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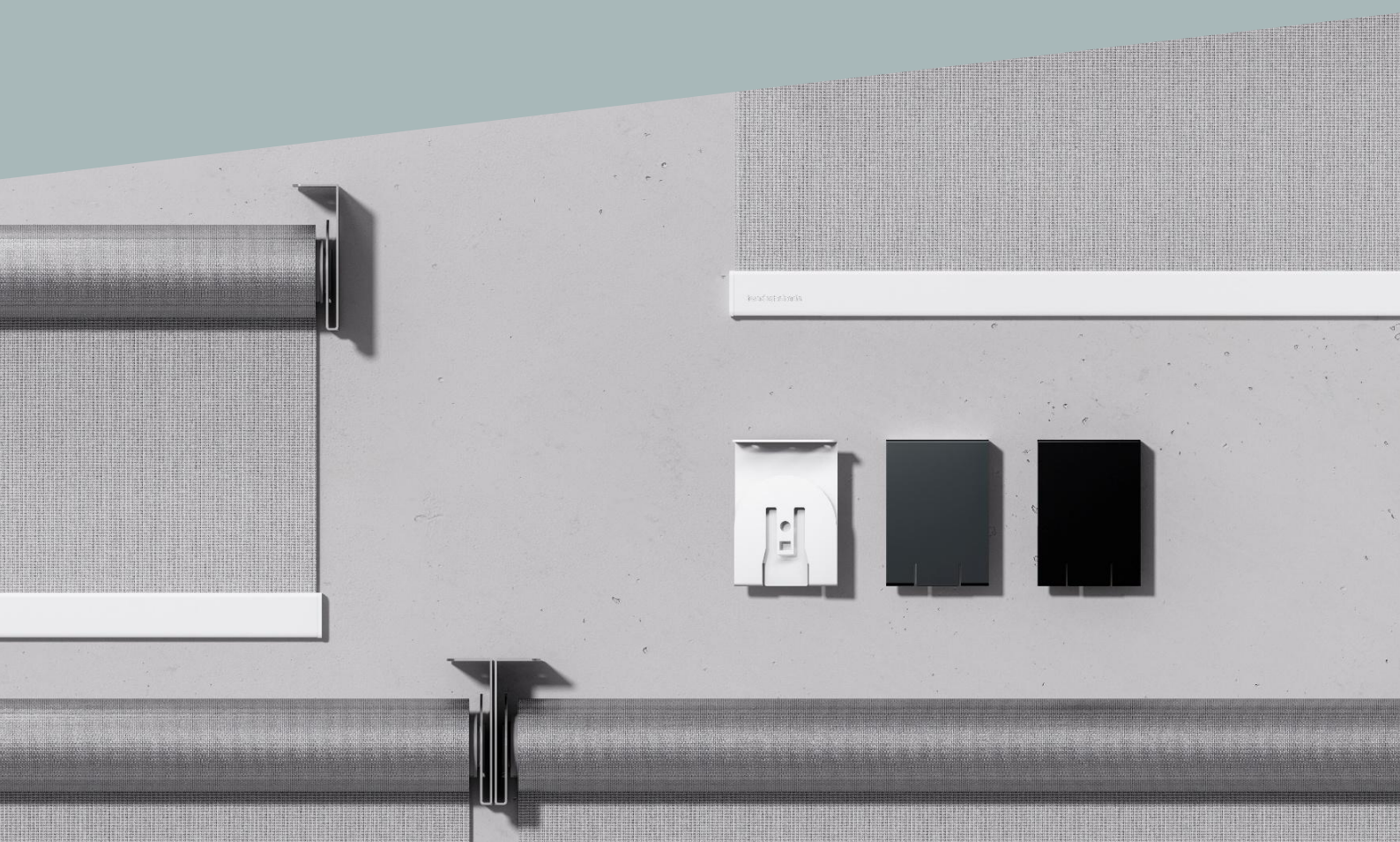
ECO PLATFORM EPD VERIFIED

Owner: Kvadrat High Performance Textiles B.V.
No.: MD-25157-EN
Issued: 19-12-2025
Valid to: 19-12-2030

3rd PARTY **VERIFIED**

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | **ISO 14025 & EN 15804**



Owner of declaration
Kvadrat High Performance Textiles B.V.
Kiefte 18
7151 HZ Eibergen, Netherlands
VAT no. NL007738250B01
www.kvadrat.dk/en/kvadrat-shade

Programme
EPD Danmark
www.epddanmark.dk

☐ Industry EPD
☒ Product EPD

☐ Product specific
☒ Average
☐ Worst Case

Declared product(s)
Minimal roller blind system by Kvadrat Shade

Number of declared datasets/product variations: 1

Production site
7151 HZ Eibergen, Netherlands

Use of Guarantees of Origin
☐ No certificates used
☒ Electricity covered by GoO
☐ Biogas covered by GoO

Declared unit
1 kg roller blind system

Year of production site data (A3)
2024

EPD version
1st version

Issued: 19-12-2025
Valid to: 19-12-2030

Basis of calculation
This EPD is developed and verified 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

☐ internal ☒ external

Third party verifier:

Morten Søes Kokborg

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	ND	ND	ND	ND	ND	MD	ND	ND	ND	X	X	X	X	X

Product information

Product description

This EPD covers the Minimal roller blind system by Kvadrat Shade. The system comes in three sizes: small (S), medium (M) and large (L). The EPD is valid for all size variations of the roller blind system.

The main product components of the system are shown in the table below.

	S	M	L	Average
Material	Weight-% of declared product			
Aluminium	64%	81%	94%	79%
Steel	25%	13%	4%	14%
Plastic	11%	6%	2%	7%

Product packaging:

The composition of the sales- and transport packaging of the product is shown in the table below, given in kg/kg and as weight-%.

	S	M	L	Average
Material	Weight of product packaging [kg]			
Cardboard	0,20	0,25	0,15	0,20
Plastic	0,018	0,004	0,001	0,01
Material	Weight-% of product packaging			
Cardboard	92%	99%	99,6%	97%
Plastic	8%	1%	0,4%	3%

Representativity

This declaration, including data collection and the modeled foreground system including results, represents the production of 1 kg of roller blind system at the production site of Kvadrat Shade Assembly located in Eibergen, Netherlands. Product specific data are based on average values collected in the year 2024. Background data are based on the Sphera version 10.9 and the Ecoinvent 3.10 database and are less than 10 years old. Generally, the background datasets used are of high quality, following the data validation requirements specified in EN 15804+A2, Annex E. The majority of the datasets are relatively recent, being only a few years old.

Hazardous substances

The products declared within this EPD do not contain substances listed on the ”Candidate List of Substances of Very High Concern for authorisation”.

(http://echa.europa.eu/candidate-list-table)

Product(s) use

Minimal is an interior roller blind solution that is easy to assemble and disassemble, allowing the roller blind textile to be changed without dismantling the entire system. The declared systems are not motorized and are operated by a chain mechanism.

Essential characteristics

The products covered in the EPD are GREENGUARD® certified and comply with respective Indoor climate minimum requirements.

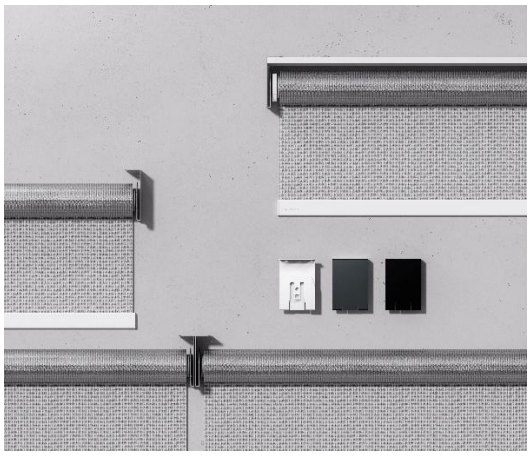
Further information about the roller blind system can be obtained by contacting the manufacturer or on the manufacturer’s website:

www.kvadrat.dk/en/kvadrat-shade

Reference Service Life (RSL)

No RSL is declared. This EPD is type cradle to gate with modules C1 - C4 and D and does not include the use stage.

Picture of product(s)



LCA background

Declared unit

The LCI and LCIA results in this EPD relate to 1 kg roller blind system. The results presented in this EPD represent an average (simple), representative of the three sizes of the Minimal roller blind system.

	Value	Unit
Declared unit (DU)	1	kg
Conversion factor to 1 kg.	1	-

Functional unit

Not defined.

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804:2012+A2:2019.

Energy modelling principles

Foreground system:
Guarantee of Origin (GoO) certificates are used in this EPD, covering the consumption of electricity at the production facility in Eibergen. The certificate guarantees 100% green electricity from renewable sources, being a mix of wind, solar and biomass from Europe. The electricity mix is modeled as being evenly sourced from wind, solar, and biomass.

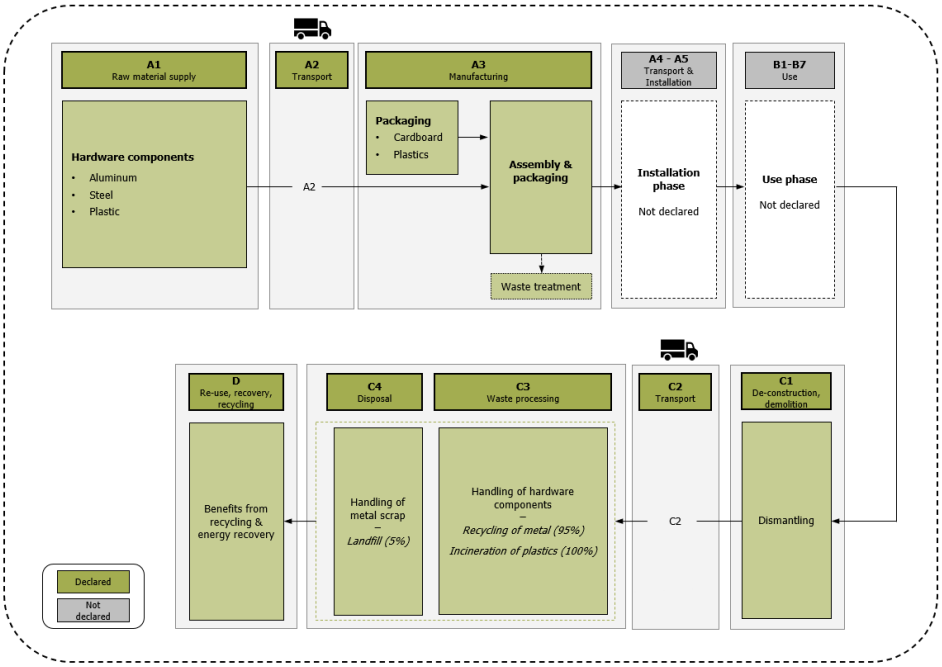
Information about the energy mix in the foreground system:

Energy mix	EF	Unit
Electricity from solar, RER, ref. year 2021	0,0110	kg CO_2e/kWh
Electricity from wind power, RER, ref. year 2021	0,0131	kg CO_2e/kWh
Electricity from biomass (solid), RER, ref. year 2021	0,0369	kg CO_2e/kWh
Thermal energy from natural gas, NL, ref. year 2021	0,0659	kg CO_2e/MJ

Background system:
Processes in the background system are modelled with average data from the Sphera or Ecoinvent database. Specific energy inputs upstream the production are modelled using the national or regional residual mix. The grid mix is used for specific energy inputs downstream production.

Flowdiagram

The flow diagram presents the main processes included in the product system of the declared product.



System boundary

This EPD is based on a cradle-to-gate study with modules C1-C4 and module D. 100 weight-% has been accounted for in this study.

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 product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, packaging and waste processing up to the ”end-of-waste” state or final disposal. The LCA results are declared in aggregated form for the product stage, which means, that the sub-modules A1, A2 and A3 are declared as one module A1-A3.

The Minimal roller blind system is produced at the Kvadrat Shade Assembly facility in Eibergen, Netherlands. All hardware components are sourced from external suppliers. At the production site, these components are manually assembled. No process-specific energy or water is used directly for the assembly operations, however, the general energy and water consumption of the site is considered. After assembly, the roller blind system is packaged using plastic and cardboard and is then prepared for shipment to customers.

Construction process stage (A4-A5) includes:

Not declared.

Use stage (B1-B7) includes:

Not declared.

End of Life (C1-C4) includes:

C1 – Dismantling

C2 – Transport to recycling or disposal

C3 – Waste processing

C4 – Landfilling

The European market is the dominant customer base of the roller blind systems and therefore end-of-life processes are modelled based on a European scenario.

The end-of-life stage begins with dismantling of the roller blind system from the building in which it is installed. It is assumed that the removal of the system is performed manually or with handheld power tools, with any associated electricity consumption deemed negligible.

From the building site, the system is transported to a waste management facility. In this EPD, a transport distance of 50 km is assumed.

Waste management of metal components involves sorting and shredding at a recycling facility. Shredding generates a residual fraction, approx. 5% shredder fluff, which is assumed to be transported to and disposed of at an inert landfill site. Plastic parts are separated from the metal scrap and transported to a waste incineration plant with energy recovery.

Any loads or benefits from waste recycling and incineration are declared in module D.

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

Module D represents benefits or loads beyond the system boundary. In this EPD, module D includes the recovery of metal through recycling and the recovery of energy from waste incineration.

Recycled metal is assumed to displace virgin metal in new production. In accordance with EN15804+A2, credits in module D are only given for the fraction of virgin content in the metal scrap.

Energy recovered from waste incineration is modeled as the avoided production of European average electricity and heat.

LCA results

LCA results, Minimal roller blind system

The declared results represent an average (simple). This is considered valid, as the product's GWP-total impact indicators do not deviate by more than 10% from the declared average.

ENVIRONMENTAL IMPACTS PER 1 KG							
Parameter	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	[kg CO_2 eq.]	3,76E+00	0,00E+00	4,58E-03	1,86E-01	7,14E-04	-1,38E+00
GWP-fossil	[kg CO_2 eq.]	3,72E+00	0,00E+00	4,51E-03	1,86E-01	7,13E-04	-1,36E+00
GWP-biogenic	[kg CO_2 eq.]	2,04E-02	0,00E+00	2,30E-05	1,88E-04	-2,31E-06	-1,36E-02
GWP-luluc	[kg CO_2 eq.]	1,82E-02	0,00E+00	4,76E-05	7,55E-05	2,92E-06	-1,18E-02
ODP	[kg CFC 11 eq.]	2,61E-11	0,00E+00	7,68E-16	4,36E-13	1,99E-15	-1,11E-11
AP	[mol H^+ eq.]	1,70E-02	0,00E+00	7,73E-06	6,10E-05	5,04E-06	-7,46E-03
EP-freshwater	[kg P eq.]	1,07E-05	0,00E+00	1,25E-08	4,40E-08	1,06E-09	-3,11E-07
EP-marine	[kg N eq.]	3,48E-03	0,00E+00	3,21E-06	1,56E-05	1,32E-06	-1,47E-03
EP-terrestrial	[mol N eq.]	3,78E-02	0,00E+00	3,42E-05	2,07E-04	1,44E-05	-1,61E-02
POCP	[kg NMVOC eq.]	9,97E-03	0,00E+00	6,98E-06	4,08E-05	3,94E-06	-4,34E-03
ADPm[1]	[kg Sb eq.]	2,04E-05	0,00E+00	3,08E-10	4,08E-09	4,41E-11	-1,42E-07
ADPf[1]	[MJ]	5,49E+01	0,00E+00	5,93E-02	4,40E-01	9,35E-03	-1,72E+01
WDP[1]	[m^3 world eq. deprived]	6,77E-01	0,00E+00	2,12E-05	2,04E-02	7,71E-05	-3,63E-01
Caption	GWP-total = Globale 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 = Ozone Depletion; AP = Acidifcation; 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 depletion potential						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.						
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.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 KG							
Parameter	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
PM	[Disease incidence]	2,37E-07	0,00E+00	7,63E-11	5,90E-10	6,27E-11	-1,07E-07
IRP[2]	[kBq U235 eq.]	2,83E-01	0,00E+00	1,61E-05	9,67E-03	1,11E-05	-6,14E-02
ETP-fw[1]	[CTUe]	1,75E+01	0,00E+00	7,71E-02	1,19E-01	8,94E-03	-4,71E+00
HTP-c[1]	[CTUh]	2,68E-09	0,00E+00	1,04E-12	8,19E-12	1,24E-13	-1,40E-09
HTP-nc[1]	[CTUh]	2,48E-08	0,00E+00	5,81E-11	3,17E-10	4,65E-12	-7,20E-09
SQP[1]	-	8,03E+01	0,00E+00	2,62E-02	1,64E-01	2,31E-03	-4,97E-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)						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.						
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.						

RESOURCE USE PER 1 KG							
Parameter	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	[MJ]	4,12E+01	0,00E+00	4,47E-03	2,63E-01	1,81E-03	-9,70E+00
PERM	[MJ]	3,44E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	4,46E+01	0,00E+00	4,47E-03	2,63E-01	1,81E-03	-9,70E+00
PENRE	[MJ]	5,49E+01	0,00E+00	5,93E-02	4,40E-01	9,35E-03	-1,72E+01
PENRM	[MJ]	2,51E+00	0,00E+00	0,00E+00	-2,15E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,74E+01	0,00E+00	5,93E-02	-1,71E+00	9,35E-03	-1,72E+01
SM	[kg]	6,38E-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]	2,90E-02	0,00E+00	2,21E-06	5,70E-04	2,26E-06	-1,69E-02
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						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 KG							
Parameter	**Unit**	**A1-A3**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	[kg]	1,04E-07	0,00E+00	2,38E-12	5,05E-10	2,05E-12	-7,04E-09
NHWD	[kg]	6,96E-01	0,00E+00	8,28E-06	1,55E-02	4,67E-02	-4,60E-01
RWD	[kg]	2,05E-03	0,00E+00	1,12E-07	5,90E-05	9,96E-08	-5,74E-04
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	1,35E-01	0,00E+00	0,00E+00	8,86E-01	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]	2,63E-01	0,00E+00	0,00E+00	3,05E-01	0,00E+00	0,00E+00
EET	[MJ]	2,94E-01	0,00E+00	0,00E+00	5,46E-01	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						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: $1,95*10^2$ or 195, while 1,12E-11 is the same as $1,12*10^{-11}$ or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 KG		
Parameter	**Unit**	**At the factory gate**
Biogenic carbon content in product	[kg C]	0,00E+00
Biogenic carbon content in accompanying packaging	[kg C]	9,66E-02
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO_2	

Additional information

LCA interpretation

A contribution analysis has been conducted with the aim of identifying which processes and materials contribute the most to the core environmental impacts. Overall, the results show that the greatest environmental impacts for the Minimal roller blind system take place in the life cycle modules A1-A3, with the production of aluminium part having the largest contribution to the overall results in most impact categories.

Technical information on scenarios

End of life (C1-C4)

Scenario information	Small	Medium	Large	Average	Unit
Collected separately	100	100	100	100	%
Collected with mixed waste	-	-	-	-	%
For reuse	-	-	-	-	kg
For recycling	0,84	0,89	0,93	0,89	kg
For energy recovery	0,11	0,06	0,02	0,06	kg
For final disposal	0,05	0,05	0,05	0,05	kg
Assumptions for scenario development	100% metal recycling and plastic waste incineration.				-

Re-use, recovery and recycling potential (D)

Scenario information/material	Small	Medium	Large	Average	Unit
Recovered metal, C3[1]	0,84	0,89	0,93	0,89	kg
Electricity recovery from waste incineration	0,52	0,29	0,10	0,31	MJ
Heat recovery from waste incineration	0,93	0,52	0,19	0,55	MJ
[1] Note that credits in module D are only given for the fraction of virgin content in the metal scrap.					

Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.

However, the products covered in the EPD are GREENGUARD® certified and comply with respective Indoor climate minimum requirements. This certification attests that the products do not exceed established limits for emissions of harmful substance (VOCs), thereby supporting a healthier indoor climate.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.

References

Publisher	epddanmark www.epddanmark.dk Template version 2025.1
Programme operator	Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	Line Granheim Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA software /background data	LCA for Experts version 10.9, databases 2024.2 https://sphera.com EcoInvent 3.10 database *EN 15804 reference package 3.1*
3rd party verifier	Morten Søes Kokborg Rambøll Hannemanns Allé 53 DK-2300 København S Verified according to Verification Checklist 1 v. 2.9.1

General programme instructions
General Programme Instructions, version 3.0, spring 2025
www.epddanmark.dk

Technical Rules and Guidelines
Technical Rules and Guidelines, version 1.0, spring 2025
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”