



in accordance with ISO 14025 and EN 15804+A2

Hunton Nativo® Wood Fibre Insulation Board





Owner of the declaration: Hunton Fiber AS

Product: Hunton Nativo® Wood Fibre Insulation Board

Declared unit: 1 m2

This declaration is based on Product Category Rules: CEN Standard EN 15804:2012+A2:2019 serves as core PCR. NPCR 012:2022 Part B for Thermal insulation products **Program operator:** The Norwegian EPD Foundation

Declaration number: NEPD-11232-11180

Registration number: NEPD-11232-11180

Issue date: 27.05.2025

Valid to: 27.05.2030

EPD software: LCAno EPD generator ID: 931719

The Norwegian EPD Foundation



General information

Product

Hunton Nativo® Wood Fibre Insulation Board

Program operator:

The Norwegian EPD Foundation Post Box 5250 Majorstuen, 0303 Oslo, Norway Phone: +47 977 22 020 web: www.epd-norge.no

Declaration number:

NEPD-11232-11180

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR. NPCR 012:2022 Part B for Thermal insulation products

Statement of liability:

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

Declared unit:

1 m2 Hunton Nativo® Wood Fibre Insulation Board

Declared unit with option:

A1, A2, A3, A4, A5, B1, B2, B3, B4, B5, B6, B7, C1, C2, C3, C4, D

Functional unit:

1 m2 wood fibre insulation installed in a thickness of 38 mm and a thermal resistance of R=1 Km2/W from cradle-to-grave with a reference lifecycle of 60 years.

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-Norway'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-Norway, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Norway'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 EPDNorway'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:

Hunton Fiber AS Contact person: Thomas Løkken Phone: +47 90633795 e-mail: tl@hunton.no

Manufacturer:

Hunton Fiber AS Niels Ødegaards gate 8 2815 Gjøvik, Norway

Place of production:

Hunton Fiber AS production site Gjøvik-Skjerven (Norway) Brennbakkvegen 120 2822 Gjøvik, Norway

Management system:

ISO 9001, ISO 50001, Eco-lighthouse, PEFC

Organisation no:

964 014 256

Issue date:

27.05.2025

Valid to: 27.05.2030

Year of study:

2024

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804:2012+A2:2019 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 Norway. NEPDT114

Developer of EPD: Gaute Thomassen

Reviewer of company-specific input data and EPD: Thomas Løkken

Approved:

Håkon Hauan, CEO EPD-Norge



Product

Product description:

Hunton Nativo® Wood Fiber Insulation Boards is manufactured by defibrating wood chips and adding fire-retardant additives. It is used for thermal insulation of walls, roofs, and ceilings in buildings. The insulation provides excellent sound absorption and has documented fire resistance. Its hygroscopic properties allow it to absorb and release moisture in response to changes in relative humidity. Wood fibre insulation does not itch and is comfortable to work with.

Product specification

Applies to all dimensions of wood fibre insulation boards.

Materials	kg	%
Ammonium salts	0,12	6,81
PE/PP fiber product	0,092	4,85
Wood fibre	1,67	88,32
Total	1,90	100,00
Packaging	kg	%
Packaging - Pallet	0,14	88,71
Packaging - Plastic	0,02	11,29
Total incl. packaging	2,06	100,00

Technical data:

Hunton Nativo Wood fibre insulation board has a thermal conductivity of (23°C/50 % RH) 0.038 W/mK at a density of 50 kg/m3. Thermal conductivity has been tested in accordance with EN 13171, which is also the harmonised standard the product is produced in compliance with.

Market:

Nordics, scenarios in LCA have been calculated based on use in Norway.

Reference service life, product

Reference service life is set to 60 years. This is the same as the service life that is normally used for constructions.

Reference service life, building or construction works

60 years

LCA: Calculation rules

Declared unit:

1 m2 Hunton Nativo® Wood Fibre Insulation Board

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. 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+A2. 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.

Data for the production of wood fibre insulation is based on year of production in 2024. All energy consumption in database figures are assumed not used as raw material.

Materials	Source	Data quality	Year
Ammonium salts	ecoinvent 3.6	Database	2019
Packaging - Pallet	NEPDT58	EPD	2022
Packaging - Plastic	Supplier specific	Supplier	2024
PE/PP fiber product	ecoinvent 3.6	Database	2019
Wood fibre	ecoinvent 3.6	Database	2019

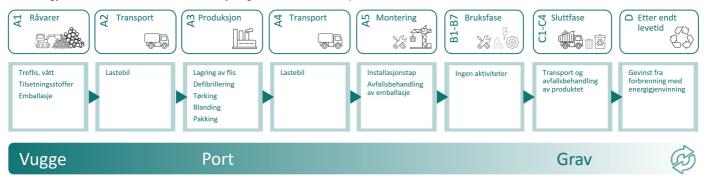


System boundaries (X=included, MND=module not declared, MNR=module not relevant)

l l	Product stag	ge	Constr installati					Use stage				End of life stage			Beyond the system boundaries	
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

System boundary:

The entire lifecycle (A1-C4) is included in the analysis on which this documentation is based. Module D has also been included outside the lifecycle with energy and material substitution from recycling, and is elaborated upon under the scenarios.



Additional technical information:



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, over 32 tonnes, EURO 6 (km) - Europe	53,3 %	300	0,023	l/tkm	6,90
Assembly (A5)	Unit	Value			
Electricity, Norway (kWh)	kWh	0,010			
Product loss during installation (percentage of insulation)	Units	0,010			
Waste, packaging, plastic, mixture, to average treatment (kg) - A5 including transport	kg	0,017			
Waste, packaging, paller Plate 1200*1200 4v - Aven Holmestrand AS - NEPDT58 - NO (kg) - A5 including transport	kg	0,13			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 4 (km) - Europe	36,7 %	85	0,044	l/tkm	3,74
Waste processing (C3)	Unit	Value			
Waste treatment per kg municipal solid waste, incineration with energy recovery and fly ash extraction (kg)	kg	0,22			
Waste treatment per kg Wood, incineration with energy recovery and fly ash extraction (kg)	kg	1,67			
Disposal (C4)	Unit	Value			
Landfilling of ashes from incineration of Municipal solid waste, process per kg ashes and residues (kg)	kg	0,054			
Landfilling of ashes from incineration of Wood, process per kg ashes and residues (kg)	kg	0,019			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of thermal energy, district heating, in Norway (MJ)	MJ	21,89			
Substitution of electricity, in Norway (MJ)	MJ	1,44			



LCA: Results

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

Envir	onmental impact											
	Indicator			Unit	A1	A2	A3	A4	A5	B1	B2	B3
P	GWP-total		kg	CO ₂ -eq	-2,65E+00	3,69E-02	5,99E-02	5,38E-02	2,56E-01	0	0	0
P	GWP-fossil		kg C		4,20E-01	3,69E-02	5,49E-02	5,38E-02	2,91E-02	0	0	0
P	GWP-biogenic	:	kg	CO ₂ -eq	-3,08E+00	1,51E-05	4,95E-03	2,30E-05	2,27E-01	0	0	0
P	GWP-luluc		kg	CO ₂ -eq	2,20E-03	1,08E-05	2,26E-05	1,64E-05	2,17E-06	0	0	0
Ò	ODP		kg (CFC11 -eq	3,04E-08	8,53E-09	4,53E-09	1,30E-08	6,32E-10	0	0	0
Ê	AP		mc	ol H+ -eq	3,09E-03	1,55E-04	2,48E-04	1,73E-04	3,84E-05	0	0	0
	EP-FreshWater	r	k	g P -eq	3,59E-05	2,81E-07	1,25E-06	4,28E-07	1,42E-07	0	0	0
	EP-Marine		k	g N -eq	3,93E-04	4,65E-05	8,01E-05	3,79E-05	2,06E-05	0	0	0
-	EP-Terrestial		m	ol N -eq	4,69E-03	5,15E-04	8,72E-04	4,23E-04	1,72E-04	0	0	0
	РОСР		kg N	MVOC -eq	1,88E-03	1,66E-04	2,48E-04	1,66E-04	4,47E-05	0	0	0
ьÐ	ADP-minerals&me	etals ¹	k	g Sb-eq	2,43E-05	6,30E-07	4,05E-07	9,59E-07	8,16E-08	0	0	0
A	ADP-fossil ¹			MJ	1,18E+01	5,74E-01	4,65E-01	8,74E-01	5,57E-02	0	0	0
%	WDP ¹			m ³	5,27E+01	4,40E-01	2,31E+02	6,70E-01	6,45E-01	0	0	0
C	1101				3,272.01	1, 102 01	2,012102	0,102 01	0,102 01	Ū	Ŭ	Ū
<u> </u>	Indicator	Uni	it	B4	B5	B6	B7	C1	C2	C3	C4	D
e P		Uni kg CO										
	Indicator		₂ -eq	B4	B5	B6	Β7	C1	C2	C3	C4	D
P	Indicator GWP-total	kg CO	₂ -eq ₂ -eq	B4 0	B5 0	B6 0	B7 0	C1 0	C2 2,90E-02	C3 2,99E+00	C4 9,81E-04	D -1,32E-01
P	Indicator GWP-total GWP-fossil	kg CO _j kg CO _j	₂ -eq ₂ -eq ₂ -eq	B4 0 0	B5 0 0	B6 0 0	B7 0 0	C1 0 0	C2 2,90E-02 2,89E-02	C3 2,99E+00 1,34E-01	C4 9,81E-04 9,80E-04	D -1,32E-01 -1,27E-01
P P P	Indicator GWP-total GWP-fossil GWP-biogenic	kg CO kg CO kg CO	2 -eq 2 -eq 2 -eq 2 -eq 2 -eq	B4 0 0 0	B5 0 0 0	B6 0 0 0	B7 0 0 0	C1 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05	C3 2,99E+00 1,34E-01 2,85E+00	C4 9,81E-04 9,80E-04 4,50E-07	D -1,32E-01 -1,27E-01 -2,62E-04
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc	kg CO kg CO kg CO kg CO	2 -eq 2 -eq 2 -eq 2 -eq 2 -eq 11 -eq	B4 0 0 0 0	B5 0 0 0 0	B6 0 0 0 0	B7 0 0 0 0	C1 0 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05 1,02E-05	C3 2,99E+00 1,34E-01 2,85E+00 4,34E-06	C4 9,81E-04 9,80E-04 4,50E-07 1,80E-07	D -1,32E-01 -1,27E-01 -2,62E-04 -4,37E-03
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP	kg CO kg CO kg CO kg CO	2 -eq 2 -eq 2 -eq 2 -eq 11 -eq + -eq	B4 0 0 0 0 0	B5 0 0 0 0 0	B6 0 0 0 0 0	B7 0 0 0 0 0	C1 0 0 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05 1,02E-05 6,65E-09	C3 2,99E+00 1,34E-01 2,85E+00 4,34E-06 2,37E-09	C4 9,81E-04 9,80E-04 4,50E-07 1,80E-07 1,48E-10	D -1,32E-01 -1,27E-01 -2,62E-04 -4,37E-03 -9,25E-03
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP	kg CO ₂ kg CO ₂ kg CO ₂ kg CFC ⁻ mol H-	2 -eq 2 -eq 2 -eq 2 -eq 11 -eq + -eq -eq	B4 0 0 0 0 0 0	B5 0 0 0 0 0 0 0	B6 0 0 0 0 0 0	B7 0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05 1,02E-05 6,65E-09 1,47E-04	C3 2,99E+00 1,34E-01 2,85E+00 4,34E-06 2,37E-09 3,22E-04	C4 9,81E-04 9,80E-04 4,50E-07 1,80E-07 1,48E-10 4,18E-06	D -1,32E-01 -1,27E-01 -2,62E-04 -4,37E-03 -9,25E-03 -1,05E-03
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater	kg CO; kg CO; kg CO; kg CO; kg CFC ² mol H- kg P	2 -eq 2 -eq 2 -eq 11 -eq + -eq -eq	B4 0 0 0 0 0 0 0	B5 0 0 0 0 0 0 0 0	B6 0 0 0 0 0 0 0 0	B7 0 0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05 1,02E-05 6,65E-09 1,47E-04 2,29E-07	C3 2,99E+00 1,34E-01 2,85E+00 4,34E-06 2,37E-09 3,22E-04 4,37E-07	C4 9,81E-04 9,80E-04 4,50E-07 1,80E-07 1,48E-10 4,18E-06 1,26E-08	D -1,32E-01 -1,27E-01 -2,62E-04 -4,37E-03 -9,25E-03 -1,05E-03 -1,13E-05
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-Marine	kg CO; kg CO; kg CO; kg CC; kg CFC ² mol H- kg P kg N	2 -eq 2 -eq 2 -eq 11 -eq + -eq -eq -eq	B4 0 0 0 0 0 0 0 0	B5 0 0 0 0 0 0 0 0 0	B6 0 0 0 0 0 0 0 0 0	B7 0 0 0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05 1,02E-05 6,65E-09 1,47E-04 2,29E-07 5,01E-05	C3 2,99E+00 1,34E-01 2,85E+00 4,34E-06 2,37E-09 3,22E-04 4,37E-07 1,53E-04	C4 9,81E-04 9,80E-04 4,50E-07 1,80E-07 1,48E-10 4,18E-06 1,26E-08 1,37E-06	D -1,32E-01 -2,62E-04 -4,37E-03 -9,25E-03 -1,05E-03 -1,13E-05 -3,42E-04
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-FreshWater EP-Marine EP-Terrestial	kg CO; kg CO; kg CO; kg CFC mol H- kg P kg N mol N	2 -eq 2 -eq 2 -eq 11 -eq + -eq -eq -eq 0 -eq	B4 0 0 0 0 0 0 0 0 0 0	B5 0 0 0 0 0 0 0 0 0 0 0 0 0	B6 0 0 0 0 0 0 0 0 0 0	B7 0 0 0 0 0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05 1,02E-05 6,65E-09 1,47E-04 2,29E-07 5,01E-05 5,53E-04	C3 2,99E+00 1,34E-01 2,85E+00 4,34E-06 2,37E-09 3,22E-04 4,37E-07 1,53E-04 1,61E-03	C4 9,81E-04 9,80E-04 4,50E-07 1,80E-07 1,48E-10 4,18E-06 1,26E-08 1,37E-06 1,54E-05	D -1,32E-01 -2,62E-04 -4,37E-03 -9,25E-03 -1,05E-03 -1,13E-05 -3,42E-04 -3,70E-03
	Indicator GWP-total GWP-fossil GWP-biogenic GWP-luluc ODP AP EP-FreshWater EP-FreshWater EP-Marine EP-Terrestial POCP	kg CO; kg CO; kg CO; kg CFC ⁻ mol H- kg P kg N mol N	2 -eq 2 -eq 2 -eq 11 -eq + -eq -eq -eq 0C -eq	B4 0 0 0 0 0 0 0 0 0 0 0	B5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B6 0 0 0 0 0 0 0 0 0 0 0 0	B7 0 0 0 0 0 0 0 0 0 0 0 0 0	C1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C2 2,90E-02 2,89E-02 1,19E-05 1,02E-05 6,65E-09 1,47E-04 2,29E-07 5,01E-05 5,53E-04 1,58E-04	C3 2,99E+00 1,34E-01 2,85E+00 4,34E-06 2,37E-09 3,22E-04 4,37E-07 1,53E-04 1,61E-03 3,95E-04	C4 9,81E-04 9,80E-04 4,50E-07 1,80E-07 1,48E-10 4,18E-06 1,26E-08 1,37E-06 1,54E-05 4,33E-06	D -1,32E-01 -2,62E-04 -4,37E-03 -9,25E-03 -1,05E-03 -1,13E-05 -3,42E-04 -3,70E-03 -1,02E-03

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

"Reading example: 9,0 E-03 = 9,0*10-3 = 0,009" *INA Indicator Not Assessed

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

Remarks to environmental impacts



Hunton is committed to reducing the environmental footprint of our products. We continuously improve our production processes and assess alternative raw materials and input factors. Several initiatives are underway to make our in-house products more circular. We also monitor upcoming regulations, which we believe will help highlight the environmental benefits of wood-based building materials.



Additio	onal enviro	onme	ntal impact ind	icators								
	Indicator		Unit		A1	A2	A3	A4	A5	B1	B2	B3
	PM		Disease incidence		3,34E-08	3,25E-09	5,05E-09	4,94E-09	4,33E-10	0	0	0
(**) B	IRP ²		kgBq U23	5-eq	2,53E-02	2,51E-03	2,27E-03	3,82E-03	2,40E-04	0	0	0
	ETP-fv	v ¹	CTUe		3,96E+00	4,20E-01	6,71E-01	6,39E-01	1,19E-01	0	0	0
	HTP-c	1	CTUh		4,79E-10	0,00E+00	9,60E-11	0,00E+00	8,00E-12	0	0	0
48- Q	HTP-n	c ¹	CTUh		6,00E-09	4,07E-10	1,06E-09	6,18E-10	3,46E-10	0	0	0
	SQP ¹		dimension	nless	2,04E+01	6,58E-01	-3,43E-01	1,00E+00	3,09E-02	0	0	0
Ind	licator		Unit	B4	B5	B6	B7	C1	C2	C3	C4	D
	PM	Di	sease incidence	0	0	0	0	0	2,10E-09	3,21E-09	6,00E-11	-6,34E-08
	IRP ²	ŀ	kgBq U235 -eq	0	0	0	0	0	1,92E-03	4,13E-04	5,29E-05	-1,16E-02
	ETP-fw ¹		CTUe	0	0	0	0	0	3,24E-01	7,92E-01	1,76E-02	-9,87E+00
40.* ****	HTP-c ¹		CTUh	0	0	0	0	0	0,00E+00	9,00E-11	1,00E-12	-1,80E-10
8° @	HTP-nc ¹		CTUh	0	0	0	0	0	3,50E-10	3,99E-09	3,20E-11	-9,46E-09
è	SQP ¹	(dimensionless	0	0	0	0	0	3,03E-01	3,31E-02	3,10E-02	-1,21E+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)

"Reading example: 9,0 E-03 = 9,0*10-3 = 0,009"

*INA Indicator Not Assessed

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.



esource us	e										
	Indicator		Unit	A1	A2	A3	A4	A5	B1	B2	B3
î, B	PERE		MJ	9,05E-01	7,22E-03	2,53E+01	1,10E-02	4,40E-02	0	0	0
J.	PERM	1	MJ	2,55E+01	0,00E+00	0,00E+00	0,00E+00	-2,00E+00	0	0	0
্ব	Sa PERT		MJ	2,64E+01	7,22E-03	2,53E+01	1,10E-02	-1,96E+00	0	0	0
Ð	PENR	E	MJ	8,19E+00	5,74E-01	4,65E-01	8,74E-01	5,57E-02	0	0	0
Å.	PENR	N	MJ	4,53E+00	0,00E+00	0,00E+00	0,00E+00	-1,01E+00	0	0	0
IA	PENR	т	MJ	1,27E+01	5,74E-01	4,65E-01	8,74E-01	-9,55E-01	0	0	0
	SM		kg	5,34E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0	0	0
2	RSF		MJ	2,01E-02	2,53E-04	1,93E-03	3,85E-04	6,03E-05	0	0	0
Ū.	NRSF		MJ	4,53E-03	8,47E-04	4,62E-03	1,29E-03	3,85E-04	0	0	0
\$	FW		m ³	1,38E-02	6,54E-05	2,01E-01	9,95E-05	3,72E-04	0	0	0
Inc											
	dicator	Unit	B4	B5	B6	B7	C1	C2	C3	C4	D
Ĩ	PERE	Unit MJ	B4 0	B5 0	B6 0	B7 0	C1 0	C2 6,21E-03	C3 7,18E-03	C4 5,02E-04	
i de la constante de la consta											-1,12E+(
	PERE	MJ	0	0	0	0	0	6,21E-03	7,18E-03	5,02E-04	-1,12E+0 0,00E+0
1	PERE PERM	MJ	0 0	0 0	0	0	0	6,21E-03 0,00E+00	7,18E-03 -2,35E+01	5,02E-04 0,00E+00	-1,12E+0 0,00E+0 -1,12E+0
A.	PERE PERM PERT	M) MJ	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	6,21E-03 0,00E+00 6,21E-03	7,18E-03 -2,35E+01 -2,35E+01	5,02E-04 0,00E+00 5,02E-04	-1,12E+(0,00E+0 -1,12E+(-1,81E+(
्र स्र	PERE PERM PERT PENRE	rw rw rW rW	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	6,21E-03 0,00E+00 6,21E-03 4,40E-01	7,18E-03 -2,35E+01 -2,35E+01 2,14E-01	5,02E-04 0,00E+00 5,02E-04 1,19E-02	-1,12E+(0,00E+0 -1,12E+(-1,81E+(0,00E+0
r Fr B L	PERE PERM PERT PENRE PENRM	rw rw rw rw rw	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	6,21E-03 0,00E+00 6,21E-03 4,40E-01 0,00E+00	7,18E-03 -2,35E+01 -2,35E+01 2,14E-01 -3,47E+00	5,02E-04 0,00E+00 5,02E-04 1,19E-02 0,00E+00	D -1,12E+(0,00E+0 -1,12E+(-1,81E+(0,00E+0 -1,81E+(0,00E+0
	PERE PERM PERT PENRE PENRM PENRT	IM IM IM IM IM	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	6,21E-03 0,00E+00 6,21E-03 4,40E-01 0,00E+00 4,40E-01	7,18E-03 -2,35E+01 -2,35E+01 2,14E-01 -3,47E+00 -3,26E+00	5,02E-04 0,00E+00 5,02E-04 1,19E-02 0,00E+00 1,19E-02	-1,12E+(0,00E+0 -1,12E+(-1,81E+(0,00E+0 -1,81E+(
	PERE PERM PERT PENRE PENRM PENRT SM	MJ MJ MJ MJ MJ Kg	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	6,21E-03 0,00E+00 6,21E-03 4,40E-01 0,00E+00 4,40E-01 0,00E+00	7,18E-03 -2,35E+01 -2,35E+01 2,14E-01 -3,47E+00 -3,26E+00 0,00E+00	5,02E-04 0,00E+00 5,02E-04 1,19E-02 0,00E+00 1,19E-02 0,00E+00	-1,12E+(0,00E+C -1,12E+(-1,81E+(0,00E+C -1,81E+(0,00E+C

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; PERT = Total use of non-renewable primary energy resources; PENRE = Use of non renewable primary energy resources; SM = Use of secondary materials; RSF = 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" *INA Indicator Not Assessed



End of life -	Waste										
	Indicator		Unit	A1	A2	A3	A4	A5	B1	B2	B3
A	A HWD		kg	6,29E-04	3,14E-05	3,08E-03	4,78E-05	3,18E-04	0	0	0
Ū	NHW	D	kg	4,48E-02	4,99E-02	1,04E-01	7,60E-02	1,63E-01	0	0	0
8	RWD)	kg	1,74E-04	3,92E-06	2,64E-06	5,97E-06	3,45E-08	0	0	0
Ind	licator	Unit	B4	B5	B6	В7	C1	C2	C3	C4	D
Ā	HWD	kg	0	0	0	0	0	2,24E-05	2,06E-05	6,06E-02	-8,53E-05
Ū	NHWD	kg	0	0	0	0	0	2,10E-02	1,85E-03	1,30E-02	-4,29E-02
	RWD	kg	0	0	0	0	0	3,00E-06	1,17E-07	1,28E-07	-9,50E-06

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" *INA Indicator Not Assessed

End of life - Οι	End of life - Output flow												
In	dicator		Unit	A1	A2	A3	A4	A5	B1	B2	B3		
\otimes	CF	งบ	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0	0	0		
<2>>	М	FR	kg	9,13E-04	0,00E+00	4,43E-03	0,00E+00	5,57E-03	0	0	0		
DF	М	ER	kg	0,00E+00	0,00E+00	1,61E-02	0,00E+00	1,40E-01	0	0	0		
۶D	E	E	MJ	4,82E-03	0,00E+00	1,02E-02	0,00E+00	9,72E-02	0	0	0		
DI	E	ET	MJ	8,56E-03	0,00E+00	1,55E-01	0,00E+00	1,47E+00	0	0	0		
Indicat	or	Unit	B4	B5	B6	B7	C1	C2	C3	C4	D		
ø۵	CRU	kg	0	0	0	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00		
3	MFR	kg	0	0	0	0	0	0,00E+00	2,56E-03	0,00E+00	0,00E+00		
DF	MER	kg	0	0	0	0	0	0,00E+00	1,68E+00	0,00E+00	0,00E+00		
۶D	EEE	MJ	0	0	0	0	0	0,00E+00	1,30E+00	0,00E+00	0,00E+00		
D0	EET	MJ	0	0	0	0	0	0,00E+00	1,97E+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" *INA Indicator Not Assessed

Biogenic Carbon Content

Indicator	Unit	At the factory gate								
Biogenic carbon content in product	kg C	7,78E-01								
Biogenic carbon content in accompanying packaging	kg C	6,21E-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 with guarantee of origin, hydropower, Norway (kWh)	ecoinvent 3.6	6,29	g CO2-eq/kWh

Dangerous substances

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

Indoor environment

Hunton Nativo® Wood fiber insulation boards are rated not to emit any particles, gases or radiation that have a perceptible impact on the indoor climate, or to have any significant impact on health (SINTEF Technical Approval, TG 20440)

Additional Environmental Information

Additional environmental impact indicators required in NPCR Part A for construction products										
Indicator	Uni	t	A1	A2	A3	A4	A5	B1	B2	B3
GWPIOBC	kg CO ₂	-eq	4,24E-01	3,69E-02	5,89E-02	5,38E-02	2,91E-02	0	0	0
Indicator	Unit	B4	B5	B6	B7	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	0	0	0	2,90E-02	1,34E-01	1,47E-03	-1,30E-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.



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