THEHOMES FORE ARE ALREADY





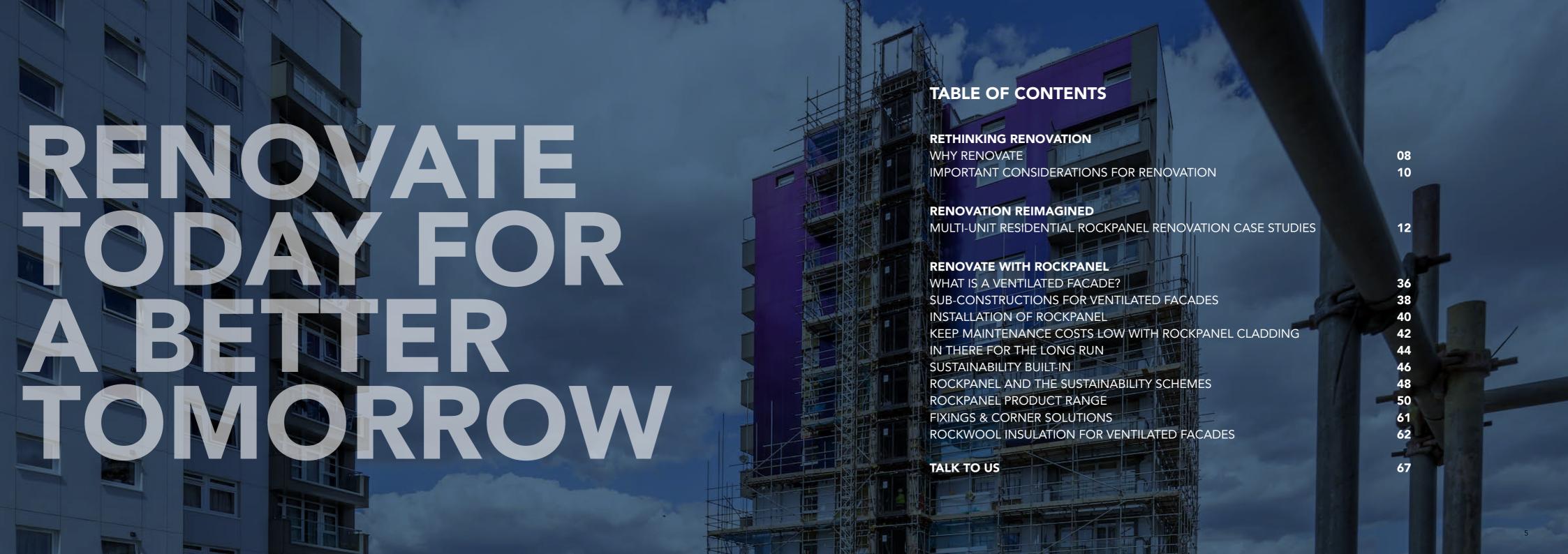
Reshaping the way we live tomorrow. Renovate with Rockpanel.

Creating environments where people live, work, play and learn is a wonderful task. Property owners, city planners, architects, contractors and other building professionals are shaping the world of the future.

Renovation projects can be a challenge – they require creativity and innovative solutions. And that is where Rockpanel comes in!

Our cladding has got what it takes. No matter how big or small your renovation project is. Let's build the future together.

Jeroen Ebus Managing Director Rockpanel

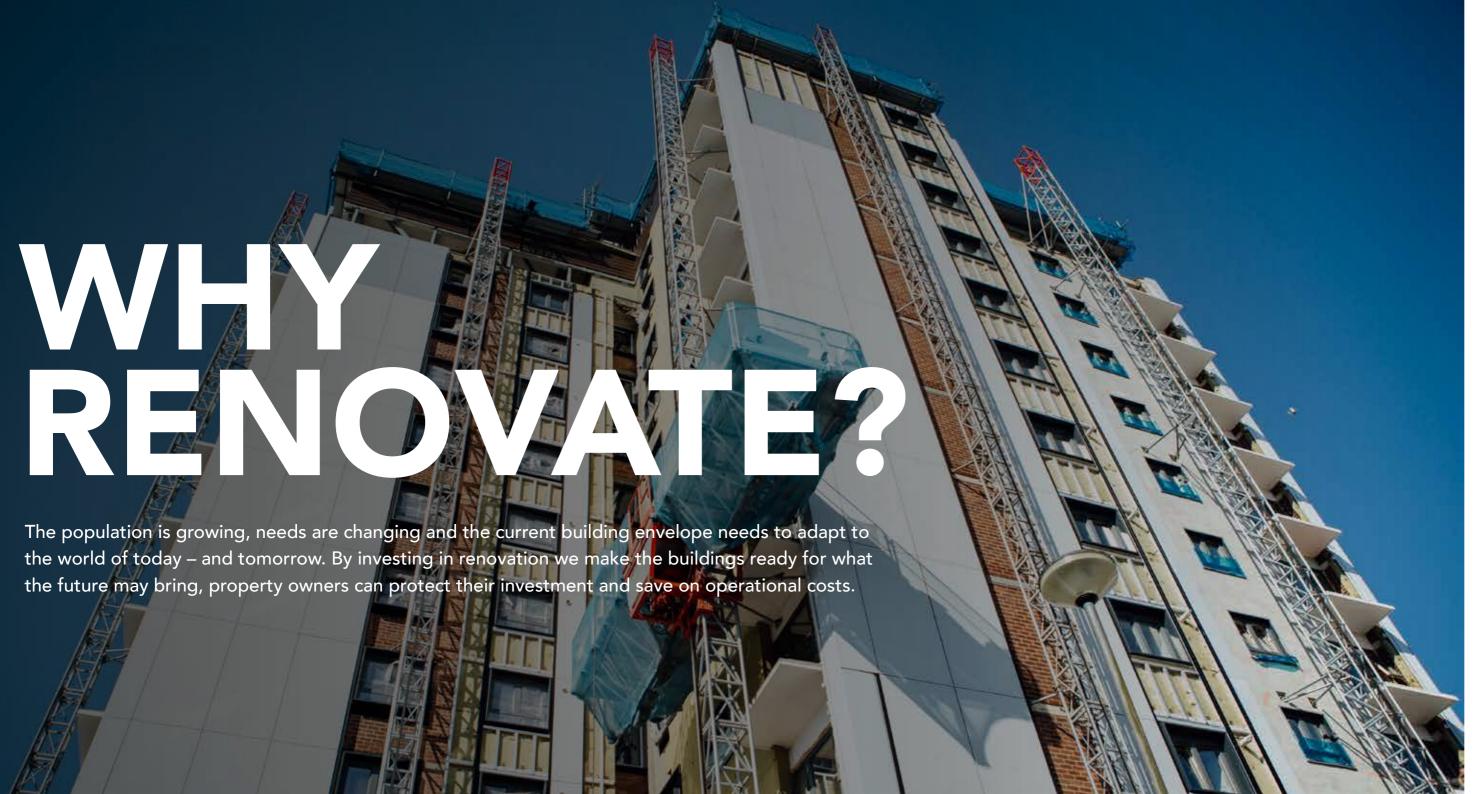




Globally, more than 50 percent of our existing buildings will be in use in 2050. In OECD countries the number is 75-90 percent. In Europe alone, it is estimated 97 percent of these buildings need partial or deep renovation to meet the highest energy standards. These buildings may be renovated only once more before 2050.¹

This means that renovation must focus on getting these properties ready for whatever may be coming. They should be long lasting, safe and durable and ready for a change of purpose. Rockpanel is here to support you during every stage of your renovation process – from design to installation.





Improve fire safety

The frequency of facade fires in large buildings worldwide has multiplied by seven times over the last 30 years from less than one per year to a current rate of 4.8 fires per year. A good reason to improve fire safety in existing buildings – even if local regulations don't require this.

Fire regulations have been gradually upgraded. In the United Kingdom, the latest update was in 2018 as a consequence of the tragic Grenfell fire. In this update a ban on the use of combustible materials in the walls of certain buildings above 18 metres was regulated. It is an estimate that there still are many buildings in the UK not complying with new fire regulations requiring non-combustible class A1 or A2 cladding and insulation on relevant high-rise buildings (18 metres and above).

Lower operational costs and improve indoor climate

The need for energy renovation is often one of the main reasons to initiate a facade renovation. By adding insulation onto external walls and installing new facade cladding onto an existing building, a major improvement of energy efficiency can be achieved.

According to the European commission, up to 70 percent reduction on heating costs can be achieved. This not only substantially lowers operational costs, but also improves the indoor climate for residents. Today, less than three percent of the EU building stock qualifies for the most energy efficient label (class A) and will need an upgrade before 2050.

Urban regeneration

With beautiful facades, you define the outside city space. Upgrading even a single building can make an amazing difference. The effect of a visual upgrade can even be seen in safety and crime levels.

A comprehensive redesign program of a 1970's housing estate in Edinburgh, which included fundamental changes in the estate layout as well as individual units, reduced burglary by 65 percent and vandalism incidents by 59 percent, with the total number of incidents being lowered overall.

Another study, in which 27 housing estates were designed according to "Secured by Design" (SBD) principles, reported that crime rates had dropped by between 54 percent and 67 percent since the redesign. Burglary rates were 50 percent less than those on other estates in the same town. and there were 42 percent fewer vehicle crimes.

Increase quality of life

At Rockpanel we believe that everyone deserves a safe and inspiring place to live, learn, work and play. Beautiful and aesthetic surroundings have a significant effect on people's well-being.

Research has confirmed that 85 percent of people find that better quality buildings and public spaces improve the quality of their lives and thought that the quality of the built environment made a difference to their quality of life.

IMPORTANT CONSIDERATIONS FOR RENOVATION

Fire safety

It is imperative that the materials used comply with current fire safety regulations. For certain buildings exceeding a height of 18 metres, Euroclass A2-s1,d0 or A1 is required for the external wall – not only for new buildings but also if a building undergoes a change in use.

Rockpanel recommends that non-combustible materials (including insulation and cladding panels) be used in the external walls of all high-risk buildings, including: all buildings taller than 11 metres; all buildings having more than three storeys; Vulnerable occupancy buildings of any height, including hospitals, schools, sheltered housing, care homes and entertainment venues.

Fast and easy to install

Time is money. Opting for materials that are easy to work with and can be mounted quickly and easily will lower cost of installation. When renovating, it is also important to minimize the impact and inconvenience

for residents. Facade materials that are fast and easy to install require no need for temporary rehousing and disturbance is kept to a minimum.

Maintenance costs

The less time and money that are needed for maintenance and care, the better. Select a facade material that does not need repainting or other regular treatments. When comparing prices, make sure to also include maintenance costs to get a full overview of the true cost of ownership.

Durability and colour fastness

Durable buildings are built to last. Durability is not limited to functionality, but also involves aesthetic durability.

Aspects such as dimensional stability, resistance against wind and water, fire safety and colour fastness are all important focus areas to keep maintenance costs low.

Sustainability

When future proofing buildings, sustainability plays an important role. Go for non-depletable, recyclable materials to support a circular economy.

Resistance to humidity and moisture

The facade material must be able to withstand the elements both visually and mechanically. In order to secure low maintenance costs, rain and humidity should not cause rot, change dimensions or affect a building in any other way.

Freedom of expression

In order to not only technically, but also visually renovate a building, a facade material needs to offer sufficient design options. It should be able to meet any design needs – whether you want to closely match an existing facade or create a totally new expression.





A PERFECT MATCH FOR BERMONDSEY APARTMENT BLOCKS

Specified to visually match the cladding they replace, Rockpanel external facades have been installed at twin seven storey blocks as the leading specialists continue to transform projects throughout the UK where regulations regarding certain buildings over 18 metres mean all components in the external wall must now meet or exceed EN13501 Class A2-s1,d0.



Regenerated Bermondsey Spa community

The Central London Thames riverside district has undergone major regeneration recently where new affordable housing, commercial premises, public space and community facilities have replaced existing buildings. More than 15,000 residents now inhabit this vibrant, bustling neighbourhood.

Post-Grenfell transformation

The Hyde Group are owners of three Bermondsey Spa apartment buildings. Prospect House and its sister block Hicks House now have transformed exterior facades following the earlier successful re-cladding of its third neighbouring property, Eyot House. The Hyde Group have written about their experiences regarding the external cladding systems at their Bermondsey properties. 'Following Grenfell, although we knew ACM cladding was not present, we carried out intrusive surveys. Overview of works: Install cavity fire barriers behind rainscreen cladding, to ducts passing through the system - horizontally and vertically to reduce the risk of fire spread. Replacement of the rendered external wall insulation system to all three buildings. Some internal compartmentation works where identified. We are proud of our commitment to fire safety, and over recent months we've learnt a lot about what we need to do to make sure our properties are safe.'

Daniel Assender of construction consultancy, Martin Arnold, was appointed as designer, contract administrator and clerk of works for the project. Daniel explained, "I was confident specifying



Rockpanel following its earlier use at neighbouring Hyde Group-owned Eyot House. It is a precision engineered A2 fire-safe product which offers great options in terms of colour and surface design.

All three projects were carried out with residents remaining in their apartments, avoiding the issues otherwise associated with relocating them during the works."

The complete fire-safe system

External facades specialists Lawtech Group undertook the remediation work of replacing the existing cladding with the new fire-safe system.

Lawtech Business Development Manager Toby
Blunsten commented, "The superb quality and
variety of Rockpanel special surface designs and
colour options available meant we were able to
precisely match the original look of these buildings,
safe in the knowledge the new facades now satisfy
the most stringent fire safety standards."

Rockpanel Business Manager for UK & Ireland, Mark Snowden, "Around 2735m2 of Rockpanel A2 is installed at the two properties. Panels were specified in bespoke turquoise from our Colours range, along with accent sections in a bespoke Cherry hue from our super-realistic natural Woods collection, to visually match the replaced non-conforming cladding. They are installed in conjunction with ROCKWOOL SP Firestop and RWA45 products.

All our ranges are lightweight and easy to cut on site without the need to seal edges, making installation quicker, saving time and money."

Colour and surface options enable design freedom

Rockpanel A2 enables specifiers to realise their most creative ambitions safe in the knowledge the reality of those intentions will satisfy the most stringent fire safety standards.

Whichever surface design or colour is chosen, specifiers can count on high durability, complete weather, temperature and UV resistance and little or no maintenance throughout its long life.





BEAUTIFUL, FIRE RESISTANT ROCKPANEL FACADE FOR EYOT HOUSE, BERMONDSEY, LONDON

Throughout the United Kingdom, many building owners are improving the fire safety of their complexes to meet the more stringent fire safety requirements regarding certain buildings over 18 metres high.



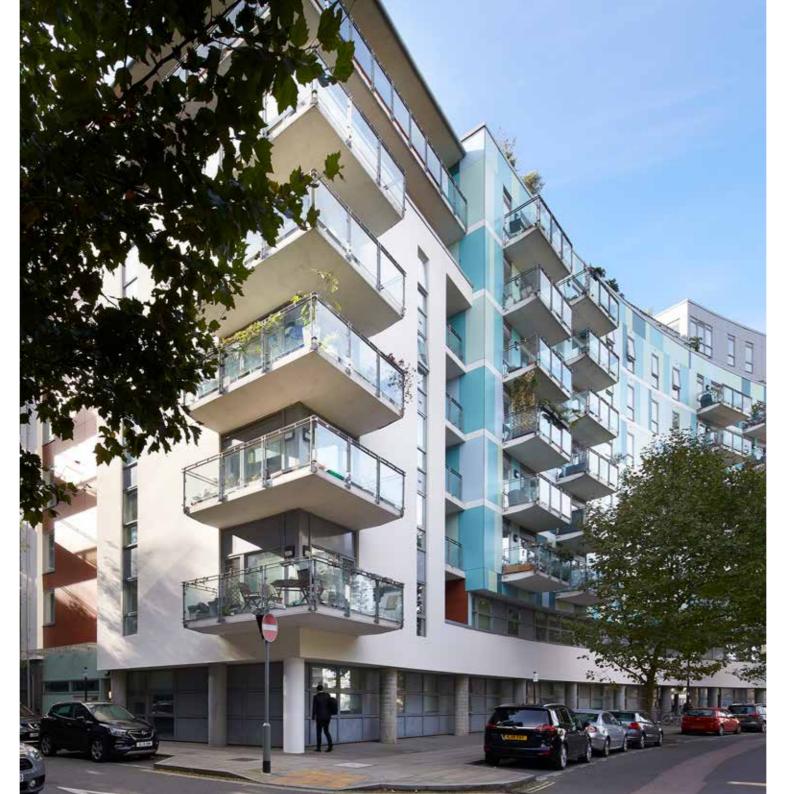
Bermondsey Spa regeneration

One such project sits at the heart of the Bermondsey Spa area, near to the River Thames and Tower Bridge in London. The area has undergone massive regeneration over the last fifteen years with 15 key sites identified for development across 20 hectares. As part of these plans, the original buildings were demolished and new affordable housing, commercial premises, public space and community facilities built in their place. There are now more than 15,000 residents living in this vibrant community, enjoying an eclectic mix of restaurants, shops and busy weekend markets.

Transformation to fire-safety

The Hyde Group are owners of seven storey Eyot House, and two neighbouring apartment buildings, which replaced original 1950s blocks. Working with main contractor, Engie UK Places & Communities, Eyot has recently undergone complete replacement of its external façade to ensure fire safety and compliance with Building (Amendment) Regulations 2018. The requirement is for a building that is over 18m in height to have all components in the external wall of at least EN13501 Class A2-s1.d0.

Daniel Assender of multi-disciplinary construction consultancy, Martin Arnold, was appointed by The Hyde Group as designer, contract administrator and clerk of works for the project. Daniel explained, "Rockpanel was specified as the only non-aluminium, A2 rated product able to meet our design brief, being light, flexible and offering great aesthetic choice in terms of colour and surface finish."



The Rockpanel and ROCKWOOL system

Leading external envelope solution specialists,
TetraClad, were tasked with replacing the existing
cladding with a completely new fire-safe system.
The firm's Technical Director Adrian Buckmaster said,
"We used non-combustible sheathing board, which
provides 90 minutes fire resistance; ROCKWOOL
Rainscreen Duoslab (A1 non-combustible);
ROCKWOOL OSCB Cavity Barriers, and Rockpanel
A2. We used the Rockpanel A2 as it complies with
the Building (Amendment) Regulations 2018."

Around 1600 m² of Rockpanel A2 was installed at Eyot House. Rockpanel supplied RAL matched colours, metallic and natural wood surface design options which closely resembled the existing scheme. Adrian Buckmaster of TetraClad, "We have worked with Rockpanel before. Their products are lightweight and easy to cut on site without the need to seal edges, making installation quicker, saving time and money."

Unrivalled colour and surface design options

Rockpanel A2 enables specifiers to realise their most creative ambitions safe in the knowledge the reality of those intentions will satisfy the most stringent fire safety standards.

Whichever of the special surface design collections or colours are chosen, specifiers can count on the high durability, complete weather, temperature and UV resistance and little or no maintenance throughout its long life.



For this project, panels in a mixture of seven special colours matched to RAL specifications were used. Along with them accent sections in Graphite Grey from our Metals range and Cherry from our highly realistic natural Woods collection were incorporated. This selection of surface designs more than met the original brief of needing to achieve a similar appearance to the panels which were replaced, but also added a sense of superior quality and contemporary visual revitalisation.

ROCKPANEL WOODS FACADE FOR DUTCH APARTMENT BUILDING

VM Geveltechniek renovated the facade of a residential building in Zwolle (The Netherlands).

The old, flaking and peeling plywood was replaced with future proof Rockpanel Woods facade cladding.

This has improved fire safety by leaps and bounds, while maintaining the warm and harmonious feel of the facade.



The residential building De Philosoof is located on the former grounds of the Stilobad in a pretty, quiet area of Zwolle, close to the city centre.

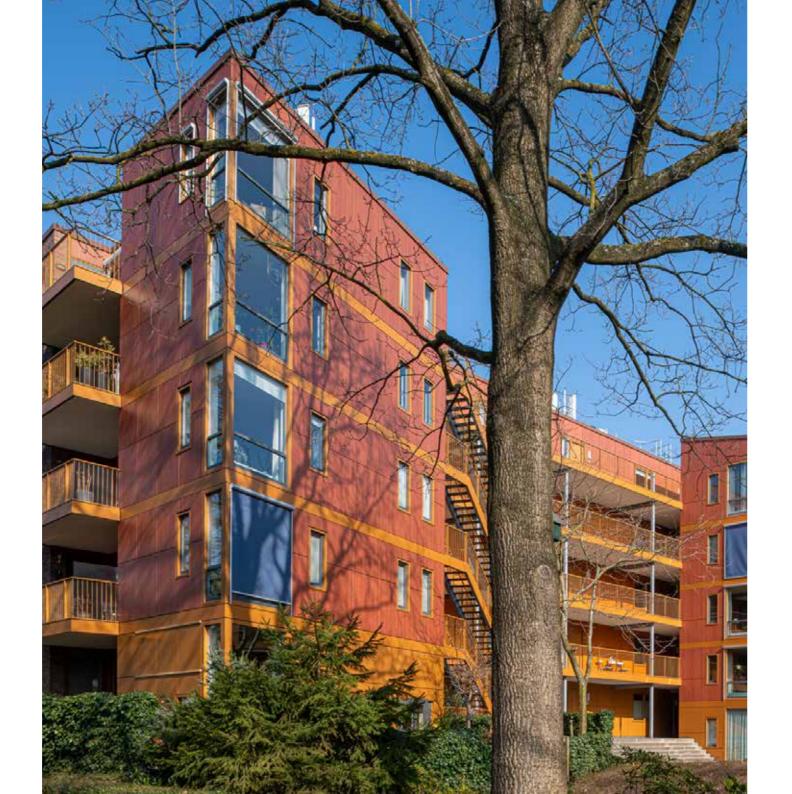
"It's a striking, colourful building that fits in perfectly with the surroundings," explains Jos Marsman, resident and spokesperson for the owners' association. The facade plays an important role in

"Facing the city and the street, the building is a real urban block, with a bold facade of closed masonry that brings order to the unstructured environment. On the other hand, the inner side of the building provides shelter and peace, and faces the garden with mature oaks and the Oude Vecht stream. The facade here was finished with varnished cherry wood when it was built, to create a calm, warm effect."

Rockpanel Woods: safe facade cladding

After an investigation five years ago, the residents of the 36-flat block realised that the wooden facade cladding on the inside and outside was in need of a thorough facelift.

Marsman: "It started with the paint peeling off and continued until a wooden panel suddenly fell to the ground. In the search for the best solution, we examined various options with a special working group: repair and repaint, or remove the backing wood and all the facade cladding and replace them with another material." While the working group was getting its bearings in the summer of 2017, the fatal fire at London's Grenfell Tower broke out. "This highlighted a top priority for us: the new cladding had to make



the new facade as fire-resistant as possible." The Rockpanel Woods boards are all available as non-combustible A2-s1, d0 classified complying with UK fire regulations for high-rise buildings.

Colourfast and low-maintenance

"We were also looking for cladding that would match the original condition and colours of the plywood cladding as closely as possible. Rockpanel Woods has the same warm, organic look of real wood, and is available in a wide range of colours. After a brief search and consultation with the members, we settled on Woods cherry, an almost identical colour to the original plywood cladding. Another obviously important aspect: Rockpanel facade cladding is weather and UV-resistant, colourfast, and low-maintenance. This means we won't have to worry about the facade for decades."

Easy-to-install cladding

Jeroen van der Loos is a project manager at VM Geveltechniek, and has worked with Rockpanel before. He has only had positive experiences: "I personally like to apply Rockpanel facade cladding in renovation projects because it's very easy to install. The shape of the facade at De Philosoof is not completely symmetrical. The original architect distributed the window frames and facade cladding on the facade with a certain playfulness."

"Because of this, there are a lot of dimensional deviations in the building. Normally, we make a demarcation beforehand, and produce from a drawing,



Good cooperation between contractor and manufacturer

economical way was to cut them on site. Fortunately,

Rockpanel is ideally suited for this. The cladding is

light, easy to handle, and can be cut to size quickly

and accurately without the need for special tools."

Prior to assembly, they worked closely with Rockpanel, says Van der Loos. "We consulted regularly, for example to check that our working method was appropriate, the tensile strength was in order, and we were using the right screws. What I personally really like about this is that Rockpanel always takes

Finally, the facade of De Philosoof was given a new look with some 600 square metres of Rockpanel Woods. To the full satisfaction of the residents, according to Marsman: "We've received nothing but enthusiastic reactions, both from all the residents, including some from the very beginning, and those who regularly pass by. The building is finally looking as beautiful as it did in its first years. More importantly, the safety of the building has been greatly improved by replacing the wooden facade cladding with Rockpanel Woods facade cladding. With this, we've taken a giant step forward for maintenance and the safety of the residents."



FUTURE-PROOF END WALLS FOR FLATS IN EMMELOORD

Four blocks of flats in Urkerweg in Emmeloord have been prepared for the future.

Besides an all-electric installation package and a new, sustainable facade, the work carried out reflected a great amount of concern for fire safety.

The new facades have been clad with an aluminium sub-structure and Rockpanel A2 façade cladding, thanks to which they are classified as non-combustible (Euroclass A2-s1,d0).

Although these four modernist blocks of flats from the 1970s have been well maintained, they could hardly have been described as energy efficient or sustainable.

The housing corporation Mercatus therefore commissioned a partnership of Martini-architekten (architects), Trecodome (consultancy firm) and Talen Vastgoedbeheer (real estate management) to improve the sustainability of the entire exterior of the flats.



Wrapped in a future-proof shell

First, the existing cavities in the 4-storey brick buildings were retro-insulated. The facades were then wrapped with ROCKWOOL insulation (A1), and finished with non-combustible Rockpanel facade cladding. Ruud Dessing, architect and director of Martini-architekten: "Not only did we insulate the façades and the roof, we also installed a layer under the floor of the first floor. These homes are therefore completely wrapped in a highly-insulating shell."

The flats are also all-electric, thanks to 176 solar panels and a ground source heat pump. The possible use of hydrogen in the future was also taken into account. This will allow the flats to easily cope with any shortage of sustainable electricity in the winter without major measures or resorting to consuming power from the grid.

Designing from the air

The four blocks of flats are on an access road from Emmeloord in a prominent location, so the appearance of the buildings was an important aspect in the renovation: Dessing: "From the Urkerweg, the end walls of the flats are visible. When the flats were built, they were covered with beautiful multicoloured ceramic tile panels, specially designed for the blank walls and an integral part of the architecture. These contrasted with the uniformity of the neighbourhood, and gave each block of flats its own identity."

The tile panels were retained in the original plan, but it turned out to be impossible to achieve the desired energy performance. "That's why we came up with



an alternative," says Dessing. The starting point?
An aerial view of the Noordoost polder. Dessing:
"A photo from the air shows the division between plots of land, with lightcolours, dark colours, and sometimes the contrasting colour of a building.
We converted this division into a graphic design that decorates the entire eastern end wall of each block of flats.

This solution allows the new façades to maintain a relationship with the past, and embed them in the DNA of the Noordoost polder."

Colourful end walls

The graphic design was made using different shades of Rockpanel Colours A2 facade cladding. Dessing: "We selected five hues per flat from the wide range available within Rockpanel. These colours form a very coherent palette that is in harmony with the colours already present in the different blocks of flats. In addition, the colours of the four blocks themselves are also coordinated with each other. The façades are now very varied. One block has blue-grey tones, one has green tones, while another has red tones."

Obviously, the idea is that this spectacular colour palette shines for as long as possible. Dessing: "They'll be left to the mercy of the elements in the coming years, as you'd expect. For this reason, we looked for cladding which maintains its colour, isn't sensitive to moisture, and provides maximum protection against dirt. Rockpanel cladding is provided with a ProtectPlus coating that meets all these conditions. Most of the dirt on the façade is already washed off by the rain, and even graffiti is easy to remove."

Rockpanel A2 facade cladding for a fire-safe building

Fire safety may have been the decisive factor for choosing Rockpanel, says Roel van Vliet, manager of VM Geveltechniek, the company that carried out the entire renovation of the façade. "We were very concerned with the safety of the residents, so we didn't want to compromise in terms of fire safety. That meant using wall cladding classified as Euroclass A2-s1, d0: non-combustible. Rockpanel is the only manufacturer we're aware of who can meet these demands, thanks to its A2 product line with 9-mm thick cladding."

"In addition, we were looking for someone we could rely on for fast and reliable deliveries. That's where Rockpanel doesn't let you down: your order is guaranteed to arrive on time."

Unique in the Netherlands

The renovation is being carried out while the residents remain in their homes. Even so, they experienced less nuisance than might be expected with

such an intensive job. Van Vliet: "We developed a new façade concept for the four blocks of flats in Emmeloord with an aluminium frame structure that is connected at the height of one floor at a time to the existing substructure. This reduced drilling operations by more than 70%, minimising nuisance to the residents and improved the insulation of the façade."

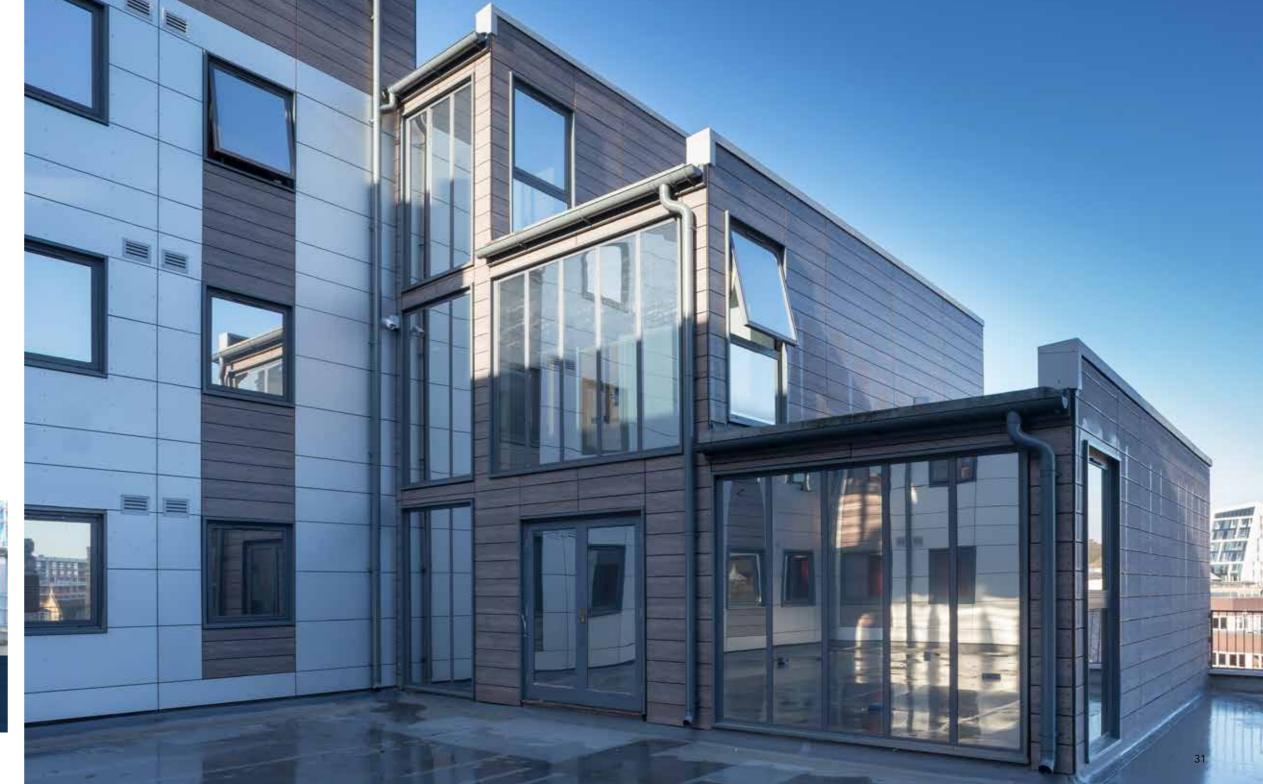
The result? "These are the first blocks of flats in the Netherlands with ventilated end walls that have been awarded fire class A2," says Van Vliet proudly. "That's a major bonus for the residents, because it means any chance of fire spreading is eliminated. The end wall is classified as non-combustible, due to the Rockpanel A2 cladding combined with ROCK-WOOL stone wool and a non-combustible aluminium substructure. According to sustainability tests, it means these beautiful new end walls will last another 50 years."



ROCKPANEL GLEAMS IN SILVER AND WOOD AT GOLDSMITH COURT

Goldsmith Court is a stylish, purpose designed student accommodation situated on the doorstep of Nottingham Trent University City Campus. The GSA (Global Student Accommodation) owned property has been re-dressed with non-combustible Rockpanel external facades, ensuring design freedom and fire-safety while delivering a sophisticated, modern exterior.







Rockpanel – the perfect fit

GSA has a global presence with a 26-year track record in the student accommodation sector, creating vibrant communities rather than simply somewhere to sleep. The safety and security of its students is central to its mission. Goldsmith Court consists of 378 rooms in an array of configurations to suit modern student needs and boasts a plethora of lifestyle amenities included in the rent. There is also a roof terrace where residents can socialise and enjoy panoramic views across the city.

Doug Barton, Senior Project Manager, GSA:
"We engaged with Broadfield Project Management
and Architects Hadfield Cawkwell Davidson (HCD),

to facilitate the refurbishment of the facade at Goldsmith Court. Following reviews and discussions, the team proposed the use of Rockpanel, which aligned with our brief perfectly.

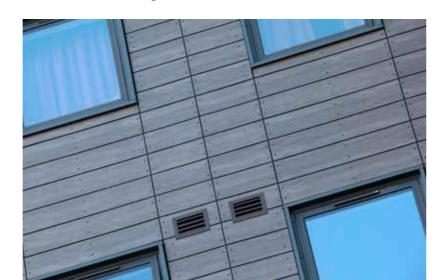
Due to the wide range of colours and styles, we were able to ensure a great match for the original cladding it has replaced, which assisted us with the planning process, negating the need for a full planning submission to be made and reducing the project programme accordingly. Having completed the works, we are very pleased with the result and Rockpanel has certainly lifted the external appearance of the building and provided further kerb appeal."

Making the vision a reality

Architects HCD worked with specialist main contractor, Elhance, to make the design vision a reality. The Rockpanel team were also on-hand to offer technical guidance and advice, and to ensure supply lines were in order and deliveries on schedule.

Adam Johnson, Director at Elhance: "The stripped back exteriors were first lined with specialist moisture repellent, A1 non-combustible BS EN 15283 compliant sheathing board, along with a breather membrane. Then a precision grid of Aluminium zed rails with firebreaks was installed ready to fit the plank shaped panels of Rockpanel Woods Ceramic Oak and contrasting rectangular panels of Rockpanel Metals

The two surface designs – organic wood and slick aluminium – work together to bring visual impact to the architecture. Be it the use of single width verticals to accentuate grey-framed window and entrance columns, or as a larger, continuous expanse, reflecting natural light while protecting the structure beneath from the elements, both combine to give a safe and stunning effect.



Capping, flashing and rainwater management fittings
– in matt grey to match window and door frames –
complete the sharp, contemporary elevations, giving
Goldsmith Court a future proof, non-combustible
outer shell with style and safety at its heart.

Everything went to plan in terms of schedule and cost. All project participants worked together in full cooperation, we are proud of both the seamless way the project progressed and with the finished result."

A2 – offering design freedom and optimum safety

Rockpanel A2 enables specifiers to realise their most creative ambitions, confident they will satisfy the most stringent fire safety standards. It is supremely durable, completely weather, temperature and UV resistant and requires little or no maintenance throughout its long life.

At Goldsmith Court, Ceramic Oak from the A2 Woods range, was used in a plank shape. The quality of detail across all 19 Woods surface designs makes them almost indistinguishable from natural wood, including no visible repeat across the facade.

With a superior environmental profile, Rockpanel embodies the workability and visual warmth of wood without the on-going maintenance costs and deterioration. Similarly, White Aluminium from the A2 Metals collection embodies the contemporary, elegant reflective sheen of metal but with the advantage being a lightweight panel which is easy to transport, cut and install.



Collaboration is key

Tom Uzelac of Rockpanel, enjoyed the project process, "We met with the design team to discuss how we could meet their brief in terms of optimum fire safety and also how our wide range of surface finishes would enable them to realise their design vision. It is gratifying to hear that the owners, architect and Elhance are all very pleased with the completed installation and how quickly and smoothly it was achieved. We look forward to collaborating with all concerned again."



WHAT IS A VENTILATED FACADE?

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**.

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. Vapour will escape quickly thanks to the ventilation flow within the cavity.

'Self-breathing' facade

Algae and moisture problems do not occur and mould cannot grow because the facade is 'self-breathing'. With a well-designed and well-constructed ventilated facade, negative effects of condensation can be prevented, because water will dry out or leak out.

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

Ventilated facades provide great insulation and contribute to energy efficiency and cutting down exterior noise.

Lower construction costs

Compared to a brick cavity wall, a ventilated facade is lighter, which can lower the construction costs.



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.

Easy demounting

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

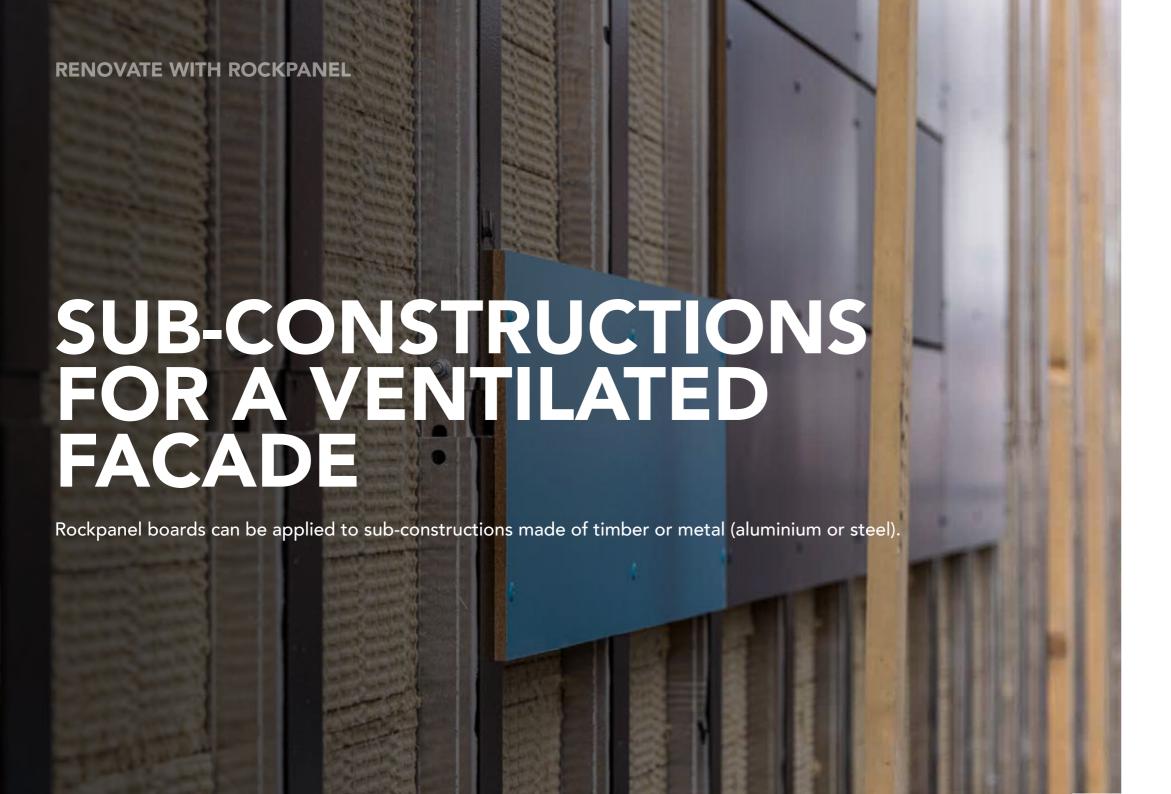
Design freedom

Architects are very flexible in their design choices, with a wide range of colours and designs available for exterior 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.

Firesafe

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.



Timber sub-construction

When opting for a timber sub construction, it's important that the sub-construction fulfils certain requirements:

- Timber stud walls and timber battens fixed to masonry walls should be constructed in accordance with BS EN 1995-1-1 and preservative treated in accordance with EN 335 and BS 8417. Studding and framing should be adequately supported by noggings to ensure rigidity.
- Where timber stud walls or battens are treated with cuprous preservatives, care must be taken to ensure that sufficient time is allowed for the preservative to properly condition before the cladding is fixed.



Metal sub-construction

Metal sub-constructions are the best option if a building requires optimum fire safety.

When Rockpanel boards are applied to an aluminium or a steel sub-construction, there are also certain requirements for the materials. Sub-construction suppliers can provide the required details.

For **aluminium sub-constructions** the following requirements should be met:

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

For **steel sub-constructions**, the requirements are the following.

- The minimum thickness of the vertical steel profiles is either 1.0 mm (steel quality is S320GD +Z EN 10346 number 1.0250, or equivalent for cold forming), or 1.5 mm (steel quality EN 10025-2:2004 S235JR number 1.0038).
- The minimum coating thickness (Z or ZA) is determined by the corrosion rate (amount of corrosion loss in thickness per year) which depends on the specific outdoor atmospheric environment.
- The coating designation (classification which determines the coating mass) shall be agreed between the contractor and the building owner. Alternatively, a hot dip galvanized coating according to EN ISO 1461 can be used.



More information

More detailed information can be found on our website, including the European Technical Assessments (ETAs) of Rockpanel products, fixing distances, BIM and CAD details.

INSTALLATION OF ROCKPANEL

The costs of a material are often an important factor when selecting facade cladding material for a building. However, to get a full picture of the total cost of ownership, it is important to also take into account what the cost of installation and for maintenance in the future are. Using Rockpanel cladding saves valuable time and money during both the installation and the complete lifetime of a building.



Working with standard tools

There's no need for special equipment when using Rockpanel.

Rockpanel facade boards can be easily cut to your desired dimensions on the building site.

Any standard woodworking tool is suitable for cutting the material.



Detailing on site

The panels are easy to cut to size on the building site using standard working tools applicable for wood.



Reduce cutting waste

Thanks to the non-directional designs, cutting waste is reduced andmounting mistakes can be pre-

vented. Reduce cutting waste and prevent mounting mistakes with our non-directional designs!

Almost all Rockpanel boards are non-directional, so you can apply them both horizontally and vertically.



No edge treatment needed

Rockpanel boards can be mounted directly after cutting. As the boards

are insensitive to moisture and temperature changes, they do not rot or delaminate.



Save on demolition costs

If certain preconditions are fulfilled, there is no need to remove the ex-

isting structure first, which brings demolition costs to a minimum. Thanks to the vapour-open structure of Rockpanel Uni and Colours boards (without Protect-Plus), these products can be used in specific situations on non- ventilated constructions.



Pre-drilling is not necessary

Save time and money and avoid risks and costly delays. Install the boards

on site without pre-drilling and ensure fewer mistakes, a better finish and no extra drilling costs.





Rockpanel boards are light-weight

This makes installation quick and easy. The boards are considerably

lighter than other board materials.

A standard Rockpanel Durable board (8 mm) weighs only 8.4 kg/m², making it easy to handle on site. High Pressure Laminate (HPL) and Fibre Cement Boards (FCB) in thickness 8 mm weigh up to + 32% (HPL) and + 83% (FCB) more.



Curving on site

It is possible to bend or curve Rockpanel facade boards onsite. This enables installation on an existing sub-construction, even if this is curved.



Multiple fixing options

Rockpanel offers a range of fixing option, including screws or nails in standard or matching colours.

Even invisible fixing is possible: both the adhesive system and the mechanical concealed fixing solution are completely certified.



Multiple corner solutions

There are multiple options for corner solutions, including showing the

edge that naturally turns dark brown, painting the edges, using a corner profile or using a mitre joint.



Narrow joints or seamless application

Rockpanel board material is dimensionally stable and will therefore hardly expand or shrink.

This enables very narrow joints of only 5 mm. Under certain conditions, even a completely seamless application is possible.

For detailed guidance about installation, please consult the **Rockpanel Instruction Guide**, (available via www.rockpanel. co.uk).

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KEEP MAINTENANCE COSTS LOW WITH ROCKPANEL CLADDING

There is an extensive choice in facade materials. Apart from the aesthetic differences, they also have very different functional characteristics. By choosing a facade material that requires little maintenance, property owners benefit from low operational costs securing a lower total cost of ownership of the facade. Rockpanel boards require very little maintenance.

No need to repeat protection or treatment

Rockpanel boards have a naturally built-in resistance to humidity and can withstand extremely high temperatures.

This means the fire resilient qualities are optimal and mould, fungus or algae do not occur. The boards have an officially confirmed lifetime of minimum 50 years.

No need to repaint

Rockpanel boards are finished with a four-layer water-based coating, which protects a facade against the effects of UV radiation and preserves the colours for years. Cleaning costs are minimized as rainwater washes away most of the atmospheric dirt.

For information on maintenance and cleaning see the 'Cleaning & Maintenance' documentation on www.rockpanel.co.uk

Easy to replace a board

A ventilated facade construction allows for easy access to parts of the facade.

Even if a single board would be damaged in some way, it is very easy to replace this board.

Graffiti can easily be removed

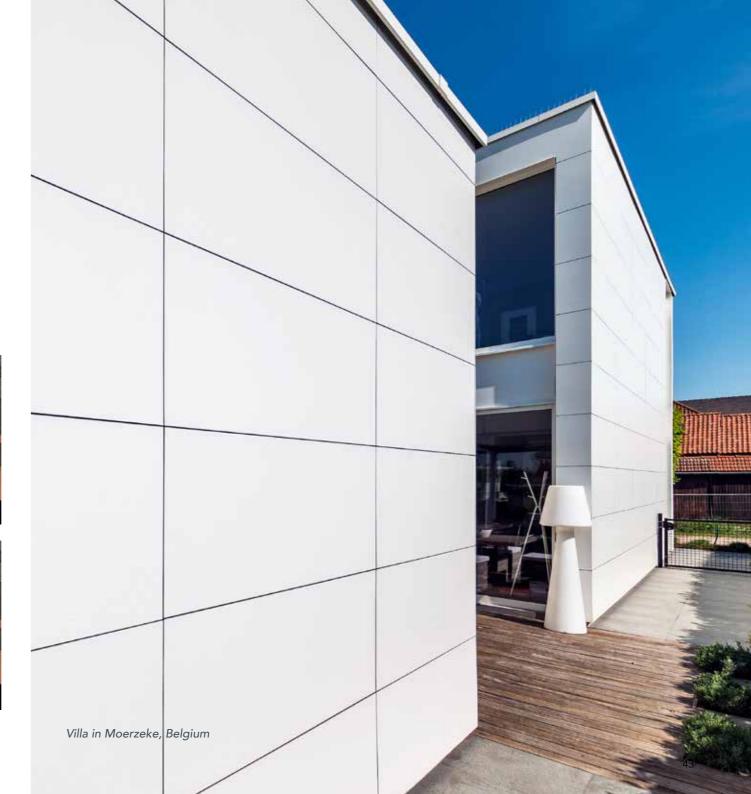
In many areas, graffiti is a big challenge for property owners. A Rockpanel ProtectPlus coating provides facades with premium protection against dirt.

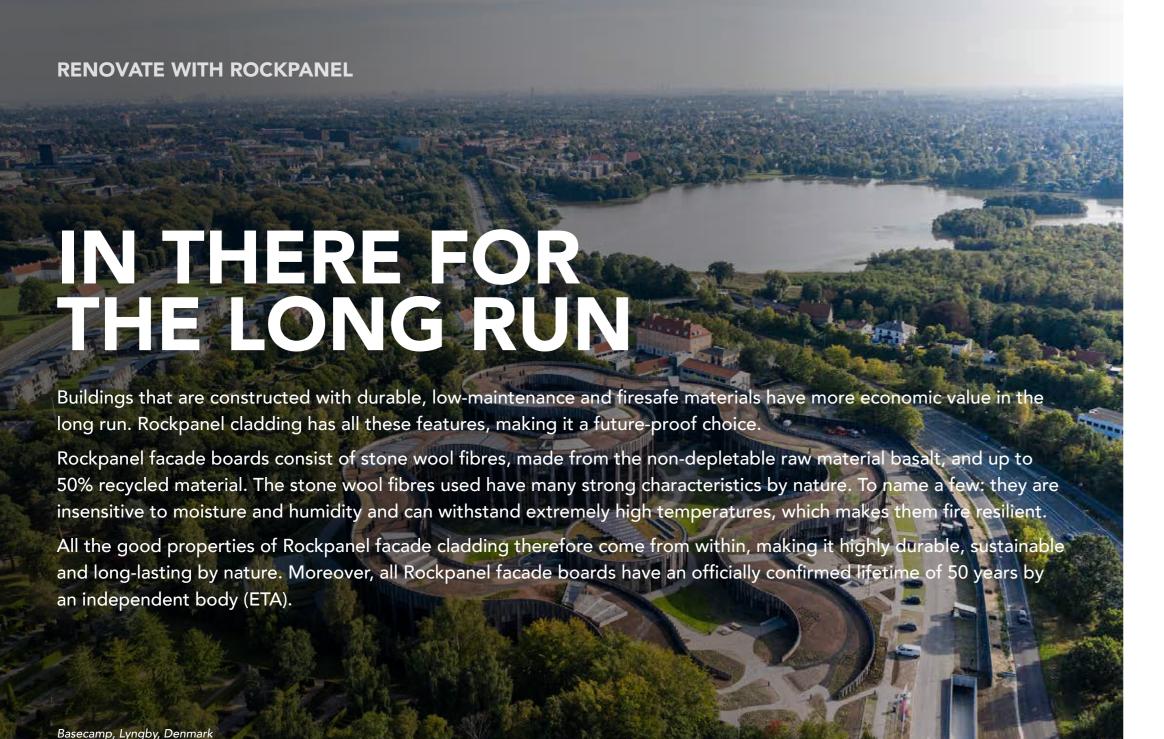
As graffiti can be easily washed off with a normal detergent without causing any change to the surface of the facade panels, permanent damage to your facade is prevented.





Easy graffiti removal due to the ProtectPlus layer





Fire resilient by nature

As Rockpanel cladding is made from basalt, a natural volcanic stone that

can withstand extremely high temperatures by nature, the boards have excellent fire resilient qualities without adding fire retardants.

For high-rise and high-risk buildings, Euroclass A2-s1, d0 cladding boards are available. Figure to the right shows the PCS value for Rockpanel cladding compared to other cladding materials. The PCS or calorific value is the amount of energy that is produced by the complete combustion of a material. This amount of energy determines how much heat a certain material contributes to a fire. More heat simply means a faster spreading of the fire.

* -O |

Long-lasting beauty

When it comes to how long a building can last, it is not only about the technical requirements, but also about aesthetics.

As Rockpanel facade boards are resistant to even the toughest weather conditions, including UV radiation, rain, wind and temperature changes, they remain looking good for many decades. An extra ProtectPlus layer further strengthens the UV resistance and offers increased self-cleaning capacity of Rockpanel cladding.

The ProtectPlus coating also has anti-graffiti properties. This means that even graffiti can be removed without damage to the facade.



With a low calorific value, Rockpanel A2 board material sets the benchmark for very low combustion heat.

Products in the graph are 8 mm thick unless otherwise indicated.

FR: Fire Retardant



Insensitive to moisture and dimensionally stable

Rockpanel boards are insensitive to moisture and changes in temperature. That means they hardly shrink or expand, enabling very narrow joints of only 5 mm. In some cases, even a seamless application is possible.

This also means that finishing the edges to protect them from moisture is not necessary.

Any moisture that is absorbed is released directly into the environment without any change to the boards mechanical or optical properties.

Value 3000 hours	Value 5000 hours	Unit
4-5	4 or better	Greyscale
4	3-4 or better	Greyscale
4-5	4 or better	Greyscale
4-5	4 or better	Greyscale
4-5	4 or better	Greyscale
4-5	4 or better	Greyscale
4-5	4 or better	Greyscale
4	3-4 or better	Greyscale
-	3 or better	Greyscale
	3000 hours 4-5 4 4-5 4-5 4-5 4-5 4-5 4-5	3000 hours 5000 hours 4-5 4 or better 4 3-4 or better 4-5 4 or better 4-7 4 or better 4-8 3-4 or better

Standard: EN 20105-A02

RENOVATE WITH ROCKPANEL

SUSTAINABILITY BUILT-IN

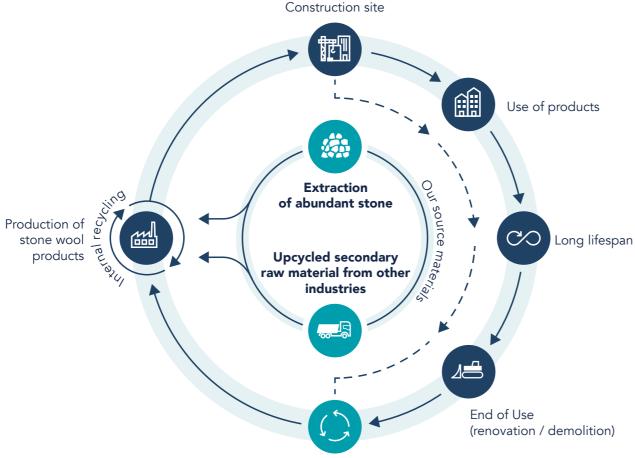
At Rockpanel, we believe that building materials should have as little impact as possible on the environment.

But how do we contribute to this?

Rockpanel cladding is made from nondepletable volcanic rock and recycled material. This makes our products naturally firesafe, durable and recyclable.

As part of the ROCKWOOL group, we continuously learn and improve our contribution to our sustainability goals.

We measure and communicate every year our progress in our ROCKWOOL Sustainability Report.



Recycling service

Natural, non-depletable material and recycled content

Stone wool, made from basalt, is the core material for Rockpanel facade boards. It is made from a combination of basalt and recycled content from other industries – material that would otherwise end up as landfill. This recycled content gets a new life in Rockpanel products, making them a perfect example of up-cycling. Rockpanel cladding itself is also fully recyclable and can be used over and over again without any loss of quality.

Every year, the earth produces 38,000 times more basalt through volcanic activity than the ROCKWOOL Group uses for the production of stone wool. This makes it a responsible choice.

Naturally built-in strengths

Rockpanel cladding has many natural built-in strengths, including fire resilience, resistance against humidity and temperature changes and durability.

As the facade boards are firesafe by nature, there's no need to use (sometimes) toxic fire retardants. The naturally built-in resistance to moisture makes the facade material highly dimensionally stable.

Combined with their resistance to UV radiation, changes in temperature, the result is that the boards are extremely durable and long-lasting, making them a future-proof choice.

Fully recyclable

When it comes to sustainability, limiting the use of new valuable resources and reducing waste are very important. Using Rockpanel products makes a substantial contribution here. It is possible to recycle Rockpanel cladding and use the materials again and again for new products - without loss of quality. On top of that, Rockpanel recycles its own production waste, gives secondary materials from other industries a new life and offers a recycling service in a continuously growing number of countries.

Supporting certification schemes

Rockpanel provides all the necessary facts and figures needed to build according to sustainability building schemes. On the Rockpanel website there are many documents available: from the EPDs (Environmental Product Declarations) of all products to information about how Rockpanel contributes to the most important certification schemes.

Transparency is the keyword here.

Annual sustainability report

Every year, the ROCKWOOL Group, of which Rockpanel is part, continues to make progress towards our sustainability goals. The ROCKWOOL group constantly strives for ambitious goals when it comes to sustainability. The annual Sustainability Report is available to provide transparent information about our progress, achievements and our new commitments.





Sustainability schemes

Rockpanel provides third party-verified EPDs (Environmental Product Declarations) about all products, which are based on a complete LCA (Life Cycle Analysis). These are useful when applying for sustainability building schemes and certifications.

BREEAM

BREEAM – Building Research Establishment Environmental Assessment Method – is a certification system that recognises sustainable buildings that exceed national standards. BREEAM originates from the United Kingdom, but also outside the UK it is one of the most used leading sustainability assessment methods for master planning projects. The BREEAM scheme is primarily focused on the environmental aspects of sustainability, but this is closely followed by social dynamics.

For certification purposes, elements like resource consumption, environmental impact and health benefits are dominant factors. Credits can be gained in different categories.

One way to demonstrate compliance to BREEAM schemes is the use of 'Environmental Profiles', where the impact of construction elements (such as facade boards) is calculated and compared to similar elements. This is done on so-called environmental indicators (13 in total). The score on each indicator is combined and added up to an Ecopoint score and rated on a scale from best (A+) to worst (E). At this moment, all 16 certified construction elements with Rockpanel Durable and Durable ProtectPlus facade boards received best-in-class Green Guide Ratings

of A+. These top ratings allow specifiers to achieve maximum credits within the materials section of the BREEAM assessment.

DGNB

The DGNB (DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen – German Sustainable Building Council) – is one of the most balanced sustainability schemes out there. Their conceptual principles revolve around a holistic understanding of sustainability, and it therefore looks at both environmental, economic and sociocultural factors.

The DGNB not only offers a certification system for new-build, but also has a system specifically for building in use. It also gives out "Climate Positive" awards to buildings that are demonstrably carbonneutral based on their real consumption data.

The DGNB system looks at all phases a building goes through and there are four levels for a certification: bronze, silver, gold and platinum. Rockpanel can contribute in many ways being made from a sustainable, recyclable material. But Rockpanel products also score well when it comes to economical and sociocultural aspects.

LEED

LEED (Leadership in Energy and Environmental Design) is an internationally recognized green building certification system. It provides an independent, third-party verification that a building is built and designed in an environmentally friendly way. A LEED assessment focuses primarily on the environmental

impact of buildings and to a lesser extent the social impacts regarding sustainability.

To obtain a LEED certification, some basic prerequisites must be fulfilled. After that, there are ways to receive credits based on a point system. There are four levels of certification: Certified, Silver, Gold or Platinum. Approximately 10-30% of the credits for a building can be achieved when material manufacturers supply documentation in compliance with the LEED® requirements or criteria.

As Rockpanel facade cladding is made from basalt, a natural and non-depletable raw material that's fully recyclable, using these facade panels can help getting LEED credits in the materials category.

Moreover, as Rockpanel products fit perfectly into a ventilated facade, which can help improving a building's energy efficiency and indoor environmental quality, there are even more opportunities to gain LEED credits here.

Further on, Rockpanel can contribute to gaining credits for the 3rd party verified EPD which is available for all products, the recycling program, the ROCKWOOL Sustainability report, the ROCKWOOL Group Code of Conduct for Suppliers and the REACH compliance.

More information

Extensive information about how Rockpanel products can contribute to the most common schemes can be found on www.rockpanel.co.uk.

All available certificates, including the EPDs can be downloaded at: www.rockpanel.co.uk/applications/resources/certificates/.

For more information about

Rockpanel and sustainability see our website:

www.rockpanel.co.uk/our-thinking/
sustainability.



ROCKPANEL PRODUCT RANGE

Rockpanel's extensive product range is the ultimate toolbox to create attractive living spaces. Whether it's about renovating a small detail on a building, a building block or an entire neighbourhood: there's always a perfect solution. And what's more – all the required functionalities are naturally built-in to the product: durability, fire safety, sustainability, impact resistance and easy maintenance. Rockpanel cladding offers all of that, so architects can design without limitations in colours, design and fixing options.

Rockpanel offers total design freedom. From an unlimited amount of colours and design options to different gloss levels, fixing solutions and corner solutions. It is possible to cut the boards into any dimension, size or shape and to bend the boards.

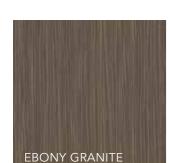
And for renovation projects with a truly unique design, Rockpanel offers the option for customization.

ROCKPANEL WOODS

UNIQUE BY NATURE





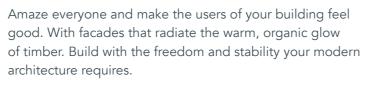


CARBON OAK

EBONY LIMESTONE

ALDER





Rockpanel Woods gives your building a natural wood look. And at the same time the durability, stability and fire protection of a stone facade.





CHERRY







ROCKPANEL **NATURAL**

IN DIALOGUE WITH THE ELEMENTS.

The true beauty of a facade is sometimes quite puristic. Be brave – let the sun, wind and rain play their part.

Without applying paint or surface sealer, uncoated Rockpanel Natural allows the elements to take an active role in your facade. Your building fits organically into its surroundings, in an interactive way from day one.

Rockpanel Natural boards have no coating and will therefore change under the influence of the local climate. As with other natural materials such as wood, concrete and steel, light from the sun ensures natural weathering and colouring over time.







EBONY SLATE

ROCKPANEL **STONES**

INSPIRED BY NATURE.

Visionary architecture is characterised by a courageous crossing of borders. Overcome limits – even those in nature. Design facades with the powerful look of stone. Build with its strength. But remain flexible in terms of shape and dimension.

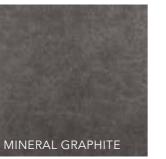
Challenge gravity – with the ease of Rockpanel Stones.



























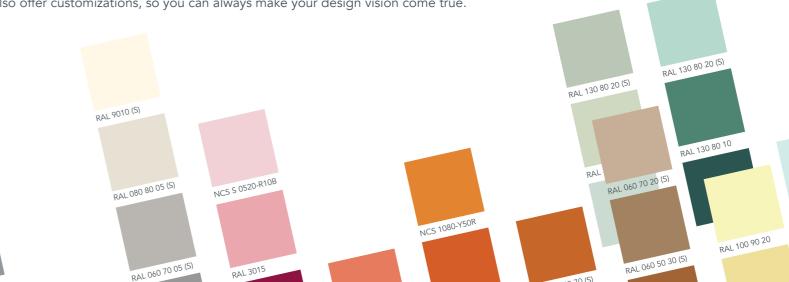
ROCKPANEL **COLOURS**

FASCINATING COLOUR RANGE.

Let your facade blend into the environment. Or emphasise the features in an urban setting. Enjoy complete freedom in the design of your building - in almost any colour of your choice.

For a colourfast decorative statement, Rockpanel Colours is the perfect choice.

The Rockpanel Colours range offers you the most complete palette of colours. You can find almost all RAL/NCS colours in our portfolio. Looking for a very specific colour? We also offer customizations, so you can always make your design vision come true.



ROCKPANEL **METALS***

MAKE YOUR METAL VISION ROCK.

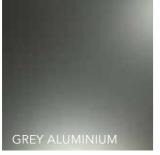
Rockpanel Metals sleek surfaces with an industrial look. Modern architecture is often characterised by an industrial design look. Give your high-quality facades an elegant finish.

Rockpanel Metals creates amazing effects on facades because of the sheen from the light striking it even with timelessly modern residential buildings. Discover the Elemental Metals line or choose an Advanced Metals design for an exceptional worn finish that lasts for decades.

* All Rockpanel Metals designs except for Elemental Grey Aluminium and Elemental White Aluminium are considered to be directional. Colour variation may occur if panel directionality is not observed.

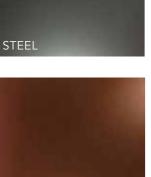


VERDIGRIS

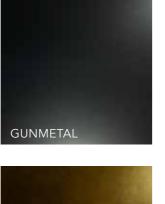


DARK COPPER

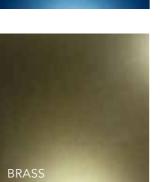


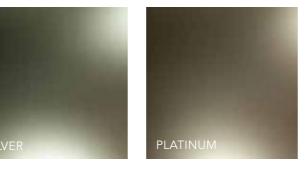


BRONZE













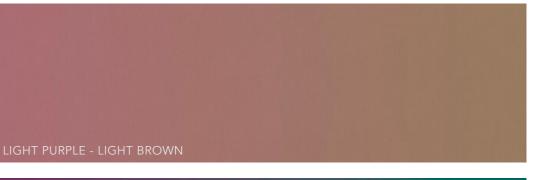
ROCKPANEL **CHAMELEON**

FASCINATINGLY DIFFERENT FROM EVERY ANGLE.

Transform your building into an eye-catching feature that is constantly changing, but always striking and inspiring. Just change your position around the facade.

The colour will never be the same no matter how long you look at the building. Depending on the angle from which it is viewed and the effect of the sunlight, the surface of the Rockpanel Chameleon facade changes.

The secret of this vibrant colour is a special crystal effect layer. The effect layer also gives permanent protection to your facade.









ROCKPANEL PREMIUM

CUSTOMISED FACADE SOLUTIONS

If there's no room for compromises or concessions on the design and detail of your project, Rockpanel Premium facades are the right choice.

Rockpanel Premium combines all the advantages of Rockpanel facade panels and also offers a number of choices outside of the norm. As standard Rockpanel Premium boards are fire classified A2-s1,d0 and comes with a ProtectPlus coating which is highly effective against dirt and graffiti.



Custom designs

Combine all of our colours, designs and finishes, anyway you want it. For example, mix the patterns of Rockpanel Woods or Stones with the effects of Rockpanel Chameleon or Metals.



Matt, semi-gloss, high-gloss

When realizing your project, you want every detail to be just right. That's why we offer three different gloss grades.



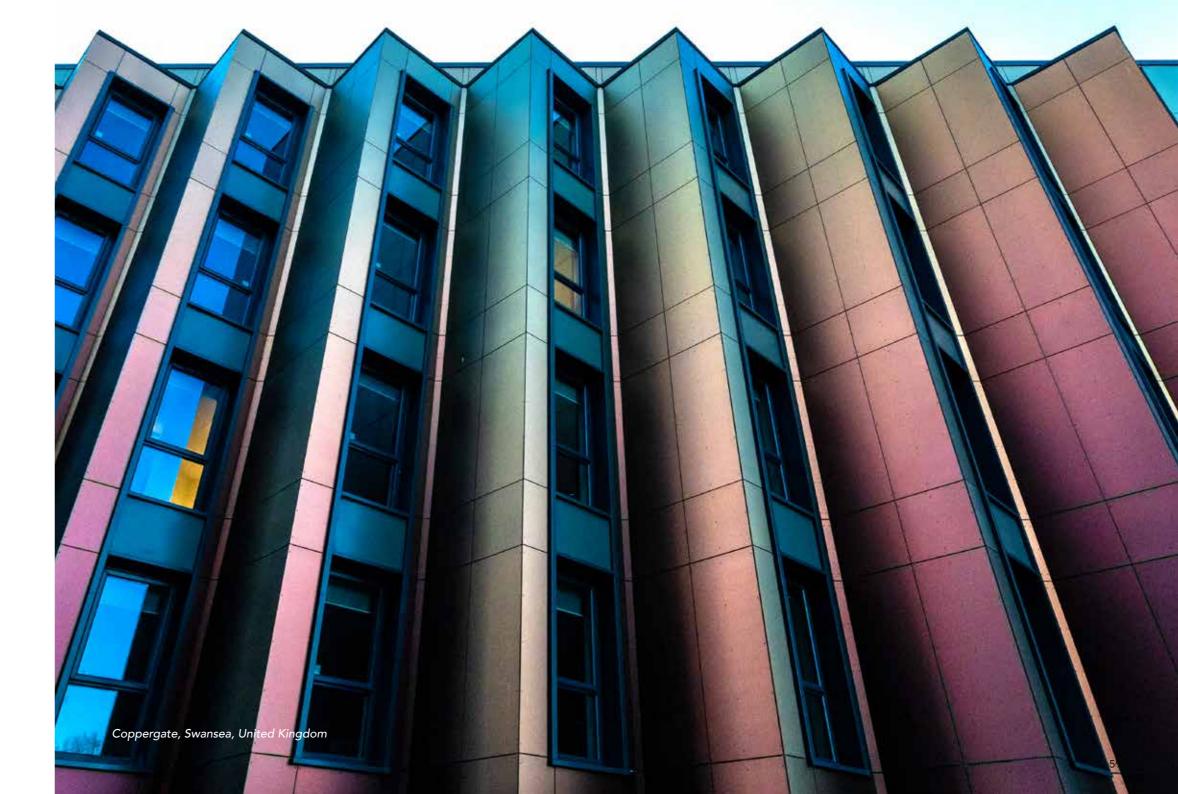
Concealed fixing

No visible rivets or screws – just your flawless facade design. Our concealed fixing system ensures a quick and easy installation and quarantees absolute stability.



Plan without limits

Do you think beyond standard solutions? Then Rockpanel Premium is right for you – with custom colours and designs, and customised formats and dimensions.





FIXINGS & CORNER SOLUTIONS

INSTALL THE FACADE IN NUMEROUS WAYS

Screws, rivets, nails, adhesive or invisible fixing – you are free to choose.

Rockpanel boards can be mounted in many different ways. Screws or rivets are used in visible mechanical mounting. These can be matched to the colour of the facade or deliberately in contrast.

A more subtle, less obvious option are nails, which are barely visible. Invisible fixing is also an option: with an adhesive system (according to Rockpanel specifications) for fast and permanent weatherboarding.

Rockpanel also offers a certified concealed fixing system. This allows you to easily create a flawless facade with invisible mechanical fixings.

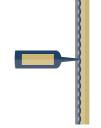


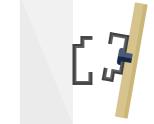
with screws











Fixing

Fixing with nails

Fixing with adhesive system

Concealed fixing system with invisible mechanical fixings



ROCKWOOL INSULATION

FOR VENTILATED FACADES

ROCKWOOL's ventilated facade technology offers buildings thermal benefits, fire resilience and acoustic protection from the outside world. These solutions can be used to improve performance of both new and existing buildings, in conjunction with the Rockpanel cladding products.



INSULATION SLABS:

RAINSCREEN DUO SLAB®

Versatile stone wool insulation for ventilated facades. RAINSCREEN DUO SLAB® is BBA approved and Euroclass A1 non-combustible.

When installed correctly, RAINSCREEN DUO SLAB®'s proven thermal and acoustic performance will remain consistent year after year.



With an increased focus on compliance with thermal, fire and acoustic performance for external walls, ROCKWOOL Timber Frame Slab has been engineered with an optimal density offering a low thermal conductivity, exceptional resistance to fire and outstanding sound absorption. The noncombustible stone wool insulation has dimensions specifically designed to enable quick and easy installation into timber frames.

STEEL FRAME SLAB

ROCKWOOL Steel Frame Slab is Euroclass A1 non-combustible and capable of withstanding temperatures in excess of 1,000°C while providing low thermal conductivity of 0.034 W/mK and delivering proven noise reduction. It has been designed specifically for use in steel frame buildings including ventilated façade constructions to help specifiers meet thermal, acoustic and fire performance requirements.



SP FIRESTOP OSCB

SP Firestop OSCB is a fire stopping solution designed for use in rainscreen systems. SP Firestop OSCB is fully tested to ASFP TGD-19 and proven to provide up to 120 minutes fire integrity and insulation. It is available for cavity widths up to 600 mm (OSCB 25) and 425 mm (OSCB 44), in two formats easily identifiable by their respective white and red weatherproof polythene wraps. SP Firestop OSCB should only be used with ROCKWOOL RAINSCREEN DUO SLAB®.



SP FIRESTOP SLAB®

A one-piece resistance solution.

Fire compartmentation forms an essential part of any fire prevention strategy., providing resistance against spread. The ROCKWOOL SP FireStop Slab® has been specifically designed as part of an effective one piece fireproof insulation system to form cavity fire stops and accommodate movement within buildings.



SP FIRESTOP PLUS SLAB®

A great one-piece solution. Fire compartmentation is essential within an effective fire prevention strategy. The SP FireStop Plus Slab® is part of the innovative ROCKWOOL SP FireStop System.

A one-piece system, it is designed to form cavity fire stops within buildings and provide critical resistance.



SP/XL FIRESTOP FIXING **BRACKETS**

prevention slabs, when used in cladding.

SP FIRESTOP FIXING

BRACKETS

cavity fire stopping.

Extra Large Fire Resistance Security. ROCKWOOL's SP FireStop System is a purpose-made solution for cavity fire stopping. Forming part of the system, the SP/XL FireStop Fixing Brackets play an important role in securing the fire prevention slabs, when used in cladding.

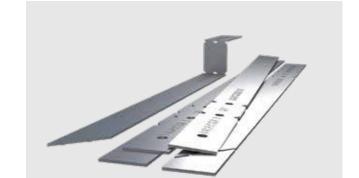
FIRESTOP FIXING BRACKETS:

Fixing power to ensure resistance. ROCKWOOL's

SP FireStop System is a purpose-made solution for

Forming part of the system, the SP FireStop Fixing

Brackets play an important role in securing the fire





For more information about the ROCKWOOL insulation products, please see www.rockwool.co.uk, or contact ROCKWOOL on info@rockwool.co.uk.

Talk to us

The Rockpanel team is happy to support you in any stage of your renovation project – from orientation, planning and design to execution and certification.

On the Rockpanel website, you can find a lot of relevant information such as certifications, product data sheets, drawings and CAD details. You can also request free product samples here.

What will your next renovation project look like? The Rockpanel team is happy to think along and support you where needed.

If you have any questions, need advice, like to receive documentation or Rockpanel samples, or would like to book a meeting online or face to face just contact us:

On mail: info@rockpanel.co.uk
On telephone: +44 (1656) 863210

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www.rockpanel.co.uk

Learn more about us, ask for product samples and be inspired by attractive reference projects.



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Engage and interact.