

Result summary

Mini Vibropaal (Van Berlo)

Van Berlo B.V.

Calculation number:	ReTHiNK-67447
Generation on:	02-03-2024
Issue date:	02-03-2024
Valid until:	02-03-2029
Status:	verified

R<THiNK



1 General information

1.1 PRODUCT

Mini Vibropaal (Van Berlo)

1.2 VALIDITY

Issue date: 02-03-2024

Valid until: 02-03-2029

1.3 OWNER OF THE DECLARATION

VAN BERLO

Manufacturer: Van Berlo B.V.

Address: Doornhoek 3715, 5465 TA Veghel

E-mail: info@vanberlo.com

Website: www.vanberlo.com

Production location: Van Berlo B.V.

Address production location: Doornhoek 3715, 5465 TA Veghel

1.4 VERIFICATION OF THE DECLARATION

The independent verification is in accordance with the ISO 14025:2011. The LCA is in compliance with ISO 14040:2006 and ISO 14044:2006. The EN 15804:2012+A2:2019 serves as the core PCR.

Internal External



Tim Mol, EcoReview NL B.V.

1.5 PRODUCT CATEGORY RULES

NMD Determination method Environmental performance Construction works v1.1 March 2022

1.6 FUNCTIONAL UNIT

m¹ funderingspalen

1 m¹ Van Berlo Mini Vibropaal (funderingspaal), gebaseerd op een ontwerpdiameter van Ø180 mm en een gemiddelde productielengte van 12,7 m¹, inclusief betonmortel, achterblijvende stalen paaldeksel en standaard paalkopwapening (Ø12 lg. 1 m), teruggerekend naar 1m¹. (massa ca. 59 kg/m¹).

reference_unit: meter (m¹)

1.7 CONVERSION FACTORS

Description	Value	Unit
reference_unit	1	m ¹
weight_per_reference_unit	58.960	kg
Conversion factor to 1 kg	0.016961	m ¹

1.8 SCOPE OF DECLARATION AND SYSTEM BOUNDARIES

This is a Cradle to gate with options, modules C1-C4 and module D LCA. The life cycle stages included are as shown below:

(X = module included, ND = module not declared)

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	ND	ND	ND	ND	X	X	X	X	X

The modules of the EN15804 contain the following:

Module A1 = Raw material supply Module B5 = Refurbishment

1 General information

Module A2 = Transport	Module B6 = Operational energy use
Module A3 = Manufacturing	Module B7 = Operational water use
Module A4 = Transport	Module C1 = De-construction / Demolition
Module A5 = Construction - Installation process	Module C2 = Transport
Module B1 = Use	Module C3 = Waste Processing
Module B2 = Maintenance	Module C4 = Disposal
Module B3 = Repair	Module D = Benefits and loads beyond the product system boundaries
Module B4 = Replacement	

1.9 COMPARABILITY

In principle, a comparison or assessment of the environmental impacts of different products is only possible if they have been prepared in accordance with EN 15804. For the evaluation of the comparability, the following aspects have to be considered in particular: PCR used, functional or declared unit, geographical reference, the definition of the system boundary, declared modules, data selection (primary or secondary data, background database, data quality), scenarios used for use and disposal phases, and the life cycle inventory (data collection, calculation methods, allocations, validity period). PCRs and general program instructions of different EPDs programs may differ. Comparability needs to be evaluated. For further guidance, see EN 15804+A2 (5.3 Comparability of EPD for construction products) and ISO 14025 (6.7.2 Requirements for comparability).

2 Product

2.1 PRODUCT DESCRIPTION

Van Berlo ontwerpt en produceert de Mini Vibropaal, toegepast in de bouw en infra. Het is een volledig geautomatiseerd funderingssysteem, met een palenproductie van gemiddeld 250 palen (afhankelijk van paallengte) op dagbasis. De heipalen kunnen in verschillende lengtes en diameter worden geproduceerd. Van Berlo beschikt over eigen constructeurs, die zorgen voor de noodzakelijke berekening en tekeningen.

2.2 APPLICATION (INTENDED USE OF THE PRODUCT)

Bij uitstek geschikt voor fundering van bedrijfsvloeren in distributiecentra en magazijnen op minder draagkrachtige gronden.

2.3 DESCRIPTION PRODUCTION PROCESS

Het productieproces vindt plaats op de bouwplaats (in-situ).

2.4 CONSTRUCTION DESCRIPTION

De grondverdringende paal wordt door middel van een ringvibrator naar het gewenste aanlegniveau bewogen. De buis wordt trillend getrokken en gevuld met beton. Dit alles loopt volledig geautomatiseerd. De machine registreert het projectnummer, tekeningnummer, paalnummer, paallengte, indringsnelheid, paalinhoud, injecteer snelheid en het pull down moment op elke diepte. Daarnaast wordt de verticaliteit van de makelaar geregistreerd. Deze gegevens worden gearchiveerd zodat de informatie te allen tijde beschikbaar is.

Nadat de buis het paalkopniveau heeft bereikt, wordt de gevormde paal handmatig aan de bovenzijde op de juiste hoogte (bedding) afgewerkt. Daarna wordt de paal aan de bovenzijde gewapend met een staaf Ø12 mm² over een lengte van 1 m¹. Deze wordt middels een fel gekleurde drijver aan de top van de paal gehouden.

Vijf dagen na productie worden de palen, conform opdracht, akoestisch doorgemeten. Alle productiegegevens en controleresultaten worden, indien gewenst, beschikbaar gesteld.

3 Results

3.1 ENVIRONMENTAL IMPACT INDICATORS PER METER

CORE ENVIRONMENTAL IMPACT INDICATORS EN15804+A2

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
AP	mol H+ eqv.	1.42E-2	9.19E-6	4.67E-3	3.94E-3	1.25E-5	0.00E+0	0.00E+0	0.00E+0	1.15E-2	4.87E-4	1.14E-4	2.39E-3	-3.40E-4	3.70E-2
GWP-total	kg CO2 eqv.	4.50E+0	2.19E-3	4.90E-1	3.77E-1	2.16E-3	0.00E+0	0.00E+0	0.00E+0	1.10E+0	8.40E-2	1.92E-2	2.52E-1	-4.92E-2	6.78E+0
GWP-b	kg CO2 eqv.	1.30E-1	1.59E-6	1.75E-3	1.05E-4	9.97E-7	0.00E+0	0.00E+0	0.00E+0	3.06E-4	3.87E-5	1.05E-4	4.96E-4	-1.77E-4	1.32E-1
GWP-f	kg CO2 eqv.	4.37E+0	2.19E-3	4.88E-1	3.77E-1	2.16E-3	0.00E+0	0.00E+0	0.00E+0	1.10E+0	8.39E-2	1.91E-2	2.51E-1	-4.89E-2	6.64E+0
GWP-luluc	kg CO2 eqv.	2.73E-3	6.38E-7	7.35E-5	2.97E-5	7.91E-7	0.00E+0	0.00E+0	0.00E+0	8.68E-5	3.07E-5	3.54E-6	7.01E-5	-4.41E-5	2.98E-3
EP-m	kg N eqv.	4.01E-3	2.76E-6	2.03E-3	1.74E-3	4.41E-6	0.00E+0	0.00E+0	0.00E+0	5.08E-3	1.71E-4	4.55E-5	8.21E-4	-9.74E-5	1.38E-2
EP-fw	kg P eqv.	1.79E-4	1.67E-8	4.01E-6	1.37E-6	2.18E-8	0.00E+0	0.00E+0	0.00E+0	4.01E-6	8.46E-7	5.69E-7	2.82E-6	-1.72E-6	1.91E-4
EP-T	mol N eqv.	4.66E-2	3.06E-5	2.23E-2	1.91E-2	4.87E-5	0.00E+0	0.00E+0	0.00E+0	5.58E-2	1.89E-3	5.05E-4	9.07E-3	-1.13E-3	1.54E-1
ODP	kg CFC 11 eqv.	2.66E-7	5.14E-10	9.67E-8	8.14E-8	4.77E-10	0.00E+0	0.00E+0	0.00E+0	2.38E-7	1.85E-8	2.39E-9	1.04E-7	-4.67E-9	8.03E-7
POCP	kg NMVOC eqv.	1.26E-2	9.83E-6	6.13E-3	5.25E-3	1.39E-5	0.00E+0	0.00E+0	0.00E+0	1.53E-2	5.40E-4	1.38E-4	2.63E-3	-3.21E-4	4.23E-2
ADP-f	MJ	3.31E+1	3.40E-2	6.38E+0	5.19E+0	3.26E-2	0.00E+0	0.00E+0	0.00E+0	1.52E+1	1.27E+0	2.45E-1	7.02E+0	-5.88E-1	6.79E+1
ADP-mm	kg Sb- eqv.	3.58E-5	3.73E-8	1.13E-6	5.78E-7	5.47E-8	0.00E+0	0.00E+0	0.00E+0	1.69E-6	2.13E-6	5.24E-8	2.30E-6	-2.34E-6	4.14E-5
WDP	m3 world eqv.	3.24E+0	1.10E-4	1.04E-2	6.95E-3	1.17E-4	0.00E+0	0.00E+0	0.00E+0	2.03E-2	4.53E-3	1.15E-3	3.15E-1	-6.74E-1	2.93E+0

AP=Acidification (AP) | **GWP-total**=Global warming potential (GWP-total) | **GWP-b**=Global warming potential - Biogenic (GWP-b) | **GWP-f**=Global warming potential - Fossil (GWP-f) | **GWP-luluc**=Global warming potential - Land use and land use change (GWP-luluc) | **EP-m**=Eutrophication marine (EP-m) | **EP-fw**=Eutrophication, freshwater (EP-fw) | **EP-T**=Eutrophication, terrestrial (EP-T) | **ODP**=Ozone depletion (ODP) | **POCP**=Photochemical ozone formation - human health (POCP) | **ADP-f**=Resource use, fossils (ADP-f) | **ADP-mm**=Resource use, minerals and metals (ADP-mm) | **WDP**=Water use (WDP)

3 Results

ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS EN15084+A2

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
ETP-fw	CTUe	1.08E+2	2.71E-2	5.05E+0	3.13E+0	2.90E-2	0.00E+0	0.00E+0	0.00E+0	9.14E+0	1.13E+0	2.09E-1	4.56E+0	-1.00E+0	1.30E+2
PM	disease incidence	1.54E-7	1.98E-10	1.21E-7	1.04E-7	1.94E-10	0.00E+0	0.00E+0	0.00E+0	3.05E-7	7.55E-9	2.52E-9	4.64E-8	-5.76E-9	7.35E-7
HTP-c	CTUh	3.36E-9	6.67E-13	2.05E-10	1.09E-10	9.42E-13	0.00E+0	0.00E+0	0.00E+0	3.19E-10	3.66E-11	4.87E-12	1.05E-10	-4.85E-12	4.14E-9
HTP-nc	CTUh	5.63E-8	3.08E-11	4.88E-9	2.68E-9	3.18E-11	0.00E+0	0.00E+0	0.00E+0	7.85E-9	1.23E-9	1.37E-10	3.24E-9	6.28E-10	7.70E-8
IR	kBq U235 eqv.	1.11E-1	1.49E-4	2.70E-2	2.22E-2	1.36E-4	0.00E+0	0.00E+0	0.00E+0	6.50E-2	5.30E-3	7.77E-4	2.88E-2	-2.18E-3	2.58E-1
SQP	Pt	2.93E+1	3.90E-2	1.17E+0	6.62E-1	2.82E-2	0.00E+0	0.00E+0	0.00E+0	1.93E+0	1.10E+0	4.10E-2	1.47E+1	-7.54E-1	4.82E+1

ETP-fw=Ecotoxicity, freshwater (ETP-fw) | **PM**=Particulate Matter (PM) | **HTP-c**=Human toxicity, cancer (HTP-c) | **HTP-nc**=Human toxicity, non-cancer (HTP-nc) | **IR**=Ionising radiation, human health (IR) | **SQP**=Land use (SQP)

CLASSIFICATION OF DISCLAIMERS TO THE DECLARATION OF CORE AND ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS

ILCD classification	Indicator	Disclaimer
ILCD type / level 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 / level 2	AAcidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	None
	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	None
	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
ILCD type / level 3	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2

3 Results

ILCD classification	Indicator	Disclaimer
	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

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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Disclaimer 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.

CORE ENVIRONMENTAL IMPACT INDICATORS EN15804+A1

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
ADPE	Kg Sb	3.58E-5	3.73E-8	1.13E-6	5.78E-7	5.47E-8	0.00E+0	0.00E+0	0.00E+0	1.69E-6	2.13E-6	5.24E-8	2.30E-6	-2.34E-6	4.14E-5
GWP	Kg CO2 Equiv.	4.33E+0	2.17E-3	4.83E-1	3.73E-1	2.14E-3	0.00E+0	0.00E+0	0.00E+0	1.09E+0	8.32E-2	1.89E-2	2.47E-1	-4.77E-2	6.58E+0
ODP	Kg CFC-11 Equiv.	2.29E-7	4.10E-10	7.70E-8	6.46E-8	3.80E-10	0.00E+0	0.00E+0	0.00E+0	1.89E-7	1.48E-8	1.99E-9	8.21E-8	-4.00E-9	6.55E-7
POCP	Kg Ethene Equiv.	1.45E-3	1.36E-6	4.49E-4	3.80E-4	1.29E-6	0.00E+0	0.00E+0	0.00E+0	1.11E-3	5.02E-5	1.03E-5	2.63E-4	-3.87E-5	3.67E-3
AP	Kg SO2 Equiv.	1.05E-2	7.12E-6	3.33E-3	2.81E-3	9.41E-6	0.00E+0	0.00E+0	0.00E+0	8.21E-3	3.66E-4	8.33E-5	1.80E-3	-2.61E-4	2.69E-2
EP	Kg PO43- Equiv.	2.08E-3	1.31E-6	7.54E-4	6.39E-4	1.85E-6	0.00E+0	0.00E+0	0.00E+0	1.87E-3	7.19E-5	1.86E-5	3.48E-4	-4.25E-5	5.74E-3

ADPE=Depletion of abiotic resources-elements | **GWP**=Global warming | **ODP**=Ozone layer depletion | **POCP**=Photochemical oxidants creation | **AP**=Acidification of soil and water | **EP**=Eutrophication

3 Results

NATIONAL ANNEX NMD

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
ADPF	Kg Sb	1.80E-2	1.61E-5	3.05E-3	2.46E-3	1.57E-5	0.00E+0	0.00E+0	0.00E+0	7.19E-3	6.12E-4	1.28E-4	3.36E-3	-3.17E-4	3.45E-2
HTP	kg 1.4 DB	1.47E+0	1.03E-3	1.89E-1	1.38E-1	9.01E-4	0.00E+0	0.00E+0	0.00E+0	4.03E-1	3.50E-2	4.33E-3	1.11E-1	-2.16E-2	2.33E+0
FAETP	kg 1.4 DB	1.88E-2	2.80E-5	2.53E-3	1.92E-3	2.63E-5	0.00E+0	0.00E+0	0.00E+0	5.62E-3	1.02E-3	7.70E-5	2.64E-3	-2.54E-4	3.24E-2
MAETP	kg 1.4 DB	6.44E+1	1.10E-1	8.71E+0	6.68E+0	9.47E-2	0.00E+0	0.00E+0	0.00E+0	1.95E+1	3.68E+0	2.87E-1	9.46E+0	-1.25E+0	1.12E+2
TETP	kg 1.4 DB	9.93E-3	3.31E-6	6.34E-4	2.27E-4	3.19E-6	0.00E+0	0.00E+0	0.00E+0	6.64E-4	1.24E-4	5.26E-5	2.80E-4	2.51E-4	1.22E-2

ADPF=Depletion of abiotic resources-fossil fuels | HTP=Human toxicity | FAETP=Ecotoxicity, fresh water | MAETP=Ecotoxicity, marine water (MAETP) | TETP=Ecotoxicity, terrestrial

3.2 INDICATORS DESCRIBING RESOURCE USE AND ENVIRONMENTAL INFORMATION BASED ON LIFE CYCLE INVENTORY (LCI)

PARAMETERS DESCRIBING RESOURCE USE

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
PERE	MJ	4.39E+0	4.28E-4	9.44E-2	2.80E-2	4.08E-4	0.00E+0	0.00E+0	0.00E+0	8.20E-2	1.58E-2	1.40E-2	5.68E-2	-3.80E-2	4.64E+0
PERM	MJ	9.89E-2	0.00E+0	1.33E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.00E-1
PERT	MJ	2.66E+0	4.28E-4	7.13E-2	2.80E-2	4.08E-4	0.00E+0	0.00E+0	0.00E+0	8.20E-2	1.58E-2	1.40E-2	5.68E-2	-3.80E-2	2.89E+0
PENRE	MJ	5.59E+1	3.61E-2	7.07E+0	5.51E+0	3.46E-2	0.00E+0	0.00E+0	0.00E+0	1.61E+1	1.34E+0	2.61E-1	7.46E+0	-6.23E-1	9.31E+1
PENRM	MJ	1.70E-2	0.00E+0	4.93E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-5.69E-4	1.69E-2
PENRT	MJ	3.66E+1	3.61E-2	6.81E+0	5.51E+0	3.46E-2	0.00E+0	0.00E+0	0.00E+0	1.61E+1	1.34E+0	2.61E-1	7.46E+0	-6.24E-1	7.35E+1
SM	Kg	1.99E+0	0.00E+0	2.79E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.02E+0
RSF	MJ	8.71E-1	0.00E+0	1.17E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.83E-1

PERE=renewable primary energy ex. raw materials | PERM=renewable primary energy used as raw materials | PERT=renewable primary energy total | PENRE=non-renewable primary energy ex. raw materials | PENRM=non-renewable primary energy used as raw materials | PENRT=non-renewable primary energy total | SM=use of secondary material | RSF=use of renewable secondary fuels | NRSF=use of non-renewable secondary fuels | FW=use of net fresh water

3 Results

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
NRSF	MJ	8.10E-1	0.00E+0	1.09E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.21E-1
FW	M3	7.73E-2	3.87E-6	3.92E-4	2.67E-4	3.97E-6	0.00E+0	0.00E+0	0.00E+0	7.80E-4	1.54E-4	8.29E-5	7.49E-3	-1.58E-2	7.07E-2

PERE=renewable primary energy ex. raw materials | **PERM**=renewable primary energy used as raw materials | **PERT**=renewable primary energy total | **PENRE**=non-renewable primary energy ex. raw materials | **PENRM**=non-renewable primary energy used as raw materials | **PENRT**=non-renewable primary energy total | **SM**=use of secondary material | **RSF**=use of renewable secondary fuels | **NRSF**=use of non-renewable secondary fuels | **FW**=use of net fresh water

OTHER ENVIRONMENTAL INFORMATION DESCRIBING WASTE CATEGORIES

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
HWD	Kg	1.03E-4	8.25E-8	1.74E-5	1.41E-5	8.25E-8	0.00E+0	0.00E+0	0.00E+0	4.13E-5	3.21E-6	4.27E-7	1.05E-5	-1.47E-6	1.89E-4
NHWD	Kg	8.26E-1	2.96E-3	3.43E-2	6.14E-3	2.07E-3	0.00E+0	0.00E+0	0.00E+0	1.79E-2	8.03E-2	3.40E-2	4.77E+1	-6.81E-3	4.87E+1
RWD	Kg	7.27E-3	2.32E-7	1.39E-4	3.60E-5	2.14E-7	0.00E+0	0.00E+0	0.00E+0	1.05E-4	8.31E-6	1.10E-6	4.61E-5	-2.45E-6	7.61E-3

HWD=hazardous waste disposed | **NHWD**=non hazardous waste disposed | **RWD**=radioactive waste disposed

ENVIRONMENTAL INFORMATION DESCRIBING OUTPUT FLOWS

Abbreviation	Unit	A1	A2	A3	A4	A5	B1	B2	B3	C1	C2	C3	C4	D	Total
CRU	Kg	0.00E+0	0.00E+0	2.88E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.88E-4
MFR	Kg	7.12E-5	0.00E+0	7.84E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.12E+1	0.00E+0	0.00E+0	1.20E+1
MER	Kg	3.03E-6	0.00E+0	4.05E-8	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.07E-6
EE	MJ	5.58E-4	0.00E+0	2.20E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.08E-3	7.85E-3
EET	MJ	3.53E-4	0.00E+0	1.39E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.48E-3	4.97E-3
EEE	MJ	2.05E-4	0.00E+0	8.07E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.60E-3	2.88E-3

CRU=Components for re-use | **MFR**=Materials for recycling | **MER**=Materials for energy recovery | **EE**=Exported energy | **EET**=Exported Energy Thermic | **EEE**=Exported Energy Electric

3 Results

3.3 INFORMATION ON BIOGENIC CARBON CONTENT PER METER

BIOGENIC CARBON CONTENT

The following Information describes the biogenic carbon content in (the main parts of) the product at the factory gate per meter:

Biogenic carbon content	Amount	Unit
Biogenic carbon content in the product	0	kg C
Biogenic carbon content in accompanying packaging	0	kg C

3 Results

3.4 ENVIRONMENTAL COST INDICATOR NL PER METER

Using the environmental cost indicator (ECI) method, which is presented in the NMD Determination Method (2020), the results are aggregated to the single-point score. The ECI is a relevant valuation method, especially in the Dutch construction sector. In the Netherlands, it is a prerequisite for public tenders. The aim of the indicator is to show the shadow price for environmental impacts of a product or project. The application of single-point scores is an additional assessment tool for eco-balance results. However, it must be pointed out that weightings are always based on a value maintenance and not on a scientific basis (EN 14040). The ECI results are shown in the following table.

Module EN15804	ECI NL	Share in total (%)
A1 Raw Materials Supply	€ 0.42	58,4 %
A2 Transport	€ 0.00	0,0 %
A3 Manufacturing	€ 0.06	8,8 %
A4 Transport from the gate to the site	€ 0.05	6,9 %
A5 Construction - Installation process	€ 0.00	0,0 %
B1 Use	€ 0.00	0,0 %
B2 Maintenance	€ 0.00	0,0 %
B3 Repair	€ 0.00	0,0 %
C1 De-construction / demolition	€ 0.15	20,2 %
C2 Transport	€ 0.01	1,4 %
C3 Waste processing	€ 0.00	0,3 %
C4 Disposal	€ 0.03	4,8 %
D Benefits and loads beyond the product system boundary	€ -0.01	-0,8 %
ECI NL per functional unit	€ 0.72	

4 Contact information

Publisher

Operator

Owner of declaration

VAN BERLO 

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