Rockpanel®

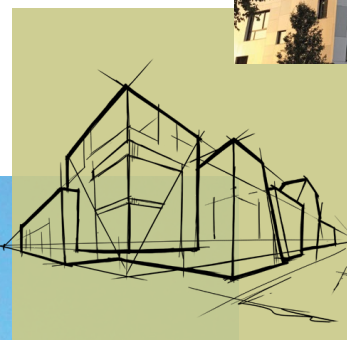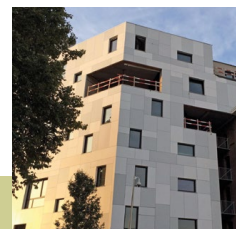# Product Data Sheet
Rockpanel Ply

Rockpanel Ply

Product description

Is the exact colour you would like for your design not available in our range, or do you want to accentuate even the smallest detail of the building? Rockpanel Ply gives you the freedom to express yourself in any colour. It is a durable, sturdy base for your desired colour. And at the same time a sustainable alternative to wood.

Assortment

Product Line	Board Composition	Thickness	Standard dimensions
Rockpanel Ply	Ply	8 mm	1200 x 2500/3050 mm

Surface

The surface of Rockpanel Ply is a light grey primer that requires a finish coating.

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 Ply 8 mm	Unit	Test/classification method
Optical properties			
Colour stability (5000 h)	N/A	Class on greyscale	ISO 105 A02
Fire			
Fire classification	B-s2,d0	Euroclass	EN 13501-1
Physical properties			
Thickness	8	mm	EN 325
Weight	8	kg/m²	
Density, nominal	1000	kg/m³	EN 323
Thermal conductivity	0.35	W/m·K	EN 10456
Water vapour permeability S_d (at 23 °C and 85 % RF) Colours	*	m	EN 12572
Coefficient of thermal expansion (mm/m·K)	9.7	x 10⁻³ mm/m·K	EN 438:2 clause 17
Coefficient of moisture expansion (after 4 days) (mm/m)	0.241	mm/m	EN 438:2 clause 17
Mechanical properties			
Bending strength, length and width (f_{05})	≥ 15	N/mm²	EN 310 / EN 1058
Modulus of elasticity m (E)	3065	N/mm²	EN 310

The S_d value will change when applying the final colour, the board cannot be mounted non-ventilated.

Fixing distances

Maximum Fixing distances (mm)	Rockpanel Ply 8 mm	
	b max.	a max.
Nail	500	400
Screw	500	500

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

Rockpanel boards

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/m^3 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, Lines^2 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 Ply

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	Ply 8 mm	Test / classification method
Hard body (1 J)	IV	ISO 7892: 1988
Hard body (3 J)	III, II, I	

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

Suitable sub frames

Rockpanel Ply can be attached to the building by fixing to a sub frame of wood.
The vertical wooden battens should have a minimum thickness of 28 mm.

Properties in relation to fire

Product Grade	Vertical subframe***	Construction build-up	Fixing method	Classification
Ply 8 mm	Wooden sub frame	Ventilated with EPDM gasket or Rockpanel strips* on the battens	Mechanically fixed	B-s2,d0
	Wooden sub frame	Non-ventilated, cavity filled with mineral wool	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 Ply

	Ring shank nail	Torx screw
Rockpanel Ply 8 mm	✓	✓
Sub frame[(2)]	Wooden sub frame	Wooden sub frame
Thickness subconstruction[(2)]	≥ 28 mm	≥ 28 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
Length	32 mm and 40 mm	35 mm
Shank diameter	2,7–2,9 mm	3,3-4,5 mm
Head diameter fixing	6,0 mm	9,6 mm
Hole Ø fixed point	2,5 mm	3,2 mm
Hole Ø moving point	3,8 mm	6,0 mm
Hole Ø slotted point	2,8 x 4,0 mm	3,4 x 6,0 mm

(1) In accordance with paragraph "Suitable sub frames"

European Technical Assessment (ETA)   Declarations of Performance (DoP)

European Technical Assessment ETA-13/0019:	Rockpanel Ply 8 mm finish with a primer coating	0764-CPR-0249

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

Additional information

The product data sheet Rockpanel Ply 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 Published March 2022. 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