



Need to **reclad** your combustible façade?

Learn more about the new UK fire safety regulations and be inspired by multiple non-combustible solutions to match any architectural need.

Recladding without compromising on design

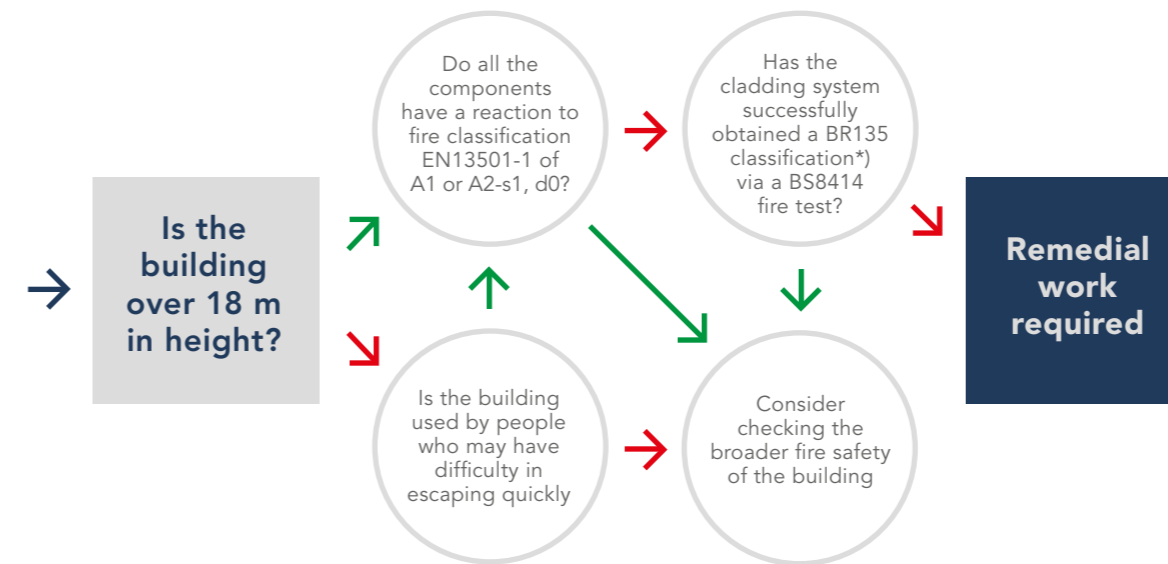
Everyone deserves to be in a safe environment. No matter where you live, work, play or learn: Safety comes first. In the UK there are at least 2135 high-rise and high-risk buildings that have combustible material on their façade (ROCKWOOL Group, 2018).

Today, for all new buildings with a storey at least 18m above ground level, all materials within the external wall should be class A1 or A2-s1, d0 (For explanation of the European fire classes please see pages 14-15). This applies for houses, apartments, educational buildings, student accommodation, hospitals and care homes.

The consequence is that many building owners wish to reclad their existing buildings with non-combustible materials that comply with the new regulations.



Advice has been confusing and it can be a complicated process to find alternative solutions that still match the current architecture of the building. A process to clarify if your building needs recladding should look like this:



For more background information about fire classes please see pages 14-15.

*) ROCKWOOL does not support the use of the BS 8414 test and BR 135 classification criteria to assess the fire safety of high-rise buildings. We recommend that buildings over 18 metres and all high-risk buildings with rainscreen systems use only cladding and insulation with a European reaction to fire classification of A1 or A2.



Who said that recladding with non-combustible solutions limits your choices? When recladding with Rockpanel boards you have full design freedom!

You can also just call us on: **+44 (2922) 405869** or drop us an e-mail on **info@rockpanel.co.uk** and we will be happy to advise you about your recladding project.

Finding a compliant solution with the right design:



With Rockpanel boards you get a non-combustible façade cladding without having to give up on your design requirements. All the designs are available both as standard and as customised options to match an exact colour or design.

Full design freedom

Premium versions are available with options for concealed fixing where no fixings are visible. It is also possible to play with the gloss levels, either with matt, semi-gloss or high gloss.

Being almost 100% recyclable and made from natural volcanic rock basalt and recycled material, Rockpanel boards are also a sustainable choice.

Long lasting anti-graffiti surface

The unique properties of Rockpanel façade boards ensure the best possible quality for the years ahead. Weather conditions such as rain, wind and sunshine can have a major influence on some buildings.

Fortunately, Rockpanel façade boards are insensitive to moisture and are UV-resistant. This prevents both thermal expansion and fading colours. Adding a Protect Plus anti-graffiti finish creates a self-cleaning surface where dirt has no grip and graffiti can be removed.

Easy to install

Thanks to their low weight the façade panels are very easy to handle and particularly suitable for use on high-rise buildings. Easy processing ensures short installation times, making them a cost-effective solution. The boards are easy to cut and adjust on-site using traditional cutting tools and the edges do not need to be sealed. Perfect for a recladding project.



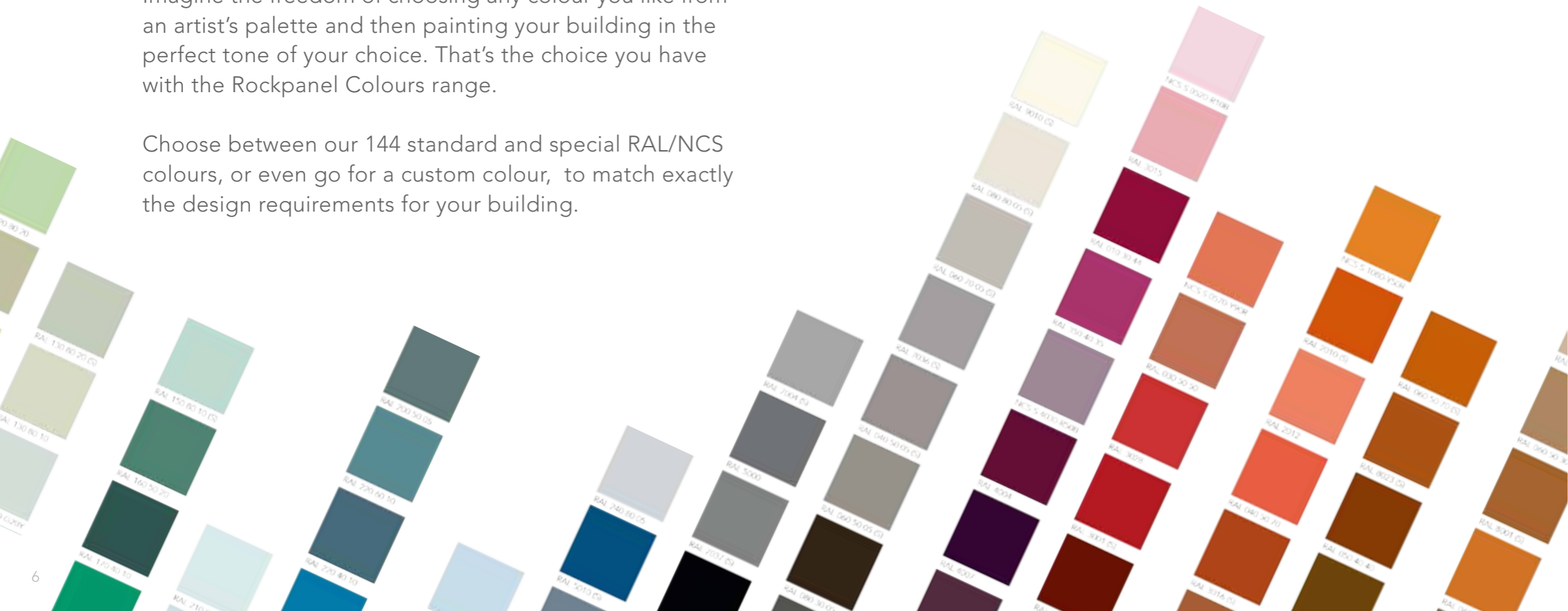
SWITCHING FROM AN HPL FAÇADE

HPL (High Pressure Laminate) panels are made of resin impregnated cellulose layers that are cured under heat and high pressure. Among these various layers are ones with overlay paper, decorative paper and Kraft paper. At best, HPL panels can only achieve European fire class B – and only when adding fire retardants. No matter the design requirement, HPL facades can be replaced with all Rockpanel products.

Rockpanel Colours

Imagine the freedom of choosing any colour you like from an artist's palette and then painting your building in the perfect tone of your choice. That's the choice you have with the Rockpanel Colours range.

Choose between our 144 standard and special RAL/NCS colours, or even go for a custom colour, to match exactly the design requirements for your building.



With Rockpanel you can always find a suitable solution for a recladding project to meet UK fire safety regulations for high rise or high risk buildings – No need to compromise on the design!

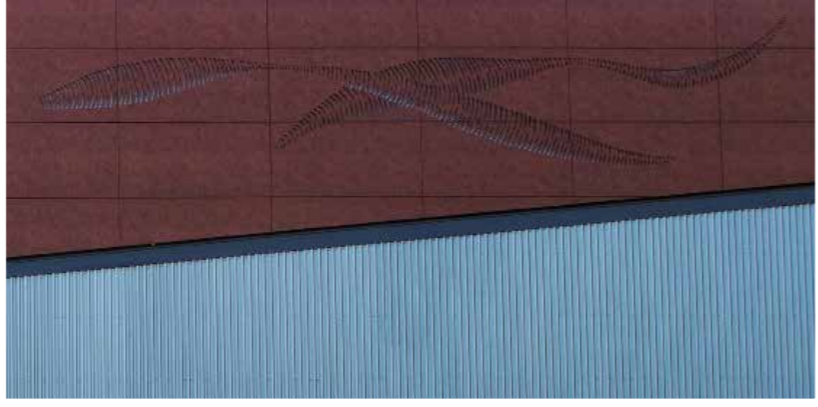


Rockpanel Stones

Rockpanel Stones façade boards offer you the best of two worlds: They look like stone and have A2-s1, d0 fire qualities, but they are as easy to work with as if they were made of wood.

No special equipment is required; standard tools for wood can also be used for our façade boards. Get inspired by our range of 13 Stones designs and colours or talk to us about a customised design.

*Solid as a rock, yet highly flexible
Rockpanel Stones panels offer you the best of both worlds: They look like stone and have A2-s1, d0 fire qualities, but they can also be bent and curved.*



Mineral Lime



Mineral Earth



Mineral Silver



Mineral Rust



Mineral Graphite



Mineral Clay



Mineral Chalk



Concrete Sand



Concrete Platinum



Concrete Ash



Basalt Zinc



Basalt Iron



Basalt Anthracite

Thanks to their light weight, Rockpanel Stones façade panels are very easy to handle and particularly suitable for use on high-rise buildings.

SWITCHING FROM TIMBER CLADDING

Timber cladding comes in a huge variety of different types and thicknesses. However, one thing is in common, all timber façades are combustible. Some timber can be treated with fire retardants; however, these will only achieve Euroclass B at best. To maintain the same architectural expression, timber cladding can be replaced with **Rockpanel Woods**.

Rockpanel Woods

Timber cladding needs regular maintenance and does not comply with UK fire regulations for high rise and high risk buildings. Rockpanel Woods offers the natural beauty of wood combined with the long-lasting benefits of stone: Non-combustible, dimensionally stable, insensitive to moisture and does not require maintenance.

Are you looking for that warm, authentic appearance of wood for your façade? Rockpanel Woods façade panels offers that beautiful wood look, but with all the advantages of stone!



SWITCHING FROM AN ACM FAÇADE

ACM are flat panels consisting of two thin coil-coated aluminium sheets, bonded to a non-aluminium core. The standard ACM core is polyethylene (PE) or polyurethane (PU). These materials are combustible and have a poor reaction to fire performance. To improve their reaction to fire performance, they can be treated with fire retardants or the core is made of mineral filling. A more sustainable solution without fire retardants is to replace the ACM with Rockpanel boards. ACM are lighter than Rockpanel boards, however usually the same support frame can be used with minor adjustments. To match an existing design Rockpanel Metallics or Rockpanel Chameleon can be used.

Rockpanel Metallics

With Rockpanel Metallics you can create a stylish contemporary finish to match an aluminium façade. Choose between the four standard shades of grey aluminium designs and a gold version – or go for a customised colour tone. Get the expression of aluminium but have a façade that is as easy to install as wood. Boards can be adjusted on site.



Customised Rockpanel Metallics façade boards in blue.



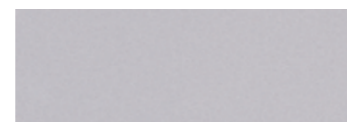
Anthracite



Gold



Graphite Grey



Aluminium White
(Not available with ProtectPlus)



Aluminium Grey
(Not available with ProtectPlus)

Rockpanel Chameleon

Look from different angles, it's never the same twice – that's the power of the ever changing Rockpanel Chameleon cladding board. Affected by natural light or artistic spots and the angle and height viewed – your vision becomes an eye catcher, ever changing and always inspiring. Choose between four very different standard colour combinations.



Light purple – Light brown



Purple – Green – Blue



Red – Gold – Purple



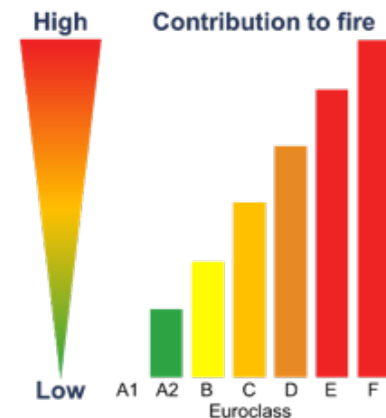
Gold – Brown



New building regulations for high-rise and high-risk buildings

Finding out what a compliant system looks like can be tricky. Regulations in the UK were changed as of December 2018 following the introduction to Approved Document B of Regulation 7. This means that when applying cladding and insulation in a rainscreen system, the materials selected should be non-combustible European Classification A2-s1, d0 or Class A1 for:

A building with a storey at least 18m above ground level and which contains one or more dwellings; an institution; or a room for residential purposes (excluding any room in a hostel, hotel or a boarding house).



European Classification A2-s1, d0 or Class A1 – what does this stand for?

The Euroclass system classifies the reaction to fire and by this the behaviour and contribution of construction materials in fire. Classes A1 and A2 are described as non-combustible and should be used in high-rise and high-risk buildings.

The subclasses s1 and d0 also deserve a bit of explanation. The 's' defines the amount of smoke generated by the product during a fire. The 'd' indicates the flaming droplets and particles created in a fire. For high-rise and high-risk buildings only the best classes can be used, i.e. s1 and d0. In combination with A2 this then creates an A2-s1, d0 construction.

Amount of smoke generated by product during a fire			Indicates the flaming droplets and particles during the initial ten minutes of the fire		
s1	s2	s3	d0	d1	d2
Little or no smoke	Visible smoke	Substantial smoke	None	Some	Quite a lot

What does a compliant rain screen façade look like?

A ventilated façade is a façade construction with a cavity between the insulation and the façade cladding. This cavity is open at the top and bottom and the cladding has open joints, thus creating a way for natural ventilation of the façade.

A ventilated façade can be seen as a raincoat: it protects a building against the weather, while creating a healthy indoor climate. Therefore, it is often referred to as rain screen cladding.

Here you can see the principles for a typical well designed and fire safe ventilated façade. The inner leaf could be masonry or block work or more commonly these days a lightweight steel frame structure clad with a non-combustible sheathing board. The helping hand brackets and rails should be either aluminum or steel.

The insulation layer should fit snugly around the helping hand brackets to ensure the thermal performance of the façade. As well as being non-combustible, stone wool insulation is a good choice here as it can shape to any irregularities of the substrate and doesn't require taping at the joints.



Stone wool based cavity barriers must be present in accordance with the local building regulations.

Based on these principles Rockpanel can provide technical advice for your building. Do not hesitate to contact us with questions about your façade cladding project at info@rockpanel.co.uk.



Did you get inspired?

Order a free sample or get advice on
how to move on with your recladding project:

Call us on +44 (2922) 405869 or
drop us an e-mail on info@rockpanel.co.uk

www.rockpanel.co.uk

Rockpanel is part of the ROCKWOOL Group