Rockpanel®

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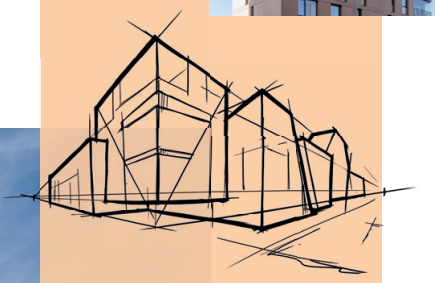
Product Data Sheet Rockpanel Natural



Rockpanel Natural

Key product data

Product description

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, 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.

Assortment

Product Line	Board Composition	Thickness	Standard dimensions
Rockpanel Natural	Durable	10 mm	1200/1250 x 2500/3050 mm

Surface

The surface of Rockpanel Natural is weathering from sunlight and the elements. The appearance of this hard-wearing, unpainted board material changes.The ageing effect is influenced by the elements of nature and differs due to artificial conditions even at micro level. Therefore the exact ageing and uniformity of the effect can not be predicted.

Fire Safety

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

Key product properties

	Rockpanel Natural	Unit	Test/classification method
Fire			
Fire classification	B-s2,d0	Euroclass	EN 13501-1
Physical properties			
Thickness	10	mm	EN 325
Weight	10.5	kg/m²	
Density, nominal	1050	kg/m³	EN 323
Thermal conductivity	0.37	W/m·K	EN 10456
Coefficient of thermal expansion (mm/m·K)	10.5	10^{-3} mm/m·K	EN 438:2 clause 17
Coefficient of moisture expansion (after 4 days) (mm/m)	0.302	mm/m	EN 438:2 clause 17
Mechanical properties			
Bending strength, length and width (f_{05})	≥ 27	N/mm²	EN 310 / EN 1058
Modulus of elasticity m (E)	4015	N/mm²	EN 310

Fixing distances

Maximum Fixing distances (mm)	Rockpanel Natural 10 mm	
	b max.	a max.
Nail	600	400
Screw	600	600
Rivet	600	600

Test in this document are executed according the European Assessment Document (EAD 090001-00-0404) for Rockpanel boards.

Rockpanel boards

General product information

The Rockpanel boards are produced from compressed natural basalt, a sustainable and readily available volcanic rock and bonded with an organic binder from which all Rockpanel products derive their unique properties. The products combine the advantages of stone and workability of wood.

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 are classified in accordance with EN 13501-1. The reaction to fire classification is based upon the end use situation as described in the EAD with non-combustible mineral wool insulation. The field of application covered by the reaction to fire classification is given in the Declaration of Performance (DoP, see www.rockpanel.com).

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

Sustainability and environment

Rockpanel Durable and A2 products have been independently certified for their environmental performance by the Building Research Establishment (BRE), complying with all requirements identified in the scheme document SD028. BRE granted Rockpanel an Environmental Product Declaration (Environmental Profiles Certificate No. 427) acknowledging Rockpanel Durable and A2 board material as amongst the best in their category with A+ and A ratings for various structures. Next to these Environmental Profiles ratings and Greenbook live registration, BRE issued for the Durable and A2 composition an ECO_EPD in accordance with EN 15804.

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 retardents or cadmium. The formaldehyde concentration is ≤ 0.0105 mg/m³ which relates to formaldehyde class E1.

Packaging

The panels are provided with a protective film on the decorative face (with the exception of Rockpanel Metallics White Aluminium/Grey Aluminium, Natural, Lines² and Structures) and are delivered on pallets and with a protective cover and edge protection. The panels must be stored on a dry sub-soil and protected against rain, preferably under a cover. Pallets shall be stacked no more than two pallets high. The panels should be lifted upward when being handled and should not be slid over one another. Protective foam membranes should be placed between the sheets again to protect the surface layer, for example when the panels are stacked after having been sawn.

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.

Maintenance

Depending on the surface treatment, the boards can be cleaned with ordinary cleaning agents such as car shampoo dissolved in lukewarm water. Organic solvents for boards with the ProtectPlus finish are in general also allowed (such as white spirit and acetone), however consult Rockpanel for the correct application method. To remove graffiti, Rockpanel can supply a special cleaner.

The Rockpanel Natural boards can be cleaned with a brush. Stubborn polution can be removed with a wire brush. The cleaned spot will then become visible and weather again. Do not clean Rockpanel Natural with a solvent or detergent.

Rockpanel Natural

Detailed product information

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.

Impact resistance

Categories	Durable 10 mm	Test / classification method
Hard body (1 J)	IV	ISO 7892: 1988
Hard body (3 J)	III, II, I	
Hard body (10 J)	II, I	
Soft body (10 J)	IV, III	
Soft body (60 J)	II, I	
Soft body (300 J)	II	

Application for full boards, for a complete overview and description, please consult the relevant European Technical Assessment.

Suitable sub frames

Rockpanel Natural in Durable quality can be attached to the building by fixing to a sub frame of wood or metal.The vertical wooden battens should have a minimum thickness of 28 mm. The minimum thickness of the vertical aluminium profiles is 1.5 mm.

The aluminium is AW-6060 according to EN 755-2. The Rm/Rp0.2 value is 170 /140 for profile T6 and 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 Grade	Vertical subframe***	Construction build-up	Fixing method	Classification
Durable 10 mm	Wooden sub frame	Ventilated with EPDM gasket or Rockpanel strips* on the battens	Mechanically fixed	B-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 Natural

	Ring shank nail	Torx screw	Rivet[1]			
Durable 10 mm	✓	✓	✓	✓	✓	✓
Code			AP14-50180-S	1290406	SSO-D15-50180	1290806
Sub frame[2]	Wooden sub frame	Wooden sub frame	Aluminium sub frame	Aluminium sub frame	Steel sub frame	Steel sub frame
Thickness subconstruction[2]	≥ 28 mm	≥ 28 mm	≥ 1,5 mm	≥ 1,8 mm	≥ 1,0 mm	≥ 1,5 mm
Material (body)	Stainless steel material nr. 1.4401 or 1.4578 according EN 10088	Stainless steel material nr. 1.4401 or 1.4578 according EN 10088	EN AW-5019 (AlMg5) according EN 755-2	EN AW-5019 (AlMg5) according EN 755-2	Stainless steel material nr. 1.4578 according EN 10088	Stainless steel material nr. 1.4578 according EN 10088
Length	32 mm and 40 mm	35 mm	18 mm	18 mm	18 mm	16 mm
Shank diameter	2,7–2,9 mm	3,3-4,5 mm	5 mm	5 mm	5 mm	5 mm
Head diameter fixing	6,0 mm	9,6 mm	14 mm	14 mm	15 mm	14 mm
Hole Ø fixed point	2,5 mm	3,2 mm	5,2 mm	5,2 mm	5,2 mm	5,2 mm
Hole Ø moving point	3,8 mm	6,0 mm	8,0 mm	8,0 mm	8,0 mm	8,0 mm
Hole Ø slotted point	2,8 x 4,0 mm	3,4 x 6,0 mm	5,2 x 8,0 mm	5,2 x 8,0 mm	5,2 x 8,0 mm	5,2 x 8,0 mm

[1] For correct fixing, use riveting tool with rivet spacer
[2] In accordance with paragraph "Suitable sub frames"

European Technical Assessment (ETA)

Declarations of Performance (DoP)

European Technical Assessment ETA-13/0648:	Rockpanel Durable 10 mm finish Natural	0764-CPR-0251

Additional information

The product data sheet Rockpanel Natural 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.

Published August 2021. 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.

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