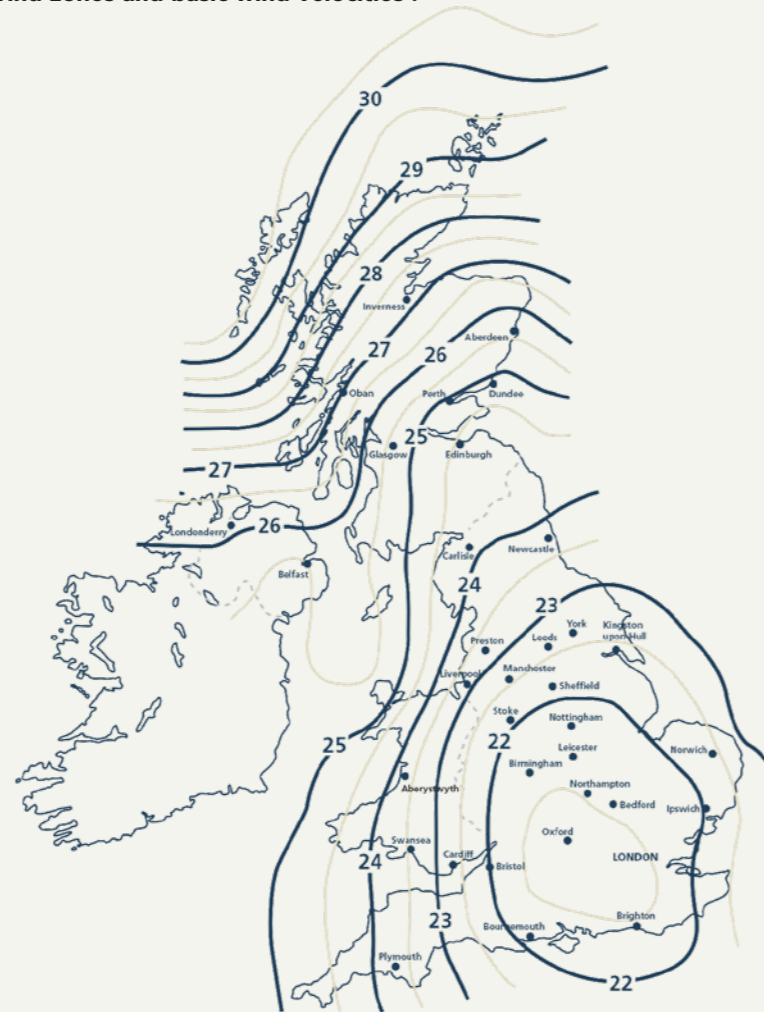
- Zone A for corner area
- Zone B for middle area

Consider the rules in standard EN 1991-1-4). If unknown or facades are very small use zone A as normative value.

4. Look up the design wind load in kN/m² in the table (Step 4)

For further technical support regarding calculations, please contact Rockpanel for advice
info@rockpanel.co.uk

Step 1. Wind zones and basic wind velocities :



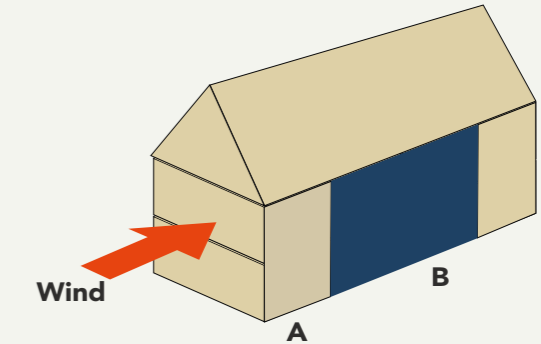
This map is an indication of the fundamental basic wind velocity according to BS-EN 1991-1-4. If you are unsure which zone the building is located please contact Rockpanel.

Step 2. Define terrain category

Terrain category (countryside)
Specified by the distance upwind to shoreline (km).

Terrain category (town)
Town located 10-100 km upwind to shoreline. Specified by the distance of the building into town (km).

Step 3. Define area on the facade



Step 4. Look-up the wind load

Value of fundamental basic wind velocity $v_{b,map}$ (m/s)														
United Kingdom		1) Wind Zone		28		26		25		23		22		
		3) Facade area		A	B	A	B	A	B	A	B	A	B	
2) Terrain category														
Terrain Category - Countryside	Distance upwind to shoreline	≤0.1 to 1 km	-2.64	-1.76	-2.28	-1.52	-2.11	-1.41	-1.78	-1.19	-1.63	-1.09		
		1 to 10 km	-2.57	-1.71	-2.22	-1.48	-2.05	-1.37	-1.73	-1.16	-1.59	-1.06		
		10 to 100 km	-2.33	-1.55	-2.01	-1.34	-1.85	-1.24	-1.57	-1.05	-1.44	-0.96		
		≥100 km	-2.18	-1.46	-1.88	-1.26	-1.74	-1.16	-1.47	-0.98	-1.35	-0.90		
Terrain Category - Town located 10-100 km upwind to shoreline	Distance into town (km)	≤0.4 km	-2.33	-1.55	-2.01	-1.34	-1.85	-1.24	-1.57	-1.05	-1.44	-0.96		
		0.4 to 1 km	-2.31	-1.54	-1.99	-1.33	-1.84	-1.23	-1.56	-1.04	-1.43	-0.95		
		1 to 5 km	-2.14	-1.43	-1.84	-1.23	-1.71	-1.14	-1.44	-0.96	-1.32	-0.88		
		≥5 km	-1.92	-1.28	-1.66	-1.11	-1.53	-1.02	-1.30	-0.87	-1.19	-0.79		

Note: Building height ≤ 10 m / Site altitude ≤ 50 m

All information in this calculation is protected by copyright. This calculation does not constitute a static verification and is purely intended as orientation. The greatest possible care has been taken in determining the calculation method and the calculation. However, ROCKWOOL B.V / Rockpanel cannot warrant the completeness and accuracy of the information stated, the performance of its products, the calculation and/or any advice based on this. All calculations and statements relating to performance are approximations and will not bind ROCKWOOL B.V / Rockpanel. Customers are recommended to have our calculation and/or technical advice on their specific projects confirmed by the involved architects, specialist engineers, designers and/or contractors. For high-rise buildings and high-risk buildings Rockpanel recommends the application of non-combustible (Euroclass A1-A2-s1, d0) cladding and insulation.

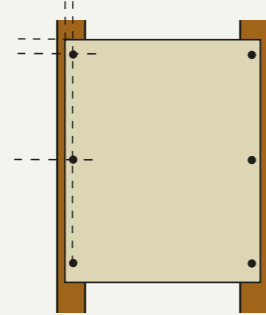
Step 5. Choose the correct table by:

- Type of board and thickness e.g., Rockpanel A2 8 mm
- Load absorption due to static scheme with 1 or 2- or more field span (5)
- Type of fastening system (e.g.)
- Timber with screws
- Aluminium with rivets

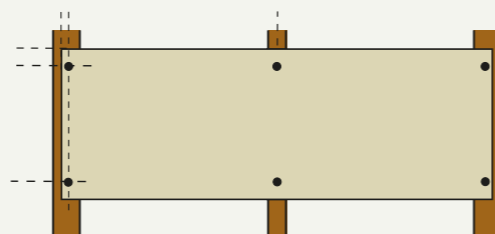
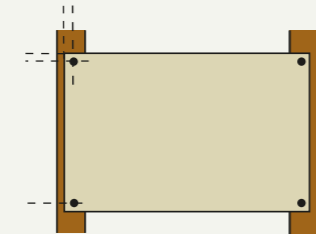
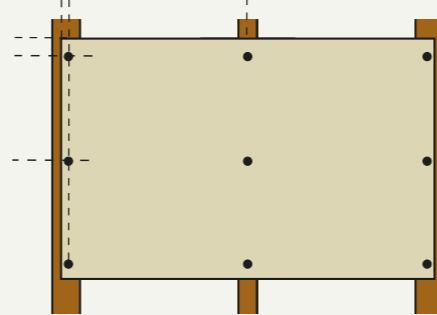
Step 6. Look up the max vertical distance possible and preferred span

- Use the wind load calculated in step 4
- Look up the centre-to-centre distance between the vertical sub construction (timber battens or metal profiles)
- Define the maximum fixing distance between the fasteners within the table

1-field-span



2- or more field-span



Step 5. Static schemes

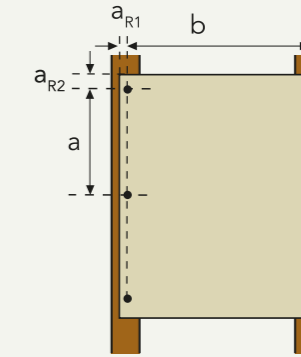
Example 1

Calculation of fixing distances

Coated Rockpanel A2 boards, 8 mm thickness

1-field span

- ETA-24/0910
- Cavity closers (on the corners of the building) applied
- Maximum deflection of the panels 0.75 %
- Thickness gasket max. 0.5 mm
- Sub-construction: see table
- If the table shows no fixing distance (-) or building height > 10 m, please contact Rockpanel for the possibilities and specific advice.



Fasteners: Screws on timber

Maximum fixing distance (mm) screws a_M for different centre-to-centre distances (b) of the vertical substructure ($k_{mod} : 1.00$)

Wood quality: \geq C18, utilisation class 2 according to EN 1995-1-1

b (mm)	Design wind load on Rockpanel board ($F_d = F_{rep} * \mu_f$) in kN/m ²												A2 8 mm				
	-0.80	-0.90	-1.00	-1.10	-1.20	1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	2.00	-2.10	2.20	-2.30	
600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500	600	600	600	600	-	-	-	-	-	-	-	-	-	-	-	-	-
400	600	600	600	600	600	600	600	600	600	600	600	565	540	515	490	465	445
300	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	575

Fasteners: Rivets on aluminium

Maximum fixing distance (mm) rivets a_M for different centre-to-centre distances (b) of the vertical substructure

Aluminium sub-construction according to ETA

b (mm)	Design wind load on Rockpanel board ($F_d = F_{rep} * \mu_f$) in kN/m ²												A2 8 mm				
	-0.80	-0.90	-1.00	-1.10	-1.20	1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	2.00	-2.10	2.20	-2.30	
600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500	600	600	600	600	-	-	-	-	-	-	-	-	-	-	-	-	-
400	600	600	600	600	600	600	600	600	600	600	600	600	590	565	540	515	
300	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600

Legend:

b Distance of the vertical sub construction carriers

a_{R1} Wood \geq 15mm
- Metal \geq 20mm

a_{R2} Edge distance top/
bottom \geq 50 mm

a_R Vertical distance between fasteners in the edge zone

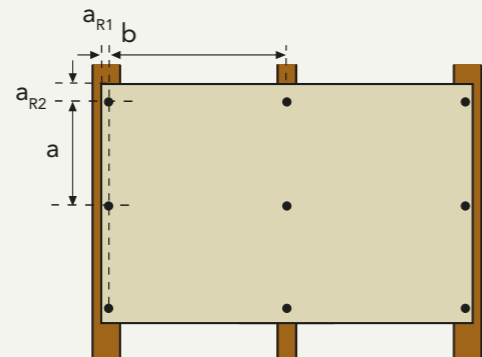
a_m Vertical distance between fasteners in the board

k_{mod} Modification coefficient for load duration and moisture content

Example 2

Calculation of fixing distances
Coated Rockpanel A2 boards, 8 mm thickness
2-field span

- ETA-24/0910
- Cavity closers (on the corners of the building) applied
- Maximum deflection of the panels 0.75 %
- Thickness gasket max. 0.5 mm
- Sub-construction: see table



Fasteners: screws on timber

Maximum fixing distance (mm) screws a_M for different centre to centre. distances (b) of the vertical sub-construction

Wood quality: \geq C18, utilisation class 2 according to EN 1995-1-1

b (mm)	Design wind load on Rockpanel board ($F_d = F_{rep} * \mu_F$) in kN/m ²												A2 8 mm			
	-0.80	-0.90	-1.00	-1.10	-1.20	1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	2.00	-2.10	2.20	-2.30
600	585	515	465	425	390	360	340	315	295	-	-	-	-	-	-	-
500	600	600	560	510	465	430	405	375	355	335	315	300	285	275	260	250
400	600	600	600	600	580	540	500	465	440	415	390	370	355	335	325	310
300	600	600	600	600	600	600	600	600	585	550	520	495	470	445	425	410

Fasteners: rivets on aluminium

Maximum fixing distance (mm) a_M for different centre-to-centre distances (b) of the vertical substructure

Aluminium sub-construction according to ETA

b (mm)	Velocity pressure on Rockpanel A2 8 mm ($F_d = F_{rep} * \mu_F$) in kN/m ²												A2 8 mm			
	-0.80	-0.90	-1.00	-1.10	-1.20	1.30	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	2.00	-2.10	2.20	-2.30
600	600	575	520	475	435	400	375	350	330	-	-	-	-	-	-	-
500	600	600	600	565	510	480	445	415	390	370	350	330	315	300	290	275
400	600	600	600	600	600	595	555	520	485	460	435	410	390	375	355	345
300	600	600	600	600	600	600	600	600	600	600	575	545	520	495	475	450

Legend:

b Distance of the vertical sub construction carriers

a_{R1} Wood \geq 15mm
 - Metal \geq 20mm

a_{R2} Edge distance top/
 bottom \geq 50 mm

a_R Vertical distance between fasteners in the edge zone

a_M Vertical distance between fasteners in the board

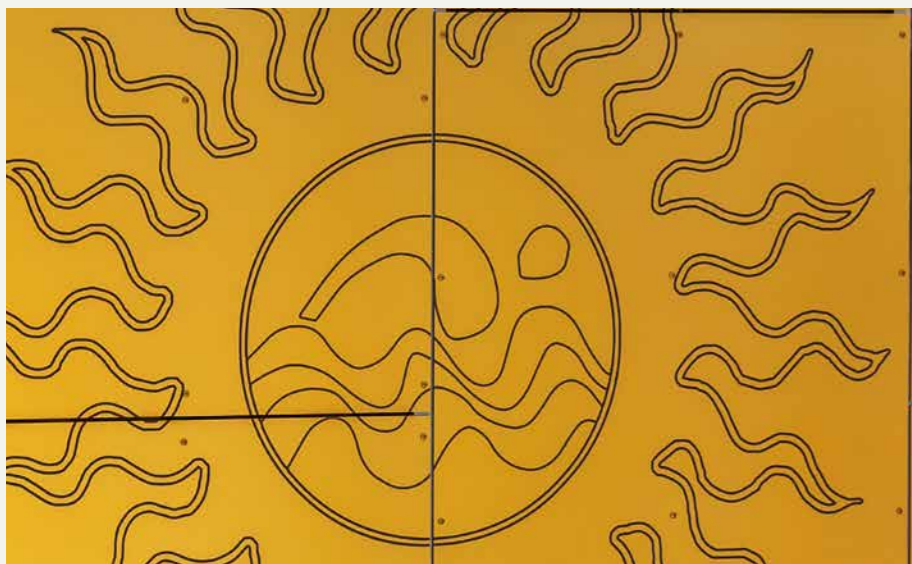
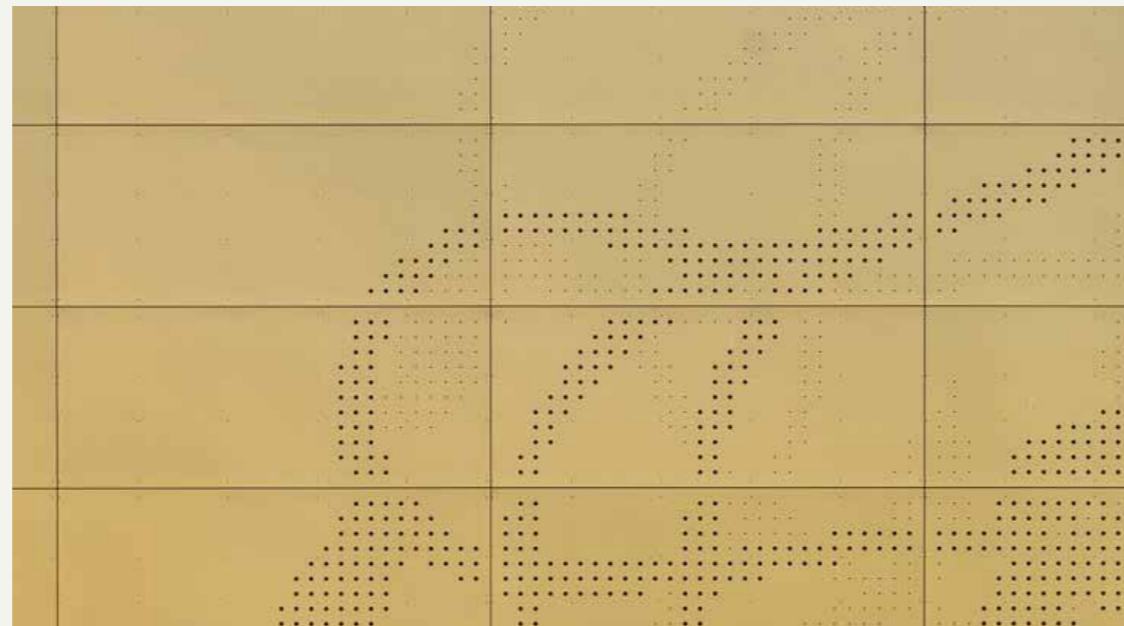
k_{mod} Modification coefficient for load duration and moisture content



See Rockpanel website for additional fixing distances for other

- Board types
- Static schemes
- Fastening systems

ROCKWOOL Nordics, Hedehusene, Denmark



2.5 Engraving and perforations

Experiment with the interplay of light and shadow. Introduce captivating visual effects with light and shadows, make a bold statement or incorporate functional elements. Elevate your building's exterior by integrating company logos and slogans, or incorporate clear patterns and drawings directly into the facade. This ensures that the architectural design and messaging are seamlessly integrated on the very fabric of the building.

Tailor your designs to meet specific customer needs and preferences, offering bespoke solutions that cater to individual project requirements. By engraving or perforating Rockpanel, you can create distinctive facades that interact dynamically with light and shadows. We are happy to assist you in realising your idea.

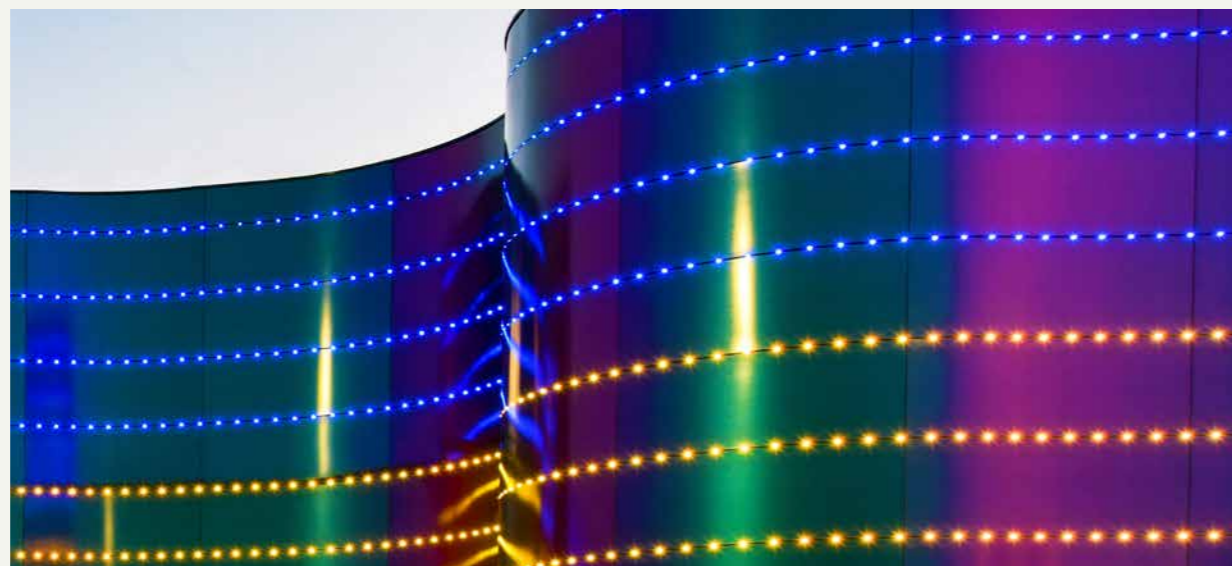


Light can escape through the perforation. Thus, in dark conditions, an attractive visual effect is produced.

Technical requirements

- With Rockpanel A2 boards engraving is possible when all separate parts between the routed lines are securely fixed to the sub-construction.
- Engraving with a large design freedom is feasible with a board thickness of 10 mm. You can choose to route only the coating or perform a more in-depth routing up to 2 mm for a more pronounced design. Keep in mind that a routed facade is classified as reaction to fire B-s2,d0, according to the EN13501-1.

For further technical support regarding these types of constructions or other alternative applications, please see our website or contact Rockpanel for advice.
Info@rockpanel.co.uk



2.6 Bending

Naturally bend, shape and curve

If you feel that nature is the greatest architect, then choosing Rockpanel follows perfectly with this belief. With Rockpanel facade panels, you can bring any vision you have for your building to life.

Share the narrative of your architecture directly on its surface, creating captivating features with fluid, organic forms. Sculpt Rockpanel facade panels into any configuration you desire, whether it's a graceful curve or even a perfect circle.

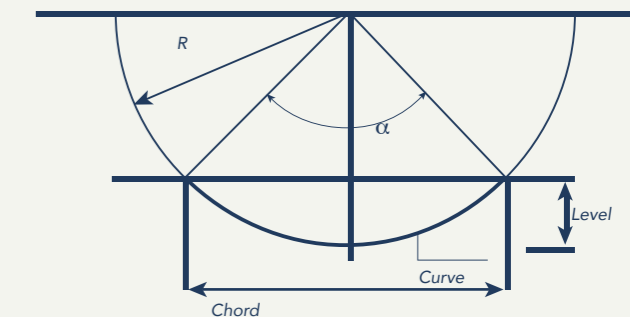
Technical requirements

- When using Rockpanel A2 8 mm, it is possible to create designs with a radius exceeding 2500 mm. Our facade panels can be easily bent and curved without any additional treatment. The recommended minimum bending radius is determined by the bending strength of Rockpanel boards and must be bent lengthwise.
- Note: Rockpanel does not recommend bending boards on an aluminium sub-construction. It is the responsibility of the engineer to decide whether it can be done tension-free with a steel sub-construction.

For further technical support regarding these types of constructions or other alternative applications, please see our website or contact Rockpanel for advice.
Info@rockpanel.co.uk

Rockpanel Colours, Metals, Woods, Stones & Chameleon	
Panel thickness (mm)	8
Panel length (curve, mm)	3050
Radius R minimal (mm)	2500
Corner α	69.9°
Chord (mm)	2864
Level (mm)	451
Battens c.t.c. (mm)	400
Fixings c.t.c. (mm)*	300

* Indication for the fixing distances in urban and rural environments with building heights ≤ 10 m. When Rockpanel is applied in bent or curved conditions on higher buildings or in environments with a higher wind load, please contact Rockpanel.
 ** Note: Rockpanel does not recommend bending boards on an aluminium sub-construction. It is the responsibility of the engineer to decide whether it can be done tension-free with a steel sub-construction.



2.7 Handling of Rockpanel boards

Packaging and storage

Rockpanel is a light-weight, decorative external cladding product which weighs less than many other board materials. The products should always be handled with care by taking the following guidelines into account:

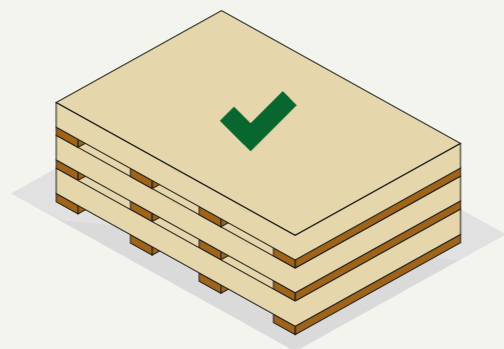
- Storage in warehouse and building site (1 - 4)
- On site handling (5 & 6)

Handling of the protective film

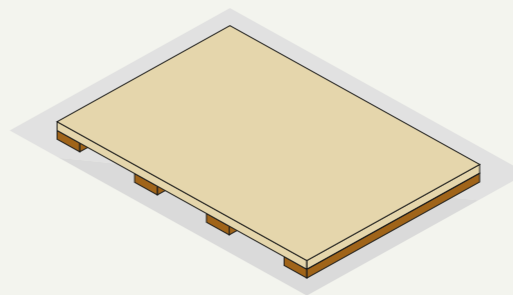
- Most Rockpanel boards are covered by a film to protect the decorative finish. Site measurements can also be marked on this film to aid the installation process. If you're marking anything on protective film, it's advisable to test the pen on a sample board first. This step ensures compatibility and helps prevent potential bleeding through. Some permanent markers may bleed through the film, so a preliminary test can save you from any unwanted surprises
- Remove the protective film:
 - directly after mounting, if attaching mechanically with screws or manual nailing;
 - before priming the board for adhesive bonding, not required but recommended;
 - before installing when using a pneumatic hammer;
 - the protective film can be recycled.
- Rockpanel Natural, Rockpanel Lines² and Rockpanel Metals (White Aluminium and Grey Aluminium) are delivered without protective film. Handling of these boards needs extra attention.



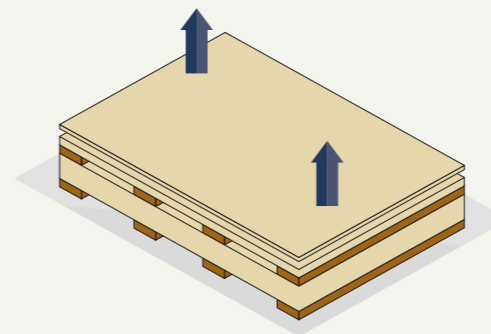
- 1.** Store the board material in dry, flat, frost-proof and protected from the weather. Do not wrap the boards, but cover them in a way that allows air circulation, aiding evaporation of humidity.



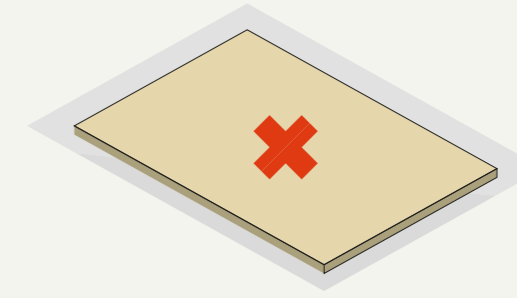
- 4.** Do not stack more than three pallets high. During storage, the board material can be more affected by moisture and night-time cooling than when installed. Before installing, the boards will need some time to allow any moisture and condensation to evaporate.



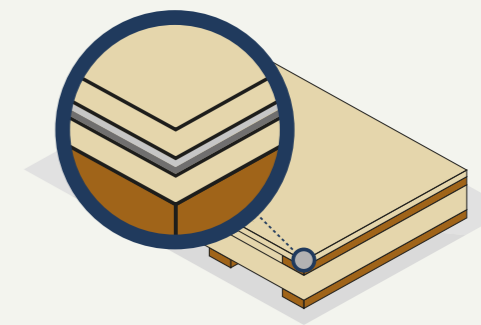
- 2.** Store on flat pallets and place the pallets on a level foundation. Preferably with PE-foil as an underlay.



- 5.** Individual panels must be lifted off the pallet by two people and carried upright. Do not pull or push the boards.



- 3.** Make sure that the board material does not have direct contact with the floor.



- 6.** Protective foam membranes should be placed between the sheets again to protect the surface layer. For example, when the panels are stacked after having been sawn.



MAINTENANCE.
CLEANING.
DISMANTLING

3 Maintenance and Recycling

Brave the elements - in the most beautiful way.

With a ventilated facade, you can protect the exterior insulation and the inside of your building from sun, rain and moisture. Rockpanel is – like all ROCKWOOL products – produced from the natural raw material basalt. This is the volcanic rock from which Rockpanel products derive their unique properties. The Rockpanel boards themselves are also equipped for all weather conditions.

- The surface permanently resists sun, wind and rain.
- This keeps the facade beautiful for the years to come.
- And in addition, Rockpanel boards are low-maintenance.

Colour stability

Rockpanel boards are treated with a water-based coating that maintains their appearance, colour and finish for years to come. The table below shows the performance of the Rockpanel boards after a weathering test of 3000 and 5000 hours. This represents the weathering on a vertical south-facing facade. The ProtectPlus coating is applied as standard on Rockpanel Premium, Woods, Stones, Metals and Chameleon.

Colour stability	Unit: Greyscale	
Rockpanel design:	Value 3000 hours	Value 5000 hours
Premium	4-5	4 or better
Colours	4	3-4 or better
Colours with ProtectPlus	4-5	4 or better
Woods	4-5	4 or better
Stones	4-5	4 or better
Metals	4-5	4 or better
Chameleon	4-5	4 or better



3.1 Cleaning

Rockpanel products generally require low maintenance, primarily needing only rain for cleaning. However, in cases where additional cleaning is necessary, such as from bird droppings or tree residue, annual inspections and occasional cleaning with mild, non-solvent based products are recommended.

Specific cleaning instructions vary by product type:

- Rockpanel Colours can be cleaned with lukewarm water and mild cleaning agents
- Rockpanel with ProtectPlus can handle anti-graffiti cleaners if needed
- Rockpanel Natural should be cleaned gently with a wire brush.

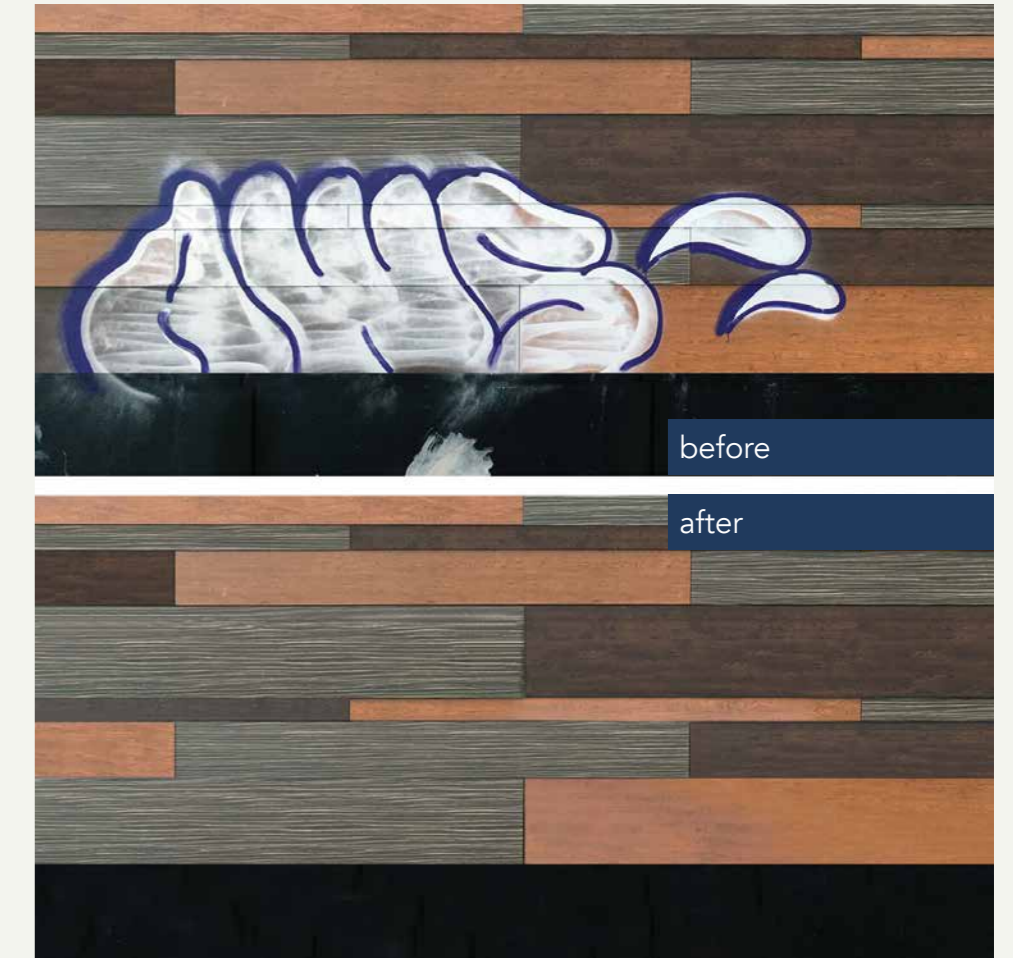
It is crucial to follow cleaning agent manufacturer instructions, conduct suitability tests on inconspicuous areas and avoid abrasive or high-pH cleaning agents. Always clean from top to bottom and avoid cleaning in extreme temperatures or direct sunlight. For more detailed cleaning and maintenance instructions visit our download section at <https://www.rockpanel.co.uk/support/resources/>

ProtectPlus and graffiti removal

Even more protection: Rockpanel with Protect Plus finish

Rockpanel has products in the assortment that come as standard with a protective coating layer called ProtectPlus. This provides extra protection against things like UV light and graffiti. Did graffiti end up on Rockpanel products? You can use our anti-graffiti cleaner if needed (the cleaner leaves no traces or marks). Rockpanel Premium, Woods, Stones, Chameleon and Metals (except White Aluminium and Grey Aluminium) are coated with ProtectPlus as standard for anti-graffiti-purposes.

Rockpanel Colours can be optionally finished with a ProtectPlus layer.



Graffiti can be removed from Rockpanel boards coated with ProtectPlus



3.2 Dismantling

Designed for disassembly.

Recycling is possible when building materials are designed for disassembly, making it easy to recycle them, rather than having to throw them away. For example, a ventilated facade with Rockpanel exterior cladding, an aluminum sub-construction, and ROCKWOOL insulation can be easily deconstructed and completely split into three clean and fully recyclable parts at the end of life of a building or in case a facade needs to be refurbished.

For each element of a ventilated façade system (decorative cladding, metal or timber sub-construction and insulation such as ROCKWOOL) suitable ways to recycle are available. For Rockpanel and ROCKWOOL products we offer the Rockcycle system. For more details on how to dismantle Rockpanel, see our advice in the download section at <https://www.rockpanel.co.uk/support/resources/>



Easy dismantling of Rockpanel boards



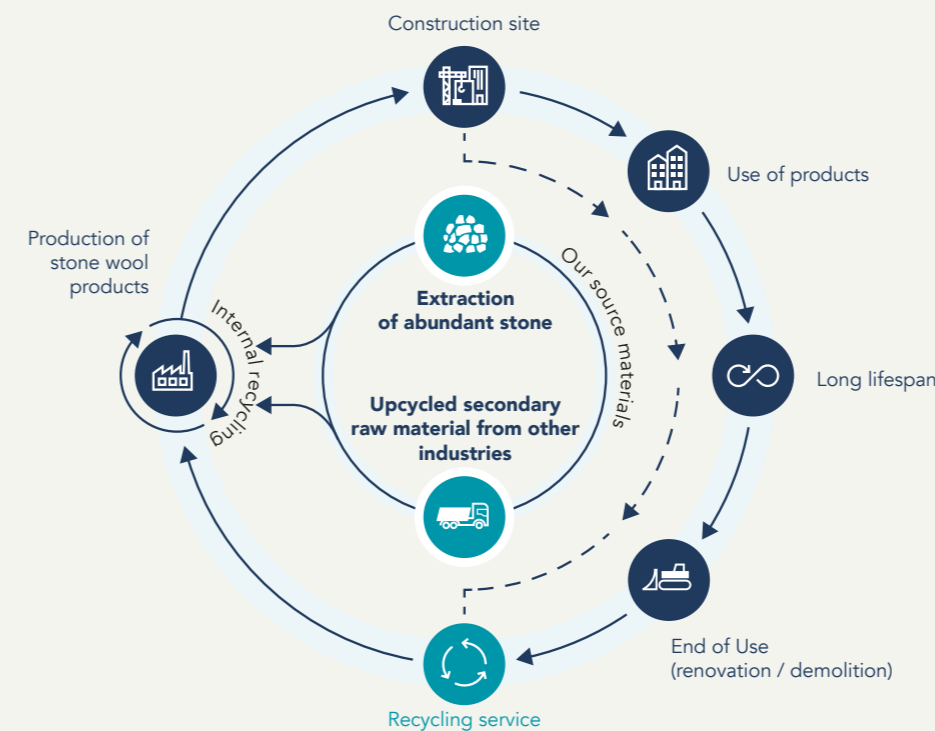


3.3 Rockcycle

Let us make a joint contribution to sustainable building.

With Rockcycle, the ROCKWOOL recycling service, Rockpanel can be turned back into high-quality stone wool insulation and new facade panels. By opting for Rockcycle®, you can make a valuable contribution to the circular economy. This is important because the construction sector and industry are increasingly opting for a low environmental impact.

Choosing Rockcycle for your renovation or demolition project helps to protect the environment by minimising waste and reducing the consumption of primary raw materials. In addition, by using our sustainable ROCKWOOL products, environmental friendly buildings are created. Our customer service department will be happy to answer any questions you have regarding Rockcycle. For more information please visit www.rockpanel.co.uk.



Easy dismantling of Rockpanel boards

The ROCKWOOL waste return service is as simple as it is sensible and brings ecological, economic and logistical advantages for all parties involved.

- Reduced environmental impact through processing and recycling into new ROCKWOOL insulation material
- Economical use of landfill space
- Simple disposal and clean building sites
- Manageable disposal costs
- Low administrative costs
- Proof of disposal through acceptance collection slip

How to use Rockcycle?

- For more information about Rockcycle consult our website www.rockpanel.com/rockcycle
- Fill in the non-binding enquiry form on our website.
- Based on your enquiry, we will send you a customised offer.

4 Planning and services

Specifications

Select the relevant specification along with the selected material to match your product finish, colour and accessory requirements. All specifications are downloadable on www.rockpanel.co.uk.

Building Information Modelling

Building Information Modelling (BIM) is an important aspect of the planning and implementation of construction projects. In order to help with this process, the Rockpanel website provides BIM data files for the full range of our facade panels, which you can access and insert into digital building models. The BIM data files can be downloaded from the website.

CAD drawings

Rockpanel offers a wide range of CAD drawings online. The drawings are easy to download in PDF, DXF and DWG files and illustrate clearly how specific design details can be produced.

Sample request

On the Rockpanel website www.rockpanel.co.uk you can easily request your sample.

References

Register to receive inspiring Rockpanel case studies, product launches and other news from across the globe. Go to the "Inspiration" section on our website for more stimulating projects!

ETA and CE marking

With regard to the EOTA procedure for innovative products, Rockpanel boards have been evaluated and approved in accordance with the European Assessment Document (EAD) no. 090001-00-0404. On the basis of this guideline Rockpanel products have received a European Technical Assessment (ETA).

With regard to the ETA all products have a declaration of performance and CE marking thereby fully complying with the construction product regulations in the UK and Europe.

Guarantee

Rockpanel provides a 10-year project guarantee for our main product portfolio. For Rockpanel Premium, we extend this offering with a 15-year project guarantee. To qualify for this guarantee, it is required to register your project with us. Should you require additional information or wish to obtain the project guarantee template form, please contact our Customer Service team for assistance.

ETA

Rockpanel boards need to be applied in all according ETA. For the latest information and updates of our ETA's please visit the Rockpanel website. Please see Rockpanel boards and corresponding ETA numbers below.

ETA-18/0883: Rockpanel Premium A2 11 mm

ETA-24/0911: Rockpanel Plankclip A2 9 mm

ETA-24/0910: Rockpanel Colours, Nordic and ProtectPlus A2 8 mm

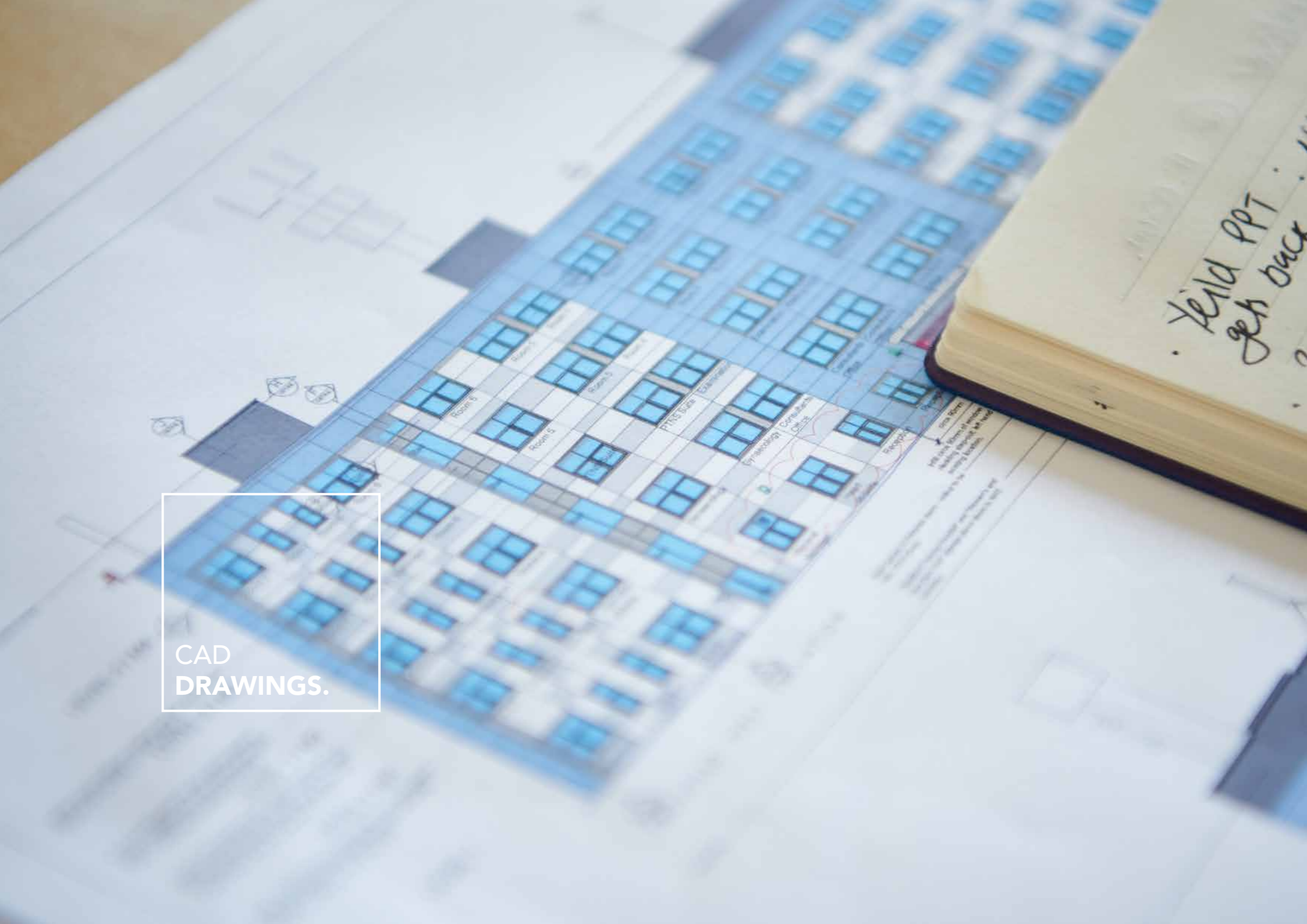
ETA-08/0343: Rockpanel Uni Durable 6 mm

ETA-13/0648: Rockpanel Natural Durable 10 mm

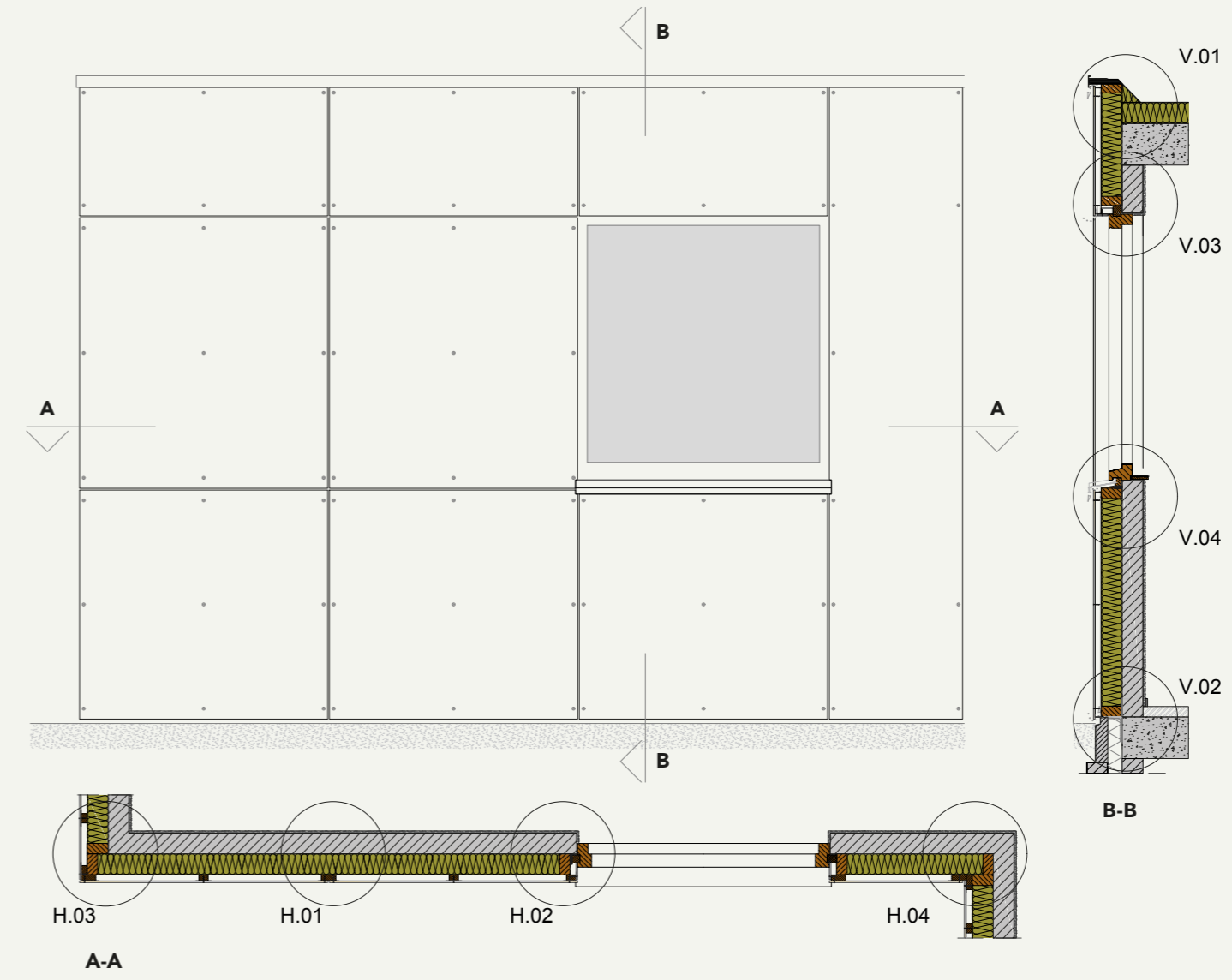
ETA-13/0204: Rockpanel Lines² 10 mm



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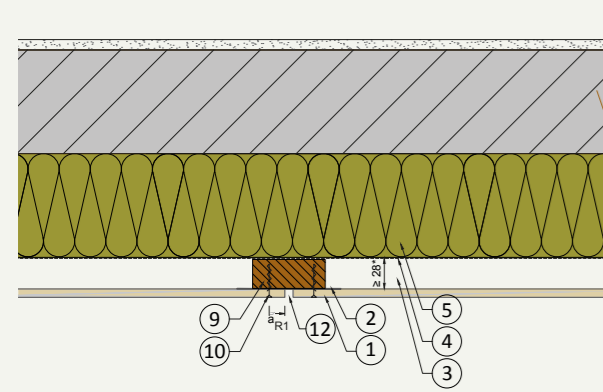


Rockpanel A2 >8 mm
Timber subconstruction, mechanically fixed

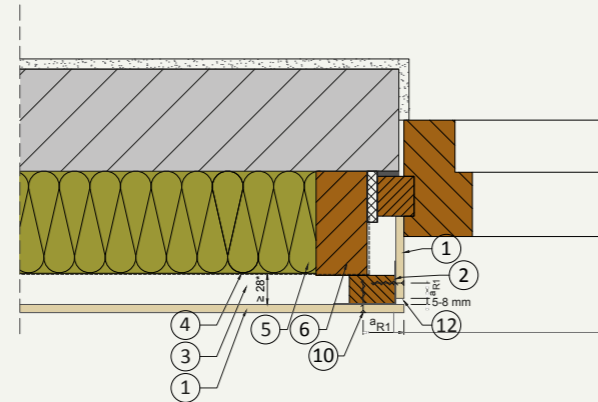


- Details:**
- H.01** Junction vertical joint
 - H.02** Window junction
 - H.03** External corner
 - H.04** Internal corner
 - V.01** Roof trim -parapet
 - V.02** Abutting pavement
 - V.03** Window header
 - V.04** Window-sill connection

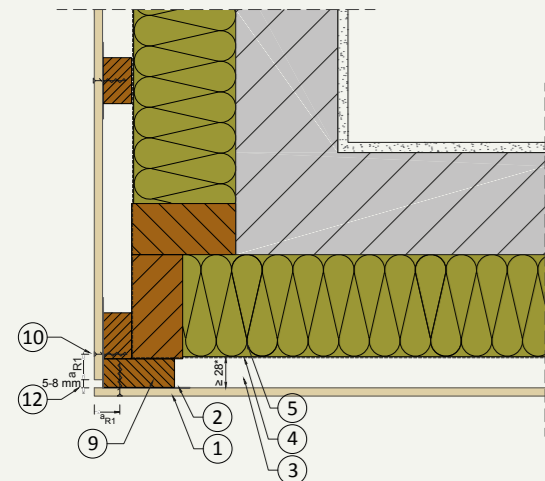
Rockpanel A2 >8 mm Timber subconstruction, mechanically fixed, Section A-A



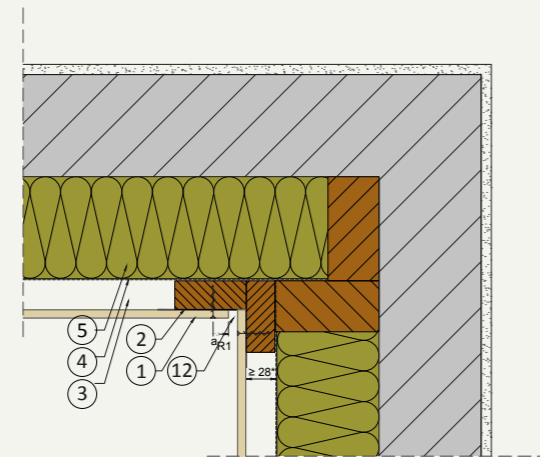
H.01 Junction vertical joint



H.02 Window junction

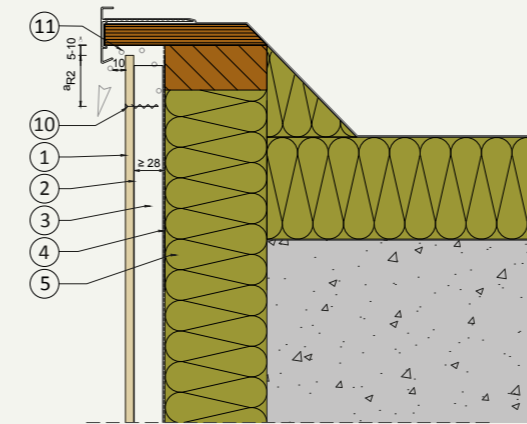


H.03 External corner

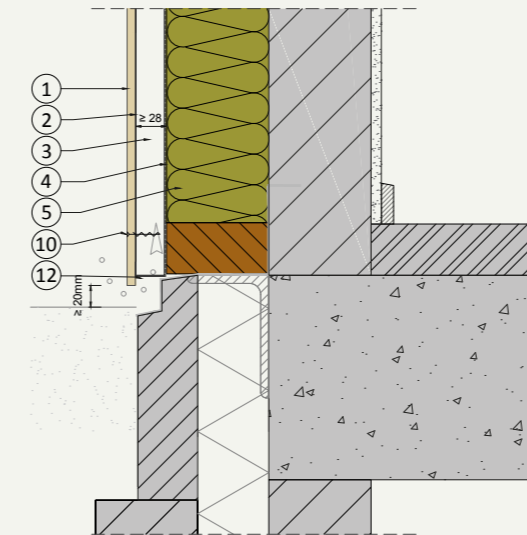


H.04 Internal corner

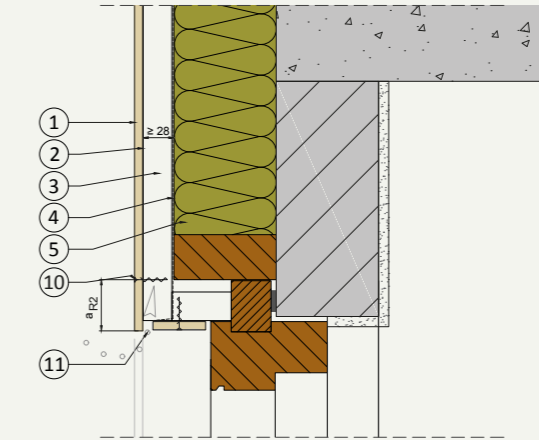
Rockpanel A2 >8 mm Timber subconstruction, mechanically fixed. Section B-B.



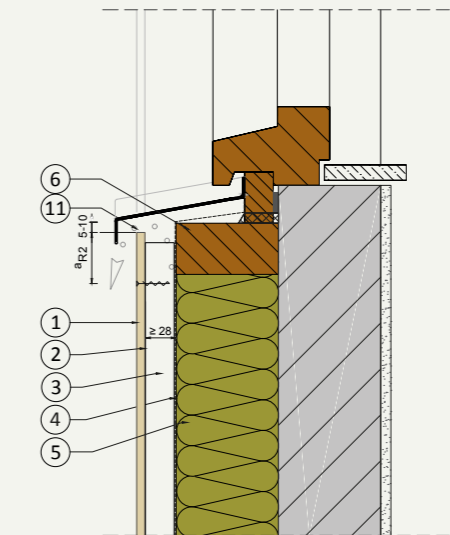
V.01 Roof trim -parapet



V.02 Abutting pavement



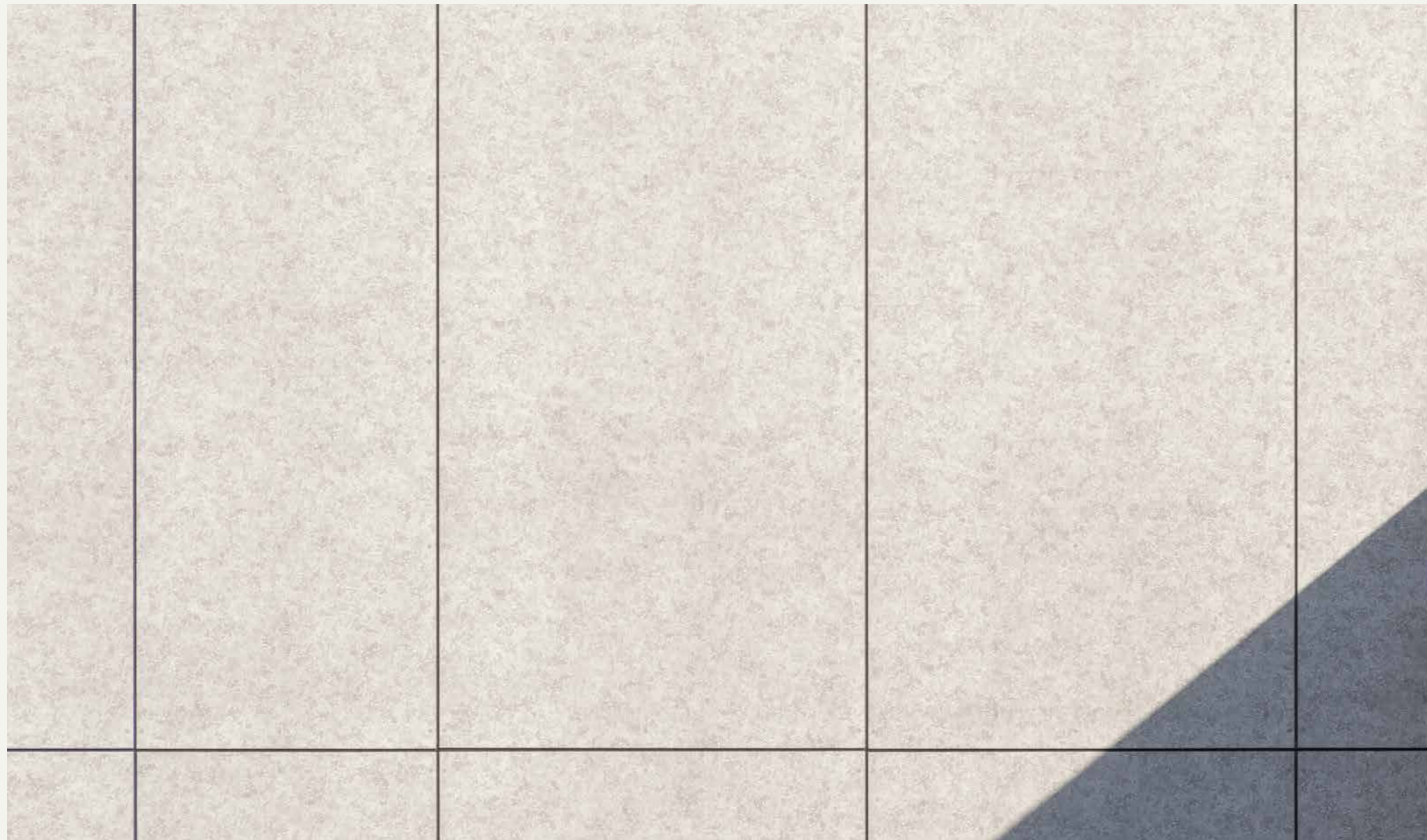
V.03 Window header



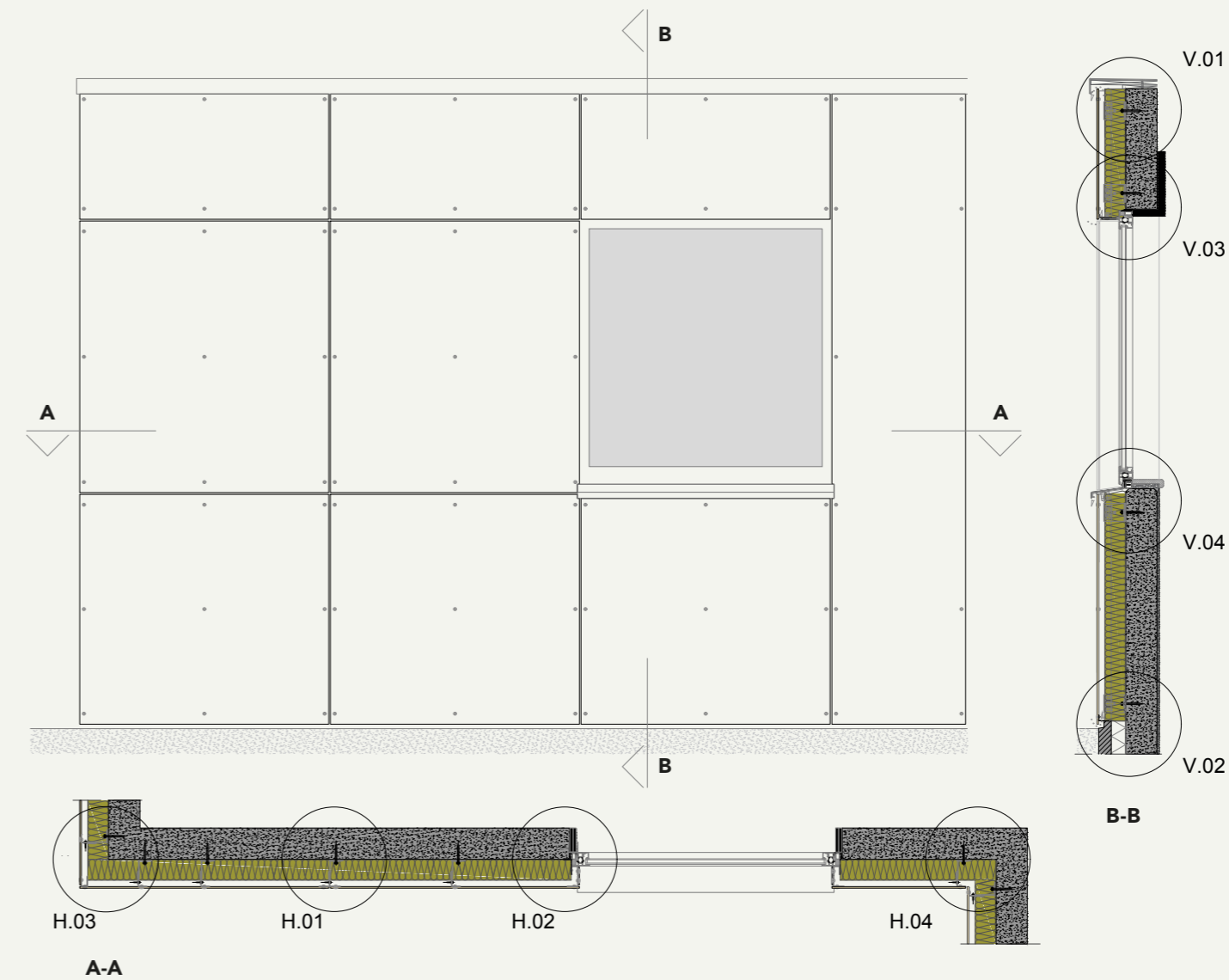
V.04 Window-sill connection

Descriptions

- 1 Rockpanel A2 8 mm
- 2 EPDM foam gasket
- 3 Air cavity
- 4 Breathable membrane
- 5 Insulation (ROCKWOOL)
- 6 Timber construction
- 7 Inner wall
- 8 Timber battens $\geq 25 \times 45\text{mm}$
- 9 Timber battens $\geq 25 \times 70\text{mm}$
- 10 Rockpanel fixing
- 11 Ventilation opening
- 12 Joint from 5 to 8 mm
- aR1 $\geq 15\text{mm}$
- aR2 $\geq 50\text{mm}$



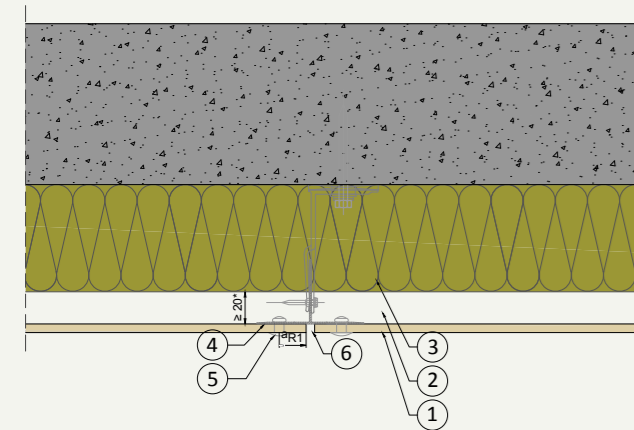
Rockpanel A2 >8 mm
Metal subconstruction, mechanically fixed.



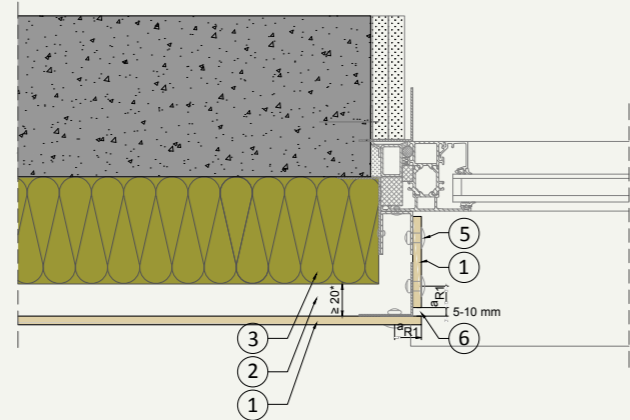
Details:

- H.01** Junction vertical joint
- H.02** Window junction
- H.03** External corner
- H.04** Internal corner
- V.01** Roof trim -parapet
- V.02** Abutting pavement
- V.03** Window header
- V.04** Window-sill connection

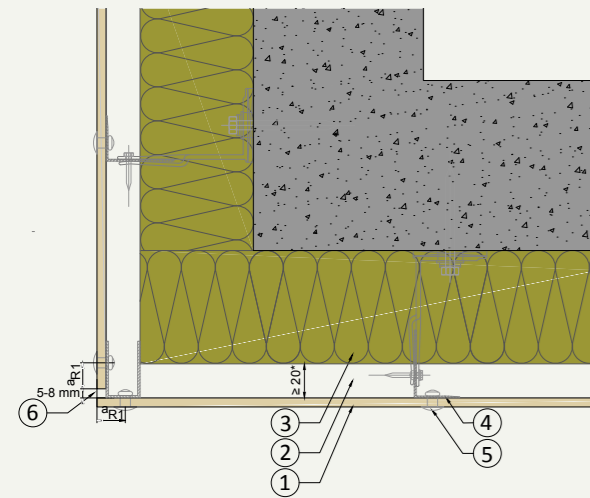
Rockpanel A2 >8 mm Timber subconstruction, mechanically fixed, Section A-A



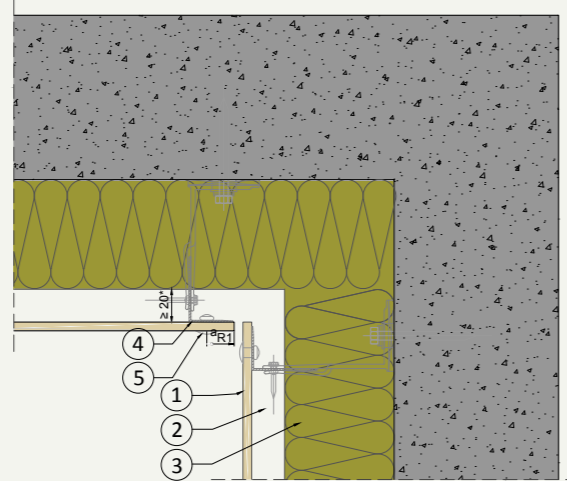
H.01 Junction vertical joint



H.02 Window junction

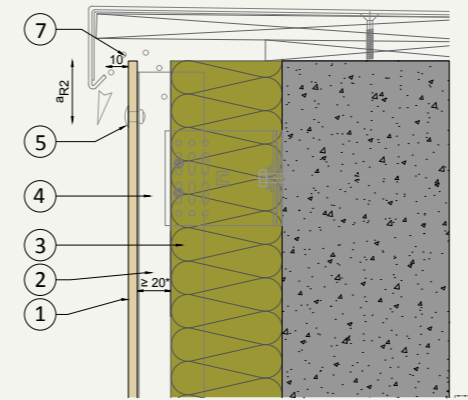


H.03 External corner

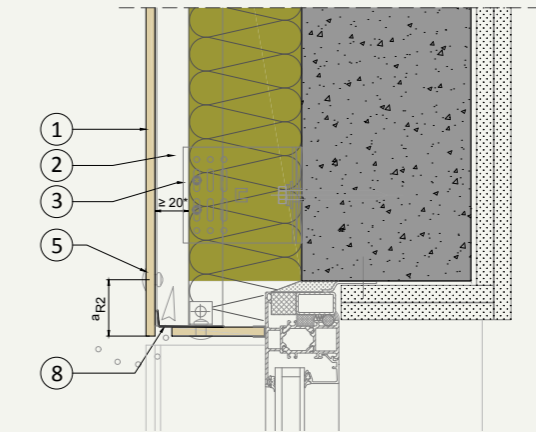


H.04 Internal corner

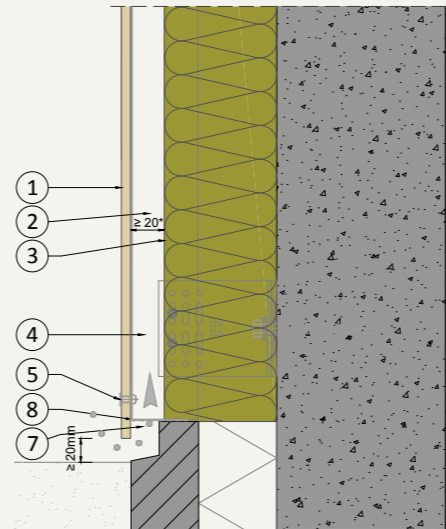
Rockpanel A2 >8 mm Metal sub construction, mechanically fixed. Section B-B



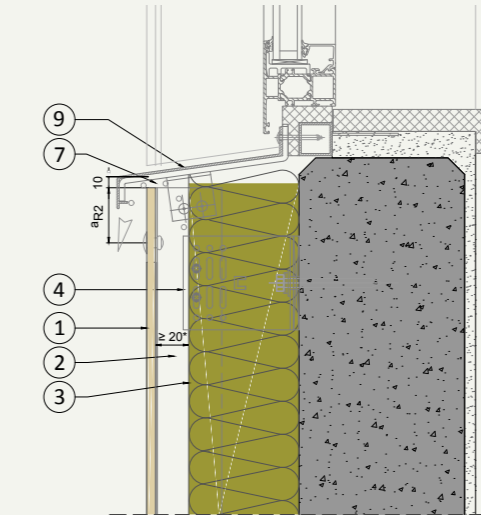
V.01 Roof trim -parapet



V.03 Window header



V.02 Abutting pavement



V.04 Window-sill connection

Descriptions

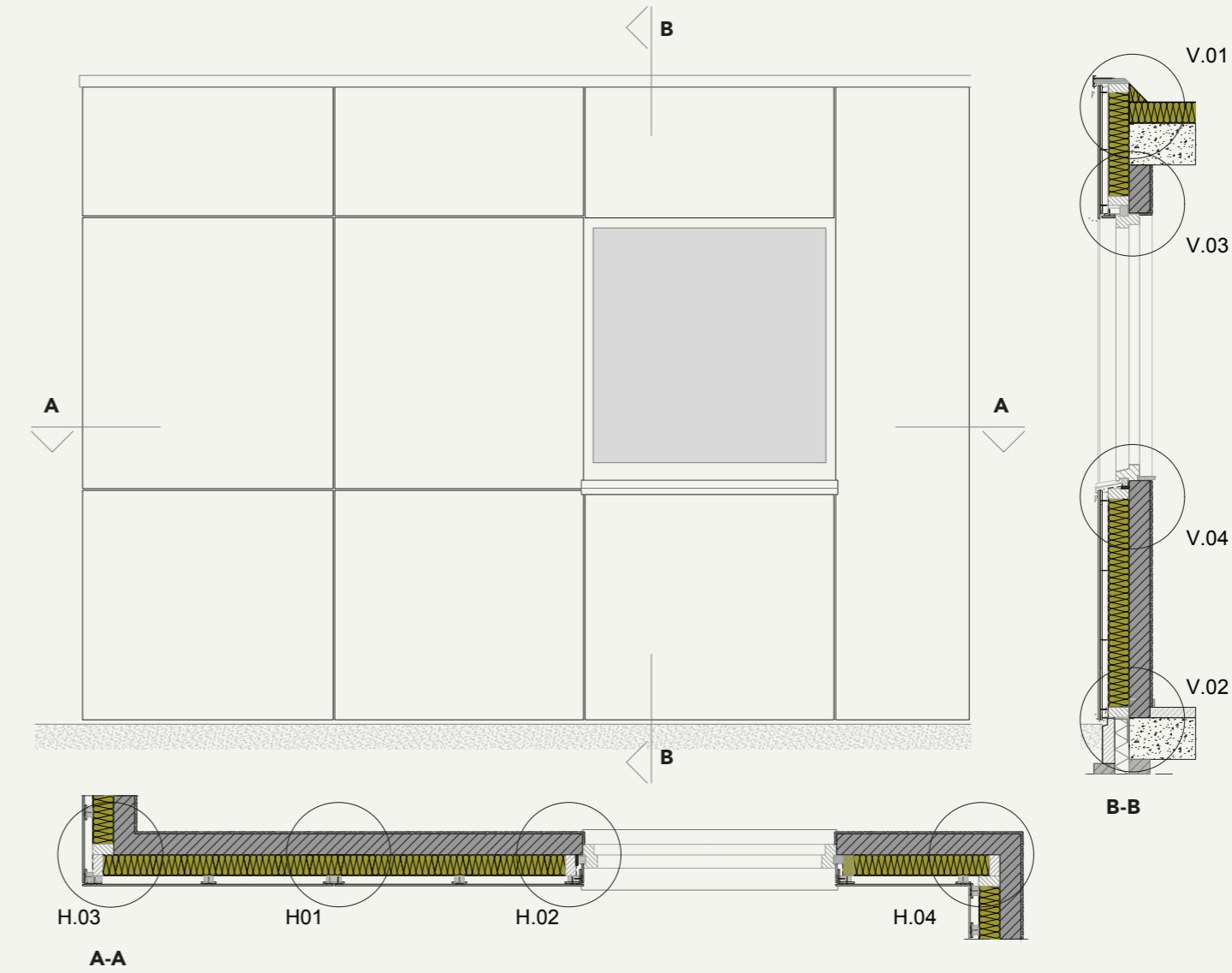
- 1 Rockpanel A2 8 mm
- 2 Air cavity
- 3 Insulation (ROCKWOOL)
- 4 Aluminium rail
- 5 Fixing (rivet/screw)
- 6 Joint from 5 to 10 mm
- 7 Ventilation opening
- 8 Ventilation profile/Anti-insect mesh
- 9 Windowsill with end dam

aR1 ≥ 20 mm

aR2 ≥ 50 mm

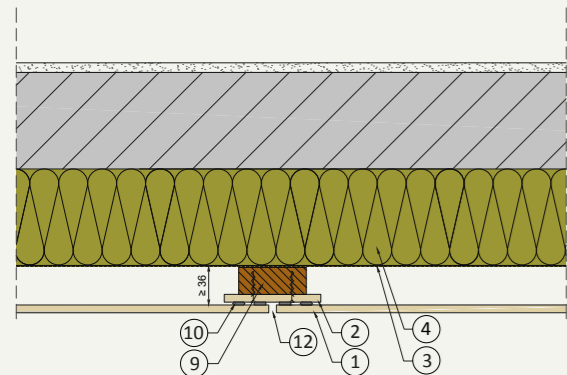


Rockpanel A2 >8 mm
Timber subconstruction, adhesive system.

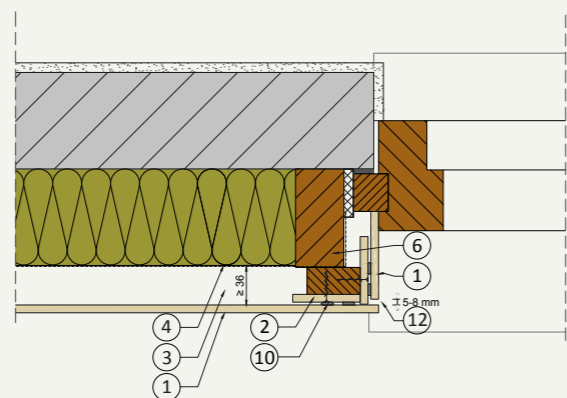


- Details:**
- H.01** Junction vertical joint
 - H.02** Window junction
 - H.03** External corner
 - H.04** Internal corner
 - V.01** Roof trim -parapet
 - V.02** Abutting pavement
 - V.03** Window header
 - V.04** Window-sill connection

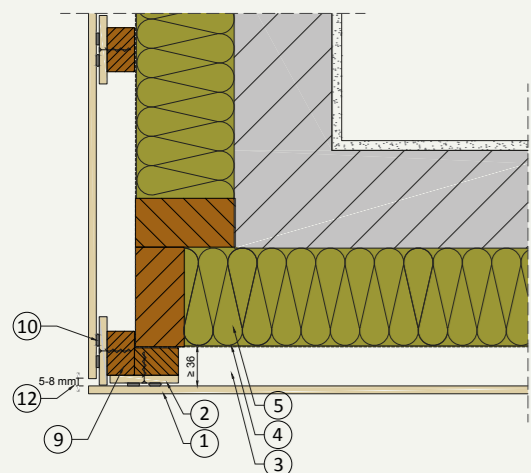
Rockpanel A2 >8 mm Timber sub construction, adhesive system. Section A-A



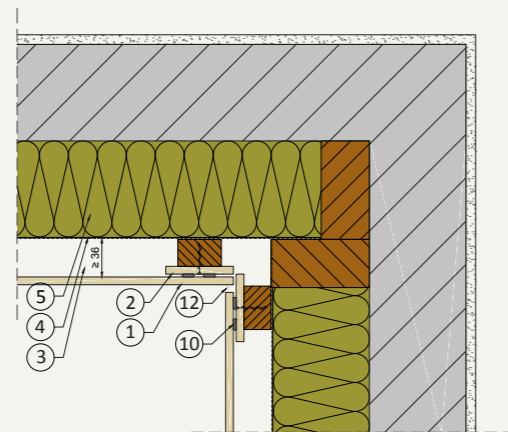
H.01 Junction vertical joint



H.02 Window junction

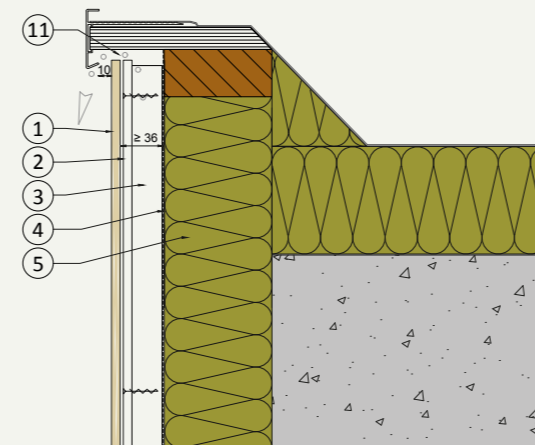


H.03 External corner

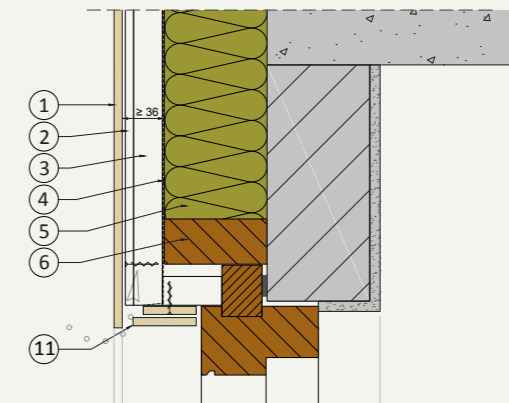


H.04 Internal corner

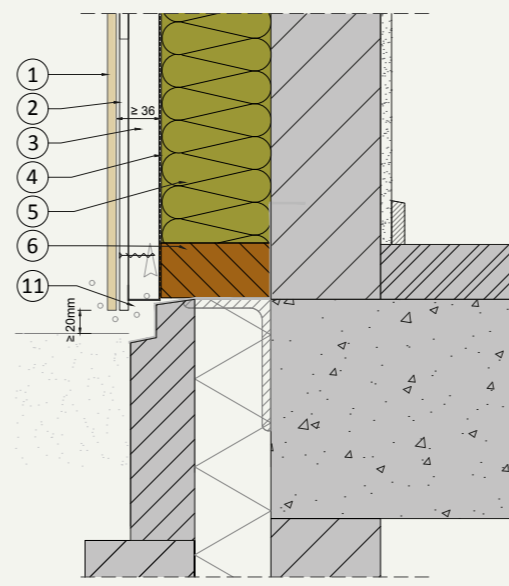
Rockpanel A2 >8 mm Timber subconstruction, adhesive system. Section B-B



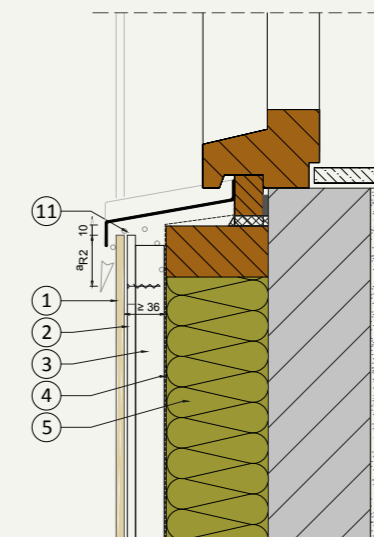
V.01 Roof trim -parapet



V.03 Window header



V.02 Abutting pavement



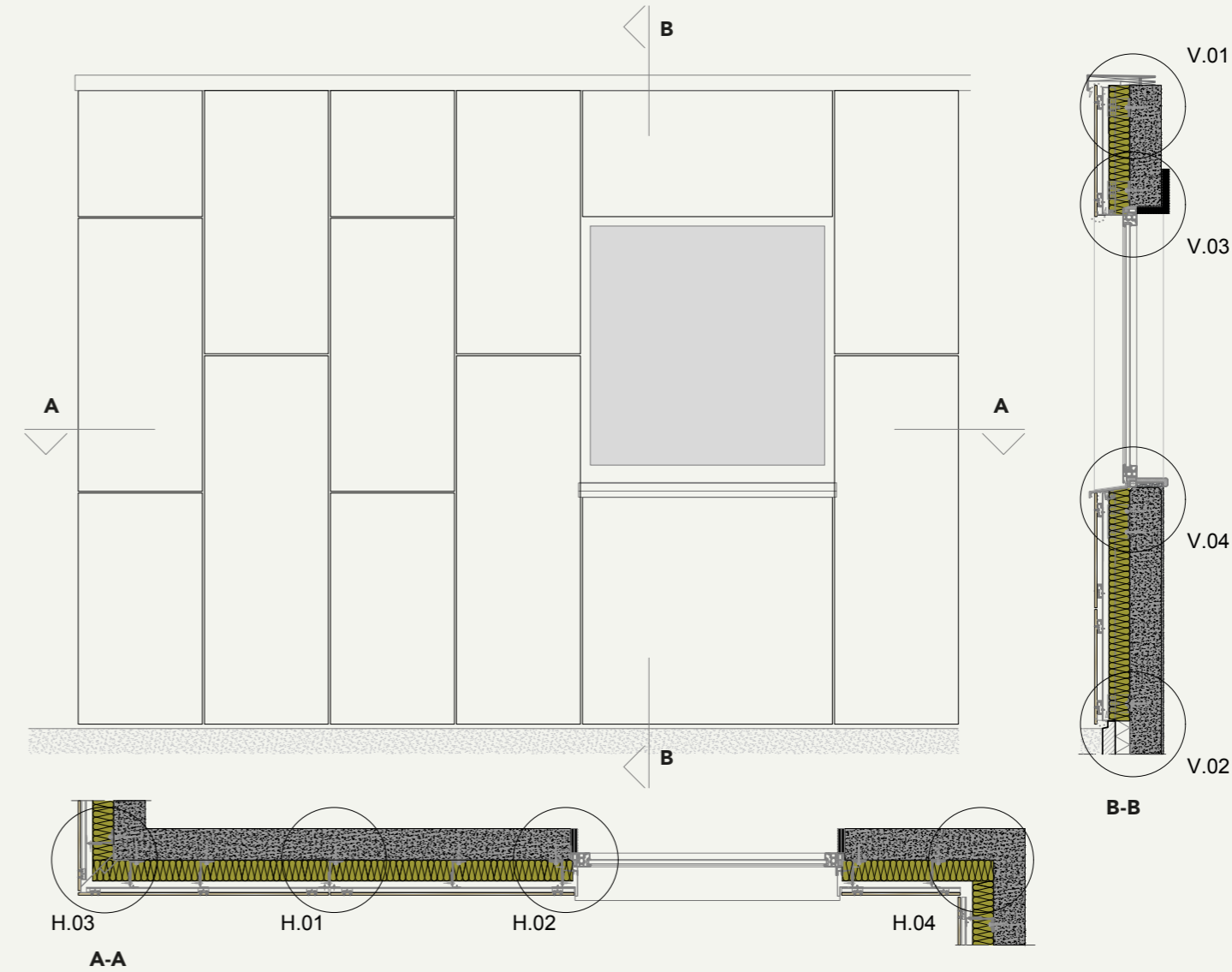
V.04 Window-sill connection

Descriptions

- 1 Rockpanel A2 8 mm
- 2 Rockpanel strips
- 3 Air cavity
- 4 Breathable membrane
- 5 Insulation (ROCKWOOL)
- 6 Timber construction
- 7 Inner wall
- 8 Timber battens $\geq 25 \times 45\text{mm}$
- 9 Timber battens $\geq 25 \times 70\text{mm}$
- 10 Bondingsystem according supplier
- 11 Ventilation opening
- 12 Joint from 5 to 8 mm

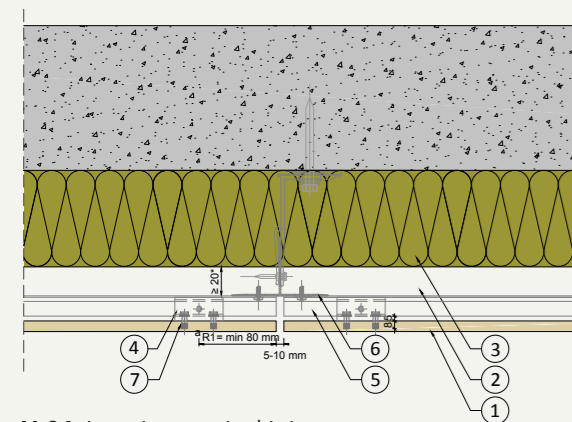


Rockpanel A2 >8 mm
Metal subconstruction, mechanical secret fixed.

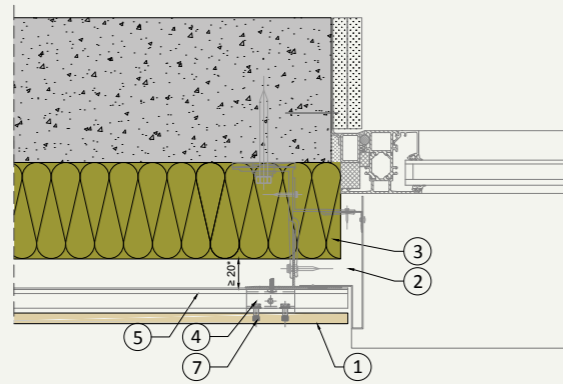


- Details:**
- H.01** Junction vertical joint
 - H.02** Window junction
 - H.03** External corner
 - H.04** Internal corner
 - V.01** Roof trim -parapet
 - V.02** Abutting pavement
 - V.03** Window header
 - V.04** Window-sill connection

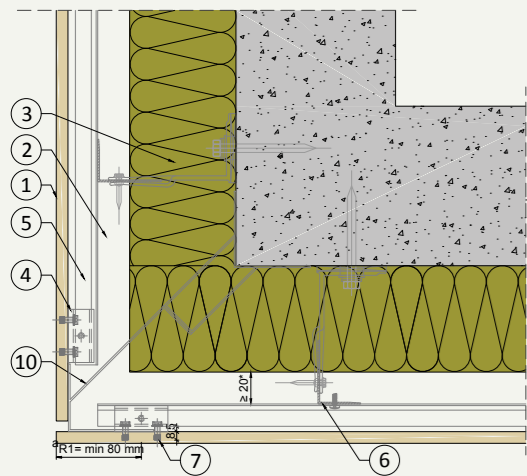
Rockpanel A2 >8 mm Metal sub construction, mechanical secret fixed. Section A-A



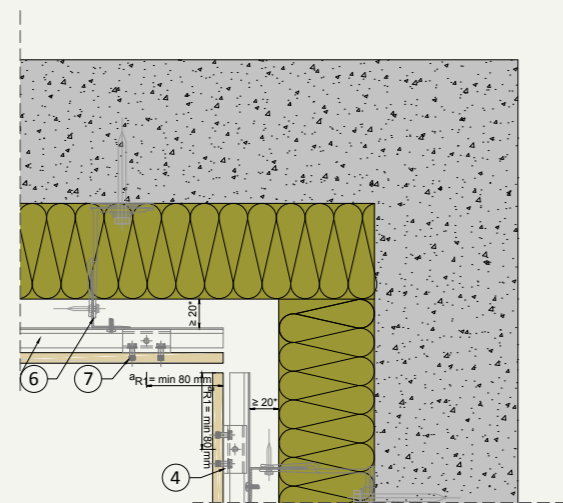
H.01 Junction vertical joint



H.02 Window junction

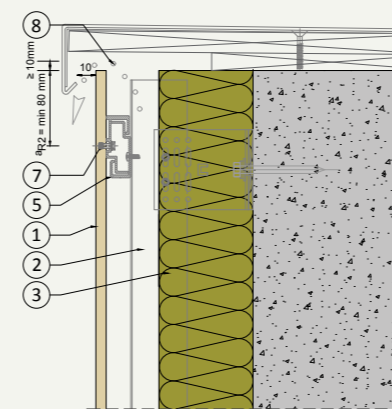


H.03 External corner

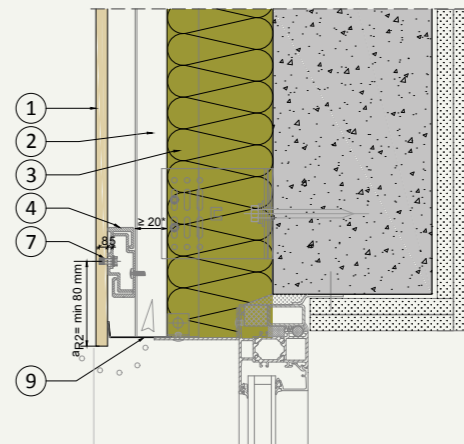


H.04 Internal corner

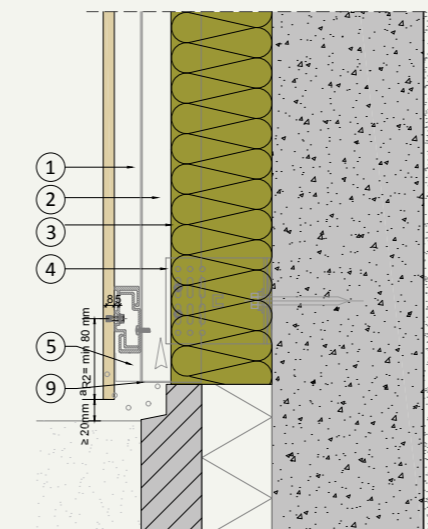
Rockpanel A2 >8 mm Metal sub construction, mechanical secret fixed. Section B-B



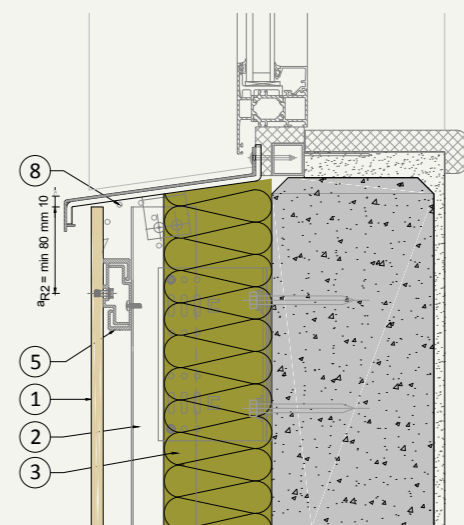
V.01 Roof trim -parapet



V.03 Window header



V.02 Abutting pavement



V.04 Window-sill connection

Descriptions

- 1 Rockpanel Premium A2
- 2 Air cavity
- 3 Insulation (ROCKWOOL)
- 4 Secret fixing clip (C-Clip)
- 5 Horizontal profile / rail
- 6 Vertical profile / rail
- 7 TU-S Blind fastener (undercut anchor)
- 8 Ventilation
- 9 Anti-Insect mesh
- 10 Cavity closure

Product features overview

		Nature facades		Design facades			Premium	
Feature	Note	Rockpanel Woods	Rockpanel Stones	Rockpanel Colours	Rockpanel Colours Protect Plus	Rockpanel Metals	Rockpanel Chameleon	Rockpanel Premium
APPLICATION								
High facades	Height > 18 m	■	■	■	■	■	■	■
Low facades	Height <10 m	■	■	■	■	■	■	■
Detailed solutions for roofs		■	■	■	■	■	■	
AESTHETICS								
Type of cladding								
Board		■	■	■	■	■	■	■
Tongue and groove		-	-	-	-	-	-	-
Dimensions								
Standard dimensions (mm)	3050x1200	■	■	■	□	■	■	■
	2500x1200	□	□	■	□	□	□	□
Standard dimensions (mm)	S: 3050x164 XL: 3050x295	-	-	-	-	-	-	-
Customised length (mm)	1700-3050	□	□	□	□	□	□	□
Special width (mm)	1250	□	□	□	□	□	□	□
Thickness (mm)		8 & 9	8 & 9	8 & 9	8 & 9	8 & 9	8 & 9	11
Surface								
Untreated		-	-	-	-	-	-	-
Primered only		-	-	-	-	-	-	-
Coloured surface		Woods look	Stones look	RAL, NSC	■	Metallic & patina look	Chameleon effect	All Rockpanel Designs*
Custom colour		-	-	-	○	-	-	■
Customized design		○	○	○	○	○	○	□
Colour stability (5000 hours)	EN 105-A02	4 or better	4 or better	3-4 or better	4 or better	4 or better	4 or better	4 or better
Standard gloss grades: Optional gloss grades:		Matt, Semi-gloss, High-gloss	Matt, Semi-gloss, High-gloss	Semi-gloss, Matt, High-gloss	Semi-gloss, Matt, High-gloss	Matt, Semi-gloss (depends on design) Matt, Semi-gloss, High-gloss	High-gloss, Matt, Semi-gloss	Depends on Design
Maintenance								
Repaintable		-	-	■	-	-	-	-
Special self-cleaning treatment		■	■	Available with Protect Plus	■	■	■	■
FIRE SAFETY								
Reaction to fire classification	EN 13501-1	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0

□ MOQ applies. Please contact Rockpanel for further details.
 ■ Standard
 ○ on request
 - not available
 N.D. Not declared

* Premium - not available in Textured Stones and Nordic
 ** Maintenance for Rockpanel Uni, primered and individually painted please contact the paint manufacturer.
 *** Rockpanel Natural boards age naturally; for further information see the product data sheet.