

# Environmental Product Declaration



EPD of multiple products, based on the average results of the product group  
In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

## Soft skirting boards “WLK”

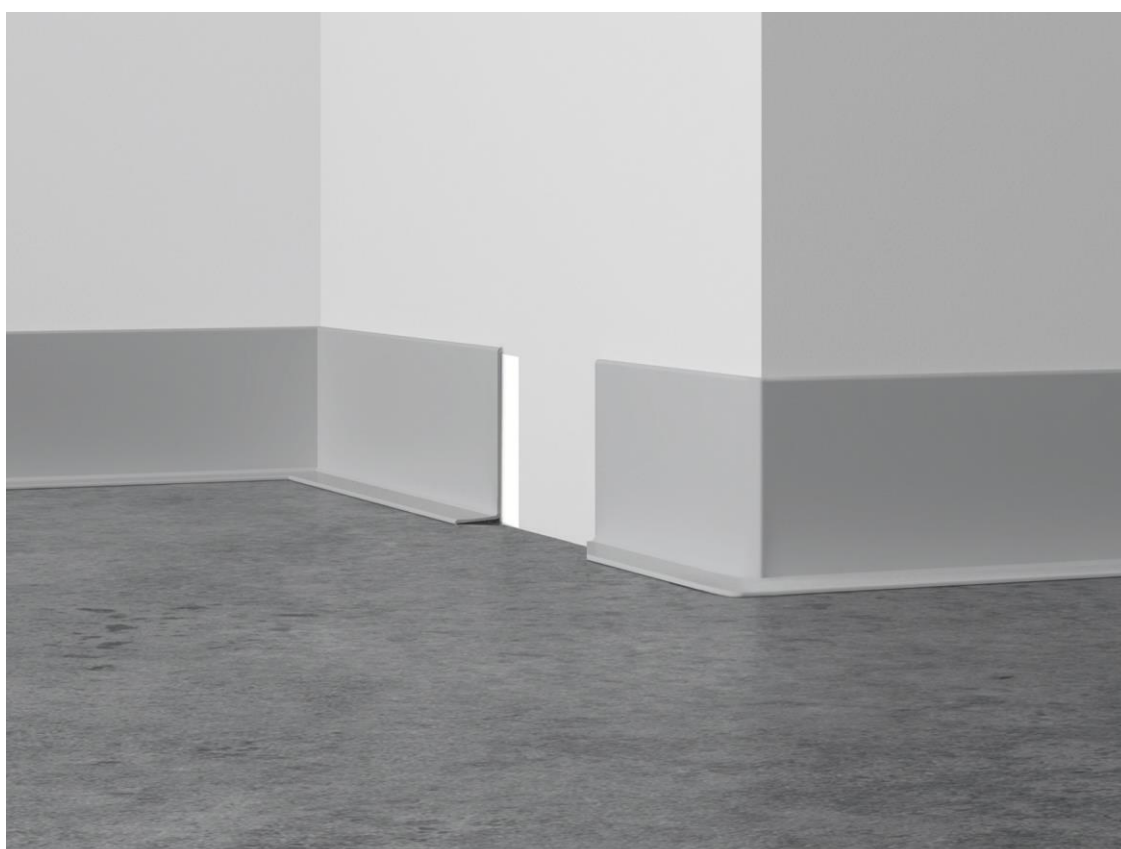
from

**Döllken Profiles GmbH**

**Döllken Profiles**

Programme:	The International EPD® System, <a href="http://www.environdec.com">www.environdec.com</a>
Programme operator:	EPD International AB
EPD registration number:	S-P-11728
Publication date:	2024-01-19 (version 1.1)
Valid until:	2029-01-18

*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)*



## General information

### Programme information

<b>Programme:</b>	The International EPD <sup>®</sup> System
<b>Address:</b>	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
<b>Website:</b>	<a href="http://www.environdec.com">www.environdec.com</a>
<b>E-mail:</b>	<a href="mailto:info@environdec.com">info@environdec.com</a>

### Accountabilities for PCR, LCA and independent, third-party verification

#### 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 (EN 15804+A2) (1.3.1)

PCR review was conducted by: El Comité Técnico del Sistema Internacional EPD<sup>®</sup>  
President: Claudia A. Peña. Contact via [info@environdec.com](mailto:info@environdec.com)

#### Life Cycle Assessment (LCA)

LCA accountability:  
Matthias Brinkert



#### Brinkert Consulting

Schulstr. 17  
54317 Osburg  
Germany

[www.brinkert-consulting.com](http://www.brinkert-consulting.com)

#### 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:  
Dr. Andreas Ciroth  
Kaiserdamm 13  
14057 Berlin  
Germany

Approved by: The International EPD<sup>®</sup> 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.

EPDs of construction products may not be comparable if they do not comply with EN 15804+A2.

### Differences versus previous versions

Version	Date	Content
1.0	2024-01-19	Initial creation and verification of EPD.
1.1	2024-01-29	Addition of carbon impact of electricity consumption of module A3

## Company information

### Owner of the EPD:

Döllken Profiles GmbH  
Industriestraße 1  
DE-59199 Bönen  
Germany

### Contact:

Martin Ottow  
Head of Material Development  
[martin.ottow@Döllken-profiles.com](mailto:martin.ottow@Döllken-profiles.com)

### Description of the organisation:

#### *Döllken Profiles as part of Surteco Group*

The trend-setting Group structure of SURTECO GROUP SE reflects the vision of the perfect decor network: SURTECO GROUP SE offers its customers multifaceted, multifunctional and professional solutions from a single source. In doing so, SURTECO GROUP SE always has its finger on the pulse of the times - trend-oriented, full of inspiration - and close to nature. As experts for creative design and technologically sophisticated surfaces, they develop new ideas and products that touch - that make trends come alive. New possibilities. New experiences.

Across all sectors, SURTECO GROUP SE focuses on uniform sales activities and joint results worldwide and bundles its services. Its unique product portfolio is perfectly coordinated and serves international companies in the wood-based materials, flooring, furniture, kitchen, door and caravan industries as well as for the craft and trade sectors.

And all this with a problem-free technology transfer, precisely matched decor data, diverse designs and individual decors.

The Sustainable Development Goals of the 2030 Agenda emphasise the importance of companies for sustainable development. Companies are explicitly encouraged to use their creativity and innovative power to solve the challenges of sustainable development. SURTECO is aware of this responsibility and therefore places particular focus on the sustainability targets where the company can make the greatest contribution.

#### *Sustainability at Döllken Profiles GmbH*

As a globally thinking and acting company, we at Döllken Profiles GmbH always strive to provide the best performance in terms of quality and service, taking into account environmental and energy-relevant aspects in all our areas of activity and influence. We are a German, medium-sized company in the international group of companies of SURTECO GROUP SE and are aware of our responsibility towards our internal and external interested parties (customers, employees, shareholders, environment, suppliers, society and associations).

In order to be able to manage and direct the expectations and obligations placed on us (binding, legal and our own obligations, in particular with regard to environmental protection, energy use, energy consumption and energy efficiency) in a targeted manner and with the best results, we concentrate on the continuous improvement of our products, services and processes with the following focal points:

- The quality of our products and services
- The impact of our actions and products on the environment
- The improvement of our specific energy consumption
- Our understanding of the environment

We see it as our duty to protect the environment, to conserve resources and to avoid or continuously minimise environmental pollution wherever possible in the course of our actions, and we are aware of the influence of our actions and our products, also on the quality of life of future generations. In this way, we also want to make our contribution to stopping climate change and maintaining biodiversity and ecosystems. More information on the Sustainable Development Goals and the contribution to the goals of the United Nations can be found here: [SURTECO - Sustainability](#)

By complying with legal and our own binding obligations, we aim to sustainably protect our environment and continuously improve environmental performance and our processes for the benefit of the environment and other interested parties. This also applies to the development and planning of new processes and products throughout their entire life cycle, including disposal. More information is available in our sustainability report. The current version can be found here: [SURTECO - Downloads](#)

#### *Döllken Profiles as expert for skirting and profile solutions*

For more than 60 years Döllken have been experts in the design, development and manufacture of high quality plastic extruded profiles. Although our services are primarily intended for companies operating within the Industrial sector, our capabilities and expertise enables us to support on all aspects of design and innovation led projects, supplying quality products to customers spanning multiple market sectors and many diverse applications on a global scale.





Our services are divided into two key categories: Technical profiles and Roller shutter systems, where the application, shape and functionality of our profiles are almost limitless.

For Döllken Profiles and its customers, the **Bönen** site is considered the birthplace and cradle of successful core skirtings (see picture of this site above). For almost 50 years, namely since 1972, this type of skirting has been produced, at the beginning still by Schock & Co. GmbH, have been developed and produced at the site.

Since 2020 10,000 square metres of additional space is available, where not only will logistics be brought to a completely new level, but ten new production lines will also be installed.

The now 176 employees at the Bönen plant not only produce core skirtings and technical profiles here, but also innovative products for Döllken Lighting.

Skirting boards and other plastic profiles have been extruded at the Thuringian plant **Grammetal** since 1991.



Döllken took over Kunststoff GmbH Weimar, which emerged from VEB Ausbau after reunification, and bundled its skirting activities there. In 1998, Döllken Weimar GmbH moved into the new building in the U.N.O. industrial estate and set up the company's headquarters there. The company started with 12 extrusion lines and about 70 employees. Currently, Grammetal produces about 34,000,000 m of plastic profiles per year. About 4,500 t of plastic powder and granulate, mainly PVC, are processed on the 20 extrusion lines. The production focus is on hard, soft and foam extrusion.

Located on the edge of the Black Forest, the **Dunningen** site exclusively produces customised profiles for a wide range of industries, as well as roller shutter systems for the office furniture industry.

The focus of competence here is on individual production technology, material selection and assembly in order to be able to fully map the respective customer requirements.

Over the years, a wide-ranging customer base has been built up in the construction industry, electrical engineering, commercial vehicle construction, air-conditioning technology and commercial refrigeration furniture segments.



The site processes all common thermoplastics on 17 extrusion lines in 3-shift operation, with output rates between 10kg/h - 280kg/h, to produce 300 different profile cross-sections. Customers appreciate our flexibility, customer proximity, fast project implementation times and consistent quality.

## Management system-related certifications:

All production sites are certificated as follows:

- ISO 9001:2015 - Quality Management
- ISO 14001:2015 - Environment Management
- ISO 50001:2011 - Energy Management

The active cooperation of all employees at the sites to which our management systems apply is necessary for the implementation of the corporate policy and the Group guidelines and the continuous improvement of our integrated management system (quality, environment, energy). The management commits itself and all employees of Döllken Profiles GmbH to take this corporate policy into account and to implement it in their own daily actions. To this end, appropriate information is communicated internally and externally and resources are made available.

## Name and location of production site:

Döllken Profiles GmbH  
Werk Grammetal  
Stangenallee 3  
DE-99428 Nohra b. Weimar  
Germany

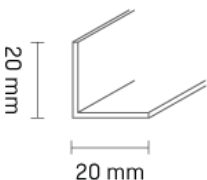
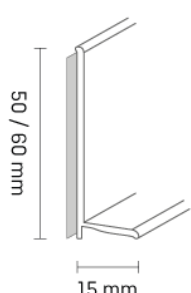
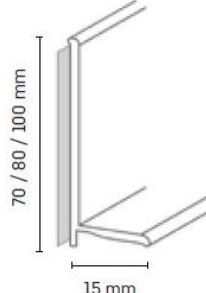
## Product information

The right skirting board for every floor covering' is not only the credo of Döllken Profiles but also a promise. Our skirting boards are as versatile as modern floor coverings. They help us ensure a perfect transition between floor and wall. From the core skirting board to the special profile – the location determines the model and we at Döllken Profiles make it possible.

### Product name:

Soft skirting board "WLK"

Soft skirting boards in different sizes and colours/decors made of elastic polyblend based on PVC (all ingredients are REACH compliant), self-adhesive.

	WLK 20 Remur	WLK 50, 60		WLK 70, 80, 100		
						
Dimension [mm]	20 x 20	50 x 15	60 x 15	70 x 15	80 x 15	100 x 15
Weight [kg] per linear meter*	0,041	0,110	0,126	0,144	0,153	0,195

\* Product without packaging.

All WLK products have the following packaging unit: 1 x 50 m (rolled).

### Product description:

Soft skirting boards from Döllken are flexible skirtings with a self-adhesive layer for quick and easy installation.

WLK product are available in different variations:

- 6 different heights: 20 mm, 50 mm, 60 mm, 70 mm, 80 mm, 100 mm
- self-adhesive
- Over 15 plain decors and various wood decors



## Application:

Soft skirtings are particularly suitable when using PVC, linoleum and plastic floor coverings. They can be installed in no time at all and create a harmonious connection between wall and floor. Döllken soft skirting boards are available in a wide range of colours and decors and are based on the most popular floor coverings.

## Properties of the soft skirting boards:

- elastic polyblend based on PVC
- Roll goods (50 m)
- Improved outside corner formation
- Up to 50 % time saving (with self-adhesive soft skirting)
- less dirt accumulation/ better cleaning
- easy installation (more information in our Installation instructions or in the area Tips & Trick - Questions about the installation of soft skirting boards)

## Installation/Processing

### *Preparation*

Before fastening the profiles, the wall must be checked for its suitability for the respective type of fastening. If possible, the processing should be carried out on smooth (max. 1mm structure) and clean surfaces. The adhesive surfaces must be dry, clean and free of grease.

### *Installation*

When installing the WLK version, the protective paper of the adhesive tape must be removed and the profile pressed firmly against the wall. An additional attachment with a rubber hammer also increases the adhesion to the substrate.

More information can be found on our website: [Döllken - Installation instructions](#)

## INSTALLATION RECOMMENDATION



Easy-Scooter



Rubber hammer



Döllken skirting  
board scissors

With our specialists from Team Döllken, you can master big challenges with ease. Because thinking systemically also means not stopping at the baseboard. Döllken thinks beyond production. This has resulted in unique tools that are revolutionizing the market.



Easy-Scooter: the rolling device makes laying easier and is easy on the knees.



Skirting shears for precise cuts.



Rubber mallet for pressing on soft skirting boards.

More information can be found on our website: [Döllken - Tools](#)

Product Stewardship:

All soft skirtings are free of harmful plasticizers in accordance with the REACH regulation. On request, Döllken soft skirting boards are also available with an antibacterial surface in accordance with ISO 22196.

Biomaster Certificate

Especially for hospitals, nursing homes, kindergartens or public spaces, where people are the focus, hygiene and health are of particular importance. The special material composition of our antimicrobial skirting boards reduces the growth of harmful bacteria on the surface up to 99.99%, offering a surface that will harbour less bacteria. Our skirting boards are tested to STANDARD ISO22196:2011 and were awarded the Biomaster seal, which means we can meet your premium requirements. Our antimicrobial skirting boards are effective for lifetime of the product and inhibit the growth of a range of organisms including those that can cause food poisoning (e.g. Salmonella) and also antibiotic-resistant bacteria (such as MRSA and VRE). The surface of the skirting incorporates Biomaster silver additive which reduce the opportunity for bacteria to grow 24 hours a day 7 days a week. Disinfectants can indeed remove bacteria immediately, but this effect is only temporary – and contamination can occur again after just a few hours. Thanks to the new antimicrobial skirting boards, bacterial growth between cleanings can also be reduced. Selected soft skirting boards are available in an antimicrobial version on request.

UN CPC code:

CPC 36920 – Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics

Geographical scope:

The EPD covers the geographical scope of production in Germany as well as the distribution and disposal of the packaged products within the EU including the United Kingdom and Northern Ireland.

## LCA information

### Functional unit / declared unit:

One (1) linear meter of a representative soft skirting board WLK incl. package with an average weight of 0.131 kg.

The representative average including soft skirting boards in different sizes and colours/decors as shown in the section "Product Information" under point "product name". The white-colored WLK variants were taken into account as representative due to their dominant share of the production volume in 2022 as well as in previous years.

### Reference service life:

RSL is 20 years.

The service life corresponds to an equivalent floor covering and, with proper care, does not need to be renewed before the floor covering.

### Time representativeness:

2022

### Database(s) and LCA software used:

- Software: openLCA, v2.0
- Database: ecoinvent v3.9.1 EN15804

### Description of system boundaries:

Cradle to gate with options, modules C1–C4, module D and with optional modules (A1–A3 + C + D and additional modules).

#### Module A1-3

The module includes the machining processes from cradle to factory gate. This includes:

- provision of product and packaging specific materials
- transportation of materials to factory
- energy consumption of production processes, its emissions and waste generation

#### Module A4

Transportation of the packaged goods to customers.

## Module A5

Disposal of product packaging and product installation on the construction sites.

## Module C1

During the dismantling of the product from the building, there is no effort that has to be taken into account as part of the life cycle assessment.

## Module C2

Transport to waste treatment at the end of product life.

## Module C3

The product is not suitable for an efficient waste-to-energy plant. For this reason, the disposal is assigned to module C4.

## Module C4

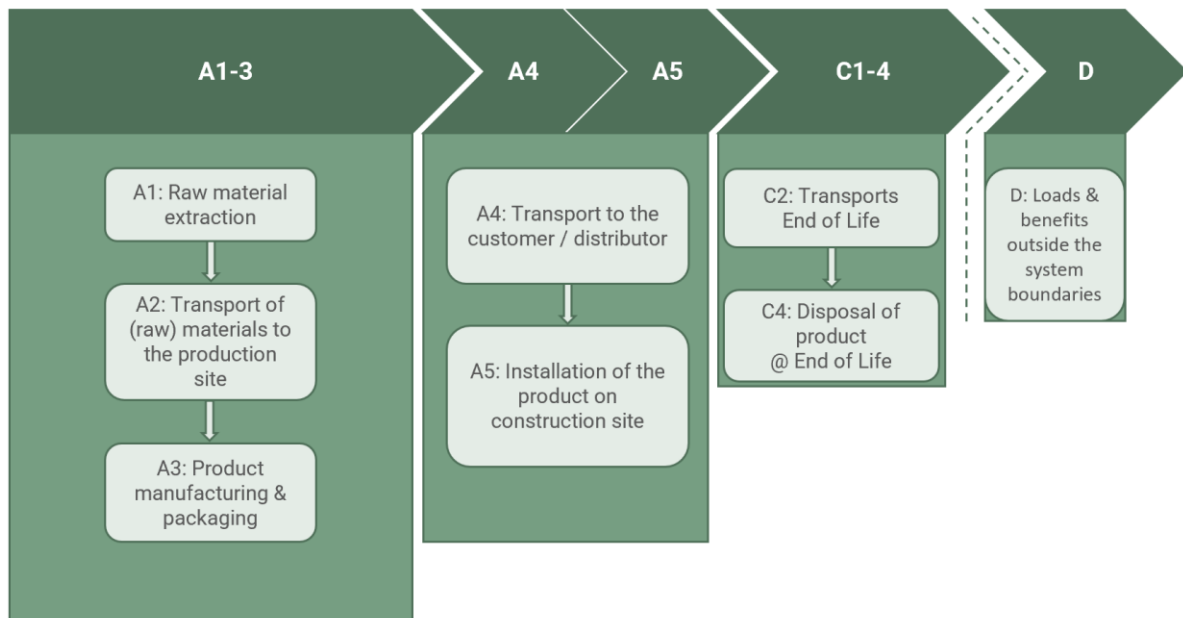
Due to various impurities from installation and use, it is assumed that the products will not serve as substitute fuel, but will have to be landfilled by means of a waste incineration plant.

## Module D

Benefits and loads beyond the system boundaries resulting from waste treatment of

- module A3 (production waste),
- module A5 (packaging waste),
- module C4 (end of product life)

The diagram shows the input and output material & energy flows per module.





### Electricity mix

Data set for electricity mix, Germany from ecoinvent in version 3.08 from 12/2022 with an emission factor of 0.496 kg CO<sub>2</sub>/kWh was used. The supplier's emission factor in 2022 is 0.328 kg CO<sub>2</sub>/kWh. The data set used represents in a good quality the electricity mix consumed by DOELLKEN PROFILES in 2022 as well as previous years.

### Cut-off rules

Wherever possible, all data collected from the recipe and the bill of materials for the packaging material were taken into account. Thus, material flows with a mass fraction of less than one per-cent were also accounted for with exclusion of:

- a few packaging materials (0.1 mass-%)
- water consumption of a closed-loop water cooling system
- energy consumption of the internal transport and storage system

If generic data sets from the ecoinvent database are not available in the current version, they have been modeled in-house. Individual substances for which no data sets are available:

- substituted by substances with similar environmental effects, or
- if not possible, have been cut-off.

### Allocation

The disposal of production waste (module A1-3) is subject to a fee. Therefore, it is not considered as a co-product. Thus, instead of economic a mass allocation was made.

Credits resulting from the thermal recovery of packaging waste (module A5) as well as from energy recovery or recycling in the end of life (module C4) are assigned to module D.

Allocations in the LCA datasets used follow the cut-off rules and are documented online. The database ecoinvent v3.9.1 EN 15804 was used. It can be assumed that the cut-off rules are consistent in the context of the requirements of EN 15804.

### Data quality

The data used come from the manufacturer's data collection from the production year 2022. In addition to primary production data, necessary background data of the raw materials used were specifically modelled or come from the ecoinvent database for EN 15804 studies. Mixtures, energy inputs and waste generation of additives and other precursors not included in the ecoinvent database and for which suppliers are unable to provide information were estimated conservatively.

The manufacturer's production data were collected from recipes and bill of materials, production data were measured or calculated on the basis of an average annual value.

Overall, a good data quality can be assumed, the representativeness can be classified as very good.

### Comparability

In principle, a comparison or evaluation of EPD data is only possible if all data sets to be compared have been created in accordance with EN 15804 and the building context or the product-specific performance characteristics are taken into account.

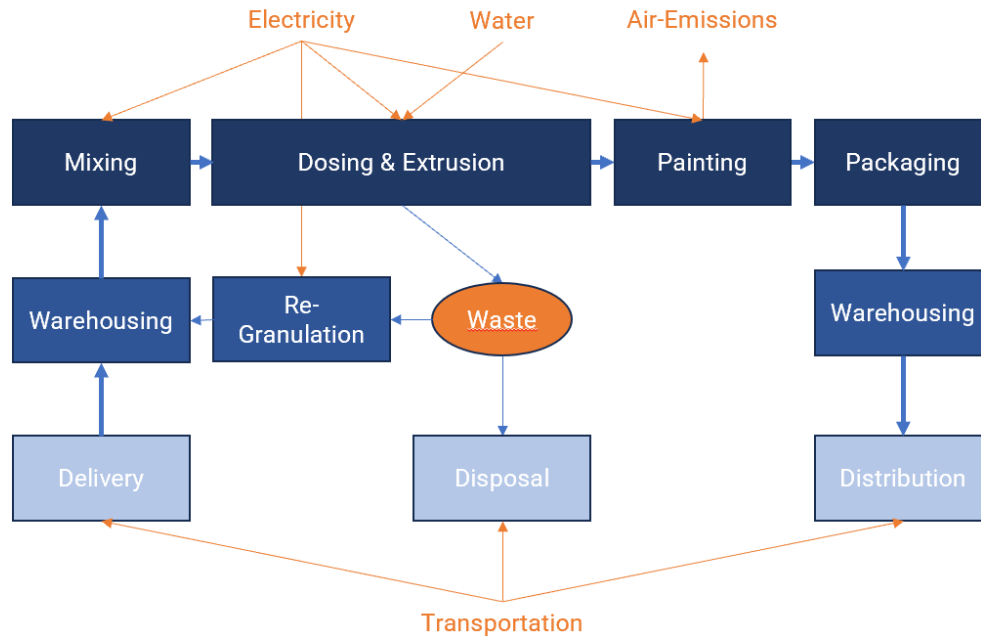
Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	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
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU	EU	DE	EU	EU	-	-	-	-	-	-	-	EU	EU	EU	EU	EU
Specific data used	> 95 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	324 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0 %					-	-	-	-	-	-	-	-	-	-	-	-

Disclaimer: The results of module A1-3 are not to be used without considering the results of C modules.

## Manufacturing

The following graphic gives an overview of the manufacturing process at plant Grammetal.



After delivery of the raw materials, they are stored. Mixing of the formulation takes place in relation to the production order. The raw materials are dosed directly into the extruder via dosing units. The plastic is plasticized in the extruder, and the liquid paint is mixed in at the same time. The profile is formed in the extrusion tool. Subsequently, the profile is cooled directly in a water bath. In the next step, the back of the profile is coated with double-sided adhesive tape. If required, the visible side of the profile is then printed. The finished soft skirting board is then wound and cut to length and the respective cardboard packaging is packed and stacked on pallets.

The scrap generated during the start-up process, if it is not yet coated with double-sided adhesive tape, is cut directly in a granulator, and dosed directly into the extruder. Profile scrap, which is already coated with double-sided tape, is collected during production, and then sent for external recycling.

The finished packaged goods are temporarily stored and then prepared for transport to the customer.

## Content information

### Content Declaration

Product components	Weight, kg	Post-consumer recycled material, weight-%	Biogenic material, weight-% and kg C/kg
WLK, total	0.1287	0	0
Product components	Weight, kg	Weight-% (versus the product)	Weight, biogenic carbon, kg C/kg
Carton	0.0015	1.187	0.0005
Paper	0.0009	0.668	0.0002

### Environmental/hazardous properties

No substance listed in the Candidate List of Substances of Very High Concern for Authorization under the REACH Regulations is present in this product, either above the limits for registration with the European Chemicals Agency or in excess of 0.1 weight-% of the product.

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit
N/A	-/-	-/-	-/-

## Results of the environmental performance indicators

### Mandatory impact category indicators according to EN 15804

The following estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

Results per 1 running meter of WLK									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	5,00E-01	2,42E-03	1,00E-04	0,00E+00	1,19E-03	0,00E+00	2,59E-01	-2,00E-01
GWP-biogenic	kg CO <sub>2</sub> eq.	-7,22E-03	2,15E-06	7,23E-03	0,00E+00	1,05E-06	0,00E+00	6,24E-04	-1,60E-04
GWP-luluc	kg CO <sub>2</sub> eq.	1,82E-02	1,20E-06	3,14E-08	0,00E+00	5,87E-07	0,00E+00	2,03E-05	-2,47E-05
GWP-total	kg CO <sub>2</sub> eq.	5,11E-01	2,43E-03	7,33E-03	0,00E+00	1,19E-03	0,00E+00	2,60E-01	-2,00E-01
ODP	kg CFC 11 eq.	1,44E-07	5,27E-11	3,49E-12	0,00E+00	2,59E-11	0,00E+00	5,24E-09	-9,02E-09
AP	mol H <sup>+</sup> eq.	2,12E-03	5,29E-06	7,19E-07	0,00E+00	2,60E-06	0,00E+00	1,54E-04	-1,69E-04
EP-freshwater	kg P eq.	1,68E-04	1,72E-07	1,33E-08	0,00E+00	8,45E-08	0,00E+00	8,64E-06	-6,39E-06
EP-marine	kg N eq.	4,58E-04	1,34E-06	3,76E-07	0,00E+00	6,56E-07	0,00E+00	5,14E-05	-5,75E-05
EP-terrestrial	mol N eq.	4,06E-03	1,36E-05	3,24E-06	0,00E+00	6,66E-06	0,00E+00	4,54E-04	-6,19E-04
POCP	kg NMVOC eq.	2,27E-03	8,22E-06	8,69E-07	0,00E+00	4,03E-06	0,00E+00	1,83E-04	-3,65E-04
ADP-minerals & metals*	kg Sb eq.	4,30E-06	8,10E-09	2,65E-10	0,00E+00	3,98E-09	0,00E+00	2,38E-07	-1,00E-07
ADP-fossil*	MJ	8,85E+00	3,47E-02	8,51E-04	0,00E+00	1,70E-02	0,00E+00	3,52E-01	-3,04E+00
WDP*	m <sup>3</sup>	3,21E-01	1,72E-04	1,48E-04	0,00E+00	8,45E-05	0,00E+00	3,28E-01	-6,58E-03
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								

\* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.



### Additional mandatory and voluntary impact category indicators

Results per 1 running meter of WLK									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG <sup>1</sup>	kg CO <sub>2</sub> eq.	5,19E-01	2,42E-03	1,00E-04	0,00E+00	1,19E-03	0,00E+00	2,59E-01	-2,00E-01
<i>Additional voluntary indicators e.g. the voluntary indicators from EN 15804 or the global indicators according to ISO 21930:2017</i>									

### Resource use indicators

Results per 1 running meter of WLK									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	6,65E-01	5,41E-04	2,71E-05	0,00E+00	2,65E-04	0,00E+00	4,41E-02	-2,81E-02
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	6,65E-01	5,41E-04	2,71E-05	0,00E+00	2,65E-04	0,00E+00	4,41E-02	-2,81E-02
PENRE	MJ	8,47E+00	3,17E-02	7,97E-04	0,00E+00	1,55E-02	0,00E+00	3,31E-01	-2,90E+00
PENRM	MJ	6,80E-01	3,00E-03	5,40E-05	0,00E+00	1,47E-03	0,00E+00	2,05E-02	-1,45E-01
PENRT	MJ	9,15E+00	3,47E-02	8,51E-04	0,00E+00	1,70E-02	0,00E+00	3,52E-01	-3,04E+00
SM	kg	4,17E-02	3,80E-05	2,30E-06	0,00E+00	1,87E-05	0,00E+00	1,41E-03	-1,80E-03
RSF	MJ	2,25E-02	1,02E-05	3,44E-07	0,00E+00	5,03E-06	0,00E+00	6,38E-04	-7,77E-04
NRSF	MJ	2,38E-02	2,01E-05	8,98E-07	0,00E+00	9,89E-06	0,00E+00	8,55E-04	-9,42E-04
FW	m <sup>3</sup>	4,36E-03	4,19E-06	2,35E-06	0,00E+00	2,05E-06	0,00E+00	7,60E-03	-1,69E-04

<sup>1</sup> 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.

### Results per 1 running meter of WLK

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 re-sources; 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 1 running meter of WLK

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	2,93E-02	3,25E-05	4,98E-05	0,00E+00	1,60E-05	0,00E+00	5,51E-02	-9,92E-04
Non-hazardous waste disposed	kg	3,74E-02	1,68E-03	1,31E-04	0,00E+00	8,24E-04	0,00E+00	6,96E-03	-3,19E-03
Radioactive waste disposed	kg	9,05E-06	1,13E-08	4,31E-10	0,00E+00	5,55E-09	0,00E+00	5,88E-07	-8,00E-07

### Output flow indicators

### Results per 1 running meter of WLK

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	4,05E-02	0,00E+00	3,11E-06	0,00E+00	0,00E+00	0,00E+00	9,36E-03	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

## References

### **ecoinvent v3.9.1**

Documentation of changes implemented in the ecoinvent database v3.9.1 (2022.12.15).

### **EN 15804:2022-03**

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

### **General Programme Instructions (GPI) for the International EPD® System**

Version 4.0, EPD International (2021-03-29).

### **ISO 14025:2011-10**

Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2011).

### **ISO 14040:2021-02**

Environmental management - Life cycle assessment - Principles and Framework (ISO 14040:2006 + Amd 1:2020).

### **ISO 14044:2021-02**

Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044:2006 + Amd 1:2017 + Amd 2:2020)

### **openLCA**

Comprehensive User Manual, GreenDelta GmbH (February 2020).

### **Product Category Rules (PCR)**

PCR 2019:14 Construction products (EN 15804+A2), Version 1.3.1, EPD International (2023-07-08).

<b>Programme Operator</b>	EPD International AB 	Box 210 60 SE-100 31 Stockholm Sweden <a href="http://www.environdec.com">www.environdec.com</a>
<b>Owner of the Declaration</b>	Döllken Profiles GmbH <b>Döllken Profiles</b>	Industriestraße 1 DE-59199 Bönen Germany <a href="http://www.Döllken-profiles.com">www.Döllken-profiles.com</a>
<b>LCA &amp; EPD Consultancy</b>	Brinkert Consulting <b>BC   BRINKERT CONSULTING</b>	Schulstr. 17 DE-54317 Osburg Germany <a href="http://www.brinkert-consulting.com">www.brinkert-consulting.com</a>
<b>Independent Verifier</b>	Dr. Andreas Ciroth	Kaiserdamm 13 DE-14057 Berlin Germany

