

Part of ROCKWOOL Group

Product Data Sheet Rockpanel Chameleon



Rockpanel Chameleon

Product description

Rockpanel Chameleon is the facade, that will never be the same. Depending on the viewing angle or the sun's reflection, the facade will transform into a new vibrant colour due to a special crystal effect layer. The effect remains the same for decades.

Assortment

| Product line | Board composition | Thickness | Standard dimensions |
|---------------------|-------------------|-----------|---------------------|
| Rockpanel Chameleon | A2 8 mm | 8 mm | 1200 x 2500/3050 mm |
| | A2 9 mm | 9 mm | 1200 x 2500/3050 mm |

Surface

The surface of Rockpanel boards is treated with layers of water-borne polymer emulsion primer and paint on one side. An additional ProtectPlus coating comes standard with Rockpanel Metals, Chameleon, Stones and Woods. This ProtectPlus layer makes the board extremely easy to clean; even graffiti can be washed off. ProtectPlus is available as an option for the Rockpanel Colours boards.

Fire safety

Rockpanel boards offer high performance when assessed for reaction to fire. Due to the nature of the stone wool fibres and the low binder content the boards have a low calorific value, this means that they will hardly contribute to a fire when exposed. As a result, the addition of environmentally unfriendly flame retardants is not needed. The Rockpanel products are tested in accordance with the European harmonized technical specification (EAD 090001-00-0404 and EAD 090001-01-0404) and are classified in accordance with EN 13501-1. The Euroclass classification of all Rockpanel products is based on testing with non-combustible mineral wool insulation. For the field of application covered by the classification, please see the relevant Declaration of Performance.

For high-rise and high-risk buildings, Rockpanel recommends the application of non-combustible (Euroclass A1-A2-s1,d0) cladding and insulation.

| Rockpanel Chameleon | A2 8 mm | A2 9 mm | Unit | Test/classification method |
|--|----------------------------|----------------------------|--------------------|----------------------------|
| Optical properties | | | | |
| Colours | ProtectPlus: 4 Colours: | ProtectPlus: 4 Colours: | Class on greyscale | ISO 105 A02 |
| Fire | | | | |
| Fire classification | A2-s1,d0 | A2-s1,d0 | Euroclass | EN 13501-1 |
| Physical properties | | | | |
| Weight | 9.4 | 11.25 | kg/m2 | EN 323 |
| Density, nominal | 1170 | 1250 | kg/m3 | EN 323 |
| Thermal conductivity | 0.47 | 0.55 | W/m·K | EN 10456 |
| Water vapour permeability Colours ProtectPlus 23 °C and 85 % RH | < 3.2 | NPD | m | EN 12572 |
| Cumulative dimensional change length % | 0.072 | 0.064 | % | EN 438-2 |
| Cumulative dimensional change width % | 0.072 | 0.064 | % | EN 438-2 |
| Mechanical properties | | | | |
| Bending strength, length and width | ≥ 27 | ≥ 25.5 | N/mm2 | EN 310 / EN 1058 |
| Modulus of elasticity | ≥ 4015 | ≥ 4740 | N/mm2 | EN 310 |

Key product properties

Rockpanel Chameleon

Rockpanel is recognised for its blend of natural qualities that make it a unique choice for exterior cladding and other architectural applications. Derived from the abundantly available rock, basalt, Rockpanel possess inherent natural properties that contribute to their durability, sustainability, fire resilience, ease of installation and aesthetic versatility.

General product information

Sustainability and environment

Rockpanel boards have a third-party verified Environmental Product Declaration (EPD), in all according to the EN15804, where we transparently communicate the environmental performance of our products.

The influence on air quality and release of dangerous substances to soil and water has been determined to achieve the European Technical Assessment. The analysis showed Rockpanel boards contain no dangerous materials such as biocides; the manufacture of Rockpanel boards does not involve the use of flame retardants or cadmium. The formaldehyde concentration is ≤ 0.0105 mg/m³ which relates to formaldehyde class E1.

Visual appearance

Surface quality: Rockpanel boards are produced with the utmost care and individually checked before being approved. In the event of doubts the panels are judged visually for aesthetic flaws, in daylight, without sight enhancements, from a distance of at least 5 metres in front of the surface of the façade element, with an observation angle of 45° (horizontally/vertically).

Batches: Rockpanel boards are produced using incoming inspection, process assurance and quality control by which Rockpanel Colours boards in RAL/NCS colours out of different batches can be combined. However for all other products and for project related orders, the whole order for a given project must be ordered as a single batch.

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

Packaging

Most Rockpanel boards are covered by a film to protect the decorative finish. Site measurements can also be marked on this film to aid the installation process. If you're marking anything on protective film, it's advisable to test the pen on a sample board first. This step ensures compatibility and helps prevent potential bleeding through. Some permanent markers may bleed through the film, so a preliminary test can save you from any unwanted surprises. Remove the protective film:

• directly after mounting, if attaching mechanically with screws or manual nailing;

• before priming the board for adhesive bonding, not required but recommended;

• before installing when using a pneumatic hammer.

The protective film can be recycled. Rockpanel Natural, Rockpanel Lines² and Rockpanel Metals (White Aluminium and Grey Aluminium) are delivered without protective film. Handling of these boards needs extra attention.

Maintenance

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

• Rockpanel Colours can be cleaned with lukewarm water and mild cleaning agents

• Rockpanel with ProtectPlus can handle anti-graffiti cleaners if needed

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

www.rockpanel.co.uk/support/resources/.

Rockpanel Chameleon

Within our detailed product information section you can read about the impact resistance, suitable sub frames, fire properties and the specified fixings. Also visit www.rockpanel.co.uk for additional information on Rockpanel board material, such as a complete overview of the Rockpanel assortment, guidelines for processing and installation, specifications text, health and safety and application.

Detailed product information

Impact resistance

| Categories | A2 (8 mm) | A2 (9 mm) | Test / classification method |
|--|---------------------------|-------------------|------------------------------|
| Hard body (1 J) without horizontal joint | | IV | |
| Hard body (3 J) without horizontal joint | | 1 | |
| Hard body (10 J) without horizontal joint | | 1 | 100 7000 4000 |
| Soft body (10 J) without horizontal joint | | 111 | — ISO 7892: 1988 |
| Soft body (60 J) without horizontal joint | | - | |
| Application for full boards, for a complete overview and | d description, please con | sult the relevant | |

European Technical Assessment.

Suitable sub frames

Rockpanel boards can be attached to the building by fixing to a sub-frame of timber or metal, in all according ETA. The vertical timber battens should have a minimum thickness of 25 mm. The minimum thickness of the vertical aluminium profiles is 1.5 mm for rivets and 1.8 mm for screws. The aluminium is minimum AW-6060 according to EN 755-2. The Rm/Rp0.2 value is \geq 170 /140 for profile T6 and \geq 195/150 for profile T66. 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).

Properties in relation to fire

| Product | Vertical subframe*** | Construction build-up | Fixing method | Classification |
|---------|-----------------------------|---|--------------------|----------------|
| | Aluminium or steel subframe | | Mechanically fixed | |
| | Wooden sub frame | Non-ventilated, cavity filled with mineral wool** | Mechanically fixed | A2-s1,d0 |
| | Wooden sub frame | Ventilated with EPDM gasket* | Mechanically fixed | |
| | Aluminium or steel subframe | Ventilated with minimum 20 mm cavity | Mechanically fixed | A2-s1,d0 |
| | Wooden sub frame | Ventilated with EPDM gasket* | Mechanically fixed | A2-s2,d0 |

* Gasket/strip 15 mm wider at both sides than the batten.

** Check the pre-conditions for non-ventilated constructions or consult Rockpanel. *** For a complete overview and description of the end use situation in which the classification is determined, please consult the relevant European Technical Assessment.

Fixings specified for use with Rockpanel

| | Torx screw | Rivet 18 SFS Aluminium | Rivet 18 SFS Stainless Steel A4 | Rivet 18 MBE Aluminium | Rivet 18 MBE stainless steel | Screw for steel, clamping depth 9 mm | Ring-shank nail, High Performance | Screw for steel, clamping length 19 mm | Self-drilling screw for aluminium |
|-------------------------------------|---|--|--|--|--|--|--|--|--|
| A2 8 mm | + | + | + | + | + | + | + | + | + |
| A2 9 mm | + | + | + | + | + | + | - | + | + |
| | | | | | | | | | |
| Fixing code | | AP14-50180-S | SSO-D15-50180 | FN-Al5-5x18 K14 | FN-A4-5x18 K15 | JT6-FR-3-5.5 x 25 | | JT6-FR-3 -5,5 x 35 | SDA4-D15- CS10/8-5.8x29- A4 |
| Sub frame | Wooden subframe | Aluminium subframe | Steel subframe | Aluminium subframe | Steel subframe | Steel subframe | Wooden subframe | Steel subframe | Aluminium subframe |
| Thickness sub construction (mm) | ≥ 28 | ≥ 1,5 | ≥ 1,0 | ≥ 1,5 | ≥ 1,0 | ≥ 1,0 | ≥ 28 | | 1.8 |
| Material (body) | Stainless steel (material nr. 1.4401 or 1.4578 according EN 10088) | EN AW-5019 (AlMg5) according EN 755-2 | Stainless steel material number 1.4578 in accordance with EN 10088 | Aluminium EN AW-5019 (AIMg5) in accordance with EN 755-2 | Stainless steel nr. 1.4567 according EN 10088 | Stainless steel A4 in accordance with EN ISO 3506 | Stainless steel in accordance with EN 10088 - Material number 1.4401 or 1.4578 | Stainless steel A4 in accordance with EN ISO 3506 | Stainless steel A4 in accordance with EN ISO 3506 |
| Length (mm) | 35 | 18 | 18 | 18 | 18 | 25 | 35 | 35 | 29 |
| Shank diameter (mm) | 4.3 - 4.6 | 5 | 5 | 5 | 5 | 4.3 | 2.7 | 4.3 | 4.5 |
| Head diameter fixing (mm) | 9.6 | 14 | 15 | 14 | 15 | 12 | 6 | 12 | 15 |
| Hole diameter fixed point (mm) | 3.2 | 5.2 | 5.2 | 5.2 | 5.2 | 4.3 | 2.5 | 4.3 | 5.8 |
| Hole diameter moving point (mm) | 6.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 3.8 | 8.0 | 10.0 |
| Hole diameter slotted point (mm) | 3.4 x 6.0 | 5.2 × 8.0 | 5.2 x 8.0 | 5.2 x 8.0 | 5.2 x 8.0 | 4.3 × 8.0 | 2.8 × 4.0 | 4.3 × 8.0 | N.A. |

For correct fixing with rivets, use riveting tool with rivet spacer. Sub-frame parameters in accordance with paragraph "Suitable sub-frames".

Fixing distances

| Maximum Fixing distances (mm) | A2 (8 mm) | | A2 (9 mm) | |
|-------------------------------|-----------|--------|-----------|--------|
| | b max. | a max. | b max. | a max. |
| Nail | 600 | 400 | N/A | N/A |
| Screw | 600 | 600 | 600 | 600 |
| Rivet | 600 | 600 | 600 | 600 |
| Bonding | | | N/A | N/A |

European Technical Assessment (ETA)

| ETA-24/0910 | |
|-------------|--|
| ETA-13/0340 | |

Rockpanel A2, 8 mm finish Colours, Rockpanel A2, 8 mm finish Nordic and Rockpanel A2, 8 mm finish ProtectPlus

Rockpanel A2 9 mm finish Colours/Rockclad and Rockpanel A2 9 mm finish ProtectPlus

Declarations of Performance (DoP)

Additional information

This product data sheet clearly specifies the general product properties and is not related to national building regulations. Relevant information about the application of Rockpanel boards related to national building regulations or national guidelines can be found in the Rockpanel instruction guide and on the Rockpanel website. The Rockpanel instruction guide and the website also provide fixing tables related to national annex of the EN 1991-1-4.

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This publication supersedes and replaces all previous datasheets. Subject to alterations. All data are intended to serve as general information about our products and their possible uses. This publication is an extract of the European Technical Assessment, which is the only legally binding document. ROCKWOOL B.V. / Rockpanel disclaims any liability towards possible (typing) errors and incomplete information in this product data sheet. No rights may be derived from the content of this publication.

www.rockpanel.co.uk