



# Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for

## Lower hinge kit and concealed upper arm WEEN HIDE 180 LINE - Art. 3304.11D

from



---

Programme:

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

Programme operator:

EPD International AB

EPD registration number:

S-P-09862

Publication date:

2023-07-28

Valid until:

2028-07-28

---

An EPD should provide current information and may be updated if conditions change.  
The stated validity is therefore subject to the continued registration and publication at [www.environdec.com](http://www.environdec.com)



## Content

- 3 - General information
- 4 - Company information
- 4 - Product information
- 5 - LCA information
- 7 - Content information
- 8 - Results of the environmental performance indicators
- 11 - Additional environmental information
- 14 - Additional social and economic information
- 14 - References

## General information

### Programme information

The International EPD® System

EPD International AB  
Box 210 60  
SE-100 31 Stockholm  
Sweden

[www.environdec.com](http://www.environdec.com)  
[info@environdec.com](mailto:info@environdec.com)

### Product Category Rules (PCR)

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

Product Category Rules (PCR): PCR 2019:14 Construction products, version 1.2.5

PCR review was conducted by: PCR Committee: IVL Swedish Environmental Research Institute, Swedish Environmental Protection Agency, SP Trä, Swedish Wood Preservation Institute, Swedisol, SCDA, Svenskt Limträ AB, SSAB  
Moderator: Martin Erlandsson, IVL Swedish Environmental Research Institute

### Life Cycle Assessment (LCA)

LCA accountability: Ing. Francesca Intini, T&A - Tecnologia & Ambiente srl

### Third-party verification

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

EPD verification by individual verifier

Third-party verifier: Adriana Del Borghi [delborghi@tetisinstitute.it](mailto:delborghi@tetisinstitute.it)

Approved by: The International EPD® System

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

Yes  No

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

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

---

## Company information

---

**Owner of the EPD:** Master Italy srl

**Contact:** Ufficio Tecnico  
info@masteritaly.com

**Description of the organisation:**

Since 1986, Master Group has been designing accessories and components for doors and windows in aluminium, with a process made of research, investments, study of the aluminium's world, and through a deep attention to the quality of the materials, the research of technologies able to allow production of goods made for high performances, and to find new market's needs, and to customers' satisfaction and constant care. Present in more than 58 countries worldwide, Master is nowadays a global brand, focused on: development of new international markets, attention to safety and quality of products, continuous improvement, and waste reduction according to lean manufacturing's principles, implementation of the new model for industrial automation INDUSTRY 4.0, with particular attention to maintaining human capital central in all strategic and productive operations.

Master Group realizes 97% of the added value of its in-house production, covering all the steps that precede product marketing: from the analysis of market needs to design, prototyping and production.

**Product-related or management system-related certifications:**

Master Italy obtained the following certifications:

- ISO 9001 – Quality Management System
- ISO 14001 – Environmental Management System
- ISO 45001 – Health and Safety Management System

Master Italy is committed with three Ps (People, Prosperity and Planet) to:

- ensuring the dignity, equality and prosperous lives of workers;
- to protect the planet's natural resources and climate for future generations.

**Name and location of production site:** S.P.37 Conversano - Castiglione Km. 0,570 Z.I. 70014 Conversano (BA) - ITALY

---

## Product information

---

**Product name:** LOWER HINGE KIT AND CONCEALED UPPER ARM -WEEN HIDE 180 LINE - ART. 3304.11D

**Product identification:** Concealed hinges for complete range of modular and performing solutions for tilt and turn systems. The basic closure kit can be combined with both the classic WEEN visible hinges and the concealed HIDE series hinges. The Program is available for CE and R40 systems

**Product description:** Lever and rods in stainless steel, support and adjustment body in zamak. Maximum capacity: 130 Kg - 150 Kg in combination with 3310.50.

**UN CPC code:** 4299                   **Geographical scope:** Global

## LCA information

### Functional unit / declared unit:

The functional unit is 1 piece of Lower hinge kit and concealed upper arm Art. 3304.11D that allows the opening and closing of windows in building having a range of actions by using of window fitting with a net mass of 0,847 Kg over the reference service life of 30 years, which corresponds to a minimum of 20.000 use cycles. The declared unit is 1 piece Lower hinge kit and concealed upper arm. Lower hinge kit and concealed upper arm, including packaging, weighs 0,876 Kg.  
 The Lower hinge kit and concealed upper arms are packed multiples in PE bags for protection during transport and supplied in corrugated board.  
 The declared unit represents the Lower hinge kit and concealed upper arm with the highest material content, therefore for each indicator, declare the highest result of the line ("worst-case product").  
 In this EPD the conversion factor is included. The mass for piece is adopted to convert the results for 1 kg.

Name	Value	Unit
Declared unit	1,000	piece
Mass of declared Product	0,847	kg
Conversion factor to 1 kg	1,181	piece

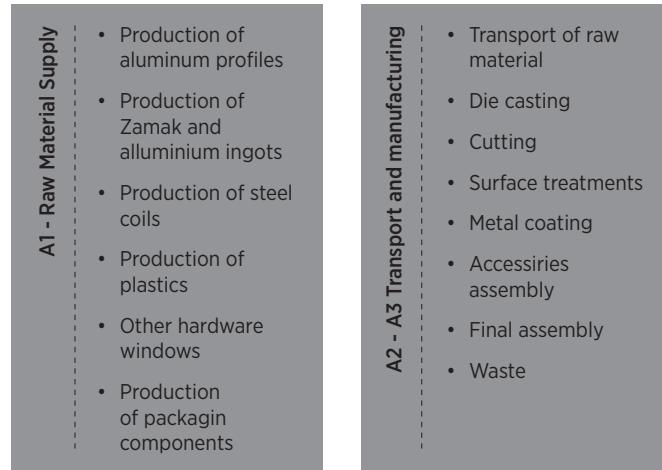
**Reference service life:** 30 years

**Time representativeness:** Reference year for data 2022, data used for LCA calculations 2022.

**Database(s) and LCA software used:** SimaPro 9.5 Ecoinvent 3.9

**Description of system boundaries:** Cradle to grave and module D (A + B + C + D).

### System diagram:



For the transport to the construction site in module A4 the default assumptions listed in UNI 17610 is adopted: 16-32 t truck over 3500 km.

In the absence of producer specific information, manual installation is assumed as the default way of installing building hardware in windows or in directly in building. Then the A5 module analyses the recovery of packaging incurred as waste during product installation.

In the case of selective demolition of buildings, the product can be recovered and sent to companies specialized in recovery.

The scenarios adopted for the modeling of modules from B1 to D are shown below:

- B1-B7: The product is designed to last throughout its service life without deterioration. The impacts associated with this modules were considered negligible and in some module not relevant for building hardware
- C1 - The impacts associated with the demolition phase were considered negligible, including the dismantling of the product;
- C2 - The transport of the product at the end of its life and of the packaging is modeled with a scenario equal to 50 km by lorry;
- C3 - After the dismantling activities, 95% of the components are recovered from the product.
- C4 - After the dismantling activities, 5% of the components are disposed to the landfills
- D - The impacts relating to the avoided impacts of the virgin raw material (aluminium, metals, plastic, etc.) have been quantified.

Cut-off rule: 1% cut-off rule was applied for input flows in the inventory.

The core process is within the Italian territory, therefore the data relating to energy aspects refer to the energy mix of the Italian supplier, with the exclusion of the manufacturing process of some raw materials, for which reference was made to the energy mix of the country of production.

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage					Construction process stage					Use stage					End of life stage				Resource recovery stage
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	Reuse - Recovery Recycling potential		
Modules declared	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Geography	GLO	GLO	IT	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO			
Specific data used	>90%					-	-	-	-	-	-	-	-	-	-	-	-			
Variation products	Not Relevant					-	-	-	-	-	-	-	-	-	-	-	-			
Variation sites	Not Relevant					-	-	-	-	-	-	-	-	-	-	-	-			

## Content information

The content of recycled or recovered material or by-products included per functional unit (considering the pre- and post-consumer material used and adopting the mass balance method) is equal to 56%.

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Steel	0,446	80%	
Zamak	0,392	26%	
Acetal	0,002	0%	
Nylon 6-6	0,007	0%	
<b>TOTAL</b>	<b>0,847</b>	<b>0%</b>	<b>-</b>
Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/kg
Film/LDPE	0,004	0%	
Corrugated board	0,026	46%	0,46
<b>TOTAL</b>	<b>0,029</b>		

The product do not contain substances which exceed the limits for registration with the European Chemicals Agency regarding the "Candidate List of Substances of Very High Concern for Authorisation".

# Results of the environmental performance indicators

## Mandatory impact category indicators according to EN 15804

Indicator	Unit	Results per functional or declared unit 1 piece														
		A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	3,8E+00	5,8E-01	1,1E-03	0,0E+00	9,9E-04	1,5E-03	1,6E-03	-8,3E-01							
GWP-biogenic	kg CO <sub>2</sub> eq.	8,0E-02	5,2E-04	1,5E-01	0,0E+00	7,7E-07	6,4E-07	1,7E-05	-2,8E-02							
GWP-luluc	kg CO <sub>2</sub> eq.	6,1E-03	2,8E-04	5,6E-07	0,0E+00	4,6E-07	2,9E-07	1,7E-06	-2,4E-03							
GWP-total	kg CO <sub>2</sub> eq.	3,8E+00	5,8E-01	1,5E-01	0,0E+00	9,9E-04	1,5E-03	1,6E-03	-8,6E-01							
ODP	kg CFC 11 eq.	6,7E-08	1,3E-08	3,2E-11	0,0E+00	2,2E-11	2,3E-11	1,8E-11	-1,3E-08							
AP	mol H <sup>+</sup> eq.	2,7E-02	1,9E-03	1,0E-05	0,0E+00	3,9E-06	1,3E-05	1,0E-05	-6,8E-03							
EP-freshwater	kg P eq.	2,2E-03	4,0E-05	1,4E-07	0,0E+00	6,9E-08	7,1E-08	4,6E-07	-8,1E-04							
EP-marine	kg N eq.	4,9E-03	6,5E-04	2,2E-05	0,0E+00	1,5E-06	6,1E-06	2,6E-06	-1,7E-03							
EP-terrestrial	mol N eq.	5,1E-02	6,8E-03	3,8E-05	0,0E+00	1,6E-05	6,6E-05	2,8E-05	-1,7E-02							
POCP	kg NMVOC eq.	1,7E-02	2,8E-03	2,0E-05	0,0E+00	5,7E-06	2,0E-05	9,2E-06	-5,1E-03							
ADP-minerals & metals [1]	kg Sb eq.	5,0E-04	1,9E-06	2,6E-09	0,0E+00	3,2E-09	5,5E-10	3,1E-09	-3,6E-04							
ADP-fossil [1]	MJ	4,9E+01	8,2E+00	1,2E-02	0,0E+00	1,4E-02	1,9E-02	2,2E-02	-1,2E+01							
WDP [1]	m <sup>3</sup>	1,6E+00	3,3E-02	7,0E-04	0,0E+00	5,3E-05	5,0E-05	5,8E-04	-6,9E-01							

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

[1] The results of this environmental impact indicator shall be used with care as the uncertainties of the results are high and as there is limited experience with the indicator.

## Additional mandatory and voluntary impact category indicators

Results per functional or declared unit 1 piece																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[2]	kg CO <sub>2</sub> eq.	3,8E+00	5,8E-01	2,4E-02	0,0E+00	9,9E-04	1,5E-03	1,6E-03	-8,4E-01							

## Resource use indicators

Results per functional or declared unit 1 piece																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	5,5E+00	1,3E-01	4,1E-04	0,0E+00	2,4E-04	2,0E-04	1,5E-03	-1,4E+00							
PERM	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
PERT	MJ	5,5E+00	1,3E-01	4,1E-04	0,0E+00	2,4E-04	2,0E-04	1,5E-03	-1,4E+00							
PENRE	MJ	5,2E+01	8,7E+00	1,3E-02	0,0E+00	1,5E-02	2,0E-02	2,4E-02	-1,2E+01							
PENRM	MJ	2,6E-01	0,0E+00	0,0E+00												
PENRT	MJ	5,2E+01	8,7E+00	1,3E-02	0,0E+00	1,5E-02	2,0E-02	2,4E-02	-1,2E+01							
SM	kg	5,6E-01	0,0E+00	0,0E+00												
RSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
NRSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
FW	m <sup>3</sup>	4,7E-02	1,2E-03	2,3E-05	0,0E+00	2,0E-06	1,9E-06	1,7E-05	-2,1E-02							

Acronyms 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 = Use of net fresh water

## Waste indicators

Results per functional or declared unit 1 piece																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	4,6E-03	5,2E-05	6,1E-08	0,0E+00	8,9E-08	1,2E-07	7,4E-08	-2,2E-03							
Non-hazardous waste disposed	kg	1,2E+00	4,0E-01	9,1E-03	0,0E+00	5,8E-04	3,0E-05	4,1E-02	-9,9E-02							
Radioactive waste disposed	kg	9,2E-05	2,7E-06	7,0E-09	0,0E+00	5,6E-09	4,2E-09	2,4E-08	-4,0E-05							

[2] This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO<sub>2</sub> is set to zero.

## Output flow indicators

Results per functional or declared unit 1 piece																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	
Material for recycling	kg	1,1E-01	0,0E+00	8,0E-01	0,0E+00	0,0E+00										
Materials for energy recovery	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	
Exported energy, electricity	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	
Exported energy, thermal	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	

## Additional environmental information

In this section the conversion factors are used to convert the result to 1 kg of Lower hinge kit and concealed upper arm Art. 3304.11D, equal to 1,181 pieces.

Results per conversion factor 1 kg																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	4,4E+00	6,8E-01	1,3E-03	0,0E+00	1,2E-03	1,7E-03	1,9E-03	-9,8E-01							
GWP-biogenic	kg CO <sub>2</sub> eq.	9,4E-02	6,2E-04	1,7E-01	0,0E+00	9,1E-07	7,6E-07	2,0E-05	-3,3E-02							
GWP-luluc	kg CO <sub>2</sub> eq.	7,2E-03	3,3E-04	6,6E-07	0,0E+00	5,4E-07	3,4E-07	2,0E-06	-2,8E-03							
GWP-total	kg CO <sub>2</sub> eq.	4,5E+00	6,8E-01	1,7E-01	0,0E+00	1,2E-03	1,7E-03	1,9E-03	-1,0E+00							
ODP	kg CFC 11 eq.	7,9E-08	1,5E-08	3,8E-11	0,0E+00	2,6E-11	2,7E-11	2,1E-11	-1,6E-08							
AP	mol H <sup>+</sup> eq.	3,2E-02	2,2E-03	1,2E-05	0,0E+00	4,6E-06	1,6E-05	1,2E-05	-8,0E-03							
EP-freshwater	kg P eq.	2,6E-03	4,8E-05	1,6E-07	0,0E+00	8,1E-08	8,4E-08	5,5E-07	-9,6E-04							
EP-marine	kg N eq.	5,8E-03	7,6E-04	2,6E-05	0,0E+00	1,7E-06	7,2E-06	3,1E-06	-2,0E-03							
EP-terrestrial	mol N eq.	6,0E-02	8,1E-03	4,5E-05	0,0E+00	1,9E-05	7,8E-05	3,3E-05	-2,1E-02							
POCP	kg NMVOC eq.	2,0E-02	3,3E-03	2,3E-05	0,0E+00	6,7E-06	2,3E-05	1,1E-05	-6,0E-03							
ADP-minerals & metals [1]	kg Sb eq.	5,9E-04	2,2E-06	3,1E-09	0,0E+00	3,8E-09	6,4E-10	3,7E-09	-4,3E-04							
ADP-fossil [1]	MJ	5,8E+01	9,7E+00	1,4E-02	0,0E+00	1,7E-02	2,3E-02	2,6E-02	-1,4E+01							
WDP [1]	m <sup>3</sup>	1,9E+00	3,9E-02	8,3E-04	0,0E+00	6,3E-05	5,9E-05	6,8E-04	-8,2E-01							

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

[1] The results of this environmental impact indicator shall be used with care as the uncertainties of the results are high and as there is limited experience with the indicator.

## Additional mandatory and voluntary impact category indicators

Results per conversion factor 1 kg																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[2]	kg CO <sub>2</sub> eq.	4,5E+00	6,8E-01	2,8E-02	0,0E+00	1,2E-03	1,7E-03	1,9E-03	-9,9E-01							

## Resource use indicators

Results per conversion factor 1 kg																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	6,5E+00	1,5E-01	4,8E-04	0,0E+00	2,9E-04	2,4E-04	1,8E-03	-1,6E+00							
PERM	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	
PERT	MJ	6,5E+00	1,5E-01	4,8E-04	0,0E+00	2,9E-04	2,4E-04	1,8E-03	-1,6E+00							
PENRE	MJ	6,2E+01	1,0E+01	1,5E-02	0,0E+00	1,8E-02	2,4E-02	2,8E-02	-1,5E+01							
PENRM	MJ	3,1E-01	0,0E+00													
PENRT	MJ	6,2E+01	1,0E+01	1,5E-02	0,0E+00	1,8E-02	2,4E-02	2,8E-02	-1,5E+01							
SM	kg	6,6E-01	0,0E+00													
RSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	
NRSF	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	
FW	m <sup>3</sup>	5,6E-02	1,4E-03	2,7E-05	0,0E+00	2,4E-06	2,2E-06	2,0E-05	-2,4E-02							

Acronyms 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 = Use of net fresh water

## Waste indicators

Results per conversion factor 1 kg																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	5,5E-03	6,2E-05	7,2E-08	0,0E+00	1,1E-07	1,5E-07	8,8E-08	-2,6E-03							
Non-hazardous waste disposed	kg	1,4E+00	4,7E-01	1,1E-02	0,0E+00	6,8E-04	3,5E-05	4,8E-02	-1,2E-01							
Radioactive waste disposed	kg	1,1E-04	3,1E-06	8,2E-09	0,0E+00	6,6E-09	4,9E-09	2,8E-08	-4,8E-05							

[2] This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO<sub>2</sub> is set to zero.

## Output flow indicators

Results per conversion factor 1 kg																
Indicator	Unit	A1 A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
Material for recycling	kg	1,3E-01	0,0E+00	9,5E-01	0,0E+00	0,0E+00										
Materials for energy recovery	kg	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
Exported energy, electricity	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00
Exported energy, thermal	MJ	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00	0,0E+00

---

## Additional social and economic information

---

The Sustainable Development Goals (SDGs) are 17 objectives contained in a major action plan on which the governments of the 193 UN member countries have agreed. The SDGs serve to set common and measurable goals that encourage everyone – governments, companies like Master Italy – to act globally to achieve them, gathering and providing a wide variety of forces, knowledge and resources. This will make it possible to build alliances that push for a more prosperous, fairer and more equitable society.

There are 9 SDGs which Master Italy is committed to contribute to this epochal change, in which the main focus' remain: People, Prosperity and Planet.

People is the chapter of Masterability dedicated to the actions that the company enhance for its people.

It is the natural prosecution of the three years project People in which the objective is the increase of the welfare of the employees and

improve the corporate environment. Always aiming at increasing skills and personal and professional growth.

Planet is the chapter dedicated to the actions that the company is putting in place to preserve the environment in which we operate and live. These are initiatives aimed at reducing the environmental impact by acting both directly on production processes and on environmental policies, to support and encourage virtuous behaviour inside and outside the company walls.

Prosperity is a very broad concept dealing with a prosperous and healthy growth in various contexts such as economy, culture, art, environment, sustainability and human rights. Prosperity, therefore the common well-being, can be achieved only if men and women have the same rights and possibilities, this is the reason why Master Italy is committed to promoting equal opportunities for education, sustainability, art and nature to the local community

---

## References

---

General Programme Instructions of the International EPD® System. Version 4.0.

PCR 2019:14 Construction products, version 1.2.5

Analisi del ciclo di vita di una selezione di prodotti della Master Italy, Ver.1.2, Luglio 2023

EN 17610:2022 Building hardware - Environmental product declarations - Product category rules complementary to EN 15804 for building hardware

EN 15804:2012+A2:2019/AC:2021 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

This declaration applies to products mentioned in the list, along with their finishes:

3304.11D	3304.11D	3311L.11D
3304.11S	3304.11S	3311L.11S
3304L.11D	3304L.11D	3312.10S
3303.11D	3303.11D	3312.11D
3303.11S	3303.11S	3312.11S
3304.10D	3304.10D	3312L.10D
3304.10S	3304.10S	3312L.10S
3304L.10D	3304L.10D	3312L.11D
3304L.10S	3304L.10S	3312L.11S
3303.10S	3303.10S	3303L.10D
3303.10D	3303.10D	3303L.10S
3304.21D	3304.21D	3303L.11D
3304.21S	3304.21S	3303L.11S
3313.21D	3313.21D	3311.20D
3313.21S	3313.21S	3311L.20D
3313L.21D	3313L.21D	3311L.20S
3313L.21S	3313L.21S	3311L.21D
3304L.21D	3304L.21D	3311L.21S
3304L.21S	3304L.21S	3303.20D
3312.21D	3312.21D	3303.20S
3312.21S	3312.21S	3303L.20D
3312L.21D	3312L.21D	3303L.20S
3312L.21S	3312L.21S	3303L.21D
3311.21D	3311.21D	3303L.21S
3311.21S	3311.21S	
3304.20D	3304.20D	
3304.20S	3304.20S	
3304L.20D	3304L.20D	
3304L.20S	3304L.20S	
3312.20S	3312.20S	



SCANSIONA IL QR CODE E GUARDA  
IL NOSTRO CANALE YOUTUBE  
SCAN QR CODE AND FIND OUT  
MASTER TUBE CHANNEL

---

**MASTER s.r.l.**  
con Socio Unico

S.P.37 Conversano  
Castiglione km. 0,7 [z.i.]  
70014 Conversano (Bari)  
Italy - C.P. 112  
Tel.: +39 080 4959823  
P. IVA 03620970727

---

**MASTER ITALY s.r.l.**  
con Socio Unico

Società soggetta a direzione e  
coordinamento di Master s.r.l.  
S.P.37 Conversano -  
Castiglione km. 0,570 [z.i.]  
70014 Conversano (Bari)  
Italy - C.P. 112  
Tel.: +39 080 4959823  
Fax.: +39 080 4959030  
P. IVA 07780290727

---

**MasterLAB s.r.l.**  
unipersonale

Società soggetta a direzione  
e coordinamento di Master s.r.l.  
S.P.37 Conversano  
Castiglione km. 0,7 [z.i.]  
70014 Conversano (Bari)  
Italy - C.P. 112

Tel.: +39 080 4955957  
Assistenza clienti: 366 2488323  
P. IVA 06835770725

---

**Master West Africa Sarl**  
Abidjan, Marcory, Zone 4  
19 Rue Marconi

P. IVA +225 27 21 519526

---

**Master Polska Sp. zo.o.**  
Partyzantów 11, 32-500 Chrzanów  
NIP: 6762481805