METALSCREEN®
INDUSTRIA PRODUZIONE CONTROSOFFITTI
FRANGISOLE E RIVESTIMENTI ESTERNI IN ALLUMINIO

MANUFACTURER FALSE CEILINGS INDUSTRY
ALLUMINIUM EXTERIOR CLADDINGS SUN LOUVERS
SOLAR SCREEN PRODUCTION SUSPENSION T GRID
SYSTEMS FACTORY

ANNIVERSARY 35 1987 - 2022

FALSE CEILING SYSTEMS AND EXTERNAL CLADDINGS MADE OF STEEL

BASED ON:
PCR 2019:14 version 1.11,
EN 15804:2012+A2:2019, ISO 14025

CERTIFICATION N°:
S-P-04989

PROGRAMME:
The International EPD System
www.environdec.com

ISSUE DATE:
2022/03/30

EPD®
ENVIRONMENTAL PRODUCT DECLARATION

CPC CODE
4219

PROGRAMME OPERATOR:
EPD International AB

REFERENCE YEAR:
2020

VALID UNTIL:
2026/10/26

ECO PLATFORM EPD VERIFIED

100% MADE IN ITALY

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EPD REFERENCES

EPD OWNER: METALSCREEN GEEE, Via Aldo Moro 38, 41030, Bomporto (MO), Italy

PROGRAMME OPERATOR: EPD INTERNATIONAL AB, box 21060, SE-100 31 Stockholm, Sweden; info@environdec.com

INDEPENDENT VERIFICATION

This declaration has been developed referring to the International EPD® System, following the General Programme Instructions v.3.01.
Further information and the document itself are available at: www.environdec.com. EDP document valid within the following geographical area: Global according to sales market conditions

ISO standard ISO 21930 and CEN standard EN 15804 served as core PCR. PCR 2019:14 version 1.11, 2020-09-14.
PCR review was conducted by: The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members. Review chair: Claudia A. Peña, University of Concepciòn, Chile.
The review panel may be contacted via the Secretariat www.environdec.com/contact.

Independent verification of the declaration and data, according to EN ISO 14025 : 2010

Third party verifier: IMQ S.p.A, via Quintiliano 43, 20138 Milano, Italy

☐ EPD process certification (Internal) ☑ EPD verification (External)

In the process of being accredited by Accredia
Procedure for follow-up during EPD validity involves third party verifier:

☐ YES ☑ NO

Environmental declarations published within the same product category, but from different programmes may not be comparable.
In particular, EPDs of construction products may not be comparable if they do not comply with EN 15804.
EPD owner has the sole ownership, liability and responsibility of the EPD.

CONTACTS

To get more information about our company and this environmental declaration kindly visit our website www.metalscreen.it
and contact our Sales and Environmental Dept: metalscreen@metalscreen.it, +39 059 8170611

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THE COMPANY

These are not only years we are working next to you, but these are also our ages, landmarks in our history that provide reliability and our experience means high quality from raw material to finished products. Experience, a very precious gift, skilfully handed down from generation to generation, allowed our family, made by self-made entrepreneurs to diversify the production, from glass processing to aluminum windows, from anodic oxidation to external aluminum coatings anodized, up to the metal false ceilings and aluminum claddings systems and all its components and eventually up to the next generation of smart false ceilings made of coated aluminum and steel.

With our continuous and constant entrepreneurial presence in the market, we have always brought innovation and modern production technologies, even when aluminum and steel ceilings were little known and little used till now that they are unquestionably a functional and irreplaceable part of modern architecture thanks also to our contribution. Our goals are full commitment and engagement in our strategies for the future, continuous innovation, cautious investments meant to reach our targets and make our view come true and consolidate our primary position, a spotlight in the false ceilings and exterior claddings sector consolidated over the years thank to many sacrifices.

METALSCREEN has been putting its experience and competence at customers' service for more than 100 years and has been the symbol of guarantee, quality, professionality and versatility.

Reliability has always distinguished us ensuring the highest quality of the raw materials processed, clever novelties, timely reactions, prompt answers, just in time production process, quick deliveries, lean organizational, flexibility, dynamic service, price competitiveness, business continuity, kindness and courtesy.

Reducing the energy use of the total building stock is the key to global warming prevention. Most modern office buildings use more energy for cooling than heating. Effectively managing solar energy passing through the transparent part of the façade is a key strategy in the prevention of overheating in both old and new buildings.

Our high performance shading solutions bring substantial energy savings, while at the same time promoting health and wellbeing. Promoting health and wellbeing of their occupants is arguably the most important function of buildings. Buildings are not constructed just to be energy efficient.

METALSCREEN contributes to sustainable buildings through aesthetic solutions that enhance comfort and save energy.

Our shading solutions promote the use of healthy daylight without the hindrances of glare and thermal discomfort.
Our acoustic ceilings are a key element in the provision of acoustic comfort. **METALSCREEN** Architectural's commitment to sustainability and responsible development is evidenced by our continuous efforts to address environmental concerns, improve production processes, eliminate waste and reduce maintenance.

All steel products are 100% recyclable at the end of their lifecycle. For decades we have been using ever higher ratios of recycled steel for our ceilings. Currently our own produced aluminum contains 76% recycled material.
All our own production scrap is collected and re-worked into new valuable input for our melting processes.

METALSCREEN architectural products ceilings and claddings are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable. Our paint and steel melting processes are recommended in terms of clean production.

BIO SANITAS metal ceilings made of steel coated with anti-microbical coated bacterioproof Pro Hygien are suggested for healthcare, hospitals, food chains, schools, kitchens.

METALSCREEN products are still life for longevity, using materially health technical nutrients that can be refused at end of life as a high-quality source for something new. Keen on Green is an important company-wide initiative to reduce energy consumption, water usage and our overall carbon footprint. We embrace ISO 9001 and 14001.

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100% MADE IN ITALY

100 YEARS OF **entrepreneurial life**

70 YEARS OF **experience in semi-finished aluminiun products**

40 YEARS OF **constant presence in the false ceilings sector**

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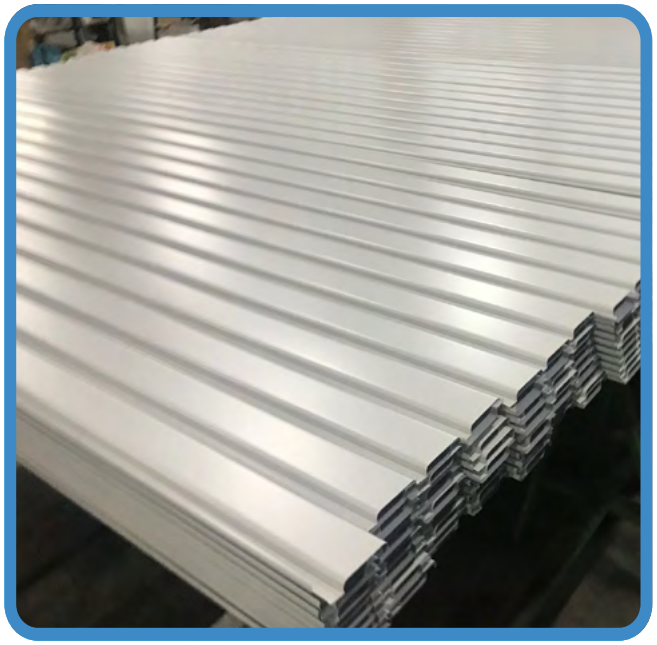
PRODUCT DESCRIPTION



This EPD reports environmental information on ceiling systems and external claddings made of steel. Steel ceiling systems are manufactured from folded or rollformed steel as a complete construction kit or as individual components. The construction set comprises a top layer, e.g a linear panel or a tile, as well as the substructure for fastening the metal ceiling. The substructure is predominantly made of steel. The product in Table 1 is selected as main reference because differences between the mandatory impact indicators compared to the other products covered by this EPD are lower than 10%. The ceiling systems and claddings made of steel are used for indoor and outdoor purposes. The products are manufactured in accordance with the respective customer's requirements and can be of different types:

- Linear panels: full inspection ceiling linear removable panels, rounded and square edges, open gap and closed gap, with or without joints;
- Linear panels for external installation (i.e. petrol stations): Windproof ceiling linear panels rounded and squared edges, open gap and closed gaps, with and without joint for external installations.

- Tiles modules: Tiles module mm 600x600 is the most diffused ceiling panel system used in classic architectural solutions worldwide. Ceiling Tiles systems with square design offer the combination of classic style with sobriety, simplicity concept with smart functionality. Tile systems are manufactured with punching and moulding robotized process in multiple installation concepts and edge options to obtain different visual aesthetic final variants: Clip-in concealed systems | Lay-on Board flat | Lay-in tegular depth of reveal | Flush systems | Deep Tegular.

Linear panels and tile modules can be coupled with a sound-absorbing nonwoven tissue thermo-glued on the back to improve high acoustic performance and comfort noise control. Furthermore, **METALSCREEN** ceiling systems are available in wide choice of patterns, colors and finishes, such as **RAL** colors, **WOOD LIKE** finishes, **OXIDAL** anodized brushed finishes.
TWIN LOCK substructure for fastening the metal ceiling has the following characteristics:

- TWIN LOCK substructure is the result of **METALSCREEN** extensive experience in the suspended worldwide market. The adopted policy is based on the use of seismic lock without click, NO rivet, NO snap tab to avoid dangers with earthquake seismic where common click systems will open and the panels, lamps etc. fall down.

Table 1

ELEMENT	DESCRIPTION	WEIGHT (kg/m²)
Top layer	Linear panel type LA/300 RIV	3,98
Substructure	Wall angle perimetrical frame C section	0,30
Substructure	Supporting carrier type 44	0,76
Product Total Weight		**5,04**

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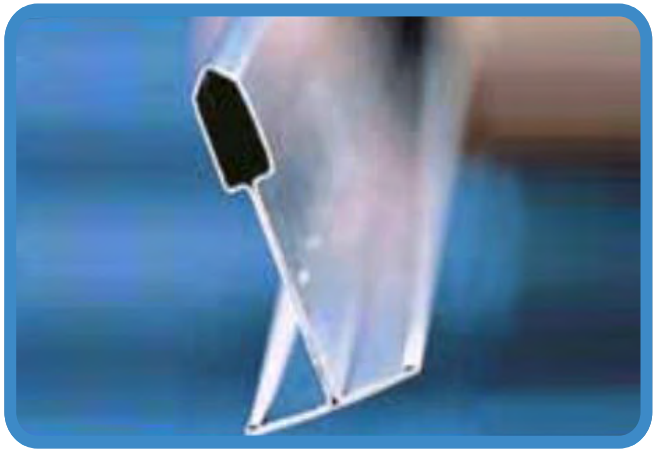
- It determines the perfect installation of the grid, ensure maximum strength and greater safety once the main runner and cross tees are assembled. Little attention is needed during dismantling operations because TWIN LOCK isn't a click-on button dangerous grid system. Our joint fitted directly to the solid body has made the coupling of the profile on the system even more secure.

- Innovative and exclusive anti-torsion lock system installed on the grids vertical side guarantee rigidity and stability mechanical properties coupled with high torsional strength grid systems are produced according to the EN 13964 in full compliance with the highest quality standards.

- TWIN LOCK grid systems are available in 15 mm, 24 mm each profile height mm.38. Available standard colours: White RAL 9003 - Black RAL 9005 Metallic grey Silver RAL 9006.



Content declaration

The base materials of the product described in Table 1 are summarized in Table 2. For packaging the metal ceiling systems a wooden pallet, cardboard and plastic sheeting are used. A protective polyolefin film is generally applied on perforated metal ceilings. Recycled content of galvanized and pre-painted steel is 75,9% (source data: Ecoinvent dataset). Polyester resin-based paints are used. Biogenic carbon content in accompaying packaging: 7,20E-04 kgC (1 kg of biogenic carbon is equivalent to 3,67 kg of CO_2).

Table 2

COMPONENT MATERIAL	kg/kg
PRODUCT	
Galvanized steel	0,15
Pre-painted steel	0,85
Total product	**1**
PACKAGING	
Wooden pallet	0,0019
Polyethylene film	0,0151
Cardboard	0,0050
Total packaging	0,0069
PROTECTIVE FILM	
Polyolefin film	0,0058

The product does not contain substances from the candidate list for authorization of the Reach legislation with a concentration above 0,1% by weight.

Product-related environmental performances

Safety and security
- A1 Euroclass – Reaction to fire (UNI EN 13501-1)
- Total protection against corrosion

Wellness and Sustainability
- Resistance to humidity and salinity

Disassembly
- Steel items are 100% recyclable at the end of their life cycle

Optimized acoustics
- **METALSCREEN** metal ceilings can be coupled with a sound-absorbing nonwoven tissue to improve high acoustic performance and comfort noise control

Adaptability
- Full adaptability of the systems, allowing easy installation and repositioning

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SCOPE AND TYPE OF EPD®

Type of EPD®: Product EPD for metal ceiling systems made of steel

Database: Ecoinvent 3.7.1

Geographical Scope: World according to sales market conditions

Software: Simapro 9.2.0.1

Report LCA: Life Cycle Assessment (LCA) for manufacturing metal ceiling systems and claddings made of steel, metal ceiling systems and claddings made of aluminium, metal ceiling systems made of steel-aluminium, v1 (2021)

Declared Unit: 1 kg metal ceiling systems made of steel (panels and structure), represented by reference product with a total system weight of 5,04 kg/m^2.

This EPD covers all different variants within each ceiling system model made of steel since results do not vary more than 10% between them. Metal ceiling systems declared in this EPD are primarily made of pre-painted steel which can vary from 80,4% to 100% by weight (panel and structure both made of pre-painted steel). Galvanized steel content up to a maximum of 18,5% by weight. The substructure for fastening the metal ceiling can be made of pre-painted aluminium up to a maximum of 1,1% expressed as a percentage of the total product weight. Weight percentages refer to 1 kg of metal ceiling system (panels and structure).

Weight per area (kg/m^2) depends on panel perforation and structure applied to the specific product.

Table 3

ELEMENT	VALUE	UNIT
Declared Unit	1	kg
Grammage*	5,04**	kg/m^2
Conversion factor to 1 kg	0,198	m^2/kg

**it does not include the packaging materials and the poliolefin protective film*

***Weight per unit of area of all variants covered by this EPD can vary between 4,8 and 6,4 kg/m^2*

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TABLE OF MODULES

	PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
	Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	Waste processing	Disposal	Reuse - Recovery - Recycling potential
MODULE	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Module declared	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	WLD	WLD	IT	WLD	–	–	–	–	–	–	–	–	WLD	WLD	WLD	WLD	WLD
Specific data used	> 90%			-	-	–	–	–	–	–	–	–	–	–	–	–	–
Variation-products	< 10%			-	-	–	–	–	–	–	–	–	–	–	–	–	–
Variation-sites	Not Applicable			-	-	–	–	–	–	–	–	–	–	–	–	–	–

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CALCOLATION RULES

Pre-painted metal coils used to produce the ceiling systems are intermediate products which are provided from companies specialized in trading and production of coated metal coils.
Primary data were collected from manufacturers of the main materials. Where suppliers' data were not comprehensive or available, they were complemented with similar supplier's data and selected generic data.
Polyester resin-based paints are used in the coating process of steel coils. The anti-microbial paint used for **BIO SANITAS** ceiling system was assimilated to a generic polyester resin-based paint, as chemical composition, tecnical data and benefical actions are available upon cusotmer's request.
In the LCA model, the recycled content of galvanized and pre-painted steel used is: 75,9% (data source: Ecoinvent dataset). Transport of raw materials to the manufacturing site (A2) was estimated based on the position of the suppliers involved. For packaging materials an average distance of 100 km was assumed. All products are manufactured in the plant located in Bomporto (Modena, Italy).

For **METALSCREEN** primary data, mass-based and economic allocation needed to be applied. Therefore, flows related to electricity consumption, natural gas, water and ancillary materials were assigned to the total mass production in 2020.
The total mass production flow was obtained from a mass balance of the entire process, by subtracting the total waste flow from the total mass of input materials in 2020 (warehouse stocks were not considered in the calculation).

For the distribution process (A4), economic allocation is used considering the share of each country of destination over total sales in 2020.

In module D, impacts arising from steel recycling are accounted, including avoided impacts associated to primary steel production. The result is expressed as net value between direct impact (i.e. recycling steel in EAF furnace) and avoided impacts (i.e. producing steel from iron ore in BOF furnace).

LCA METHODOLOGY

The environmental burden of the product has been calculated according to PCR 2019:14, 1.11.
This declaration is a cradle to gate with options EPD type, based on the application of Life Cycle Assessment (LCA) methodology to the whole life cycle system. In the whole LCA model, infrastructures and production equipment are not considered.
Customized LCA questionnaires were used to gather in-depth information about all aspects of the production system, in order to provide a complete picture of the environmental burden of the system for example, raw materials specifications, process efficiencies, air emissions, waste management.

According to the PCR, processes contributing greater than 1% of the total environmental impact indicator for each impact are included in the inventory. No data gaps were allowed which were expected to significantly affect the outcome of the indicator results

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Process description

The system components for metal ceilings are manufactured in a continuous manufacturing process. The steel sheets are mainly uncoiled, perforated (optional), clipped and folded or pressed. Subsequently, a thermoadesive acoustic tissue can be applied to the back of the panels by means of heat in a continuous process. Furthermore, a polyolefin protective film is generally applied on perforated ceiling systems.

Product stage	Construction process stage	End of life stage

A1 A2 A3 A4 C1 C2 C3 C4

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PRODUCT STAGE

A1

- Raw materials extraction and processing
- Generation of electricity
- Extraction and processing of natural gas used for module A3 energy demand

A2

- Raw materials transportation from production or collection facilities to the production plant located in Bomporto (Modena, Italy)

A3

- Natural gas combustion for energy production
- Treatment of waste generated from the manufacturing process
- Ancillary materials consumption
- Packaging materials

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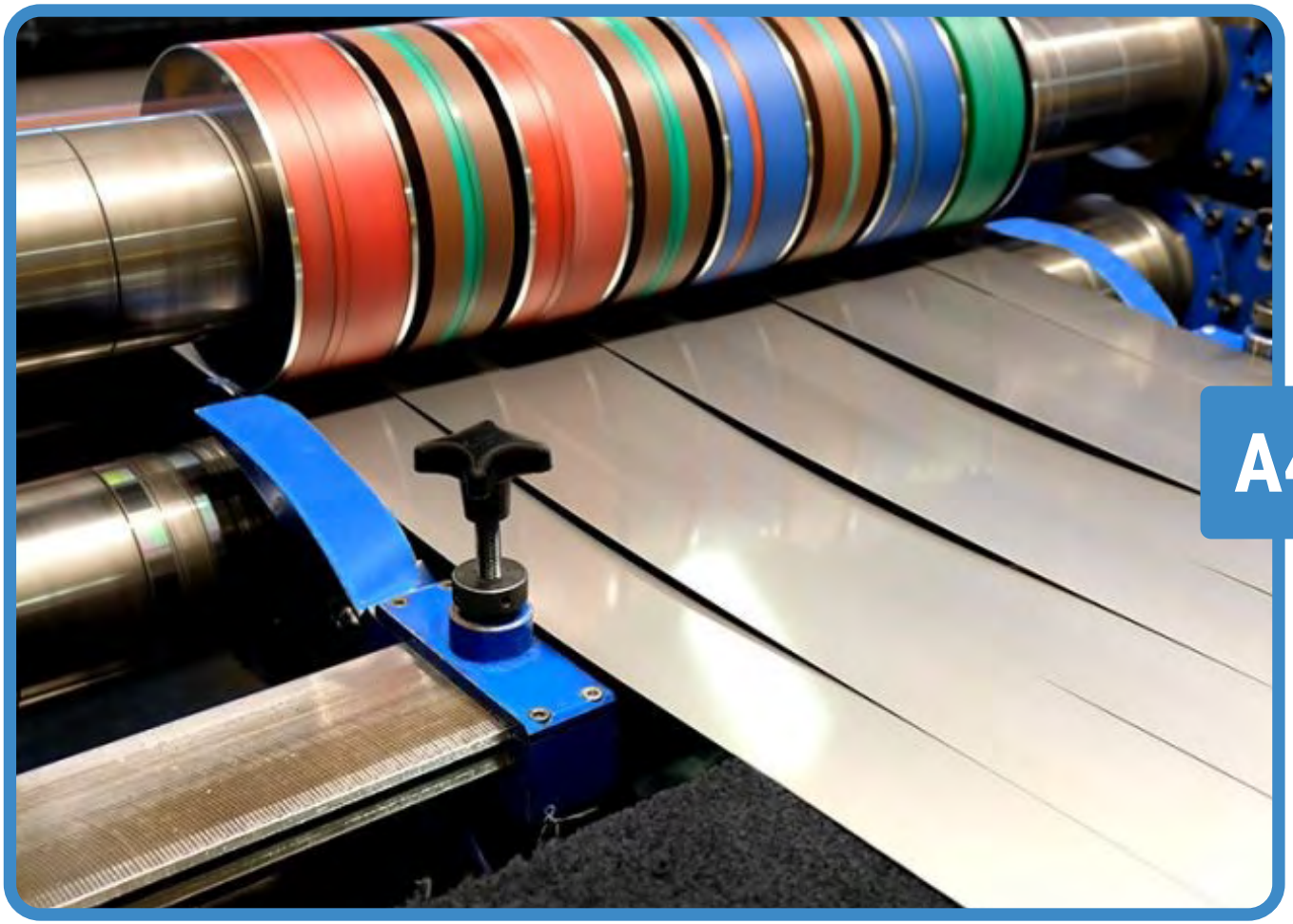
CONSTRUCTION PROCESS STAGE



A4

- Transport to the customers. Distances were estimated based on the country of destination. Final products are delivered in Italy (about 33% of the total sold products) and balance exported worldwide. The products are delivered through truck and sea freight ship. Deliveries in Italy an average distance is assumed for North Italy (300 km), Central Italy (500 km) and South Italy (1000 km).

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END OF LIFE STAGE

C1

- Dismantling operations are mainly performed manually. Energy consumption resulting from the use of power tools is difficult to estimate, therefore emissions associated to module C1 are set to zero.

C2

- Transportation of the discarded product as part of the waste processing (to recycling site or to a final disposal site). In the LCA model, transportation of the discarded product to a recycling site or to a final disposal site (C2) was described considering 150 km by truck.

C3

- Waste processing of material flows intended for reuse, recycling and energy recovery. After use (end-of-life), 85% by weight of the discarded product is assumed to be recycled, according to global reference scenarios for steel sheets.

C4

- Waste disposal including physical pre-treatment and management of the disposal site. The remaining 15% by weight of the discarded product is assumed to be landfilled (C4).

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ENVIRONMENTAL PERFORMANCE

The detailed environmental performance (in terms of potential environmental impacts, use of resources and waste generations) is presented for the declared modules (A1-A2-A3-C1-C2-C3-C4-D). Construction installation (A5) and use phase (B1-B7) are modules not declared (ND). The results refer to the declared unit of **1 kg of metal ceiling made of steel**.

ENVIRONMENTAL IMPACT INDICATOR	UNITS / D.U	PRODUCT STAGE	CONSTRUCTION PROCESS STAGE	END OF LIFE STAGE				BENEFITS AND LOADS BEYOND SYSTEM BOUNDARIES
		A1-A3	A4	C1	C2	C3	C4	D
GWP	kg CO_2 eq	2,21E+00	1,32E-01	0,00E+00	2,10E-02	0,00E+00	5,37E-05	-2,99E-01
GWP,f	kg CO_2 eq	2,21E+00	1,32E-01	0,00E+00	2,10E-02	0,00E+00	5,37E-05	-2,99E-01
GWP,b	kg CO_2 eq	4,16E-03	8,14E-06	0,00E+00	1,29E-06	0,00E+00	1,64E-08	-6,38E-05
GWP,luluc	kg CO_2 eq	1,93E-03	1,53E-06	0,00E+00	2,35E-07	0,00E+00	2,26E-09	-3,06E-05
GWP, ghg	kg CO_2 eq	2,21E+00	1,32E-01	0,00E+00	2,10E-02	0,00E+00	5,37E-05	-2,99E-01
ODP	kg CFC11 eq	1,57E-07	2,99E-08	0,00E+00	4,80E-09	0,00E+00	1,21E-11	-9,26E-09
AP	mol H+ eq	9,96E-03	8,71E-04	0,00E+00	8,96E-05	0,00E+00	5,69E-07	-1,13E-03
EP,f	kg P eq	1,11E-04	2,30E-07	0,00E+00	3,54E-08	0,00E+00	5,51E-11	-1,27E-05
EP,m	kg N eq	2,40E-03	2,63E-04	0,00E+00	3,18E-05	0,00E+00	2,54E-07	-2,30E-04
EP,t	mol N eq	2,23E-02	2,90E-03	0,00E+00	3,50E-04	0,00E+00	2,79E-06	-2,51E-03
POCP	kg NMVOC eq	8,84E-03	7,62E-04	0,00E+00	9,30E-05	0,00E+00	7,63E-07	-1,34E-03
ADPE	kg Sb eq	2,93E-05	6,65E-09	0,00E+00	1,11E-09	0,00E+00	2,64E-12	-4,67E-06
ADPF	MJ	2,78E+01	1,85E+00	0,00E+00	2,97E-01	0,00E+00	7,44E-04	-2,46E+00
WDP	m^3	1,13E+00	2,77E-04	0,00E+00	3,89E-05	0,00E+00	1,65E-07	-2,63E-02

GWP Global warming potential, total
GWP,f Global warming potential, fossil
GWP,b Global warming potential, biogenic
GWP,luluc Global warming potential, land use & land use change
AP Acidification Potential
EP, f Eutrophication Potential, freshwater**
EP, m Eutrophication Potential, marine
EP, t Eutrophication Potential, terrestrial
POCP Photochemical ozone creation potential
ADPE Abiotic depletion potential minerals & metals*
ADPF Abiotic depletion potential fossil fuels*
WDP Water use deprivation potential*

*** 1 kg of phosphorus is equivalent to 3,26 kg of phosphate.*
**The results of this environmental impact indicator shall be used with care as theuncertainties on these results are high or as there is limited experienced with the indicator.*

Additional environmental impact indicators are computed in the LCA report but not reported in the EPD.

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PARAMETERS DESCRIBING RESOURCE USE

PARAMETER	UNITS / D.U	PRODUCT STAGE	CONSTRUCTION PROCESS STAGE	END OF LIFE STAGE				BENEFITS AND LOADS BEYOND SYSTEM BOUNDARIES
		A1-A3	A4	C1	C2	C3	C4	D
PERE	MJ	2,18E+00	2,46E-03	0,00E+00	4,02E-04	0,00E+00	2,03E-05	-2,17E-01
PERM	MJ	5,56E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,23E+00	2,46E-03	0,00E+00	4,02E-04	0,00E+00	2,03E-05	-2,17E-01
PENRE	MJ	3,50E+01	1,82E+00	0,00E+00	2,92E-01	0,00E+00	7,28E-04	-3,67E+00
PENRM	MJ	1,01E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,60E+01	1,82E+00	0,00E+00	2,92E-01	0,00E+00	7,28E-04	-3,67E+00
SM	kg	7,60E-01	0,00E+00	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	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	3,32E-02	4,47E-05	0,00E+00	7,23E-06	0,00E+00	2,39E-08	-3,97E-04

PERE Renewable energy (carrier)
PERM Renewable energy (feedstock)
PERT Renewable energy (total)
PENRE Non-renewable energy (carrier)
PENRM Non-renewable energy (feedstock)
PENRT Non-renewable energy (total)
SM Use of secondary materials
RSF Use of renewable secondary fuels
NRSF Use of non-renewable secondary fuels
FW Use of Net Fresh Water

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PARAMETERS DESCRIBING WASTE CATEGORIES AND OUTPUT FLOWS

PARAMETER	UNITS / D.U	PRODUCT STAGE	CONSTRUCTION PROCESS STAGE	END OF LIFE STAGE				BENEFITS AND LOADS BEYOND SYSTEM BOUNDARIES
		A1-A3	A4	C1	C2	C3	C4	D
HWD	kg	9,06E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NHWD	kg	4,47E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,25E-02	0,00E+00
RWD	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	4,47E-02	0,00E+00	0,00E+00	0,00E+00	7,23E-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	0,00E+00
EE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

HWD Hazardous waste disposed
NHWD Non-hazardous waste disposed
RWD Radioactive waste disposed
CRU Components for re-use
MFR Material for recycling
MER Materials for energy recovery
EE Exported energy (per energy carrier)

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ADDITIONAL INFORMATION

Transport to customers

Table 4

TRANSPORT TO CUSTOMERS		
PARAMETER	**VALUE**	**UNIT**
Vehicle type	Long distance lorry	-
Vehicle load capacity	16-32	t
Fuel type and consumption	0,038 kg of diesel to transport 1 tonn for 1 km	-
Average distance to site	860	km
Capacity utilisation (including empty returns)	95	%
Bulk density of transported products	-	kg/m^3
Capacity utilisation	1	-

Energy consumption

Manufacturing process electricity supply and consumption is 100% from national electricity grid. In the LCA model, the national specific residual mix was used (modelled according to the share of energy carriers listed for 2020 by the Association of Issuing Bodies for Italy). The electricity emission factor is 0,69 $kgCO_2/kWh$ (expressed as GWP-GHG indicator).

Main references

PCR 2019:14 version 1.11 “Construction Products” (2021)

General Programme Instructions for The International EPD® System, version 3.01 (2019)

EN 15804:2012+A2:2019 “Sustainability of Construction Works - Environmental Product Declaration - Core rules for the product category of construction products” (2019)

LCA Report “Life Cycle Assessment (LCA) for manufacturing metal ceiling systems and claddings made of steel, metal ceiling systems and claddings made of aluminium, metal ceiling systems made of steel-aluminium" v1 (2021)

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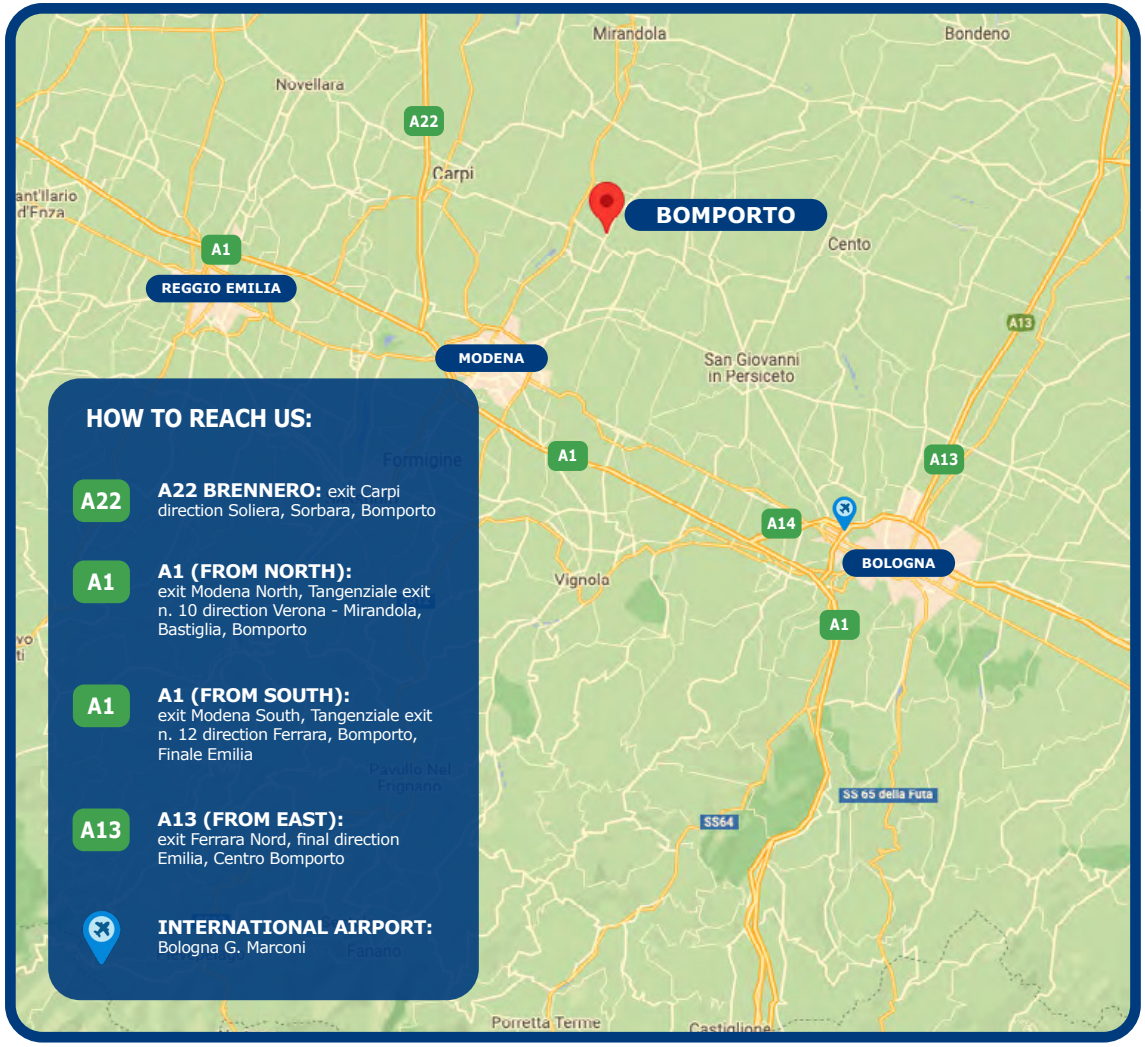
METALSCREEN®

INDUSTRIA PRODUZIONE CONTROSOFFITTI FRANGISOLE E RIVESTIMENTI ESTERNI IN ALLUMINIO

MANUFACTURER FALSE CEILINGS INDUSTRY ALLUMINIUM EXTERIOR CLADDINGS SUN LOUVERS SOLAR SCREEN PRODUCTION SUSPENSION T GRID SYSTEMS FACTORY

ANNIVERSARY 35 1987 - 2022



FOR A SUSTAINABLE GROWTH
TO RESPECT THE ENVIRONMENT AND HUMAN HEALTH: A CONSTANT EFFORT FOR EVERYONE'S FUTURE

METALSCREEN has committed itself for years in order to minimize environmental impacts of manifacturing processes. We make every effort to promote the rationalization of raw materials and energy. We are committed to developing new products and services which contribute to a cleaner and safer world. We promote the development and sale of ceiling systems made of aluminium and steel, produced with new technologies, environmentally friendly, 100% recyclable at the end of their life, not harmful to human health, dissuading the market from using harmful and not recyclable fibrous and chalky ceiling systems.
Our programmes have eliminated the use of harmful raw materials and reduced energy consumption. They constitute an integral part of our efforts to protect the environment and achieve excellence.

PRODUCTS COMPLIANT WITH THE RELEVANT EU LEGISLATION
CE EN 13964:2014 - EN 14195:2005

Company with Certified Quality and Environmental Management System (ISO 9001 and ISO 14001)

MADE IN ITALY 100%

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