Environmental product Declaration

ROCKWOOL®
Stone Wool Thermal Insulation for buildings

EPD according to EN 15804 and ISO 14025 and 3rd party verified
ROCKWOOL Group EPD rules and LCA model

Manufacturer:
ROCKWOOL Malaysia Sdn Bhd and
ROCKWOOL (Thailand) Ltd.

Owner of the declaration:
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Life Cycle Assessment study:
This environmental product declaration is based on a Life Cycle Assessment (LCA) background study according to EN15804:2012+A1:2013 carried out by:

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Verification:

CEN standard EN 15804 serves as the core PCR	
Independent verification of the "Rules for LCAs / EPDs for ROCKWOOL products" and the underlying LCA model described in the rules, in accordance with ISO 14025: 2010, EN 15804: 2012+A1:2013, with prEN 16783 serving as the PCR: External	Independent verification of the calculation and this declaration, in accordance with EN ISO 14025:2010: Internal
Third-party verifier: Dr. Frank Werner 13 November 2018	Remark: this EPD is issued by ROCKWOOL and has been internally reviewed by senior experts. The externally reviewed rules and model have been applied.

Environmental Product Declarations (EPDs) may not be comparable if they do not comply with the EN15804:2012+A1: 2013 Clause 5.3

Scaling factors for other products

Product	Scaling factor
Comfort Liner SSL940	1.5
Comfort Liner SSL950	2
Comfort Liner SSL960	2.5
Conlit[1]	4.5
Conrock L10[1]	3.1
Conrock L12[1]	3.8
Conrock L15[1]	5.2
Conrock S10 1	3.3
Conrock S12.5 1	4.2
Conrock S15 1	5.3
Cool ‘n’ Comfort RL920	1.1
Cool ‘n’ Comfort RL930	1.3
Cool ‘n’ Comfort RL940	1.5
Cool ‘n’ Comfort RL950	2.0
Cool ‘n’ Comfort RL960	2.5
Cool ‘n’ Comfort SL920	1.1
Cool ‘n’ Comfort SL930	1.3
Cool ‘n’ Comfort SL940	1.5
Cool ‘n’ Comfort SL950	2.0
Cool ‘n’ Comfort SL960	2.5
Curtainrock 40	1.6
Curtainrock 80	3.2
Curtainrock 80 Plus[1]	2.6
Curtainrock 80 Pro[1]	2.6

Product	Scaling factor
Curtainrock One[1]	1.8
Facaderock 10	4.2
Hardrock 60[1]	3.8
Hardrock 80[1]	4.7
ProRox BL938-SA[2]	1.7
ProRox BL940-SA[2]	1.7
ProRox BL950-SA[2]	2.2
ProRox BL958-SA[2]	2.3
ProRox BL960-SA[2]	3.0
ProRox SL540-SA[2]	4.3
ProRox SL560	4.8
ProRox SL580	4.2
ProRox SL920-SA[2]	1.1
ProRox SL930-SA[2]	1.7
ProRox SL950-SA[2]	2.2
ProRox SL960-SA[2]	2.6
ProRox SL970-SA[2]	3.6
ProRox SL978-SA[2]	3.1
ProRox SL980	4.1
ProRox WM950-SA[2]	2.2
ProRox WM960-SA[2]	2.6
ProRox WM970-SA[2]	4.9
Rainscreen SL950	2
Rainscreen SL960	2.5

Product	Scaling factor
Rock Air RL	0.8
Rock Air SL	0.8
Rockrock 30	3.0
Rocksafe Pro[1]	2.0
Rocksafe[1]	1.5
RoofRock[1]	2.7
Safe 'n' Silent Pro330[1]	1.0
Safe 'n' Silent Pro331[1]	1.3
Safe 'n' Silent Pro350[1]	1.5
Safe 'n' Silent Pro370[1]	2.0
Safe 'n' Silent Pro380[1]	2.4
SAFE[1]	2.0
Thermalrock B100[1]	2.5
Thermalrock B40[1]	1.1
Thermalrock B50[1]	1.3
Thermalrock B60[1]	1.5
Thermalrock B80[1]	1.9
Thermalrock S100[1]	2.4
Thermalrock S120[1]	3.0
Thermalrock S140[1]	3.5
Thermalrock S40[1]	1.1
Thermalrock S50[1]	1.3
Thermalrock S60[1]	1.5
Thermalrock S80[1]	2.0

[1] For all general building insulation products the mean temperature of thermal conductivity measurement in 20°C as per ASTM C518.

[2] Technical insulation products for which the lambda value varies according to the declared work temperatures. The assumed lambda correlates with the work temperature of 50°C as per ASTM C117. Please see the product specific websites for details.

Certain products have extra features such as facings out of wire netting or aluminium foil. These extra features are not included in the EPD-calculations.

Other Information

Dangerous substances

ROCKWOOL® stone wool does not contain substances from the Candidate List of Substances of Very High Concern.

Mineral wool fibres produced by ROCKWOOL® are classified as non-hazardous under REACH (Regulation (EC) No 1272/2008 of the European parliament and of the council of 16 December 2008 on classification, labelling and packaging of substances and mixtures).

The ROCKWOOL® fibres are registered with REACH under the following definition: “Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Note Q conditions”.

ROCKWOOL® products produced in Europe fulfil the Note Q requirements [ref. Note Q]. This is certified by the independent certification body EUCEB. More information on EUCEB can be found at www.euceb.org

The International Agency for Research on Cancer (IARC), part of the World Health Organization, revised its classification of mineral wool fibres in October 2001, including them in Group 3 as an agent “not classifiable as to its carcinogenicity to humans”.

Indoor air

ROCKWOOL® stone wool products fulfil the national demands in the EU with regard to emission to indoor climate. ROCKWOOL® stone wool products have small impact on emission levels in buildings. Salthammer et al. 2010 notes that “the presence of mineral wool had no influence on the formaldehyde level in the house”.

Instruction for safe installation

Due to the well-known mechanical effect of coarse fibres, mineral wool products may cause temporary skin itching. Mineral wool fibres cannot cause a chemical or allergic reaction.

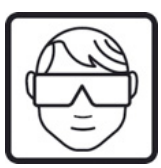
Cover exposed skin. When working in unventilated area wear disposable face mask.

Clean area using vacuum equipment.

Waste should be disposed of according to local regulations.

Rinse in cold water before washing.

Ventilate working area if possible.



Wear goggles when working overhead.

To diminish the mechanical effect of coarse fibres and avoid unnecessary exposure to mineral wool dust, information on good practice is available on the packaging of all mineral wool products with pictograms and/or written information (see pictograms on this page).

Safe use instruction sheets are also available from www.rockwoolasia.com.

Bibliography

Abdelghafour, Mohamed: Adaptation of the up-flow percolation test TS 14 405 for mineral wools, Preparation and analyses of eluates. Insavalor, Division Polden, Villeurbanne, FRANCE, February 2004.

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EN 15804:2012+A1:2013 – Sustainability of construction works – Environmental product declaration – Core rules for the product category of construction products.

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Hjelmer, Ole: Results of column leaching tests performed on 4 mineral wool products, DHI Water & Environment.

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Note Q: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:EN:PDF, p. 335. Accessed January 2015

ROCKWOOL® A/S: Primary data for Bukit Raja, Melaka, Rayong production side, entered in verified parameter template for calculation in verified LCA model. (internal due to confidentiality), March, 2022.

ROCKWOOL® A/S: Rules for calculating Life Cycle Assessments (LCAs) / Environmental Product Declarations (EPDs) for ROCKWOOL products. 3rd party verification by Frank Werner, November 2018.

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