ENVIRONMENTAL PRODUCT DECLARATION

B-EPD .BE

026.0184.001-01.00.00

URSA BENELUX

Glass mineral wool lambda 35 naked

HOMETEC® 35

FRAMETEC® 35

FRAMETEC® SLAB 35

ACOUSTIC ROLL

PARTY WALL ROLL

CAVITY BATT 35

ISSUED 05.01.2026
VALID UNTIL 05.01.2031

THIRD PARTY VERIFIED
in accordance with EN 15804+A2, EN 16783, and B-EPD PCR_versie1.0_18.10.2022

FUNCTIONNAL UNIT & MODULES DECLARED

1 m² thermal insulation with a thickness of 180 mm and R_D value of 5,10 m²K/W

Cradle to grave

A123	A4	A5	B2-B4	C	D
•	•	•		•	•

The intended use of this EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings. This EPD is only valid when registered on www.b-epd.be. The FPS Public Health cannot be held responsible for the information provided by the owner of the EPD.

TABLE OF CONTENTS

1. PRODUCT DESCRIPTION

1.1 Product name

Glass mineral wool lambda 35 naked:
HOMETEC® 35 / FRAMETEC® 35 / FRAMETEC® SLAB 35 / ACOUSTIC ROLL / PARTY WALL ROLL / CAVITY BATT 35, mineral wool, λ 0,035 W/m·K

1.2 Product description and intended use

Unfaced mineral wool insulation in accordance with the EN 13162 standard. The insulation products are noncombustible, water repellent and have a high acoustic performance. The insulation products have different commercial names depending on the application.

- HOMETEC® 35 is a lightweight, unfaced mineral wool roll for use in pitched roofs, attics, timber frame walls and twin skin metal cladding.
- FRAMETEC® 35 is a lightweight, unfaced mineral wool roll for use in timber and steel frame walls.
- FRAMETEC® SLAB 35 is a lightweight, unfaced mineral wool semi-rigid slab for use in light steel frame walls.
- ACOUSTIC ROLL is a lightweight, unfaced mineral wool roll for use in partition walls, internal walls and floors.
- PARTY WALL ROLL is a lightweight, unfaced mineral wool roll for use in masonry cavity party.
- CAVITY BATT 35 is a semi-rigid mineral wool slab for use in external walls and masonry cavity party.

The product is available in thicknesses from 25 mm up to 260 mm. The following table displays all the thicknesses per commercial names.

Product	Thickness (mm)
FRAMETEC 35	90, 100, 120, 135, 140, 150, 180 185, 190, 220, 240 & 260
HOMETEC 35	60, 80, 100, 120, 140, 150, 160, 180, 200, 220, 240 & 260
ACOUSTIC ROLL	25, 50, 60, 75 & 100
CAVITY BATT 35	75, 100, 125 & 150
PARTY WALL ROLL	100

The EPD is a specific EPD from a single company, URSA Benelux BV.

Supplementary production required to compensate losses and treatment of site waste, being 2% of glass wool.

1.3 Reference flow / declared unit

1 m² thermal insulation with a thickness of 180 mm and R_D value of 5,10 m²K/W.
This EPD includes the range of thicknesses between 25mm and 260mm using a multiplication factor to obtain the environmental performance for each thickness. To calculate the multiplication factors, a reference unit has been selected. All results refer to 180 mm thickness with a thermal resistance of R=5.10 m²*K/W. The following table lists the main products with specific thicknesses. To obtain the environmental performance associated with each specific thickness, the results presented in this EPD must be multiplied by their corresponding multiplication factor.

Thickness (mm) (EN)	Multiplication factor (EN/180)
25	0.14
50	0.28
60	0.33
75	0.42
80	0.44
90	0.50
100	0.56
120	0.67
125	0.69
135	0.75
140	0.78
150	0.83
160	0.89
180	1.00
185	1.03
190	1.06
200	1.11
220	1.22
240	1.33
260	1.44
EN	EN/180

The R_D-range of this product is 0,70 m²K/W (25 mm) to 7,40 m²K/W (260 mm).
Packaging is included.
The weight per reference flow is 3,4 kg.
The density of the product is 19 kg / m³.

1.4 Installation

Materials for fixation and installation are not included. Regarding installation this EPD only includes the environmental impact related to the product itself:

- the loss of material during construction;
- the additional needed production;
- transport;
- end-of-life of the lost material during construction;
- end-of-life of packaging material up to the end-of-waste state.

For installing the product following scenarios are possible: built-in or mechanical fixing. This may lead to the need of additional products and materials for which the impact is not included in this EPD and which shall be taken into account at building level. More detailed information on these scenarios can be found in our technical datasheets on our website www.ursa.be.

1.5 Composition and content

Components	Composition / content / ingredients	Quantity
Product	– Glass wool – Binder – Facing	– ≥94% – ≤6 % – No facing
Packaging	– LDPE and HDPE – Wooden pallet	– 0.025 kg/m² – 0.231 kg/m²

The product does not contain materials listed in the “Candidate list of Substances of Very High Concern for authorization”.

1.6 Reference service life

The reference service life is estimated at 75 years.

According to PCR for thermal insulation products[1], the thermal performance characteristics of thermal insulation products are at least 50 years, although glass wools can maintain these properties for longer. Therefore, it is recommended that a minimum of 50 years is used.
The stable thermal characteristics of mineral wool insulation products and their long-term durability are supported by the durability study run by EURIMA in 2016 [2]. Based on this information and product use in buildings in the Benelux, URSA considers the reference service life of URSA products to be the service life for residential buildings and is set to 75 years.

The RSL is based on the PCR EN 16783:2024 for thermal insulation products 6.3.3. Reference Service Life
The conditions under which this RSL is valid are as following:

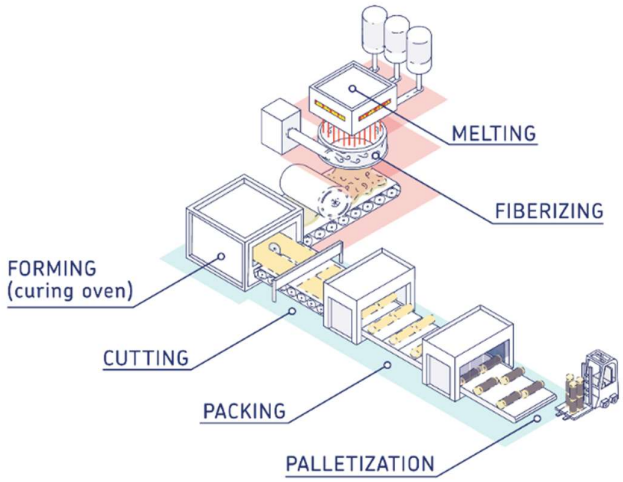
- Normal aging conditions;
- When correctly installed in accordance with manufacturer's instructions or accepted good practice. If there is any uncertainty, the manufacturer should be consulted.

1.7 Description of geographical representativity

The EPD is representative for the Belgian market.

1.8 Description of the production process and technology

URSA manufactures glass wool using natural raw materials (sand), recycled materials (cullet) and additives that are melted into glass in a furnace. A high-speed fiberizing process divides the melted glass into millions of filaments, which are sprayed with a binding solution and accumulated on a conveyor belt. The resulting product is transported through a curing oven and cut to size. In some cases, facing materials are attached to the glass wool product. Furthermore, production of packaging is considered during this phase.



[1] EN 16783:2016 Thermal insulation products - Product category rules (PCR) for factory made and in-situ formed products for preparing environmental product declarations.
[2] FIW Munchen e.V. (January 2016): Durability Project Mineral Wool for EURIMA Association

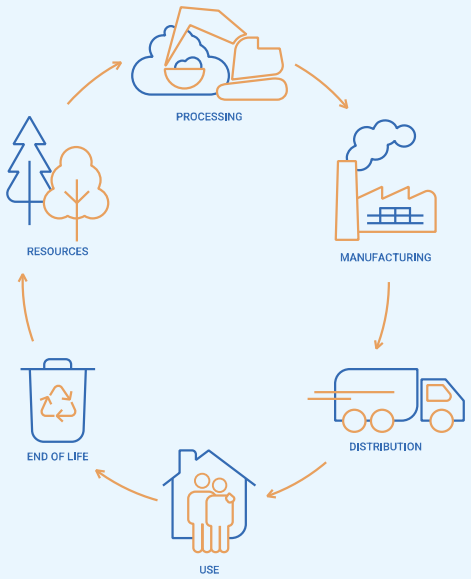
2. TECHNICAL DATA / PHYSICAL CHARACTERISTICS

Technical property	Standard	Value	Unit	Comment
Thickness		180	mm	
Thermal characteristics (mandatory)	EN 12667 EN 12939	0,035	W/(m.K)	
R-value		5,10	m² K/W	
Reaction to fire	EN 13501-1	A1		
Designation code CE	HOMETEC® 35: EN13162- MW-T2-WS-MU1-AFr5 FRAMETEC® 35: EN13162- MW- T2-WS-MU1-AFr5 FRAMETEC® SLAB 35: EN13162- MW- T2-WS-MU1-AFr5 ACOUSTIC ROLL: EN13162- MW-T2-MU1-AFr5 PARTY WALL ROLL: EN13162- MW- T2-MU1-AFr5 CAVITY BATT 35: EN13162- MW- T4-WS-WL(P)			
Application	Thermal Insulation in Building			

3. LCA-STUDY

3.1 Date of LCA STUDY

November 2024



3.2 Software

For the calculation of the LCA results, the software program OpenLCA 2.4.0 has been used.

3.3 Information on allocation

At URSA, different types of mineral wool insulation are produced. The energy consumption, emissions and raw materials are allocated based on the physical criteria of the mass of glass.

3.4 Informatie on cut off

The following processes are considered below cut-off:

- The process energy and materials representing less than 1% of the whole energy and mass are neglected (when they do not cause significant impacts);
- Diffuse emissions of particulate matter during transport and storage of raw materials, & long-term emissions.
- The total of neglected input flows per module is less than 5% of energy usage and mass as prescribed by EN15804+A2].

3.5 Information on excluded processes

Following processes were excluded for the inventory:

- lighting, heating and cleaning of workshops;
- the administrative department;
- transportation of employees;
- the manufacturing of the production tool and transport systems (machines, trucks, etc.)
- maintenance of the infrastructure.

3.6 Information on biogenic carbon modelling

The product and plastic packaging do not contain biogenic carbon. The wooden pallets contain biogenic carbon taken into account in the LCA study.

Biogenic carbon content	(kg C / FU)
Biogenic carbon content in product (at the gate)	0
Biogenic carbon content in accompanying packaging (at the gate)	0.116

3.7 Information on carbon offsetting

Carbon offsetting is not allowed in the EN 15804 and hence not taken into account in the calculations.

3.8 Additional or deviating characterisation factors

As specified in EN 15804:2012+A2:2019/AC:2021 and the Product-Category Rules, the environmental impacts are declared and reported using the baseline characterization factors are from the ILCD.
Characterization factors EN15804 based on EF 3.1.

3.9 Description of the variability

The declared unit is 1 m² thermal insulation with a thickness of 180 mm and R_D value of 5,10 m²K/W.

This product can be produced in thicknesses between 25 mm and 260 mm with corresponding R_D-range from 0,70 m²K/W (25 mm) to 7,40 m²K/W (260 mm). The variability percentages for GWP-total (kg CO_2 eq.) stages A1-A3 goes from -51/+25%.

The results in this EPD can be converted to other thicknesses and corresponding R_D-values.

The table in the following page details the variability percentages for stage A1-A3 for every indicator.

3.10 Specificity

The data used for the LCA are specific for this product which is manufactured by a single manufacturer in a single production site.

3.11 Period of data collection

Manufacturer specific data have been collected for the year 2023.

3.12 Information on data collection

All the raw materials for the manufacturing of the declared product, the necessary energy consumption, the water and the resulting emissions are considered in the life cycle analysis in its two forms, slab and roll.

The production data of the Desselgem factory, for the full year 2023, have been used. The allocations of energy consumption, emissions and raw materials have been made based on physical criteria of the mass of glass.

Primary data is used for modules A1, A2, A3, and A5. The rest of the study is based on scenarios (module A4, modules B1-B7, modules C1-C4, and module D).

3.13 Database used for background data

The Ecoinvent 3.10 database has been used to choose the most representative processes, considering that the data is representative of technological development, regionalized data and as current as possible.

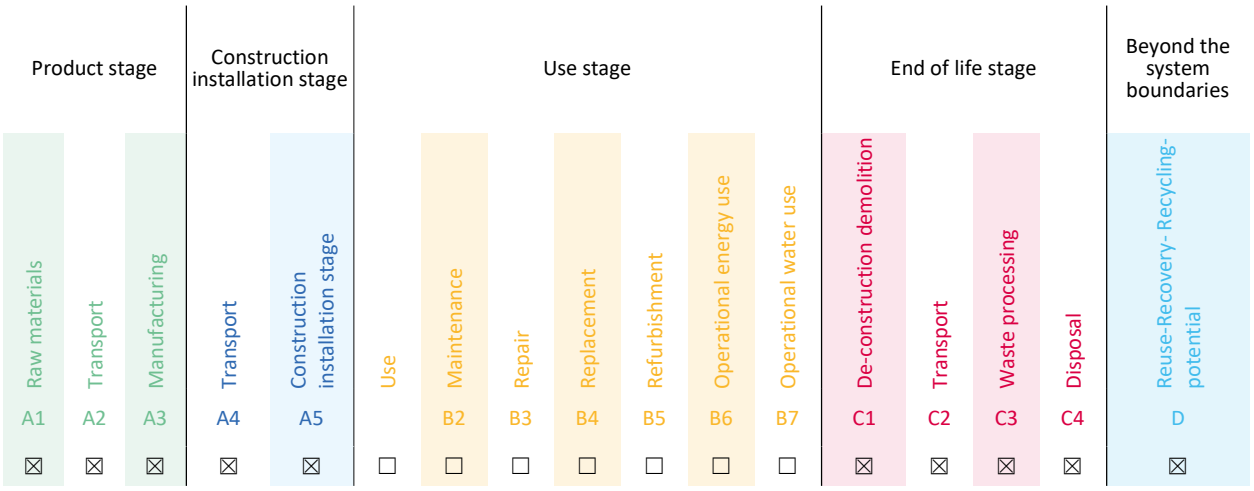
3.14 Energy mix

The Belgian energy mix for generic processes has been used.

4. PRODUCTION SITES

Manufacturing site located in Pitantiestraat 127, 8792 Desselgem (Belgium).

5. SYSTEM BOUNDARIES



X = included in the EPD
☐ = module not declared

6. POTENTIAL ENVIRONMENTAL IMPACTS PER REFERENCE FLOW

	Production	Construction process stage		Use stage							End-of-life stage				
	A1-A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
GWP total (kg CO2 equiv/FU)	1.60E+00	7.26E-02	3.51E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.26E-01	0.00E+00	2.18E+00	-1.80E-01
GWP fossil (kg CO2 equiv/FU)	1.90E+00	7.25E-02	4.14E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.26E-01	0.00E+00	8.96E-01	-1.79E-01
GWP biogenic (kg CO2 equiv/FU)	-3.01E-01	4.55E-05	-6.29E-03	MND	MND	MND	MND	MND	MND	MND	0.00E+00	8.62E-05	0.00E+00	1.29E+00	-1.19E-03
GWP luluc (kg CO2 equiv/FU)	1.82E-03	2.40E-05	3.88E-05	MND	MND	MND	MND	MND	MND	MND	0.00E+00	4.11E-05	0.00E+00	3.87E-05	-3.00E-04
ODP (kg CFC 11 equiv/FU)	2.72E-07	1.45E-09	6.82E-09	MND	MND	MND	MND	MND	MND	MND	0.00E+00	2.50E-09	0.00E+00	9.61E-09	-1.33E-08
AP (mol H+ eq/FU)	1.00E-02	2.28E-04	2.30E-04	MND	MND	MND	MND	MND	MND	MND	0.00E+00	3.94E-04	0.00E+00	6.24E-04	-1.28E-03
EP - freshwater (kg (PO4)3- equiv/FU)	6.11E-04	4.86E-06	1.25E-05	MND	MND	MND	MND	MND	MND	MND	0.00E+00	8.39E-06	0.00E+00	6.75E-05	-6.95E-05
EP - marine (kg (PO4)3- equiv/FU)	1.87E-03	7.72E-05	4.76E-05	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.33E-04	0.00E+00	3.09E-04	-2.28E-04
EP - terrestrial (kg (PO4)3- equiv/FU)	2.15E-02	8.39E-04	5.45E-04	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.44E-03	0.00E+00	2.72E-03	-3.68E-03
POCP (kg Ethene equiv/FU)	6.70E-03	3.62E-04	1.67E-04	MND	MND	MND	MND	MND	MND	MND	0.00E+00	6.16E-04	0.00E+00	6.93E-04	-6.74E-04
ADP Elements (kg Sb equiv/FU)	3.42E-04	2.26E-07	6.84E-06	MND	MND	MND	MND	MND	MND	MND	0.00E+00	4.12E-07	0.00E+00	8.58E-08	-2.66E-06
ADP fossil fuels (MJ/FU)	2.68E+01	1.03E+00	5.37E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.77E+00	0.00E+00	1.52E-01	-1.26E+00
WDP (m^3 water eq deprived /FU)	1.83E+00	5.02E-03	3.67E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	8.53E-03	0.00E+00	1.19E-01	-7.69E-02

GWP TOTAL = TOTAL GLOBAL WARMING POTENTIAL (CLIMATE CHANGE); GWP-LULUC = GLOBAL WARMING POTENTIAL (CLIMATE CHANGE) LAND USE AND LAND USE CHANGE; ODP = OZONE DEPLETION POTENTIAL; AP = ACIDIFICATION POTENTIAL FOR SOIL AND WATER; EP = EUTROPHICATION POTENTIAL; POCP = PHOTOCHEMICAL OZONE CREATION; ADPE = ABIOTIC DEPLETION POTENTIAL – ELEMENTS; ADPF = ABIOTIC DEPLETION POTENTIAL – FOSSIL FUELS; WDP = WATER USE (WATER (USER) DEPRIVATION POTENTIAL, DEPRIVATION-WEIGHTED WATER CONSUMPTION)

7. RESOURCE USE

	Production	Construction process stage		Use stage							End-of-life stage				
	A1-A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
PERE (MJ/FU, net calorific value)	6.10E+00	1.52E-02	1.22E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	2.63E-02	0.00E+00	1.30E-02	-1.70E-01
PERM (MJ/FU, net calorific value)	0.00E+00	0.00E+00	7.67E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT (MJ/FU, net calorific value)	6.10E+00	1.72E-02	1.22E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	3.00E-02	0.00E+00	1.30E-02	-1.70E-01
PENRE (MJ/FU, net calorific value)	2.63E+01	9.32E-01	5.28E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.60E+00	0.00E+00	1.52E-01	-1.26E+00
PENRM (MJ/FU, net calorific value)	4.38E-01	9.56E-02	8.46E-03	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.64E-01	0.00E+00	0.00E+00	0.00E+00
PENRT (MJ/FU, net calorific value)	2.68E+01	1.03E+00	5.37E-01	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.77E+00	0.00E+00	1.52E-01	-1.26E+00
SM (kg/FU)	2.43E+00	1.14E-03	8.26E-03	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00
RSF (MJ/FU, net calorific value)	9.77E-04	3.14E-04	9.17E-06	MND	MND	MND	MND	MND	MND	MND	0.00E+00	5.58E-04	0.00E+00	0.00E+00	0.00E+00
NRSF (MJ/FU, net calorific value)	0.00E+00	0.00E+00	0.00E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW (m^3 water eq/FU)	4.39E-02	1.41E-04	9.57E-04	MND	MND	MND	MND	MND	MND	MND	0.00E+00	2.35E-04	0.00E+00	2.24E-03	-2.24E-03

PERE = USE OF RENEWABLE PRIMARY ENERGY EXCLUDING RENEWABLE PRIMARY ENERGY RESOURCES USED AS RAW MATERIALS; PERM = USE OF RENEWABLE PRIMARY ENERGY RESOURCES USED AS RAW MATERIALS; PERT = TOTAL USE OF RENEWABLE PRIMARY ENERGY RESOURCES; PENRE = USE OF NON-RENEWABLE PRIMARY ENERGY EXCLUDING NON-RENEWABLE PRIMARY ENERGY RESOURCES USED AS RAW MATERIALS; PENRM = USE OF NON-RENEWABLE PRIMARY ENERGY RESOURCES USED AS RAW MATERIALS; PENRT = TOTAL USE OF NON-RENEWABLE PRIMARY ENERGY RESOURCES; SM = USE OF SECONDARY MATERIAL; RSF = USE OF RENEWABLE SECONDARY FUELS; NRSF = USE OF NON-RENEWABLE SECONDARY FUELS; FW = NET USE OF FRESH WATER

8. WASTE CATEGORIES & OUTPUT FLOWS

	Production	Construction process stage		Use stage							End-of-life stage				
	A1-A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
Hazardous waste disposed (kg/FU)	3.32E-03	1.00E-03	4.71E-05	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.73E-03	0.00E+00	2.10E-06	-2.00E-06
Non-hazardous waste disposed (kg/FU)	3.61E-01	1.08E-02	5.46E-04	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.92E-02	0.00E+00	0.00E+00	0.00E+00
Radioactive waste disposed (kg/FU)	1.93E-04	3.26E-07	4.47E-06	MND	MND	MND	MND	MND	MND	MND	0.00E+00	5.63E-07	0.00E+00	3.30E-06	-6.03E-06
Components for re-use (kg/FU)	0.00E+00	0.00E+00	0.00E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling (kg/FU)	2.39E-03	1.02E-03	2.73E-05	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.81E-03	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery (kg/FU)	4.39E-07	1.41E-07	4.12E-09	MND	MND	MND	MND	MND	MND	MND	0.00E+00	2.51E-07	0.00E+00	0.00E+00	0.00E+00
Exported energy (MJ/FU)	6.00E-03	1.69E-04	4.62E-06	MND	MND	MND	MND	MND	MND	MND	0.00E+00	2.97E-04	0.00E+00	0.00E+00	0.00E+00

9. IMPACT CATEGORIES ADDITIONAL TO EN 15804

	Production	Construction process stage		Use stage							End-of-life stage				
	A1 Raw material	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
PM (disease incidence)	1.49E-07	6.11E-09	3.54E-09	MND	MND	MND	MND	MND	MND	MND	0.00E+00	9.88E-09	0.00E+00	6.39E-09	-1.03E-08
IRHH (kg U235 eq/FU)	6.57E-01	1.31E-03	1.35E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	2.27E-03	0.00E+00	2.87E-03	-1.92E-02
ETF (CTUe/FU)	3.70E+02	2.65E-01	7.41E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	4.74E-01	0.00E+00	3.71E+00	-9.77E-01
HTCE (CTUh/FU)	2.08E-09	4.85E-10	4.06E-11	MND	MND	MND	MND	MND	MND	MND	0.00E+00	8.79E-10	0.00E+00	2.54E-10	-5.73E-10
HTnCE (CTUh/FU)	1.51E-08	6.64E-10	3.21E-10	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.14E-09	0.00E+00	8.61E-09	-1.67E-09
Land Use Related impacts (dimensionless)	4.22E+01	7.38E-01	1.01E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	1.05E+00	0.00E+00	9.09E-01	-5.42E-01

HTCE = HUMAN TOXICITY – CANCER EFFECTS; HTNCE = HUMAN TOXICITY – NON CANCER EFFECTS; ETF = ECOTOXICITY – FRESHWATER; (POTENTIAL COMPARATIVE TOXIC UNIT)
PM = PARTICULATE MATTER (POTENTIAL INCIDENCE OF DISEASE DUE TO PM EMISSIONS);
IRHH = IONIZING RADIATION – HUMAN HEALTH EFFECTS (POTENTIAL HUMAN EXPOSURE EFFICIENCY RELATIVE TO U235);F

9.1 Environmental impact categories explained

 Global Warming Potential	The global warming potential of a gas refers to the total contribution to global warming resulting from the emission of one unit of that gas relative to one unit of the reference gas, carbon dioxide, which is assigned a value of 1. It is split up in 4: – Global Warming Potential total (GWP-total) which is the sum of GWP-fossil, GWP-biogenic and GWP-luluc – Global Warming Potential fossil fuels (GWP-fossil) : The global warming potential related to greenhouse gas (GHG) emissions to any media originating from the oxidation and/or reduction of fossil fuels by means of their transformation or degradation (e.g. combustion, digestion, landfilling, etc). – Global Warming Potential biogenic (GWP-biogenic) : The global warming potential related to carbon emissions to air (CO2, CO and CH4) originating from the oxidation and/or reduction of aboveground biomass by means of its transformation or degradation (e.g. combustion, digestion, composting, landfilling) and CO2 uptake from the atmosphere through photosynthesis during biomass growth - i.e. corresponding to the carbon content of products, biofuels or above ground plant residues such as litter and dead wood. – Global Warming Potential land use and land use change (GWP-luluc): The global warming potential related to carbon uptakes and emissions (CO2, CO and CH4) originating from carbon stock changes caused by land use change and land use. This sub-category includes biogenic carbon exchanges from deforestation, road construction or other soil activities (including soil carbon emissions).
 Ozone Depletion	Destruction of the stratospheric ozone layer which shields the earth from ultraviolet radiation harmful to life. This destruction of ozone is caused by the breakdown of certain chlorine and/or bromine containing compounds (chlorofluorocarbonsor halons), Which break down when they reach the stratosphere and then catalytically destroy ozone molecules.
 Acidification potential	Acid depositions have negative impacts on natural ecosystems and the man-made environment incl. buildings. The main sources for emissions of acidifying substances are agriculture and fossil fuel combustion used for electricity production, heating and transport.
 Eutrophication potential	The potential to cause over-fertilization of water and soil, which can result in increased growth of biomass and following adverse effects. It is split up in 3: – Eutrophication potential - freshwater: The potential to cause over-fertilization of freshwater, which can result in increased growth of biomass and following adverse effects. – Eutrophication potential - marine: The potential to cause over-fertilization of marine water, which can result in increased growth of biomass and following adverse effects. – Eutrophication potential - terrestrial: The potential to cause over-fertilization of soil, which can result in increased growth of biomass and following adverse effects.
 Photochemical ozone creation	Chemical reactions brought about by the light energy of the sun creating photochemical smog. The reaction of nitrogen oxides with hydrocarbons in the presence of sunlight to form ozone is an example of a photochemical reaction.
 Abiotic depletion potential for non-fossil ressources	Consumption of non-renewable resources, thereby lowering their availability for future generations. Expressed in comparison to Antimonium (Sb). The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.
 Abiotic depletion potential for fossil ressources	Measure for the depletion of fossil fuels such as oil, natural gas, and coal. The stock of the fossil fuels is formed by the total amount of fossil fuels, expressed in Megajoules (MJ). The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

Ecotoxicity for aquatic fresh water	The impacts of chemical substances on ecosystems (freshwater). The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.
Human toxicity (carcinogenic effects)	The impacts of chemical substances on human health via three parts of the environment: air, soil and water. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.
Human toxicity (non-carcinogenic effects)	The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.
Particulate matter	Accounts for the adverse health effects on human health caused by emissions of Particulate Matter (PM) and its precursors (NOx, SOx, NH3)
Resource depletion (water)	Accounts for water use related to local scarcity of water as freshwater is a scarce resource in some regions, while in others it is not. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.
Ionizing radiation - human health effects	This impact category deals mainly with the eventual impact on human health of low dose ionizing radiation of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.
Land use related impacts	The indicator is the “soil quality index” which is the result of an aggregation of following four aspects: – Biotic production – Erosion resistance – Mechanical filtration – Groundwater The aggregation is done based on a JRC model. The four aspects are quantified through the LANCA model for land use. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

10. DETAILS OF THE UNDERLYING SCENARIOS USED TO CALCULATE THE IMPACTS

10.1 A1 - raw material supplier

This module takes into account:

- the extraction and processing of all raw materials and energy which occur upstream to the studied manufacturing process;
- the supply and processing of all raw materials and the energy produced prior to the manufacturing process.

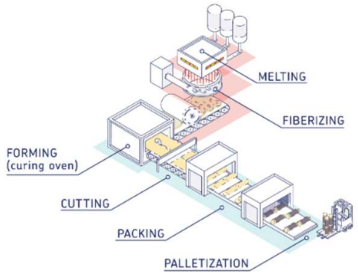
In particular, it covers supply of raw materials for manufacturing the binding of glass fibers. In addition to these raw materials, 50% of recycled materials (cullet) are used in the process.

10.2 A2 – transport to the manufacturer

The raw materials are transported to the manufacturing site using supplier specific distances.

10.3 A3- Manufacturing

This module takes into account the production process. Glass wool manufacture includes stages of fusion and fibre formation (see diagram of manufacturing process). The electricity mix used for Desselgem electricity consumption modelling is based on the general mix, considering the electricity bills percentages in 2023. It uses fossil and nuclear energy. Furthermore, production of packaging is considered during this phase.



A4 – transport to the building site

Fuel type and consumption of vehicle or vehicle type used for transport	Truck 7,5-16 ton EURO5 xx l diesel / km	Truck 16-32 ton EURO5 0,256 l diesel / km	Truck >32 ton EURO5 0,256 l diesel / km
Distance	35 km	135 km	100 km
Capacity utilisation (including empty returns)	100 % volume capacity	100 % volume capacity	100 % volume capacity
Bulk density of transported products	19 kg/m³	19 kg/m³	19 kg/m³
Volume capacity utilisation factor	1 or lower for compressed insulation materials		

The following transport steps apply:

- 40% directly to the construction site over 100 km with a 16-32 ton lorry (ecoinvent record: 'Transport, freight, lorry 16-32 metric ton, EURO5 {RER}| transport, freight, lorry 16-32 metric ton, EURO5 | Cut-off, U')
- 60% to a supplier over 100 km with a 16 -32 ton lorry (ecoinvent record: 'Transport, freight, lorry 16-32 metric ton, EURO5 {RER}| transport, freight, lorry 16-32 metric ton, EURO5 | Cut-off, U')
- 85% of these 60% is transported over 35 km from supplier to construction site with a 16-32 ton lorry (ecoinvent record: 'Transport, freight, lorry 16-32 metric ton, EURO5 {RER}| transport, freight, lorry 16-32 metric ton, EURO5 | Cut-off, U')
- 15% of these 60% is transported over 35 km from supplier to construction site with a 7.5-16 ton lorry (ecoinvent record: 'Transport, freight, lorry 7.5-16 metric ton, EURO5 {RER}| transport, freight, lorry 7.5-16 metric ton, EURO5 | Cut-off, U')

1.1 A5 – installation in the building

At the construction site, packaging materials are released. Also 2% material losses have been taken into account

Parts of the installation	quantity	Description
Processes necessary for the installation of the product	*NA*	MANUAL INSTALLATION, NO ENERGY NEEDEDL
Fixation materials	*NA*	NOT DECLARED
Jointing materials	*NA*	NA
Treatments	*NA*	NA
Material losses	*2%*	GLASS WOOL WASTE PRODUCED ON THE CONSTRUCTION SITE PRIOR TO WASTE TREATMENT GENERATED BY INSTALLATION OF THE PRODUCT
Packaging	*0.025 kg/m²* *0.231 kg/m²*	THE PACKAGING WASTE AT THE CONSTRUCTION SITE (PLASTIC + WOODEN PALLET)
Others	*NA*	NA

1.2 B – use stage (excluding potential savings)

B1: Use or application installed product
Included.
Emissions in the indoor air: The health classification of the product URSA products is A+ according to the French order of 19 April 2011 on labelling of construction documents or wall or floor coverings, and paints and varnishes, regarding their emissions and volatile pollutants.
B2: Maintenance
URSA Products do not require maintenance during use in standard conditions and if correctly applied
B3: Repair
URSA Products are hidden from the surface and do not require any repair.
B4: Replacement
URSA Products will not be replaced during use in standard conditions and if correctly installed according to URSA guidelines.
B5: Refurbishment
URSA products are not refurbished during use in standard conditions and if correctly applied.
B6-B7: Operational energy and water use
Energy and water needs during exploitation phase: URSA products permit potential energy saving.

1.3 C: End of life

This phase includes the different modules of the end of service life as follows: C1, deconstruction, demolition; C2, transport to waste treatment; C3, waste treatment with a view to their reuse, recovery and/or recycling; C4, disposal.

Description of the scenarios and supplementary technical information:
C1: C1 Deconstruction, demolition
Deconstruction and /or dismantling of the insulation products is part of the demolition work of an entire building. In our case the environmental impact is considered to be very slight and can be ignored, as the deconstruction only requires manual work from the operator without any additional resources.

C2: C2 Transport to waste treatment site:
The use of the model for transport is considered (see A4, transport to the construction site) at the next scenarios:
Module C2 – Transport to waste processing

Type of vehicle (truck/boat/etc.)	Fuel consumption (litres/km)	Distance (km)	Capacity utilisation (%)	Density of products (kg/m3)	Assumptions
Truck	0.37	100+30	50	19	Incineration
Truck	0.37	50+30	50	19	Landfill

The "+30" refers to the distance from the construction or demolition site to the sorting plant or collection point; and it is considered in both scenarios. In one hand, the incineration scenario, the distance is 100 km (from sorting facility to

incineration plant/energy recovery) plus 30 km (from construction/demolition site to sorting plant/collection point). On the other hand, the landfill scenario, the distance is: 50 km (from sorting plant to landfill) plus 30 km (from construction/demolition site to sorting plant/collection point).

C3: Waste treatment with a view to reuse, recovery, and/or recycling:
The product is considered for landfill without reuse, recovery and/or recycling.

C4: Disposal:

End-of-life modules – C3 and C4	
Parameter	Value (kg)
Wastes collected separately	0
Wastes collected as mixed construction waste	3.42
Waste for re-use	0
Waste for recycling	0
Waste for energy recovery	1.71
Waste for final disposal	1.71

1.4 D – Benefits and loads beyond the system boundaries

In module D, the benefits and loads beyond the system boundaries are quantified.

QUANTITATIVE DESCRIPTION OF THE LOADS BEYOND THE SYSTEM BOUNDARIES	No loads

11. RELEASE OF DANGEROUS SUBSTANCES TO INDOOR AIR, SOIL AND WATER DURING THE USE STAGE

11.1 Indoor air

Emissions in the indoor air:
The health classification of the product URSA Products is A+ according to the French order of 19 April 2011 on labelling of construction documents or wall or floor coverings, and paints and varnishes, regarding their emissions and volatile pollutants.

EUCEB:
Mineral wool fibers have been exempted from carcinogenic classification according to: Regulation on classification and labelling of substances and mixtures Regulation (EC) n° 1272/2008 and its last update Regulation (EU) nº 2021/643. They have in fact successfully passed the tests established by this Regulation and their biopersistance is lower than the values defined in note « Q » of this text. This exemption is certified by the European CErtification Board (EUCEB - www.euceb.org).
The EUCEB certifies that fibers conform to note « Q » of the Regulation (EC) n° 1272/2008. The EUCEB guarantees that the exemption tests have been executed in conformance with European protocols, that industrial entities have control procedures in place during manufacture of the products, and that third parties inspect and approve the results.
The industrial entities in respect of EUCEB undertake as follows:

- To provide a test report compiled by a EUCEB recognized laboratory providing proof that the fibers satisfy one of the four exemption conditions established in note « Q » of Regulation (EC) n° 1272/2008,
- Twice yearly, to undergo production inspection by an independent third party recognized by EUCEB (sample taking and conformance with initial chemical analysis),
- To set up internal control procedures in each factory.

The products with this certification are recognizable as they have the EUCEB logo affixed to their packaging

REACH:
Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
The glass wool products (rolls and boards) manufactured by URSA are defined as “articles” according to the article 3 (3) of EC Regulation 1907/2006 (REACH). Articles, whose functionality is more determinate by the shape, surface or design given in their production process, than by its chemical composition.

There, according to Art. 2 of EC Regulation 1907/2006 (REACH) our articles are excluded from the EC Regulation 1907/2006 (REACH). Our products do not contain Substances of Very High Concern (SVHC) in a higher concentration than 0,01 % by weight according to the last update of the candidate list know at the date this document was issued.
ECHA-European Chemicals Agency regularly published an update SHVC list. The validity of this statement is therefore of ECHA new publications.

11.2 Soil and water

There are no emissions to soil and water during the use stage.
Valuable information is Waste glass wool in the module A5 and C will be classified according to the European Waste Codes:
17 06 04 insulation materials other than those mentioned in 17 06 01 and 17 06 03

12. DEMONSTRATION OF VERIFICATION

EN 15804+A1 serves as the core PCR

Independent verification of the environmental declaration and data according to standard EN ISO 14025:2010
Internal ☐ External ☒

Third party verifier:
Vinçotte nv
Ramses Sterckx
Jan Olieslagerslaan 35 1800 Vilvoorde Belgium
rsterckx@vincotte.be

13. APPLICATION UNIT

This table gives information on the applied product and how the reference flow and table with impacts relate to different applications.

Commercial names	Description	Reference flow	Thickness (mm)	Scalability minimum (mm)	Scalability maximum (mm)	Specs	Application	Ratio	
HOMETEC® 35 FRAMETEC® 35 FRAMETEC® SLAB 35 ACOUSTIC ROLL PARTY WALL ROLL CAVITY BATT 35	Mineral wool, λ 0.035 W/m·K	1 m²	180	25	260	Euroclass A1, 20 kg/m³ R-value: 5,10 m²·K/W MU1 WS <1 AFR10 No facing	Roof: thermal or acoustic insulation for flat and inclined roofs Outer walls: thermal or acoustic insulation of the outer and inner wall. Ceilings: suspended ceilings floors: thermal or acoustic insulation for floors between floors	1 m²	1

14. ADDITIONAL INFORMATION ON REVERSIBILITY

Description	Type of fixing	Level of reversibility	Simplicity of disassembly	Speed of disassembly	Ease of handling (size and weight)	Robustness of material (material resistance to disassembly)	Damage to other elements	Comment
Roof: Thermal or acoustic insulation for flat and inclined roofs	screws, bolts and dowels	reversible with light repairable damage	simple – no specific dismantling tools required	very speedy disassembly	easy to handle manually, one workers is usually sufficient	the material resists well during disassembly	disassembly is possible but should be done carefully in order not to generate any damage to the element or product it is attached to	
Outer walls: Thermal or acoustic insulation of the outer and inner wall	brackets, hooks, hooves, clips…	reversible fixing	simple – no specific dismantling tools required	very speedy disassembly	easy to handle manually, one workers is usually sufficient	the material resists well during disassembly	dissassembly does not damage the element or product attached to	
Ceilings: Suspended ceilings	screws, bolts and dowels	reversible with light repairable damage	simple – no specific dismantling tools required	very speedy disassembly	easy to handle manually, one workers is usually sufficient	the material resists well during disassembly	disassembly is possible but should be done carefully in order not to generate any damage to the element or product it is attached to	
Floors: Thermal or acoustic insulation for floors between floors	brackets, hooks, hooves, clips…	reversible fixing	simple – no specific dismantling tools required	very speedy disassembly	easy to handle manually, one workers is usually sufficient	the material resists well during disassembly	dissassembly does not damage the element or product attached to	

15. BIBLIOGRAPHY

ISO 14040:2006: Environmental Management-Life Cycle Assessment-Principles and framework.
ISO 14044:2006: Environmental Management-Life Cycle Assessment-Requirements and guidelines.
ISO 14025:2006: Environmental labels and Declarations-Type III Environmental Declarations-Principles and procedures. NBN EN 15804:2012+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
B-EPD PCR_versie1.0_18.10.2022
EN 13162:2012+A1:2015 Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification

General information

Owner of the EPD, Responsible for the data, LCA and information

URSA Benelux BV
Pitantiestraat 127
8792 Desselgem
Belgium
For more information you can contact
Silvia Herranz silvia.herranz@etexgroup.com
Dirk Glorieux dirk.glorieux@etexgroup.com

Author(s) of the LCA and EPD

URSA Insulation
Paseo de Recoletos 3
28004 Madrid
Spain
Project report : URSA LCA GW Project Benelux

Verifier
Ramses Sterckx (Vinçotte)
Jan Olieslagerslaan 35 –
1800 Vilvoorde - Belgium
Date of verification: 25.02.2025
External independent verification of the declaration and data according to EN ISO 14025 and relevant PCR documents

B-EPD program operator
Federal Public Service (FPS) of Health,
Food Chain Safety and Environment

Avenue Galilée / Galileelaan 5
box 2, 1210 Brussels

www.b-epd.be
epd@health.fgov.be

B-EPD .BE

federal public service
HEALTH,
FOOD CHAIN SAFETY
AND ENVIRONMENT

.be