

ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration:	<Name of EPD owner>
Program operator:	<Name of program operator>
Publisher:	The Norwegian EPD Foundation
Declaration number:	<From EPD-Norge>
Registration number:	<From EPD-Norge>
ECO Platform reference number:	<From EPD-Norge>
Issue date:	<xx.xx.xxxx>
Valid to:	<xx.xx.xxxx>

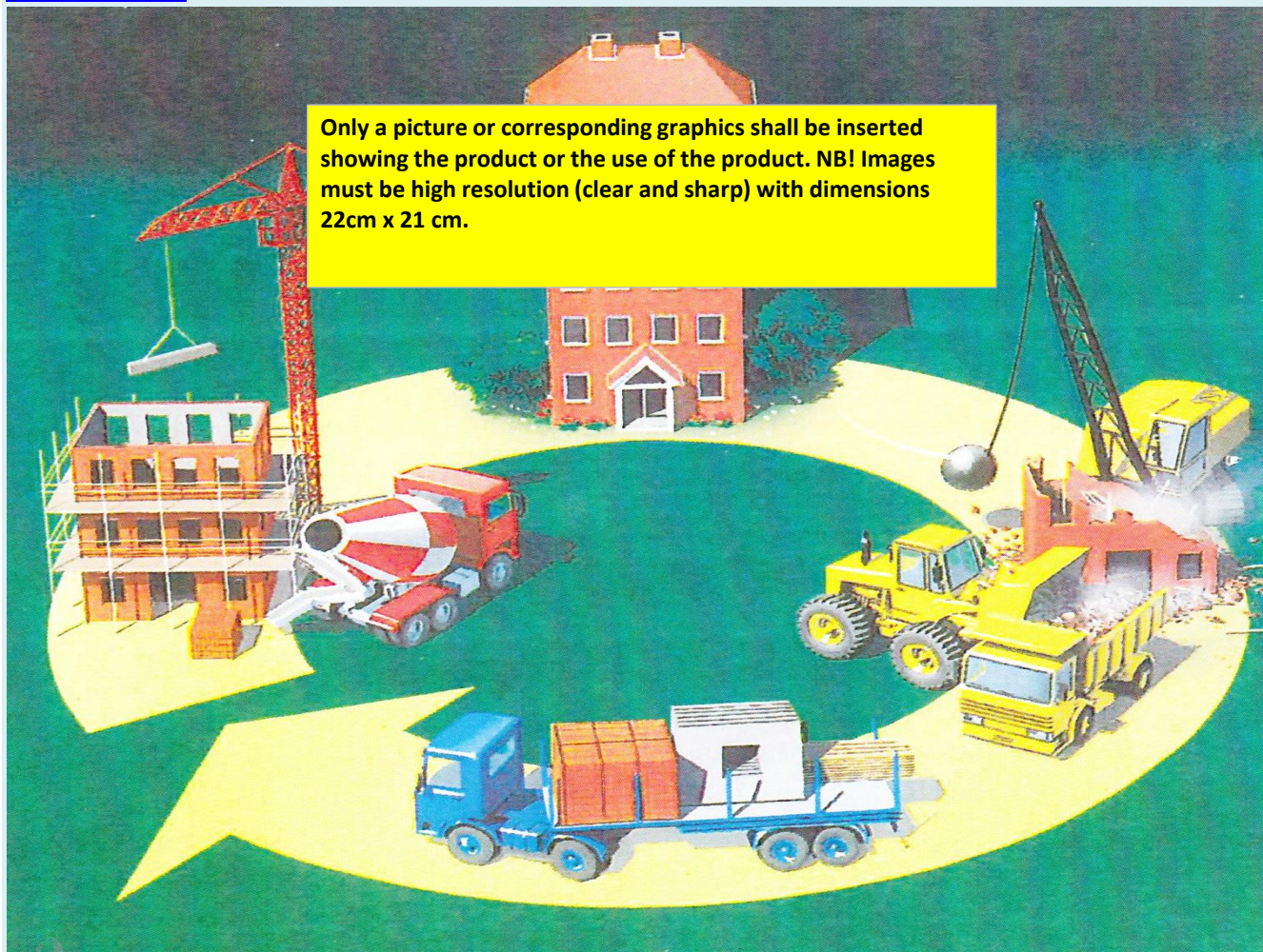
<Product name>

<Name of EPD owner>

Logo

www.epd-norge.no

Only a picture or corresponding graphics shall be inserted showing the product or the use of the product. NB! Images must be high resolution (clear and sharp) with dimensions 22cm x 21 cm.



General information

Product:

<Product name>

Program operator:

<Name of program operator>

<Address>

Phone: <xx no xx>

e-mail: xxx@xx

Declaration number:

<From EPD-Norge>

ECO Platform reference number:

<From EPD-Norge>

This declaration is based on Product Category Rules:

CEN Standard EN 15804 serves as core PCR

<PCR>

Statement of liability:

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

Declared unit:

<mandatory>

Declared unit with option:**Functional unit:****Verification:**

The CEN Norm EN 15804 serves as the core PCR. Independent verification of the declaration and data, according to ISO14025:2010

internal

external

Third party verifier:

sign

<Title Name>

(Independent verifier approved by EPD Norway)

Owner of the declaration:

<Name of EPD owner>

Contact person: <Name>

Phone: <xx no xx>

e-mail: <xxx@xx>

Manufacturer:

<Name of manufacturer>

<Address>

Phone: <xx no xx>

e-mail: xxx@xx

Place of production:

<Place>

Management system:

<ISO 14001 fill in>

Organisation no:

<123456789MVA fill in>

Issue date:

<xx.xx.xxxx>

Valid to:

<xx.xx.xxxx>

Year of study:

<xxxx>

Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

The EPD has been worked out by:

<Name>

<sign>

Company logo

Approved

sign

<Name>

(Managing Director EPD-Norway)

Product

Product description:

<Application Uniqueness at use etc.>

Technical data:

<Weight and dimensions of the product>

<References to technical data sheets - Standards>

<Technical Approval etc. - Set in QR code or other reference to the web>

Product specification:

<Description>

Market:

<Norway/Nordic countries/Europe>

Reference service life, product:

<Years>

Reference service life, building:

<Years>

Materials	kg	%
<material 1>		
<material 2>		
<material 3>		
<material 4>		
<material 5>		
<material 6>		

LCA: Calculation rules

Declared unit:

<mandatory>

System boundary:

<Flowsheet - use the entire sheet width, see figure below>

<Additional information>

<Modul D description, calculation methods - recycled part>

<Figure 1>

Flowsheet: EN15804 ch. 7.2.1 requires flow diagram according to modular approach. A suggestion will be to relate processes in the flow diagram to the modular approach.

Data quality:

<Description of age of data, specific data, generic data, uncertainty of the figures etc.

Data source: GaBi, SimaPro, Ecoinvent others>

Cut-off criteria: <proposed text>

All major raw materials and all the essential energy is included. The production process for raw materials and energy flows that are included with very small amounts (<1%) are not included. This cut-off rule does not apply for hazardous materials and substances.

Allocation: <proposed text>

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

<Short description, if A4 only applies for transport to central warehouse!>

Transport from production place to user (A4)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Value (l/t)
Truck				l/tkm	
Railway				kWh/tkm	
Boat				l/tkm	
<Other Transportation>				<xx>	

<Short description>

Assembly (A5)

	Unit	Value
Auxiliary	kg	
Water consumption	m ³	
Electricity consumption	kWh	
Other energy carriers	MJ	
Material loss	kg	
Output materials from waste treatment	kg	
Dust in the air	kg	

Use (B1)

	Unit	Value

<Short description>

Maintenance (B2)/Repair (B3)

	Unit	Value
Maintenance cycle*		
Auxiliary	kg	
Other resources	kg	
Water consumption	m ³	
Electricity consumption	kWh	
Other energy carriers	MJ	
Material loss	kg	

Replacement (B4)/Refurbishment (B5)

	Unit	Value
Replacement cycle*		
Electricity consumption	kWh	
Replacement of worn parts	0	

* Number or RSL (Reference Service Life)

<Short description>

Operational energy (B6) and water consumption (B7)

	Unit	Value
Water consumption	m ³	
Electricity consumption	kWh	
Other energy carriers	MJ	
Power output of equipment	kW	

End of Life (C1, C3, C4)

	Unit	Value
Hazardous waste disposed	kg	
Collected as mixed construction waste	kg	
Reuse	kg	
Recycling	kg	
Energy recovery	kg	
To landfill	kg	

<Short description>

Transport to waste processing (C2)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Value (l/t)
Truck				l/tkm	
Railway				kWh/tkm	
Boat				l/tkm	
<Other Transportation>				<xx>	

<Short description>

Benefits and loads beyond the system boundaries (D)

	Unit	Value

<Short description>

Additional technical information

<Description>

LCA: Results

<Short description>

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

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

Environmental impact

Parameter	Unit	A1	A2	A3	A1- A3				
GWP	kg CO ₂ -eqv								
ODP	kg CFC11-eqv								
POCP	kg C ₂ H ₄ -eqv								
AP	kg SO ₂ -eqv								
EP	kg PO ₄ ³⁻ -eqv								
ADPM	kg Sb-eqv								
ADPE	MJ								

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer; POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

Resource use

Parameter	Unit	A1	A2	A3	A1-A3				
RPEE	MJ								
RPEM	MJ								
TPE	MJ								
NRPE	MJ								
NRPM	MJ								
TRPE	MJ								
SM	kg								
RSF	MJ								
NRSF	MJ								
W	m ³								

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as energy carrier; NRPM Non renewable primary energy resources used as materials; TRPE Total use of non renewable primary energy resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; W Use of net fresh water

End of life - Waste

Parameter	Unit	A1	A2	A3	A1- A3				
HW	kg								
NHW	kg								
RW	kg								

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

End of life - Output flow

Parameter	Unit	A1	A2	A3	A1- A3				
CR	kg								
MR	kg								
MER	kg								
EEE	MJ								
ETE	MJ								

CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy

Reading example: $9,0 \text{ E-03} = 9,0 \cdot 10^{-3} = 0,009$

<possibility to insert graphical display of the results>

Additional Norwegian requirements

Greenhouse gas emission from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process(A3).

Data source	Amount	Unit
Econinvent v3 (june 2014)	24	CO ₂ -eqv/kWh

Dangerous substances

- The product contains no substances given by the REACH Candidate list or the Norwegian priority list
- The product contains substances given by the REACH Candidate list or the Norwegian priority list that are less than 0,1 % by weight.
- The product contain dangerous substances, more then 0,1% by weight, given by the REACH Candidate List or the Norwegian Priority list, see table.
- The product contains no substances given by the REACH Candidate list or the Norwegian priority list. The product is classified as hazardous waste (Avfallsforsriften, Annex III), see table.

Name	CAS no.	Amount

Indoor environment

The product meets the requirements for low emissions (M1) according to EN15251: 2007 Appendix E.

<No tests have been carried out on the product concerning indoor climate - Not relevant>

Carbon footprint

Carbon footprint has not been worked out for the product.

<Set in QR code or another reference to the web> ISO/TS 14067

Bibliography

ISO 14025:2010	<i>Environmental labels and declarations - Type III environmental declarations - Principles and procedures</i>
ISO 14044:2006	<i>Environmental management - Life cycle assessment - Requirements and guidelines</i>
EN 15804:2012+A1:2013	<i>Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products</i>
ISO 21930:2007	<i>Sustainability in building construction - Environmental declaration of building products</i>

<LCI Report Mandatory>

<PCR Mandatory>

<Other references>

Company logo	Program operator <Name> <xxxxxxx> <xxxxxxx>	Phone: <xxxx> <xxxx> e-mail: <xxxx> web <xxxx>
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Company logo	Owner of the declaration <Name of EPD owner> <xxxxxxx> <xxxxxxx>	Phone: <xxxx> Fax <xxxx> e-mail: <xxxx> web <xxxx>
Company logo	Author of the Life Cycle Assessment <Name> <xxxxxxx> <xxxxxxx>	Phone: <xxxx> Fax <xxxx> e-mail: <xxxx> web <xxxx>