



## Environmental Product Declaration

weber.floor 110 Fine/120 Reno/130 Core/140 Nova



The environmental impact of these products have been assessed according to EN 15804 and verified by an independent third party.  
Declaration number: VAHEPD-2015-106



Registration number: S-P-00651

# General information

## Manufacturer

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Saint-Gobain Byggprodukter AB  
Organisation №: SE 556241-2592  
Box 415  
SE-191 24 Sollentuna  
Sweden  
Production site: Lyttersta, Vingåker

## Contact information

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## Environmental management systems

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ISO 14001 №: 1098M, issued April, 1998.

## Product Category Rules

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EN 15804 as the core PCR + International EPD System Product Category Rule, PCR for constructions products and construction services, PCR 2012:01, version 2.0, 2015-03-03, with the appendix 'Mortars applied to a surface'.

## Date of publication

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15.10.2015

## EPD Validity

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5 years

## Verification

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EPD Program	The International EPD® System For more information — <a href="http://www.environdec.com">www.environdec.com</a>
Registration No	S-P-00651
Date of publication	2015-10-15
EPD validity	5 years
EPD valid within the following geographical area	Worldwide
PCR review conducted by	The Technical Committee of the International EPD® System. Chair: Massimo Marino. Contact via <a href="mailto:info@environdec.com">info@environdec.com</a> .
Independent verification of the declaration and data, according to ISO 14025	Hannu Karppi
Accredited or approved by	The International EPD® System



# Product description

## Description of the product and its use

The products covered by this assessment 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 levelling	Self-drying	Fibre reinforced	Intended layer thickness
weber.floor 110 Fine	X	X	-	-	4-40 mm
weber.floor 120 Reno	X	X	X	X	4-50 mm
weber.floor 130 Core	X	-	-	-	10-100 mm
weber.floor 140 Nova	X	X	-	X	5-60 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 connected to the datasheet on [www.weber.se](http://www.weber.se)

## Description of the main product components and or materials:

Component	Substance	Weight-%	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 <sub>4</sub>	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

The screeds are free from substances of very high concern (SVHC).

# 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 reference thickness is used.

## Declared unit / Functional unit

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This EPD describes the environmental effect of 1m<sup>2</sup> of floor screed.

In this analysis, the quantity used was 34 kg of dry mortar, which is equivalent to a 20 mm thickness.

## System boundaries

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Cradle-to-Gate. Modules A1 (Raw material supply), A2 (Transports), A3 (Manufacturing).

## Cut-off rules

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In the assessment, all significant parameters from gathered production data are considered, i.e. raw material used per formulation, used thermal energy, internal fuel and electric power consumption, direct production waste. This study also takes into account some material flows of less than 1. It is assumed that the total sum of omitted processes does not exceed 1% of the GWP or energy impact.

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

## Reference service life (RSL)

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The family of products covered by this declaration are aimed for leveling and ground for further surface covering. 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

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Raw materials, transports and manufacturing data: 2014.

## Software

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SimaPro 7  
PRé Consultants  
Netherlands

## Life cycle stages

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

### Product stage; A1-A3

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#### A1; Raw-material supply

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

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

#### A2 ;Transports

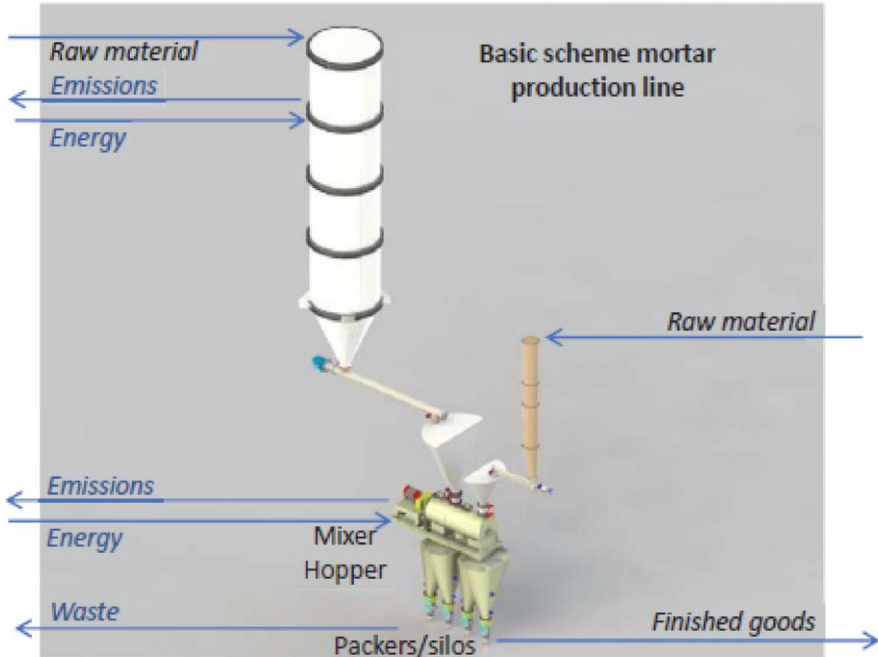
Data on transport of the different raw materials to the manufacturing plant as well as internal transports at the plant is taken into account.

#### 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 module A3 as well. 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





# LCA results

## Life cycle impacts

Impact category	unit	110 FINE	120 RENO	130 CORE	140 NOVA
Global Warming	kg CO2 eq	7,00	7,14	5,16	5,09
Ozone Depletion	kg CFC 11 eq	0,00000063	0,00000064	0,00000059	0,00000057
Acidification	kg SO2 eq	0,026	0,027	0,025	0,024
Eutrophication	kg (PO4)3- eq	0,0031	0,0033	0,0029	0,0027
Photochemical ozone creation	kg Ethene eq	0,0011	0,0011	0,0010	0,0009
Depletion of abiotic resources - elements	kg Sb eq	0,0000074	0,0000073	0,0000041	0,0000037
Depletion of abiotic resources - fossil fuels	MJ	62,19	65,85	36,20	46,30

## Resource use

Resource use	unit	110 FINE	120 RENO	130 CORE	140 NOVA
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	2,6	2,5	2,6	2,7
Use of renewable primary energy resources used as raw materials	MJ	-	-	-	-
<b>Total use of renewable primary energy resources</b>	MJ	2,6	2,5	2,6	2,7
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ	68,5	72,2	42,5	52,7
Use of non-renewable primary energy resources used as raw materials	MJ	-	-	-	-
<b>Total use of non-renewable primary energy resources</b>	MJ	68,5	72,2	42,5	52,7
Use of secondary material	kg	0,3	0,3	0,2	0,2
Use of renewable secondary fuels	MJ	0,6	0,5	0,3	0,0
Use of non-renewable secondary fuels	MJ	11,9	12,3	11,5	10,9
Net use of fresh water	m3	0,04	0,04	0,04	0,04

## Waste categories

Waste categories	unit	110 FINE	120 RENO	130 CORE	140 NOVA
Hazardous waste disposed	kg	0,0002	0,0003	0,0002	0,0002
Non-hazardous waste disposed	kg	0,8	0,8	0,6	0,3
Radioactive waste disposed	kg	0,0005	0,0004	0,0003	0,0002

## Other output flows

Other output flows	unit	110 FINE	120 RENO	130 CORE	140 NOVA
Components for re-use	kg	-	-	-	-
Materials for recycling	kg	0,1	0,1	0,1	0,1
Materials for energy recovery	kg	-	-	-	-
Exported energy	MJ	-	-	-	-

# Additional information

## Construction process

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Construction installation process

instruction for a proper installation of the product, e.g. to minimise the energy or water consumption or to improve the durability of the product

## Use

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Use, maintenance, repair etc

Information shall be provided for products release of dangerous substances to indoor air, soil and water during the use stage.

instruction for a proper use of the product, e.g. to minimise the energy or water consumption or to improve the durability of the product

instructions for a proper maintenance and service of the product

information on key parts of the product determining its durability

## End-of-life

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De-construction/demolition and waste processing

information on recycling including e.g. suitable procedures for recycling the entire product or selected parts and the potential environmental benefits gained

information on a suitable method of reuse of the product (or parts of the products) and procedures for disposal as waste at the end of its life cycle, and

information regarding disposal of the product or inherent materials, and any other information considered necessary to minimise the product's end-of-life impacts.

## Other environmental information

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i.e. environmental benefits or loads resulting from reusable products, recyclable materials and/or useful energy carriers leaving a product system e.g. as secondary materials or fuels.

As one option for other environmental information it is possible to report on recyclability potentials.

# References

1. PCR for constructions products and construction services, PCR 2012:01, version 2.0 (2015)
2. Appendix to PCR 2012:01 'Mortars applied to a surface' (2015)
3. EN 15804, Sustainability of construction works – Environmental product declaration – Core rules of the product category of construction products (2012)
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 Weber Oy Ab Multipurpose floor leveling products. (2014)