



**RTS EPD, No 12
VAHEPD-2017-108
weber.vetonit 110 FINE, 120 RENO, 130 CORE and
140 NOVA**



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Saint-Gobain Finland Oy / Weber Environmental Product Declaration (EPD) is in accordance with EN 15804 + A1. In addition, the RTS PCR has been used as an additional guidance. Environmental Product Declaration lists all the environmental impacts of the product during the life cycle. EPD is verified by an independent external party.



General information

Manufacturer and Contact Information

Saint-Gobain Finland Oy / Weber
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Conductor of Life Cycle Assessment (LCA) and Environmental Product Declaration (EPD)

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Product Category Rules

RTS PCR protocol: EPDs published by the Building Information Foundation RTS sr. The publishing date is 02.06.2017.

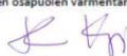
EN 15804 + A1: Sustainability of construction works – Environmental product declaration – Core rules of the product category of construction products..

Date of publication and validity of EPD

EPD is published on 01.09.2017. EPD is valid for 5 years

Verification

The EPD is verified by an independent external party according to the EN 15804 standard. The EPD is verified by Vahanen Environment Oy, DI Hannu Karppi according to the product category rules presented above. Tampellan Esplanadi 2, FI-33100 Tampere, +358 20 769 8698, www.vahanen.com.

Yleissääntöinä on noudatettu eurooppalaisen standardin EN 15804 vaatimuksia ^a	
Kansainvälisen standardin EN ISO 14025:2010 mukainen riippumaton varmentava taho on	
<input type="checkbox"/> sisäinen	<input checked="" type="checkbox"/> ulkoinen
(*) Kolmannen osapuolen varmentaminen on suorittanut:	
	
Vahanen Environment Oy, M. Sc. (Tech) Hannu Karppi	
^a	Tuoteryhmäsäännöt
^b	Kolmannen osapuolen varmentaminen on vapaaehtoista yrityksiltä yrityksille suunnatuissa ympäristöselosteissa; pakollisia kuluttajille suunnatuissa ympäristöselosteissa (katso standardin EN ISO 14025:2010 kohta 9.4)

Product description

Description of the product and its use

The products covered by this declaration are a family of pumpable floor screeds for indoor use, aimed for leveling and as a ground for further surface covering, such as carpet, parquet or tiling.

The pumpability enables the products to be fed through bulk, big bags or handy bags, via designated equipment requiring no manual mixing, and allowing continuous application in various size areas.

	Pumpable	Self leveling	Rapid curing	Fibre reinforced	Intended layer thickness
weber.vetonit 110 FINE	X	X	-	-	5-30 mm
weber.vetonit 120 RENO	X	X	X	X	5-50 mm
weber.vetonit 130 CORE	X	-	-	X	5-50 mm
weber.vetonit 140 NOVA	X	X	-	-	5-40 mm

Product standard

The floor screeds are designed, produced and CE marked according to EN 13813.

Physical characteristics

The products are supplied from production in dry form, premixed in respect of all contents but water. Water is added at the workplace, in a defined amount and technique, to produce a floor screed of high performance.

For specific physical properties, we refer to the CE-declaration or Declaration of Performance (DoP-FI-500001-500082) connected to the datasheet on www.e-weber.fi

Main product components and or materials

The floor screeds are made out of special cements, aggregates, supplementary binders and chemical admixtures. The screeds does not include Substances of very high concern (SVHC).

Component		Amount	CAS-nr	Classification	Comment
Aggregate	Silica sand	40-65%	-	-	Respirable quartz content <0.1% (particles <5µm)
Filler	Limestone	20-35%	72608-12-9	-	-
Binder	Aluminate cement	5-15%	65997-16-2	-	-
Binder	CaSO ₄	1-10%	7778-18-9	-	-
Binder	Portland cement	0-5%	65997-15-1	Xi, R37/38-41	-
Polymer binder	Resin Vinyl Acetate	0,1-5%	-	-	-
Additives	Various	0,5-1%	-	-	Fibres, Plasticizer

LCA calculation information

According to EN 15804, EPD of construction products may not be comparable if they do not comply with this standard. EPD might not be comparable if different functional unit or reference thickness is used.

Declared unit / Functional unit

This EPD describes the environmental effect of 1m² of floor screed throughout the life cycle. In this analysis, the quantity used was 34 kg of dry mortar, which is equivalent to a 20 mm thickness.

System boundaries

Cradle-to-Grave;

- product stage (A1-A3),
- construction process stage (A4-A5),
- use stage (B1-B7),
- end-of-life stage (C1-C4).

Cut-off rules

In the inventory of the input flows a 1 % cut-off rule has been applied. The 1 % cut-off rule is based on the assumption that these input flows do not have a major impact on the environmental impacts as a whole (EN 15805 6.3.5).

Machines and facilities (capital goods) required for and during production are excluded, as is transportation of employees.

Reference service life (RSL)

If properly installed, the service life time of the screed is equal to the lifetime of the building, and 50 years as a default.

Year of study

Raw material, transport, manufacturing, construction process, use and end-of-life data is collected for 2013.

LCA-software

SimaPro 8,
PRé Consultants, Netherlands

Life cycle stages

	Production			Construction process		Use							End-of-life				Loads beyond the system boundary																						
Modules	A1-A3			A4-A5		B1-B7							C1-C5				D																						
Included in the assessment	X			X		X							X																										
R/NR	R	R	R	R	R	R	R	R	R	R	NR	NR	R	R	R	R																							
	A1: Raw material supply			A2: Transports		A3: Manufacturing		A4: Transports		A5: Installation		B1: Use		B2: Maintenance		B3: Repair		B4: Replacement		B5: Refurbishment		B6: Energy use		B7: Water use		C1: De-construction		C2: Transport		C3: Waste processing		C4: Disposal		Reuse		Recovery		Recycling	

R= Relevant

NR = Not relevant

Product stage; A1-A3

A1; Raw-material supply

The raw material supply covers sourcing and production of all raw materials, fuels and energy used.

The emission factor for electricity is 231g CO₂-eq/kWh.

As most of the products are delivered as bulk the packaging materials are excluded from the study.

A2; Transports

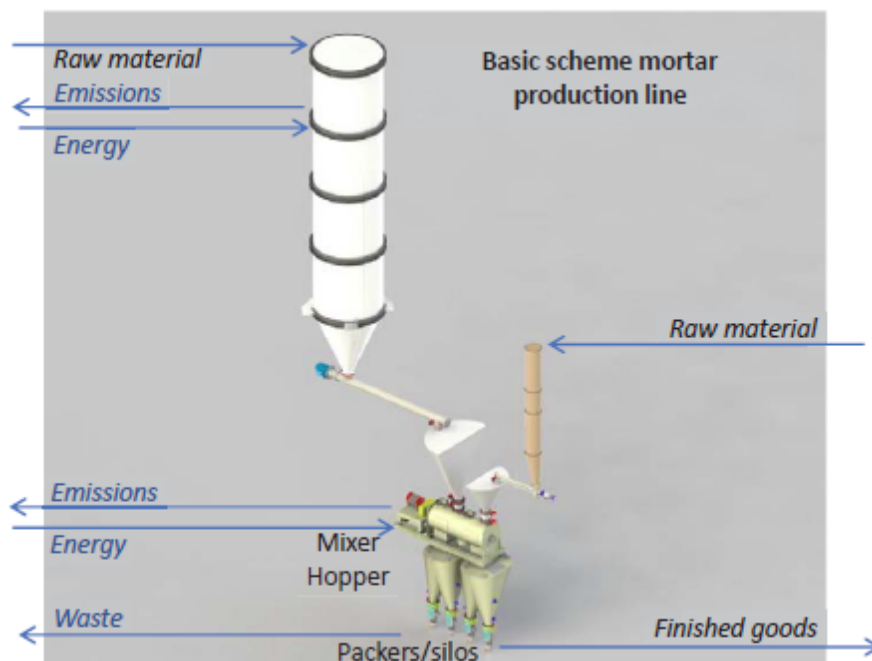
Transports of the different raw materials to the manufacturing plant as well as internal transports at the plant is taken into account.

A3; Manufacturing

The manufacturing process covers drying, grinding and screening of sand, dosing and mixing of the raw-materials and additives.

The emissions from the combustion of fuels and the disposal of generated waste are taken into account in the manufacturing phase. There are no other airborne emissions. There are neither any emissions to the water nor the ground in the manufacturing process.

Manufacturing process flow diagram



Construction process stage; A4-A5

A4; Transports

Transport distance to the construction site is estimated to be 90 km from the manufacturing site (Kiikala – Helsinki).

A5; Installation

The installation of the product is considered to be done by pumping machinery and by adding water to the product. The water consumption is estimated to be 20 % of the product weight. Wastage of product in the installation is estimated to 0,2 %.

Use stage; B1-B7

The use phase consists of the following modules:

B1: Use

B2: Maintenance

B3: Repair

B4: Replacement

B5: Refurbishment

B6: Operational energy use

B7: Operational water use

Once the product is installed, no actions or technical operations are required during the use phase until the demolition of the construction. No operational energy or water use is required by the product, and therefore phases B6 and B7 are not relevant in the evaluation.

End-of-life stage; C1-C4

C1; De-construction

The de-construction and/or demolition of the product is part of the demolition of the entire construction. The deconstruction is considered to be done by excavation.

C2; Transports

It is estimated that 50 % of the demolished product is processed on-site and 50 % is transported to a separate location for processing. Transport distance to processing is estimated to be < 30 km.

C3; Waste processing

The generated waste is crushed and recycled as material.

C4; Disposal

No generated waste is disposed to landfill.

Loads beyond the system boundary; D

This EPD doesn't present the benefits or scenarios outside the lifecycle according module D (Reuse, Recovery Recycling).

LCA results

All the results of the life cycle assessment are calculated for a floor thickness equal to 20 mm thick and 1 m² surface area.

Life cycle impacts: 110 FINE

Impact category	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Global warming	kg CO2 eq	5.66	0.51	0.01	0	0	0	0	0
Ozone depletion	kg CFC 11 eq	5.49E-07	9.38E-08	1.41E-09	0	0	0	0	0
Acidification	kg SO2 eq	2.19E-02	1.69E-03	4.98E-05	0	0	0	0	0
Eutrophication	kg (PO4)3- eq	2.40E-03	3.72E-04	6.13E-06	0	0	0	0	0
Photochemical ozone depletion	kg Ethene eq	9.09E-04	8.65E-05	2.13E-06	0	0	0	0	0
Depletion of abiotic resources - elements	kg Sb eq	5.90E-06	1.04E-06	1.41E-08	0	0	0	0	0
Depletion of abiotic resources – fossil fuels	MJ	52.37	7.77	0.13	0	0	0	0	0

Impact category	unit	C1	C2	C3	C4	D
Global warming	kg CO2 eq	0.01	0.09	0.11	0	0
Ozone depletion	kg CFC 11 eq	1.92E-09	1.56E-08	2.06E-08	0	0
Acidification	kg SO2 eq	8.04E-05	2.82E-04	8.59E-04	0	0
Eutrophication	kg (PO4)3- eq	1.90E-05	6.20E-05	1.96E-04	0	0
Photochemical ozone depletion	kg Ethene eq	2.30E-06	1.44E-05	2.29E-05	0	0
Depletion of abiotic resources - elements	kg Sb eq	2.65E-09	1.73E-07	1.79E-08	0	0
Depletion of abiotic resources – fossil fuels	MJ	0.16	1.29	1.63	0	0

Life cycle impacts: 120 RENO

Impact category	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Global warming	kg CO2 eq	8.19	0.51	0.02	0	0	0	0	0
Ozone depletion	kg CFC 11 eq	7.41E-07	9.38E-08	1.98E-09	0	0	0	0	0
Acidification	kg SO2 eq	3.08E-02	1.69E-03	7.11E-05	0	0	0	0	0
Eutrophication	kg (PO4)3- eq	3.20E-03	3.72E-04	8.47E-06	0	0	0	0	0
Photochemical ozone depletion	kg Ethene eq	1.28E-03	8.65E-05	3.03E-06	0	0	0	0	0
Depletion of abiotic resources - elements	kg Sb eq	8.64E-06	1.04E-06	2.17E-08	0	0	0	0	0
Depletion of abiotic resources – fossil fuels	MJ	77.88	7.77	0.20	0	0	0	0	0

Impact category	unit	C1	C2	C3	C4	D
Global warming	kg CO2 eq	0.01	0.09	0.11	0	0
Ozone depletion	kg CFC 11 eq	1.92E-09	1.56E-08	2.06E-08	0	0
Acidification	kg SO2 eq	8.04E-05	2.82E-04	8.59E-04	0	0
Eutrophication	kg (PO4)3- eq	1.90E-05	6.20E-05	1.96E-04	0	0
Photochemical ozone depletion	kg Ethene eq	2.30E-06	1.44E-05	2.29E-05	0	0
Depletion of abiotic resources - elements	kg Sb eq	2.65E-09	1.73E-07	1.79E-08	0	0
Depletion of abiotic resources – fossil fuels	MJ	0.16	1.29	1.63	0	0

Life cycle impacts: 130 CORE

Impact category	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Global warming	kg CO2 eq	4.26	0.51	0.01	0	0	0	0	0
Ozone depletion	kg CFC 11 eq	4.86E-07	9.38E-08	1.47E-09	0	0	0	0	0
Acidification	kg SO2 eq	1.92E-02	1.69E-03	4.79E-05	0	0	0	0	0
Eutrophication	kg (PO4)3- eq	2.12E-03	3.72E-04	6.30E-06	0	0	0	0	0
Photochemical ozone creation	kg Ethene eq	8.09E-04	8.65E-05	2.10E-06	0	0	0	0	0
Depletion of abiotic resources - elements	kg Sb eq	4.12E-06	1.04E-06	1.27E-08	0	0	0	0	0
Depletion of abiotic resources – fossil fuels	MJ	29.64	7.77	0.10	0	0	0	0	0

Impact category	unit	C1	C2	C3	C4	D
Global warming	kg CO2 eq	0.01	0.09	0.11	0	0
Ozone depletion	kg CFC 11 eq	1.92E-09	1.56E-08	2.06E-08	0	0
Acidification	kg SO2 eq	8.04E-05	2.82E-04	8.59E-04	0	0
Eutrophication	kg (PO4)3- eq	1.90E-05	6.20E-05	1.96E-04	0	0
Photochemical ozone creation	kg Ethene eq	2.30E-06	1.44E-05	2.29E-05	0	0
Depletion of abiotic resources - elements	kg Sb eq	2.65E-09	1.73E-07	1.79E-08	0	0
Depletion of abiotic resources – fossil fuels	MJ	0.16	1.29	1.63	0	0

Life cycle impacts: 140 NOVA

Impact category	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Global warming	kg CO2 eq	4.25	0.51	0.01	0	0	0	0	0
Ozone depletion	kg CFC 11 eq	5.64E-07	9.38E-08	1.63E-09	0	0	0	0	0
Acidification	kg SO2 eq	2.33E-02	1.69E-03	5.60E-05	0	0	0	0	0
Eutrophication	kg (PO4)3- eq	2.46E-03	3.72E-04	6.98E-06	0	0	0	0	0
Photochemical ozone creation	kg Ethene eq	8.89E-04	8.65E-05	2.26E-06	0	0	0	0	0
Depletion of abiotic resources - elements	kg Sb eq	2.82E-06	1.04E-06	1.01E-08	0	0	0	0	0
Depletion of abiotic resources – fossil fuels	MJ	35.64	7.77	0.11	0	0	0	0	0

Impact category	unit	C1	C2	C3	C4	D
Global warming	kg CO2 eq	0.01	0.09	0.11	0	0
Ozone depletion	kg CFC 11 eq	1.92E-09	1.56E-08	2.06E-08	0	0
Acidification	kg SO2 eq	8.04E-05	2.82E-04	8.59E-04	0	0
Eutrophication	kg (PO4)3- eq	1.90E-05	6.20E-05	1.96E-04	0	0
Photochemical ozone creation	kg Ethene eq	2.30E-06	1.44E-05	2.29E-05	0	0
Depletion of abiotic resources - elements	kg Sb eq	2.65E-09	1.73E-07	1.79E-08	0	0
Depletion of abiotic resources – fossil fuels	MJ	0.16	1.29	1.63	0	0

Resource use: 110 FINE

Resource use	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	2.6	0.1	0.006	0	0	0	0	0
Use of renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of renewable primary energy resources	MJ	2.6	0.1	0.006	0	0	0	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	57.0	7.9	0.1	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	57.0	7.9	0.1	0	0	0	0	0
Use of secondary material	kg	0	0	0	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Net use of fresh water	m3	0.04	0.002	0.007	0	0	0	0	0

Resource use	unit	C1	C2	C3	C4	D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	0.001	0.02	0.009	0	0
Use of renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of renewable primary energy resources	MJ	0.001	0.02	0.009	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	0.2	1.3	1.6	0	0
Use of non-renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	0.2	1.3	1.6	0	0
Use of secondary material	kg	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0
Net use of fresh water	m3	0.00003	0.0003	0.0003	0	0

Resource use: 120 RENO

Resource use	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	2.7	0.1	0.006	0	0	0	0	0
Use of renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of renewable primary energy resources	MJ	2.7	0.1	0.006	0	0	0	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	82.8	7.9	0.2	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	82.8	7.9	0.2	0	0	0	0	0
Use of secondary material	kg	0	0	0	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Net use of fresh water	m3	0.04	0.002	0.007	0	0	0	0	0

Resource use	unit	C1	C2	C3	C4	D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	0.001	0.02	0.009	0	0
Use of renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of renewable primary energy resources	MJ	0.001	0.02	0.009	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	0.2	1.3	1.6	0	0
Use of non-renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	0.2	1.3	1.6	0	0
Use of secondary material	kg	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0
Net use of fresh water	m3	0.00003	0.0003	0.0003	0	0

Resource use: 130 CORE

Resource use	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	2.6	0.1	0.006	0	0	0	0	0
Use of renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of renewable primary energy resources	MJ	2.6	0.1	0.006	0	0	0	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	34.2	7.9	0.1	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	34.2	7.9	0.1	0	0	0	0	0
Use of secondary material	kg	0	0	0	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Net use of fresh water	m3	0.04	0.002	0.007	0	0	0	0	0

Resource use	unit	C1	C2	C3	C4	D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	0.001	0.02	0.009	0	0
Use of renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of renewable primary energy resources	MJ	0.001	0.02	0.009	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	0.2	1.3	1.6	0	0
Use of non-renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	0.2	1.3	1.6	0	0
Use of secondary material	kg	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0
Net use of fresh water	m3	0.00003	0.0003	0.0003	0	0

Resource use: 140 NOVA

Resource use	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	2.7	0.1	0.006	0	0	0	0	0
Use of renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of renewable primary energy resources	MJ	2.7	0.1	0.006	0	0	0	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	40.4	7.9	0.1	0	0	0	0	0
Use of non-renewable primary energy resources used as raw materials	MJ	0	0	0	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	40.4	7.9	0.1	0	0	0	0	0
Use of secondary material	kg	0	0	0	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0	0	0	0
Net use of fresh water	m3	0.04	0.002	0.007	0	0	0	0	0

Resource use	unit	C1	C2	C3	C4	D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	0.001	0.02	0.009	0	0
Use of renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of renewable primary energy resources	MJ	0.001	0.02	0.009	0	0
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	0.2	1.3	1.6	0	0
Use of non-renewable primary energy used as raw materials	MJ	0	0	0	0	0
Total use of non-renewable primary energy resources	MJ	0.2	1.3	1.6	0	0
Use of secondary material	kg	0	0	0	0	0
Use of renewable secondary fuels	MJ	0	0	0	0	0
Use of non-renewable secondary fuels	MJ	0	0	0	0	0
Net use of fresh water	m3	0.00003	0.0003	0.0003	0	0

Waste categories: 110 FINE

Waste categories	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Hazardous waste disposed	kg	0.0002	0	0	0	0	0	0	0
Non-hazardous waste disposed	kg	2.4	0	0.07	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0	0	0	0

Waste categories	unit	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0	0	0	0
Non-hazardous waste disposed	kg	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0

Waste categories: 120 RENO

Waste categories	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Hazardous waste disposed	kg	0.0002	0	0	0	0	0	0	0
Non-hazardous waste disposed	kg	2.4	0	0.07	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0	0	0	0

Waste categories	unit	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0	0	0	0
Non-hazardous waste disposed	kg	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0

Waste categories: 130 CORE

Waste categories	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Hazardous waste disposed	kg	0.0002	0	0	0	0	0	0	0
Non-hazardous waste disposed	kg	2.4	0	0.07	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0	0	0	0

Waste categories	unit	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0	0	0	0
Non-hazardous waste disposed	kg	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0

Waste categories: 140 NOVA

Waste categories	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Hazardous waste disposed	kg	0.0002	0	0	0	0	0	0	0
Non-hazardous waste disposed	kg	2.4	0	0.07	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0	0	0	0

Waste categories	unit	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0	0	0	0
Non-hazardous waste disposed	kg	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0

Other output flows: 110 FINE

Other output flows	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Components for re-use	kg	0	0	0	0	0	0	0	0
Materials for recycling	kg	0.002	0	0	0	0	0	0	0
Materials for energy recovery	kg	0.01	0	0	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0	0	0	0

Other output flows	unit	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0
Materials for recycling	kg	0	0	34	0	0
Materials for energy recovery	kg	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0

Other output flows: 120 RENO

Other output flows	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Components for re-use	kg	0	0	0	0	0	0	0	0
Materials for recycling	kg	0.002	0	0	0	0	0	0	0
Materials for energy recovery	kg	0.01	0	0	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0	0	0	0

Other output flows	unit	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0
Materials for recycling	kg	0	0	34	0	0
Materials for energy recovery	kg	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0

Other output flows: 130 CORE

Other output flows	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Components for re-use	kg	0	0	0	0	0	0	0	0
Materials for recycling	kg	0.002	0	0	0	0	0	0	0
Materials for energy recovery	kg	0.01	0	0	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0	0	0	0

Other output flows	unit	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0
Materials for recycling	kg	0	0	34	0	0
Materials for energy recovery	kg	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0

Other output flows: 140 NOVA

Other output flows	unit	A1-A3	A4	A5	B1	B2	B3	B4	B5
Components for re-use	kg	0	0	0	0	0	0	0	0
Materials for recycling	kg	0.002	0	0	0	0	0	0	0
Materials for energy recovery	kg	0.01	0	0	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0	0	0	0

Other output flows	unit	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0
Materials for recycling	kg	0	0	34	0	0
Materials for energy recovery	kg	0	0	0	0	0
Exported energy	MJ	0	0	0	0	0

This EPD doesn't present the benefits or scenarios outside the lifecycle according module D (Reuse, Recovery Recycling). Since no scenarios are presented, the value of module D is zero (0) in all environmental impact categories.

Additional information

Use

Regarding indoor air quality the flooring products have a M1 emission classification granted by the Finnish Building Information Foundation (Suomen Rakennustietosäätiö, RTS). M1 stands for low emissions. The products also meet GEV-EMICODE EC 1+ requirements (very low emissions).

All the products are considered as low alkaline (pH < 11).

The products are fast setting and fast drying enabling time and energy savings throughout the construction process.

References

1. RTS. PCR protocol: EPDs published by the Building Information Foundation RTS sr (2016)
2. EN 15804: Sustainability of construction works - Environmental product declaration - Core rules of the product category of construction products (2014)
3. ISO 14025: Environmental labels and declarations - Type III environmental declarations - Principles and procedures (2006)
4. ISO 14040: Environmental management - Life Cycle Assessment - Principles and framework (2006)
5. ISO 14044: Environmental management - Life Cycle Assessment - Requirements and guidelines (2006)
6. LCA report: Saint-Gobain Rakennustuotteet Oy/ Weber - Multipurpose floor leveling products. (2016)