



Owner: No.: Issued: Valid to:

yst ApS 1D-23128-Ef 1-11-2023 1-11-2028

3rd PARTY VERIFIED

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804







Owner of declaration

TYST ApS Valdemars Have 9,1.th 8000 Aarhus C CVR-nr.: 38 19 07 25

Program

EPD Danmark www.epddanmark.dk

 \Box Industry EPD \boxtimes Product EPD

Declared product(s)

Acoustic Panels

Number of declared datasets/product variations: 2

Production site

TYST ApS Valdemars Have 9,1.th 8000 Aarhus C Denmark

Product(s) use

Acoustic panels of glass wool and textile.

Declared/ functional unit.

 $1m^2$ of acoustic panels of either 40mm thickness (class A acoustic) or 20 mm (class D acoustic).

Year of data

1/1-2022 to 31/12-2022

EPD version First version

Kepddanmark

Issued: 21-11-2023

Valid to: 21-11-2028

Basis of calculation

This EPD is developed in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing 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

⊠ external

internal

Third party verifier:



Kim Christiansen

renjer Martha Katrine Sørensen EPD Danmark

System boundary (X = included in LCA; MND = module not declared) Beyond Construction Product End of life Use system process boundary Manufacturing Raw material Refurbishmen Maintenance Replacement construction Construction recovery-recycling potential energy use Operational installation Operationa water use Transport demolition Transport processing Transport Disposal process Waste Reusesupply Repair De-Use 4 A1 A2 A3 A4 Α5 Β1 B2 B3 Β4 B5 B6 Β7 C1 C2 C3 C4 D Х Х MND MND MND MND MND MND Х Х Х Х Х MND MND MND Х



Product information

Product description

The main product components are shown in the table below.

For a thickness of acoustic panels of 20mm

Material	Weight-% of product	Kg/declared product	
Glass wool panel	63.5	1.960	
Textile	19.4	0.600	
Glue	16.7	0.514	
Adhesive paper tape	0.4	0.013	
Total	100	3.09	

For a thickness of acoustic panels of 40mm

Material	Weight-% of product	Kg/declared product	
Glass wool panel	77.7	3.920	
Textile	11.9	0.600	
Glue	10.2	0.514	
Adhesive paper tape	0.3	0.013	
Total	100	5.05	

The packaging materials are shown in the table below.

The amount of packaging is considered the same for acoustic panels of 20mm and 40mm of thickness.

Packaging	Weight-% of packaging	Kg/declared product
Wood pallets	9.7	0.1
Plastic film	3.3	0.034
Cardboard	87.0	0.899
Total	100	1.033

The textile covered acoustic panels described in this declaration are composed of an acoustic panel of glass wool, cut to the required dimension on top of which a textile is glued and maintained by a paper tape on the sides.

The finished product is referred to as textile covered acoustic panels.

The acoustic panels are used to reduce noise level and eliminate echoes in a room.

The acoustic panels are created in the requested size at Tyst assembly facility and do not need adjusting by the customer. The acoustic panels are part of the interieur of a building, part of the interieur design.

Representativity

This declaration, including data collection and the modeled life cycle, represents the production of $1m^2$ of textile covered acoustic panel on the production site located in Aarhus, Denmark. Product specific data are based on average values collected in the period 1/1-2022 to 31/12-2022. Environmental data are based on the ecoinvent 3.9 datasets and are less than 10 years old. Generally, the used environmental datasets are of good quality, and most of the datasets are less than 5 years old.

Hazardous substances

Textile covered acoustic panel does not contain substances listed in the" Candidate List of Substances of Very High Concern for authorization"

(http://echa.europa.eu/candidate-list-table)

Essential characteristics

Further technical information can be obtained by contacting the manufacturer or on the manufacturer's website:

https://www.tyst-panels.com/specifications

Reference Service Life (RSL)

The RSL of the finished product is based on the glass wool RSL, showing that a 50-year life. The lifetime of the textile covered acoustic panels bares no relation with the room in which it is placed.

Pictures of product(s)







LCA background

Declared unit

The LCI and LCIA results in this EPD relates to $1m^2$ of described textile covered acoustic panels, $1m^2$ of acoustic panels of either 40mm thickness (class A acoustic) or 20 mm (class D acoustic). As the panels are sold in both standard dimensions and order specific dimensions, the declared unit is set at 1 m² and tables values calculated for the most common standard dimensions for both class A and D.

Table 1 - Standard dimensions of acoustic panels in both20mm and 40mm thickness

Standard Dimension (mxm)	Surface (m ²)
0.600x1.200	0.72
0.800x1.200	0.96
1.200x1.200	1.44
1.200x1.600	1.92
1.200x1.800	2.16
1.200x2.400	2.88

The reference product was a density as shown in the table below kg/m³. For the calculation of the results in this declaration averages are formed based on the production volumes at Tyst A/S plant in Denmark. This approach is considered conservative, as it contains all waste related to production and all energy use for supporting equipment.

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804, and the PCR EN15804+A2 and the PCR EN16485.

Name	Value for 20mm thickness	Value for 40mm thickness	Unit
Declared unit	1	1	1m ² textile covered acoustic panel
Density (calculated based on mass balance for each final product)	154	126	kg/m ³
Conversion factor to 1 kg	8x10 ⁻³	7x10 ⁻³	M³/kg

Guarantee of Origin – certificates Module A1-A3 is modeled using the residual mix in DK, while module C2, C3, C4 and D are modeled using the electricity mix in DK.

Foreground system:

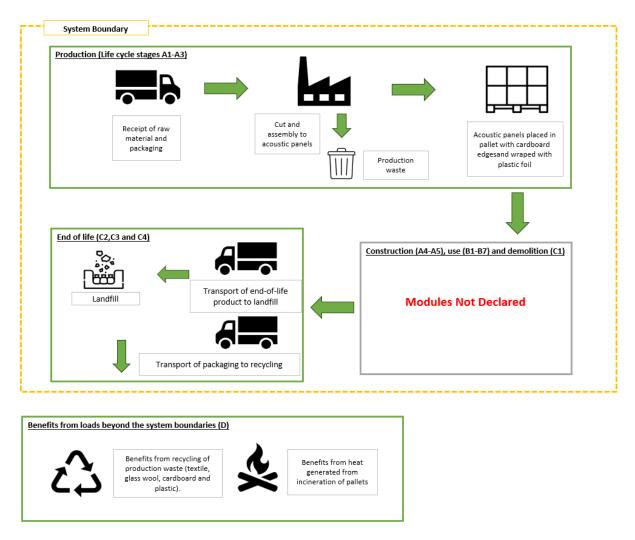
The product is produced using electricity not covered by certificates on green electricity. The electricity is used for the manufacturing at TYST's production sites in Denmark. No other energy processed are included in the foreground.

Background system:

Both upstream and downstream processes are modelled using grid mix.



Flowdiagram



The Flow diagram conforms with the requirements in the modular approach and shows phases even though not all are declared. The phases are described below.

System boundary

This EPD is based on a cradle-to-gate LCA, in which 100 weight-% is being accounted for.

The general rules for the exclusion of inputs and outputs follow the requirements in EN 15804, 6.3.5,. No processes in the included modules are excluded.

The production waste of Dana Lim glue has not been considered in the calculation as it is of 1% of the total glue used by Tyst.

Product stage (A1-A3) includes:

- A1 Extraction and processing of raw materials
- A2 Transport to the production site
- A3 Manufacturing processes

The product stage comprises the acquisition of all raw materials and packaging materials, products and energy, transport to the production site, and waste processing up to the" end-of-waste" state or final disposal. The LCA results are declared in aggregated form for the product stage, which means, that the sub-modules A1, A2 and A3 are declared as one module A1-3.



The glass wool acoustic panel arrives in the desired thickness and is cut to the dimensions of the customer's order. The chosen textile, either polyethylene or polyester in the desired color is cut and fixed to the acoustic panel with glue. The sides of the textile to the acoustic panel are then maintained by paper tape. Once an order is complete, it is placed on pallets, separated by carboard edges, and wrapped in LDPE stretching wrap before shipment.

Construction process stage (A4-A5) includes:

Stage A4 and A5 are not declared in this study.

Use stage (B1-B7) includes:

Stage B1-B7 are not declared in this declaration.

End of Life (C1-C4) includes:

The end-of-life stage includes:

C1 - de-construction, demolition
C2 - transport to waste processing
C3 - waste processing for reuse, recovery and/or recycling
C4 - disposal

Manual deconstruction is assumed for C1; therefore, no impacts are assigned.

The impact assigned to C2 is the transportation of the end-of-life product to landfill.

There is no impact assigned to module C3 as there is no need for process prior to recycling

plastic and cardboard in Denmark. As no paper is used in the process, there is no need for considering a waste process that would separate carboard form paper before its recycling.

It is assumed that the several materials composing the textile covered acoustic panels will not be separated in end of life. Moreover, glass wool has a high incineration temperature (>500°C). Therefore, it is modelled in C4 that the whole product will be 100% landfilled disposed.

Reuse, recovery, and recycling potential (D) includes:

The credits from recycling of glass wool, textile waste, cardboard and plastic waste as well as the disposal of wooden pallets (electricity recovery) are assigned to module D.

The benefits of recycling are calculated using current average substitution processes. Electricity gained from waste incineration is modelled based on the Calorific value of wood and the efficiency of conversion to electricity by combustion.

Electricity generated from waste is credited for with the specific electricity mix for Denmark. This is not applied for materials that are landfilled as the avoided impact of electricity production and/or thermal energy recovery from landfill gas recovery is not modeled. For the recycling of packaging material used for the acoustic panels in module A1-3 it is important that no double counting occurs.



LCA results for 40mm thickness acoustic panels

	ENVIRONMENTAL IMPACTS PER [The LCI and LCIA results in this EPD relates to 1m ² of textile covered acoustic panel of a thickness of 40mm]					
Indicator	Unit	A1-3	C2	C4	D	
GWP-total	kg CO₂ eq.	1.20E+01	2.65E-02	3.28E-02	-2.01E-01	
GWP-fossil	kg CO₂ eq.	1.28E+01	2.64E-02	3.25E-02	-5.00E-01	
GWP-biogenic	kg CO ₂ eq.	-8.37E-01	2.38E-05	2.61E-04	2.99E-01	
GWP-luluc	kg CO ₂ eq.	1.13E-02	1.04E-05	3.29E-05	-5.76E-04	
ODP	kg CFC 11 eq.	8.97E-06	6.11E-09	9.89E-09	-6.14E-08	
AP	mol H ⁺ eq.	6.42E-02	1.07E-04	2.74E-04	-2.15E-03	
EP-freshwater	kg P eq.	2.89E-03	1.70E-06	9.43E-06	-1.42E-04	
EP-marine	kg N eq.	1.47E-02	3.23E-05	9.45E-05	-5.64E-04	
EP-terrestrial	mol N eq.	1.95E-01	3.53E-04	1.03E-03	-7.16E-03	
POCP	kg NMVOC eq.	4.73E-02	1.08E-04	2.98E-04	-1.72E-03	
ADPm ¹	kg Sb eq.	1.54E-04	9.19E-08	1.06E-07	-4.06E-06	
ADPf ¹	МЈ	1.58E+02	3.99E-01	7.64E-01	-6.03E+00	
WDP ¹	m ³ world eq. deprived	6.27E+00	1.20E-03	3.33E-02	-3.09E-01	
Caption			ODP = O EP-freshwater = Eutr Eutrophication – aqu terrestrial; POCP = P Depletion Potential –	VP-biogenic = Global Wa	rming Potential - biogenic se and land use change; idification; shwater; EP-marine = ial = Eutrophication - ation; ADPm = Abiotic DPf = Abiotic Depletion	
Disclaimer					l be used with care as the re is limited experienced	



			TAL IMPACTS PER le covered acousti		
Parameter	Unit	A1-3	C2	C4	D
РМ	[Disease incidence]	6.94E-07	2.28E-09	5.50E-09	-2.54E-08
IRP ²	[kBq U235 eq.]	7.31E-01	2.05E-03	3.60E-03	-4.87E-02
ETP-fw ¹	[CTUe]	2.28E+02	3.12E-01	5.44E-01	-7.31E+00
HTP-c ¹	[CTUh]	1.93E-08	1.01E-11	2.34E-11	-6.19E-10
HTP-nc ¹	[CTUh]	1.57E-07	3.28E-10	3.67E-10	-4.89E-09
SQP ¹	-	1.59E+02	2.74E-01	1.83E+00	-3.30E+01
	Caption Captio			P-c = Human toxicity -	
			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.		
Disclaimers			ionizing radiation on h consider effects due to nor due to radioactive ionizing radiation from	deals mainly with the even numan health of the nuclear possible nuclear accidents waste disposal in undergr the soil, from radon and is also not measured by th	ar fuel cycle. It does not s, occupational exposure ound facilities. Potential from some construction

	RESOURC		he LCI and LCIA resured acoustic panel of		
Parameter	Unit	A1-3	C2	C4	D
PERE	[MJ]	-3.47E+01	-4.21E-03	-9.67E-03	2.10E+00
PERM	[MJ]	6.15E+01	5.63E-03	1.30E-02	-7.49E+00
PERT	[MJ]	2.68E+01	1.42E-03	3.37E-03	-5.39E+00
PENRE	[MJ]	-1.65E-02	-1.66E-05	-1.38E-04	4.43E-04
PENRM	[MJ]	1.58E+02	3.99E-01	7.64E-01	-6.03E+00
PENRT	[MJ]	1.58E+02	3.99E-01	7.64E-01	-6.03E+00
SM	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	[m ³]	2.76E-01	4.45E-05	8.07E-04	-1.49E-02
Caption			energy resources used as r energy resources used as primary energy resources; excluding non renewable p	s raw materials; PERT = T PENRE = Use of non ren primary energy resources newable primary energy re use of non renewable prin aterial; RSF = Use of rene	e of renewable primi otal use of renewabl ewable primary ener used as raw materia esources used as raw nary energy resource wable secondary fue



			UTPUT FLOWS PER [The LCI and LCIA results in ile covered acoustic panel of a thickness of 40mr			
Parameter	Unit	A1-3	C2	C4	D	
HWD	[kg]	2.94E-03	1.04E-06	1.18E-06	-1.73E-05	
NHWD	[kg]	2.37E+00	2.05E-02	3.09E+00	-6.12E-02	
RWD	[kg]	3.57E-04	2.70E-06	4.57E-06	-1.63E-05	
CRU	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
MFR	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
MER	[kg]	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	
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Caption			disposed; RWD = Radi use; MFR = Materials f	I waste disposed; NHWD = oactive waste disposed; C for recycling; MER = Mate electrical energy; EET = Expo	CRU = Components for rials for energy recover	

BIOGENIC CARBON CONTENT PER [The LCI and LCIA results in this EPD relates to 1m² of textile covered acoustic panel of a thickness of 40mm]						
Parameter	Unit	At the factory gate				
Biogenic carbon content in product	kg C	0				
Biogenic carbon content in accompanying packaging	kg C	0.05				



LCA results for 20mm thickness acoustic panels.

				d LCIA results in th el of a thickness of	
Indicator	Unit	A1-3	C2	C4	D
GWP-total	kg CO ₂ eq.	9.05E+00	2.65E-02	3.28E-02	-2.01E-01
GWP-fossil	kg CO ₂ eq.	9.69E+00	2.64E-02	3.25E-02	-5.00E-01
GWP-biogenic	kg CO ₂ eq.	-6.72E-01	2.38E-05	2.61E-04	2.99E-01
GWP-luluc	kg CO ₂ eq.	3.00E-02	1.04E-05	3.29E-05	-5.76E-04
ODP	kg CFC 11 eq.	8.24E-06	6.11E-09	9.89E-09	-6.14E-08
AP	mol H ⁺ eq.	5.64E-02	1.07E-04	2.74E-04	-2.15E-03
EP-freshwater	kg P eq.	2.82E-03	1.70E-06	9.43E-06	-1.42E-04
EP-marine	kg N eq.	1.34E-02	3.23E-05	9.45E-05	-5.64E-04
EP-terrestrial	mol N eq.	1.67E-01	3.53E-04	1.03E-03	-7.16E-03
POCP	kg NMVOC eq.	4.01E-02	1.08E-04	2.98E-04	-1.72E-03
ADPm ¹	kg Sb eq.	1.23E-04	9.19E-08	1.06E-07	-4.06E-06
ADPf ¹	MJ	1.42E+02	3.99E-01	7.64E-01	-6.03E+00
WDP ¹	m ³ world eq. deprived	6.58E+00	1.20E-03	3.33E-02	-3.09E-01
Caption			Potential - fossil fuels; GWP-luluc = Global ODP = EP-freshwater = Eutrophication – terrestrial; POCP Depletion Potentia	(arming Potential - total; GV (arming Potential - land wa Warming Potential - land wa = Ozone Depletion; AP = Ac Eutrophication - aquatic fre aquatic marine; EP-terrestr = Photochemical zone form al - minerals and metals; Al	arming Potential - biogenic ise and land use change; idification; shwater; EP-marine = ial = Eutrophication - ation; ADPm = Abiotic DPf = Abiotic Depletion
Disclaimer			¹ The	ential – fossil fuels; WDP = v e results of this environment are as the uncertainties on t there is limited experienced	al indicator shall be used hese results are high or as



				R [The LCI and LC tic panel of a thicl	
Parameter	Unit	A1-3	C2	C4	D
PM	[Disease incidence]	6.47E-07	2.28E-09	5.50E-09	-2.54E-08
IRP ²	[kBq U235 eq.]	7.60E-01	2.05E-03	3.60E-03	-4.87E-02
ETP-fw ¹	[CTUe]	2.33E+02	3.12E-01	5.44E-01	-7.31E+00
HTP-c ¹	[CTUh]	1.40E-08	1.01E-11	2.34E-11	-6.19E-10
HTP-nc ¹	[CTUh]	1.51E-07	3.28E-10	3.67E-10	-4.89E-09
SQP ¹	-	1.86E+02	2.74E-01	1.83E+00	-3.30E+01
	Caption Captio			TP-c = Human toxicity -	
			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.		
Disclaimers			ionizing radiation on consider effects due t nor due to radioactiv ionizing radiation fro	y deals mainly with the ev human health of the nucle to possible nuclear acciden we waste disposal in under m the soil, from radon and s is also not measured by	ear fuel cycle. It does not its, occupational exposure ground facilities. Potential d from some construction

	RESOURCE USE PER [The LCI and LCIA results in this EPD relates to 1m ² of textile covered acoustic panel of a thickness of 20mm]				
Parameter	Unit	A1-3	C2	C4	D
PERE	[MJ]	-2.25E+01	-4.21E-03	-9.67E-03	2.10E+00
PERM	[MJ]	5.78E+01	5.63E-03	1.30E-02	-7.49E+00
PERT	[MJ]	3.53E+01	1.42E-03	3.37E-03	-5.39E+00
PENRE	[MJ]	-3.75E-02	-1.66E-05	-1.38E-04	4.43E-04
PENRM	[MJ]	1.42E+02	3.99E-01	7.64E-01	-6.03E+00
PENRT	[MJ]	1.42E+02	3.99E-01	7.64E-01	-6.03E+00
SM	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	[m ³]	2.48E-01	4.45E-05	8.07E-04	-1.49E-02
Caption			resources used as raw m resources used as raw m energy resources; PENRE non renewable primary en of non renewable primary Total use of non renewabl material; RSF = Use o	primary energy excluding re- primary energy excluding re- materials; PERM = Use of rer materials; PERT = Total use E = Use of non renewable pr ergy resources used as raw y energy resources used as e primary energy resources f renewable secondary fuels ondary fuels; FW = Net use	newable primary energy of renewable primary rimary energy excludi materials; PENRM = raw materials; PENRT ;; SM = Use of second s; NRSF = Use of non



	EPD relates	to 1m ² of text	ile covered acousti	c panel of a thick	ness of 20mn
Parameter	Unit	A1-3	C2	C4	D
HWD	[kg]	2.71E-03	1.04E-06	1.18E-06	-1.73E-05
NHWD	[kg]	1.90E+00	2.05E-02	3.09E+00	-6.12E-02
RWD	[kg]	3.43E-04	2.70E-06	4.57E-06	-1.63E-05
CRU	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	[kg]	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
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Caption			disposed; RWD = Rad re-use; MFR = Mate	 /aste disposed; NHWD = ioactive waste disposed; rials for recycling; MER rted electrical energy; EET	; CRU = Component = Materials for ener

BIOGENIC CARBON CONTENT PER [The LCI and LCIA results in this EPD relates to 1m ² of textile covered acoustic panel of a thickness of 20mm]			
Parameter	Unit	At the factory gate	
Biogenic carbon content in product	kg C	0	
Biogenic carbon content in accompanying packaging	kg C	0.05	

Additional information

LCA interpretation

A contribution analysis shows that the aggregated modules A1-3, are fare the most contribution modules to any of the impact categories. This aligns well with the expectation that the larges flows entering and leaving the system are associated with the larges emissions.

Technical information on scenarios

Reference service life

RSL information	Unit	
Reference service Life	50 years	
Declared product properties	https://www.tyst-panels.com/documents	
Design application parameters	https://www.tyst-panels.com/specifications	
Assumed quality of work	-	
Outdoor environment	NA	
Indoor environment	-	
Usage conditions	https://www.tyst-panels.com/specifications	
Maintenance	https://www.tyst-panels.com/specifications	

Use (B1-B7)

Scenario information	Value	Unit
Not relevant		

End of life (C1-C4)

Scenario information	Value for 40mm thickness	Value for 20mm thickness	Unit
For final disposal (landfill)	5.008	3.048	[kg/declared product]

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

Scenario information/Materiel	Value for both thickness	Unit
Ecophon -recycling Waste	0.166	[kg/declared product]
Textile waste end of life recycling	0.002	[kg/declared product]
Cardboard- Recycling Waste	0.993	[kg/declared product]
Plastic - Recycling Waste	0.058	[kg/declared product]
Wood pallets - incineration	0.100	[kg/declared product]

Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on measurement of release of regulated dangerous substances from construction products using harmonized test methods according to the provisions of the respective technical committees for European product standards are not available.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on measurement of release of regulated dangerous substances from construction products using harmonized test methods according to the provisions of the respective technical committees for European product standards are not available.





References

Publisher	www.epddanmark.dk
Program operator	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	SOLUTIONS Elsa Jarrige CO2Solutions Hindkjærvej 3 Mejrup 7500 Holstebro
LCA software /background data	SimaPro, version 9.2.0.2 Ecoinvent v. 3.9 from 2022
3 rd party verifier	Kim Christiansen, kimconsult.dk

General program instructions

Version 2.0 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 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"