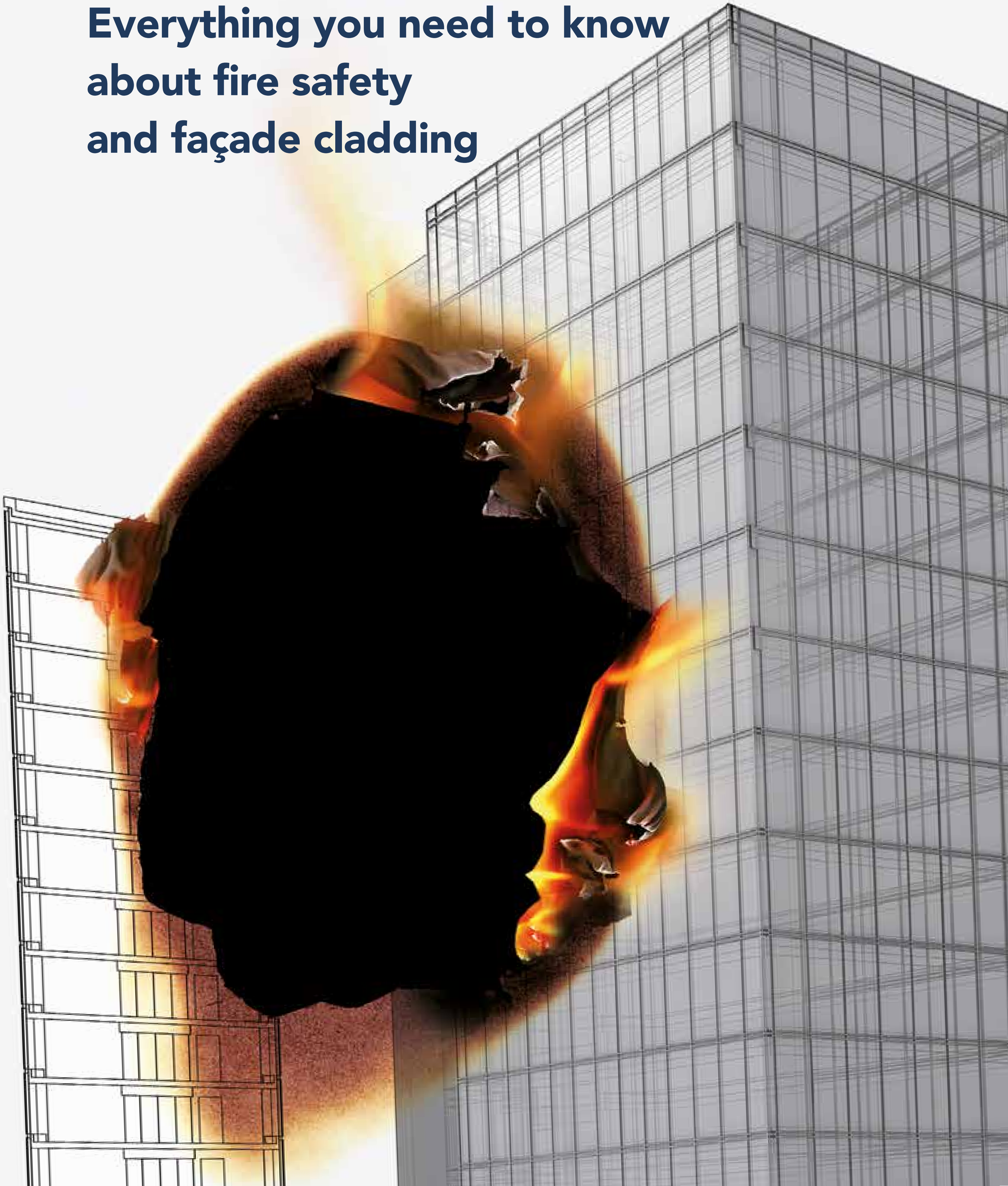
Rockpanel®

Part of the ROCKWOOL Group

# Everything you need to know about fire safety and façade cladding



# Table of contents



# Safety comes first. No compromises. Build responsibly.

At Rockpanel, we feel everyone deserves to be in a safe environment. No matter where you live, work, play or learn: safety comes first.

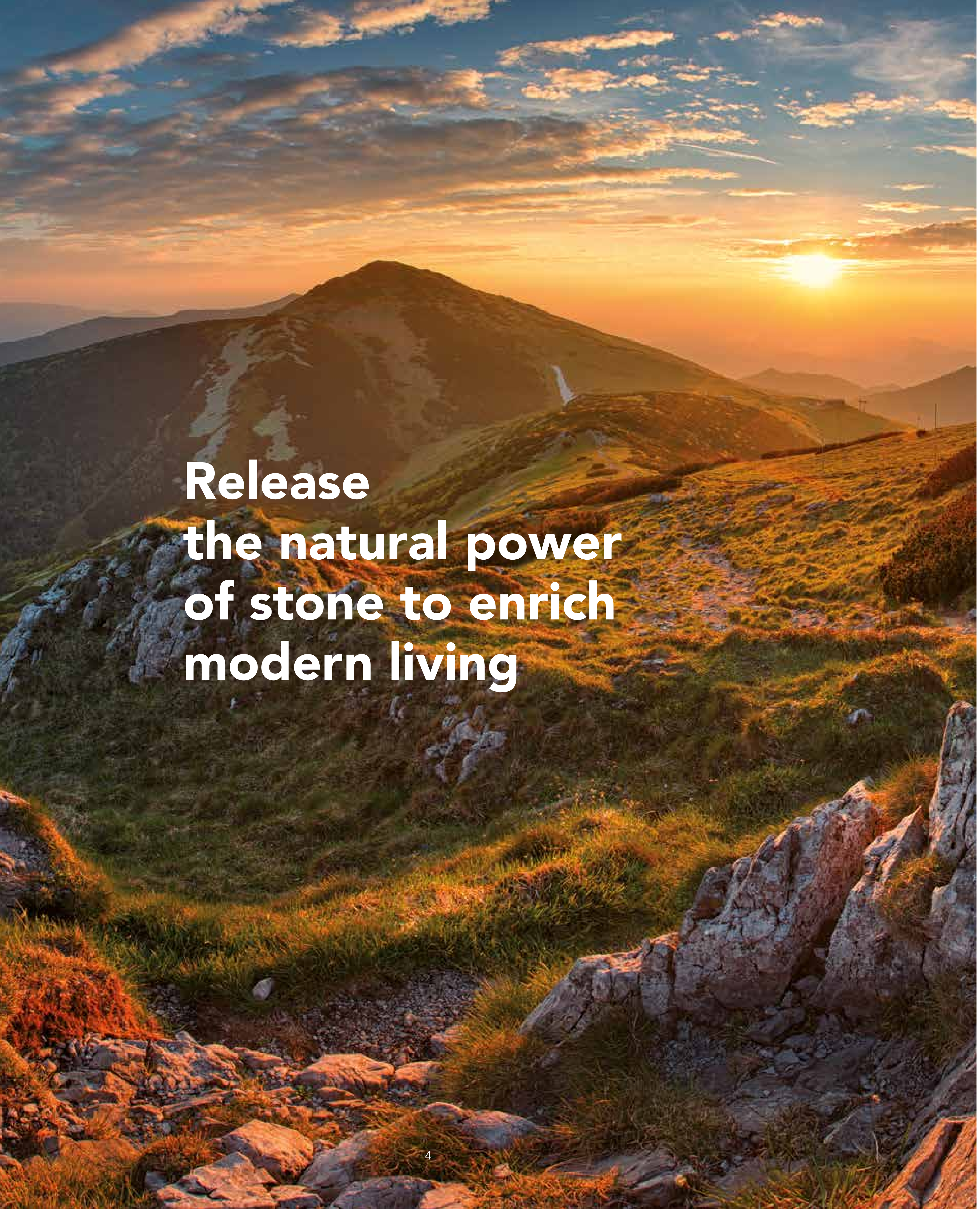
When it comes to protecting people's lives, you can never be too sure. Making the right choices therefore is essential. To ensure fire safety in high-risk and high-rise buildings, we should all work together. Each and every one of us should take responsibility and do their part.

It's part of our mission to use the power of stone to improve people's safety, but we can't do this alone. We therefore ask you to build responsibly and make the right choices.

When it comes to fire safety in building materials, there currently is a lack of clear-cut, unequivocal information. We feel that it is our duty to provide you with all the information you need. The clear and simple facts, so you can make decisions you support with all your heart. No worries, no what ifs, no doubts.

We're building the future together. Let's do it the right way. Fire-proof, future-proof.

Management Team Rockpanel



# Release the natural power of stone to enrich modern living

## We have a clear goal.

We want to make stone come alive in all its facets.
This is our mission, which represents a new chapter in the history of the ROCKWOOL Group.
Let's start it together!

## We are a family.

At the ROCKWOOL Group, we are committed to enriching people's lives. Our range of products reflects the diversity of the world's needs, supporting you in enjoying the comforts of modern living while reducing your carbon footprint along the way.

**ROCKWOOL®**

ROCKWOOL thermal insulation helps in providing a safe environment for your little ones.

**Rockpanel®**

Our innovative facade solutions give you the freedom to explore the boundaries of your wildest design dreams. So, if you can imagine it, you can build it.

**Rockfon®**

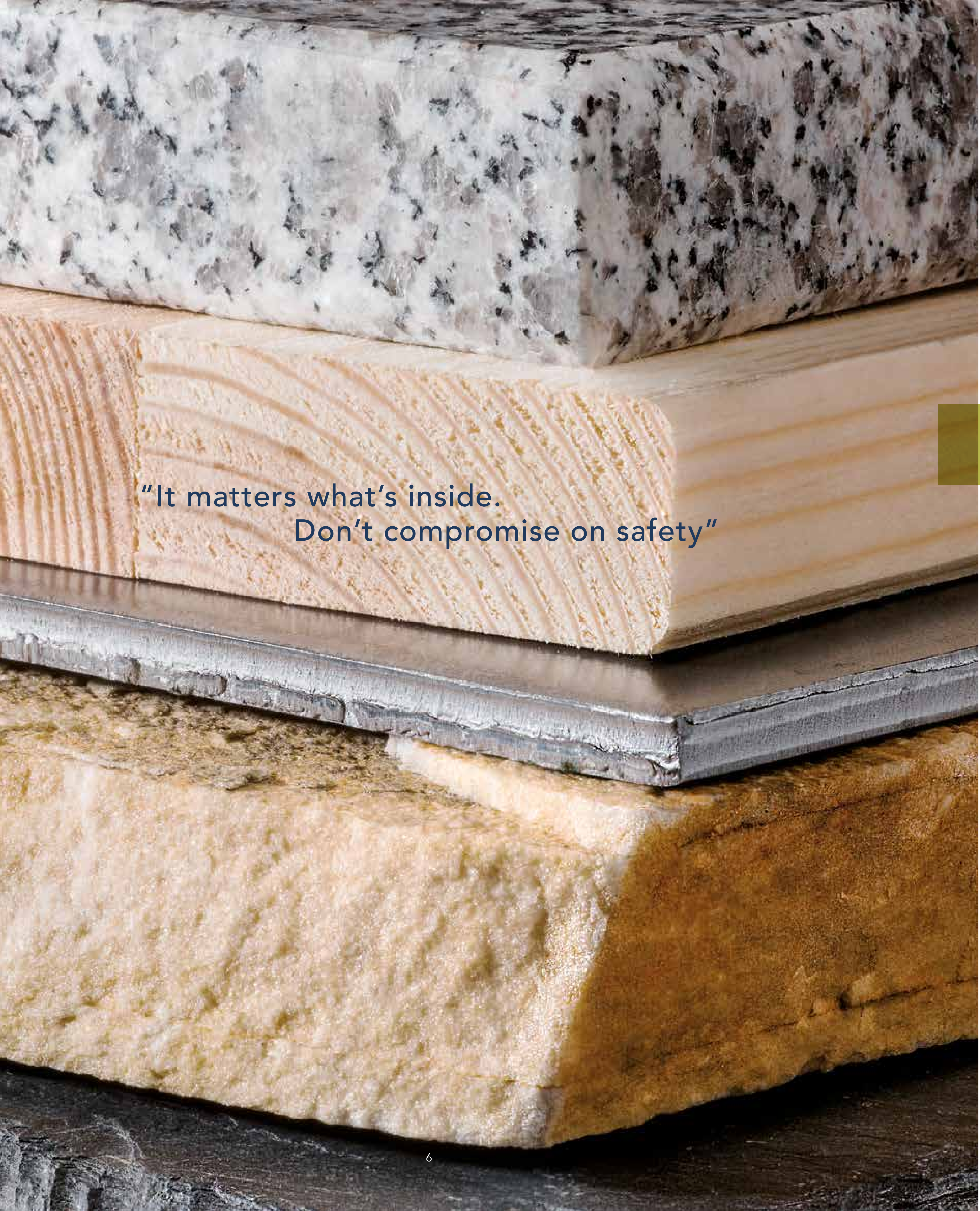
Rockfon products don't just keep the sound where you want it, they help keep every word or note crisp and clean.

**Lapinus®**

Our intelligent brake fibres make braking a precise art even in the most difficult conditions.

**Grodan®**

Our precision growing products increase the amount you can grow, improve the quality of what you grow, and limit your operating risks.




# How are the different types of façade cladding made?

## What materials are used for the most common types of façade cladding and how does this relate to fire safety?

**ACP or ACM (Aluminium Composite Panels or Materials)** are flat panels consisting of two thin coil-coated aluminium sheets, bonded to a non-aluminium core. The standard ACP core is polyethylene (PE) or polyurethane (PU). These materials are combustible and have a poor reaction to fire performance. To improve their performance, they can be treated with flame retardants or even completely exchanged for a mineral core to improve the reaction to fire performance. ACPs are frequently used for external cladding (façades) of buildings, insulation and signage.

**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. HPL panels consist of about 60-70% paper and about 30-40% thermosetting resins. All these materials are combustible by nature and therefore have a poor reaction to fire performance. This performance can be improved by adding flame retardants, but the calorific content of these materials remains high.

**Fibre cement** is a composite material, made of cement reinforced with cellulose fibres. Fibre cement boards can be pre-painted or pre-stained or this can be done after installation. The fire behaviour of fibre cement boards is very good, because of their low calorific content.

Rockpanel boards are made of highly compressed **stone wool fibres** from the natural material basalt (volcanic rock). The panels are finished with a decorative coating. For the binding of the fibres small amounts of thermosetting resin is used, creating a panel with a low calorific content and very good reaction to fire performance.

> “Fire retardants are used to mask high calorific values”

| Panel type | Calorific value (MJ/m²) |
|---|---|
| High Pressure Laminates Brand 1 | 256 |
| High Pressure Laminates FR Brand 1 | 216 |
| High Pressure Laminates FR Brand 2 | 200 |
| Aluminium Composite Material FR Brand 1 (4 mm) | 76 |
| Rockpanel Durable (8 mm) | 34 |
| Rockpanel A2 (FS-Xtra) (9 mm) | 30,7 |
| Fibre Cement Brand 1 | 23 |
| Aluminium Composite Material A2 Brand 2 (4 mm) | 17 |
| Fibre Cement Brand 2 | 12,8 |

With a low calorific value, Rockpanel A2 (FS-Xtra) sets the benchmark for very low combustion heat.

** Products in the graph are 8 mm thick unless otherwise indicated.*
*FR: Fire Retardant*



# Performance of façade panels in a fire

### Why is the calorific value of cladding materials important?

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.

The calorific content of a panel is indicated by its PCS (abbreviation of the French term ‘Pouvoir Calorifique Supérieur’) value. The higher a PCS value is, the more calorific content a panel has. Non-combustible façade material (Euroclass A1 & A2) has a very low calorific value and thus a very low contribution to the fire. The classification of these non-combustible materials has an upper limit on the PCS values.

### Comparing PCS values

In general, the lower the calorific value (pcs value) of a product, the better it is when it comes to fire safety. But what does this imply?
When it comes to PCS value, two panels distinct themselves: fibre cement and stone wool (Rockpanel). They both have a very low caloric content. Stone wool, for example, is made from natural volcanic rock basalt, which can withstand extremely high temperatures by nature.

For ACM/ACP and HPL, the situation is much more complicated. In many cases, the core **in ACM panels** is made from polyethylene (PE) or polyurethane (PUR), which is highly flammable. In case of fire, the panels can delaminate and expose this core, with all its consequences. The issue with an exposed core is even becoming bigger when profiled into so-called cassettes (a common application of ACPs).  Some ACP panels do have a fire-retardant or even a non-combustible core, which leads to a lower calorific value.

**HPL panels** contain lots of organic material that will ignite when heated. This makes it combustible and explains why the manufacturers choose to use fire retardants in these products. These are needed in order to obtain a B classification. Without fire retardants, this usually fails (often a D classification).

*However, to be sure of a totally fire safe solution, it is strongly advised to use non-combustible panels and do not risk the somewhat dodgy performance of panels that include fire retardants to ‘mask’ their high calorific value.*



**In the Euroclass system, the classifications are divided into non-combustible (A1 & A2) and combustible (B-F). However, there is quite a wide variety within boards classified as combustible.**

### Fire behaviour of different B boards

We always recommend using non-combustible materials for façade cladding (including sub construction and insulation) on high-rise and high-risk buildings. These are **Euroclass A1 and A2 materials**.

**Euroclass-B cladding** is very well-suited for many applications (for instance houses or low-risk buildings), especially when used in combination with non-combustible stone wool insulation. However, it is important to take in mind that B panels differ from one another.

First of all, the material of which they are made (combustible or non-combustible by nature) and the calorific value are important. There's a wide variation in calorific value within Euroclass B boards. In addition, the amount of binder used is an important factor.

Compared to other Euroclass B panels, the calorific value of **Rockpanel** is very low, meaning that it does not have a lot of organic material in it that can contribute to a fire. Even more so, in case of fire this binder will decompose, but not burn, because of the core of basalt fibres that do not burn.

Although **HPL panels** have a very high caloric value, they also have a Euroclass B classification. This is because the added fire retardants slow down the ignition during the limited time and limited fire load of an SBI test. In real life, the fire retardants are consumed at some point and the panel would then still contribute heavily to the fire due to its high calorific content. Rockpanel on the contrary, would still not burn, because of its basalt core and very low calorific content.

"Design out the risk
for inhabitants in all buildings"



# Fire terminology explained

## From non-combustible to flammable

**Non-combustible** simply means that a material does not contribute to a fire. The gradation of non-combustibility is determined by the Euroclass system, where **classes A1 and A2 are non-combustible and B-F combustible**.

When you use non-combustible materials, you basically design out the risk, because this material does not significantly contribute to a fire. The non-combustibility (A1, A2) is secured by setting limits to the calorific content (PCS values). For combustible materials (B-F), these limits are not set.

**Fire retardants** are additives that are mostly used with **combustible** materials, to slow down the ignition of these materials. These fire retardants are consumed when exposed to a fire; they slow down the combustibility but do not reduce it.

**Flammable materials,** such as Euroclass E and F materials, are extremely combustible and/or have a flash point below a very low temperature.

## Fire resistance: limiting the spread of fire

When a fire does ignite and sets fire to a room, it brings us to the field of **fire resistance.** This focuses on how long we can keep the fire from spreading between separate rooms or floors (compartments) of a building. Fire resistance is therefore determined by the total engineering, construction and condition of a building. The fire resistance classification is mostly given as a time limit in minutes in which people should be able to safely escape out of a building in case of fire.

**Fire barriers or cavity barriers** are elements placed in the cavity of a façade to prevent the spread of fire within the cavity. One can argue that when non-combustible insulation and cladding (Euroclass A1-A2) is used, the risk of fire spread via the cavity is limited. However, the use of cavity barriers is often prescribed in national building regulations or codes. In general, fire barriers can be divided into two categories: vertical and horizontal.

For rainscreen cladding, often **vertical fire barriers** are used, which are also referred to as **cavity closers**. Their function is to avoid horizontal fire spread.

**Horizontal cavity barriers** are often designed in such a way that they allow the airflow behind a ventilated façade in normal use and block the cavity when exposed to fire. For this either intumescent barriers or metal elements with a reduced ventilation gap between the barrier and the cladding are used.

"Living a healthy life
in a healthy building"



# All about ventilated façades

## What is a ventilated façade and why should I use it in a firesafe building?

### What is a ventilated façade (rainscreen cladding)?

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

A ventilated façade 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 it is often referred to as rainscreen cladding.

### Why should I opt for rainscreen cladding?

Scientific research shows that a ventilated façade has multiple benefits compared to other building techniques. When a brick or concrete wall is exposed to continuous rain, it will act as a sponge, due to the porous nature of the materials. Ventilated façades, however, allow for the water to be drained in the cavity and any other humidity to evaporate through the air gap.

The façade may get wet in the cavity because of the open joints, but this moisture will evaporate quickly thanks to the ventilation flow within the air cavity.

### How does rainscreen cladding improve the indoor climate of a building?

A ventilated façade reduces the direct solar impact on the building and reduces thermal movement of the structure itself. With a well-designed/constructed façade, condensation inside the façade build-up can be prevented. Algae and moisture problems do not occur in that case, because the façade is 'self-breathing'.

### Is a non-ventilated façade safer? After all, there is no 'chimney' effect

As long as non-combustible materials are used for the insulation, sub construction and facade cladding, the so-called chimney (air gap) cannot contribute to any fire spread. In that case, you can have the best of both worlds: all the advantages of a ventilated façade and optimum fire safety.

# The Euroclass system: one standard on fire safety

"Non-combustibles (Euroclass A1 and A2) are the best choice in high-rise and high-risk"

| | EN 11925 (Ignitability test) | EN 13823 (SBI-test) | | | EN ISO 1716 (Gross calorific test) | EN ISO 1182 (Non-combustibility test) | | |
|---|---|---|---|---|---|---|---|---|
| **Class** | **$F_s$** | **FIGRA** | **LFS** | **$THR_{600s}$** | **PCS** | $\Delta T$ | $\Delta m$ | $tf$ |
| A1 | | | | | ≤ 2.0 MJ/kg | ≤ 30°C | ≤ 50% | 0 s |
| A2 | | ≤ 120 W/s | < edge | ≤ 7.5 MJ | ≤ 3.0 MJ/kg | | - | |
| B | ≤ 150 mm 60s | ≤ 120 W/s | < edge | ≤ 7.5 MJ | | | - | |
| C | ≤ 150 mm 60s | ≤ 250 W/s | < edge | ≤ 15 MJ | | | - | |
| D | ≤ 150 mm 60s | ≤ 750 W/s | | | | | - | |
| E | ≤ 150 mm 20s | | | | | | - | |

This is a summary. For the complete criteria, please check EN 13501-1



# What is the Euroclass system?

**The Euroclass system classifies the reaction to fire and by this the behaviour and contribution of construction materials in a fire. The method of SBI-testing is leading here for determining class A2 to D. A1 and A2 classifications can be given on the basis of a successful non-combustibility test. Certification by the Euroclass system is mandatory.**

### What does a certain classification mean?

In the Euroclass system, each classification means that for a product tested within a certain end-use application, there are specific parameters tested and achieved. In the lowest class, F, nothing is tested. Class E only tests with a small flame for a short period of time. D does more testing and also takes into account smoke propagation (s) and the amount of flaming droplets and particles in the first ten minutes of the test (d). At level D, we basically see the first SBI-test, wherein a total kit is tested. Classes C and B are even more strict.

In class A2, the SBI test of the previous classification levels is done, and there is also a test for the calorific content of the product. A1 only tests the calorific content, which should be of a very low value. Classes A1 and A2 are defined as non-combustible: materials from these classes do not contribute significantly to a fire. Basically, this classification method is based on a stacked level of testing: with every class there are more strict rules to comply with. *(see table page 16)**

### What do the additions s1, s2, s3, d0, d1 and d2 mean?

Whereas the A-F determines the class of a product, there are also two subclasses inroved with a classification. The 's' indicates the amount of smoke generated by the product during a fire, and can be s1 (little or no smoke), s2 (visible smoke) or s3 (substantial smoke).
The 'd' indicates the flaming droplets and particles during the initial ten minutes of the fire and can be d0 (none), d1 (some) or d2 (quite a lot).

### Why was the Euroclass system introduced?

The Euroclass system was introduced by the European Union (EU) in 2000 to remove trade barriers between individual member states.

Before the introduction, manufacturers of building products had to test building products in individual countries. All of them had their own unique testing methods to define the fire performance of a product. In order to enter the market in another country, companies had to obtain approval in every single country. This was not only time-consuming, but it also led to inconsistencies in quality levels. The EU solved this situation by introducing a classification system that applied to all member states.

The benefit of the Euroclass system is that it tests the performance in the so-called End Use Application. It also evaluates multiple aspects like ignitability, flame spread, heat emission and so on. Often national test methods cover only flame spread over the product surface for example.

### What does this mean for old national classifications? How can I compare national classes to the international standard?

All over Europe, the Euroclass system is recognised as the standard on fire safety. This means that, in principle, it is no longer allowed to use older (national) classifications. The Euroclass system is integrated into the national building regulations and codes (mandatory), but often the reference to the old standards is kept in this adaptation. This leads to confusion and incorrectness. National classifications can not be compared with those of the Euroclass, because the test methods are totally different. It can look like there are tables that 'translate' the older classifications or regulations into Euroclass, but these are tables for legislation purposes and do not say anything about the performance of materials in case of fire. It is not possible to use a national classification to claim a Euroclass.

! *It is therefore strongly advised to always use the Euroclass system and to be suspicious and question referrals to older classifications.*

# European fire-testing explained

**The harmonised norm NEN-EN 13501-1 is the leading standard for fire classification of construction products and building elements in Europe. At the core of most of the classifications of this norm is the SBI test (Single Burning Item).**

## SBI test (Single Burning Item test - EN 13823)

An SBI test (Single Burning Item) simulates the start of a fire to assess the fire behaviour of building products. Out of this test, the tested material (kit) gets a classification (Euroclass) based on the different parameters that are being measured during the test. These parameters include the flame spread, ignitability, the amount of heat, smoke and toxic gas release and whether a product melts, drips or chars. The classification is based on a certain end-use situation and field of application.

## Things to keep in mind with regard to SBI-testing

During an SBI test, a specific combination of building materials is tested: a certain type of insulation is used, a type of subframe is chosen etc. This is the so-called End Use Application. Test results are only valid for this specific build-up of the construction. Since it is undoable to test all possible variation, the standard foresees in the so-called Field of Application rules.
This set of predefined rules (part of the Harmonized Technical Specification of a building product) makes it possible to extend the test results to other construction build ups where the reaction to fire classification is proven to be unchanged.

During the design and realisation of a building, a lot of changes to a kit can happen. Sometimes out of necessity, sometimes due to choices made within the supply chain. In such cases, fire safety is only assured when the new situation is part of the Field of Application of a classification.

If for instance a panel is tested with mineral wool and then is used with another type of insulation, the classification out of the SBI-test is only valid with non-combustible insulation. With combustible insulation, this classification is no longer valid as the kit can show a different fire behaviour.

Another issue is the unclarity that exists on test results. Test reports aren't always made public, and in that case you don't know what combination of materials have been tested. If it's not clear which end use application is exactly tested, it's highly recommended to ask the manufacturer for this information.
It's wrong to assume that using a combination of Euroclass B products automatically results in a B classification for the entire construction. To prevent any uncertainty, it is strongly advised to use non-combustible materials for the insulation, facade cladding panels and sub construction.

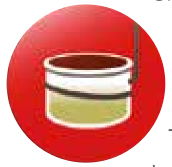


"The full story on how fire performance is tested"

# Other European test methods

## Non-combustibility test (EN ISO 1182)

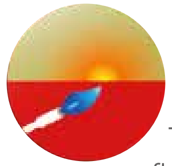
The purpose of this test is to identify the products that will not contribute to a fire (A1 classification). In this test, a small sample of a certain type of material is put in a furnace with a temperature of about 750 °C for a maximum of 60 minutes. The change in temperature, mass loss and the time of sustained flaming, determine the classification.



## Gross calorific potential test (EN ISO 1716)

This test determines the potential maximum total heat release of a product when burned completely. A powdery test specimen is ignited in pressurized oxygen inside a closed steel cylinder (calorimetric bomb) surrounded by water. The temperature rise of the water is measured to determine the gross calorific potential (PCS), which is the classification parameter of this method.

This value needs to remain under a certain value in for the tested material to be classified as A1 or A2.



## Ignitability test (EN ISO 11925-2)

The ignitability test is used for the product classifications B, C, D and E. A small flame is used here to determine whether the product can ignite easily and, if so, whether the fire then will extend rapidly.
During this test, a propane gas flame is brought into contact with the product (temperature of 180 °C). The flame spread shouldn't reach a height of 15 cm in a certain amount of time. In addition, the occurrence and duration of flaming and glowing are observed.

| **Class** | EN-ISO 1182 (Non-combustibility test) | EN-ISO 1716 (Gross calorific potential test) | EN 13823 (SBI test) | EN 119225-2 (Ignitability test) |
|---|---|---|---|---|
| A1 | ✓ | ✓ | | |
| A2 | | ✓ | ✓ | |
| B | | | ✓ | ✓ |
| C | | | ✓ | ✓ |
| D | | | ✓ | ✓ |
| E | | | | ✓ |
| F | | | | |



"From test environment to real life:
what test results actually
mean for your construction"

# Field of applications

When you are performing a test, you're trying to resemble reality as much as possible. But when applying façade cladding in a real life setting, there are many choices you can make: you can use multiple subframes, substrates, types of insulation, etc. As every situation is unique, it is impossible to test for all these different situations.

It's therefore very important to get a clear view of what the test results of the cladding solution of your choice actually mean. Without transparent and trustworthy information about test results, it's difficult – or even impossible – to make the right decisions when it comes to fire safety.

! *We therefore strongly advise you to do your research thoroughly and ask the industry for clear information.*

**Crystal clear information about test results**

As fire safety is our number one priority, we at Rockpanel have chosen to provide extensive and complete information about the tests we perform. On our website, you can always consult our ETA (European Technical Assessment) document, which gives you all the information and test results our CE mark is based on. Here, we would like to present you with the highlights from our fire performance tests for our Rockpanel A2 (FS-Xtra) boards (Euroclass A2-s1,d0).

**Requirements for fire safe constructions using Rockpanel A2 (FS-Xtra) boards**

Our test results are valid for ventilated façades with cavities of 20 mm or more, placed on a substrate of either concrete or masonry and a metal (aluminium or steel) subframe. In ventilated constructions, the subframe should be backed with min. 50 mm mineral wool insulation with a density 30-70 kg/m$^3$ according to EN 13162 with a cavity of minimal 20 mm between the panels and the insulation.

Of course, any mineral wool insulation layer with the same density and the same or better reaction to fire classification would also be valid. It's also possible leave out the insulation layer, as long as the substrate chosen according to EN 13238 is made of panel with Euroclass A1 or A2.

Vertical joints can be applied without a gasket and horizontal joints can be open or closed with an aluminium profile. The max. joint width should be 8 mm.

"Design out the risk in high-rise and high-risk buildings"

# High-rise and high-risk buildings

**When it comes to fire safety, two types of buildings need some extra attention: high-rise and high-risk buildings. What do these terms exactly mean? And what should you bear in mind to ensure optimum safety?**

## What is a high-rise building?

Height is an important factor in fire safety. Although the definition of what constitutes a high-rise building differs per European country buildings (Germany 22 metres and above, UK 18 metres and above, Belgium 25 metres and above etc.), it is indisputable that risks increase when the height of a building is at a certain level.

Escaping from tall buildings is more complicated and takes more time compared to a single-family house with only one floor. Not only do high-rises have more inhabitants or people that work in them, normal houses also have more escape routes (windows, doors) and are therefore easier to escape when a fire occurs. Using combustible materials on a building that is, for instance, 15 metres tall and thus not generally recognised as a high-rise, greatly enlarges the risks in the event of a fire and can have a catastrophic outcome.

Often high-rise limits are based upon possibilities for fire fighters to reach the fire via ladders or other equipment. With the rapid changes in the building environment these methods cannot always be applied and by this the limits are part of the debate in defining new regulations for fire safety.


## What is a high-risk building?

**A high-risk building is a building where the impact of a fire can be catastrophic**.

Hospitals, nursing homes, schools, hotels, student housing: all of these and similar buildings fall under the definition of high-risk. These are buildings where a lot of people live, sleep, are in need of care and/or cannot escape quickly or easily in case of a fire emergency. The risks of losing lives due to a fire are high within this category of buildings. Also, the loss of property and the decreasing economic value of a high-risk building are aspects of attention here.

It is also important to keep in mind the future use of a building. A structure that today is not considered a high-risk building, could be one in ten years from now if the usage of it changes. For example, from an office building to an elderly care home.

! *Therefore, keeping in mind the lifetime safety of a building and its users is always the best way to go when dealing with fire safety. Using non-combustible façade cladding materials is the only way to design out the potential dangers involved with current or future high-risk buildings.*

| | | | |
|---|---|---|---|
| Legislation | Building Regulations 2010 (Statutory instrument No. 2214) | | |
| Government guidance | Approved Documents<br>ADs support the 14 "Parts" of the Building Regulations. ADB supports Part B - Fire Safety | | |
| | Building Bulleting 100: Design for fire safety in schools | HTM 05-02: Fire Safety in the design of healthcare premises | |
| | Standards, test methods and other "tier two" documents directly referred to in the Ads<br>Eg BR135 and BS8414 | | |
| Interpretative guidance | BCA and NHBC Technical Guidance Notes (notably No. 18), etc | | |
| Evidence of compliance | Manufacturer test data and guidance | Desktop studies | Fire engineering |



# Fire safety regulations UK

**Please note: the current building regulations and guidance documents are under consultation by the government. The information below is the status of December 2018.**

When applying cladding and insulation in a rainscreen system, the materials must be selected in order to fulfill the building regulations. The fundamental requirements with respect to fire safety are regulated in Part B (Building Regulations). More detailed guidance is offered in Approved Document B. The legislative framework and guidance documents are schematically presented in the diagram on page 28.

The Requirement B4(1) of the Building Regulations states the following: "The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building."

## New regulations concerning high-rise and high-risk buildings

As of December 2018, the building regulations have been changed. This means that materials of Euroclass A2-s1, d0 or Euroclass A1 are now required for certain types of buildings. Regulation 7 of the Building Regulations 2010 states that for a relevant building with a storey at least 18 m above ground level, all materials that become part of an external wall or specified attachment of this building should be of European Classification A2-s1, d0 or Class A1, classified in accordance with BS EN 13501-1:2007+A1:2009.

A relevant building is defined as any building that either contains one or more dwellings, an institution, or a room for residential purposes (excluding any room in a hostel, hotel or boarding house). These include student accommodations, care homes, sheltered housing, hospitals and dormitories in boarding schools.

## Approved Document B: guidance document

Fire Safety Approved Document B provides further guidance. It consists of 2 volumes: volume 1 covers dwellinghouses and volume 2 sets the guidelines for all buildings other than dwellinghouses. High-rise buildings (above 18 m) and multi-unit housing are included in the latter category.

The guidance offered within Approved Document B section B4 recognizes the risks associated with the use of combustible materials within the cladding system and extended cavities by restricting the combustibility of the insulation and cladding over 18 m. For other buildings than the relevant buildings addressed in Regulation 7, this is covered in section 12.4 till 12.6.

Section 12.7 and 12.8 give guidance on the application of fire barriers. In section 12.9 till 12.14, detailed guidance is given with respect to Regulation 7. In this section, it is clearly mentioned that for the relevant buildings, the only acceptable classification method for materials is the appointed Euroclass classification.

*Disclaimer: These texts are for information purposes only and no warranty is given. The official legislation is leading.*

"To ensure fire safety, we must all do our part and make the right choices"



# A word on responsibilities

When cladding a façade, who carries end responsibility? Defining both legal and moral responsibility is a complicated matter. As a producer of building materials, we feel like it's our duty to not only provide high-quality products we believe in, but to also help architects and contractors as much as we can.

We therefore have extensive information available and are fully transparent in sharing our test results. As every building is unique, we also offer technical support on an individual level. Clear, correct and to the point: that's what we stand for. We stick to the facts and genuinely care about fire safety.

Ensuring safety is not just about choosing the right materials; it's so much more than that. The complete design and construction of a building consists of so many factors that all play a part in fire safety. It is therefore essential for architects and contractors to be aware of the risks and interactions between all these factors. You will need to gather information, connect all the dots and create a solid design plan that ticks all the boxes when it comes to safety. Doing your research thoroughly and asking critical questions when you aren't a 100% sure is vital here.

As you're building for the years to come and shaping the world for our future generations, it's highly important to really think ahead and go the extra mile. National building regulations are often outdated, having been implemented years ago and not updated since.
They therefore do not consider modern developments, such as the increased fire load (consumer electronics, more furniture, new building materials and modern methods of construction) that is present in buildings nowadays.

Although regulations in many European countries do not require the use of non-combustible materials, it's the only way to go when installing or specifying façade cladding on high-rise and high-risk buildings.

After all, the best way to prevent risks is to 'design them out' completely. Make the right decisions in all phases of a construction project, from the creation of blueprints to the final construction of the building.

*If you need any information or want to have a second opinion, just get in touch. We're here to help.*

# BUILDING INSPIRATIONS

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