

RTS BUILDING
INFORMATION FOUNDATION
RTS

RTS EPD, EPD NUMBER, EXAMPLE 1 IMAGINED PLASTER CODE 123

RELEVANT INFORMATION

Owner of the declaration: Name of the company
Program operator: The Building Information Foundation RTS sr
Publisher: The Building Information Foundation RTS sr
Name of the product: Imagined plaster
Declaration number: RTSEPD-16-1
Registration number: RTSEPD-16-1
ECO Platform reference number:
Issue date: 16.11.2016
Valid to: 16.11.2021



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Scope of the declaration

This environmental product declaration covers the environmental impacts of Imagined Plaster. The declaration has been prepared in accordance with EN 15804:2012+A1:2013 and ISO 14025 standards and the additional requirements stated in the RTS PCR (English version, 2.6.2016). This declaration covers the life cycle stages from cradle-to-gate

Laura Sariola

Secretary of
certification group

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General Manager



General information, declaration scope and verification (7.1)

1. Owner of the declaration, manufacturer

Yritys Oy
 Yritystie 1
 00100 Helsinki
 Etunimi Sukunimi
 etunimi.sukunimi@yritys.fi

2. Product name and number

Imagined plaster SL 600, koodi 123

3. Place of production

Produced in Helsinki, Finland

4. Additional information

Additional Information from Firstname Lastname.

5. Product Category Rules and the scope of the declaration

The declaration has been prepared in accordance with EN 15804:2012+A1:2013 and ISO 14025 standards and the additional requirements stated in the RTS PCR (English version, 2.6.2016)

6. Author of the life-cycle assessment and declaration

Engineer Oy, EPDkatu 4 D 00100 Helsinki, puh +358
 (0)20 123 456, www.insinööritoimisto.fi. Compiler Kaisa Engineer.

7. Verification

This EPD has been verified according to the requirements of EN 15804+A1 and RTS PCR by a third party. The verification has been carried out Insinööritsto Environment Oy, DI Liisa Ympäristö. Ympäristökatu 2, FI-33100 Tampere, +358 456 123, www.environment.com.

8. Declaration issue date and validity

Declaration issue date 3.3.2016. The declaration is valid 5 years.

Verified according to the requirements of EN 15804+A1 (product group rules)	
Independent verification of the declaration and data, according to ISO14025:2010	
<input type="checkbox"/> Internal	<input type="checkbox"/> External
Third party verifier:	
< Name of the third party verifier >	

Product information

9. Product description

The declaration has been conducted for one Imagined plaster in the group, LCA- calculations does not derogate from each other.

10. Technical specifications

Imagined plastered produced from cement with grain size of 3-7mm. Casein free product, layer thickness 5-50 mm. Consumption average 1,8 kg/m²/mm. The plaster shall be spread and compressed carefully.

11. Product standards

SFS-EN 998-1, plaster specifications. Part 1.

12. Physical properties

Compression resistance 30, Bending tenacity F3, Fireclass A1 standard EN 13813:2002 paloluokka

13. Raw-materials of the product and product information

Compulsory: material, quantity, origin

Product structure / composition / raw-material	Material	quantity p%*	Usability			Origin of the raw materials
			Renewable	Non-renewable	Recycled	
Portlandcement		10-25		x		EU
Granulated blast-furnace cinder		5-15			x	EU
Natural sand		80		x		EU
						EU

*Order of magnitude, not exact composition

14. Substances under European Chemicals Agency's REACH, SVHC restrictions

<http://echa.europa.eu/web/guest/candidate-list-table>

Compulsory: CAS-number

<u>Name</u>	<u>EC Number</u>	<u>CAS Number</u>
Chrome(VI)- compound	-	-

LIFE CYCLE ASSESMENT (Standard 7.2.1-2)

Mark all the covered modules of the EPD with X. Mandatory modules are marked with blue in the table below. This declaration covers "cradle-to-gate with options". Please fulfil relevant stages "R" (relevant) and non-relevant stages "NR".

Product stage			Construction process stage		Use stage							End of life stage				Supplementary information beyond the life cycle		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Raw material supply	Transport	Manufacturing	Transport	Construction-instsallation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

	Mandatory modules
	Mandatory as per the RTS PCR section 6.2.1 rules and terms
	Optional modules based on scenarios

15. Functional / declared unit

Indicators for one kg. The values can be converted to m² by using conversion factor, product 1,8 kg/m²/mm.

16. System boundary

This EPD covers the following modules; A1 (Raw material supply), A2 (Transport) and A3 (Manufacturing). The construction stage includes module A4 (Transport to the site). In addition, in the end of life stage is included information from C3 and C4 and beyond the life cycle information from D module.

17. Cut-off criteria

A1 raw material supply, A2 transportation, A3 manufacturing. All used materials, energy, packing and transportation until the end-of-waste state have been included. The information from transportation A4 is included to LCA-calculation, the distance is 600 km and utilization boundary 70%. Information from B -module has not been calculated nor included in the LCA-calculations. Module C3 an C4 has been included. The waste quality will depend on the waste production process EWC 10 13 11 other than 10 13 09 and 1 0 13 10 waste mentioned originated from production. The module D is included.

18. Production process

The clinker is very finely ground to produce portland cement. The final product will include calciumsilicate minerals, water, blast-furnace cinder and additives.

Scope of the Life-Cycle Assessment (7.2.1-2)

19. Environmental impacts

Environmental Impacts	Unit (expressed per declared unit)	Life cycle stage / quantity:					
		quantity A1-A3	A1	A4	C3	C4	D
			A2				
			A3				
Global warming potential	kg CO ₂ ekv	0,98		1,5	0,1	0,4	-0,05
Depletion of stratospheric ozone layer	kg CFC 11 ekv	0,00002		0,0000002	0,000002	0,00003	- 0,000002
Acidification	kg SO ₂ ekv	0,5		0,0002	0,0001	0,001	-0,0002
Eutrophication	kg (PO ₄) ₃₋ ekv	0,08		0,00004	0,000006	0,00005	-0,000004
Photochemical ozone creation	kg eteeni ekv	0,04		-0,00002	0,000001	0,00005	-0,0005
Depletion of abiotic resources - elements	kg Sb ekv	0,00004		0,00000008	0,000000005	0,00000004	-0,0000006
Depletion of abiotic resources - fossil fuels	MJ	20		50	2,5	10	-

20. Use of natural resources (7.2.4)

Life cycle stage / quantity: A1-A3 shall be informed, information in the module D shall be informed. The information shall be informed as numbers (e.g. 0), bar/line corresponds data which have not been considered. Primary energy corresponds to energy content.

Parameters describing resource use	Unit (expressed per declared unit)	quantity A1-A3	Life cycle stage / quantity:				
			A1	A4	C3	C4	D
			A2				
			A3				
Use of renewable primary energy excluding renewable primary	MJ	145,2		-	-	-	-

energy resources used as raw materials							
Renewable primary energy resources used as raw materials	MJ	418,7		-	-	-	-
Total use of renewable primary energy resources	MJ	563,9		0,05	0,06	0,02	-0,48
Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials	MJ	2106		-	-	-	-
Nonrenewable primary energy resources used as raw materials	MJ	129,3		-	-	-	-
Total use of non renewable primary energy resources	MJ	2235,3		50	3	4	-10
Use of renewable secondary fuels	MJ	20,7		-	-	-	-
Use of non-renewable secondary fuels	MJ	0,0		-	-	-	-
Net use of fresh water	m ³	2,9		0,05	0,003	0,05	-0,02
Use of secondary material	kg	3,6		-	-	-	-

OTHER INDICATORS (Standard 7.2.5)
21. End of life - Waste

Waste categories	Unit (expressed per declared unit)	quantity A1-A3	A1	A4	C3	C4	D
			A2				
			A3				
Hazardous waste disposed	kg	0,03		0,005	0,0007	0,006	-0,0003
Non hazardous waste disposed	kg	2,4		1,3	0,02	0,0007	-0,003
Radioactive waste disposed	kg	0,0		-	-	-	-

22. End of life - Output flow

Other environmental information	Unit (expressed per declared unit)	quantity A1-A3	A1	A4	C3	C4	D
			A2				
			A3				
Components for reuse	kg	-		-	-	-	-
Materials for recycling	kg	0,003		-	-	-	-0,0002
Materials for energy recovery	kg	-		-	-	-	-
Exported energy	MJ/energia muoto	-		-	-	-	-

Scenarios and additional technical information (7.3)
23. Energy in the manufacturing phase (7.3. A3)

A3 Electricity information and CO ₂ emission kg CO ₂ ekv. /kWh		
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24. Additional technical information, transport to the building site (Standardi 7.3.2, kohta A4)

Technical information of transportation (A4) from production plant to the site.

Parameter	Määrä	Tiedon laatu
Fuel type and consumption of vehicle or vehicle type used for transport e.g. long distance truck, boat etc. Litre of fuel type per distance or vehicle type, Commission Directive 2007/37/EC (European Emission Standard)	0,0035	Trailer-lorry, diesel 55 dm ³ /100km
Distance (average distance of the transportation) km	600	Average distance of transportation in Finland.
Capacity utilisation % (including empty returns)	70	
Bulk density of transported products kg/m³	800	
Volume capacity utilisation factor (factor = 1 or <1 tai ≥ 1 for compressed or nested packaged products)	1	

25. End-of-life process description (7.3.4)

Process flow	Unit (expressed per functional unit or per declared unit of components products or materials and by type of material)	Amount kg/kg Data quality
Collection process specified by type	kg collected separately	1
	kg collected with mixed construction waste	-
Recovery system specified by type	kg for re-use	-
	kg for recycling	0,6

	kg for energy recovery	-
Disposal specified by type	kg product or material for final deposition	0,4
Assumptions for scenario development, e.g. transportation	units as appropriate	transportation distance 50km, utilization 50%

*These values are based to current knowledge.

26. Other technical information

Consumption	1,8 kg/m ² 1 mm:n layer thickness
Water needed	2,5 - 3,4 l / 25 kg (3 mm) 2,2 - 2,5 l / 25 kg (7 mm)
Ready product	12-13 l / 25 kg
Colour	grey
Exposure class	XF 4, XC 4, XS 2, XD 3 (50v), XF 3, XC 4, XS 2, XD 3 (100v)

27. Additional information (7.4)

a) emissions to soil

The information is not available

b) emissions to water

The information is not available

c) emissions to indoor air

The product has emission class M1

28. Product declaration:

The information is available at the web pages, please see link.

29. Reference of the common information

The Building Information Foundation RTS (RTS EPD Product Category Rules)

ISO 14025

ISO 14025:2011-10 Environmental labels and declarations. Type III environmental declarations. Principles and procedures

EN 15804

EN15804+A1 Sustainability of construction works. Environmental Product Declarations. Core rules for the product category of construction products

30. Product information (volunteer, verified information)