EcoReview
Part of the solution.

Environmental Product Declaration
Declaration according to
EN 15804+A2 &
NMD Assessment Method 1.2

Environmental Product Declaration

According to EN 15804+A2

(conform NMD Assessment Method 1.2)

isover
SAINT-GOBAIN

Product Declaration	Isover Insulsafe Cavity (60 mm)		
Unit (DU or FU)	m^2		
Declared by	Saint-Gobain Construction Products NL B.V.	**LCA study by**	EcoReview B.V.
Owner of Declaration	Saint-Gobain Construction Products NL B.V.	**Calculation number**	2026.022.
Verifier	Else-A	**Issue Date**	26-11-2025
		Expiry Date	26-11-2030

General Information

Owner of Declaration

Name	Saint-Gobain Construction Products NL B.V.
Street	Stuartweg 1B
Postal Code	4131 NH
City	Vianen
Contact	Rogier Stoker

Declaration for

Calculation Number	2026.022.
Issue Date	26-11-2025
Expiry Date	26-11-2030
Product	Isover Insulsafe Cavity (60 mm)
Declared / Functional Unit	m^2
Reference Service Life	75 years
Scalable product	Yes, on glass wool component (See EPD application)
Geographical Representation	Produced (A1-A3) by Saint Gobain, Etten-Leur, the Netherlands
Product Description	Glass wool insulation product.

Declaration Information

This Environmental Product Declaration is in accordance with EN 15804+A2. This certificate is based on an LCA-dossier developed according to ISO14040:2006, ISO14044:2006 and EN15804+A2 and the NMD Assessment Method 1.2. EPD of construction products may not be comparable if they do not comply to comparable norms and standards. Substances of Very High Concern (SVHC) that are listed on the 'Candidate List of Substances of Very High Concern for authorization' are declared when contents exceed the limits for registration with ECHA.

This LCA study was conducted by: Roel van Oosterhout, EcoReview B.V.

Demonstration of Verification

Statement	CEN standard EN15804 serves as the core PCR. Verification of the claim and data was carried out independently.
Verifier	External
Name	Elsemieke Juffer, Else-A
Signature	

LCA Information

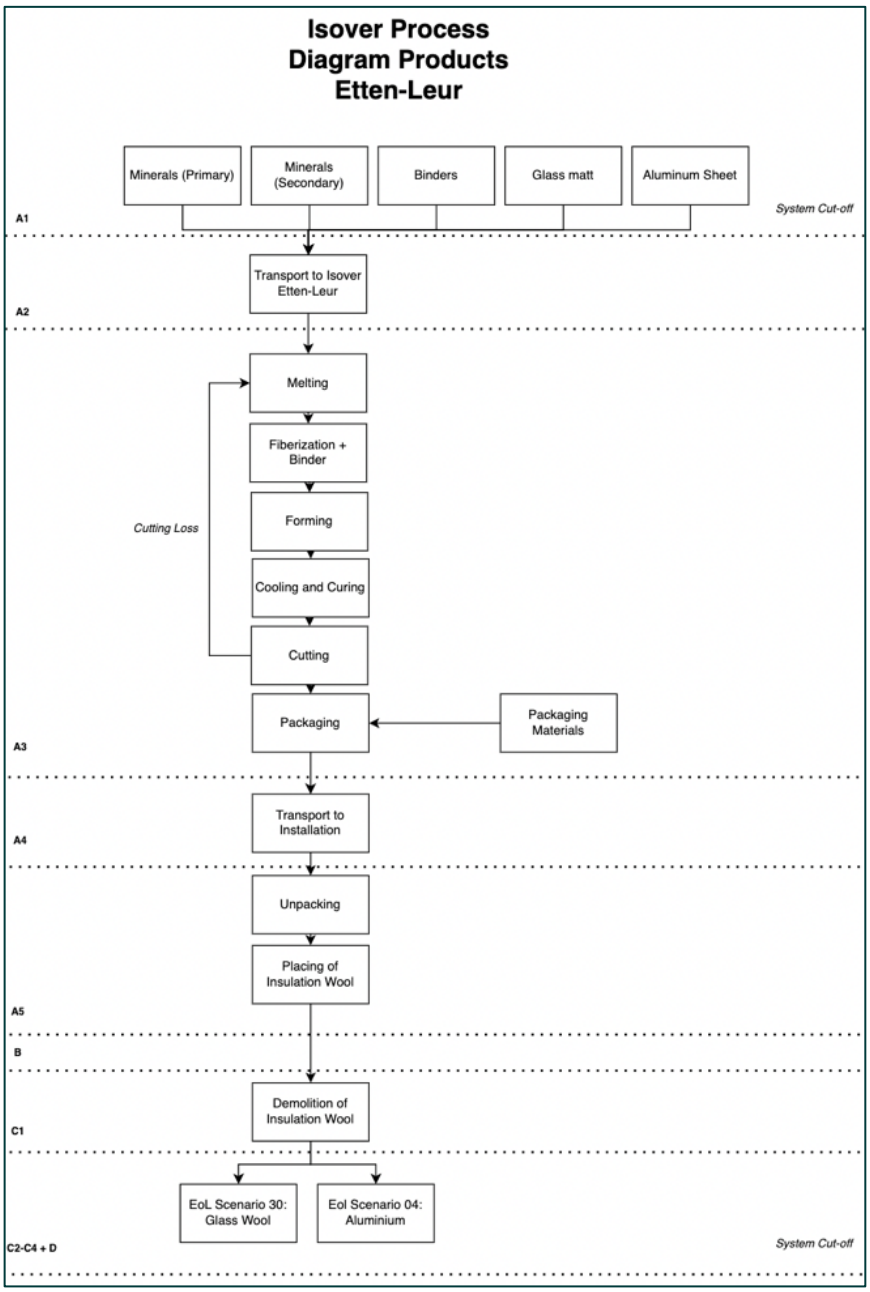
LCA Standard	ISO 14040:2006
Product Category Rules (PCR)	EN 15804+A2 + NMD Assessment Method 1.2
Additional PCR	Not Applicable
Standard Database (EN15804+A1)	Ecoinvent 3.6 + NMD 3.11
Standard Database (EN15804+A2)	Ecoinvent 3.9.1. + NMD 3.11
Char. Method (EN15804+A2)	EF 3.1
System Model	Allocation, cut-off by classification
LCA Software	SimaPro 9.6.0.1
Year of Data Collection	Q3 2024 – Q2 2025

Scope of Declaration

Lifecycle Stage	Module	Declared	Description
Production stage	A1	X	Raw Material supply
	A2	X	Transport
	A3	X	Manufacturing
Construction stage	A4	X	Transport
	A5	X	Installation
Use stage	B1	X	Use
	B2	X	Maintenance
	B3	X	Repair
	B4	X	Replacement
	B5	X	Refurbishment
	B6	X	Operational Energy Use
	B7	X	Operational Water Use
End-of-Life stage	C1	X	Deconstruction
	C2	X	Transport
	C3	X	Waste Processing
	C4	X	Disposal
Benefits and loads beyond the system boundaries	D	X	Reuse, Recycle, Recycling potential

X = Module Declared
MND = Module Not Declared

Process Diagram



Detailed Product Description

General Product Information

Thermal retrofit insulation of existing, non-insulated cavity walls; white glass wool flakes.

Environmental product declaration per m2 based on glass wool component thickness of 60 mm, in which glass wool component is scalable on thickness (in mm). Total weight of product is 1,8 kg/m2. Weight of scalable component is 1,8 kg/m2. Lambda-value of product is 0,034 W/m*K. R-declared-value is 1,75 m2·K/W. Reference service life is 75 years.

This EPD is a component based EPD, as is explained in the section “EPD Application” below.

Components (<1%)

Component	Mass (kg)	Mass (%)
Glass Wool (60 mm thick)	1,8	100,00%
Non-Scalable Component	0	0,00%

Example Image

Figure: Representation of product

EPD Application.

EPD Components

This EPD is constructed as a component EPD, as is in line with the NMD Assessment Method 1.2. Through the combination of the two or more individual components, specific product results can be constructed. The components consist of:

Component	Explanation	Component Scalable?
Glass Wool (**EPD**)	Glass wool component which is declared for a specific thickness in this EPD.	Yes, on any thickness produced by Saint Gobain Etten-Leur.[1]
Non-Scalable Component (**B**)	Non scalable layer which consists of one or more glass fibre / aluminium sheets.	No

1 - In case scaling range in detailed product description = 0 mm, this implies Saint Gobain only produces 1 specific thickness of the product as of publication of EPD.

Result Calculation

EPD product specific results can be calculated on the base of this document by following the formula below.

EPD Results = Glass Wool (EPD) + Non-Scalable Component (B).

In case results of another specific thickness needs to be generated, this can be done by following the following formula:

Specific Results = Glass Wool (A) + Non-Scalable Component (B)

in which:

Glass Wool (A) = Glass Wool (EPD) / EPD Thickness (in mm) * Specific Thickness (in mm)

Results EN15804+A1 – Glass Wool (EPD) – in m²

Set 1	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	D	A1-D
ECI A1	euro	**0,20**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,21**
ECI A1	euro	2,01E-01	4,36E-03	4,20E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,83E-03	6,70E-04	1,12E-03	-5,70E-06	2,14E-01
Core Impact Indicators															
ADPE	kg Sb eq	1,40E-05	9,23E-07	3,14E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,00E-07	4,39E-08	7,37E-08	-6,17E-11	1,60E-05
ADPF	kg Sb eq	1,41E-02	2,66E-04	2,94E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,73E-04	4,33E-05	1,08E-04	-8,78E-07	1,50E-02
GWP1	kg CO2 eq	1,59E+00	3,61E-02	3,33E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,35E-02	4,80E-03	7,91E-03	-9,25E-05	1,69E+00
ODP1	kg CFC-11 eq	1,62E-07	6,41E-09	3,53E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,17E-09	1,00E-09	2,63E-09	-1,04E-11	1,80E-07
POCP	kg C2H4	6,48E-04	2,18E-05	1,39E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,42E-05	4,82E-06	8,42E-06	-1,66E-08	7,11E-04
AP	kg SO2 eq	6,14E-03	1,59E-04	1,30E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,03E-04	3,15E-05	5,78E-05	-7,20E-08	6,63E-03
EP	kg PO4--- eq	1,31E-03	3,12E-05	2,75E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,03E-05	6,44E-06	1,12E-05	-1,04E-08	1,40E-03
Toxicity Indicators for Dutch Market															
HTP	kg 1,4-DB eq	7,76E-01	1,52E-02	1,62E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,89E-03	2,37E-03	3,57E-03	-5,47E-06	8,24E-01
FAETP	kg 1,4-DB eq	5,91E-03	4,44E-04	1,37E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,89E-04	3,90E-05	8,48E-05	-6,35E-08	6,90E-03
MAETP	kg 1,4-DB eq	1,09E+02	1,60E+00	2,25E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,04E+00	1,38E-01	3,03E-01	-2,52E-04	1,15E+02
TETP	kg 1,4-DB eq	5,51E-03	5,38E-05	1,12E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,49E-05	7,69E-06	8,98E-06	-1,85E-08	5,73E-03

EC A1 = Environmental Cost Indicator (Milieukosten Indicator (MKI) in Dutch); ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; GWP1 = Global warming potential; ODP1 = Depletion potential of the stratospheric ozone layer; POCP = Formation potential of tropospheric ozone photochemical oxidants; AP = Acidification potential of land and water; EP = Eutrophication potential; HTP = Human toxicity potential; FAETP = Freshwater aquatic ecotoxicity potential; MAETP = Marine aquatic ecotoxicity potential; TETP = Terrestrial ecotoxicity potential

Results EN15804+A2 – Glass Wool (EPD) – in m²

Set 2	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	D	A1-D
ECI A2	euro	**0,29**	**0,01**	**0,01**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,01**	**0,00**	**0,00**	**0,00**	**0,32**
ECI A2	euro	2,94E-01	8,17E-03	6,28E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,31E-03	2,98E-03	2,46E-03	-1,26E-05	3,19E-01
GWP2	kg CO2 eq	1,68E+00	4,03E-02	3,54E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,62E-02	5,54E-03	9,31E-03	-9,70E-05	1,80E+00
GWP-F	kg CO2 eq	1,68E+00	4,01E-02	3,54E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,60E-02	5,34E-03	9,30E-03	-9,69E-05	1,80E+00
GWP-B	kg CO2 eq	9,26E-04	6,25E-05	2,89E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,06E-05	2,01E-04	5,32E-06	-4,95E-08	1,26E-03
GWP-L	kg CO2 eq	5,56E-04	1,43E-04	1,60E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,29E-05	4,45E-06	5,61E-06	-9,05E-09	8,18E-04
ODP2	kg CFC11 eq	8,04E-08	7,13E-10	1,64E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,64E-10	1,20E-10	2,69E-10	-4,97E-12	8,36E-08
AP2	mol H+ eq	9,35E-03	1,92E-04	1,95E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,25E-04	3,95E-05	7,01E-05	-7,92E-08	9,97E-03
EP-FW	kg P eq	1,91E-05	3,99E-07	3,99E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,59E-07	6,48E-08	9,07E-08	-2,47E-10	2,03E-05
EP-M	kg N eq	1,90E-03	7,29E-05	4,12E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,74E-05	1,63E-05	2,67E-05	-2,69E-08	2,10E-03
EP-T	mol N eq	3,71E-02	7,78E-04	7,76E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,06E-04	1,76E-04	2,88E-04	-3,03E-07	3,96E-02
POCP2	kg NMVOC eq	4,49E-03	2,66E-04	1,02E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,73E-04	5,71E-05	1,00E-04	-1,56E-07	5,18E-03
ADP-MM	kg Sb eq	1,08E-04	1,26E-07	2,17E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,16E-08	8,86E-09	1,29E-08	-4,01E-11	1,11E-04
ADP-F	MJ	2,45E+01	5,74E-01	5,16E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,73E-01	9,28E-02	2,32E-01	-1,58E-03	2,63E+01
WDP	m3 depriv.	5,48E-01	3,52E-03	1,13E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,29E-03	9,00E-04	1,04E-02	-1,07E-05	5,77E-01
PM	disease inc.	1,00E-07	3,96E-09	2,24E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,57E-09	3,77E-09	1,53E-09	-5,10E-13	1,14E-07
IR	kBq U-235 eq	9,48E-03	2,24E-04	2,00E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,46E-04	5,85E-05	6,12E-05	-2,17E-07	1,02E-02
ETP-FW	CTUe	7,95E+00	4,24E-01	1,76E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,75E-01	4,75E-02	1,09E-01	-4,52E-05	8,98E+00
HTP-C	CTUh	6,32E-10	2,12E-11	1,35E-11	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,38E-11	4,13E-12	3,96E-12	-1,23E-14	6,89E-10
HTP-NC	CTUh	1,04E-08	4,61E-10	2,25E-10	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,00E-10	3,00E-11	4,95E-11	-1,29E-13	1,15E-08
SQP	Pt	2,08E+00	4,53E-01	6,79E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,94E-01	1,04E-01	4,60E-01	-1,17E-04	3,46E+00

ECI A2 = Environmental Cost Indicator (Milieukosten Indicator (MKI) in Dutch); GWP2 = Climate change - Total; GWP-F = Climate change – Fossil; GWP-B = Climate change – Biogenic; GWP-L= Climate change – Land use and LU change; ODP2 = Ozone depletion; AP2 = Acidification; EP-FW = Eutrophication, freshwater; EP-M = Eutrophication, marine; EP-T = Eutrophication, terrestrial; POCP2 = Photochemical ozone formation; ADP-MM = Resource use, minerals and metals; ADP-F = Resource use, fossils; WDP = Water use; PM = Particulate matter; IR = Ionising radiation; ETP-FW = Ecotoxicity, freshwater; HTP-C= Human toxicity, cancer; HTP-NC = Human toxicity, non-cancer; SQP = Land use

Results Parameters – Glass Wool (EPD) – in m²

Parameter	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	D	A1-D
Resource Use															
PERE	MJ	9,14E+00	8,12E-03	1,83E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,27E-03	1,75E-03	1,96E-03	-3,10E-05	9,34E+00
PERM	MJ	4,14E-05	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	0,00E+00	0,00E+00	4,14E-05
PERT	MJ	9,14E+00	8,12E-03	1,83E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,27E-03	1,75E-03	1,96E-03	-3,10E-05	9,34E+00
PENRE	MJ	2,45E+01	5,75E-01	5,16E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,74E-01	9,29E-02	2,32E-01	-1,58E-03	2,63E+01
PENRM	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,45E+01	5,75E-01	5,16E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,74E-01	9,29E-02	2,32E-01	-1,58E-03	2,63E+01
PET	MJ	3,37E+01	5,83E-01	6,99E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,79E-01	9,46E-02	2,34E-01	-1,61E-03	3,57E+01
SM	kg	1,01E+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	0,00E+00	0,00E+00	0,00E+00	1,01E+00
SF-R	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SF-NR	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	1,38E-02	1,48E-04	2,86E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,61E-05	2,67E-05	2,50E-04	-1,61E-07	1,46E-02
Waste Categories															
HWD	kg	1,01E-04	3,66E-06	2,18E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,38E-06	5,19E-07	1,23E-06	-6,21E-09	1,11E-04
NHWD	kg	1,79E-01	3,79E-02	3,91E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,47E-02	1,81E-01	1,53E+00	-1,81E-06	1,99E+00
RWD	kg	7,05E-06	1,31E-07	1,47E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,54E-08	4,10E-08	3,42E-08	-1,60E-10	7,49E-06
Output Flows															
CRU	kg	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	4,50E-03	0,00E+00	2,92E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,80E-01	0,00E+00	0,00E+00	1,85E-01
MER	MJ	2,25E-03	0,00E+00	5,18E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,00E-02	0,00E+00	0,00E+00	9,23E-02
EE-E	MJ	0,00E+00	0,00E+00	3,86E-04	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	3,86E-04
EE-T	MJ	0,00E+00	0,00E+00	6,64E-04	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	6,64E-04

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total Energy [MJ]; **SM** = Use of secondary material [kg]; **SF-R** = Use of renewable secondary fuels [MJ]; **SF-NR** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE-E** = Exported electric energy [MJ]; **EE-T** = Exported thermal energy [MJ]

Results EN15804+A1 – Non-Scalable Component (B) – in m²

Set 1	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	D	A1-D
ECI A1	euro	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
ECI A1	euro	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Core Impact Indicators															
ADPE	kg Sb eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ADPF	kg Sb eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP1	kg CO2 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ODP1	kg CFC-11 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
POCP	kg C2H4	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
AP	kg SO2 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EP	kg PO4--- eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Toxicity Indicators for Dutch Market															
HTP	kg 1,4-DB eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FAETP	kg 1,4-DB eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MAETP	kg 1,4-DB eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TETP	kg 1,4-DB eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00

EC A1 = Environmental Cost Indicator (Milieukosten Indicator (MKI) in Dutch); ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; GWP1 = Global warming potential; ODP1 = Depletion potential of the stratospheric ozone layer; POCP = Formation potential of tropospheric ozone photochemical oxidants; AP = Acidification potential of land and water; EP = Eutrophication potential; HTP = Human toxicity potential; FAETP = Freshwater aquatic ecotoxicity potential; MAETP = Marine aquatic ecotoxicity potential; TETP = Terrestrial ecotoxicity potential

Results EN15804+A2 - Non-Scalable Component (B) – in m²

Set 2	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	D	A1-D
ECI A2	euro	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
ECI A2	euro	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP2	kg CO2 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-F	kg CO2 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-B	kg CO2 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-L	kg CO2 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ODP2	kg CFC11 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
AP2	mol H+ eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EP-FW	kg P eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EP-M	kg N eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EP-T	mol N eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
POCP2	kg NMVOC eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ADP-MM	kg Sb eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ADP-F	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
WDP	m3 depriv.	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PM	disease inc.	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
IR	kBq U-235 eq	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETP-FW	CTUe	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP-C	CTUh	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP-NC	CTUh	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SQP	Pt	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ECI A2 = Environmental Cost Indicator (Milieukosten Indicator (MKI) in Dutch); GWP2 = Climate change - Total; GWP-F = Climate change – Fossil; GWP-B = Climate change – Biogenic; GWP-L= Climate change – Land use and LU change; ODP2 = Ozone depletion; AP2 = Acidification; EP-FW = Eutrophication, freshwater; EP-M = Eutrophication, marine; EP-T = Eutrophication, terrestrial; POCP2 = Photochemical ozone formation; ADP-MM = Resource use, minerals and metals; ADP-F = Resource use, fossils; WDP = Water use; PM = Particulate matter; IR = Ionising radiation; ETP-FW = Ecotoxicity, freshwater; HTP-C= Human toxicity, cancer; HTP-NC = Human toxicity, non-cancer; SQP = Land use

Results Parameters – Non-Scalable Component (B) – in m²

Parameter	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	D	A1-D
Resource Use															
PERE	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERM	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRE	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRM	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PET	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SM	kg	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SF-R	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SF-NR	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Waste Categories															
HWD	kg	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NHWD	kg	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RWD	kg	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Output Flows															
CRU	kg	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	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	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
MER	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total Energy [MJ]; **SM** = Use of secondary material [kg]; **SF-R** = Use of renewable secondary fuels [MJ]; **SF-NR** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE-E** = Exported electric energy [MJ]; **EE-T** = Exported thermal energy [MJ]

Biogenic Carbon Content

In the table below, information describing the biogenic carbon content at factory gate (A1-A3) is described.

Biogenic Carbon Content	Amount (in kg C)
Biogenic Carbon in Product	0,00
Biogenic Carbon in Packaging	0,00
Note: 1 kg biogenic carbon (C) is equivalent to 44/12 kg CO_2	

If the mass of biogenic carbon containing materials in the product is less than 5% of the mass of the product, the declaration of biogenic carbon may be omitted (= 0 kg).

If the mass of biogenic carbon containing materials in the packaging is less than 5% of the mass of the product, the declaration of biogenic carbon may be omitted (= 0 kg).

Disclaimers on Indicators

According to EN15804+A2, the following disclaimers shall be made.

Disclaimer	Statement
Disclaimer 1	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 disposals in underground d facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.
Dislaimer 2	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.

The disclaimers from the table above apply to the relevant core and additional environmental impact indicators defined below and follow the ILCD classification.

ILCD Classification	Indicator	Disclaimer
ILCD Type 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
ILCD Type 2	Acidification potential, accumulated exceedance (AP)	None
	Eutrophication potential, fraction of nutrients reaching freshwater end compartment (EP-FW)	None
	Eutrophication potential, fraction of nutrients reaching marine end compartment (EP-M)	None
	Eutrophication potential, accumulated exceedance (EP-T)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential human exposure efficiency relative to U235 (IR)	1
ILCD Type 3	Abiotic depletion potential for non-fossil resources (ADP-MM)	2
	Abiotic depletion potential for fossil resources (ADP-F)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2
	Potential comparative toxic unit for ecosystems (ETP-FW)	2
	Potential comparative toxic unit for humans (HTP-C)	2
	Potential comparative toxic unit for humans (HTP-NC)	2
	Potential soil quality index (SQP)	2

References

CML - Department of Industrial Ecology, CML-IA Characterisation Factors, Dated August 2016, Leiden University, Leiden, Netherlands Available at: https://www.universiteitleiden.nl/en/research/research-output/science/cml-ia-characterisation-factors.

PRé Sustainability - Simapro 9.6.0.1

EN 15804: Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products', I.S. EN 15804:2012+A1:2013 and EN 15804:2019+A2.

ISO 14040: Environmental management - Life cycle assessment – Principles and Framework', International Organization for Standardization, ISO14040:2006.

ISO 14044: Environmental management - Life cycle assessment - Requirements and guidelines', International Organization for Standardization, ISO14044:2006.

NMD Environmental Performance Assessment Method for Buildings version 1.2 (December 2024)