Product description

Rockpanel Lines are cladding strips with a tongue and groove edge suitable for horizontal application in ventilated constructions. The innovative products are a durable and low maintenance alternative to timber. The panels can be installed mechanically with a visible fixing (RP Lines Regular), or secretly with the nail heads being covered by the versatile tongue and groove system (RP Lines Secret Fix).

Application

The products are suitable for renovation as well as new construction and can be used in residential and non-residential building in various areas of construction.

Typical application areas include:

- Façades
- Soffits and fascias
- Detailing and roofline

Rockpanel Lines is only used in ventilated constructions.

Product advantages

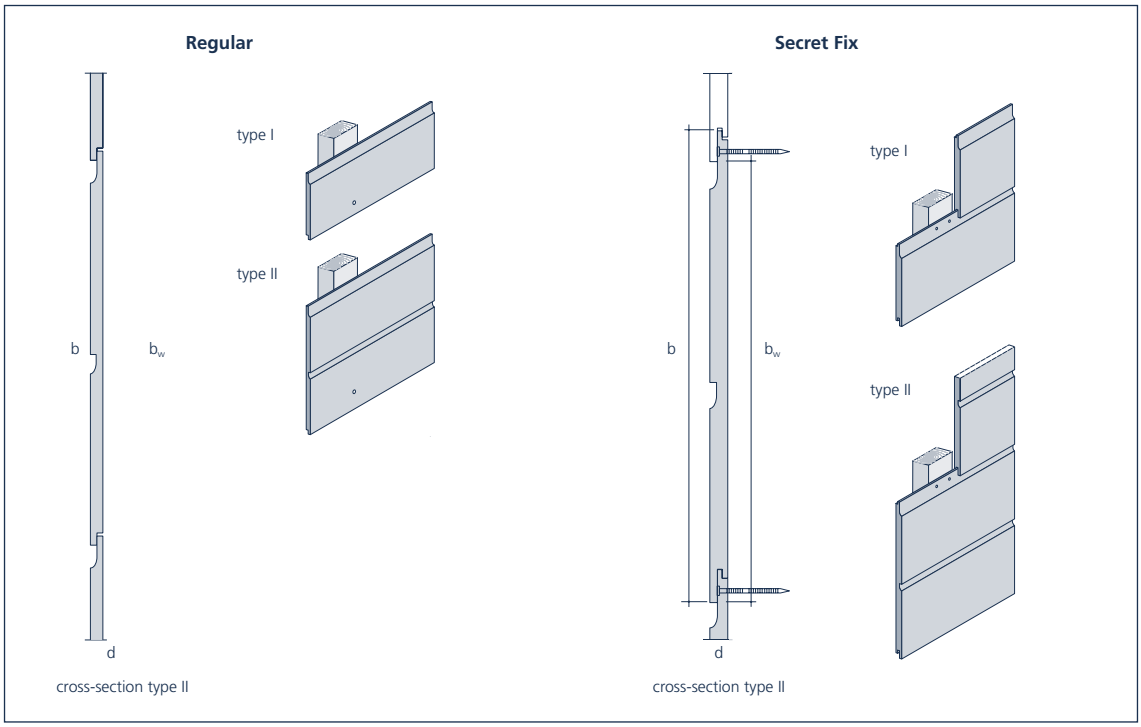
Rockpanel board material is as workable as wood and as durable as stone, and in addition:

- light in weight
- can easily be cut to size on-site
- cut edges do not need to be treated
- temperature- and weather-resistant
- dimensionally stable
- fire safe
- 100% recyclable
- low in maintenance

Properties

Version

Rockpanel Lines is available in Regular (visible fixing) and Secret Fix (hidden fixing) versions. Each system comes in either Type I (single strip) which gives good flexibility on complex facades, or in Type II (double strip) which facilitates faster assembly on site.



Dimensions and tolerances of the boards

	Regular	Secret Fix
Working width in mm	Type I: 130 Type II: 260	Type I: 140 Type II: 279
Strip width (actual)	Type I: 137 Type II: 267	Type I: 158 Type II: 297
Panel thickness	8	10
Panel length	3050	3050
Thickness tolerance	+0,5/-0,5	+0,5/-0,5
Length/width tolerance	+2/-2	+2/-2

Material properties

Properties	Value	Unit	Standard
Mechanical properties			
Modules of elasticity	4015	N/mm^2	EN 310
Characteristic bending strength	≥ 27	N/mm^2	EN 310 and EN 1058 f_{05}
Optical properties			
Colour stability Lines*	4 (3.000 hours; Xenon test)	Greyscales	ISO 105 A02
Physical properties			
Density nominal	1050+ -150	kg/m^3	
Dimensional stability			
- Linear expansion coefficient	0,011	mm/(m°K)	EN 438-2
- Dimensional stability length/width per 23°C/50% RF change 23°/95% RF	0,302	mm/m (after 4 days)	
Dampopenheid S_d			
Water uptake via the sawn edge after 28 days: - At 20° C and 65% RH - At 2° C and 90% RH	 < 1,3 < 0,2	 % %	

** The Natural version darkens under the influence of natural elements such as sunlight, wind, precipitation and environmental factors. The final effect is dependent on elements at the micro-level. Therefore the exact effect and the uniformity cannot be predicted. For more information on the weathering process, see the Rockpanel Natural product datasheet.*

Handling

Ventilated facade systems

Rockpanel Lines is suitable for use as facade cladding in ventilated constructions. In this type of facade, the outer facade is constructed as a cavity wall with an inner and outer layer, so that a ventilated space is created between facade cladding and construction. Rockpanel Lines is particularly suitable for horizontal application.

In vertical application, special architectural points are important in preventing risks from moisture behind the cladding strips.

- Mount Rockpanel Lines along the 'prevailing' wind direction.
- The structure of the rear must be water- and airtight.
- Ensure that the structure is ventilated and condensation and/or rain have a way out.

→ Prevailing wind direction

Fixing

Rockpanel Lines can be mechanically fixed to a wooden construction with nails or screws which comply with Rockpanel specifications. See below for details. Attachment 'in the field' is only allowed with the Secret Fix type.

Visible fixing Rockpanel Lines Regular

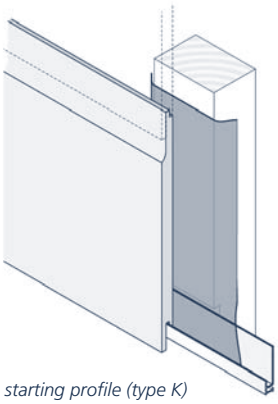
- Rockpanel ring shank nails (SS316 quality) 2.7/2.9 x 32 flat head, if desired with the head in the colour of the board. Fixing can be done with synthetic or pneumatic hammer. The nail heads in corresponding RAL colour match the RAL colour of the board material perfectly.
- Rockpanel torx screws (SS316 quality) 4.5 x 35 mm, if desired with the head in the board colour. Pre-drilling is not needed.

Invisible fixing Rockpanel Lines Secret Fix

- Using Rockpanel ring nails (SS316 quality) 2.1/2.3 x 27 mm (for Secret Fix). Fixing can be done with synthetic as well as pneumatic hammer.
- Using SS304 clips with a 38 mm length and a 13 mm spine.

Connection at ground level

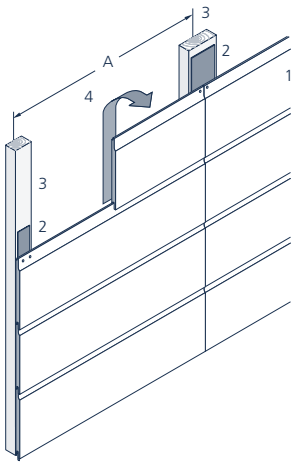
For easy connection at ground level, a Rockpanel starting profile (type K) can be used for placement of the lowest section of Rockpanel Lines Secret Fix.



starting profile (type K)

Ventilation

The structure at the rear must be ventilated with ventilation openings of at least 1000 mm^2/m^1 on the upper and lower side of the cladding. The openings must be at least 5 mm deep and max. 10 mm maximum deep and 50 mm (for example) in length.



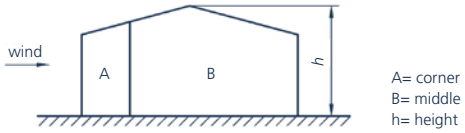
Summary legend:

1 Rockpanel Lines
2 Weather-resistant joint sealing strip
3 Timber battens dimensions 34 x 45 mm resp. 34 x 70 mm at joints (minimum thickness 28 mm)
A Maximum distance between supports: 600 mm by Secret Fix or 500 mm by Regular
4 Ventilation

Fixing distances

When determining the subframe the following should be kept in mind:

- wind loading
- the maximum fixing centres for the boards
- the required ventilation provisions
- unimpeded movement of the boards
- legal requirements
- the height of the building



The table gives the maximum building height on which the Rockpanel Lines can be applied related to basic windspeed and distance to the coast. The site altitude is assumed on 50 m above sea level.

Maximum height by 50 m site altitude

				Lines Regular 8 mm		**Lines Secret Fix 10 mm**	
			Distance battens	Max 500 mm		Max 600 mm	
		Basic wind speed	Closest distance to the coast	Zone B: Middle	Zone A: Corner area	Zone B: Middle	Zone A: Corner area
Type I	Single nail	22 m/s	100 km	Max. 50 m	Max. 30 m	Max. 50 m	Max. 20 m
		22 m/s	0 km	Max. 50 m	Max. 20 m	Max. 50 m	Max. 10 m
		23 m/s	100 km	Max. 50 m	Max. 20 m	Max. 50 m	Max. 15 m
		23 m/s	0 km	Max. 50 m	Max. 10 m	Max. 50 m	n.a.
		24 m/s	100 km	Max. 50 m	Max. 15 m	Max. 50 m	Max. 10 m
		24 m/s	0 km	Max. 50 m	n.a.	Max. 50 m	n.a.
		25 m/s	100 km	Max. 50 m	Max. 10 m	Max. 50 m	n.a.
		25 m/s	0 km	Max. 50 m	n.a.	Max. 30 m	n.a.
	Double nail	22 m/s	100 km	n.a.	n.a.	Max. 50 m	Max. 50 m
		22 m/s	0 km	n.a.	n.a.	Max. 50 m	Max. 40 m
		23 m/s	100 km	n.a.	n.a.	Max. 50 m	Max. 30 m
		23 m/s	0 km	n.a.	n.a.	Max. 50 m	Max. 20 m
		24 m/s	100 km	n.a.	n.a.	Max. 50 m	Max. 30 m
		24 m/s	0 km	n.a.	n.a.	Max. 50 m	Max. 15 m
		25 m/s	100 km	n.a.	n.a.	Max. 50 m	Max. 20 m
		25 m/s	0 km	n.a.	n.a.	Max. 50 m	Max. 10 m
Type II	Single nail	22 m/s	100 km	Max. 50 m	Max. 20 m	Max. 10 m	n.a.
		22 m/s	0 km	Max. 50 m	Max. 10 m	n.a.	n.a.
		23 m/s	100 km	Max. 50 m	Max. 15 m	n.a.	n.a.
		23 m/s	0 km	Max. 50 m	n.a.	n.a.	n.a.
		24 m/s	100 km	Max. 50 m	Max. 10 m	n.a.	n.a.
		24 m/s	0 km	Max. 50 m	n.a.	n.a.	n.a.
		25 m/s	100 km	Max. 50 m	n.a.	n.a.	n.a.
		25 m/s	0 km	Max. 30 m	n.a.	n.a.	n.a.
	Double nail	22 m/s	100 km	n.a.	n.a.	Max. 50 m	Max. 20 m
		22 m/s	0 km	n.a.	n.a.	Max. 50 m	Max. 10 m
		23 m/s	100 km	n.a.	n.a.	Max. 50 m	Max. 15 m
		23 m/s	0 km	n.a.	n.a.	Max. 50 m	n.a.
		24 m/s	100 km	n.a.	n.a.	Max. 50 m	Max. 10 m
		24 m/s	0 km	n.a.	n.a.	Max. 50 m	n.a.
		25 m/s	100 km	n.a.	n.a.	Max. 50 m	n.a.
		25 m/s	0 km	n.a.	n.a.	Max. 30 m	n.a.

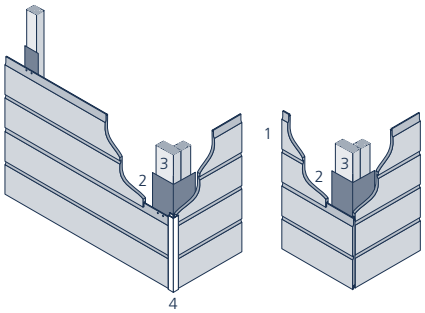
Remark: In special situations (building shape, turbulance effect) always contact Rockpanel.

Joints and board connections

In horizontal use of Rockpanel Lines, horizontal seams are automatically covered by the overlaid board and no additional finishing of the seam is necessary. On vertical framework, weather-resistant joint tape should be applied to protect the framework.

In panel joints and seams, take account of the following.

- Rockpanel is dimensionally stable and therefore resistant to changes in length and width. When constructing keep in mind that other materials can expand.
- Boards assembly and building tolerances play an important role in the joint detail.
- Apply joint tape to the seams to protect the back construction against weather influences.



Summary legend:

1 Rockpanel Lines
2 Weather-resistant joint tape
3 Timber battens
4 Rockpanel Profile D or E (outer corner profile)

Workability

Sawing

When working with Rockpanel products, the same guidelines hold, as a rule, as for wood products.

- hand saw, e.g. a hardpoint hand saw
- circular saw, e.g. a fine-toothed hard metal saw blade
- fretsaw, e.g. a fine-toothed or a saw blade with tungsten granules

Drilling

Rockpanel Lines Regular does not usually need to be pre-drilled when fixing with screws. Therefore it can be easily detailed on site, making flawless, optimal finishing a simple matter.

Edge finishing

Rockpanel board material is resistant to the elements and does not delaminate or rot. Cut edges do not need to be treated. Chamfering can be done easily by using a leftover strip of Rockpanel to lightly sand the edge with the non-painted side. The sides can be painted for aesthetic reasons.

Storage

Rockpanel is moisture resistant. Nevertheless it is recommended that the board material be stored on a flat pallet in dry, flat, frost-free and protected conditions. Never stack more than 2 pallets on top of each other. It is not advisable to slide the panels over each other; they should be raised for handling. Protective foam sheets should also be laid between the boards to protect the surface layer after, for example, machining.

Maintenance

Rockpanel Lines is durable as stone, resistant to temperature and weather influences, and therefore low-maintenance. The colours remain stable and the board material maintains its original freshness and appearance for a long time.*

It is recommended that the boards be maintained from time to time by cleaning them with water. If desired, the board material can be cleaned with, for example, a car shampoo or an all-purpose cleaner, diluted as indicated on the packaging.

** The Natural version discolours under the influence of natural elements such as sunlight, wind, precipitation and environmental factors. For more information on the weathering process, see the Rockpanel Natural Product datasheet.*

Specifications and CAD drawings

Specifications and CAD drawings can be downloaded from **www.rockpanel.co.uk**.

Availability

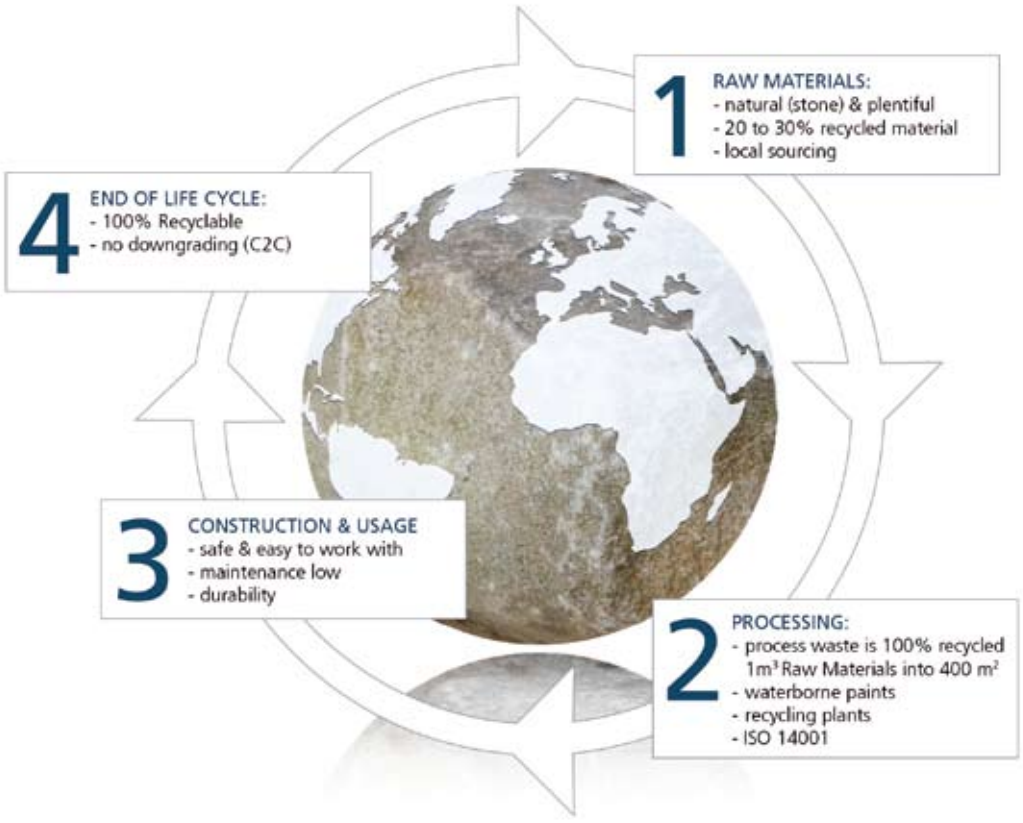
Consult the dealer locator on **www.rockpanel.co.uk** For a Rockpanel distributor in your area.

Assortment

For the current selection of Rockpanel Lines and other Rockpanel products, see **www.rockpanel.co.uk**.

Sustainability

Rockpanel is a sustainable building material throughout the material's useful life.



Rockwool Rockpanel B.V. – Wern Tarw, Pencoed – Bridgend CF35 6NY

Rockpanel®
a ROCKWOOL company