ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

WARMOTECH THERMAL INSULATION BOARDS

UAB WARMOTECH

Programme operator: Rakennustieto Oy
EPD registration number: RTS_415_25
Publication date: 13.11. 2025
Valid until: 13.11. 2030

GENERAL INFORMATION

MANUFACTURER INFORMATION

Manufacturer	UAB WARMOTECH
Address	Elektrėnų g. 16, Kaunas, Lithuania
Contact details	info@warmotech.lt +370 662 30007
Website	www.warmotech.com

PRODUCT IDENTIFICATION

Product name	Warmotech board
Place(s) of production	Elektrėnų g. 16, Kaunas, Lithuania
CPC code	UN CPC 369

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison.

EPD INFORMATION

EPD program operator	Rakennustieto Oy
EPD standards	This EPD is in accordance with EN 15804+A2 and ISO 14025 standards.
Product category rules	The CEN standard EN 15804 serves as the core PCR. In addition, the RTS PCR (Version 121124) is used.
EPD author	Silvija Serapinaitė, UAB Vesta Consulting
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☒ External verification
EPD verifier	Mari Kirss
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Jukka Seppänen
RTS EPD Committee Secretary

Laura Apilo
Managing Director

PRODUCT INFORMATION

PRODUCT DESCRIPTION

Warmotech® is a recycled PU foam board with a density of 550 kg/m^3. The properties of water resistance, compressive strength and thermal conductivity create exceptional application possibilities. Warmotech® is biologically safe, resistant to any type of microorganisms, does not rot, and does not contain toxic substances (formaldehyde). It is composed of milled PU-residues (can include other materials e.g. craft paper or aluminium foil) and bonding agents. The residue left after cutting/ processing the board can be milled and reused once more.

The color of Warmotech boards (green or yellow) depends on the origins of the recylced polyurethane. However, it has no effect on the flammability machanical strength, thermal conductivity, environmental impact results or other declared characteristics.

PRODUCT APPLICATION

Warmotech® panels are designed for thermal insulation in buildings and construction applications, including floors, walls and roofs. Warmotech® panels are widely used in the construction sector for building components where the problem of thermal bridging may occur, or as a substitute for other insulation materials that are not strong enough to withstand heavy loads. Products made of Warmotech panels are often used for the installation of windows and doors in the insulation layer.
The panels can be painted, laminated, combined with other materials to create new multi-layer products (Warmotech® board is ideal as a core substrate to different other materials).

PRODUCT QUALITY CONTROL

Warmotech® panels has CE marking and represents that products comply with the EU's New Approach Directives. Notified body – Statybos produkcijos sertifikavimo centras (SPSC) issued European Technical Assessment ETA 22/0454 on the basis of EAD no. 040419-00-1201. SPSC performed third party tasks under system 3. FPC (factory production control) in accordance with EAD no. 040419-00-1201 (European Assessment Document).

TECHNICAL SPECIFICATIONS

Essential characteristics		Performance and characteristics	Unit	Test method
Reaction to fire		D-s3, d0		EN 13501
Bending strength		≥ 4.7	MPa	EN 12089
Thermal conductivity, λ_{10}		≤ 0.088	W/ (m·K)	EN 12667
Compressive strength (at 10 % compression)	10 – 60 mm 61 – 70 mm	≥ 7.1 ≥ 6.8	MPa	EN 826
Compressive strength (at 2 % compression) [1)]		≥ 2.2	MPa	EN ISO 29469
Water absorption (by short term, partial immersion)		≤ 0.4	kg/m^2	EN ISO 29767
Dimensional stability under specified temperature and humidity (DS 70,90)		1.0	%	EN 1604
Dimensional stability under specified temperature and humidity (DS -20,-)		1.0	%	EN 1604
Density		550 ± 50	kg/m^3	EN 1602
Thickness tolerance	not sanded sanded	0.5 0.2	mm	EN 823
Length tolerance		5.0	mm	EN 822
Width tolerance		5.0	mm	EN 822
Squareness tolerance		1.0	mm/m	EN 824
Flatness tolerance		4.0	mm	EN 825
Hygroscopic sorption properties [1)]		≤ 3.0	%	EN ISO 12571

Water vapour diffusion resistance coefficient [1]	10 – 40 mm range 41 – 70 mm	60 – 100 25-60	μ	EN 12086
Swelling in thickness, 24h [1]		≤ 1.0	%	EN 317
Moisture content [1]		2 – 4	%	EN 322
Water absorption after 24 h in water [1]		≤ 5.0	%	internal
Temperature resistance [1]		-50 °C to + 100 °C		
Dimensional change after 28 days in water [1]		≤ 2.0	%	internal
Linear expansion coefficient [1]		$3.4 \cdot 10^{-5}$	1/K	EN 1604
Shear strength [1]		1.0 – 1.4	MPa	EN 12090
Airborne sound insulation [1]	10 mm 15 mm 20 mm 25 mm 40 mm 50 mm 60 mm 70 mm	28 (-2; -4) 30 (-2; -3) 32 (-2; -3) 33 (-2; -2) 34 (-2; -1) 35 (-2; -1) 35 (-2; -1) 36 (-2; -1)	R_w (C; C_{tr}) dB	EN ISO 717-1

ADDITIONAL TECHNICAL INFORMATION

Further information can be found at the website www.warmotech.com

PRODUCT RAW MATERIAL COMPOSITION

Product Material	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-%	Biogenic material, kg C/DU
PU waste	0.9	100	0	0
Binding agent	0.1	0	0	0
Total	**1.0**	**90**	**0**	**0**

PRODUCT PACKAGING

Packaging Material	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-%	Biogenic material, kg C/DU**
Plastic film	0.0007	0	0	0
Wooden pallets*	0.0112	0	100	0.0051
PP fastening strap	0.0001	0	0	0
Total	**0.012**	**0**	**100**	**0.0051**

** Global Warming Potential biogenic: -1.436 kg CO_2e/kg*

*** Conversion factor for converting kg CO_2e to kg C equal to 44/14 = 3.67*

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass-%	Material origin
Metals	0	-
Minerals	0	-
Fossil materials	100	EU
Water	0	-
Bio-based materials	0	-

SUBSTANCES, REACH - VERY HIGH CONCERNER

The product does not contain any REACH SVHC substances in amounts greater than 0.1 % (1000 ppm).

PRODUCT LIFE-CYCLE

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

MANUFACTURING PROCESS

The Warmotech Panel production process begins with collecting and assessing the quality of polyurethane (PU) waste, with most of this waste coming directly from manufacturers of PU insulation panels. Therefore, the PU waste is modelled with zero input burdens in this EPD. This waste is then shredded to the required particle size and transported to silos for storage. The shredded PU is mixed with a binder and other required additives, formed into a mat, and hot-pressed under high temperature and pressure into panels. These panels are stacked and dried before being cut to their final dimensions. Waste material from the cutting process is recycled back into the system. Finally, the panels undergo quality control testing and are packaged for distribution.

Warmotech thermal insulation boards

TRANSPORT AND INSTALLATION (A4-A5)

A4: This EPD does not cover the transport module. The GWP (global warming potential) of A4 stage is less than 20% of the GWP of modules A1–A3 and less than 1000 km, so it is not mandatory to declare.

A5: This EPD does not cover the Installation phase. However, module A5 is declared for "balancing-out reporting" since packaging of products contains more than 5% biogenic carbon. The uptake of this biogenic carbon, as biogenic CO2, in module A1 shall be balanced out by an equal amount of emission of biogenic CO2 in module A5.

PRODUCT USE AND MAINTENANCE (B1-B7)

This EPD does not cover the use phase. Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

C1: Demolition is assumed to be done by mobile machinery (10 kWh/t)[1] and that that 100% of the waste is collected and treated.

C2: It is estimated that there is no mass loss during the use of the product, therefore the end-of-life product is assumed to have the same weight as the declared product. All the end-of-life products are assumed to be sent to the closest facilities such as recycling and landfill. Transportation distance to the closest disposal area is estimated as 50 km and the transportation method is assumed as lorry which is the most common option.

C3: According to the manufacturer's information, 100% of the end-of-life product is assumed to be recycled due to the recycling potential of the end-of-life product and its value in the market. Stage C3 in this study is defined as covering all processes related to the sorting of waste materials for recycling and ends once the materials have been sorted and are ready to leave the factory gate.

C4: None of the material is assumed to go to landfill, as the entire end-of-life product is directed to recycling.

D: In the context of end-of-life scenario D, the polyurethane waste is fully recycled, and has been modelled to avoid the use of primary materials. Only the share of primary (virgin) material in the product provides the benefit, in order to avoid double counting.

[1] O. Bozdag and M. Secer. (2007). *Energy Consumption of RC Buildings during Their Life Cycle*. Sustainable Construction, Materials and Practices: Challenge of the Industry for the New Millennium, Minho.

LIFE-CYCLE ASSESSMENT

LIFE-CYCLE ASSESSMENT INFORMATION

Period for data	2024

DECLARED AND FUNCTIONAL UNIT

Declared unit	1 kg
Mass per declared unit	1 kg

SYSTEM BOUNDARY

This EPD covers the cradle to gate with options scope with following modules: A1 (Raw material supply), A2 (Transport), and A3 (Manufacturing), modules C1 (Deconstruction), C2 (Transport at end-of-life), C3 (Waste processing) and C4 (Disposal). In addition, module D - benefits and loads beyond the system boundary is included.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
x	x	x	ND	ND*	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x	x	x
Geography, by two-letter ISO country code or regions. The International EPD System only.																		
EU	EU	EU	EU	EU	-	-	-	-	-	-	-	EU	EU	EU	EU	EU		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Not declared = ND.

**module A5 is declared for "balancing-out reporting" since packaging of products contains more than 5% biogenic carbon.*

DATA QUALITY

The quality requirements for the life cycle assessment were set according to the EN ISO 14044 standard (4.2.3.6) and EN 15804 standard (6.3.7). This LCA study follows the standard EN 15804:2012+A2:2019 and RTS PCR and no decisions are made based on the values. The study does not consider long-term emissions (i.e. over 100 years). The calculations were conducted using One Click LCA -tool which is a cloud-based LCA software in compliancy with EN 15804 -standard. No poor or very poor data was found during the assessment of relevant data using PEF method (EN 15804:2012+A2:2019, Annex E, only E.2). The data quality assessment is done in accordance with EN 15941:2024. Overall, the data quality can be described as good. The EN 15804 reference package used is based on EF 3.1.

PROCEDURES FOR COLLECTION PROCESS SPECIFIC DATA

Production specific data was collected directly from the manufacturer's production plant. The data represents the production of the studied product at the plant from the materials transported to the facility and represents 1 year average. The data represents the year 2024, which was the latest year with full year data. All gathered data was used without excluding categories in advance following the system boundaries set in earlier chapters.

CRITERIA FOR CHOOSING THE GENERIC DATA

Generic data that was used for upstream and downstream processes represents complementary data from Ecoinvent 3.10.1 database. The datasets were chosen to represent the studied system as closely as

possible. As supplier-specific information was not available the information sources were chosen based on their technical and geographical representativeness. Only when country specific or European data has not been available global level data has been used (concerns mainly data from EcoInvent 3.10.1.). As up-to-date data as possible was chosen and no more than five years old for producer specific data and ten years for generic data was used.

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the EN 15804:2012+A2:2019 and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation.

In this study, as per EN 15804, allocation is conducted in the following order;

1. Allocation should be avoided.
2. Allocation should be based on physical properties (e.g. mass, volume) when the difference in revenue is small.
3. Allocation should be based on economic values.

The allocations in the Ecoinvent 3.10.1 datasets used in this study follow the Ecoinvent system model 'Allocation, cut-off, EN15804'.

The environmental impacts of capital goods (e.g., production equipment, recycling machinery) and infrastructure (e.g., recycling facilities, transportation systems) have not been included in this assessment.

The scenarios included are currently in use and are representative for one of the most probable alternatives

The environmental impacts of capital goods (e.g., production equipment, recycling machinery) and infrastructure (e.g., recycling facilities, transportation systems) have not been included in this assessment.

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0.0051

ENVIRONMENTAL IMPACT DATA

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks. Note: additional environmental impact data may be presented in annexes.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	6.59E-01	ND	1.94E-02	ND	ND	ND	ND	ND	ND	ND	3.61E-03	5.39E-03	1.67E-01	0.00E+00	-2,46E-01
GWP – fossil	kg CO_2e	6.76E-01	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	3.60E-03	5.38E-03	1.67E-01	0.00E+00	-2.45E-01
GWP – biogenic	kg CO_2e	-1.76E-02	ND	1.94E-02	ND	ND	ND	ND	ND	ND	ND	3.68E-07	1.22E-06	0.00E+00	0.00E+00	0.00E+00
GWP – LULUC	kg CO_2e	5.01E-04	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	3.69E-07	2.41E-06	9.10E-05	0.00E+00	-2.57E-04
Ozone depletion pot.	kg $CFC_{-11}e$	5.16E-09	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	5.52E-11	7.95E-11	4.45E-10	0.00E+00	-3.71E-07
Acidification potential	mol H^+e	1.49E-03	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	3.25E-05	1.84E-05	2.62E-04	0.00E+00	-7.91E-04
EP-freshwater[2)]	kg Pe	3.93E-05	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	1.04E-07	4.19E-07	1.69E-05	0.00E+00	-1.39E-05
EP-marine	kg Ne	4.56E-04	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	1.51E-05	6.03E-06	1.66E-04	0.00E+00	-1.92E-04
EP-terrestrial	mol Ne	4.59E-03	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	1.65E-04	6.56E-05	8.21E-04	0.00E+00	-1.75E-03
POCP ("smog")[3)]	kg NMVOCe	1.72E-03	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	4.93E-05	2.70E-05	2.47E-04	0.00E+00	-7.76E-04
ADP-minerals & metals[4)]	kg Sbe	1.93E-06	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	1.29E-09	1.50E-08	5.97E-07	0.00E+00	-5.22E-07
ADP-fossil resources	MJ	1.24E+01	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	4.72E-02	7.81E-02	5.05E-01	0.00E+00	-5.70E+00
Water use[5)]	m^3e depr.	-4.51E-01	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	1.18E-04	3.86E-04	2.38E-02	0.00E+00	-5.47E-01

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	2.17E-08	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	9.25E-10	5.39E-10	4.24E-09	0.00E+00	-3.05E-08
Ionizing radiation[6)]	kBq U235e	2.34E-02	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	2.09E-05	6.80E-05	4.34E-03	0.00E+00	-3.53E-02
Ecotoxicity (freshwater)	CTUe	2.55E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	2.60E-03	1.10E-02	5.54E-01	0.00E+00	-2.50E+01
Human toxicity, cancer	CTUh	1.34E-10	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	3.71E-13	8.88E-13	7.73E-11	0.00E+00	-1.16E-09
Human tox, non-cancer	CTUh	6.87E-09	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	5.87E-12	5.06E-11	1.34E-09	0.00E+00	-6.80E-09
SQP[7)]	-	3.95E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	3.30E-03	7.87E-02	9.55E-01	0.00E+00	-2.00E+00

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health 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; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy[8)]	MJ	8.73E-01	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	2.99E-04	1.07E-03	6.70E-02	0.00E+00	-5.23E-01
Renew. PER as material	MJ	1.70E-01	ND	-1.70E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renew. PER	MJ	1.04E+00	ND	-1.70E-01	ND	ND	ND	ND	ND	ND	ND	2.99E-04	1.07E-03	6.70E-02	0.00E+00	-5.23E-01
Non-re. PER as energy	MJ	8.22E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	4.72E-02	7.81E-02	-4.20E+01	0.00E+00	-3.84E+00
Non-re. PER as material	MJ	9.16E+00	ND	-1.12E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-0.915+01
Total use of non-re. PER	MJ	8.23E+00	ND	-1.12E-02	ND	ND	ND	ND	ND	ND	ND	4.72E-02	7.81E-02	-4.20E+01	0.00E+00	-3.84E+00
Secondary materials	kg	1.00E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	1.96E-05	3.32E-05	3.33E-03	0.00E+00	9.01E-02
Renew. secondary fuels	MJ	5.77E-03	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	5.12E-08	4.22E-07	2.70E-05	0.00E+00	-2.69E-03
Non-ren. secondary fuels	MJ	0.00E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.95E-05
Use of net fresh water	m^3	8.84E-02	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	3.12E-06	1.15E-05	3.62E-04	0.00E+00	-9.97E-03

8) PER = Primary energy resources

END OF LIFE – WASTE

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	1.29E-02	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	5.25E-05	1.32E-04	1.06E-02	0.00E+00	-1.53E-03
Non-hazardous waste	kg	3.71E-01	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	7.15E-04	2.45E-03	3.26E-01	0.00E+00	-5.03E-02
Radioactive waste	kg	5.74E-06	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	5.12E-09	1.67E-08	1.11E-06	0.00E+00	-1.13E-04

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.24E-04
Materials for recycling	kg	1.00E-04	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	1.00E+00	0.00E+00	-8.04E-04
Materials for energy rec	kg	0.00E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.22E-05
Exported energy	MJ	0.00E+00	ND	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.20E-02

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value	Source
Electricity, low voltage, residual mix	0.65 kg CO_2e / kWh	Data source: ecoinvent 3.10 Country: Lithuania
Electricity production, photovoltaic, 3kWp slanted-roof installation, multi-Si, panel, mounted	0.0981 kg CO_2e / kWh	Data source: ecoinvent 3.10 Country: Lithuania
District heating	0.0498 kg CO_2e / kWh	Data source: ecoinvent 3.10 Country: Lithuania
Diesel, burned in building machine	0.1 kg CO_2e / MJ	Data sources: ecoinvent 3.10 Country: World

End of life scenario documentation

Scenario parameter	Value
Collection process – kg collected separately	1.0
Collection process – kg collected with mixed waste	
Recovery process – kg for re-use	
Recovery process – kg for recycling	1.0
Recovery process – kg for energy recovery	
Disposal (total) – kg for final deposition	
Scenario assumptions e.g. transportation	Transported 50 km with an average lorry

BIBLIOGRAPHY

RTS PCR EN 15804:2019 RTS PCR in line with EN 15804+A2. Published by the Rakennustietosäätiö RTS sr. version 11/12/2024.

Guideline and instructions of the RTS EPD Environmental Product Declaration Programme in Finland (18.2.2021).

ISO 14025:2010 Environmental labels and declarations – Type III environmental declarations. Principles and procedures.

ISO 14040:2006 Environmental management. Life cycle assessment. Principles and frameworks.

ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.

EN 15804:2012+A2:2019 Sustainability in construction works – Environmental product declarations – Core rules for the product category of construction products.

EN 15941:2024 Sustainability of construction works - Data quality for environmental assessment of products and construction work - Selection and use of data

Warmotech panel LCA background report

Ecoinvent database v3.10.1 (2025) and One Click LCA database.

ABOUT THE MANUFACTURER

Lithuanian company UAB WARMOTECH has been recycling rigid polyurethane foam since 2018. In 2020 it became a part of Finnfoam group and has been steadily growing ever since. Our company is a great example of sustainable manufacturing by creating widely used products made of non-degradable waste. We take the waste from production process and construction to produce a new innovative material under the Warmotech brand name.

Manufacturer	UAB WARMOTECH
EPD author	Silvija Serapinaitė
EPD verifier	Mari Kirss
EPD program operator	The Building Information Foundation RTS sr
Background data	This EPD is based on Ecoinvent 3.10.1 (Allocation, cut-off, EN15804) and One Click LCA databases.
LCA software	The LCA and EPD have been created using One Click LCA tool

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Call us

Great Britain +44 (0)1228 711511

Ireland +353 46 9432104

Email us

info@ecologicalbuildingsystems.com

Find us

Great Britain Ecological Building Systems UK Ltd,
Cardewlees, Carlisle, Cumbria, CA5 6LF, United Kingdom

Ireland Ecological Building Systems Ltd.,
Main Street, Athboy. Co. Meath, C15 Y678, Republic of Ireland

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