

Owner: Fischer International A/S
No.: MD-22016-EN
Issued: 25-04-2022
Valid to: 25-04-2027

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration
 Fischer International A/S
 Holmstrupgårdvej 4
 8220 Brabrand
 VAT: 20033290

Fischer
blendex
KViNT blendex
 Fönsterdesign **blendex**

Issued:
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Valid to:
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Programme
 EPD Danmark
www.epddanmark.dk



- Industry EPD
- Product EPD

Declared product(s)

The EPD covers all products below sold under the brand names Fischer, Blendex, Kvint Blendex and Fönsterdesign Blendex.

The declared products are listed below

- Screen System Zipper 95 Straight, 95 OV, 100i and 105i
- Screen System Zipper D-95 and 3z-100
- Screen System Zipper 125 Straight and 125 OV
- Screen System Zipper D-125 and 3ZM-143
- Screen System 65 Straight
- Screen System D-65 and 3F-67
- Screen System 95 Straight
- Screen System D-95, D85 and 3D-97
- Screen System 125 Straight
- Screen System D-125 and D110

Number of declared datasets: 10

Production site

Fischer International's production site in Lithuania
 Address: Siūlų g. 1, Kaunas 45202, Lithuania

Products use

Screen Systems are flexible exterior solar shading solutions for buildings. The main purpose is to keep the heat away from the inside of the building, hereby contributing to an improved indoor climate and a reduced energy consumption for cooling in the building.

Declared/ functional unit

1 m² of screen

Year of data

2020

Basis of calculation

This EPD is developed in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

EPD type

- Cradle-to-gate with modules C1-C4 and D
- Cradle-to-gate with options, modules C1-C4 and D
- Cradle-to-grave and module D
- Cradle-to-gate
- Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR
Independent verification of the declaration and data, according to EN ISO 14025
<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
Third party verifier: Ninkie Bendtsen

Martha Katrine Sørensen
 EPD Danmark

Life cycle stages and modules (MND = module not declared)

Product			Construction process		Use								End of life				Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X	

Product information

Product description

The main product components are shown in the table below.

Material	Weight-% of declared product
Aluminium	37% - 46%
Electric motor	7% - 22%
Neoprene	0% - 0.03%
Polyamide	0% - 4%
Polypropylene	0% - 0.3%
Rubber	0% - 0.1%
Glass fiber/PVC vovon	9% - 14%
Stainless steel	0% - 0.5%
Steel	17% - 43%
Sum	100%

The packaging composition is listed in the table below.

Material	Value
Corrugated board	46% - 57%
Tape	0.3% - 0.4%
Foam	2% - 4%
Wooden pallet	40% - 52%

Representativity

This declaration, including data collection and the modelled foreground system including results, represents the production of Screen Systems on the production site located in Kaunas, Lithuania. Product specific data are based on average values collected in the year 2020. Background data are based on the GaBi LCA software and are less than 10 years old. Generally, the used background datasets are of high quality, and the majority of the datasets are only a couple of years old.

Hazardous substances

The Screen Systems do not contain substances listed in the "Candidate List of Substances of Very High Concern for authorisation"
(<http://echa.europa.eu/candidate-list-table>)

Essential characteristics

There is no harmonized EN norm covering the screens as a product but the Screen Systems live up to the following directives for CE marking:

- 2006/42/EF Machinery directive
- 2014/35/EU Low Voltage Directive
- 2014/30/EU EMC Directive

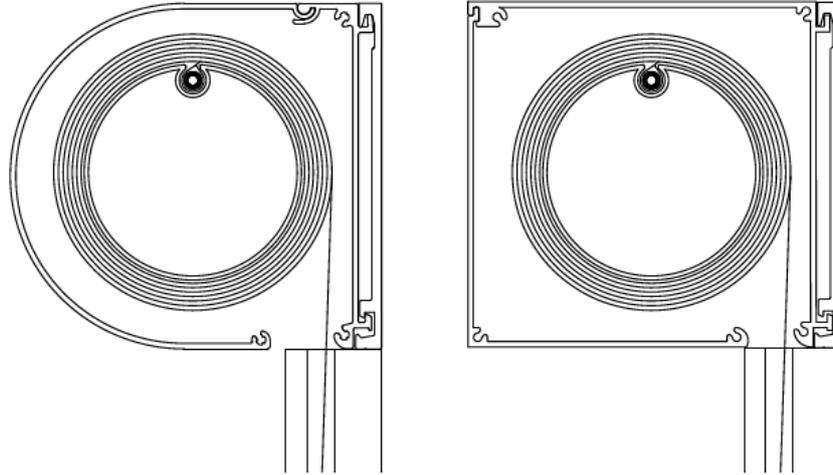
Further technical information can be obtained by contacting the manufacturer or on the manufacturers website:
<https://fischer-international.dk/products/screens/>

Reference Service Life (RSL)

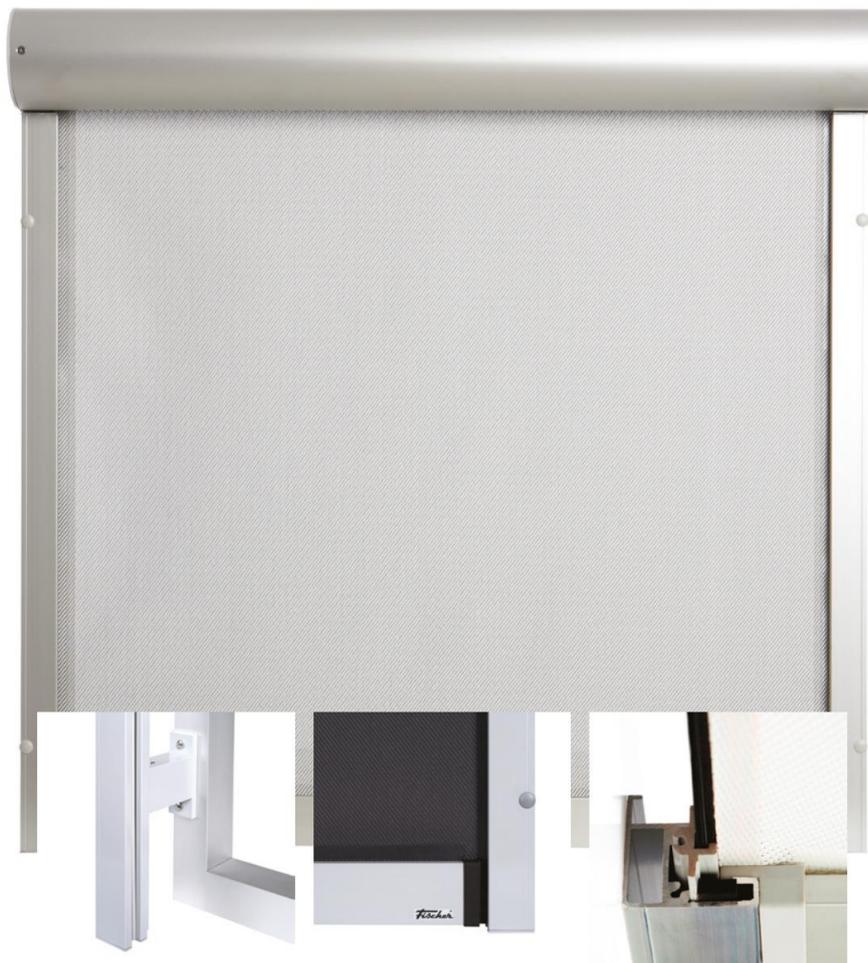
The lifetime of the rail and system installation is 30 years. The lifetime of the electric motor and the screen fabric is 15 years.

Pictures of products

The outline below shows how products are available in a D shaped version (left) and a Straight version (right) referring to the shape of the top box of the product installed. This specification is found in the product name. The photos on the following page show the Screen Zipper system and then the Screen System without zipper declared in the specified model codes from 65 to 125.



The photo below shows the Zipper Screen System.



The photo below shows the Screen System without zipper.



LCA background

Declared unit

The LCI and LCIA results in this EPD relates to 1 m² of screen system

Name	Zipper 95 Straight	Zipper D-95	Zipper 125 Straight	Zipper D-125	65 Straight	D-65	95 Straight	D-95	125 Straight	D-125
Declared unit, m ²	1 m ²									
Mass per declared unit, kg/m ²	5.51	5.44	4.61	4.42	3.87	3.78	5.54	5.38	5.64	5.34
Conversion to 1 kg	0.181	0.184	0.217	0.226	0.258	0.265	0.180	0.186	0.177	0.187

Functional unit and reference service life (RSL)

The functional unit is not defined as the use stages B1-B7 are not declared

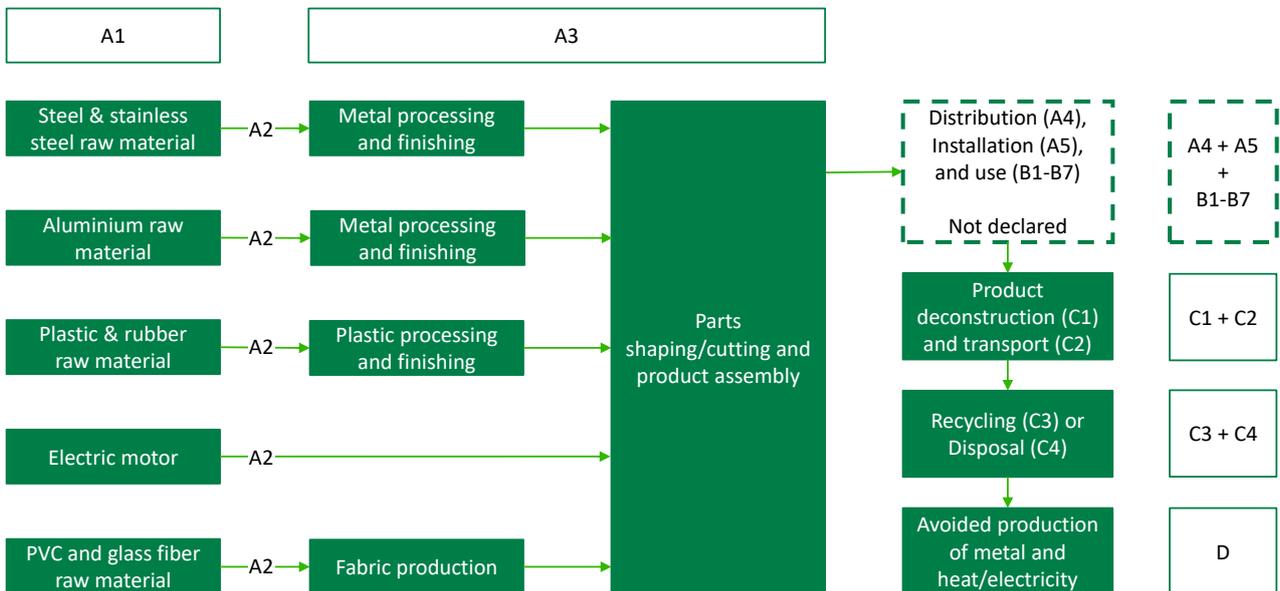
The reference service life (RSL) is approx. 15 years on screen and electric motor and 30 years on remaining product.

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804 version A2:2019.

Flowdiagram

The process diagram below represents the life cycle of a Screen System product from Fischer.



System boundary

This EPD is based on a cradle-to-grave LCA with modules C1-C4 and D, in which 100 weight-% has been accounted for.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

Product stage (A1-A3) includes:

- A1 – Extraction and processing of raw materials
- A2 – Transport to the production site
- A3 – Manufacturing processes

The steel and stainless steel parts, as well as plastic/rubber parts, are manufactured by suppliers. Aluminium extruded side-rails are received in long shapes and cut into final length. Other aluminium parts are manufactured entirely at suppliers.

Electric motor is received from suppliers as a complete unit.

The screen fabric in woven PVC/glass fibre is received on large reels from suppliers. The fabric is cut into a pre-shape slightly larger than final cut. The pre-shape is allowed to rest for 24 hours before cutting into final shape to prevent material shrinking/deformation on the final product.

End of Life (C1-C4) includes:

The screens are assumed disposed of in Northern Europe. The screens are assumed dismantled using hand tools (C1) and transported to local recycling (C2).

The fabric in PVC and glass fibre is landfilled (C4).

The remaining product is dismantled in an industrial shredder assuming average recovery of materials (C3).

Re-use, recovery and recycling potential (D) includes:

The recycled metals are credited an avoided production of primary steel, stainless steel and aluminium.

LCA results

Screen System Zipper 95 Straight Screen System Zipper 95 Straight

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	4,06E+01	0,00E+00	1,52E-02	3,54E-01	3,23E-02	-2,31E+01
GWP-fossil	[kg CO ₂ eq.]	4,12E+01	0,00E+00	1,49E-02	3,50E-01	3,27E-02	-2,31E+01
GWP-bio	[kg CO ₂ eq.]	-6,38E-01	0,00E+00	1,61E-04	3,01E-03	-4,72E-04	4,30E-03
GWP-luluc	[kg CO ₂ eq.]	2,18E-02	0,00E+00	1,23E-04	4,37E-04	4,21E-05	-6,71E-03
ODP	[kg CFC 11 eq.]	7,67E-10	0,00E+00	2,98E-18	7,34E-15	8,93E-17	-1,91E-12
AP	[mol H ⁺ eq.]	1,66E-01	0,00E+00	1,63E-05	6,62E-04	1,27E-04	-8,55E-02
EP-fw	[kg P eq.]	1,77E-04	0,00E+00	4,48E-08	1,56E-06	4,76E-06	-1,99E-05
EP-mar	[kg N eq.]	2,77E-02	0,00E+00	5,29E-06	1,62E-04	3,04E-05	-1,46E-02
EP-ter	[mol N eq.]	2,84E-01	0,00E+00	6,26E-05	1,69E-03	3,34E-04	-1,59E-01
POCP	[kg NMVOC eq.]	8,35E-02	0,00E+00	1,43E-05	4,38E-04	9,52E-05	-4,49E-02
ADP-mm ¹	[kg Sb eq.]	3,38E-04	0,00E+00	1,34E-09	9,14E-08	2,43E-09	-1,57E-04
ADP-fos ¹	[MJ]	5,86E+02	0,00E+00	2,01E-01	5,85E+00	4,68E-01	-2,99E+02
WDP ¹	[m ³]	1,33E+01	0,00E+00	1,40E-04	5,15E-02	4,35E-04	-1,47E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

Screen System Zipper 95 Straight

ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,21E-06	0,00E+00	1,11E-10	5,61E-09	1,38E-09	-8,62E-07
IRP2	[kBq U235 eq.]	6,78E+00	0,00E+00	5,35E-05	1,33E-01	7,27E-04	-4,35E+00
ETP-fw1	[CTUe]	3,97E+02	0,00E+00	1,49E-01	2,39E+00	4,10E-01	-1,05E+02
HTP-c1	[CTUh]	6,81E-08	0,00E+00	3,02E-12	7,09E-11	2,38E-11	-1,30E-08
HTP-nc1	[CTUh]	1,11E-06	0,00E+00	1,57E-10	2,89E-09	2,20E-09	-2,13E-07
SQP1	-	2,03E+02	0,00E+00	6,91E-02	1,72E+00	4,43E-02	-1,69E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² 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.						

Screen System Zipper 95 Straight

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,70E+02	0,00E+00	1,16E-02	2,51E+00	3,98E-02	-8,39E+01
PERM	[MJ]	7,69E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,78E+02	0,00E+00	1,16E-02	2,51E+00	3,98E-02	-8,39E+01
PENRE	[MJ]	5,67E+02	0,00E+00	2,02E-01	5,85E+00	4,68E-01	-3,00E+02
PENRM	[MJ]	1,90E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,86E+02	0,00E+00	2,02E-01	5,85E+00	4,68E-01	-3,00E+02
SM	[kg]	5,77E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	4,20E-01	0,00E+00	1,33E-05	2,50E-03	2,64E-05	-1,85E-01
Caption	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						

Screen System Zipper 95 Straight

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,68E-05	0,00E+00	1,06E-11	1,51E-09	7,74E-11	-1,64E-08
NHWD	[kg]	6,21E+00	0,00E+00	3,17E-05	2,88E-02	8,22E-01	-4,29E+00
RWD	[kg]	3,57E-02	0,00E+00	3,66E-07	8,11E-04	5,33E-06	-1,97E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,10E-01	0,00E+00	0,00E+00	4,65E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

Screen System Zipper 95 Straight

BIOGENIC CARBON CONTENT PER PER PRODUKT PER M ²		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	2,48E-01

Screen System Zipper D-95
Screen System Zipper D-95

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	4,00E+01	0,00E+00	1,51E-02	3,50E-01	3,23E-02	-2,26E+01
GWP-fossil	[kg CO ₂ eq.]	4,06E+01	0,00E+00	1,48E-02	3,46E-01	3,27E-02	-2,26E+01
GWP-bio	[kg CO ₂ eq.]	-6,45E-01	0,00E+00	1,60E-04	2,98E-03	-4,71E-04	4,35E-03
GWP-luluc	[kg CO ₂ eq.]	2,15E-02	0,00E+00	1,23E-04	4,31E-04	4,20E-05	-6,55E-03
ODP	[kg CFC 11 eq.]	7,62E-10	0,00E+00	2,96E-18	7,25E-15	8,91E-17	-1,91E-12
AP	[mol H ⁺ eq.]	1,64E-01	0,00E+00	1,62E-05	6,54E-04	1,27E-04	-8,34E-02
EP-fw	[kg P eq.]	1,75E-04	0,00E+00	4,45E-08	1,55E-06	4,77E-06	-1,97E-05
EP-mar	[kg N eq.]	2,73E-02	0,00E+00	5,25E-06	1,60E-04	3,04E-05	-1,43E-02
EP-ter	[mol N eq.]	2,80E-01	0,00E+00	6,22E-05	1,67E-03	3,33E-04	-1,55E-01
POCP	[kg NMVOC eq.]	8,25E-02	0,00E+00	1,42E-05	4,33E-04	9,49E-05	-4,38E-02
ADP-mm ¹	[kg Sb eq.]	3,38E-04	0,00E+00	1,33E-09	9,02E-08	2,43E-09	-1,57E-04
ADP-fos ¹	[MJ]	5,76E+02	0,00E+00	2,00E-01	5,78E+00	4,68E-01	-2,92E+02
WDP ¹	[m ³]	1,31E+01	0,00E+00	1,39E-04	5,09E-02	4,29E-04	-1,44E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

Screen System Zipper D-95

ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,18E-06	0,00E+00	1,10E-10	5,54E-09	1,37E-09	-8,42E-07
IRP2	[kBq U235 eq.]	6,60E+00	0,00E+00	5,32E-05	1,31E-01	7,27E-04	-4,22E+00
ETP-fw1	[CTUe]	3,89E+02	0,00E+00	1,48E-01	2,36E+00	4,09E-01	-1,02E+02
HTP-c1	[CTUh]	6,79E-08	0,00E+00	3,00E-12	7,01E-11	2,37E-11	-1,28E-08
HTP-nc1	[CTUh]	1,10E-06	0,00E+00	1,56E-10	2,86E-09	2,19E-09	-2,08E-07
SQP1	-	2,03E+02	0,00E+00	6,86E-02	1,70E+00	4,42E-02	-1,64E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
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Screen System Zipper D-95

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,66E+02	0,00E+00	1,15E-02	2,48E+00	3,97E-02	-8,15E+01
PERM	[MJ]	7,69E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,74E+02	0,00E+00	1,15E-02	2,48E+00	3,97E-02	-8,15E+01
PENRE	[MJ]	5,58E+02	0,00E+00	2,00E-01	5,78E+00	4,68E-01	-2,92E+02
PENRM	[MJ]	1,90E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,77E+02	0,00E+00	2,00E-01	5,78E+00	4,68E-01	-2,92E+02
SM	[kg]	5,79E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	4,13E-01	0,00E+00	1,32E-05	2,47E-03	2,62E-05	-1,80E-01
Caption	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						

Screen System Zipper D-95

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,68E-05	0,00E+00	1,06E-11	1,50E-09	7,73E-11	-1,58E-08
NHWD	[kg]	6,05E+00	0,00E+00	3,14E-05	2,87E-02	8,18E-01	-4,16E+00
RWD	[kg]	3,47E-02	0,00E+00	3,63E-07	8,01E-04	5,33E-06	-1,92E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	5,99E-01	0,00E+00	0,00E+00	4,59E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

Screen System Zipper D-95

BIOGENIC CARBON CONTENT PER PER PRODUKT PER M2		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	2,48E-01

Screen System Zipper 125 Straight
Screen System Zipper 125 Straight

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,46E+01	0,00E+00	1,23E-02	2,78E-01	3,03E-02	-1,93E+01
GWP-fossil	[kg CO ₂ eq.]	3,49E+01	0,00E+00	1,21E-02	2,76E-01	3,07E-02	-1,93E+01
GWP-bio	[kg CO ₂ eq.]	-3,32E-01	0,00E+00	1,31E-04	2,36E-03	-4,39E-04	3,32E-03
GWP-luluc	[kg CO ₂ eq.]	1,80E-02	0,00E+00	1,00E-04	3,52E-04	3,91E-05	-5,35E-03
ODP	[kg CFC 11 eq.]	7,43E-10	0,00E+00	2,42E-18	5,92E-15	8,35E-17	-1,26E-12
AP	[mol H ⁺ eq.]	1,45E-01	0,00E+00	1,33E-05	5,30E-04	1,18E-04	-7,08E-02
EP-fw	[kg P eq.]	1,56E-04	0,00E+00	3,64E-08	1,15E-06	4,50E-06	-1,47E-05
EP-mar	[kg N eq.]	2,38E-02	0,00E+00	4,30E-06	1,29E-04	2,83E-05	-1,22E-02
EP-ter	[mol N eq.]	2,44E-01	0,00E+00	5,09E-05	1,35E-03	3,11E-04	-1,33E-01
POCP	[kg NMVOC eq.]	7,16E-02	0,00E+00	1,16E-05	3,49E-04	8,86E-05	-3,74E-02
ADP-mm ¹	[kg Sb eq.]	2,07E-04	0,00E+00	1,09E-09	7,35E-08	2,28E-09	-9,00E-05
ADP-fos ¹	[MJ]	4,94E+02	0,00E+00	1,63E-01	4,66E+00	4,39E-01	-2,49E+02
WDP ¹	[m ³]	1,20E+01	0,00E+00	1,14E-04	4,12E-02	3,86E-04	-1,15E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

Screen System Zipper 125 Straight

ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	2,90E-06	0,00E+00	9,00E-11	4,49E-09	1,28E-09	-7,15E-07
IRP2	[kBq U235 eq.]	5,72E+00	0,00E+00	4,35E-05	1,07E-01	6,84E-04	-3,67E+00
ETP-fw1	[CTUe]	3,42E+02	0,00E+00	1,21E-01	1,91E+00	3,85E-01	-8,74E+01
HTP-c1	[CTUh]	1,93E-08	0,00E+00	2,45E-12	5,63E-11	2,22E-11	-1,08E-08
HTP-nc1	[CTUh]	1,02E-06	0,00E+00	1,27E-10	2,26E-09	2,05E-09	-1,78E-07
SQP1	-	1,27E+02	0,00E+00	5,61E-02	1,39E+00	4,12E-02	-1,36E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² 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.						

Screen System Zipper 125 Straight

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,41E+02	0,00E+00	9,40E-03	2,03E+00	3,71E-02	-7,07E+01
PERM	[MJ]	4,51E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,45E+02	0,00E+00	9,40E-03	2,03E+00	3,71E-02	-7,07E+01
PENRE	[MJ]	4,78E+02	0,00E+00	1,64E-01	4,66E+00	4,39E-01	-2,49E+02
PENRM	[MJ]	1,61E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,95E+02	0,00E+00	1,64E-01	4,66E+00	4,39E-01	-2,49E+02
SM	[kg]	3,65E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,67E-01	0,00E+00	1,08E-05	2,01E-03	2,42E-05	-1,54E-01
Caption	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						

Screen System Zipper 125 Straight

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,67E-05	0,00E+00	8,64E-12	1,21E-09	7,28E-11	-1,37E-08
NHWD	[kg]	5,22E+00	0,00E+00	2,57E-05	1,94E-02	7,61E-01	-3,65E+00
RWD	[kg]	3,01E-02	0,00E+00	2,97E-07	6,55E-04	5,01E-06	-1,67E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	5,14E-01	0,00E+00	0,00E+00	3,83E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

Screen System Zipper 125 Straight

BIOGENIC CARBON CONTENT PER PER PRODUKT PER M ²		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	1,45E-01

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Screen System Zipper D-125

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,28E+01	0,00E+00	1,20E-02	2,68E-01	3,01E-02	-1,79E+01
GWP-fossil	[kg CO ₂ eq.]	3,32E+01	0,00E+00	1,18E-02	2,65E-01	3,05E-02	-1,79E+01
GWP-bio	[kg CO ₂ eq.]	-3,41E-01	0,00E+00	1,28E-04	2,28E-03	-4,35E-04	3,45E-03
GWP-luluc	[kg CO ₂ eq.]	1,72E-02	0,00E+00	9,78E-05	3,37E-04	3,86E-05	-4,93E-03
ODP	[kg CFC 11 eq.]	7,32E-10	0,00E+00	2,36E-18	5,67E-15	8,28E-17	-1,25E-12
AP	[mol H ⁺ eq.]	1,39E-01	0,00E+00	1,30E-05	5,08E-04	1,17E-04	-6,53E-02
EP-fw	[kg P eq.]	1,49E-04	0,00E+00	3,56E-08	1,12E-06	4,50E-06	-1,40E-05
EP-mar	[kg N eq.]	2,28E-02	0,00E+00	4,19E-06	1,24E-04	2,80E-05	-1,13E-02
EP-ter	[mol N eq.]	2,33E-01	0,00E+00	4,96E-05	1,30E-03	3,08E-04	-1,23E-01
POCP	[kg NMVOC eq.]	6,87E-02	0,00E+00	1,13E-05	3,35E-04	8,78E-05	-3,46E-02
ADP-mm ¹	[kg Sb eq.]	2,07E-04	0,00E+00	1,06E-09	7,04E-08	2,26E-09	-8,98E-05
ADP-fos ¹	[MJ]	4,68E+02	0,00E+00	1,59E-01	4,47E+00	4,37E-01	-2,29E+02
WDP ¹	[m ³]	1,15E+01	0,00E+00	1,11E-04	3,95E-02	3,70E-04	-1,06E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

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ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	2,81E-06	0,00E+00	8,78E-11	4,30E-09	1,27E-09	-6,61E-07
IRP2	[kBq U235 eq.]	5,23E+00	0,00E+00	4,24E-05	1,03E-01	6,81E-04	-3,34E+00
ETP-fw1	[CTUe]	3,19E+02	0,00E+00	1,18E-01	1,83E+00	3,84E-01	-8,01E+01
HTP-c1	[CTUh]	1,87E-08	0,00E+00	2,39E-12	5,41E-11	2,20E-11	-1,02E-08
HTP-nc1	[CTUh]	9,90E-07	0,00E+00	1,24E-10	2,18E-09	2,03E-09	-1,64E-07
SQP1	-	1,24E+02	0,00E+00	5,48E-02	1,33E+00	4,08E-02	-1,23E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² 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.						

Screen System Zipper D-125

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,30E+02	0,00E+00	9,17E-03	1,94E+00	3,69E-02	-6,41E+01
PERM	[MJ]	4,51E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,35E+02	0,00E+00	9,17E-03	1,94E+00	3,69E-02	-6,41E+01
PENRE	[MJ]	4,52E+02	0,00E+00	1,60E-01	4,47E+00	4,37E-01	-2,29E+02
PENRM	[MJ]	1,61E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,68E+02	0,00E+00	1,60E-01	4,47E+00	4,37E-01	-2,30E+02
SM	[kg]	3,65E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,50E-01	0,00E+00	1,05E-05	1,93E-03	2,37E-05	-1,41E-01
Caption	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						

Screen System Zipper D-125

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,67E-05	0,00E+00	8,43E-12	1,16E-09	7,25E-11	-1,23E-08
NHWD	[kg]	4,79E+00	0,00E+00	2,51E-05	1,92E-02	7,51E-01	-3,32E+00
RWD	[kg]	2,76E-02	0,00E+00	2,90E-07	6,27E-04	4,98E-06	-1,51E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	4,87E-01	0,00E+00	0,00E+00	3,65E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

Screen System Zipper D-125

BIOGENIC CARBON CONTENT PER PER PRODUKT PER M ²		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	1,45E-01

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Screen System 65 Straight

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,80E+01	0,00E+00	1,44E-02	1,77E-01	3,18E-02	-1,74E+01
GWP-fossil	[kg CO ₂ eq.]	3,92E+01	0,00E+00	1,42E-02	1,75E-01	3,22E-02	-1,74E+01
GWP-bio	[kg CO ₂ eq.]	-1,31E+00	0,00E+00	1,53E-04	1,50E-03	-4,45E-04	2,59E-03
GWP-luluc	[kg CO ₂ eq.]	3,09E-02	0,00E+00	1,17E-04	2,36E-04	3,92E-05	-5,99E-03
ODP	[kg CFC 11 eq.]	7,43E-10	0,00E+00	2,83E-18	3,98E-15	8,63E-17	-4,17E-13
AP	[mol H ⁺ eq.]	1,56E-01	0,00E+00	1,55E-05	3,51E-04	1,21E-04	-6,69E-02
EP-fw	[kg P eq.]	1,28E-04	0,00E+00	4,26E-08	5,96E-07	4,88E-06	-9,72E-06
EP-mar	[kg N eq.]	2,76E-02	0,00E+00	5,03E-06	8,44E-05	2,87E-05	-1,11E-02
EP-ter	[mol N eq.]	2,68E-01	0,00E+00	5,95E-05	8,85E-04	3,15E-04	-1,20E-01
POCP	[kg NMVOC eq.]	7,65E-02	0,00E+00	1,35E-05	2,29E-04	9,01E-05	-3,37E-02
ADP-mm ¹	[kg Sb eq.]	4,19E-04	0,00E+00	1,27E-09	4,92E-08	2,37E-09	-2,37E-04
ADP-fos ¹	[MJ]	5,62E+02	0,00E+00	1,91E-01	3,04E+00	4,62E-01	-2,22E+02
WDP ¹	[m ³]	6,38E+00	0,00E+00	1,33E-04	2,72E-02	3,03E-04	-1,08E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

Screen System 65 Straight

ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,11E-06	0,00E+00	1,05E-10	2,97E-09	1,29E-09	-6,64E-07
IRP2	[kBq U235 eq.]	5,99E+00	0,00E+00	5,09E-05	7,23E-02	7,26E-04	-3,41E+00
ETP-fw1	[CTUe]	6,34E+02	0,00E+00	1,42E-01	1,26E+00	4,10E-01	-8,11E+01
HTP-c1	[CTUh]	2,48E-08	0,00E+00	2,87E-12	3,65E-11	2,29E-11	-9,16E-09
HTP-nc1	[CTUh]	9,24E-07	0,00E+00	1,49E-10	1,42E-09	2,09E-09	-1,65E-07
SQP1	-	3,79E+02	0,00E+00	6,57E-02	9,35E-01	4,18E-02	-1,53E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² 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.						

Screen System 65 Straight

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,85E+02	0,00E+00	1,10E-02	1,36E+00	3,84E-02	-6,66E+01
PERM	[MJ]	1,42E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,99E+02	0,00E+00	1,10E-02	1,36E+00	3,84E-02	-6,66E+01
PENRE	[MJ]	5,50E+02	0,00E+00	1,92E-01	3,04E+00	4,62E-01	-2,23E+02
PENRM	[MJ]	1,27E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,62E+02	0,00E+00	1,92E-01	3,04E+00	4,62E-01	-2,23E+02
SM	[kg]	8,22E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,46E-01	0,00E+00	1,26E-05	1,34E-03	2,27E-05	-1,42E-01
Caption	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						

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WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,68E-05	0,00E+00	1,01E-11	7,97E-10	7,74E-11	-1,38E-08
NHWD	[kg]	5,31E+00	0,00E+00	3,01E-05	7,14E-03	7,54E-01	-3,26E+00
RWD	[kg]	3,40E-02	0,00E+00	3,48E-07	4,41E-04	5,28E-06	-1,55E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,61E-01	0,00E+00	0,00E+00	3,11E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

Screen System 65 Straight

BIOGENIC CARBON CONTENT PER PER PRODUKT PER M2		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	4,56E-01

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ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,66E+01	0,00E+00	1,43E-02	1,71E-01	3,18E-02	-1,67E+01
GWP-fossil	[kg CO ₂ eq.]	3,79E+01	0,00E+00	1,40E-02	1,69E-01	3,22E-02	-1,67E+01
GWP-bio	[kg CO ₂ eq.]	-1,31E+00	0,00E+00	1,52E-04	1,44E-03	-4,44E-04	2,66E-03
GWP-luluc	[kg CO ₂ eq.]	2,97E-02	0,00E+00	1,16E-04	2,28E-04	3,91E-05	-5,79E-03
ODP	[kg CFC 11 eq.]	7,39E-10	0,00E+00	2,81E-18	3,85E-15	8,62E-17	-3,91E-13
AP	[mol H ⁺ eq.]	1,53E-01	0,00E+00	1,54E-05	3,39E-04	1,20E-04	-6,43E-02
EP-fw	[kg P eq.]	1,25E-04	0,00E+00	4,23E-08	5,71E-07	4,89E-06	-9,27E-06
EP-mar	[kg N eq.]	2,67E-02	0,00E+00	4,98E-06	8,15E-05	2,87E-05	-1,06E-02
EP-ter	[mol N eq.]	2,60E-01	0,00E+00	5,90E-05	8,53E-04	3,14E-04	-1,15E-01
POCP	[kg NMVOC eq.]	7,45E-02	0,00E+00	1,34E-05	2,21E-04	8,98E-05	-3,23E-02
ADP-mm ¹	[kg Sb eq.]	4,20E-04	0,00E+00	1,26E-09	4,75E-08	2,36E-09	-2,37E-04
ADP-fos ¹	[MJ]	5,42E+02	0,00E+00	1,89E-01	2,93E+00	4,62E-01	-2,13E+02
WDP ¹	[m ³]	6,33E+00	0,00E+00	1,32E-04	2,62E-02	2,96E-04	-1,03E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

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ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,06E-06	0,00E+00	1,04E-10	2,86E-09	1,29E-09	-6,38E-07
IRP2	[kBq U235 eq.]	5,71E+00	0,00E+00	5,04E-05	6,98E-02	7,26E-04	-3,25E+00
ETP-fw1	[CTUe]	5,95E+02	0,00E+00	1,41E-01	1,22E+00	4,10E-01	-7,76E+01
HTP-c1	[CTUh]	2,45E-08	0,00E+00	2,84E-12	3,52E-11	2,28E-11	-8,87E-09
HTP-nc1	[CTUh]	9,14E-07	0,00E+00	1,48E-10	1,37E-09	2,09E-09	-1,58E-07
SQP1	-	3,74E+02	0,00E+00	6,51E-02	9,02E-01	4,17E-02	-1,47E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² 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.						

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RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,77E+02	0,00E+00	1,09E-02	1,32E+00	3,83E-02	-6,35E+01
PERM	[MJ]	1,42E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,91E+02	0,00E+00	1,09E-02	1,32E+00	3,83E-02	-6,35E+01
PENRE	[MJ]	5,29E+02	0,00E+00	1,90E-01	2,93E+00	4,62E-01	-2,13E+02
PENRM	[MJ]	1,26E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,42E+02	0,00E+00	1,90E-01	2,93E+00	4,62E-01	-2,13E+02
SM	[kg]	8,17E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,36E-01	0,00E+00	1,25E-05	1,29E-03	2,25E-05	-1,35E-01
Caption	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						

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WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,69E-05	0,00E+00	1,00E-11	7,70E-10	7,74E-11	-1,31E-08
NHWD	[kg]	5,08E+00	0,00E+00	2,98E-05	6,74E-03	7,50E-01	-3,10E+00
RWD	[kg]	3,24E-02	0,00E+00	3,45E-07	4,26E-04	5,28E-06	-1,48E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,48E-01	0,00E+00	0,00E+00	3,02E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

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BIOGENIC CARBON CONTENT PER PER PRODUKT PER M ²		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	4,56E-01

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ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,99E+01	0,00E+00	1,71E-02	2,66E-01	3,31E-02	-2,37E+01
GWP-fossil	[kg CO ₂ eq.]	4,11E+01	0,00E+00	1,67E-02	2,63E-01	3,35E-02	-2,37E+01
GWP-bio	[kg CO ₂ eq.]	-1,18E+00	0,00E+00	1,81E-04	2,24E-03	-4,82E-04	4,90E-03
GWP-luluc	[kg CO ₂ eq.]	2,25E-02	0,00E+00	1,39E-04	3,63E-04	4,30E-05	-7,40E-03
ODP	[kg CFC 11 eq.]	7,72E-10	0,00E+00	3,35E-18	6,13E-15	9,13E-17	-3,49E-13
AP	[mol H ⁺ eq.]	1,71E-01	0,00E+00	1,84E-05	5,37E-04	1,30E-04	-8,90E-02
EP-fw	[kg P eq.]	1,86E-04	0,00E+00	5,04E-08	8,07E-07	4,89E-06	-1,17E-05
EP-mar	[kg N eq.]	2,82E-02	0,00E+00	5,95E-06	1,28E-04	3,11E-05	-1,50E-02
EP-ter	[mol N eq.]	2,89E-01	0,00E+00	7,04E-05	1,35E-03	3,41E-04	-1,63E-01
POCP	[kg NMVOC eq.]	8,44E-02	0,00E+00	1,60E-05	3,48E-04	9,73E-05	-4,58E-02
ADP-mm ¹	[kg Sb eq.]	4,51E-04	0,00E+00	1,50E-09	7,56E-08	2,49E-09	-2,40E-04
ADP-fos ¹	[MJ]	5,74E+02	0,00E+00	2,26E-01	4,62E+00	4,79E-01	-2,97E+02
WDP ¹	[m ³]	1,35E+01	0,00E+00	1,57E-04	4,15E-02	4,39E-04	-1,31E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

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ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,32E-06	0,00E+00	1,24E-10	4,53E-09	1,41E-09	-8,93E-07
IRP2	[kBq U235 eq.]	6,93E+00	0,00E+00	6,02E-05	1,11E-01	7,45E-04	-4,46E+00
ETP-fw1	[CTUe]	3,89E+02	0,00E+00	1,68E-01	1,93E+00	4,20E-01	-1,07E+02
HTP-c1	[CTUh]	2,24E-08	0,00E+00	3,39E-12	5,52E-11	2,43E-11	-1,36E-08
HTP-nc1	[CTUh]	1,11E-06	0,00E+00	1,76E-10	2,12E-09	2,25E-09	-2,20E-07
SQP1	-	2,90E+02	0,00E+00	7,77E-02	1,44E+00	4,53E-02	-1,83E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² 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.						

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RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,82E+02	0,00E+00	1,30E-02	2,10E+00	4,07E-02	-8,62E+01
PERM	[MJ]	9,97E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,92E+02	0,00E+00	1,30E-02	2,10E+00	4,07E-02	-8,62E+01
PENRE	[MJ]	5,62E+02	0,00E+00	2,27E-01	4,62E+00	4,80E-01	-2,97E+02
PENRM	[MJ]	1,24E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,74E+02	0,00E+00	2,27E-01	4,62E+00	4,80E-01	-2,97E+02
SM	[kg]	8,42E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	4,26E-01	0,00E+00	1,49E-05	2,05E-03	2,69E-05	-1,85E-01
Caption	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						

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WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,69E-05	0,00E+00	1,20E-11	1,22E-09	7,93E-11	-1,69E-08
NHWD	[kg]	6,40E+00	0,00E+00	3,56E-05	7,26E-03	8,38E-01	-4,35E+00
RWD	[kg]	3,65E-02	0,00E+00	4,11E-07	6,79E-04	5,46E-06	-2,03E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,00E-01	0,00E+00	0,00E+00	4,70E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

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BIOGENIC CARBON CONTENT PER PER PRODUKT PER M2		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	3,21E-01

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ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,84E+01	0,00E+00	1,68E-02	2,57E-01	3,30E-02	-2,24E+01
GWP-fossil	[kg CO ₂ eq.]	3,96E+01	0,00E+00	1,65E-02	2,54E-01	3,34E-02	-2,24E+01
GWP-bio	[kg CO ₂ eq.]	-1,20E+00	0,00E+00	1,78E-04	2,17E-03	-4,79E-04	5,02E-03
GWP-luluc	[kg CO ₂ eq.]	2,20E-02	0,00E+00	1,37E-04	3,51E-04	4,27E-05	-7,04E-03
ODP	[kg CFC 11 eq.]	7,63E-10	0,00E+00	3,30E-18	5,92E-15	9,10E-17	-3,45E-13
AP	[mol H ⁺ eq.]	1,66E-01	0,00E+00	1,81E-05	5,19E-04	1,29E-04	-8,42E-02
EP-fw	[kg P eq.]	1,80E-04	0,00E+00	4,97E-08	7,83E-07	4,89E-06	-1,11E-05
EP-mar	[kg N eq.]	2,73E-02	0,00E+00	5,86E-06	1,24E-04	3,09E-05	-1,42E-02
EP-ter	[mol N eq.]	2,80E-01	0,00E+00	6,94E-05	1,30E-03	3,39E-04	-1,54E-01
POCP	[kg NMVOC eq.]	8,19E-02	0,00E+00	1,58E-05	3,36E-04	9,67E-05	-4,33E-02
ADP-mm ¹	[kg Sb eq.]	4,51E-04	0,00E+00	1,48E-09	7,30E-08	2,48E-09	-2,40E-04
ADP-fos ¹	[MJ]	5,52E+02	0,00E+00	2,23E-01	4,46E+00	4,78E-01	-2,80E+02
WDP ¹	[m ³]	1,31E+01	0,00E+00	1,55E-04	4,01E-02	4,26E-04	-1,23E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

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ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,25E-06	0,00E+00	1,23E-10	4,38E-09	1,40E-09	-8,47E-07
IRP2	[kBq U235 eq.]	6,51E+00	0,00E+00	5,93E-05	1,08E-01	7,44E-04	-4,17E+00
ETP-fw1	[CTUe]	3,70E+02	0,00E+00	1,65E-01	1,87E+00	4,19E-01	-1,00E+02
HTP-c1	[CTUh]	2,20E-08	0,00E+00	3,34E-12	5,34E-11	2,42E-11	-1,31E-08
HTP-nc1	[CTUh]	1,09E-06	0,00E+00	1,74E-10	2,05E-09	2,24E-09	-2,07E-07
SQP1	-	2,90E+02	0,00E+00	7,66E-02	1,39E+00	4,50E-02	-1,73E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² 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.						

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RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,73E+02	0,00E+00	1,28E-02	2,03E+00	4,05E-02	-8,05E+01
PERM	[MJ]	9,97E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,83E+02	0,00E+00	1,28E-02	2,03E+00	4,05E-02	-8,05E+01
PENRE	[MJ]	5,40E+02	0,00E+00	2,24E-01	4,46E+00	4,78E-01	-2,80E+02
PENRM	[MJ]	1,24E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,52E+02	0,00E+00	2,24E-01	4,46E+00	4,78E-01	-2,80E+02
SM	[kg]	8,47E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	4,11E-01	0,00E+00	1,47E-05	1,98E-03	2,65E-05	-1,74E-01
Caption	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						

Screen System D-95

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,69E-05	0,00E+00	1,18E-11	1,18E-09	7,92E-11	-1,57E-08
NHWD	[kg]	6,03E+00	0,00E+00	3,51E-05	7,15E-03	8,31E-01	-4,06E+00
RWD	[kg]	3,44E-02	0,00E+00	4,06E-07	6,55E-04	5,45E-06	-1,89E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	5,76E-01	0,00E+00	0,00E+00	4,54E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

Screen System D-95

BIOGENIC CARBON CONTENT PER PER PRODUKT PER M ²		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	3,21E-01

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Screen System 125 Straight

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,91E+01	0,00E+00	1,50E-02	2,96E-01	3,16E-02	-2,25E+01
GWP-fossil	[kg CO ₂ eq.]	3,96E+01	0,00E+00	1,47E-02	2,93E-01	3,21E-02	-2,25E+01
GWP-bio	[kg CO ₂ eq.]	-4,55E-01	0,00E+00	1,59E-04	2,50E-03	-4,69E-04	5,42E-03
GWP-luluc	[kg CO ₂ eq.]	2,07E-02	0,00E+00	1,22E-04	3,98E-04	4,19E-05	-6,29E-03
ODP	[kg CFC 11 eq.]	7,58E-10	0,00E+00	2,95E-18	6,72E-15	8,79E-17	-5,96E-13
AP	[mol H ⁺ eq.]	1,62E-01	0,00E+00	1,62E-05	5,91E-04	1,26E-04	-8,24E-02
EP-fw	[kg P eq.]	1,68E-04	0,00E+00	4,43E-08	9,73E-07	4,60E-06	-1,22E-05
EP-mar	[kg N eq.]	2,68E-02	0,00E+00	5,23E-06	1,42E-04	3,02E-05	-1,42E-02
EP-ter	[mol N eq.]	2,74E-01	0,00E+00	6,19E-05	1,49E-03	3,31E-04	-1,54E-01
POCP	[kg NMVOC eq.]	8,06E-02	0,00E+00	1,41E-05	3,84E-04	9,44E-05	-4,34E-02
ADP-mm ¹	[kg Sb eq.]	2,86E-04	0,00E+00	1,32E-09	8,29E-08	2,39E-09	-1,40E-04
ADP-fos ¹	[MJ]	5,47E+02	0,00E+00	1,99E-01	5,11E+00	4,58E-01	-2,80E+02
WDP ¹	[m ³]	1,38E+01	0,00E+00	1,38E-04	4,57E-02	4,67E-04	-1,17E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

Screen System 125 Straight

ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,15E-06	0,00E+00	1,09E-10	4,99E-09	1,37E-09	-8,37E-07
IRP2	[kBq U235 eq.]	6,40E+00	0,00E+00	5,29E-05	1,22E-01	7,09E-04	-4,11E+00
ETP-fw1	[CTUe]	3,69E+02	0,00E+00	1,47E-01	2,13E+00	3,99E-01	-9,87E+01
HTP-c1	[CTUh]	2,15E-08	0,00E+00	2,98E-12	6,12E-11	2,35E-11	-1,36E-08
HTP-nc1	[CTUh]	1,09E-06	0,00E+00	1,55E-10	2,37E-09	2,18E-09	-2,05E-07
SQP1	-	1,81E+02	0,00E+00	6,83E-02	1,58E+00	4,39E-02	-1,53E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² 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.						

Screen System 125 Straight

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,58E+02	0,00E+00	1,14E-02	2,30E+00	3,92E-02	-7,87E+01
PERM	[MJ]	7,33E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,65E+02	0,00E+00	1,14E-02	2,30E+00	3,92E-02	-7,87E+01
PENRE	[MJ]	5,34E+02	0,00E+00	1,99E-01	5,11E+00	4,58E-01	-2,81E+02
PENRM	[MJ]	1,34E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,47E+02	0,00E+00	1,99E-01	5,11E+00	4,58E-01	-2,81E+02
SM	[kg]	4,80E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	4,19E-01	0,00E+00	1,31E-05	2,26E-03	2,69E-05	-1,71E-01
Caption	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						

Screen System 125 Straight

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,68E-05	0,00E+00	1,05E-11	1,34E-09	7,53E-11	-1,48E-08
NHWD	[kg]	5,91E+00	0,00E+00	3,13E-05	1,10E-02	8,22E-01	-4,09E+00
RWD	[kg]	3,35E-02	0,00E+00	3,62E-07	7,43E-04	5,21E-06	-1,86E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,51E-01	0,00E+00	0,00E+00	4,81E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

Screen System 125 Straight

BIOGENIC CARBON CONTENT PER PER PRODUKT PER M2		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	2,36E-01

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Screen System D-125

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,63E+01	0,00E+00	1,45E-02	2,80E-01	3,14E-02	-2,02E+01
GWP-fossil	[kg CO ₂ eq.]	3,68E+01	0,00E+00	1,43E-02	2,77E-01	3,18E-02	-2,02E+01
GWP-bio	[kg CO ₂ eq.]	-4,69E-01	0,00E+00	1,54E-04	2,36E-03	-4,62E-04	5,63E-03
GWP-luluc	[kg CO ₂ eq.]	1,95E-02	0,00E+00	1,18E-04	3,74E-04	4,13E-05	-5,62E-03
ODP	[kg CFC 11 eq.]	7,40E-10	0,00E+00	2,85E-18	6,32E-15	8,70E-17	-5,89E-13
AP	[mol H ⁺ eq.]	1,52E-01	0,00E+00	1,57E-05	5,56E-04	1,24E-04	-7,37E-02
EP-fw	[kg P eq.]	1,56E-04	0,00E+00	4,30E-08	9,29E-07	4,60E-06	-1,12E-05
EP-mar	[kg N eq.]	2,51E-02	0,00E+00	5,07E-06	1,34E-04	2,98E-05	-1,27E-02
EP-ter	[mol N eq.]	2,58E-01	0,00E+00	6,00E-05	1,40E-03	3,27E-04	-1,38E-01
POCP	[kg NMVOC eq.]	7,59E-02	0,00E+00	1,37E-05	3,62E-04	9,31E-05	-3,89E-02
ADP-mm ¹	[kg Sb eq.]	2,85E-04	0,00E+00	1,28E-09	7,80E-08	2,37E-09	-1,39E-04
ADP-fos ¹	[MJ]	5,05E+02	0,00E+00	1,93E-01	4,81E+00	4,55E-01	-2,49E+02
WDP ¹	[m ³]	1,30E+01	0,00E+00	1,34E-04	4,30E-02	4,42E-04	-1,04E+00
Caption	GWP-total = Globale Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-bio = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water use						
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						

Screen System D-125

ADDITIONAL ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,01E-06	0,00E+00	1,06E-10	4,70E-09	1,35E-09	-7,51E-07
IRP2	[kBq U235 eq.]	5,63E+00	0,00E+00	5,13E-05	1,15E-01	7,05E-04	-3,58E+00
ETP-fw1	[CTUe]	3,33E+02	0,00E+00	1,43E-01	2,00E+00	3,97E-01	-8,71E+01
HTP-c1	[CTUh]	2,06E-08	0,00E+00	2,89E-12	5,77E-11	2,32E-11	-1,26E-08
HTP-nc1	[CTUh]	1,05E-06	0,00E+00	1,50E-10	2,24E-09	2,15E-09	-1,82E-07
SQP1	-	1,76E+02	0,00E+00	6,62E-02	1,48E+00	4,33E-02	-1,33E+01
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.						
	² 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.						

Screen System D-125

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	1,41E+02	0,00E+00	1,11E-02	2,16E+00	3,87E-02	-6,83E+01
PERM	[MJ]	7,33E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	1,48E+02	0,00E+00	1,11E-02	2,16E+00	3,87E-02	-6,83E+01
PENRE	[MJ]	4,92E+02	0,00E+00	1,93E-01	4,81E+00	4,55E-01	-2,49E+02
PENRM	[MJ]	1,34E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,06E+02	0,00E+00	1,93E-01	4,81E+00	4,55E-01	-2,49E+02
SM	[kg]	4,78E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m ³]	3,92E-01	0,00E+00	1,27E-05	2,12E-03	2,62E-05	-1,50E-01
Caption	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						

Screen System D-125

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Enhed	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1,67E-05	0,00E+00	1,02E-11	1,26E-09	7,50E-11	-1,25E-08
NHWD	[kg]	5,23E+00	0,00E+00	3,03E-05	1,08E-02	8,07E-01	-3,56E+00
RWD	[kg]	2,96E-02	0,00E+00	3,51E-07	6,99E-04	5,18E-06	-1,62E-02
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,08E-01	0,00E+00	0,00E+00	4,52E+00	0,00E+00	0,00E+00
MER	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						

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BIOGENIC CARBON CONTENT PER PER PRODUKT PER M ²		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	2,36E-01

Additional information

Technical information on scenarios

Reference service life

RSL information	Unit
Reference service Life	30 Years on frames, 15 years on electric motor and screen fabric
Declared product properties	Technical specifications and guidance can be obtained from direct contact to Fischer at +45 7015 4055 or fischer@fischer-international.dk
Design application parameters	
Assumed quality of work	
Outdoor environment	
Indoor environment	
Usage conditions	
Maintenance	

Power consumption during use (B6)

The power consumption of the electric motor is based on running 4 times per day for 30 seconds with a 90W electric motor, 365 days per year. This causes an annual consumption of approx. 1 kWh which can be modelled according to the national electricity grid mix at installation.

End of life (C1-C4)

Scenario information	Zipper 95 Straight	Zipper D-95	Zipper 125 Straight	Zipper D-125	65 Straight	D-65	95 Straight	D-95	125 Straight	D-125	Unit
Collected separately	5,51	5,44	4,61	4,42	3,87	3,78	5,54	5,38	5,64	5,34	kg
Collected with mixed waste	0	0	0	0	0	0	0	0	0	0	kg
For reuse	0	0	0	0	0	0	0	0	0	0	kg
For recycling	4,69	4,62	3,86	4,17	3,11	3,03	4,70	4,55	4,82	4,54	kg
For energy recovery	0	0	0	0	0	0	0	0	0	0	kg
For final disposal	0,82	0,82	0,75	0,25	0,76	0,74	0,85	0,83	0,82	0,80	kg
Assumptions for scenario development	Assumed dismantled using hand tools										

Re-use, recovery and recycling potential (D)

Avoided production	Zipper 95 Straight	Zipper D-95	Zipper 125 Straight	Zipper D-125	65 Straight	D-65	95 Straight	D-95	125 Straight	D-125	Unit
Stainless st.	0,01	0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	kg
Steel	1,93	1,93	1,60	1,60	1,11	1,11	2,07	2,07	2,35	2,35	kg
Aluminium	2,35	2,28	1,99	2,30	1,84	1,76	2,41	2,26	2,23	1,95	kg
Copper	0,06	0,06	0,03	0,03	0,08	0,09	0,09	0,09	0,05	0,05	kg

The avoided production is only calculated on the virgin fraction of the input material in A1-A3

Indoor air

The product is for outdoor installation only.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on measurement of release of regulated dangerous substances from construction products using harmonised test methods according to the provisions of the respective technical committees for European product standards are not available.

References

Publisher	 www.epddanmark.dk
Programme operator	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA software / background data	Thinkstep GaBi 10.6 Database version 2021.2 www.gabi-software.com
3rd party verifier	Ninkie Bendtsen NIRAS A/S Sortemosevej 19 DK-3450 Allerød www.niras.dk

General programme instructions

Version 2.0

www.epddanmark.dk

EN 15804

DS/EN 15804 + A2:2019 - "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products"

EN 15942

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

ISO 14025

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

ISO 14040

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

ISO 14044

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"