Environmental Product Declaration

according to ISO 14025 and EN 15804

This declaration is for:

HEX tiles - Sold on Israeli market

Provided by:

Criaterra Earth Technologies

program operator

Stichting MRPI®

publisher

Stichting MRPI®

www.mrpi.nl

MRPI® registration

1.1.00314.2022

date of first issue

16-12-2022

date of this issue

16-12-2022

expiry date

16-12-2027

COMPANY INFORMATION

Criaterra Earth Technologies
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58856 17
Holon - Israel
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criaterra.com

MRPI® REGISTRATION

1.1.00314.2022

DATE OF ISSUE

16-12-2022

EXPIRY DATE

16-12-2027

PRODUCT

HEX tiles - Sold on Israeli market

DECLARED UNIT/FUNCTIONAL UNIT

1 m2

DESCRIPTION OF PRODUCT

Criaterra tiles are suitable for decorative indoor walls. The tiles have various shapes.

VISUAL PRODUCT

MORE INFORMATION

https://criaterra.com/#BeIndChart

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by **dr. Niels Jonkers, PLUK Sustainability.**
The LCA study has been done by **dr. Lex Roes, Ecochain Technologies BV.**
The certificate is based on an LCA-dossier according to ISO14025 and EN15804+A2/Bepalingsmethode. It is verified according to the 'MRPI®-EPD verification protocol November 2020.v4.0'. EPDs of construction products may not be comparable if they do not comply with EN15804+A2/Bepalingsmethode. Declaration of SVHC that are listed on the 'Candidate List of Substances of Very High Concern for authorisation' when content exceeds the limits for registration with ECHA.

PROGRAM OPERATOR

Stichting MRPI®
Kingsfordweg 151
1043GR
Amsterdam

ir. J-P den Hollander, Managing director MRPI®

DEMONSTRATION OF VERIFICATION
CEN standard EN15804 serves as the core PCR[a]
Independent verification of the declaration and data, according to EN ISO 14025:2010: internal: external: X
Third party verifier: dr. Niels Jonkers, PLUK Sustainability
[a] PCR = Product Category Rules

DETAILED PRODUCT DESCRIPTION

Criaterra tiles are suitable for decorative indoor walls. They are not suitable for areas exposed to outdoor conditions or to high moisture levels internally. The tiles have various shapes. Per square meter of the HEX collection, the weight is up to 28 kg. The tile depth is up to 17,5 mm. A reference service life (RSL) of 50 years is assumed, applying to reference conditions.

COMPONENT > 1% of total mass	[%]
Sand powder 2	Confidential
Sand powder 1	Confidential
Clay powder 1	Confidential
sand powder 3	Confidential
Sand powder 4	Confidential
Clay powder 2	Confidential
Fibers flax / textile	Confidential
Cardboard	Confidential
Packing tape	Confidential

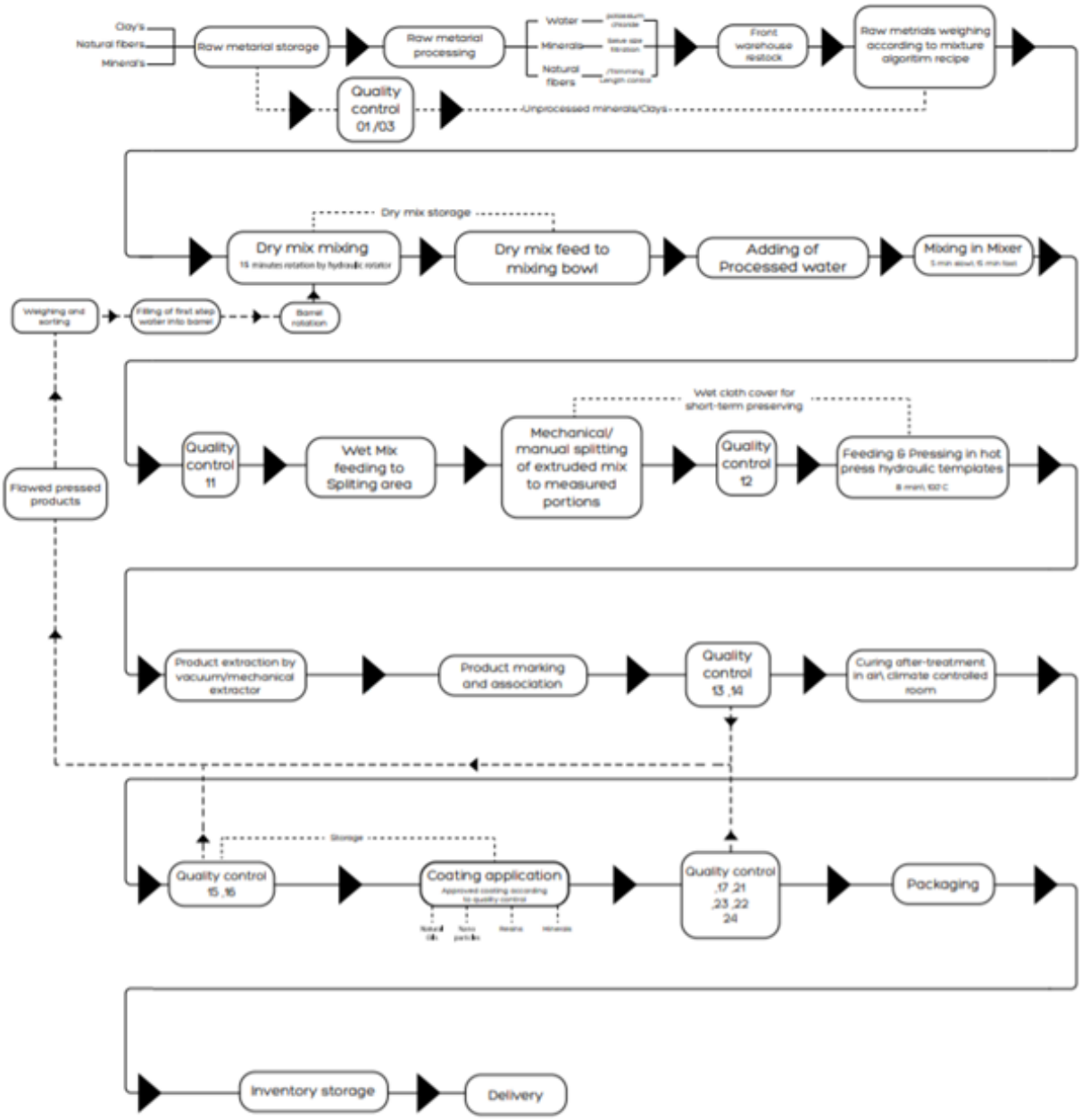
SCOPE AND TYPE

This EPD is specific for Hex Tiles produced and sold on the Israeli market. End-of-life treatment is in Israel. The LCA has been modelled using software of Ecochain Helix v3.5.48 with databases Ecoinvent v3.6 and Nationale Milieudatabase v3.3.

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport gate to site	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
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

X = Modules Assessed

ND = Not Declared



LCA process diagram according to EN 15804 (7.2.1)

REPRESENTATIVENESS

The data in this EPD are representative for Criaterra earth tiles from the HEX collection, produced by Criaterra Earth Technologies at their production facility in Holon, Israel.

ENVIRONMENTAL IMPACT per functional unit or declared unit (indicators A1)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADPE	kg Sb eq.	7.02 E-5	1.29 E-5	4.25 E-8	8.31 E-5	4.79 E-6	6.83 E-4	0.00	1.32 E-6	0.00	0.00	0.00	0.00	0.00	0.00	9.57 E-6	1.03 E-7	2.02 E-7	-8.84 E-6
ADPF	MJ	8.97 E+1	8.56 E+0	2.27 E-2	9.83 E+1	2.86 E+0	9.35 E+1	0.00	1.63 E+0	0.00	0.00	0.00	0.00	0.00	0.00	5.73 E+0	5.30 E-1	6.15 E-1	-6.21 E+0
GWP	kg CO2 eq.	6.70 E+0	5.77 E-1	1.49 E-3	7.28 E+0	1.87 E-1	5.84 E+0	0.00	4.71 E-2	0.00	0.00	0.00	0.00	0.00	0.00	3.75 E-1	3.60 E-2	2.17 E-2	-4.56 E-1
ODP	kg CFC11 eq.	3.26 E-7	1.01 E-7	1.57 E-10	4.26 E-7	3.32 E-8	5.03 E-7	0.00	5.50 E-9	0.00	0.00	0.00	0.00	0.00	0.00	6.65 E-8	3.94 E-9	7.23 E-9	-2.93 E-8
POCP	kg ethene eq.	2.98 E-3	4.22 E-4	9.14 E-7	3.41 E-3	1.13 E-4	4.19 E-3	0.00	5.51 E-5	0.00	0.00	0.00	0.00	0.00	0.00	2.26 E-4	2.06 E-5	2.31 E-5	-2.38 E-4
AP	kg SO2 eq.	4.56 E-2	4.75 E-3	7.36 E-6	5.03 E-2	8.24 E-4	3.29 E-2	0.00	2.92 E-4	0.00	0.00	0.00	0.00	0.00	0.00	1.65 E-3	1.67 E-4	1.59 E-4	-3.04 E-3
EP	kg (PO4)3- eq.	2.92 E-2	7.02 E-4	9.35 E-7	2.99 E-2	1.62 E-4	4.94 E-3	0.00	2.44 E-5	0.00	0.00	0.00	0.00	0.00	0.00	3.24 E-4	3.71 E-5	3.06 E-5	-1.58 E-3

Toxicity indicators for Dutch market

HTP	kg DCB eq.	2.15 E+0	2.57 E-1	5.88 E-4	2.41 E+0	7.89 E-2	3.27 E+0	0.00	3.07 E-2	0.00	0.00	0.00	0.00	0.00	0.00	1.58 E-1	8.56 E-3	9.81 E-3	-1.63 E-1
FAETP	kg DCB eq.	3.64 E-1	6.77 E-3	1.28 E-5	3.70 E-1	2.30 E-3	4.25 E-1	0.00	5.67 E-4	0.00	0.00	0.00	0.00	0.00	0.00	4.61 E-3	1.48 E-4	2.33 E-4	-1.92 E-2
MAETP	kg DCB eq.	1.62 E+2	2.54 E+1	4.06 E-2	1.87 E+2	8.28 E+0	3.51 E+2	0.00	1.68 E+0	0.00	0.00	0.00	0.00	0.00	0.00	1.66 E+1	5.56 E-1	8.32 E-1	-1.21 E+1
TETP	kg DCB eq.	1.91 E-2	8.74 E-4	1.76 E-5	2.00 E-2	2.79 E-4	9.60 E-3	0.00	3.79 E-4	0.00	0.00	0.00	0.00	0.00	0.00	5.58 E-4	1.05 E-4	2.46 E-5	-1.22 E-3
ECI	Euro	1.01 E+0	8.16 E-2	1.75 E-4	1.10 E+0	2.26 E-2	8.26 E-1	0.00	6.95 E-3	0.00	0.00	0.00	0.00	0.00	0.00	4.52 E-2	3.72 E-3	3.06 E-3	-6.66 E-2
ADPF	kg Sb. eq.	4.32 E-2	4.12 E-3	1.09 E-5	4.73 E-2	1.38 E-3	4.50 E-2	0.00	7.85 E-4	0.00	0.00	0.00	0.00	0.00	0.00	2.76 E-3	2.55 E-4	2.96 E-4	-2.98 E-3

ADPE = Abiotic Depletion Potential for non-fossil resources
ADPF = Abiotic Depletion Potential for fossil resources
GWP = Global Warming Potential
ODP = 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 = Fresh water aquatic ecotoxicity potential
MAETP = Marine aquatic ecotoxicity potential
TETP = Terrestrial ecotoxicity potential
ECI = Environmental Cost Indicator
ADPF = Abiotic Depletion Potential for fossil resources expressed in [kg Sb-eq.]

ENVIRONMENTAL IMPACT per functional unit or declared unit (core indicators A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	5.90 E+0	5.82 E-1	1.55 E-3	6.48 E+0	1.89 E-1	5.97 E+0	0.00	4.87 E-2	0.00	0.00	0.00	0.00	0.00	0.00	3.78 E-1	3.67 E-2	2.22 E-2	-4.18 E-1
GWP-fossil	kg CO2 eq.	5.29 E+0	5.81 E-1	1.52 E-3	5.87 E+0	1.89 E-1	5.90 E+0	0.00	4.86 E-2	0.00	0.00	0.00	0.00	0.00	0.00	3.78 E-1	3.64 E-2	2.21 E-2	-3.88 E-1
GWP-biogenic	kg CO2 eq.	-5.71 E-2	1.90 E-4	3.10 E-5	-5.69 E-2	8.72 E-5	2.79 E-2	0.00	8.02 E-5	0.00	0.00	0.00	0.00	0.00	0.00	1.74 E-4	2.11 E-4	4.39 E-5	2.41 E-3
GWP-luluc	kg CO2 eq.	6.61 E-1	2.46 E-4	2.47 E-6	6.61 E-1	6.92 E-5	3.73 E-2	0.00	3.60 E-5	0.00	0.00	0.00	0.00	0.00	0.00	1.38 E-4	6.93 E-6	6.17 E-6	-3.32 E-2
ODP	kg CFC11 eq.	2.98 E-7	1.26 E-7	1.35 E-10	4.24 E-7	4.17 E-8	5.51 E-7	0.00	5.35 E-9	0.00	0.00	0.00	0.00	0.00	0.00	8.34 E-8	4.73 E-9	9.11 E-9	-3.06 E-8
AP	mol H+ eq.	3.41 E-2	6.10 E-3	8.86 E-6	4.02 E-2	1.10 E-3	3.83 E-2	0.00	3.44 E-4	0.00	0.00	0.00	0.00	0.00	0.00	2.19 E-3	2.29 E-4	2.10 E-4	-2.69 E-3
EP-freshwater	kg PO4 eq.	3.18 E-3	5.25 E-6	1.21 E-7	3.18 E-3	1.91 E-6	3.76 E-4	0.00	2.18 E-6	0.00	0.00	0.00	0.00	0.00	0.00	3.81 E-6	1.14 E-6	2.48 E-7	-1.63 E-4
EP-marine	kg N eq.	7.95 E-3	1.80 E-3	1.41 E-6	9.74 E-3	3.86 E-4	6.24 E-3	0.00	4.72 E-5	0.00	0.00	0.00	0.00	0.00	0.00	7.72 E-4	9.10 E-5	7.22 E-5	-6.82 E-4
EP-terrestrial	mol N eq.	6.62 E-2	1.99 E-2	1.64 E-5	8.61 E-2	4.26 E-3	6.72 E-2	0.00	5.30 E-4	0.00	0.00	0.00	0.00	0.00	0.00	8.51 E-3	1.01 E-3	7.96 E-4	-6.56 E-3
POCP	kg NMVOC eq.	1.73 E-2	5.43 E-3	5.14 E-6	2.27 E-2	1.22 E-3	2.21 E-2	0.00	2.21 E-4	0.00	0.00	0.00	0.00	0.00	0.00	2.43 E-3	2.75 E-4	2.31 E-4	-1.76 E-3
ADP-minerals & metals	kg Sb eq.	6.65 E-5	1.29 E-5	4.25 E-8	7.94 E-5	4.79 E-6	6.82 E-4	0.00	1.32 E-6	0.00	0.00	0.00	0.00	0.00	0.00	9.57 E-6	1.03 E-7	2.02 E-7	-8.66 E-6
ADP-fossil	MJ, net calorific value	6.84 E+1	8.53 E+0	2.60 E-2	7.69 E+1	2.85 E+0	8.21 E+1	0.00	1.55 E+0	0.00	0.00	0.00	0.00	0.00	0.00	5.70 E+0	4.89 E-1	6.18 E-1	-5.02 E+0
WDP	m3 world eq. deprived	2.33 E+0	2.78 E-2	1.91 E-1	2.55 E+0	1.02 E-2	3.03 E+0	0.00	8.81 E-1	0.00	0.00	0.00	0.00	0.00	0.00	2.04 E-2	2.22 E-3	2.77 E-2	-1.48 E+0

GWP-total = Global Warming Potential total
GWP-fossil = Global Warming Potential fossil fuels
GWP-biogenic = Global Warming Potential biogenic
GWP-luluc = Global Warming Potential land use and land use change
ODP = Depletion potential of the stratospheric ozone layer
AP = Acidification Potential, Accumulated Exceedence
EP-freshwater = Eutrophication Potential, fraction of nutrients reaching freshwater end compartment
EP-marine = Eutrophication Potential, fraction of nutrients reaching marine end compartment
EP-terrestrial = Eutrophication Potential, Accumulated Exceedence
POCP = Formation potential of tropospheric ozone photochemical oxidants
ADP-minerals&metals = Abiotic Depletion Potential for non fossil resources [2]
ADP-fossil = Abiotic Depletion for fossil resources potential [2]
WDP = Water (user) deprivation potential, deprivation-weighted water consumption [2]

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 experience with the indicator.

ENVIRONMENTAL IMPACT per functional unit or declared unit (additional indicators A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PM	Disease incidence	1.92 E-7	4.62 E-8	7.44 E-11	2.38 E-7	1.70 E-8	3.21 E-7	0.00	3.13 E-9	0.00	0.00	0.00	0.00	0.00	0.00	3.39 E-8	5.03 E-9	4.07 E-9	-2.36 E-8
IRP	kBq U235 eq.	7.90 E-2	3.59 E-2	1.80 E-4	1.15 E-1	1.19 E-2	1.83 E-1	0.00	1.51 E-3	0.00	0.00	0.00	0.00	0.00	0.00	2.39 E-2	1.55 E-3	2.54 E-3	-1.05 E-2
ETP-fw	CTUe	1.60 E+2	7.29 E+0	2.85 E-2	1.67 E+2	2.54 E+0	1.87 E+2	0.00	1.12 E+0	0.00	0.00	0.00	0.00	0.00	0.00	5.08 E+0	3.97 E-1	4.01 E-1	-1.03 E+1
HTP-c	CTUh	2.29 E-9	2.67 E-10	4.15 E-12	2.56 E-9	8.24 E-11	6.82 E-9	0.00	1.72 E-10	0.00	0.00	0.00	0.00	0.00	0.00	1.65 E-10	9.42 E-12	9.27 E-12	-1.98 E-10
HTP-nc	CTUh	7.02 E-8	7.72 E-9	9.29 E-11	7.80 E-8	2.78 E-9	1.62 E-7	0.00	2.11 E-9	0.00	0.00	0.00	0.00	0.00	0.00	5.56 E-9	2.66 E-10	2.85 E-10	-5.87 E-9
SQP	---	8.18 E+1	6.45 E+0	7.33 E-3	8.83 E+1	2.47 E+0	3.49 E+1	0.00	1.93 E-1	0.00	0.00	0.00	0.00	0.00	0.00	4.94 E+0	8.18 E-2	1.30 E+0	-5.93 E+0

PM = Potential incidence of disease due to PM emissions
IRP = Potential Human exposure efficiency relative to U235 [1]
ETP-fw = Potential Comparative Toxic Unit for ecosystems [2]
HTP-c = Potential Comparative Toxic Unit for humans [2]
HTP-nc = Potential Comparative Toxic Unit for humans, non-cancer [2]
SQP = Potential soil quality index [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 experience with the indicator.

RESOURCE USE per functional unit or declared unit (A1 / A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	3.19 E+1	9.93 E-2	3.53 E-3	3.20 E+1	3.57 E-2	6.50 E+0	0.00	5.01 E-2	0.00	0.00	0.00	0.00	0.00	0.00	7.13 E-2	2.79 E-2	5.00 E-3	-1.68 E+0
PERM	MJ	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	0.00	0.00	0.00	0.00
PERT	MJ	3.19 E+1	9.93 E-2	3.53 E-3	3.20 E+1	3.57 E-2	6.50 E+0	0.00	5.01 E-2	0.00	0.00	0.00	0.00	0.00	0.00	7.13 E-2	2.79 E-2	5.00 E-3	-1.68 E+0
PENRE	MJ	8.18 E+1	9.06 E+0	2.74 E-2	9.09 E+1	3.03 E+0	8.81 E+1	0.00	1.65 E+0	0.00	0.00	0.00	0.00	0.00	0.00	6.05 E+0	5.22 E-1	6.57 E-1	-5.79 E+0
PENRM	MJ	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	0.00	0.00	0.00	0.00
PENRT	MJ	8.18 E+1	9.06 E+0	2.74 E-2	9.09 E+1	3.03 E+0	8.81 E+1	0.00	1.65 E+0	0.00	0.00	0.00	0.00	0.00	0.00	6.05 E+0	5.22 E-1	6.57 E-1	-5.79 E+0
SM	kg	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	0.00	0.00	0.00	0.00
RSF	MJ	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	0.00	0.00	0.00	0.00
NRSF	MJ	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	0.00	0.00	0.00	0.00
FW	m3	1.83 E-1	9.48 E-4	4.46 E-3	1.89 E-1	3.47 E-4	8.42 E-2	0.00	2.07 E-2	0.00	0.00	0.00	0.00	0.00	0.00	6.94 E-4	1.63 E-4	6.60 E-4	-4.10 E-2

PERE = Use of renewable energy excluding renewable primary energy resources
PERM = Use of renewable energy resources used as raw materials
PERT = Total use of renewable primary energy resources
PENRE = Use of non-renewable primary energy resources excluding non-renewable 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 materials
RSF = Use of renewable secondary fuels
NRSF = Use of non renewable secondary fuels
FW = Use of net fresh water

OUTPUT FLOWS AND WASTE CATEGORIES per functional unit or declared unit (A1 / A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	5.44 E-4	1.95 E-5	4.45 E-8	5.64 E-4	7.22 E-6	1.12 E-4	0.00	1.15 E-6	0.00	0.00	0.00	0.00	0.00	0.00	1.44 E-5	8.52 E-7	9.24 E-7	-3.06 E-5
NHWD	kg	5.42 E-1	4.61 E-1	3.15 E-4	1.00 E+0	1.81 E-1	1.55 E+0	0.00	4.68 E-3	0.00	0.00	0.00	0.00	0.00	0.00	3.62 E-1	6.82 E-2	4.20 E+0	-6.29 E-2
RWD	kg	1.08 E-4	5.65 E-5	1.52 E-7	1.64 E-4	1.87 E-5	1.92 E-4	0.00	1.38 E-6	0.00	0.00	0.00	0.00	0.00	0.00	3.74 E-5	2.20 E-6	4.06 E-6	-1.34 E-5
CRU	kg	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	0.00	0.00	0.00	0.00
MFR	kg	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	0.00	0.00	0.00	0.00
MER	kg	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	0.00	0.00	0.00	0.00
EEE	MJ	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	0.00	0.00	0.00	0.00
ETE	MJ	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	0.00	0.00	0.00	0.00

HWD = Hazardous Waste Disposed
NHWD = Non Hazardous Waste Disposed
RWD = Radioactive Waste Disposed
CRU = Components for reuse
MFR = Materials for recycling
MER = Materials for energy recovery
EEE = Exported Electrical Energy
ETE = Exported Thermal Energy

BIOGENIC CARBON CONTENT per functional unit or declared unit (A1 / A2)

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
BCCpr	kg C	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	0.00	0.00	0.00	0.00
BCCpa	kg C	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	0.00	0.00	0.00	0.00

BCCpr = Biogenic carbon content in product
BCCpa = Biogenic carbon content in packaging

CALCULATION RULES

Only for electricity use a specific dataset for Israel could be selected. Other datasets have been chosen more generic, e.g. region ‘Rest-of-World’ or ‘Global’. The dataset is up-to-date and representative for the current technology used in the processes of manufacturing the product.

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

The material for manufacturing is made by an intelligent mixture of dry particulate insoluble minerals; utilize advanced particle distribution approaches and models. Some clays are added to that dry mixture to add both bonding and plasticity properties. To the particulate ingredients (sands+ silts +clays) some plant based fibrous materials are introduced to add the tensile capability to the total mixture. All those ingredients are mixed together with water to create the final ready to press mixture. The wet mixture is pressed with the addition of heating to low temperatures in a metal mold having the capability to aid water extraction from the material from one hand and entrapping all other materials from the other hand. The pressed product is dried until reaching predetermined moisture content. Electricity is used for heating the mold and heating the oven for drying. The product is then coated by plant drying oils extraction to seal and protect it from water and other possible harmful substances. After transport to the construction site (A4) the tiles are installed by hand with the use of adhesive mortar (A5). Packaging material is released and processed. After use (B), the tiles are demolished by hand (C1) with separation of the tiles and the adhesive. For the waste processing of the tiles, the default waste processing scenario for 'light ceramic ('fijnkeramisch')' is assumed. According to this scenario 80% is recycled, 15% is landfilled and 5% is reused. The tiles are transported to (C2) and further processed in a grinding installation (C3) where granulate is recycled and transported to (C2) a landfill (C4). Module D involves the primary equivalent of granulate (gravel) and the avoided tile impacts from reusing the tiles.

For tiles sold on the Israeli market, a transport distance of 50 km is assumed.

DECLARATION OF SVHC

According to the Declaration of SVHC for the products under study, none of the raw materials is listed in the “Candidate List of Substances of Very High Concern for authorisation” of the European Chemicals Agency.

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REMARKS

None