Agrodome
Advice & Development

Environmental Product Declaration

According to the EN 15804 +A2

Accoya® cladding

Scope of the declaration

Type of the EPD is Cradle to grave, including modules A - D.
According to the EN 15804 + A2.
The LCA was carried out by Agrodome B.V.

Based on production data from Accsys Technologies.

Release Date: 18 February 2022
Validity for: 5 years

Functional unit: 1 m^2

Goal and Target Group

Goal

This declaration covers the environmental effects throughout the lifetime of the product Accoya® cladding.

Target audience

The EPD can be used for building or building part level assessments by designers, architects, constructors, developers etc. The EPD is made for business-to-business communication and can be used for business-to-consumer communication purposes. The background EPD report is third party verified.

Product description

Accoya® wood is made of Radiata Pine (species) from New Zealand. The sawn wood is transported to Arnhem where it is acetylated. The acetylation process increases the stability and reduces the impact of natural elements significantly. For this reason warranties are provided up until 50 years, with an expected service life of a minimum of 60 years. During acetylation, the hydroxyl groups within the wood are replaced by acetyl groups, which are more chemically stable and attract less moisture. Minimal acetic anhydride or acetic acid residue is present in the final product (<0.5%), making Accoya® a non-toxic material, resulting in wood that can be burned/processed similarly to non-modified wood.

Accoya® wood is a modified wood product, which means it can be used in various circumstances. The wood can made in various dimensions, depending on the application and demands of the end-user.
It is recommended to use stainless steel fasteners in accordance with EN 10088-1, for example fasteners made of A2 or A4 stainless steel.

Accoya® wood is certified as FSC® mix (minimal 70% FSC® and the rest controlled wood) and Cradle to Cradle® Gold among other certificates. Please consult the website for an up-to-date overview of the sustainability credentials. https://www.accoya.com/uk/sustainability/ecolabels-acquired/

Accoya® cladding

Accoya® wood can be used for cladding, because it has a durability class I (EN 350). The factory in Arnhem delivers planks of Accoya® that can be processed by their partners into the desired shape and dimensions. The construction can vary depending on the demands and wishes of the buyer. In this study, the information from Centrum Hout in their brochure "Houtwijzer, gevelbekleding van massief hout" (2017), is used. The cladding consist of Accoya® planks, 185 mm width, 15 mm thick with a spacing of 7 mm, including fasteners, with a framework (22mmx50mm| 60cm spacing) of spruce and a water protecting foil.

Composition Accoya®, cladding

Material	Share
Accoya® wood	88 %
Spruce	11 %
Nails	<1 %
Foil	<1 %

Technical data Accoya® wood

Durability	Class I (EN 350)
Density	average 515 kg / m³, on delivery
Fire resistance class	C (ASTM E84); D (EN14915)
Heat transfer (λ)	0,12 W/m·K (EN 12667)
Bending strength	40 N/mm² (EN 408)
Flexibility	8800 N/mm² (EN 408)
Hardness (Janka) Hardness (Brinel)	side 4100 N, end grain 6600 N (ASTM D143) 2,4 kgf/mm²
Shrink (wet to 65% RH at 20 °C) Shrink (wet to oven dry)	Radial 0.4% Tangential 0.8% Radial 0.7% Tangential 1.5%
Equilibrium moisture content	3 - 5% at 65% relative humidity, 20 °C

LCA calculation rules

Functional unit

Accoya®, cladding

Accoya® cladding made of acetylated Radiata pine, which originated from sustainably managed forest, 185 mm width, 15mm thick with a spacing of 7mm, including fasteners, with a framework of spruce, foil, lifespan of 60 years, calculated back to 1 m²

Name	**Value**	**Unit**
Functional unit	1.00	m²
Weight	8.46	kg/FU

Reference Service Life

The service life specified by the manufacturer is 60 years for the correct application of the product and the maintenance schedule recommended by the manufacturer

There is no post-consumer take-back program. Considering the longevity of Accoya®, the company has not been in existence long enough for this type of initiative. Accsys, the producer of Accoya® wood has a pre-consumer offcuts take-back reuse scheme in place, which collects offcuts to be reprocessed into another product. This is not included in the calculations.

Biogenic carbon storage

Biogenic carbon storage during the lifetime of Accoya® cladding is calculated according to the EN16449, and with 1 kg biogenic carbon as equivalent to 44/12 kg of CO2:

12.98 kg CO2eq/m^2 = 3.54 kg C/m^2, including the spruce

Comparability

A comparison or evaluation of EPD data is only possible if all datasets have been made in accordance with EN 15804 and the same product-related standard properties and modules have been taken into account..

System boundaries

The LCA study was created for "Cradle to Grave" according to the modules below and are the basis for calculations or can be used for further calculations. All declared values relate to the specified functional unit. According to the European standard EN 15804+A2.

The environmental performance of building materials is categorized in four modules corresponding to different lifecycle phases in the building material; Modules A (production of materials and construction), B (use phase), C (end-of-life phase of the building) and D (loads and benefits outside the system boundary).

Product stage			Construction installation stage		Use stage							End of life stage					Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	Construction installation stage	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
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☒	☒	☒	☒		☒

For Accoya® cladding, all the modules A1 -D have been examined, except B6 and B7.

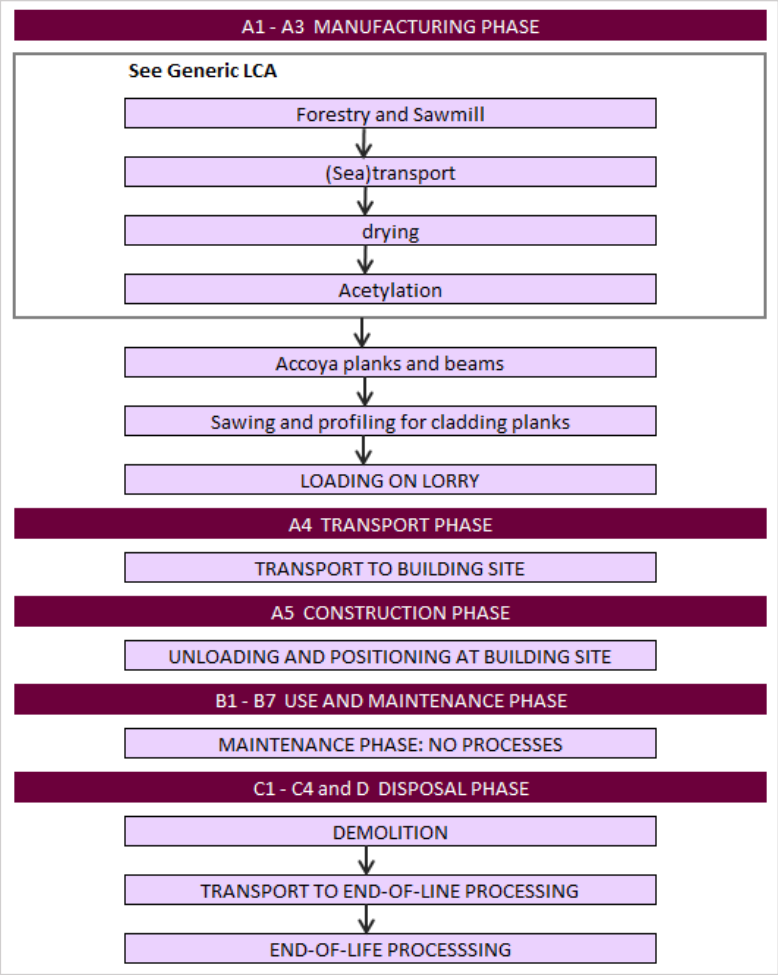
Allocations

There are no allocation's for the co-products of the Accoya® planks used for cladding.

Production process

The flowchart of the production process of Accoya® cladding is summarized in the flowchart. This flowchart includes the entire process from the base material to the waste phase.

Flowchart Accoya® cladding for 1m



Explanation Flowchart and Life Cycle per phase

Production phase (A1-3)

After the wood (Radiata Pine) acetylation process is complete the Accoya® planks are stored in Arnhem. To create the cladding planks, Accoya® planks are transported to a factory[1]. Here the planks are profiled and sawn to the requested dimensions.

Construction process phase (A4-5)

Transport to the construction site (A4)

For the transport to the construction site calculated values are taken. Based upon the market share in volumes for the European market a calculation is made of the average weighted transport distance from

[1] Unspecified, for the calculations the European mix based upon market shares is used

factory to the building site. The average distance is 539,30 km (based upon 96% of the transports). The transport to the construction site is assumed to be empty return, default value. For the process 'Transport, freight, lorry >32 metric ton, euro5 {RER}| market for transport, freight, lorry >32 metric ton, EURO5 | Cut-off, U' is used.

Processing and construction on the construction site (A5)

On the construction site the Accoya® wood is used for making the cladding. The water barrier foil and framework are adjusted and the Accoya® planks are fastened with stainless steel nails on the frame work at the site. For the construction of the cladding only (electric) hand tools are used. At the building site there is a minimal loss of materials since the materials are coming in the right sizes

Use phase (B1-7)

The products made from Accoya® do not need additional maintenance, during their life time, when installed and used correctly. Only manual cleaning with water and possibly detergent during the use phase. The Accoya® cladding does not release emissions during use.

End-of-life phase (C1-4)

A number of assumptions have been made for the end-of-life phase:

Disassembly and demolition (C1)

Disassembly and demolition takes place manually, not an industrial process.

Transport (C2)

Transport phase assumptions: 50 km to sorting installation and 100 km from demolition or sorting location to processing location. For the process 'Transport, freight, lorry >32 metric ton, euro5 {RER}| market for transport, freight, lorry >32 metric ton, EURO5 | Cut-off, U' is used.

Waste treatment (C3-C4)

A weighted calculation, based upon European market shares (Volume based) is used for the waste scenario of the wood: 27% landfill, 67% incineration and 6% recycling. For the steel 99% recycling and for the foil (85% incinerations, 10% landfill and 5% recycling).

Benefits and burdens outside the system boundary (D)

The income and expenses outside the system boundary relate to combustion in which energy use is avoided. The efficiency of heat and electricity recovery from waste material is 25.56% for heat and 13% for electricity.

LCA results

Core Environmental Indicators per FU (1 m²) EN 15804 + amendment A2, Accoya® cladding

Potential Environmental Impacts	Production			Construction process stage		Use stage							End-of-life stage				D Reuse, recovery, recycling
	A1 Raw material	A2 Transport	A3 manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	
CC total (kg CO2 equiv/FU)	1,85E+00	3,59E-02	3,49E-01	3,87E-01	-1,68E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,50E-01	7,85E+00	2,47E+00	-7,44E-01
CC fossil (kg CO2 equiv/FU)	1,18E+01	3,58E-02	3,22E-01	3,86E-01	6,70E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,50E-01	2,71E-01	2,37E-02	-3,01E+00
CC biogenic (kg CO2 equiv/FU)	-9,98E+00	7,51E-05	2,56E-02	8,09E-04	-2,35E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	3,15E-04	7,58E+00	2,45E+00	2,27E+00
CC luluc (kg CO2 equiv/FU)	7,03E-03	9,98E-06	9,19E-04	1,08E-04	1,32E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	4,19E-05	2,49E-05	1,07E-05	-2,53E-03
ODP (kg CFC 11 equiv/FU)	2,22E-06	8,41E-09	1,02E-08	9,06E-08	5,47E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	3,53E-08	5,96E-09	6,83E-09	-2,38E-07
AP (mol H+ equiv/FU)	6,20E-02	1,48E-04	2,30E-03	1,60E-03	3,81E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	6,21E-04	1,66E-03	1,90E-04	-8,55E-03
EP - freshwater (kg P equiv/FU)	4,39E-04	2,57E-07	4,71E-05	2,77E-06	2,84E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,08E-06	1,27E-06	4,41E-07	-1,44E-04
EP - marine (kg N equiv/FU)	1,33E-02	4,53E-05	3,00E-04	4,88E-04	8,58E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,90E-04	7,73E-04	1,25E-04	-1,16E-03

EP - terrestrial (mol N equiv/FU)	1,43E-01	4,99E-04	3,46E-03	5,38E-03	9,69E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,09E-03	8,84E-03	7,12E-04	-1,27E-02
POCP (kg NMVOC equiv/FU)	4,49E-02	1,60E-04	8,95E-04	1,73E-03	3,13E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	6,73E-04	2,31E-03	2,54E-04	-3,83E-03
ADP Elements (kg Sb equiv/FU)	1,44E-04	8,39E-08	3,30E-06	9,05E-07	1,31E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	3,52E-07	1,76E-07	7,43E-08	-5,62E-06
ADP fossil fuels (MJ/FU)	2,73E+02	5,58E-01	7,55E+00	6,01E+00	1,22E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,34E+00	5,97E-01	5,25E-01	-5,25E+01
WDP (m^3 water eq deprived /FU)	1,66E+01	1,78E-03	9,46E-02	1,92E-02	3,53E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	7,45E-03	1,21E-02	2,25E-02	-3,03E-01

CC total = Climate Change total; CC fossil = Climate Change fossil; CC biogenic= Climate Change biogenic; CC-luluc = Climate Change land use and land use change; ODP = Ozone Depletion Potential; AP = Acidification Potential for Soil and Water; EP = Eutrophication Potential; POCP = Photochemical Ozone Creation; ADPE = Abiotic Depletion Potential – Elements; ADPF = Abiotic Depletion Potential – Fossil Fuels; WDP = water use (Water (user) deprivation potential, deprivation-weighted water consumption)

Additional Environmental Indicators per FU (1 m^2) EN 15804 +A2, Accoya® cladding

Additional Impact Categories	Production			Construction process		Use stage							End-of-life stage				
	A1 Raw material	A2 Transport	A3 manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
PM (disease incidence)	2,69E-07	3,22E-09	5,77E-09	3,47E-08	8,64E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,35E-08	1,29E-08	3,64E-09	8,96E-09
IRHH (kg U235 eq/FU)	5,42E-01	2,45E-03	8,15E-02	2,64E-02	2,88E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,03E-02	1,56E-03	2,06E-03	-2,61E-01
ETF (CTUe/FU)	2,65E+02	4,28E-01	5,07E+00	4,61E+00	1,64E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,80E+00	1,22E+00	5,11E-01	-2,12E+01

HTCE (CTUh/FU)	5,76E-09	1,33E-11	1,40E-10	1,43E-10	8,96E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	5,56E-11	1,57E-09	1,79E-11	-2,11E-09
HTnCE (CTUh/FU)	1,54E-07	4,60E-10	4,23E-09	4,96E-09	1,23E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,93E-09	4,78E-09	5,06E-10	-1,70E-08
Land Use Related impacts (dimensionless)	3,53E+01	6,40E-01	1,48E+00	6,90E+00	2,10E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,68E+00	1,88E-01	1,25E+00	9,55E+01

HTCE = Human Toxicity – cancer effects; HTnCE = Human Toxicity – non cancer effects; ETF = Ecotoxicity – freshwater; (potential comparative toxic unit)

PM = Particulate Matter (Potential incidence of disease due to PM emissions);

IRHH = Ionizing Radiation – human health effects (Potential Human exposure efficiency relative to U235);

Parameters describing resource use_per FU (1 m^2) EN 15804 +A2, Accoya® cladding

Resource Use	Production			Construction		Use stage							End-of-life stage				
	A1 Raw material	A2 Transport	A3 manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
PERE (MJ/FU, net calorific value)	1,21E+01	6,81E-03	1,65E+00	7,34E-02	3,00E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,86E-02	3,21E-02	9,30E-03	-2,12E+01
PERM (MJ/FU, net calorific value)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT (MJ/FU, net calorific value)	1,21E+01	6,81E-03	1,65E+00	7,34E-02	3,00E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,86E-02	3,21E-02	9,30E-03	-2,12E+01
PENRE (MJ/FU, net calorific value)	2,97E+02	5,92E-01	7,84E+00	6,39E+00	1,30E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,48E+00	6,45E-01	5,58E-01	-5,91E+01

PENRM (MJ/FU, net calorific value)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT (MJ/FU, net calorific value)	2,97E+02	5,92E-01	7,84E+00	6,39E+00	1,30E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,48E+00	6,45E-01	5,58E-01	-5,91E+01
SM (kg/FU)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF (MJ/FU, net calorific value)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF (MJ/FU, net calorific value)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW (m^3 water eq/FU)	4,21E-01	5,96E-05	7,64E-03	6,42E-04	8,71E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,50E-04	2,49E-03	5,42E-04	-2,53E-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 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

Environmental information describing output flows and waste categories per FU (1 m^2) EN 15804 +A2, Accoya® cladding

	Production			Construction process stage		Use stage							End-of-life stage				
Waste Categories & Output Flows	A1 Raw material	A2 Transport	A3 manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
Hazardous waste disposed (kg/FU)	2,87E-04	1,34E-06	4,13E-06	1,45E-05	1,18E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	5,64E-06	1,52E-06	7,93E-07	-2,59E-05
Non-hazardous waste disposed (kg/FU)	8,88E-01	4,86E-02	3,05E-02	5,24E-01	5,02E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	2,04E-01	3,74E-02	2,10E+00	-1,43E-01

Radioactive waste disposed (kg/FU)	5,80E-04	3,82E-06	6,62E-05	4,12E-05	2,02E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	1,60E-05	1,59E-06	3,13E-06	-2,20E-04
Components for reuse (kg/FU)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling (kg/FU)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery (kg/FU)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy Heat (MJ/FU)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy Energy (MJ/FU)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNA	MNA	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Representativeness of the production process

Purchase of raw materials

Because Accsys does not have fixed suppliers for additional materials, fixing materials, spruce and foil, data from the Ecoinvent database, version 3.6 and the NMD database version 3.4 were used.

Data quality

Accsys has handed over the physical and digital documentation and drawings, as well as a material statement with the quantities of material required for the tested element.

Energy consumption of equipment and equipment required to manufacture the product under investigation is based on consumption figures for 2021.

With the exception of the manufacturing phase, standard values have been used where appropriate in accordance with Ecoinvent 3.6.. This applies in particular to transport distances, processing in the waste phase and the choice of means of transport. Return transports loaded/unloaded are as per the manufacturer's instructions.

Production processes can change over time. The information used in this LCA of the production process of the element is based on measurements and observations from 2021 (energy, waste percentages, quantities net per element, production volume). Data from supplying companies are all of the most recent date possible.

Accountability

The LCA study was conducted by Agrodome B.V. in 2021.

The data provided by Accsys have been extensively discussed with Agrodome B.V.

The final version of the LCA study has been submitted to SGS for external peer review.

The LCA is carried out according to EN 15804 +A1 and +A2 in compliance with the standards from the ISO 14000 series: 14025, 14040 and 14044.

When calculating the environmental impact categories, Simapro, version 9.0.0.49 and environmental data from the Ecoinvent database, version 3.6 are used.

When making calculations in Simapro, the long-term effects (emissions that can occur after 100 years) are not taken into account. The effects of capital goods and infrastructural processes are included.

References

ISO 14040
ISO 14040:2006-10, Environmental management - Life cycle assessment - Principles and framework; EN ISO 14040:2006

ISO 14044
ISO 14044:2006-10, Environmental management - Life cycle assessment - Requirements and guidelines; EN ISO 14040:2006

ISO 14025
ISO 14025:2011-10: Environmental labels and declarations — Type III environmental declarations — Principles and procedures

EN 15804+A1
EN 15804+A1: 2013: Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products

EN 15804+A2
EN 15804+A2: 2019: Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products

Sissy Verspeek and Fred van der Burgh, 2021
Background EPD report, Life cycle analysis, Accoya® wood - decking, cladding and sheet pile, Agrodome B.V. Wageningen, the Netherlands

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Declaration Agrodome B.V.

SGS Search B.V. has reviewed the background EPD report on EN 15804 +A2 and therefore also on the underlying standards.
The background EPD report has been approved by Harry van Ewijk, SGS Search Ingenieursbureau B.V. on 4 February 2022.

Disclaimer

Comparisons based on the information from this report are only possible and valid if the starting points of the calculations and data collection are the same and if it concerns the same applications