



Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Huntonit building boards without surface treatment





EPD-Global

Owner of the declaration:

Huntonit AS

Product:

Huntonit building boards without surface treatment

Declared unit:

1 m2

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR NPCR 010:2022 Part B for building boards

Program operator:

EPD-Global

Declaration number:

NEPD-12971-14204

Issue date:

04.11.2025

Latest revision

v1.1 Date: 10.12.2025

Valid to:

04.11.2030

EPD software:

LCAno EPD generator ID: 1359261



General information

Product

Huntonit building boards without surface treatment

Program operator:

EPD-Global

Post Box 5250 Majorstuen, 0303 Oslo, Norway

Phone: +47 977 22 020 web: www.epd-global.com

Declaration number:

NEPD-12971-14204

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR NPCR 010:2022 Part B for building boards

Statement of liability:

The owner of the declaration shall be liable for the underlying information and evidence. EPD-Global shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

Declared unit:

1 m2 Huntonit building boards without surface treatment

Declared unit with option:

A1-A3, A4, A5, C1, C2, C3, C4, D

Functional unit:

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD-Global's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD-Global, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Global's General Programme Instructions for further information on EPD tools

Verification of EPD tool:

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPD-Global's procedures and guidelines for verification and approval of EPD tools.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

Owner of the declaration:

Huntonit AS

Contact person: Halvor Stavdal Phone: +47 38 13 71 00 e-mail: halvor.stavdal@byggma.no

Manufacturer:

Huntonit AS

Place of production:

Huntonit AS Postboks 21

4701 Vennesla, Norway

Management system:

NS-EN ISO 9001:2015, NS-EN ISO 14001:2015, ISO 50001:2018, PEFC ST 2002:2020.

Organisation no:

914 801 958

Issue date:

04.11.2025

Valid to:

04.11.2030

Year of study:

2024

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03, developed by LCA.no. The EPD tool is integrated in the company's management system, and has been approved by EPD-Global. NEPDT138

Developer of EPD: Halvor Stavdal

Reviewer of company-specific input data and EPD: Jon Helge Lande

Approved:

Håkon Hauan, CEO EPD-Global



Product

Product description:

Huntonit building boards are semi-hard wood fiber boards for interior panels in walls and ceilings. The boards are manufactured using the wet process method.

Product specification

The life cycle assessment has been carried out on 11 mm board without surface treatment.

Materials	kg	%
Additives	0.054	0.6013
Adhesive	0.081	0.9019
Wood	8.85	98.50
Total	8.98	100.00
De ales seles se	la se	0/
Packaging	kg	%
Packaging - Cardboard	0.02	7.56
Packaging - Plastic	0.06	25.78
Packaging - Plastic straps	0.00	0.44
Packaging - Wood	0.15	66.22
Total incl. packaging	9.21	100.00

Technical data:

More product information is available on www.huntonit.no/www.huntonit.se

Produced according to:	Weight:	Thickness:	Reaction to fire:
EN 622- 3 Board type MBH	≤ 840 kg/m3	11 mm	D-s1,d0

Market:

Norway / Denmark / Sweden. The scenarios are based on the situation in the Norwegian market.

Reference service life, product

The reference life is the same as for the building, and is usually set at 60 years.

Reference service life, building or construction works

60 years.

LCA: Calculation rules

Declared unit:

1 m2 Huntonit building boards without surface treatment

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included when specific information are missing. These cut-off criteria do not apply for hazardous materials and substances.

Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

Data quality:

Specific data for the product composition are provided by the manufacturer. The data represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on EPDs according to EN 15804 and different LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Production data was collected in 2024. The model of wood raw materials and transport is based on ecoinvent, with extensive changes to increase the representativeness for Norwegian conditions. Other data is from ecoinvent v.3.6, which was released in 2019, but with certain changes to improve the representativeness.

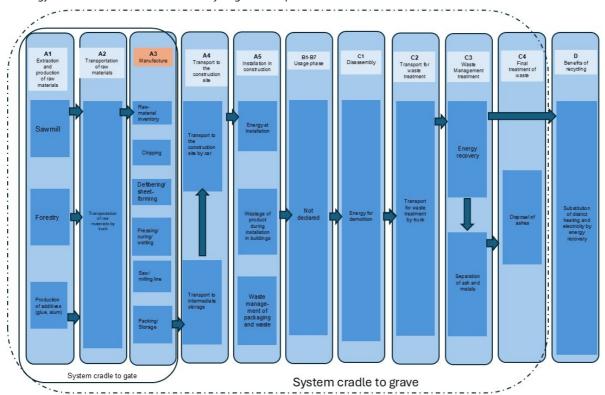
Materials	Source	Data quality	Year
Additives	ecoinvent 3.6	Database	2019
Adhesive	ecoinvent 3.6 + Supplier Information	Database + Supplier specific	2021
Packaging - Cardboard	ecoinvent 3.6	Database	2019
Packaging - Plastic	ecoinvent 3.6	Database	2019
Packaging - Plastic straps	ecoinvent 3.6	Database	2019
Packaging - Wood	ecoinvent 3.6	Database	2019
Wood	ecoinvent 3.6	Database	2019

System boundaries (X=included, MND=module not declared, MNR=module not relevant)

P	roduct stag	je		ruction ion stage				Use stage					End of life stage			Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurb ishment	Operational energy use	Operational water use	De- construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling-potential
A1	A2	A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	D
Χ	X	X	Χ	Χ	MND	MND	MND	MND	MND	MND	MND	Χ	Χ	Χ	X	X

System boundary:

The flow chart for the entire life cycle (A1-C4) with system boundaries is shown in the figure below. Module D is also included outside the life cycle with energy and material substitution from recycling and is explained in more detail under the scenarios.



Additional technical information:

The product is manufactured with PEFC certified wood fiber.



LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km) - Europe	36.7 %	20.00	0.043	l/tkm	0.86
Truck, over 32 tonnes, EURO 6 (km) - Europe	53.3 %	400.00	0.023	l/tkm	9.20
Assembly (A5)	Unit	Value			
Waste, packaging, corrugated board box, 36 % recycled, to average treatment (kg)	kg	0.017			
Waste, packaging, PET straps, to average treatment (kg)	kg	0.001			
Waste, packaging, pallet, EUR wooden pallet, single use, average treatment (kg)	kg	0.149			
Waste, packaging, plastic film (LDPE), to average treatment (kg)	kg	0.058			
De-construction demolition (C1)	Unit	Value			
Electricity, Norway (kWh)	kWh	0.2778			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km) - Europe	36.7 %	50.00	0.043	l/tkm	2.15
Waste processing (C3)	Unit	Value			
Waste treatment per kg Additives, hazardous waste incineration (kg)	kg	0.054			
Waste treatment per kg Glue, hazardous waste incineration (kg)	kg	0.081			
Waste treatment per kg Wood, from incineration (kg)	kg	8.85			
Disposal (C4)	Unit	Value			
Landfilling of ashes from incineration of Emulsion Paint, hazardous waste incineration, process of ashes and residues (kg)	kg	0.09545			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues - C4 (kg)	kg	0.1018			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	93.07			
Substitution of electricity, in Norway (MJ)	MJ	6.15			
Substitution of electricity, in Norway (MJ)	MJ	0.0009723			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	0.01471			
Substitution of electricity, in Norway (MJ)	MJ	0.000000077			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	0.000001162			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	1.56			
Substitution of electricity, in Norway (MJ)	MJ	0.1028			

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Enviro	Environmental impact													
	Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D				
	GWP-total	kg CO ₂ -eq	-1.30E+01	3.51E-01	2.64E-01	6.76E-03	7.52E-02	1.58E+01	3.30E-02	-5.69E-01				
	GWP-fossil	kg CO ₂ -eq	2.63E+00	3.51E-01	8.96E-03	6.55E-03	7.52E-02	3.81E-01	3.30E-02	-5.49E-01				
	GWP-biogenic	kg CO ₂ -eq	-1.57E+01	1.50E-04	2.55E-01	1.81E-04	3.11E-05	1.54E+01	1.53E-05	-1.13E-03				
	GWP-luluc	kg CO ₂ -eq	1.16E-02	1.08E-04	1.48E-06	2.70E-05	2.68E-05	9.30E-05	3.82E-06	-1.89E-02				
Ö	ODP	kg CFC11 -eq	3.53E-07	8.41E-08	9.79E-10	4.49E-10	1.70E-08	4.79E-08	1.92E-09	-4.00E-02				
Œ	АР	mol H+ -eq	9.63E-03	1.12E-03	3.93E-05	5.12E-05	2.16E-04	1.88E-03	1.09E-04	-4.52E-03				
	EP-FreshWater	kg P -eq	1.14E-04	2.79E-06	5.99E-08	4.71E-07	6.01E-07	3.91E-06	4.65E-07	-4.88E-05				
	EP-Marine	kg N -eq	2.11E-03	2.43E-04	1.95E-05	5.63E-06	4.28E-05	7.49E-04	3.44E-05	-1.48E-03				
-	EP-Terrestial	mol N -eq	2.33E-02	2.71E-03	1.73E-04	7.32E-05	4.78E-04	8.02E-03	4.11E-04	-1.60E-02				
	POCP	kg NMVOC -eq	9.63E-03	1.06E-03	4.62E-05	1.97E-05	1.83E-04	2.05E-03	1.02E-04	-4.41E-03				
	ADP-minerals&metals ¹	kg Sb-eq	4.62E-05	6.55E-06	9.66E-08	4.89E-07	2.08E-06	1.75E-06	8.84E-08	-5.46E-06				
	ADP-fossil ¹	MJ	4.51E+01	5.66E+00	7.02E-02	8.94E-02	1.14E+00	2.76E+00	1.94E-01	-7.85E+00				
<u>%</u>	WDP ¹	m ³	5.92E+01	4.43E+00	1.46E-01	3.49E-01	1.10E+00	9.89E+00	3.43E+00	-9.77E+01				

GWP-total = Global Warming Potential total; GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment: EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Remarks to environmental impacts

[&]quot;Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

^{1.} 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



Addition	Additional environmental impact indicators												
In	dicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D			
	PM	Disease incidence	9.48E-08	3.13E-08	5.17E-10	3.67E-10	4.60E-09	2.31E-08	2.10E-09	-2.74E-07			
	IRP ²	kgBq U235 -eq	1.51E-01	2.48E-02	2.74E-04	1.62E-03	4.97E-03	1.06E-02	9.92E-04	-5.01E-02			
4	ETP-fw ¹	CTUe	4.19E+01	4.15E+00	7.72E-02	4.07E-01	8.43E-01	7.35E+00	5.62E-01	-4.27E+01			
46. *** <u>*</u>	HTP-c ¹	CTUh	2.89E-09	0.00E+00	6.00E-12	1.90E-11	0.00E+00	3.56E-10	4.40E-11	-7.82E-10			
26 E	HTP-nc ¹	CTUh	4.51E-08	4.05E-09	3.09E-10	4.58E-10	9.21E-10	1.72E-08	1.13E-09	-4.09E-08			
	SQP ¹	dimensionless	1.05E+03	6.29E+00	6.26E-02	4.50E-02	7.95E-01	1.05E+00	5.03E-01	-5.25E+01			

PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Potential Soil Quality Index (dimensionless)

[&]quot;Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

^{1.} 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

^{2.} 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.



Resource use	Resource use													
	ndicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D				
	PERE	MJ	1.49E+02	7.20E-02	1.52E-03	1.16E+00	1.63E-02	4.26E-01	1.79E-02	-4.85E+01				
	PERM	MJ	9.84E+01	0.00E+00	-2.21E+00	0.00E+00	0.00E+00	-9.62E+01	0.00E+00	0.00E+00				
ីក្ន	PERT	МЈ	2.48E+02	7.20E-02	-2.21E+00	1.16E+00	1.63E-02	-9.58E+01	1.79E-02	-4.85E+01				
	PENRE	МЈ	4.27E+01	5.66E+00	7.02E-02	8.96E-02	1.14E+00	2.76E+00	1.95E-01	-7.85E+00				
e <u>k</u> .	PENRM	МЈ	2.49E+00	0.00E+00	-2.49E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00				
I	PENRT	МЈ	4.51E+01	5.66E+00	-2.42E+00	8.96E-02	1.14E+00	2.76E+00	1.95E-01	-7.85E+00				
	SM	kg	7.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00				
2	RSF	МЈ	8.41E-02	2.53E-03	4.31E-05	9.10E-04	5.82E-04	8.97E-03	4.40E-04	-8.49E-03				
	NRSF	MJ	1.46E-01	8.52E-03	3.64E-04	2.27E-03	2.08E-03	0.00E+00	3.38E-02	-2.87E+00				
%	FW	m^3	4.90E-01	6.41E-04	4.63E-05	8.65E-03	1.22E-04	2.59E-03	2.61E-04	-5.84E-02				

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; SM = Use of secondary materials; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water

"Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"



End of life - Waste													
Inc	dicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D			
ā	HWD	kg	1.75E-02	3.08E-04	0.00E+00	5.74E-05	5.86E-05	0.00E+00	7.39E-02	-3.69E-04			
Ū	NHWD	kg	7.17E-01	4.75E-01	2.25E-01	6.89E-03	5.53E-02	0.00E+00	1.23E-01	-1.85E-01			
8	RWD	kg	1.24E-04	3.87E-05	0.00E+00	8.01E-07	7.74E-06	0.00E+00	2.13E-07	-4.11E-05			

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed

"Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

End of life - Outpu	End of life - Output flow												
Indicat	tor	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D			
∅ D	CRU	kg	0.00E+00										
\$>>	MFR	kg	1.67E-01	0.00E+00	4.59E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
DF	MER	kg	2.76E-01	0.00E+00	1.49E-01	0.00E+00	0.00E+00	8.98E+00	0.00E+00	0.00E+00			
50	EEE	MJ	1.89E-01	0.00E+00	1.04E-01	0.00E+00	0.00E+00	6.15E+00	0.00E+00	0.00E+00			
▷ 鳳	EET	MJ	2.86E+00	0.00E+00	1.57E+00	0.00E+00	0.00E+00	9.31E+01	0.00E+00	0.00E+00			

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy electrical; EET = Exported energy thermal "Reading example: 9.0 E-03 = 9.0*10-3 = 0.009"

Biogenic Carbon Content									
Indicator	Unit	At the factory gate							
Biogenic carbon content in product	kg C	4.21E+00							
Biogenic carbon content in accompanying packaging	kg C	6.95E-02							

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2



Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Source	Amount	Unit
Electricity, Norway (kWh)	ecoinvent 3.6	24.33	g CO2-eq/kWh

Dangerous substances

The product contains no substances given by the REACH Candidate list.

Indoor environment

This is a product that must preferably be surface treated. The surface treatment given will have some impact on the indoor climate.

Additional Environmental Information

Additional environmental impact indicators required in NPCR Part A for construction products									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	2.63E+00	3.51E-01	8.96E-03	6.75E-03	7.52E-02	3.84E-01	3.31E-02	-5.60E-01

GWP-IOBC: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

Bibliography

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

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

EN 15804:2012+A2:2019 Environmental product declaration - Core rules for the product category of construction products.

ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products.

ecoinvent v3, Allocation, cut-off by classification, Swiss Centre of Life Cycle Inventories.

Iversen et al., (2021) eEPD v2021.09 Background information for EPD generator tool system verification, LCA.no Report number: 07.21 Vold, M. et al. (2022) EPD generator for Building boards

Background information for EPD generator application and LCA data, LCA.no report number 05.22

NPCR Part A: Construction products and services. Ver. 2.0. April 2021, EPD-Norge.

NPCR 010 Part B for Building Boards. Ver. 4.0, March 2022, EPD-Norge.

© epd-global Powered by EPD-Norway	Program operator and publisher EPD-Global Postboks 5250 Majorstuen, 0303 Oslo, Norway	Phone: e-mail: web:	+47 977 22 020 post@epd-norge.no www.epd-global.com
HUNTONI	Owner of the declaration: Huntonit AS Postboks 21, 4701 Vennesla, Norway	Phone: e-mail: web:	+47 38 13 71 00 halvor.stavdal@byggma.no https://www.huntonit.no/
LCA _{no}	Author of the Life Cycle Assessment	Phone:	+47 916 50 916
	LCA.no AS	e-mail:	post@lca.no
	Dokka 6A, 1671 Kråkerøy, Norway	web:	www.lca.no
LCA _{no}	Developer of EPD generator	Phone:	+47 916 50 916
	LCA.no AS	e-mail:	post@lca.no
	Dokka 6A, 1671 Kråkerøy, Norway	web:	www.lca.no
ECO PLATFORM VERIFIED	ECO Platform	web:	www.eco-platform.org
	ECO Portal	web:	ECO Portal