


CEN EPD prEN15804:2010 data Rockwool		Preliminary version. All rights reserved.		January 18, 2017
Company	<div>Rockwool BV Postbus 1160 6040 KD Roermond tel. ++1 (0) 475 35 35 35 fax. ++1 (0) 475 35 34 84</div> <div></div>			
For	Others ROCKWOOL 133 EF			
Standard	Verified CEN EPD based on the prEN15804:2010		Type: Cradle-to-Gate with Options	
Issue date	18. januar 2017			
Valid until	17. januar 2022			
	Data on this certificate have been generated by SGS INTRON B.V. based on the NEN8006:2004 and the MRPI®-verification protocol 2010 and has been verified by an independent third party			
Product unit	1 m2 Others			
Description	Weight	Weight	Facing	
	25 mm	1 kg/m2	not relevant	
	Parameter			
Representative for	Rockwool products produced in the Benelux			
Remarks	EPDs of construction products may not be comparable if they do not comply with the prEN15804:2010 standard			

Demonstation of verification

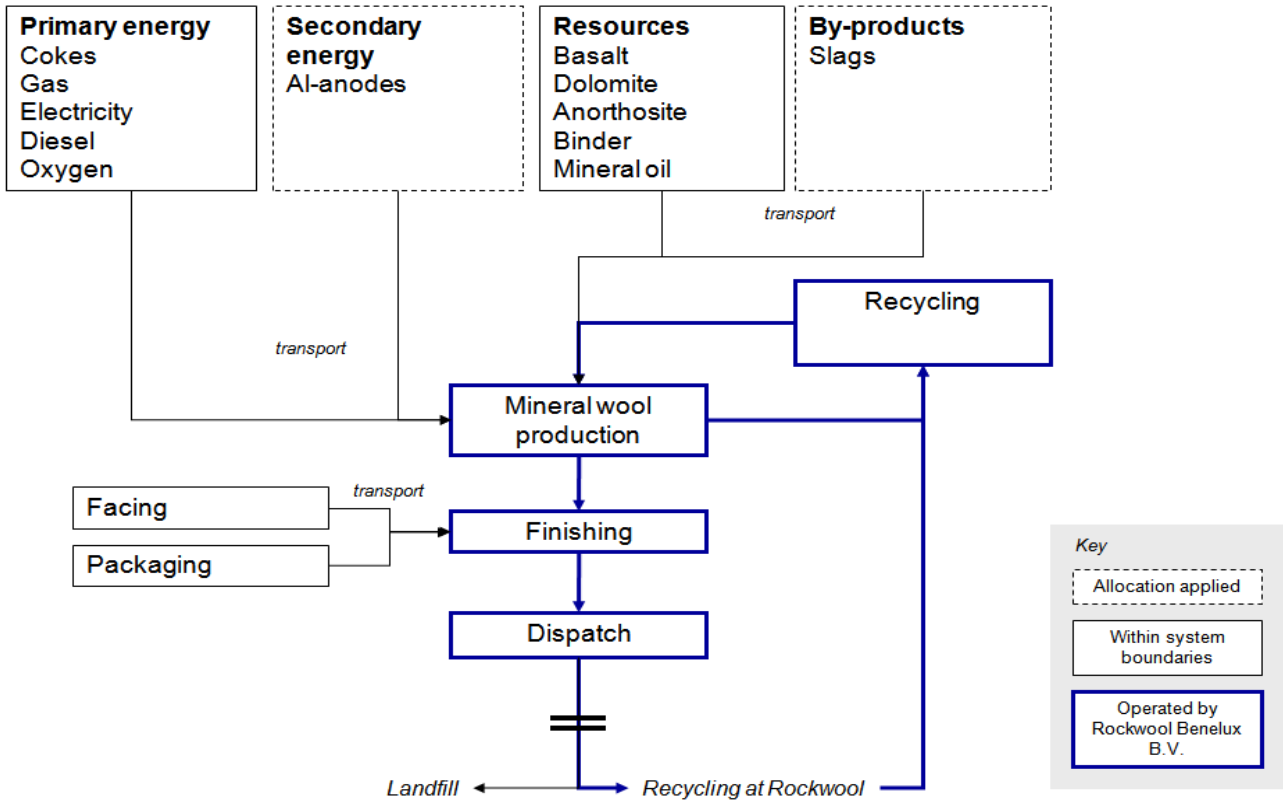
CEN standard prEN15804 serves as core PCR
Third party verification of the declaration, according to ISO 14025
<input type="checkbox"/> Internal <input checked="" type="checkbox"/> External
Third party verifier IVAM B.V.

Declaration of material content

Reference title	All information related to the content and safety of our products can be obtained by contacting our technical support.
Safety data sheet	Mineral wool fibres are spun from melted minerals based on vulcanoic mass, such as diabase or basalt, from recycled mineral wool and other secondary mineral resources. Depending on the actual product the fibres are kept separate or connected by use of a resin. Rockwool minderal wool does not contain substances of very high concern that are listed by the European Chemicals Agency. Rockwool minderal wool is safe to use and carries the EUCEB label. If more information is required, please contact Rockwool.
Substances considered under REACH (Registration, Evaluation and Authorisation of Chemicals)	All information related to the content and safety of our products can be obtained by contacting our technical support. Rockwool stone wool does not contain substances of very high concern.

System boundaries and flow diagram

The process tree for mineral wool (material and energy inputs smaller than 1% excluded from flow chart)
Note: the construction and use phase have not been considered



Environmental impacts		Product stage	Construction	Construction	Use and maintenance	End-of-life	End-of-life	Module D
Environmental profile	Unit	A1, A2, A3	A4	A5	B1 – B7	C1	C2, C3, C4	D
Global warming potential, GWP	kg CO2	8.95E-01	5.04E-02	n.a.	n.a.	n.a.	1.90E-02	n/a
Depletion potential of the stratospheric ozone layer, ODP	kg CFK-11	3.76E-08	7.41E-09	n.a.	n.a.	n.a.	3.15E-09	n/a
Acidification potential of land and water resources, AP	kg SO2	4.92E-03	2.73E-04	n.a.	n.a.	n.a.	1.03E-04	n/a
Eutrophication potential, EP	kg PO43-	7.69E-04	6.16E-05	n.a.	n.a.	n.a.	2.25E-05	n/a
Formation potential of tropospheric ozone photochemical oxidants, POCP	kg ethyl	2.23E-04	6.60E-06	n.a.	n.a.	n.a.	3.14E-06	n/a
Depletion of abiotic resources, elements	kg Sb	4.37E-07	2.75E-09	n.a.	n.a.	n.a.	5.39E-08	n/a
Depletion of abiotic resources, fossil fuels	MJ	1.26E+01	6.62E-01	n.a.	n.a.	n.a.	2.91E-01	n/a
Resource input								
Use of renewable energy primary energy, excluding renewable primary resources used as raw materials	MJ, net calorific value	1.46E+00	1.70E-03	n.a.	n.a.	n.a.	4.00E-03	n/a
Use of renewable primary energy resources used as raw materials	MJ, net calorific value	5.32E-05	7.71E-07	n.a.	n.a.	n.a.	8.92E-07	n/a
Total use of renewable primary resources	MJ, net calorific value	1.46E+00	1.70E-03	n.a.	n.a.	n.a.	4.00E-03	n/a
Use of non renewable primary energy, excluding non renewable primary energy resources used as materials	MJ, net calorific value	1.30E+01	6.71E-01	n.a.	n.a.	n.a.	3.09E-01	n/a
Use of non renewable primary energy used as raw materials	MJ, net calorific value	0.00E+00	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Total use of non renewable primary energy resources	MJ, net calorific value	1.30E+01	6.71E-01	n.a.	n.a.	n.a.	3.09E-01	n/a
Use of secondary material	kg	5.62E-01	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Use of non renewable secondary fuels	MJ	0.00E+00	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Input of fresh water*	m3	1.36E-03	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Waste categories								
Hazardous waste disposed	kg	3.07E-02	2.48E-04	n.a.	n.a.	n.a.	1.24E-03	n/a
Non hazardous waste disposed	kg	6.81E-01	5.24E-03	n.a.	n.a.	n.a.	1.10E-01	n/a
Radioactive waste disposed	kg	0.00E+00	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Further output material flows								
Components for reuse	kg	0.00E+00	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Materials for recycling	kg	7.45E-02	0.00E+00	n.a.	n.a.	n.a.	9.00E-01	n/a
Materials for energy recovery	kg	6.98E-04	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a
Exported energy	kq	0.00E+00	0.00E+00	n.a.	n.a.	n.a.	0.00E+00	n/a

*Only water use at the Rockwool facilities is presented here.

Transport

Parameter		
Fuel type consumption of vehicle or vehicle type used for transport e.g. long distance truck, boat etc.		1 liter of diesel per 3 km; over 150 km, truck
Capacity utilisation (including empty returns)	%	diesel consumption is for average loads, 30% returns empty, 70% is utilized for other loads/products
Bulk density volume capacity utilisation factor (factor = 1 or <1 or > 1 for compressed or nested packaged products)	kg/m3	Volume based, average of 105 m3 per truck some products are compressed, this has been neglected, therefor a factor of 1 has been applied for all products

End of life

Processes		
collected separately	kg	9.00E+02
collected with mixed construction waste	kg	1.00E+02
for re-use	kg	0.00E+00
for recycling	kg	9.00E+02
for energy recovery	kg	0.00E+00
product of material for final deposition	kg	0.00E+00

Indoor air

Considerations	There are no indoor air health quality related concerns for the use of Rockwool construction products.
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