

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025 and EN 15804+A2 

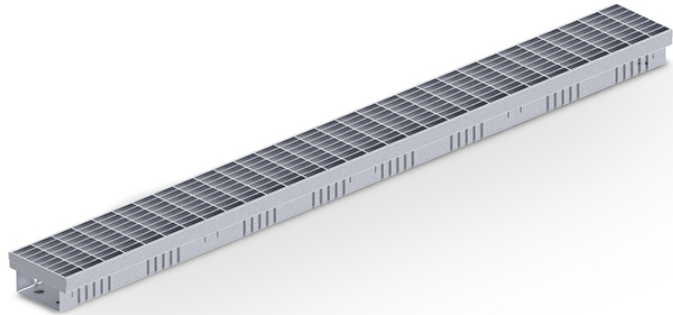
BG-Graspointner GmbH

**BG-FLEX, FA W 100, facade channel H 100, L 1000, stainless steel, perforated,
incl. L 1000 stainless steel grating**



GRASPOINTNER
Sustainable innovation.

BG-FLEX
Steel channels systems



Owner of the declaration

BG-Graspointner GmbH
Gessenschwandt 39
4882 Oberwang
Austria

Product

BG-FLEX, FA W 100, facade channel H 100,
L 1000, stainless steel, perforated, incl. L
1000 stainless steel grating

Declared product / Declared unit

1 piece

**This declaration is based on Product
Category Rules**

EN 15804:2012 + A2:2019,
NPCR 013 Part B for Steel and Aluminium
Construction Products

Program operator:

EPD Global
Majorstuen P.O. Box 5250
N-0303 Oslo
Norway

Declaration number

NEPD-10259-10259-2

Registration number

NEPD-10259-10259-2

Issue date

05.09.2025

Valid to

04.09.2030

EPD Software

Emidat EPD Tool v1.0.0

General Information

Product

BG-FLEX, FA W 100, facade channel H 100, L 1000, stainless steel, perforated, incl. L 1000 stainless steel grating

Program Operator

EPD Global
Majorstuen P.O. Box 5250
N-0303 Oslo
Norway
Phone: +47 23 08 80 00
Email: post@epd-norge.no

Declaration Number

NEPD-10259-10259-2

This declaration is based on Product Category Rules

EN 15804:2012 + A2:2019,
NPCR 013 Part B for Steel and Aluminium Construction Products

Statements

The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit

1 piece

General information on verification of EPD from EPD tools

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPDNorway's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD-Norway, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools.

Verification of EPD tool

Charlotte Merlin, FORCE Technology
(no signature required)

Owner of the declaration

BG-Graspointner GmbH

Contact person

alexander.zeppetzauer@bg-graspointner.com

Phone

+43 664 8820 72 84

Email

alexander.zeppetzauer@bg-graspointner.com

Manufacturer

BG-Graspointner GmbH
Gessenschwandt 39
4882 Oberwang, Austria

Place of production

Oberwang, Austria

Management system

ISO 9001, ISO 14001, ISO 50001

Issue date

05.09.2025

Valid to

04.09.2030

Year of study

2024

Comparability

EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not seen in a building context. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database (including primary and secondary data).

Development and verification of EPD

The declaration was created using the Emidat EPD tool v1.0, developed by Emidat GmbH. The EPD tool has been approved by EPD Norway.

Developer of EPD: Alexander Zeppetzauer
Reviewer of company-specific input data and EPD: Steffen Bernauer

Approved



Håkon Hauan, CEO EPD-Norge

Product

Product description

BG-FLEX FA RB 100 facade channel (item code: 23010302) made of stainless steel, walkable and wheelchair accessible, incl. L1000 mm stainless steel grating, load class: walkable and wheelchair accessible (item code: 23510301) in accordance with Austrian standard B 3691:2019, construction length 1000 mm, perforated side walls, delivery and installation in accordance with the manufacturer's installation instructions.



The product is designed for versatile use in various construction and landscaping applications. Typical areas of application include roofing systems (pitched and flat roofs), building facades, and flat roof structures. In addition, the product is well-suited for use in garden and landscape construction (GALA Bau), including pathways, paving, and terraces. It may also be applied in outdoor living spaces such as swimming pool surrounds and garden installations.

Product specification

| Name of ingredient | Share of total weight | Country of origin |
|--------------------|-----------------------|-------------------|
| Metals and alloys | 80 - 100 % | Austria |

Technical data

| | Unit | Value |
|------------|---------------------|--------|
| Density | kg / m ³ | 7850.0 |
| Total mass | kg | 4.7 |

Market

Austria

LCA: Calculation rules

Declared unit

1 piece

Reference service life

Not defined

Data quality

The foreground data are based on extensive and detailed data collection at the production site of the manufacturer, covering key processes such as raw material sourcing, formulation, and manufacturing. These foreground data are fully linked with corresponding datasets from the background database (ecoinvent 3.10) or with EN15804+A2-compliant EPDs, ensuring consistency, reliability, and maintaining alignment with the latest industry standards.

The overall data representativeness is rated as good with an overall score of 4.31/5, in accordance with EN 15804+A2 Annex E guidance on data quality assessment, considering geographical, technical, and temporal representativeness.

System boundaries (X=included, MND=module not declared)

| | Production | | | Installation | | Use stage | | | | | | | End-of-Life | | | | Next product system |
|------------------|---------------------|-----------|---------------|--------------|----------------------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|-------------|-----------|------------------|----------|---|
| | Raw material supply | Transport | Manufacturing | Transport | Installation Process | Use | Maintenance | Repair | Replacement | Refurbishment | Operational Energy Use | Operational Water Use | Demolition | Transport | Waste Processing | Disposal | Benefits and loads beyond the system boundary |
| Module | A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| Modules declared | x | x | x | x | MND | MND | MND | MND | MND | MND | MND | MND | x | x | x | x | x |
| Geography | | | AT | AT | MND | MND | MND | MND | MND | MND | MND | MND | AT | AT | AT | AT | AT |

For the geographies modeled in A1 and A2, refer to *Product specification*.

Type of EPD: Cradle to gate with options A4, C1, C2, C3, C4 and D

Stage of Material Production and Construction

Module A1: Extraction and processing of raw materials

Module A2: Transportation of raw materials to the plant

Module A3: Steel component production at the plant and waste treatment

Module A4: Transportation to the construction site

Disposal Stage

Module C1: Demolition/Dismantling

Module C2: Transportation of steel demolition waste for processing

Module C3: Sorting of waste components and recycling of steel

Module C4: Disposal of steel to landfill

Credits and burdens outside the system boundaries

Module D: Credits and burdens from the use of recycled steel as a replacement for primary steel

Cut-off criteria

No cut-offs were applied.

Allocation

Foreground inventory data (energy and fuels, ancillary materials, emissions and waste) was collected at the production-process level. Using the total output of the production process in 2024, these flows are allocated to one declared unit based on mass.

LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

| Transport to the building site (A4) | Value | Unit |
|-------------------------------------|---|-----------|
| Transported mass | 5.35 | kg |
| Truck: Distance | 500.00 | km |
| Truck: Energy demand | 1.58 | MJ / t*km |
| Truck: Activity | transport, freight, lorry >32 metric ton, EURO6 | - |
| Truck: Capacity utilization | 53.30 | % |

| Demolition (C1) | Value | Unit |
|--------------------------------|-------|------|
| Diesel dismantling and sorting | 0.18 | MJ |
| Electricity for sorting | 0.05 | kWh |

90.0% of the steel is recycled, 10.0% is sent to landfill.

| Transport to the waste facility (C2) | Value | Unit |
|--------------------------------------|---|-----------|
| Mass to recycling | 4.23 | kg |
| Mass to landfill | 0.47 | kg |
| Distance to recycling by truck | 50.00 | km |
| Distance to landfill by truck | 50.00 | km |
| Truck: Activity | transport, freight, lorry >32 metric ton, EURO6 | - |
| Truck: Capacity utilization | 53.30 | % |
| Truck: Distance | 50.00 | km |
| Truck: Energy demand | 1.58 | MJ / t*km |

| Waste processing (C3) | Value | Unit |
|------------------------|-------|------|
| Material for recycling | 4.23 | kg |

| Disposal (C4) | Value | Unit |
|-----------------------|-------|------|
| Material for landfill | 0.47 | kg |

| Reuse, recovery and/or recycling potentials (D) | Value | Unit |
|---|----------|------|
| Amount of secondary material that the system takes in | 2.21 | kg |
| Substitution of primary steel | 2.53 | kg |
| Substitution of electrical energy production | 4.44e-03 | MJ |
| Substitution of thermal energy production | 0.06 | MJ |

Calculation of benefits and loads per EN 15804+A2.

LCA: Results

Core environmental impact indicators

| Indicator | Unit | A1-3 | A4 | C1 | C2 | C3 | C4 | D |
|----------------|----------------------------------|----------|----------|----------|----------|----------|----------|-----------|
| GWP-total | kg CO ₂ -eq. | 1.87e+01 | 2.77e-01 | 2.92e-02 | 2.44e-02 | 1.35e+00 | 2.94e-03 | -3.66e+00 |
| GWP-fossil | kg CO ₂ -eq. | 1.86e+01 | 2.77e-01 | 2.86e-02 | 2.43e-02 | 1.32e+00 | 2.94e-03 | -3.69e+00 |
| GWP-biogenic | kg CO ₂ -eq. | 1.51e-01 | 1.39e-04 | 6.60e-04 | 1.22e-05 | 3.05e-02 | 3.04e-07 | 2.74e-02 |
| GWP-luluc | kg CO ₂ -eq. | 1.42e-02 | 9.84e-05 | 1.50e-05 | 8.64e-06 | 1.09e-03 | 1.53e-06 | -5.85e-04 |
| ODP | kg CFC-11-Eq | 1.80e-07 | 5.77e-09 | 5.22e-10 | 5.07e-10 | 2.04e-08 | 8.50e-11 | -8.91e-09 |
| AP | mol H ⁺ -Eq | 9.89e-02 | 6.54e-04 | 1.93e-04 | 5.75e-05 | 7.02e-03 | 2.08e-05 | -1.09e-02 |
| EP-freshwater | kg P-Eq | 5.85e-03 | 1.95e-05 | 1.06e-05 | 1.71e-06 | 6.69e-04 | 2.44e-07 | -1.67e-03 |
| EP-marine | kg N-Eq | 1.86e-02 | 1.72e-04 | 8.41e-05 | 1.51e-05 | 1.13e-03 | 7.94e-06 | -2.96e-03 |
| EP-terrestrial | mol N-Eq | 2.00e-01 | 1.86e-03 | 9.02e-04 | 1.63e-04 | 1.15e-02 | 8.66e-05 | -3.22e-02 |
| POCP | kg NMVOC-Eq | 6.32e-02 | 1.14e-03 | 2.72e-04 | 9.98e-05 | 3.82e-03 | 3.10e-05 | -1.13e-02 |
| ADPE | kg Sb-Eq | 4.16e-04 | 7.92e-07 | 3.73e-08 | 6.95e-08 | 2.98e-06 | 4.66e-09 | -1.48e-06 |
| ADPF | MJ, net calorific value | 2.12e+02 | 4.16e+00 | 4.05e-01 | 3.65e-01 | 1.64e+01 | 7.21e-02 | -3.55e+01 |
| WDP | m ³ world Eq deprived | 5.56e+00 | 2.09e-02 | 1.08e-02 | 1.83e-03 | 7.47e-01 | 2.02e-04 | -7.29e-01 |

GWP-total: Global Warming Potential - total **GWP-fossil:** Global warming potential - fossil **GWP-biogenic:** Global Warming Potential - biogenic **GWP-luluc:** Global Warming Potential - luluc **ODP:** Depletion potential of the stratospheric ozone layer **AP:** Acidification potential, Accumulated Exceedance **EP-freshwater:** Eutrophication potential - freshwater **EP-marine:** Eutrophication potential - marine **EP-terrestrial:** Eutrophication potential - terrestrial **POCP:** Photochemical Ozone Creation Potential **ADPE:** Abiotic depletion potential - non-fossil resources **ADPF:** Abiotic depletion potential - fossil resources **WDP:** Water (user) deprivation potential

Additional indicators

| Indicator | Unit | A1-3 | A4 | C1 | C2 | C3 | C4 | D |
|-----------|-------------------|----------|----------|----------|----------|----------|----------|-----------|
| PM | disease incidence | 1.47e-06 | 2.70e-08 | 4.83e-09 | 2.37e-09 | 1.38e-07 | 4.74e-10 | -2.23e-07 |
| IRP | kBq U235-Eq | 1.16e+00 | 5.05e-03 | 2.69e-03 | 4.44e-04 | 1.88e-01 | 4.59e-05 | -1.35e-02 |
| ETP-fw | CTUe | 1.82e+02 | 9.85e-01 | 6.94e-02 | 8.66e-02 | 7.22e+00 | 9.85e-03 | -3.26e+02 |
| HTP-c | CTUh | 4.61e-07 | 1.77e-09 | 9.81e-11 | 1.56e-10 | 1.23e-08 | 1.33e-11 | -1.24e-06 |
| HTP-nc | CTUh | 3.64e-07 | 2.74e-09 | 1.09e-10 | 2.41e-10 | 1.06e-08 | 1.29e-11 | -3.44e-08 |
| SQP | dimensionless | 1.48e+02 | 4.18e+00 | 6.72e-02 | 3.67e-01 | 5.16e+00 | 1.42e-01 | -6.60e+00 |

PM: Potential incidence of disease due to PM emissions **IRP:** Potential Human exposure efficiency relative to U235 **ETP-fw:** Potential Comparative Toxic Unit for ecosystems **HTP-c:** Potential Comparative Toxic Unit for humans - cancer effects **HTP-nc:** Potential Comparative Toxic Unit for humans - non-cancer effects **SQP:** Potential Soil quality index

IRP: This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

ETP-fw, HTP-c, HTP-nc and SQP: The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with these indicators.

Use of resources

| Indicator | Unit | A1-3 | A4 | C1 | C2 | C3 | C4 | D |
|-----------|----------------|----------|----------|----------|----------|----------|----------|-----------|
| PERE | MJ | 5.98e+01 | 6.60e-02 | 1.37e-01 | 5.80e-03 | 6.68e+00 | 6.68e-04 | 2.32e+00 |
| PERM | MJ | 9.16e-02 | 0 | 0 | 0 | 0 | 0 | 0 |
| PERT | MJ | 5.99e+01 | 6.60e-02 | 1.37e-01 | 5.80e-03 | 6.68e+00 | 6.68e-04 | 2.32e+00 |
| PENRE | MJ | 2.12e+02 | 4.16e+00 | 4.05e-01 | 3.65e-01 | 1.64e+01 | 7.21e-02 | -3.55e+01 |
| PENRM | MJ | 2.85e-01 | 0 | 0 | 0 | 0 | 0 | 0 |
| PENRT | MJ | 2.13e+02 | 4.16e+00 | 4.05e-01 | 3.65e-01 | 1.64e+01 | 7.21e-02 | -3.55e+01 |
| SM | kg | 2.21e+00 | 0 | 0 | 0 | 0 | 0 | 2.53e+00 |
| RSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRSF | MJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FW | m ³ | 1.69e-01 | 6.05e-04 | 2.78e-04 | 5.31e-05 | 1.91e-02 | 7.47e-05 | -1.42e-02 |

PERE: Primary energy resources - renewable: use as energy carrier **PERM:** Primary energy resources - renewable: used as raw materials **PERT:** Primary energy resources - renewable: total **PENRE:** Primary energy resources - non-renewable: use as energy carrier **PENRM:** Primary energy resources - non-renewable: used as raw materials **PENRT:** Primary energy resources - non-renewable: total **SM:** Use of secondary material **RSF:** Renewable secondary fuels **NRSF:** Non-renewable secondary fuels **FW:** Net use of fresh water

Waste flows

| Indicator | Unit | A1-3 | A4 | C1 | C2 | C3 | C4 | D |
|-----------|------|----------|----------|----------|----------|----------|----------|-----------|
| HWD | kg | 1.67e+01 | 6.04e-03 | 6.10e-04 | 5.31e-04 | 2.76e-01 | 8.01e-05 | -6.89e-01 |
| NHWD | kg | 3.93e+01 | 1.21e-01 | 5.36e-02 | 1.06e-02 | 3.51e+00 | 1.83e-03 | -9.31e+00 |
| RWD | kg | 2.90e-04 | 1.25e-06 | 6.93e-07 | 1.10e-07 | 4.82e-05 | 1.12e-08 | -3.07e-06 |

HWD: Hazardous waste disposed **NHWD:** Non hazardous waste disposed **RWD:** Radioactive waste disposed

Output flows

| Indicator | Unit | A1-3 | A4 | C1 | C2 | C3 | C4 | D |
|-----------|------|----------|----|----|----|----------|----|---|
| CRU | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MFR | kg | 1.66e-01 | 0 | 0 | 0 | 4.23e+00 | 0 | 0 |
| MER | kg | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EEE | MJ | 4.44e-03 | 0 | 0 | 0 | 0 | 0 | 0 |
| EET | MJ | 5.99e-02 | 0 | 0 | 0 | 0 | 0 | 0 |

CRU: Components for re-use **MFR:** Materials for recycling **MER:** Materials for energy recovery **EEE:** Exported electrical energy **EET:** Exported thermal energy

| Name | Value | Unit |
|---|----------|------|
| Biogenic carbon content in product | 0 | kg C |
| Biogenic carbon content in accompanying packaging | 2.85e-03 | kg C |

Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

Electricity consumption in the manufacturing phase is composed from the sources below certified by Guarantee of Origin. Electricity is represented by data in ecoinvent 3.10 regionalised for Austria.

| Electricity | Unit | Value |
|-------------|-------------------------------|-------|
| Solar | kg CO ₂ -eq. / kWh | 0.10 |
| Wind | kg CO ₂ -eq. / kWh | 0.03 |
| Hydro | kg CO ₂ -eq. / kWh | 0.33 |
| Geothermal | kg CO ₂ -eq. / kWh | 0.07 |
| Bioenergy | kg CO ₂ -eq. / kWh | 0.05 |
| Gas | kg CO ₂ -eq. / kWh | 0.83 |

Dangerous substances

The product contains no hazardous substances given by the REACH Candidate List or the Norwegian Priority List.

Additional environmental information







Additional environmental impact indicators required in NPCR Part A for construction products

| Indicator | Unit | A1-3 | A4 | C1 | C2 | C3 | C4 | D |
|-----------|-------------------------|----------|----------|----------|----------|----------|----------|-----------|
| GWP-IOBC | kg CO ₂ -eq. | 1.86e+01 | 2.77e-01 | 2.86e-02 | 2.43e-02 | 1.32e+00 | 2.94e-03 | -3.69e+00 |

GWP-IOBC: Global Warming Potential - Instantaneous oxidation of biogenic carbon

Bibliography

| | |
|--------------------------|---|
| DIN EN ISO 14025:2011-10 | Environmental labels and declarations - Type III environmental declarations - Principles and procedures |
| DIN EN ISO 14040:2021-02 | Environmental management - Life cycle assessment - Principles and framework |
| DIN EN ISO 14044:2021-02 | Environmental management - Life cycle assessment - Requirements and guidelines |
| EN 15804:2012+A2:2019 | Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products |
| DIN CENTR 15941:2010-11 | Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data |
| DIN EN 15942:2022-04 | Sustainability of construction works - Environmental product declarations - Communication format business-to-business |
| ISO 21930:2017-07 | Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products and services |
| ecoinvent v3.10 | ecoinvent, Zurich, Switzerland, database version 3.10 |
| PCR | NPCR 013 Part B for Steel and Aluminium Construction Products |
| | Basic principles and recommendations for describing the dismantling, post use, and disposal stage of construction products: https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2020-07-06_texte_130-2020_guidance-document-construction-industry.pdf |
| | ILCD Handbook: https://eplca.jrc.ec.europa.eu/uploads/ILCD-Handbook-LCIA-Background-analysis-online-12March2010.pdf |

| | | | |
|--|---|-------|--|
|  Powered by EPD-Norway | Program Operator | Phone | +47 23 08 80 00 |
| | EPD Global P.O. Box 5250 Majorstuen, N-0303 Oslo Norway | Email | post@epd-norge.no |
| | | Web | www.epd-norge.no |
|  Powered by EPD-Norway | Publisher | Phone | +47 23 08 80 00 |
| | EPD Global P.O. Box 5250 Majorstuen, N-0303 Oslo Norway | Email | post@epd-norge.no |
| | | Web | www.epd-norge.no |
|  | Owner of the declaration | Phone | +43 664 8820 72 84 |
| | BG-Graspointner GmbH Gessenschwandt 39, 4882 Oberwang Austria | Email | alexander.zepetzauer@bg-graspointner.com |
| | | Web | www.bg-graspointner.com |
|  | Author of the life cycle assesment | Phone | +43 664 8820 72 84 |
| | BG-Graspointner GmbH Gessenschwandt 39, 4882 Oberwang Austria | Email | alexander.zepetzauer@bg-graspointner.com |
| | | Web | www.bg-graspointner.com |
|  | ECO Platform ECO Portal | Web | www.eco-platform.org |
| | | Web | ECO Portal |
|  | Developer of EPD generator | Phone | +49 176 56 96 77 91 |
| | Emidat GmbH Sandstraße 33, 80335 München Germany | Email | epd@emidat.com |
| | | Web | www.emidat.com |