

Part of the ROCKWOOL Group

# **Product Sustainability Declaration**

Rockfon<sup>®</sup> Koral<sup>™</sup>



## Our sustainable commitment

Sustainability sits at the heart of our research and development. It's why we use natural stone, constantly reduce our carbon footprint and recycle as part of circular economy.

Our noise absorbing ceiling and wall systems are a fast and simple way to create beautiful, comfortable spaces. Easy to install and durable, they protect people from noise and the spread of fire while making a constructive contribution toward a sustainable future.

## Content

## In this declaration you will find product specific information on the following:

- 1. Contribution to the major building rating schemes
- 2. Our approach to responsible sourcing of raw materials
- 3. Recycled content
- 4. Recycling of product in the end of life
  - 5. Where you can find our third-party verified EPD
  - 6. Health and safety of stone wool fibers
  - 7. Compliance with REACH
  - 8. Our corporate sustainability reporting from ROCKWOOL Group
  - 9. Availability of indoor low emission labels
  - 10. Availability of ISO certificates for manufacturing
  - 11. Information on material content



## Contribution to building rating schemes

**LEED®** version 4.1

| Integrative Process (IP)   | Max credits |  |  |  |  |  |  |  |  |
|--|-------------|--|--|--|--|--|--|--|--|
| - Integrative process  | 1 point     |  |  |  |  |  |  |  |  |
| Materials and resources (MR)   | Max credits |  |  |  |  |  |  |  |  |
| - Building Life-Cycle Impact Reduction                                       | 1 point     |  |  |  |  |  |  |  |  |
| - Building product disclosure and optimization - Envir                       | ronmental   |  |  |  |  |  |  |  |  |
| Product Declarations   | 1 point     |  |  |  |  |  |  |  |  |
| - Building product disclosure and optimization - Sourcing of Raw             |             |  |  |  |  |  |  |  |  |
| Materials  | 2 points    |  |  |  |  |  |  |  |  |
| - Building product disclosure and optimization - Material Ingree<br>2 points |             |  |  |  |  |  |  |  |  |
| - Construction and Demolition Waste Management                               | 2 points    |  |  |  |  |  |  |  |  |
| Indoor Environmental Quality (EQ)  | Max credits |  |  |  |  |  |  |  |  |
| - Low-emitting materials   | 3 points    |  |  |  |  |  |  |  |  |
| - Indoor Air Quality assessment  | 2 points    |  |  |  |  |  |  |  |  |
| - Interior lighting  | 1 point     |  |  |  |  |  |  |  |  |
| - Acoustic performance   | 1 point     |  |  |  |  |  |  |  |  |
| Innovation (IN)  | Max credits |  |  |  |  |  |  |  |  |
| - Innovation   | 5 points    |  |  |  |  |  |  |  |  |

## WELL Building Standard<sup>™</sup> version 2

| Air Concept                                      | Max credits |
|--|-------------|
| - A01: Air Quality                               | n/a -       |
| Precondition                                     |             |
| - A04: Construction pollution management         | n/a -       |
|  | 1           |
| - A05: Enhanced Air Quality                      | 1 point     |
| Water Concept                                    | Max credits |
| - W07: Moisture Management                       | 1 point     |
| Light Concont                                    | Max credits |
| Light Concept                                    | n/a –       |
| - L01: Light Exposure (indirect)<br>Precondition | n/a –       |
| - L02: Visual Lighting Design (indirect)         | n/a –       |
| Precondition                                     | n/a –       |
| - L06: Daylight Simulation (indirect)            | 2 points    |
| - L07: Visual Balance (indirect)                 | 1 point     |
|  | . 1         |
| Thermal Comfort                                  | Max credits |
| - T01: Thermal Performance                       | n/a –       |
| Precondition                                     |             |
| - T07: Humidity Control                          | 1 point     |
| Sound Concept                                    | Max credits |
| - S02: Maximum Noise Levels                      | 3 points    |
| - S03: Sound Barriers                            | 3 points    |
| - S04: Reverberation Time                        | 2 points    |
| - S05: Sound Reducing Surfaces                   | 2 points    |
| - S06: Minimum Background Sound                  | 1 point     |
| Material Concept                                 | Max credits |
| - X01 Material Restrictions                      | n/a –       |
| Precondition                                     |             |
| - X05 Enhanced Material Restrictions             | 1 point     |
| - X06 VOC Restrictions                           | 2 points    |
| - X08 Materials Optimization                     | 2 points    |
| Mind Concert                                     | Max credits |
| Mind Concept                                     |             |
| - M02 Nature and Space<br>Precondition           | n/a –       |
| - M07 Restorative Spaces                         | 1 point     |
| - Mor Restorative Spaces                         | i point     |
| Innovation Concept                               | Max credits |
| - 101 Innovate WELL max                          | 10 points   |

## **BREEAM® International (New Construction 2016)**

| Management  | Max credits |
|---|-------------|
| - MAN 02: Life cycle cost and service life planning     | 1 credit    |
| Health and Well-Being (HEA)                             | Max credits |
| - HEA 01: Visual Comfort                                | 4 credits   |
| - HEA 02: Indoor Air Quality                            | 1 credit    |
| - HEA 04: Thermal Comfort                               | 2 credits   |
| - HEA 05: Acoustic Performance                          | 4 credits   |
| Materials (MAT)   | Max credits |
| - Mat 01: Life cycle impacts                            | 1 credit    |
| - Mat 03: Responsible sourcing of construction products | 4 credits   |
| - Mat 06: Material efficiency                           | 1 credit    |
| Waste (WST)   | Max credits |
| - WST 01: Construction waste management                 | 3 credits   |
| - WST 06: Functional adaptability                       | 1 credit    |
| Innovation (INN)  | Max credits |
| - INN 01: Innovation                                    | 10 credits  |

## DGNB 2020 INTERNATIONAL – New Buildings

| Environmental Quality (ENV)                         | Max credits |
|---|-------------|
| - ENV 1.1: Building Life Cycle Assessment           | 9.5%        |
| - ENV 1.2: Local environmental impact               | 4.7%        |
| - ENV 1.3: Sustainable resource extraction          | 2.4%        |
| Economic Quality (ECO)                              | Max credits |
| - ECO 1.1: Building Related Costs                   | 12.9%       |
| - ECO 2.1: Flexibility and adaptability             | 9.6%        |
| Sociocultural and functional quality (SOC)          | Max credits |
| - SOC 1.1: Thermal comfort                          | 4.5%        |
| - SOC 1.2: Indoor air quality                       | 5.4%        |
| - SOC 1.3: Acoustic comfort                         | 2.9%        |
| - SOC 1.4: Visual comfort                           | 3.4%        |
| - SOC 1.6: Quality of indoor and outdoor spaces     | 5.4%        |
| Technical Quality (TEC)                             | Max credits |
| - TEC 1.1: Fire safety                              | 2.9%        |
| - TEC 1.2: Sound insulation                         | 2.3%        |
| - TEC 1.5: Ease of cleaning building components     | 1.8%        |
| - TEC 1.6: Ease of recovery and recycling           | 3.5%        |
| Process Quality (PRO)                               | Max credits |
| - PRO 1.5: Documentation for sustainable management | 1.1%        |
| - PRO 2.1: Construction site / construction process | 1.6%        |

The points or credits gained in each scheme are not solely dependent upon the performance of Rockfon products. Rockfon products merely help towards the goal of achieving the credits or points but they are not a stand alone element. The final credits earned depend on various elements, components and overall building performance. Rockfon shall not guarantee or be held liable for non-fulfilment of the credits which can include a broader assessment of construction products and building elements. The credits or points in each scheme are the result of internal evaluation.



## Sourcing of raw materials

## **Recycled content**

The recycled content of the mineral wool core in Rockfon products is >40%. Including facings (paint and glass fleeces) the recycled content of the full product is between 29% and 64% according to ISO 14021.

The recycled content is primarily post-industrial/pre-consumer resulting from upcycling waste from other industries, that would otherwise be sent to landfill. Wool waste from end of life recycling, installation cut-offs and manufacturing (e.g. as part of briquettes) is also included.

The information provided under recycled content is self-declared.

#### **Responsible sourcing**

>90% of all suppliers identified as key suppliers to the ROCKWOOL Group have currently signed the ROCKWOOL Code of Conduct for Suppliers.

The ROCKWOOL Code of Conduct addresses laws and standards compliance, equal opportunities, trade union recognition, fair employment, safe and healthy working conditions, no child labour, sound environmental principles, purchasing ethics and bribery.

# Environmental Product Declarations and Carbon Footprint

Our EPD covers our full portfolio and it is third party verified according to EN 15804. It is available in our website and also in external databases, like IBU (Institut Bauen und Umwelt), EPD Norge, INIES and UL. In order to get product specific information, please use the product scaling formula in the EPD or get in touch with our local support team. The carbon footprint (kg of CO2 eq.) of the product, from cradle to grave is given in this declaration in the Performance section below. The carbon footprint value derives from the third party verified Rockfon EPD with the application of the product scaling formula and the impact of the facing.

## Cradle to Cradle Certified®

Rockfon acoustic solutions are Cradle to Cradle Certified® Silver and Bronze. The certification covers most of the products in our portfolio. Cradle to Cradle Certified® Product Standard is a globally recognized measure to create safer, more sustainable products made for circular economy.



\* According to the information provided by such third party manufacturers, who have been carefully selected by Rockfon, the products delivered by said third party suppliers fulfil the content requirements stated in the above schemes. Rockfon however accepts no liability should such information provided prove to be incorrect.



## Low emitting materials

This product is certified for low emissions. Laboratories employed by Rockfon are accredited under ISO/IEC 17025 for the applied test methods. Please consult the table in the final page to see which low emission labels are available for the product.

## Safe raw materials

## Material ingredients

Rockfon materials are regularly screened against BREEAM Norway A20 list and the REACH candidate list; biocides/pesticide, flame retardants, azo dyes, nitrosamines and aromatic amines, halogenated compounds, nanomaterials, plastic softeners, surfactants and classified substances, among others, by an independent third party (Altox Itd).

Rockfon products comply with the Authorization List – Annex XIV, the Restriction list – Annex XVII and the SVHC candidate list, (June 2013). No substances listed in Annex XIV and Annex XVII of REACH regulation\* are intentionally added to the products included in this declaration". Rockfon ceiling tiles do not contain substances of very high concern (SVHC) in concentrations >0.01% (100 ppm).

The general cut off concentrations is 1000 ppm for external raw material suppliers. But for the stone wool core material the inventory threshold is 100 ppm (0.01%).

## **Health and fibres**

The Rockfon stone wool fibers are a non-hazardous material to work with. This fact is supported by the decision of the World Health Organisation's International Agency for Research on Cancer (IARC) to exempt stone wool from its list of "possibly cancer causing agents". Rockfon stone wool core is certified to comply with the Note Q for safe mineral wool fibres of EU Regulations (EC) No 1272/2008 and Directive 97/69/EEC and has a certificate from EUCEB (European Certification Board for Mineral Wool Products).



## Corporate sustainability reporting

## Sustainability reporting

ROCKWOOL Group is a participant in the UN Global Compact. SDG Invest includes ROCKWOOL Group in a portfolio of the 60 best performing companies globally. The ROCKWOOL Group Sustainability report covers the calendar year and is informed by the Global Reporting Initiative (GRI) Standards. The Group performance on CO2 emissions is regularly disclosed through international reporting platforms such as the Carbon Disclosure Project (CDP). Our Environmental Health & Safety performance was rated 'Prime' – the highest rating score – by leading sustainable investment rating agency ISS-oekom.

The report is available for download on www. rockwoolgroup.com/sustainability

## Material ingredients table

| Substances                              | E.C. Number <sup>1)</sup> | Amount weight (%) | REACH Regulation | REACH substances registration number | Function                 |  |
|---|---------------------------|-------------------|------------------|--------------------------------------|--------------------------|--|
| Stone wool                              | 926-099-9                 | 73-97%            | Not classified   | 01-211-947-2313-44                   | Core insulation material |  |
| Binder, a thermoset inert polymer resin | Proprietary composition   | <4%               | Not classified   | No number                            | Structural binder        |  |
| Mineral oil                             | Proprietary composition   | <0,2%             | Not classified   | No number                            | Water repellent          |  |
| Non-woven glass wool facing             | Proprietary composition   | 1-15%             | Not classified   | No number                            | Facing                   |  |
| Water based paints                      | Proprietary composition   | 0-16%             | Not classified   | No number                            | Decorative finish        |  |
| Glue                                    | Proprietary composition   | 0,01              | Not classified   | No number                            | Glue                     |  |

 $^{\mbox{\tiny 1)}}$  E.C.: EC-no, determined by the European Commission for identifying materials

## Performance



Sound absorption  $\alpha_w$ : up to 0.95 (Class A)



Reaction to fire

| <u></u> |
|---------|
|---------|

Light reflection 86%



Humidity and sag resistance Up to 100% RH. No visible deflection in high humidity C/0N



## Environment

Fully recyclable stone wool The recycled content of Rockfon products is between 29% and 64% according to ISO 14021. Rockfon acoustic solutions are Cradle to Cradle Certified® Silver and Bronze (depending on product type).



## Hygiene

Stone wool provides no sustenance to microorganisms



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Carbon footprint 2.04 - 2.43 kg of CO2 eq. (cradle to gate based on EPD) The following table is categorised by edge type and provides all relevant information related to the products sustainability profile.

|     |                     |                  |     | Environmental & emission labels |                                |                                  |              |                                     |                          | syst      | jement<br>ems<br>cations | Fibre<br>chemistry                |                  | tance<br>ening     |
|-----|---------------------|------------------|-----|---------------------------------|--------------------------------|----------------------------------|--------------|-------------------------------------|--------------------------|-----------|--------------------------|-----------------------------------|------------------|--------------------|
|     | Module size<br>(mm) | Recycled content | E1* | Cradle to Cradle                | Blue Angel (RAL DE-<br>UZ 132) | Danish Indoor Cli-<br>mate Label | M1           | Singapore Green<br>Building Council | Singapore Green<br>Label | ISO 14001 | ISO 9001                 | EC Note O com-<br>pliance (EUCEB) | REACH compliance | BREEAM NO A20 list |
| A15 | 600 x 600 x 15      | 30%              | ~   | Bronze                          | -                              | ~                                | ~            | ~                                   | ~                        | ~         | ~                        | ~                                 | $\checkmark$     | ~                  |
| A24 | 1200 x 600 x 15     | 30%              | ~   | Bronze                          | -                              | ✓                                | ✓            | ✓                                   | √                        | ✓         | ~                        | ✓                                 | ✓                | ✓                  |
|     | 600 x 600 x 15      | 30%              | ✓   | Bronze                          | -                              | ~                                | ✓            | ✓                                   | $\checkmark$             | ~         | ~                        | ~                                 | $\checkmark$     | ✓                  |
| E15 | 1200 x 600 x 15     | 33%              | ✓   | Bronze                          | -                              | ✓                                | ✓            | ✓                                   | ✓                        | ✓         | ✓                        | ✓                                 | ~                | ✓                  |
|     | 600 x 600 x 15      | 33%              | ~   | Bronze                          | -                              | ✓                                | ✓            | ✓                                   | ✓                        | ~         | ~                        | ✓                                 | ✓                | ✓                  |
| E24 | 1200 x 600 x 15     | 33%              | ✓   | Bronze                          | -                              | ✓                                | ✓            | ✓                                   | ✓                        | ✓         | ✓                        | ✓                                 | ✓                | ✓                  |
|     | 600 x 600 x 15      | 33%              | ✓   | Bronze                          | -                              | ✓                                | $\checkmark$ | ✓                                   | $\checkmark$             | ✓         | ✓                        | ✓                                 | $\checkmark$     | ✓                  |

\* 124 microgram/m<sup>3</sup> according to test method EN717-1, based on loading scenario 1 m<sup>2</sup>/m<sup>3</sup>, after 14 days (23+/-0,5 °C, RH 45+/-3%.)

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# **Sounds Beautiful**

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