

# EPD

ENVIRONMENTAL  
PRODUCT DECLARATION

## TRAPEZOIDAL CORRUGATED STEEL SHEET FOR CONSTRUCTION INDUSTRY

Environmental Product Declaration  
in accordance with UNI EN ISO 14025  
and UNI EN 15804:2012+A2:2019.



**DECLARATION NUMBER**

S-P-03146

**PRODUCT CATEGORY RULES**

Construction products, 2019:14,  
version 1.11, UN CPC 54

**ISSUE DATE**

2022/02/02

**REVISION DATE**

2023/09/28

**VALID UNTIL**

2026/12/13

**PROGRAMME**

The International EPD® System  
[www.environdec.com](http://www.environdec.com)

**PROGRAMME HOLDER**

EPD International AB

EN



**MARCEGAGLIA**  
**BUILDTECH**

# Our steel, your life

*Sustainability objectives* such as respect for the environment and the protection of its workers have always been priorities, and Marcegaglia has been committed over the years to promoting constant innovation in the context of *production efficiency*, in the *safety of its facilities*, and *environmental protection*. These objectives are pursued by adopting the *best technologies* available, investing in *R&D*, ongoing training, and the close *involvement of its collaborators*, thereby tracing a strategic path towards an *increasing awareness of sustainability* which permeates all of the group's activities, in order to strengthen its "green" spirit and maximize its positive impact on employees, the community, and the environment.



# SUMMARY

<b>1 THE COMPANY</b>	2
<b>2 THE PRODUCT</b>	3
<b>3 THE PRODUCTION SITE</b>	4
<b>4 PLANT CERTIFICATIONS</b>	5
<b>5 THE PROCESS</b>	6
<b>6 THE METHODOLOGY</b>	7
<b>7 POTENTIAL ENVIRONMENTAL IMPACTS</b>	8
<b>8 RESOURCE USE</b>	9
<b>9 WASTE PRODUCTION</b>	10
<b>10 OUTPUT FLOWS</b>	10
<b>11 RESULTS</b>	11
<b>12 REFERENCES</b>	33
<b>13 GENERAL INFORMATION</b>	34



## 1. THE COMPANY

**Marcegaglia Buildtech** is a part of the Marcegaglia group, a leader in the European and world steel processing sector. A **unique business and manufacturing model**, a typical expression of Italian family entrepreneurship, capable of combining its operational capacity with a significant presence in the international market alongside multinationals.

Marcegaglia Buildtech is a **global partner in civil and industrial construction**, thanks to the development of custom steel solutions. The expertise developed in the construction sector allows the company to offer a range of finished goods and complete solutions with a high technical value: insulated and sectional panels, safety barriers, and construction equipments.

The Marcegaglia Buildtech range of **insulated panels** is produced in the largest and most modern specialist Italian plant, in Pozzolo Formigaro (Alessandria).

Furthermore, Marcegaglia Buildtech is the leading manufacturer of **steel road** safety barriers, entirely produced at the Pozzolo Formigaro plant.

Lastly, the company is the steel partner for a wide range of construction equipments and scaffolding systems made in Graffignana (Lodi) plant.

## 2. THE PRODUCT

Marcegaglia Buildtech manufactures **steel trapezoidal corrugated sheets**, which are widely used as roofing elements and external or internal enveloping, in both civil and industrial construction.

The product, a **corrugated sheet** made by galvanized or coated steel, thanks to a cold roll forming process is available in different shapes, designed for multiple use with different performance specifications.

Corrugated sheets are used as both **structural elements**, in addition with collaborative materials, and for **non-structural purposes**.

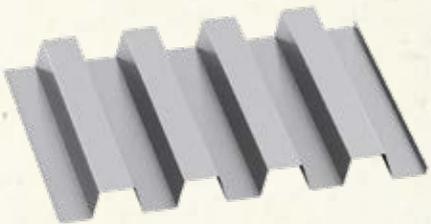
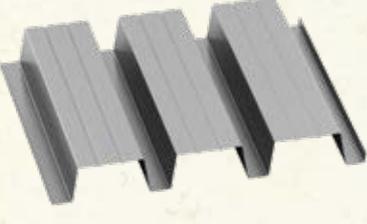
In particular, the following product ranges will be analyzed on the following pages:

- **trapezoidal corrugated sheets;**
- **floors with structural plates.**

The corrugated sheets analyzed have an estimated useful life of **50 years** [Ref.: Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)].

For specific use, the floors with structural plates are available with **struts**. Production is partially outsourced.

All the technical documentation and other specific references are available on the website [marcegagliabuildtech.it](http://marcegagliabuildtech.it).

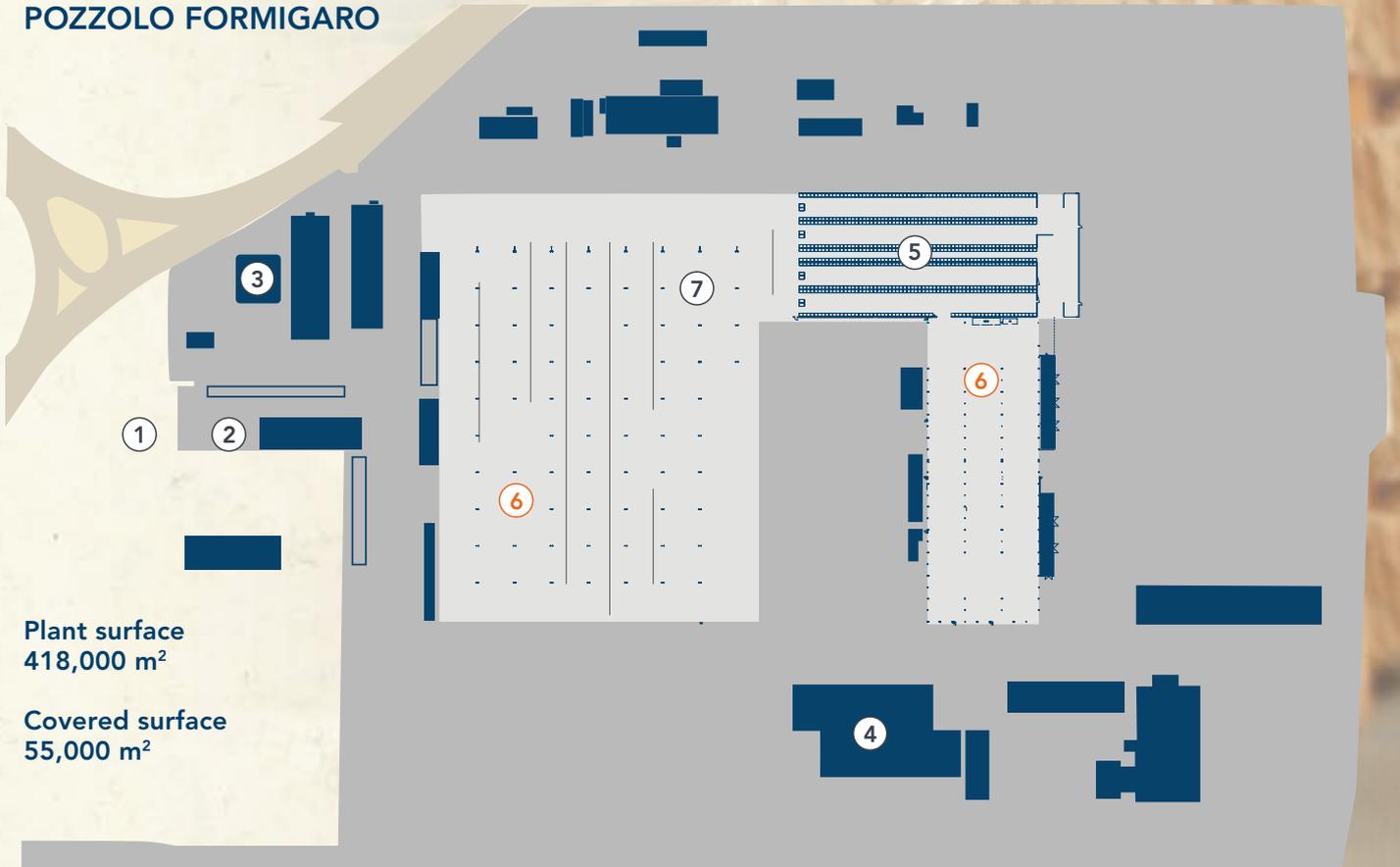
	TYPE	USE	MATERIAL	THICKNESS (mm)	UNIT WEIGHT (kg/m <sup>2</sup> )
<b>EGB 210</b>					
	With structural plates	Slab	Galvanized steel	0,7	9,16
				0,8	10,47
				1	13,08
				1,2	15,7
	Standard	Slab, wall and roof	Coated steel	0,6	7,85
				0,7	9,16
				0,8	10,47
				1	13,08
			1,2	15,7	
<b>EGB 1200</b>					
	With structural plates	Slab	Galvanized steel	0,7	9,64
				0,8	11,02
				1	13,77
				1,2	16,53
	Standard	Slab, wall and roof	Coated steel	0,6	8,26
				0,7	9,64
				0,8	11,02
				1	13,77
			1,2	16,53	
<b>EGB 1250</b>					
	Standard	Slab, wall and roof	Coated steel	0,6	5,89
				0,7	6,87
				0,8	7,85
				1	9,81

### 3. THE PRODUCTION SITE

The range of the **metal building enveloping department**, consisting of insulated panels, sectional doors, and corrugated sheets, is manufactured in the largest and most modern specialist Italian plant, located in **Pozzolo Formigaro** (Alessandria).

The site, **extended and refurbished** using the latest manufacturing technologies to ensure maximum product performance, has a surface area of some **418,000 m<sup>2</sup>**, of which 55,000 are covered.

#### POZZOLO FORMIGARO



Plant surface  
418,000 m<sup>2</sup>

Covered surface  
55,000 m<sup>2</sup>

- ① Entrance
- ② Offices
- ③ Utilities
- ④ Main storage
- ⑤ Coils storage
- ⑥ Panels and corrugated sheets production area
- ⑦ Safety barriers production area

## 4. PLANT CERTIFICATION

The company's **management systems** testify the company's commitment to pursue the **continuous improvement** of its environmental and safety performance, for example by properly managing the hazardous substances and waste produced by its business. Within the **environmental management system** there is also a specific data management procedure for studying the life cycle of products. Year after year, the company plans new improvement objectives aimed at increasing its performance.

With reference to the systems used by the company, for example, as they testify to the company's commitment to underline the continuous improvement of its environmental and safety performance used, for example by managing its own products from hazardous substances and its own waste. activities.

Within the environmental management system there is also a specific data management procedure for studying the life cycle of the products. From year to year the company plans new improvement objectives aimed at increasing its performance.

The company has implemented and maintains the following management systems:

- **Quality management system** that meet the requirements of the UNI EN ISO 9001: 2015 (certificate No. 12370/05 / S - expiry 22/05/2025);
- **Environmental management system** that meet the requirements of the UNI EN ISO 14001: 2015 (certificate No. EMS-7290 / S - expiry 25/07/2024);
- Occupational **health and safety management system** that meet the requirements of the UNI ISO 45001: 2018 (certificate No. OHS-260 - expiry 25/09/2025);
- **Social responsibility management system** that meet the requirements of the SA 8000: 2014 (certificate No. SA-2040 - expiry 04/04/2025).

### SYSTEM CERTIFICATIONS



QUALITY  
MANAGEMENT  
SYSTEM

RINA

ISO 9001:2015

ENVIRONMENTAL  
MANAGEMENT  
SYSTEM

RINA

ISO 14001:2015

ENVIRONMENTAL  
MANAGEMENT  
SYSTEM

IQNET

ISO 14001:2015

HEALTH AND  
SAFETY  
MANAGEMENT  
SYSTEM

RINA

ISO 45001:2018

HEALTH  
AND SAFETY  
MANAGEMENT  
SYSTEM

IQNET

ISO 45001:2018

WORKER HEALTH  
/ SAFETY AND  
ENVIRONMENT  
POLICY

SOCIAL  
RESPONSIBILITY  
MANAGEMENT  
SYSTEM

RINA

SA 8000:2014

## 5. THE PROCESS

The **production cycle** begins with the **arrival of raw materials** to the company by road. The raw materials consist of **coils** arriving from Marcegaglia Carbon Steel S.p.A., whose steel has a **recycled content of 24,4%**: this percentage is calculated as a weighted average of the same value associated with the incoming raw material and deriving both from Type III environmental declarations as well as from self-declarations compliant with the UNI EN ISO 14021 standard. The steel comes both from blast furnace (with an average recycled content of 17.0%) and from an electric arc furnace (with an average recycled content of 82.8%).

Below, the manufacturing cycle main activities description:

### • COIL UNWINDING

The steel sheet, supplied in coil, is unwinded thanks to special reels.

### • COLD ROLL FORMING

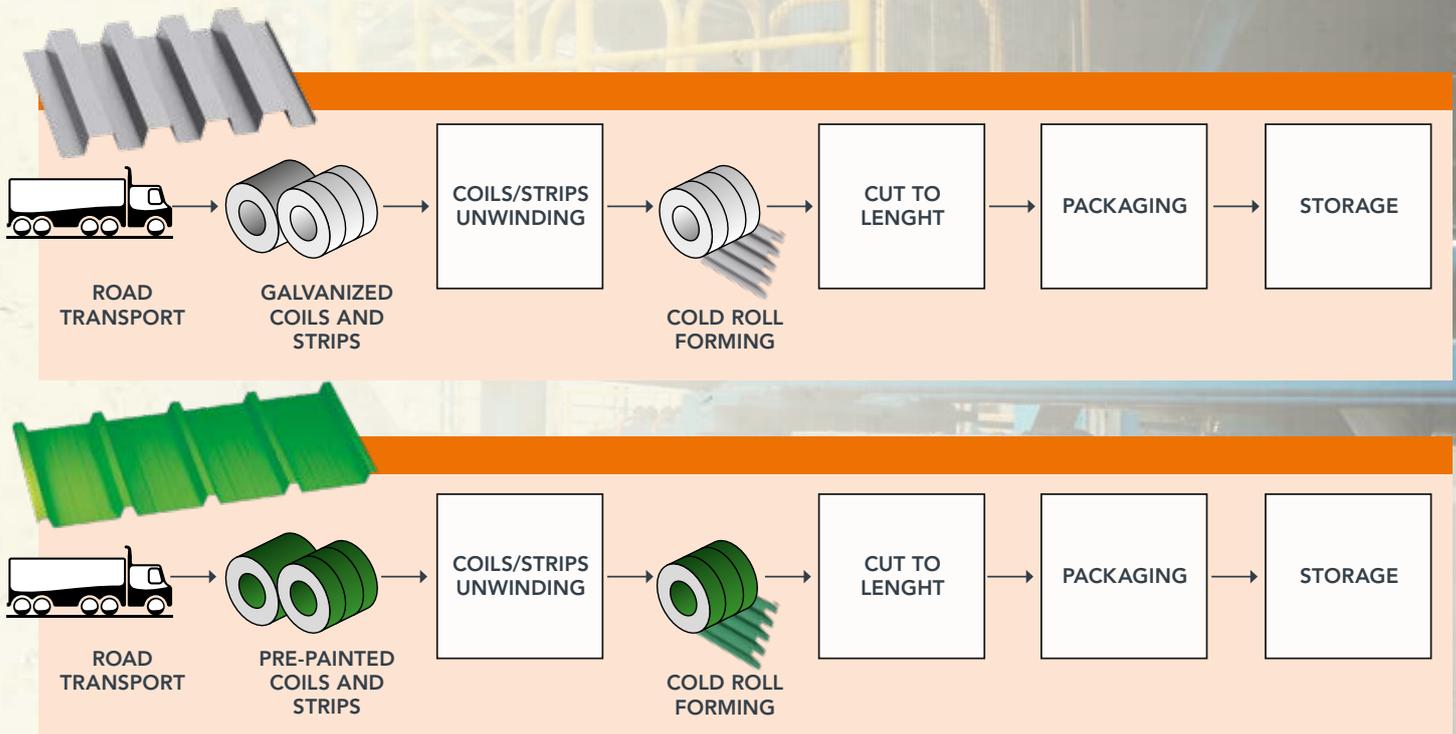
The steel sheet is shaped into different corrugated shapes thanks to a roll forming machine made with adjustable rolls.

### • CUT TO LENGHT

An automatic cutting to size machine, process the corrugated sheet into different pieces. The machine moves in synchronously with the sheet, thanks to an automatic system that allow the cutting process that follow the corrugated sheet for a thanks to an automatic control system that guarantees the designed size.

### • PACKAGING AND STORAGE

The corrugated sheet are stacked with an automatic system. The strapping process is made manually aside.



## 6. THE METHODOLOGY

The environmental performance of products have been evaluated considering **1 m<sup>2</sup> of corrugated sheet** as a functional unit.

To collect, analyze and monitor performance, **SimaPro rel. 9.5 software** has been used.

The data used is representative of the **year 2022** and were provided by the company (**primary data**).

**Secondary data**, on the other hand, comes from the Ecoinvent database (Ref.: database v.3.9.1, January 2023). For energy consumption and waste, a mass allocation has been made.

The study model is the system “from cradle to gate with options (A1-A3 + A4 + C1-C4 + D)”, as shown in the following table (reference: PCR 2019: 14 “Construction products” version 1.11), valid until 20/12/2024.

**Modules A1-A3** include material procurement processes (raw and auxiliary materials) as well as manufacturing processes. The impact of producing steel sheets is not taken into consideration here.

**Module A4** considers the distribution of the finished product to the customer, considering an average delivery distance of the same equal to 400 km.

The **C1-C4 modules** analyze the end of life stage of the panels, including the transport, the treatment and disposal. These operations are not directly managed by the company and literature data are therefore used. In particular it has been assumed an average 50 km distance between the site and the recycling center.

**Module D** assess the positive and net impact of the recovery of the steel material following the demolition process. The calculation of the environmental benefits is based on the indications provided by the document “Product Category Rules for Type III environmental product declaration of construction products to EN 15804: 2012 - Par. 6.3.4.6. Benefits and loads beyond the product system boundary, information Module D”.

		MODULE	Modules declared	Geography	Specific data	Variations product	Variation site
PRODUCT STAGE	Raw material supply	A1	X	GLO	>90%	Not relevant	Not relevant
	Transport	A2	X	IT	>90%	Not relevant	Not relevant
	Manufacturing	A3	X	IT	>90%	Not relevant	Not relevant
CONSTRUCTION PROCESS STAGE	Transport	A4	X	IT	>90%	Not relevant	Not relevant
	Construction installation	A5	ND	-	>90%	Not relevant	Not relevant
USE STAGE	Use	B1	ND	-	-	-	-
	Maintenance	B2	ND	-	-	-	-
	Repair	B3	ND	-	-	-	-
	Replacement	B4	ND	-	-	-	-
	Refurbishment	B5	ND	-	-	-	-
	Operational energy use	B6	ND	-	-	-	-
	Operational water use	B7	ND	-	-	-	-
END OF LIFE STAGE	De-construction demolition	C1	X	GLO	-	-	-
	Transport	C2	X	GLO	-	-	-
	Waste processing	C3	X	GLO	-	-	-
	Disposal	C4	X	GLO	-	-	-
RESOURCE RECOVERY STAGE	Reuse, recovery, recycling potential	D	X	IT	-	-	-

LEGEND: X = Module considered, ND = Module not declared, GLO = Global, IT = Italy



## 7. POTENTIAL ENVIRONMENTAL IMPACTS

The manufacturing activities performed at the Marcegaglia site generate typical atmospheric emissions from the transformation of steel.

Air quality monitoring programs, the quality of working environments and individual issuing points are active in respect to the prescriptions of the authorizations issued by the competent regional authorities.

The impact categories are:

- **global warming:** the increase of the average temperature of the surface of the Earth, attributed in large

part to increasing quantities of atmospheric emissions of greenhouse gases;

- the **distribution of the ozone layer**, linked to the agents issued by human activity, primarily chlorine and bromine;

- **photochemical oxidation**, a complex mixture of atmospheric pollutants consisting of ozone and other oxidizing chemical substances, nitrogen dioxide (NO<sub>2</sub>) and fine particles;

- **atmospheric acidification:** acid rain, due to emissions derived from the use of fossil fuels;

- the **eutrophication of water:** an excess increase in plant organisms in aquatic ecosystems;

- the **depletion of abiotic fossil resources and otherwise.**

IMPACT CATEGORY	ABB.	UNIT
Climate change - total	GWP - t	kg CO <sub>2</sub> eq
Climate change - Fossil	GWP - fossil	kg CO <sub>2</sub> eq
Climate change - Biogenic	GWP - biogenic	kg CO <sub>2</sub> eq
Climate change - Land use and LU change	GWP - luluc	kg CO <sub>2</sub> eq
Climate change - Greenhouse Gases	GWP - GHG	kg CO <sub>2</sub> eq
Ozone depletion	ODP	kg CFC11 eq
Photochemical ozone formation	POCP	kg NMVOC eq
Acidification of land and water	AP	mol H <sup>+</sup> eq
Eutrophication	EP - freshwater EP - marine EP - terrestrial	kg P eq kg N eq mol N eq
Water use	WDP	m <sup>3</sup> depriv.
Resource use, fossils	ADP - F	MJ
Resource use, minerals and metals	ADP - MM	kg Sb eq





## 8. RESOURCE USE

The resources used to transform steel products have always been a priority for Marcegaglia. The main energy sources used are electricity and natural gas; diesel is used exclusively for internal handling and transport. The energy consumption impact, only due to the electricity used, is minimal compared to the total impact of the cycle.

The company has a certificate energy management

system pursuant to the **UNI CEI EN ISO 50001: 2018** to identify the most important plants in terms of energy as well as define opportunities for improvement in order to reduce over time the energy consumption determined by the performance of its business.

The amount of energy resources used shall be taken into account in calculating the **resources used** (from renewable and non-renewable sources), the **depletion of fossil fuels** and the **volume of fresh water taken**.

IMPACT CATEGORY	ABB.	UNIT
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ
Use of renewable primary energy resources used as raw materials	PERM	MJ
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PERT	MJ
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	PENRE	MJ
Use of non-renewable primary energy resources used as raw materials	PENRM	MJ
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PENRT	MJ
Use of secondary material	SM	kg
Use of renewable secondary fuels	RSF	MJ
Use of non-renewable secondary fuels	NRSF	MJ
Use of net fresh water	FW	m <sup>3</sup>



## 9. WASTE PRODUCTION

In this analysis, the generation of waste is examined, subdividing it into three categories: **hazardous**, **non-hazardous** and **radioactive waste**.

IMPACT CATEGORY	ABB.	UNIT
Hazardous waste disposed	HW	kg
Non-hazardous waste disposed	NHW	kg
Radioactive waste disposed	RW	kg



## 10. OUTPUT FLOWS

Steel falls into the category of durable goods and is considered to be a **permanent material**. It can be **re-generated** and **reused over and over again** without ever losing any of its original properties, resistance, and durability, allowing it to have a **very long life cycle**, ample opportunities for **industrial synergies**, the possibility to be easily separated from other materials, as a result of its magnetic characteristics and specific weight. Marcegaglia Buildtech has always paid par-

ticular attention to **waste reduction** thanks to specific policies in the management of processes: metal waste is a durable material that can be recast over and over again without losing its properties.

It is noteworthy that the trapezoidal sheet is **mostly recyclable** once is disassembled at the end of its life cycle. The **87.2% of the steel recovered** is intended for **recycling**, the value is consistent with the report released by ISPRA in 2022: "Rapporto rifiuti speciali" di ISPRA – n° 367/2022.

IMPACT CATEGORY	ABB.	UNIT
Reuse	REUSE	kg
Materials for recycling	RECYCLE	kg
Materials for energy recovery	EN-REC	kg
Exported energy - electricity	EE-E	MJ
Exported energy - thermal energy	EE-T	MJ

## TRAPEZOIDAL CORRUGATED SHEET EGB 210 STANDARD

Thickness 0,6 mm, unit weight 7,85 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,31E+01	3,26E-01	1,58E-01	-9,01E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,30E+01	3,26E-01	1,58E-01	-8,98E-01
GWP - biogenic	kg CO <sub>2</sub> eq	4,37E-02	2,51E-04	6,02E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	4,50E-02	1,53E-04	3,52E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,31E+01	3,27E-01	1,58E-01	-9,02E-01
ODP	kg CFC-11 eq	9,62E-07	7,13E-09	2,83E-09	-1,57E-08
POCP	kg NMVOC eq	8,08E-02	1,71E-03	1,82E-03	-4,28E-03
AP	mol H+ eq	9,69E-02	1,10E-03	1,21E-03	-4,06E-03
EP - freshwater	kg P eq	6,74E-03	2,32E-05	6,80E-06	-4,38E-04
EP - marine	kg N eq	2,32E-02	3,80E-04	5,43E-04	-9,31E-04
EP - terrestrial	mol N eq	2,41E-01	4,02E-03	5,89E-03	-9,45E-03
WDP	m <sup>3</sup> depriv.	7,33E+00	2,28E-02	1,23E-02	6,58E-02
ADP - F	MJ	2,34E+02	4,77E+00	2,20E+00	-9,51E+00
ADP - MM	kg Sb eq	4,61E-04	8,79E-07	1,57E-07	-6,46E-06
PERE	MJ	2,78E+01	8,67E-02	2,26E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,78E+01	8,67E-02	2,26E-02	-1,06E+00
PENRE	MJ	2,59E+02	3,16E+00	1,41E+00	-1,10E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,59E+02	3,16E+00	1,41E+00	-1,10E+01
SM	kg	2,33E+00	0,00E+00	6,43E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	4,94E-01	9,67E-04	3,99E-04	-1,05E-02
HW	kg	1,25E-01	0,00E+00	1,33E-04	-6,62E-03
NHW	kg	1,27E-02	0,00E+00	9,26E-06	-6,65E-04
RW	kg	2,43E-03	0,00E+00	1,92E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	5,40E-02	0,00E+00	1,07E-03	-4,57E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 210 STANDARD

Thickness 0,7 mm, unit weight 9,16 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,72E+01	3,81E-01	1,85E-01	-9,01E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,71E+01	3,80E-01	1,84E-01	-8,98E-01
GWP - biogenic	kg CO <sub>2</sub> eq	5,12E-02	2,93E-04	7,03E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	5,27E-02	1,79E-04	4,11E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,72E+01	3,81E-01	1,85E-01	-9,02E-01
ODP	kg CFC-11 eq	1,13E-06	8,32E-09	3,30E-09	-1,57E-08
POCP	kg NMVOC eq	9,58E-02	1,99E-03	2,12E-03	-4,28E-03
AP	mol H+ eq	1,14E-01	1,28E-03	1,42E-03	-4,07E-03
EP - freshwater	kg P eq	7,89E-03	2,71E-05	7,94E-06	-4,38E-04
EP - marine	kg N eq	2,74E-02	4,43E-04	6,34E-04	-9,31E-04
EP - terrestrial	mol N eq	2,84E-01	4,69E-03	6,87E-03	-9,45E-03
WDP	m <sup>3</sup> depriv.	8,57E+00	2,66E-02	1,44E-02	6,58E-02
ADP - F	MJ	2,78E+02	5,56E+00	2,57E+00	-9,51E+00
ADP - MM	kg Sb eq	5,39E-04	1,03E-06	1,83E-07	-6,46E-06
PERE	MJ	3,25E+01	1,01E-01	2,63E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,25E+01	1,01E-01	2,63E-02	-1,06E+00
PENRE	MJ	3,05E+02	3,68E+00	1,65E+00	-1,10E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,05E+02	3,68E+00	1,65E+00	-1,10E+01
SM	kg	2,72E+00	0,00E+00	7,50E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	5,78E-01	1,13E-03	4,66E-04	-1,05E-02
HW	kg	1,46E-01	0,00E+00	1,56E-04	-6,62E-03
NHW	kg	1,48E-02	0,00E+00	1,08E-05	-6,65E-04
RW	kg	2,84E-03	0,00E+00	2,24E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	6,30E-02	0,00E+00	1,25E-03	-4,57E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 210 STANDARD

Thickness 0,8 mm, unit weight 10,74 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	3,11E+01	4,35E-01	2,11E-01	-9,01E-01
GWP - fossil	kg CO <sub>2</sub> eq	3,10E+01	4,35E-01	2,11E-01	-8,99E-01
GWP - biogenic	kg CO <sub>2</sub> eq	5,85E-02	3,34E-04	8,03E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	6,02E-02	2,05E-04	4,69E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	3,11E+01	4,36E-01	2,11E-01	-9,02E-01
ODP	kg CFC-11 eq	1,29E-06	9,51E-09	3,78E-09	-1,57E-08
POCP	kg NMVOC eq	1,10E-01	2,28E-03	2,42E-03	-4,28E-03
AP	mol H+ eq	1,30E-01	1,46E-03	1,62E-03	-4,07E-03
EP - freshwater	kg P eq	9,02E-03	3,09E-05	9,07E-06	-4,38E-04
EP - marine	kg N eq	3,13E-02	5,07E-04	7,25E-04	-9,31E-04
EP - terrestrial	mol N eq	3,25E-01	5,36E-03	7,85E-03	-9,45E-03
WDP	m <sup>3</sup> depriv.	9,80E+00	3,04E-02	1,64E-02	6,58E-02
ADP - F	MJ	3,17E+02	6,36E+00	2,93E+00	-9,51E+00
ADP - MM	kg Sb eq	6,16E-04	1,17E-06	2,09E-07	-6,46E-06
PERE	MJ	3,72E+01	1,16E-01	3,01E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,72E+01	1,16E-01	3,01E-02	-1,06E+00
PENRE	MJ	3,49E+02	4,21E+00	1,89E+00	-1,10E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,49E+02	4,21E+00	1,89E+00	-1,10E+01
SM	kg	3,11E+00	0,00E+00	8,58E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	6,60E-01	1,29E-03	5,33E-04	-1,05E-02
HW	kg	1,67E-01	0,00E+00	1,78E-04	-6,62E-03
NHW	kg	1,70E-02	0,00E+00	1,23E-05	-6,65E-04
RW	kg	3,25E-03	0,00E+00	2,57E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	7,21E-02	0,00E+00	1,42E-03	-4,57E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 210 STANDARD

Thickness 1,0 mm, unit weight 13,08 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	3,89E+01	5,44E-01	2,63E-01	-9,02E-01
GWP - fossil	kg CO <sub>2</sub> eq	3,87E+01	5,43E-01	2,63E-01	-9,00E-01
GWP - biogenic	kg CO <sub>2</sub> eq	7,31E-02	4,18E-04	1,00E-04	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	7,52E-02	2,56E-04	5,86E-05	-5,98E-04
GWP - GHG	kg CO <sub>2</sub> eq	3,89E+01	5,45E-01	2,64E-01	-9,03E-01
ODP	kg CFC-11 eq	1,61E-06	1,19E-08	4,72E-09	-1,57E-08
POCP	kg NMVOC eq	1,37E-01	2,85E-03	3,03E-03	-4,29E-03
AP	mol H+ eq	1,63E-01	1,83E-03	2,02E-03	-4,07E-03
EP - freshwater	kg P eq	1,13E-02	3,87E-05	1,13E-05	-4,38E-04
EP - marine	kg N eq	3,91E-02	6,33E-04	9,05E-04	-9,32E-04
EP - terrestrial	mol N eq	4,06E-01	6,69E-03	9,81E-03	-9,46E-03
WDP	m <sup>3</sup> depriv.	1,22E+01	3,80E-02	2,05E-02	6,59E-02
ADP - F	MJ	3,97E+02	7,95E+00	3,66E+00	-9,52E+00
ADP - MM	kg Sb eq	7,69E-04	1,47E-06	2,61E-07	-6,47E-06
PERE	MJ	4,65E+01	1,44E-01	3,76E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,65E+01	1,44E-01	3,76E-02	-1,06E+00
PENRE	MJ	4,36E+02	5,26E+00	2,36E+00	-1,11E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,36E+02	5,26E+00	2,36E+00	-1,11E+01
SM	kg	3,89E+00	0,00E+00	1,07E-03	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	8,25E-01	1,61E-03	6,66E-04	-1,05E-02
HW	kg	2,08E-01	0,00E+00	2,22E-04	-6,63E-03
NHW	kg	2,12E-02	0,00E+00	1,54E-05	-6,66E-04
RW	kg	4,06E-03	0,00E+00	3,20E-06	-7,62E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	9,00E-02	0,00E+00	1,78E-03	-4,58E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 210 STANDARD

Thickness 1,2 mm, unit weight 15,70 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	4,86E+01	6,80E-01	3,16E-01	-9,02E-01
GWP - fossil	kg CO <sub>2</sub> eq	4,84E+01	6,79E-01	3,16E-01	-9,00E-01
GWP - biogenic	kg CO <sub>2</sub> eq	9,14E-02	5,23E-04	1,20E-04	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	9,40E-02	3,20E-04	7,04E-05	-5,98E-04
GWP - GHG	kg CO <sub>2</sub> eq	4,87E+01	6,81E-01	3,17E-01	-9,03E-01
ODP	kg CFC-11 eq	2,02E-06	1,49E-08	5,66E-09	-1,57E-08
POCP	kg NMVOC eq	1,71E-01	3,56E-03	3,64E-03	-4,29E-03
AP	mol H+ eq	2,04E-01	2,29E-03	2,43E-03	-4,07E-03
EP - freshwater	kg P eq	1,41E-02	4,83E-05	1,36E-05	-4,38E-04
EP - marine	kg N eq	4,89E-02	7,92E-04	1,09E-03	-9,32E-04
EP - terrestrial	mol N eq	5,08E-01	8,37E-03	1,18E-02	-9,46E-03
WDP	m <sup>3</sup> depriv.	1,53E+01	4,75E-02	2,46E-02	6,59E-02
ADP - F	MJ	4,96E+02	9,94E+00	4,40E+00	-9,52E+00
ADP - MM	kg Sb eq	9,62E-04	1,83E-06	3,14E-07	-6,47E-06
PERE	MJ	5,81E+01	1,81E-01	4,51E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,81E+01	1,81E-01	4,51E-02	-1,06E+00
PENRE	MJ	5,45E+02	6,57E+00	2,83E+00	-1,11E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	5,45E+02	6,57E+00	2,83E+00	-1,11E+01
SM	kg	4,86E+00	0,00E+00	1,29E-03	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	1,03E+00	2,01E-03	7,99E-04	-1,05E-02
HW	kg	2,61E-01	0,00E+00	2,67E-04	-6,63E-03
NHW	kg	2,65E-02	0,00E+00	1,85E-05	-6,66E-04
RW	kg	5,07E-03	0,00E+00	3,85E-06	-7,62E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	1,13E-01	0,00E+00	2,14E-03	-4,58E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 210

Thickness 0,7 mm, unit weight 9,16 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,48E+01	3,81E-01	1,85E-01	-9,36E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,47E+01	3,80E-01	1,84E-01	-9,33E-01
GWP - biogenic	kg CO <sub>2</sub> eq	3,28E-02	2,93E-04	7,03E-05	-1,99E-03
GWP - luluc	kg CO <sub>2</sub> eq	1,67E-02	1,79E-04	4,11E-05	-6,20E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,48E+01	3,81E-01	1,85E-01	-9,37E-01
ODP	kg CFC-11 eq	9,17E-07	8,32E-09	3,30E-09	-1,63E-08
POCP	kg NMVOC eq	8,73E-02	1,99E-03	2,12E-03	-4,45E-03
AP	mol H+ eq	1,05E-01	1,28E-03	1,42E-03	-4,22E-03
EP - freshwater	kg P eq	7,36E-03	2,71E-05	7,94E-06	-4,55E-04
EP - marine	kg N eq	2,49E-02	4,43E-04	6,34E-04	-9,67E-04
EP - terrestrial	mol N eq	2,62E-01	4,69E-03	6,87E-03	-9,82E-03
WDP	m <sup>3</sup> depriv.	3,24E-01	2,66E-02	1,44E-02	6,83E-02
ADP - F	MJ	2,45E+02	5,56E+00	2,57E+00	-9,88E+00
ADP - MM	kg Sb eq	5,19E-04	1,03E-06	1,83E-07	-6,71E-06
PERE	MJ	3,10E+01	1,01E-01	2,63E-02	-1,10E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,10E+01	1,01E-01	2,63E-02	-1,10E+00
PENRE	MJ	2,74E+02	3,68E+00	1,65E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,74E+02	3,68E+00	1,65E+00	-1,15E+01
SM	kg	2,71E+00	0,00E+00	7,50E-04	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-6,91E+00	1,13E-03	4,66E-04	-1,09E-02
HW	kg	1,44E-01	0,00E+00	1,56E-04	-6,88E-03
NHW	kg	1,47E-02	0,00E+00	1,08E-05	-6,91E-04
RW	kg	2,81E-03	0,00E+00	2,24E-06	-7,90E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	6,05E-02	0,00E+00	1,25E-03	-4,75E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 210

Thickness 0,8 mm, unit weight 10,74 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,83E+01	4,35E-01	2,11E-01	-9,37E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,83E+01	4,35E-01	2,11E-01	-9,34E-01
GWP - biogenic	kg CO <sub>2</sub> eq	3,74E-02	3,34E-04	8,03E-05	-2,00E-03
GWP - luluc	kg CO <sub>2</sub> eq	1,91E-02	2,05E-04	4,69E-05	-6,21E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,83E+01	4,36E-01	2,11E-01	-9,38E-01
ODP	kg CFC-11 eq	1,05E-06	9,51E-09	3,78E-09	-1,63E-08
POCP	kg NMVOC eq	9,98E-02	2,28E-03	2,42E-03	-4,45E-03
AP	mol H+ eq	1,20E-01	1,46E-03	1,62E-03	-4,23E-03
EP - freshwater	kg P eq	8,41E-03	3,09E-05	9,07E-06	-4,55E-04
EP - marine	kg N eq	2,84E-02	5,07E-04	7,25E-04	-9,68E-04
EP - terrestrial	mol N eq	3,00E-01	5,36E-03	7,85E-03	-9,83E-03
WDP	m <sup>3</sup> depriv.	3,71E-01	3,04E-02	1,64E-02	6,84E-02
ADP - F	MJ	2,80E+02	6,36E+00	2,93E+00	-9,89E+00
ADP - MM	kg Sb eq	5,93E-04	1,17E-06	2,09E-07	-6,72E-06
PERE	MJ	3,54E+01	1,16E-01	3,01E-02	-1,11E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,54E+01	1,16E-01	3,01E-02	-1,11E+00
PENRE	MJ	3,13E+02	4,21E+00	1,89E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,13E+02	4,21E+00	1,89E+00	-1,15E+01
SM	kg	3,10E+00	0,00E+00	8,58E-04	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-7,90E+00	1,29E-03	5,33E-04	-1,09E-02
HW	kg	1,65E-01	0,00E+00	1,78E-04	-6,89E-03
NHW	kg	1,69E-02	0,00E+00	1,23E-05	-6,92E-04
RW	kg	3,22E-03	0,00E+00	2,57E-06	-7,91E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	6,91E-02	0,00E+00	1,42E-03	-4,76E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 210

Thickness 1,0 mm, unit weight 13,08 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	3,54E+01	5,44E-01	2,63E-01	-9,37E-01
GWP - fossil	kg CO <sub>2</sub> eq	3,53E+01	5,43E-01	2,63E-01	-9,34E-01
GWP - biogenic	kg CO <sub>2</sub> eq	4,68E-02	4,18E-04	1,00E-04	-1,99E-03
GWP - luluc	kg CO <sub>2</sub> eq	2,39E-02	2,56E-04	5,86E-05	-6,21E-04
GWP - GHG	kg CO <sub>2</sub> eq	3,54E+01	5,45E-01	2,64E-01	-9,37E-01
ODP	kg CFC-11 eq	1,31E-06	1,19E-08	4,72E-09	-1,63E-08
POCP	kg NMVOC eq	1,25E-01	2,85E-03	3,03E-03	-4,45E-03
AP	mol H+ eq	1,50E-01	1,83E-03	2,02E-03	-4,23E-03
EP - freshwater	kg P eq	1,05E-02	3,87E-05	1,13E-05	-4,55E-04
EP - marine	kg N eq	3,55E-02	6,33E-04	9,05E-04	-9,68E-04
EP - terrestrial	mol N eq	3,75E-01	6,69E-03	9,81E-03	-9,82E-03
WDP	m <sup>3</sup> depriv.	4,63E-01	3,80E-02	2,05E-02	6,84E-02
ADP - F	MJ	3,50E+02	7,95E+00	3,66E+00	-9,88E+00
ADP - MM	kg Sb eq	7,41E-04	1,47E-06	2,61E-07	-6,72E-06
PERE	MJ	4,42E+01	1,44E-01	3,76E-02	-1,11E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,42E+01	1,44E-01	3,76E-02	-1,11E+00
PENRE	MJ	3,91E+02	5,26E+00	2,36E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,91E+02	5,26E+00	2,36E+00	-1,15E+01
SM	kg	3,87E+00	0,00E+00	1,07E-03	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-9,87E+00	1,61E-03	6,66E-04	-1,09E-02
HW	kg	2,06E-01	0,00E+00	2,22E-04	-6,89E-03
NHW	kg	2,11E-02	0,00E+00	1,54E-05	-6,91E-04
RW	kg	4,02E-03	0,00E+00	3,20E-06	-7,91E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	8,64E-02	0,00E+00	1,78E-03	-4,76E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 210

Thickness 1,2 mm, unit weight 15,70 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	4,25E+01	6,53E-01	3,16E-01	-9,37E-01
GWP - fossil	kg CO <sub>2</sub> eq	4,24E+01	6,52E-01	3,16E-01	-9,34E-01
GWP - biogenic	kg CO <sub>2</sub> eq	5,61E-02	5,02E-04	1,20E-04	-2,00E-03
GWP - luluc	kg CO <sub>2</sub> eq	2,87E-02	3,07E-04	7,04E-05	-6,21E-04
GWP - GHG	kg CO <sub>2</sub> eq	4,25E+01	6,54E-01	3,17E-01	-9,38E-01
ODP	kg CFC-11 eq	1,57E-06	1,43E-08	5,66E-09	-1,63E-08
POCP	kg NMVOC eq	1,50E-01	3,42E-03	3,64E-03	-4,45E-03
AP	mol H+ eq	1,79E-01	2,20E-03	2,43E-03	-4,23E-03
EP - freshwater	kg P eq	1,26E-02	4,64E-05	1,36E-05	-4,55E-04
EP - marine	kg N eq	4,27E-02	7,60E-04	1,09E-03	-9,68E-04
EP - terrestrial	mol N eq	4,50E-01	8,03E-03	1,18E-02	-9,83E-03
WDP	m <sup>3</sup> depriv.	5,56E-01	4,56E-02	2,46E-02	6,84E-02
ADP - F	MJ	4,20E+02	9,54E+00	4,40E+00	-9,89E+00
ADP - MM	kg Sb eq	8,89E-04	1,76E-06	3,14E-07	-6,72E-06
PERE	MJ	5,31E+01	1,73E-01	4,51E-02	-1,11E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,31E+01	1,73E-01	4,51E-02	-1,11E+00
PENRE	MJ	4,70E+02	6,31E+00	2,83E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,70E+02	6,31E+00	2,83E+00	-1,15E+01
SM	kg	4,65E+00	0,00E+00	1,29E-03	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-1,19E+01	1,93E-03	7,99E-04	-1,09E-02
HW	kg	2,48E-01	0,00E+00	2,67E-04	-6,89E-03
NHW	kg	2,53E-02	0,00E+00	1,85E-05	-6,91E-04
RW	kg	4,82E-03	0,00E+00	3,85E-06	-7,91E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	1,04E-01	0,00E+00	2,14E-03	-4,76E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1200 STANDARD

Thickness 0,6 mm, unit weight 8,26 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,43E+01	3,44E-01	1,66E-01	-9,00E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,42E+01	3,43E-01	1,66E-01	-8,98E-01
GWP - biogenic	kg CO <sub>2</sub> eq	4,60E-02	2,64E-04	6,34E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	4,74E-02	1,61E-04	3,70E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,43E+01	3,44E-01	1,67E-01	-9,01E-01
ODP	kg CFC-11 eq	1,01E-06	7,51E-09	2,98E-09	-1,57E-08
POCP	kg NMVOC eq	8,50E-02	1,80E-03	1,91E-03	-4,28E-03
AP	mol H+ eq	1,02E-01	1,15E-03	1,28E-03	-4,06E-03
EP - freshwater	kg P eq	7,10E-03	2,44E-05	7,16E-06	-4,37E-04
EP - marine	kg N eq	2,44E-02	4,00E-04	5,72E-04	-9,30E-04
EP - terrestrial	mol N eq	2,53E-01	4,23E-03	6,20E-03	-9,45E-03
WDP	m <sup>3</sup> depriv.	7,71E+00	2,40E-02	1,29E-02	6,58E-02
ADP - F	MJ	2,47E+02	5,02E+00	2,31E+00	-9,50E+00
ADP - MM	kg Sb eq	4,85E-04	9,25E-07	1,65E-07	-6,46E-06
PERE	MJ	2,93E+01	9,12E-02	2,37E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,93E+01	9,12E-02	2,37E-02	-1,06E+00
PENRE	MJ	2,72E+02	3,32E+00	1,49E+00	-1,10E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,72E+02	3,32E+00	1,49E+00	-1,10E+01
SM	kg	2,45E+00	0,00E+00	6,77E-04	-1,66E-01
RSF	MJ	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
FW	m <sup>3</sup>	5,20E-01	1,02E-03	4,20E-04	-1,05E-02
HW	kg	1,32E-01	0,00E+00	1,40E-04	-6,62E-03
NHW	kg	1,34E-02	0,00E+00	9,74E-06	-6,65E-04
RW	kg	2,56E-03	0,00E+00	2,02E-06	-7,60E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	5,68E-02	0,00E+00	1,12E-03	-4,57E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1200 STANDARD

Thickness 0,7 mm, unit weight 9,64 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,83E+01	4,01E-01	1,94E-01	-9,01E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,82E+01	4,00E-01	1,94E-01	-8,98E-01
GWP - biogenic	kg CO <sub>2</sub> eq	5,36E-02	3,08E-04	7,40E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	5,53E-02	1,88E-04	4,32E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,84E+01	4,01E-01	1,94E-01	-9,02E-01
ODP	kg CFC-11 eq	1,18E-06	8,76E-09	3,48E-09	-1,57E-08
POCP	kg NMVOC eq	9,93E-02	2,10E-03	2,23E-03	-4,28E-03
AP	mol H+ eq	1,19E-01	1,35E-03	1,49E-03	-4,07E-03
EP - freshwater	kg P eq	8,28E-03	2,85E-05	8,35E-06	-4,38E-04
EP - marine	kg N eq	2,85E-02	4,67E-04	6,67E-04	-9,31E-04
EP - terrestrial	mol N eq	2,95E-01	4,93E-03	7,23E-03	-9,45E-03
WDP	m <sup>3</sup> depriv.	9,00E+00	2,80E-02	1,51E-02	6,58E-02
ADP - F	MJ	2,88E+02	5,86E+00	2,70E+00	-9,51E+00
ADP - MM	kg Sb eq	5,66E-04	1,08E-06	1,93E-07	-6,46E-06
PERE	MJ	3,42E+01	1,06E-01	2,77E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,42E+01	1,06E-01	2,77E-02	-1,06E+00
PENRE	MJ	3,18E+02	3,87E+00	1,74E+00	-1,10E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,18E+02	3,87E+00	1,74E+00	-1,10E+01
SM	kg	2,86E+00	0,00E+00	7,90E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	6,07E-01	1,19E-03	4,91E-04	-1,05E-02
HW	kg	1,54E-01	0,00E+00	1,64E-04	-6,62E-03
NHW	kg	1,56E-02	0,00E+00	1,14E-05	-6,65E-04
RW	kg	2,99E-03	0,00E+00	2,36E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	6,63E-02	0,00E+00	1,31E-03	-4,57E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1200 STANDARD

Thickness 0,8 mm, unit weight 11,02 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	3,24E+01	4,58E-01	2,22E-01	-9,01E-01
GWP - fossil	kg CO <sub>2</sub> eq	3,23E+01	4,58E-01	2,22E-01	-8,99E-01
GWP - biogenic	kg CO <sub>2</sub> eq	6,13E-02	3,52E-04	8,45E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	6,32E-02	2,15E-04	4,94E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	3,24E+01	4,59E-01	2,22E-01	-9,02E-01
ODP	kg CFC-11 eq	1,35E-06	1,00E-08	3,98E-09	-1,57E-08
POCP	kg NMVOC eq	1,13E-01	2,40E-03	2,55E-03	-4,29E-03
AP	mol H+ eq	1,36E-01	1,54E-03	1,70E-03	-4,07E-03
EP - freshwater	kg P eq	9,47E-03	3,26E-05	9,55E-06	-4,38E-04
EP - marine	kg N eq	3,25E-02	5,33E-04	7,63E-04	-9,31E-04
EP - terrestrial	mol N eq	3,38E-01	5,64E-03	8,27E-03	-9,46E-03
WDP	m <sup>3</sup> depriv.	1,03E+01	3,20E-02	1,73E-02	6,58E-02
ADP - F	MJ	3,29E+02	6,69E+00	3,09E+00	-9,51E+00
ADP - MM	kg Sb eq	6,47E-04	1,23E-06	2,20E-07	-6,47E-06
PERE	MJ	3,90E+01	1,22E-01	3,17E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,90E+01	1,22E-01	3,17E-02	-1,06E+00
PENRE	MJ	3,64E+02	4,43E+00	1,98E+00	-1,11E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,64E+02	4,43E+00	1,98E+00	-1,11E+01
SM	kg	3,27E+00	0,00E+00	9,03E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	6,94E-01	1,36E-03	5,61E-04	-1,05E-02
HW	kg	1,76E-01	0,00E+00	1,87E-04	-6,63E-03
NHW	kg	1,79E-02	0,00E+00	1,30E-05	-6,65E-04
RW	kg	3,42E-03	0,00E+00	2,70E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	7,58E-02	0,00E+00	1,50E-03	-4,58E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1200 STANDARD

Thickness 1,0 mm, unit weight 13,77 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	3,24E+01	4,58E-01	2,22E-01	-9,02E-01
GWP - fossil	kg CO <sub>2</sub> eq	3,23E+01	4,58E-01	2,22E-01	-8,99E-01
GWP - biogenic	kg CO <sub>2</sub> eq	6,13E-02	3,52E-04	8,45E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	6,32E-02	2,15E-04	4,94E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	3,24E+01	4,59E-01	2,22E-01	-9,02E-01
ODP	kg CFC-11 eq	1,35E-06	1,00E-08	3,98E-09	-1,57E-08
POCP	kg NMVOC eq	1,13E-01	2,40E-03	2,55E-03	-4,29E-03
AP	mol H+ eq	1,36E-01	1,54E-03	1,70E-03	-4,07E-03
EP - freshwater	kg P eq	9,47E-03	3,26E-05	9,55E-06	-4,38E-04
EP - marine	kg N eq	3,25E-02	5,33E-04	7,63E-04	-9,32E-04
EP - terrestrial	mol N eq	3,38E-01	5,64E-03	8,27E-03	-9,46E-03
WDP	m <sup>3</sup> depriv.	1,03E+01	3,20E-02	1,73E-02	6,58E-02
ADP - F	MJ	3,29E+02	6,69E+00	3,09E+00	-9,51E+00
ADP - MM	kg Sb eq	6,47E-04	1,23E-06	2,20E-07	-6,47E-06
PERE	MJ	3,90E+01	1,22E-01	3,17E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,90E+01	1,22E-01	3,17E-02	-1,06E+00
PENRE	MJ	3,64E+02	4,43E+00	1,98E+00	-1,11E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,64E+02	4,43E+00	1,98E+00	-1,11E+01
SM	kg	3,27E+00	0,00E+00	9,03E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	6,94E-01	1,36E-03	5,61E-04	-1,05E-02
HW	kg	1,76E-01	0,00E+00	1,87E-04	-6,63E-03
NHW	kg	1,79E-02	0,00E+00	1,30E-05	-6,65E-04
RW	kg	3,42E-03	0,00E+00	2,70E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	7,58E-02	0,00E+00	1,50E-03	-4,58E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1200 STANDARD

Thickness 1,2 mm, unit weight 16,53 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	4,89E+01	6,87E-01	3,33E-01	-8,93E-01
GWP - fossil	kg CO <sub>2</sub> eq	4,87E+01	6,87E-01	3,33E-01	-8,91E-01
GWP - biogenic	kg CO <sub>2</sub> eq	9,25E-02	5,28E-04	1,27E-04	-1,90E-03
GWP - luluc	kg CO <sub>2</sub> eq	9,54E-02	3,23E-04	7,41E-05	-5,92E-04
GWP - GHG	kg CO <sub>2</sub> eq	3,24E+01	4,59E-01	2,22E-01	-9,02E-01
ODP	kg CFC-11 eq	2,04E-06	1,50E-08	5,96E-09	-1,56E-08
POCP	kg NMVOC eq	1,71E-01	3,60E-03	3,83E-03	-4,25E-03
AP	mol H+ eq	2,05E-01	2,31E-03	2,56E-03	-4,03E-03
EP - freshwater	kg P eq	1,43E-02	4,89E-05	1,43E-05	-4,34E-04
EP - marine	kg N eq	4,91E-02	8,00E-04	1,14E-03	-9,23E-04
EP - terrestrial	mol N eq	5,10E-01	8,46E-03	1,24E-02	-9,37E-03
WDP	m <sup>3</sup> depriv.	1,55E+01	4,80E-02	2,59E-02	6,52E-02
ADP - F	MJ	4,96E+02	1,00E+01	4,63E+00	-9,43E+00
ADP - MM	kg Sb eq	9,77E-04	1,85E-06	3,30E-07	-6,41E-06
PERE	MJ	5,89E+01	1,83E-01	4,75E-02	-1,05E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,89E+01	1,83E-01	4,75E-02	-1,05E+00
PENRE	MJ	5,49E+02	6,64E+00	2,98E+00	-1,09E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	5,49E+02	6,64E+00	2,98E+00	-1,09E+01
SM	kg	4,94E+00	0,00E+00	1,35E-03	-1,65E-01
RSF	MJ	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
FW	m <sup>3</sup>	1,05E+00	2,04E-03	8,41E-04	-1,04E-02
HW	kg	2,65E-01	0,00E+00	2,81E-04	-6,57E-03
NHW	kg	2,70E-02	0,00E+00	1,95E-05	-6,59E-04
RW	kg	5,16E-03	0,00E+00	4,05E-06	-7,54E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	1,14E-01	0,00E+00	2,25E-03	-4,53E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 1200

Thickness 0,7 mm, unit weight 9,64 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,61E+01	4,01E-01	1,94E-01	-9,36E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,60E+01	4,00E-01	1,94E-01	-9,34E-01
GWP - biogenic	kg CO <sub>2</sub> eq	3,45E-02	3,08E-04	7,40E-05	-1,99E-03
GWP - luluc	kg CO <sub>2</sub> eq	1,76E-02	1,88E-04	4,32E-05	-6,20E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,61E+01	4,01E-01	1,94E-01	-9,37E-01
ODP	kg CFC-11 eq	9,65E-07	8,76E-09	3,48E-09	-1,63E-08
POCP	kg NMVOC eq	9,19E-02	2,10E-03	2,23E-03	-4,45E-03
AP	mol H+ eq	1,10E-01	1,35E-03	1,49E-03	-4,22E-03
EP - freshwater	kg P eq	7,74E-03	2,85E-05	8,35E-06	-4,55E-04
EP - marine	kg N eq	2,62E-02	4,67E-04	6,67E-04	-9,67E-04
EP - terrestrial	mol N eq	2,76E-01	4,93E-03	7,23E-03	-9,82E-03
WDP	m <sup>3</sup> depriv.	3,41E-01	2,80E-02	1,51E-02	6,84E-02
ADP - F	MJ	2,58E+02	5,86E+00	2,70E+00	-9,88E+00
ADP - MM	kg Sb eq	5,46E-04	1,08E-06	1,93E-07	-6,72E-06
PERE	MJ	3,26E+01	1,06E-01	2,77E-02	-1,10E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,26E+01	1,06E-01	2,77E-02	-1,10E+00
PENRE	MJ	2,88E+02	3,87E+00	1,74E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,88E+02	3,87E+00	1,74E+00	-1,15E+01
SM	kg	2,85E+00	0,00E+00	7,90E-04	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-7,28E+00	1,19E-03	4,91E-04	-1,09E-02
HW	kg	1,52E-01	0,00E+00	1,64E-04	-6,88E-03
NHW	kg	1,55E-02	0,00E+00	1,14E-05	-6,91E-04
RW	kg	2,96E-03	0,00E+00	2,36E-06	-7,90E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	6,37E-02	0,00E+00	1,31E-03	-4,75E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 1200

Thickness 0,8 mm, unit weight 11,02 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,98E+01	4,58E-01	2,22E-01	-9,36E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,97E+01	4,58E-01	2,22E-01	-9,33E-01
GWP - biogenic	kg CO <sub>2</sub> eq	3,94E-02	3,52E-04	8,45E-05	-1,99E-03
GWP - luluc	kg CO <sub>2</sub> eq	2,01E-02	2,15E-04	4,94E-05	-6,20E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,98E+01	4,59E-01	2,22E-01	-9,36E-01
ODP	kg CFC-11 eq	1,10E-06	1,00E-08	3,98E-09	-1,63E-08
POCP	kg NMVOC eq	1,05E-01	2,40E-03	2,55E-03	-4,45E-03
AP	mol H+ eq	1,26E-01	1,54E-03	1,70E-03	-4,22E-03
EP - freshwater	kg P eq	8,85E-03	3,26E-05	9,55E-06	-4,55E-04
EP - marine	kg N eq	2,99E-02	5,33E-04	7,63E-04	-9,67E-04
EP - terrestrial	mol N eq	3,16E-01	5,64E-03	8,27E-03	-9,81E-03
WDP	m <sup>3</sup> depriv.	3,90E-01	3,20E-02	1,73E-02	6,83E-02
ADP - F	MJ	2,94E+02	6,69E+00	3,09E+00	-9,87E+00
ADP - MM	kg Sb eq	6,24E-04	1,23E-06	2,20E-07	-6,71E-06
PERE	MJ	3,72E+01	1,22E-01	3,17E-02	-1,10E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,72E+01	1,22E-01	3,17E-02	-1,10E+00
PENRE	MJ	3,30E+02	4,43E+00	1,98E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,30E+02	4,43E+00	1,98E+00	-1,15E+01
SM	kg	3,26E+00	0,00E+00	9,03E-04	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-8,32E+00	1,36E-03	5,61E-04	-1,09E-02
HW	kg	1,74E-01	0,00E+00	1,87E-04	-6,88E-03
NHW	kg	1,77E-02	0,00E+00	1,30E-05	-6,91E-04
RW	kg	3,38E-03	0,00E+00	2,70E-06	-7,90E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	7,28E-02	0,00E+00	1,50E-03	-4,75E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 1200

Thickness 1,0 mm, unit weight 13,77 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sup>2</sup> eq	3,72E+01	5,73E-01	2,77E-01	-9,36E-01
GWP - fossil	kg CO <sup>2</sup> eq	3,72E+01	5,72E-01	2,77E-01	-9,33E-01
GWP - biogenic	kg CO <sup>2</sup> eq	4,92E-02	4,40E-04	1,06E-04	-1,99E-03
GWP - luluc	kg CO <sup>2</sup> eq	2,52E-02	2,69E-04	6,17E-05	-6,20E-04
GWP - GHG	kg CO <sup>2</sup> eq	3,73E+01	5,73E-01	2,78E-01	-9,36E-01
ODP	kg CFC-11 eq	1,38E-06	1,25E-08	4,97E-09	-1,63E-08
POCP	kg NMVOC eq	1,31E-01	3,00E-03	3,19E-03	-4,45E-03
AP	mol H+ eq	1,57E-01	1,93E-03	2,13E-03	-4,22E-03
EP - freshwater	kg P eq	1,11E-02	4,07E-05	1,19E-05	-4,55E-04
EP - marine	kg N eq	3,74E-02	6,66E-04	9,53E-04	-9,67E-04
EP - terrestrial	mol N eq	3,94E-01	7,04E-03	1,03E-02	-9,81E-03
WDP	m <sup>3</sup> depriv.	4,88E-01	4,00E-02	2,16E-02	6,83E-02
ADP - F	MJ	3,68E+02	8,37E+00	3,86E+00	-9,87E+00
ADP - MM	kg Sb eq	7,80E-04	1,54E-06	2,75E-07	-6,71E-06
PERE	MJ	4,65E+01	1,52E-01	3,96E-02	-1,10E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,65E+01	1,52E-01	3,96E-02	-1,10E+00
PENRE	MJ	4,12E+02	5,53E+00	2,48E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,12E+02	5,53E+00	2,48E+00	-1,15E+01
SM	kg	4,07E+00	0,00E+00	1,13E-03	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-1,04E+01	1,70E-03	7,01E-04	-1,09E-02
HW	kg	2,17E-01	0,00E+00	2,34E-04	-6,88E-03
NHW	kg	2,22E-02	0,00E+00	1,62E-05	-6,91E-04
RW	kg	4,23E-03	0,00E+00	3,37E-06	-7,90E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	9,09E-02	0,00E+00	1,87E-03	-4,75E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## FLOORS WITH STRUCTURAL PLATES EGB 1200

Thickness 1,2 mm, unit weight 16,53 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	4,47E+01	6,87E-01	3,33E-01	-9,36E-01
GWP - fossil	kg CO <sub>2</sub> eq	4,46E+01	6,87E-01	3,33E-01	-9,34E-01
GWP - biogenic	kg CO <sub>2</sub> eq	5,91E-02	5,28E-04	1,27E-04	-1,99E-03
GWP - luluc	kg CO <sub>2</sub> eq	3,02E-02	3,23E-04	7,41E-05	-6,20E-04
GWP - GHG	kg CO <sub>2</sub> eq	4,48E+01	6,88E-01	3,33E-01	-9,37E-01
ODP	kg CFC-11 eq	1,65E-06	1,50E-08	5,96E-09	-1,63E-08
POCP	kg NMVOC eq	1,58E-01	3,60E-03	3,83E-03	-4,45E-03
AP	mol H+ eq	1,89E-01	2,31E-03	2,56E-03	-4,22E-03
EP - freshwater	kg P eq	1,33E-02	4,89E-05	1,43E-05	-4,55E-04
EP - marine	kg N eq	4,49E-02	8,00E-04	1,14E-03	-9,67E-04
EP - terrestrial	mol N eq	4,73E-01	8,46E-03	1,24E-02	-9,82E-03
WDP	m <sup>3</sup> depriv.	5,85E-01	4,80E-02	2,59E-02	6,84E-02
ADP - F	MJ	4,42E+02	1,00E+01	4,63E+00	-9,88E+00
ADP - MM	kg Sb eq	9,36E-04	1,85E-06	3,30E-07	-6,72E-06
PERE	MJ	5,59E+01	1,83E-01	4,75E-02	-1,10E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,59E+01	1,83E-01	4,75E-02	-1,10E+00
PENRE	MJ	4,95E+02	6,64E+00	2,98E+00	-1,15E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,95E+02	6,64E+00	2,98E+00	-1,15E+01
SM	kg	4,89E+00	0,00E+00	1,35E-03	-1,73E-01
RSF	MJ	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
FW	m <sup>3</sup>	-1,25E+01	2,04E-03	8,41E-04	-1,09E-02
HW	kg	2,61E-01	0,00E+00	2,81E-04	-6,88E-03
NHW	kg	2,66E-02	0,00E+00	1,95E-05	-6,91E-04
RW	kg	5,08E-03	0,00E+00	4,05E-06	-7,90E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	1,09E-01	0,00E+00	2,25E-03	-4,75E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1250 STANDARD

Thickness 0,6 mm, unit weight 5,89 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	1,75E+01	2,45E-01	1,19E-01	-9,03E-01
GWP - fossil	kg CO <sub>2</sub> eq	1,74E+01	2,45E-01	1,19E-01	-9,00E-01
GWP - biogenic	kg CO <sub>2</sub> eq	3,29E-02	1,88E-04	4,52E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	3,39E-02	1,15E-04	2,64E-05	-5,98E-04
GWP - GHG	kg CO <sub>2</sub> eq	1,75E+01	2,45E-01	1,19E-01	-9,03E-01
ODP	kg CFC-11 eq	7,26E-07	5,35E-09	2,12E-09	-1,58E-08
POCP	kg NMVOC eq	6,17E-02	1,28E-03	1,36E-03	-4,29E-03
AP	mol H+ eq	7,34E-02	8,23E-04	9,11E-04	-4,07E-03
EP - freshwater	kg P eq	5,07E-03	1,74E-05	5,10E-06	-4,39E-04
EP - marine	kg N eq	1,76E-02	2,85E-04	4,08E-04	-9,33E-04
EP - terrestrial	mol N eq	1,83E-01	3,01E-03	4,42E-03	-9,47E-03
WDP	m <sup>3</sup> depriv.	5,51E+00	1,71E-02	9,23E-03	6,59E-02
ADP - F	MJ	1,79E+02	3,58E+00	1,65E+00	-9,53E+00
ADP - MM	kg Sb eq	3,46E-04	6,60E-07	1,18E-07	-6,48E-06
PERE	MJ	2,09E+01	6,51E-02	1,69E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,09E+01	6,51E-02	1,69E-02	-1,06E+00
PENRE	MJ	2,06E+02	3,54E+00	1,63E+00	-1,17E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,06E+02	3,54E+00	1,63E+00	-1,17E+01
SM	kg	1,75E+00	0,00E+00	4,82E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	3,72E-01	7,25E-04	3,00E-04	-1,05E-02
HW	kg	9,38E-02	0,00E+00	1,00E-04	-6,64E-03
NHW	kg	9,55E-03	0,00E+00	6,95E-06	-6,66E-04
RW	kg	1,83E-03	0,00E+00	1,44E-06	-7,62E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	4,05E-02	0,00E+00	8,01E-04	-4,58E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1250 STANDARD

Thickness 0,7 mm, unit weight 6,87 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,04E+01	2,86E-01	1,38E-01	-9,02E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,03E+01	2,85E-01	1,38E-01	-8,99E-01
GWP - biogenic	kg CO <sub>2</sub> eq	3,84E-02	2,19E-04	5,27E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	3,95E-02	1,34E-04	3,08E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,04E+01	2,86E-01	1,39E-01	-9,02E-01
ODP	kg CFC-11 eq	8,47E-07	6,24E-09	2,48E-09	-1,57E-08
POCP	kg NMVOC eq	7,20E-02	1,50E-03	1,59E-03	-4,29E-03
AP	mol H+ eq	8,56E-02	9,61E-04	1,06E-03	-4,07E-03
EP - freshwater	kg P eq	5,92E-03	2,03E-05	5,95E-06	-4,38E-04
EP - marine	kg N eq	2,05E-02	3,32E-04	4,75E-04	-9,32E-04
EP - terrestrial	mol N eq	2,13E-01	3,51E-03	5,15E-03	-9,46E-03
WDP	m <sup>3</sup> depriv.	6,43E+00	1,99E-02	1,08E-02	6,58E-02
ADP - F	MJ	2,09E+02	4,17E+00	1,92E+00	-9,51E+00
ADP - MM	kg Sb eq	4,04E-04	7,70E-07	1,37E-07	-6,47E-06
PERE	MJ	2,44E+01	7,59E-02	1,97E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,44E+01	7,59E-02	1,97E-02	-1,06E+00
PENRE	MJ	2,29E+02	2,76E+00	1,24E+00	-1,11E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,29E+02	2,76E+00	1,24E+00	-1,11E+01
SM	kg	2,04E+00	0,00E+00	5,63E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	4,33E-01	8,46E-04	3,50E-04	-1,05E-02
HW	kg	1,09E-01	0,00E+00	1,17E-04	-6,63E-03
NHW	kg	1,11E-02	0,00E+00	8,10E-06	-6,66E-04
RW	kg	2,13E-03	0,00E+00	1,68E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	4,73E-02	0,00E+00	9,34E-04	-4,58E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1250 STANDARD

Thickness 0,8 mm, unit weight 7,85 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,31E+01	3,26E-01	1,58E-01	-9,01E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,30E+01	3,26E-01	1,58E-01	-8,98E-01
GWP - biogenic	kg CO <sub>2</sub> eq	4,37E-02	2,51E-04	6,02E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	4,50E-02	1,53E-04	3,52E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,31E+01	3,27E-01	1,58E-01	-9,02E-01
ODP	kg CFC-11 eq	9,62E-07	7,13E-09	2,83E-09	-1,57E-08
POCP	kg NMVOC eq	8,08E-02	1,71E-03	1,82E-03	-4,28E-03
AP	mol H+ eq	9,69E-02	1,10E-03	1,21E-03	-4,06E-03
EP - freshwater	kg P eq	6,74E-03	2,32E-05	6,80E-06	-4,38E-04
EP - marine	kg N eq	2,32E-02	3,80E-04	5,43E-04	-9,31E-04
EP - terrestrial	mol N eq	2,41E-01	4,02E-03	5,89E-03	-9,45E-03
WDP	m <sup>3</sup> depriv.	7,33E+00	2,28E-02	1,23E-02	6,58E-02
ADP - F	MJ	2,34E+02	4,77E+00	2,20E+00	-9,51E+00
ADP - MM	kg Sb eq	4,61E-04	8,79E-07	1,57E-07	-6,46E-06
PERE	MJ	2,78E+01	8,67E-02	2,26E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,78E+01	8,67E-02	2,26E-02	-1,06E+00
PENRE	MJ	2,59E+02	3,16E+00	1,41E+00	-1,10E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,59E+02	3,16E+00	1,41E+00	-1,10E+01
SM	kg	2,33E+00	0,00E+00	6,43E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	4,94E-01	9,67E-04	3,99E-04	-1,05E-02
HW	kg	1,25E-01	0,00E+00	1,33E-04	-6,62E-03
NHW	kg	1,27E-02	0,00E+00	9,26E-06	-6,65E-04
RW	kg	2,43E-03	0,00E+00	1,92E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	5,40E-02	0,00E+00	1,07E-03	-4,57E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## TRAPEZOIDAL CORRUGATED SHEET EGB 1250 STANDARD

Thickness 1,0 mm, unit weight 9,81 kg/m<sup>2</sup>

ABB.	UNIT	A1 - A3	A4	C1 - C4	D
GWP - t	kg CO <sub>2</sub> eq	2,88E+01	4,08E-01	1,98E-01	-9,02E-01
GWP - fossil	kg CO <sub>2</sub> eq	2,87E+01	4,07E-01	1,97E-01	-8,99E-01
GWP - biogenic	kg CO <sub>2</sub> eq	5,46E-02	3,13E-04	7,53E-05	-1,92E-03
GWP - luluc	kg CO <sub>2</sub> eq	5,63E-02	1,92E-04	4,40E-05	-5,97E-04
GWP - GHG	kg CO <sub>2</sub> eq	2,89E+01	4,09E-01	1,98E-01	-9,02E-01
ODP	kg CFC-11 eq	1,20E-06	8,91E-09	3,54E-09	-1,57E-08
POCP	kg NMVOC eq	1,01E-01	2,14E-03	2,27E-03	-4,29E-03
AP	mol H+ eq	1,21E-01	1,37E-03	1,52E-03	-4,07E-03
EP - freshwater	kg P eq	8,43E-03	2,90E-05	8,50E-06	-4,38E-04
EP - marine	kg N eq	2,90E-02	4,75E-04	6,79E-04	-9,32E-04
EP - terrestrial	mol N eq	3,01E-01	5,02E-03	7,36E-03	-9,46E-03
WDP	m <sup>3</sup> depriv.	9,16E+00	2,85E-02	1,54E-02	6,58E-02
ADP - F	MJ	2,93E+02	5,96E+00	2,75E+00	-9,52E+00
ADP - MM	kg Sb eq	5,76E-04	1,10E-06	1,96E-07	-6,47E-06
PERE	MJ	3,48E+01	1,08E-01	2,82E-02	-1,06E+00
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,48E+01	1,08E-01	2,82E-02	-1,06E+00
PENRE	MJ	3,24E+02	3,94E+00	1,77E+00	-1,11E+01
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,24E+02	3,94E+00	1,77E+00	-1,11E+01
SM	kg	2,91E+00	0,00E+00	8,03E-04	-1,67E-01
RSF	MJ	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
FW	m <sup>3</sup>	6,18E-01	1,21E-03	4,99E-04	-1,05E-02
HW	kg	1,56E-01	0,00E+00	1,67E-04	-6,63E-03
NHW	kg	1,59E-02	0,00E+00	1,16E-05	-6,66E-04
RW	kg	3,04E-03	0,00E+00	2,40E-06	-7,61E-05
REUSE	kg	0,00E+00	1,00E+00	2,00E+00	3,00E+00
RECYCLE	kg	6,75E-02	0,00E+00	1,33E-03	-4,58E-01
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-E	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-T	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## 12. REFERENCES

- General Programme Instructions of the International EPD® System. Version 3.01;
- PCR 2019:14 - Version 1.11 "CONSTRUCTION PRODUCTS";
- BRE Global Product Category Rules (PCR) for Type III EPD of construction products to EN 15804+A2;
- Ecoinvent database v.3.9.1 – January 2022;
- <http://unstats.un.org/unsd/default.htm>;
- UNI EN ISO 14025: 2010 "Environmental labels and declarations - Type III environmental declarations - Principles and procedures";
- UNI EN ISO 14040: 2021 "Environmental management - Life cycle assessment - Principles and framework";
- UNI EN ISO 14044:2021 " Environmental management - Life cycle assessment - Requirements and guidelines";
- UNI EN ISO 15804:2019 "Sustainability of buildings - Environmental product declarations - Development framework rules by product category";
- European Residual Mixes 2022 Association of Issuing Bodies "European Residual Mixes Results of the calculation of Residual Mixes for the calendar year 2022" – version 1.0, 2023-06-01;
- ISPRA "Special waste report" – n° 367/2022 – Ed. 2022;
- EPD " Coils, strips and sheets in carbon steel" – Marcegaglia Carbon Steel S.p.A., 2022-10-10.

## 13. GENERAL INFORMATION

### PROGRAMME INFORMATION

**PROGRAMME:**

The International EPD® System

**ADDRESS:**

EPD International AB Box 210 60

SE-100 31 Stockholm

Sweden

**WEBSITE:**

[www.environdec.com](http://www.environdec.com)

**E-MAIL:**

[info@environdec.com](mailto:info@environdec.com)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR).

**Product category rules (PCR):**

Construction products, 2019:14, version 1.11,

UN CPC 54, valid until 20-12-2024

**PCR review was conducted by:**

The Technical Committee of the International EPD® System.

Review chair: Claudia A. Peña - Contact via the Secretariat [www.environdec.com/contact](http://www.environdec.com/contact)

Independent third-party verification of the declaration and data according to ISO 14025:2010:

EPD process verification

EPD verification by individual verifier

**Third-party verifier:**

Guido Croce

**In case of individual verifiers:**

Approved by: The International EPD® System Technical Committee, supported by the Secretariat

Procedure for follow-up of data during EPD validity involves third party verifier:

YES

NO

SI

The EPD owner has the sole ownership, liability and responsibility for this EPD.

Codice UN CPC: 54 Construction services

Geographical scope: Worldwide

EPDs within the same product category but from different programs may not be comparable.

EPDs of construction products may not be comparable if they do not comply with UNI EN 15804. For further information about comparability, refer to UNI EN 15804 and UNI EN ISO 14025:2010

### DIFFERENCES FROM PREVIOUS VERSION

Compared to the previous version referring to the data of the year 2021, this EPD Declaration considers the data of the year 2022; this review of the data is due from the increase of the percentage electricity product by fossil fuels in the Italian residual mix. For this reason in the 2022 there is an increase higher than 10% for some indicators in the modules C1-C4 and A4. In addition, more up-to-date databases and evaluation's methods were used than those used in the previous version of the environmental impact analysis.

To obtain more information about this product declaration and/or its configurations, the following references are available:

Technical Support

Mail: [technicalsupportmb@marcegaglia.com](mailto:technicalsupportmb@marcegaglia.com)

Phone: +39 0143 7761 / +39 0230 7041



# MARCEGAGLIA BUILDTECH

**Registered seat:**

via Bresciani 16 • 46040 Gazoldo degli Ippoliti (MN) - Italy

phone + 39 . 0376 6851

[tamponamento@marcegaglia.com](mailto:tamponamento@marcegaglia.com)

[www.marcegagliabuildtech.it](http://www.marcegagliabuildtech.it)

**Main offices and plant:**

**MARCEGAGLIA Pozzolo Formigaro**

Strada Roveri 4 • 15068 Pozzolo Formigaro (AL)- Italy

phone + 39 0143 7761

[pozzolo@marcegaglia.com](mailto:pozzolo@marcegaglia.com)



ELEMENTAL  
CHLORINE  
FREE  
OF HALOGENS



HEAVY METAL  
FREE  
CE 94/03

