

Owner: Træ- og Møbelindustrien (TMI)
No.: MD-25108-EN
Issued: 20-08-2025
Valid to: 20-08-2030

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration

Træ- og Møbelindustrien (TMI)
H.C. Andersens Boulevard 18,
DK-1553 København



CVR nr.: 13513104

<https://www.danskindustri.dk/medlemsforeninger/foreningssites/tmi/>

Programme

EPD Danmark
www.epddanmark.dk



☒ Industry EPD

☐ Product EPD

☐ Product specific

☒ Average

☐ Worst Case

Declared product

Glulam made of spruce

Number of declared datasets/product variations: 1

Production site

Production sites in Denmark

Use of Guarantees of Origin

☒ No certificates used

☐ Electricity covered by GO

☐ Biogas covered by GO

Declared unit

1 m³ of glulam made of spruce in various dimensions

Year of production site data (A3)

Varies due to the use of different EPDs (2021, 2022)

EPD version

Version 1.0.

Issued:

20-08-2025

Valid to:

20-08-2030

Basis of calculation

This EPD has been developed and verified following the European standard: EN 15804+A2.

Comparability

EPDs are not comparable unless they comply with the requirements of EN 15804+A2. Likewise, EPD data is not comparable unless the datasets comply with the requirements of EN 15804+A2 and are from the same database.

Validity

This EPD has been verified following ISO 14025. From the date of issue, it is valid for five years.

Use

The purpose is to provide scientifically based environmental information regarding glulam to evaluate the environmental performance of buildings.

EPD type

☐ Cradle-to-gate with modules C1-C4 and D

☒ Cradle-to-gate with options, modules C1-C4 and D

☐ Cradle-to-grave and module D

☐ Cradle-to-gate

☐ Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

☐ internal

☒ external

Third party verifier:

Mie Ostenfeldt

Mie Ostenfeldt
Ostenfeldt Consulting

Martha Katrine Sørensen

Martha Katrine Sørensen
EPD Danmark

Life cycle stages and modules (ND = module not declared)

Product			Construction Process		Use							End-of-Life				Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, Recovery and Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	ND	ND	ND	ND	MD	ND	ND	ND	X	X	X	X	X

Product information

Product description

The product materials are listed below.

Material	Weight-% of declared product
Wood*	85%
Moisture	12%
Glue/Adhesive	<2%
Hardener	<1%
TOTAL	100%

*Spruce.

Product packaging:

Product packaging is listed below.

Material	Amount [kg]	Weight-% of product packaging
Wood	0,38	31%
Plastic	0,84	69%
TOTAL	1,22	100%

Representativity

This EPD covers the declared unit of 1 m³ of glulam produced by multiple companies in Denmark and sold in Denmark. This EPD covers the majority of the Danish market.

Product-specific data originates from EPDs and is weighted using Danish production statistics.

Background data is from the EN 15804 ecoinvent database. Generally, the used background data-sets are of good quality and most of them are only a couple of years old.

Picture of product



Hazardous substances

The glulam do not contain substances listed on the "Candidate List of substances of very high concern for Authorisation" in quantities exceeding 0,1% by weight.

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

Product use

The products are used as construction timber in various types of constructions and in a range of different functions such as beams and columns and are often load-bearing.

Essential characteristics

Not declared.

Reference Service Life (RSL)

Not declared.

LCA background

Declared unit

The LCI and LCIA results in this EPD cover the declared unit of 1 m³ of glulam.

	Value	Unit
Declared unit	1	m ³

Functional unit

Not relevant.

Material properties

The material properties are listed below.

	Mass Factor [kg/DU]	Density [kg/m ³]
Product	434	434

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804+A2, and the core rules in PCR EN 16485:2014 Product category rules for wood and wood-based products for use in construction.

Conversion factors

A conversion factor to 1 kg is listed below.

	Conversion Factor to 1 kg
Product	0,00230

Energy modelling principles

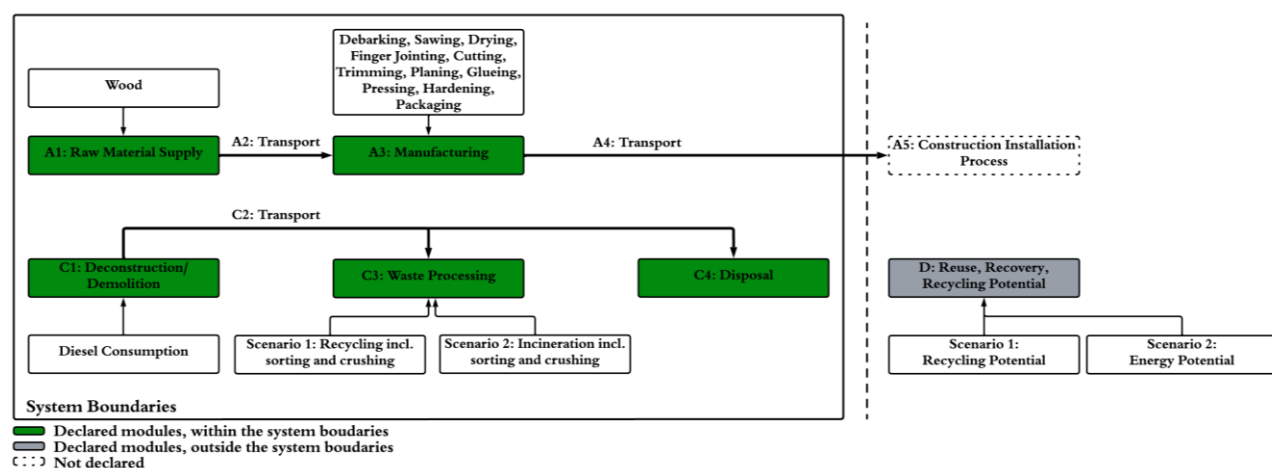
Foreground System:

The foreground system is modelled using EPDs. The energy modelling principles are therefore unknown but are expected to fulfill requirements.

Background System:

The background system is modelled using aggregatedecoinvent processes that use electricity grid mixes.

Flow diagram



System boundary

This EPD is based on a cradle-to-gate LCA with options and modules C1-C4 and D in which 100 weight-% has been accounted for.

The cut-off criterium per module is set at a maximum of 5% of energy usage and mass while the cut-off criterium per unit process is set at a maximum of 1% of energy usage and mass. This is in compliance with the rules stated in EN 15804+A2, 6.3.6. There are no known excluded processes.

Product stage (A1-3) includes:

A1 - Extraction and processing of raw materials

A2 - Transport to the production site

A3 - Manufacturing processes

The product stage comprises acquisition of Nordic wood logs from forestry as well as other raw materials, products and energy, transport to the production site, packaging and waste processing up to the "end-of-waste" state or final disposal. The production processes include debarking, sawing, drying, finger jointing, cutting, trimming, planing, glueing, hardening and packaging.

The LCA results are declared in aggregated form, which means, that the sub-modules A1, A2 and A3 are declared as one module: A1-A3.

Construction process stage (A4-5) includes:

A4 - Transport to the building site, located in DK.

Type	Distance [km]	Distance & Amount [tkm]
Lorry	455	198

The distance is a weighted value, calculated using Danish production statistics.

Module A5 is not declared.

End-of-Life (C1-4) includes:

Deconstruction of glulam in Denmark is assumed to be carried out by various companies and in various ways. An average diesel consumption of 1.4 L/ton, based on data from the Danish Environmental Protection Agency, is modelled to represent typical deconstruction activities.

The End-of-Life includes two different scenarios. Scenario 1 assumes that glulam is collected separately from other construction waste and recycled into particle boards. Scenario 2 assumes that glulam is collected with mixed construction waste and incinerated. These scenarios are modelled as the actual percentages of recycling and incineration are unknown.

Transport to recycling is modelled by assuming a distance of 150 km by lorry while transport to incineration is modelled by assuming a distance of 100 km by lorry. Following EN 16485:2014, both scenarios are modelled in module C3.

Re-use, recovery and recycling potential (D) includes:

For Scenario 1, module D includes benefits from the avoided production of virgin wood shavings (used in particle boards).

For Scenario 2, module D includes benefits from the avoided production of average Danish electricity and thermal energy.

LCA results

The additional environmental impact indicators are not declared as the EPDs - used as data sources in A1-A3 - have not consistently declared them.

The following tables present LCI and LCIA results for **Scenario 1 (100% Recycling)**.

ENVIRONMENTAL IMPACTS PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (1)	C3 (1)	C4 (1)	D (1)
GWP-total	[kg CO ₂ eq.]	-5,42E+02	3,77E+01	2,22E+00	1,24E+01	6,94E+02	0,00E+00	-8,19E+02
GWP-fossil	[kg CO ₂ eq.]	1,31E+02	3,77E+01	2,22E+00	1,24E+01	9,18E+00	0,00E+00	-3,29E+01
GWP-biogenic	[kg CO ₂ eq.]	-6,73E+02	0,00E+00	0,00E+00	0,00E+00	6,85E+02	0,00E+00	-7,86E+02
GWP-luluc	[kg CO ₂ eq.]	5,62E-01	1,25E-02	1,93E-04	4,11E-03	9,38E-04	0,00E+00	-1,88E-01
ODP	[kg CFC 11 eq.]	9,71E-06	7,49E-07	3,39E-08	2,46E-07	1,25E-07	0,00E+00	-4,06E-07
AP	[mol H ⁺ eq.]	7,30E-01	7,84E-02	2,00E-02	2,58E-02	3,58E-02	0,00E+00	-2,05E-01
EP-freshwater	[kg P eq.]	1,43E-02	2,55E-03	6,46E-05	8,38E-04	3,12E-03	0,00E+00	-1,71E-02
EP-marine	[kg N eq.]	2,60E-01	1,88E-02	9,28E-03	6,19E-03	1,05E-02	0,00E+00	-6,01E-02
EP-terrestrial	[mol N eq.]	2,93E+00	2,03E-01	1,02E-01	6,67E-02	1,10E-01	0,00E+00	-6,45E-01
POCP	[kg NMVOC eq.]	7,28E-01	1,30E-01	3,03E-02	4,28E-02	3,29E-02	0,00E+00	-2,13E-01
ADPm ¹	[kg Sb eq.]	1,44E-03	1,22E-04	7,72E-07	4,02E-05	1,48E-05	0,00E+00	-7,70E-05
ADPf ¹	[MJ]	2,60E+03	5,30E+02	2,90E+01	1,74E+02	1,25E+02	0,00E+00	-5,26E+02
WDP ¹	[m ³ world eq. deprived]	4,88E+01	2,98E+00	8,50E-02	9,79E-01	7,37E+00	0,00E+00	-1,21E+01
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication - aquatic freshwater; EP-marine = Eutrophication - aquatic marine; EP-terrestrial = Eutrophication - terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential - minerals and metals; ADPf = Abiotic Depletion Potential - fossil fuels; WDP = water depletion potential							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.							

ADDITIONAL ENVIRONMENTAL IMPACTS PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (1)	C3 (1)	C4 (1)	D (1)
PM	[Disease incidence]	INA	INA	INA	INA	INA	INA	INA
IRP ²	[kBq U235 eq.]	INA	INA	INA	INA	INA	INA	INA
ETP-fw ¹	[CTUe]	INA	INA	INA	INA	INA	INA	INA
HTP-c ¹	[CTUh]	INA	INA	INA	INA	INA	INA	INA
HTP-nc ¹	[CTUh]	INA	INA	INA	INA	INA	INA	INA
SQP ¹	-	INA	INA	INA	INA	INA	INA	INA
Caption	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 = Soil Quality (dimensionless)							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience 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 PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (1)	C3 (1)	C4 (1)	D (1)
PERE	[MJ]	1,37E+04	9,09E+00	1,77E-01	2,99E+00	7,63E+00	0,00E+00	-4,95E+03
PERM	[MJ]	6,29E+03	0,00E+00	0,00E+00	0,00E+00	-6,07E+03	0,00E+00	0,00E+00
PERT	[MJ]	1,99E+04	9,09E+00	1,77E-01	2,99E+00	-6,06E+03	0,00E+00	-4,95E+03
PENRE	[MJ]	2,63E+03	5,30E+02	2,90E+01	1,74E+02	1,25E+02	0,00E+00	-5,26E+02
PENRM	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	2,63E+03	5,30E+02	2,90E+01	1,74E+02	1,25E+02	0,00E+00	-5,26E+02
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	3,11E-03	3,15E-05	1,02E-03	7,06E-05	0,00E+00	-2,18E-02
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	1,63E+00	7,34E-02	2,07E-03	2,41E-02	1,73E-01	0,00E+00	-3,12E-01
Caption	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							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							

WASTE CATEGORIES AND OUTPUT FLOWS PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (1)	C3 (1)	C4 (1)	D (1)
HWD	[kg]	9,89E-02	7,73E-01	3,24E-02	2,54E-01	8,62E-01	0,00E+00	-2,28E+00
NHWD	[kg]	2,56E+01	1,63E+01	4,43E-01	5,36E+00	1,56E+01	0,00E+00	-7,96E+01
RWD	[kg]	3,58E-02	1,71E-04	3,18E-06	5,61E-05	2,45E-04	0,00E+00	-2,07E-03
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	8,53E+00	0,00E+00	0,00E+00	0,00E+00	4,34E+02	0,00E+00	0,00E+00
MER	[kg]	2,37E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	3,04E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							

The following tables present LCI and LCIA results from **Scenario 2 (100% Incineration)**.

ENVIRONMENTAL IMPACTS PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (2)	C3 (2)	C4 (2)	D (2)
GWP-total	[kg CO ₂ eq.]	-5,42E+02	3,77E+01	2,22E+00	8,25E+00	7,32E+02	0,00E+00	-6,99E+01
GWP-fossil	[kg CO ₂ eq.]	1,31E+02	3,77E+01	2,22E+00	8,24E+00	4,63E+01	0,00E+00	-6,97E+01
GWP-biogenic	[kg CO ₂ eq.]	-6,73E+02	0,00E+00	0,00E+00	0,00E+00	6,86E+02	0,00E+00	0,00E+00
GWP-luluc	[kg CO ₂ eq.]	5,62E-01	1,25E-02	1,93E-04	2,74E-03	2,46E-03	0,00E+00	-1,28E-01
ODP	[kg CFC 11 eq.]	9,71E-06	7,49E-07	3,39E-08	1,64E-07	1,96E-07	0,00E+00	-3,43E-06
AP	[mol H ⁺ eq.]	7,30E-01	7,84E-02	2,00E-02	1,72E-02	1,00E-01	0,00E+00	-1,59E-01
EP-freshwater	[kg P eq.]	1,43E-02	2,55E-03	6,46E-05	5,58E-04	5,74E-03	0,00E+00	-1,85E-02
EP-marine	[kg N eq.]	2,60E-01	1,88E-02	9,28E-03	4,12E-03	4,44E-02	0,00E+00	-4,28E-02
EP-terrestrial	[mol N eq.]	2,93E+00	2,03E-01	1,02E-01	4,45E-02	4,38E-01	0,00E+00	-4,93E-01
POCP	[kg NMVOC eq.]	7,28E-01	1,30E-01	3,03E-02	2,85E-02	1,15E-01	0,00E+00	-1,59E-01
ADPm ¹	[kg Sb eq.]	1,44E-03	1,22E-04	7,72E-07	2,68E-05	2,55E-05	0,00E+00	-2,77E-04
ADPf ¹	[MJ]	2,60E+03	5,30E+02	2,90E+01	1,16E+02	1,81E+02	0,00E+00	-1,15E+03
WDP ¹	[m ³ world eq. deprived]	4,88E+01	2,98E+00	8,50E-02	6,53E-01	1,10E+01	0,00E+00	-7,46E+01
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication - aquatic freshwater; EP-marine = Eutrophication - aquatic marine; EP-terrestrial = Eutrophication - terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential - minerals and metals; ADPf = Abiotic Depletion Potential - fossil fuels; WDP = water depletion potential							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.							

ADDITIONAL ENVIRONMENTAL IMPACTS PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (2)	C3 (2)	C4 (2)	D (2)
PM	[Disease incidence]	INA	INA	INA	INA	INA	INA	INA
IRP ²	[kBq U235 eq.]	INA	INA	INA	INA	INA	INA	INA
ETP-fw ¹	[CTUe]	INA	INA	INA	INA	INA	INA	INA
HTP-c ¹	[CTUh]	INA	INA	INA	INA	INA	INA	INA
HTP-nc ¹	[CTUh]	INA	INA	INA	INA	INA	INA	INA
SQP ¹	-	INA	INA	INA	INA	INA	INA	INA
Caption	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 = Soil Quality (dimensionless)							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							
Disclaimers	¹ The results of this environmental 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 PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (2)	C3 (2)	C4 (2)	D (2)
PERE	[MJ]	1,37E+04	9,09E+00	1,77E-01	1,99E+00	9,03E+00	0,00E+00	-7,04E+02
PERM	[MJ]	6,29E+03	0,00E+00	0,00E+00	0,00E+00	-6,07E+03	0,00E+00	0,00E+00
PERT	[MJ]	1,99E+04	9,09E+00	1,77E-01	1,99E+00	-6,06E+03	0,00E+00	-7,04E+02
PENRE	[MJ]	2,63E+03	5,30E+02	2,90E+01	1,16E+02	1,81E+02	0,00E+00	-1,15E+03
PENRM	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	2,63E+03	5,30E+02	2,90E+01	1,16E+02	1,81E+02	0,00E+00	-1,15E+03
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	3,11E-03	3,15E-05	6,80E-04	3,87E-04	0,00E+00	-9,82E-04
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	1,63E+00	7,34E-02	2,07E-03	1,61E-02	2,57E-01	0,00E+00	-1,81E+00
Caption	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							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							

WASTE CATEGORIES AND OUTPUT FLOWS PER M3 OF GLULAM								
Parameter	Unit	A1-A3	A4	C1	C2 (2)	C3 (2)	C4 (2)	D (2)
HWD	[kg]	9,89E-02	7,73E-01	3,24E-02	1,69E-01	3,98E+00	0,00E+00	-2,94E+00
NHWD	[kg]	2,56E+01	1,63E+01	4,43E-01	3,57E+00	4,22E+02	0,00E+00	-9,39E+01
RWD	[kg]	3,58E-02	1,71E-04	3,18E-06	3,74E-05	2,61E-04	0,00E+00	-2,43E-03
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	8,53E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	[kg]	2,37E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,78E+02	0,00E+00	0,00E+00
EET	[MJ]	3,04E+01	0,00E+00	0,00E+00	0,00E+00	1,37E+03	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy							
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.							

BIOGENIC CARBON CONTENT PER M3 OF GLULAM		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	186,8
Biogenic carbon content in accompanying packaging	[kg C]	0,2
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

Additional information

Technical information on scenarios

Transport to the building site (A4)

Scenario information	Value	Unit
Fuel type	Diesel	-
Vehicle type	Lorry, 16-32 tons	-
Transport load and distance	198	tkm

End-of-Life (C1-C4)

Scenario 1 (100% recycling) information	Value	Unit
Collected separately	1	m ³
For recycling	1	m ³

Scenario 2 (100% incineration) information	Value	Unit
Collected with mixed waste	1	m ³
For energy recovery	1	m ³

Re-use, recovery and recycling potential (D)

Scenario 1 (100% recycling) information	Value	Unit
Displaced material	1	m ³

Scenario 2 information/Material	Value	Unit
Electrical energy recovery from waste incineration	678	MJ
Thermal energy recovery from waste incineration	1370	MJ

Indoor air

The EPD does not give information on the release of dangerous substances to indoor air. The horizontal standards of the relevant measurements are not available.

Read more in EN15804+A1, Chapter 7.4.1.

Soil and water

The EPD does not give information on the release of dangerous substances to soil and water. The horizontal standards of the relevant measurements are not available.

Read more in EN15804+A1, Chapter 7.4.2.

References

Publisher	 epddanmark www.epddanmark.dk Template version 2024.2
Programme operator	Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	 Transition Transition ApS Regnbuepladsen 7, DK-1550 København V https://transition.nu/ Att. Lukas Blander Enevoldsen, Emma Ekebjærg & Hannibal Holm Johansen
LCA software/background data	SimaPro v.9.6.0.1 ecoinvent v.3.10 (EN 15804 database)
3rd party verifier	Mie Ostenfeldt Ostenfeldt Consulting Verified according to Verification Checklist 1, v. 2.8 

General programme instructions

General Programme Instructions, version 2.0, spring 2020
www.epddanmark.dk

EN 15804

DS/EN 15804+A2:2019 - "Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products"

EN 16485

DS/EN 16485:2014 - "Product category rules for wood and wood-based products for use in construction"

EN 15942

DS/EN 15942:2011 - "Sustainability of construction works - Environmental product declarations - Communication format business-to-business"

ISO 14025

DS/EN ISO 14025:2010 - "Environmental labels and declarations - Type III environmental declarations - Principles and procedures"

ISO 14040

DS/EN ISO 14040:2008 - "Environmental management - Life cycle assessment - Principles and framework"

ISO 14044

DS/EN ISO 14044:2008 - "Environmental management - Life cycle assessment - Requirements and guidelines"