

# Product Verification

## Sustainability

Self declared according to DGNB Neubau 2018

### ■ Product Systems

#### Fradiflex® coated metal waterstop system premium

Max Frank GmbH & Co. KG

All concrete structures in contact with the ground must be sealed against ground moisture, seepage water or pressurized water. Our Fradiflex® metal waterstop system meets all requirements for the secure sealing of water-impermeable structures. The flexible special coating bonds with the concrete, creating an adhesive barrier seal that prevents water from circulating. The system can be used for the reliable sealing of construction and predetermined crack joints in in-situ concrete construction and with element walls.

<https://www.maxfrank.com/intl-de/produkte/dichtungstechnik/o2-fugenblech-fradiflex/>



## Product Assessment

### Environmental Quality (ENV)

Criteria	Product Verification
ENV 1.1 Building life cycle assessment (Updated on: 16.07.2018)	EPD available: No
ENV 1.2 Local environmental impact (Updated on: 05.01.2022)	Quality level 4 of 4
ENV1.3.1 Responsibly sourced raw materials	quality level 1 of 3
ENV1.3.2 Secondary raw materials	quality level 1 of 2

Legend: yes = Product contributes toward satisfying the credit, N/A = Product not relevant in the credit, no = Credit requirements are not proven

## Summary

### The product contributes to the certification:

- The product has an Environmental Product Declaration (EPD) which can be used to calculate the building life cycle assessment: EPD available: No
- Achieved quality level in DGNB 2018 Criteria ENV 1.2 Local environmental impact for the entire product: Quality level 4 of 4
- The product achieves the following quality level in criterion ENV1.3.1 (Responsibly sourced raw materials). quality level 1 of 3
- The product achieves the following quality level in criterion ENV1.3.2 (Secondary raw materials). quality level 1 of 2

## Product Properties

### Ingredients:

Free of solvent according to VdL-RL01:	Yes
Free of plasticizer according to VdL-RL01:	Yes
Recycled content post-consumer:	25 wt%
Recycled content pre-consumer:	5 wt%
SVHC according REACH < 0,1 %:	Yes
Free (< 0,1 %) of biocidal:	Yes
Free (< 0,1 %) of chlorinated paraffins (= CP inkl. SCCP, MCCP, LCCP):	Yes
Free (< 0,1 %) of polybrominated diphenyl ethers (= PBDE):	Yes
Free (< 0,1 %) of polybrominated biphenyls (= PBB):	Yes

Free (< 0,1 %) of hexabromocyclododecane (= HBCD):	Yes
Free (< 0,1 %) of tris (2-carboxyethyl) phosphine (= TCEP):	Yes
Free (< 0,1 %) of lead:	Yes
Free (< 0,1 %) of cadmium:	Yes
Free (< 0,1 %) of chromium-VI compounds:	Yes
Free (< 0,1 %) of aromatic compounds:	Yes
Free (< 0,1 %) from halogenated propellants:	Yes
Free (< 0,1 %) of tin:	Yes
Free (< 0,1 %) of halogenated flame retardants:	Yes
Content of solvents:	0 %
Free (< 0,1 %) of halogens:	Yes
Free (< 0,1 %) of hydrocarbon (KWS) plasticizer:	Yes
VOC content according 2004/42/EG:	0,0000000629 g/l
Percentage of the product's composition, that is known to the chemical ingredient level	100 wt%

#### Manufacturer:

Are reverse logistics in place for the product?	No
Environmental Management System according ISO 14001:	Yes

#### Emissions:

Formaldehyde emissions after 28 days according DIN EN 717-1:	0 mg/m <sup>3</sup>
TVOC after 3 days according ISO 16000-3 / AgBB:	0,0000000629 mg/m <sup>3</sup>
Carcinogens 1A and 1B after 3 days according ISO-16000 / AgBB:	0 mg/m <sup>3</sup>
Carcinogens 1A and 1B after 28 days according ISO-16000 / AgBB:	0 mg/m <sup>3</sup>

#### Life Cycle Assessment:

Functional use period	min. 50 a
-----------------------	-----------

#### Circularity:

Has the product been designed for reuse, refurbishment or remanufacturing?	No
Is the product designed for a recycling of equal quality?	No
Product was designed with cycling in mind.	No

Was the Product designed for emission or direct dispersal? No

Was the product specifically designed for clean and rapid disassembly? No

## Product Components

Name	Amount	Material type		Total Weight	Specific Weight	Portion (%)
		/ Function	DfD			
Hot-dip galvanised sheet	1.000		No	4.710	5 kg / m <sup>2</sup>	97.72 %
Fradiflex® adhesive coating	2.000		No	0.110	0 kg / m	2.28 %

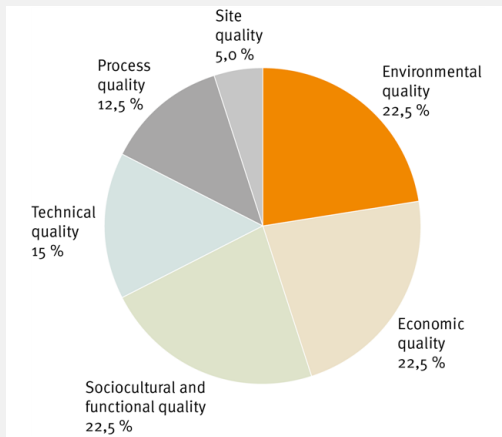
## System description

The DGNB certification system was founded by the "German Sustainable Building Council" and first appeared on the market in 2008. The DGNB system evaluates buildings holistically on the basis of individual criteria within the categories Ecological Quality, Economic Quality, Sociocultural and Functional Quality, Technical Quality, Process Quality and Location Quality. Different profiles allow the certification of new buildings and existing buildings, as well as of quarters in Germany and Internationally. Buildings can achieve a certification in Bronze, Silver, Gold and Platinum. Up to now, more than 3,500 projects have been awarded by the DGNB (as of June 2018).

Source: [www.dgnb.de](http://www.dgnb.de)

## System categories

### Category Weighting



Source: DGNB 2018

### Category

### Category considered in product verification

Environmental quality (ENV)	Yes
Economic quality (ECO)	No
Sociocultural and functional quality (SOC)	No
Technical quality (TEC)	No
Process quality (PRO)	Yes
Site quality (SITE)	No

# Detailed Verification

Self declared according to DGNB Neubau 2018

## ■ Environmental Quality (ENV)

### ■ ENV 1.1 LBuilding life cycle assessment (Updated on: 16.07.2018)

The product has an Environmental Product Declaration (EPD) which can be used to calculate the building life cycle assessment:

Fradiflex® coated metal waterstop system premium	EPD available: No
--	-------------------

An environmental product declaration exists for the product:

Fradiflex® coated metal waterstop system premium	No
Hot-dip galvanised sheet	No
Fradiflex® adhesive coating	No

EPD Owner of the Declaration:

Fradiflex® coated metal waterstop system premium	IBU
Hot-dip galvanised sheet	No Information
Fradiflex® adhesive coating	No Information

EPD Publisher:

Fradiflex® coated metal waterstop system premium	IBU
Hot-dip galvanised sheet	No Information
Fradiflex® adhesive coating	No Information

EPD Programme holder:

Fradiflex® coated metal waterstop system premium	IBU
Hot-dip galvanised sheet	No Information
Fradiflex® adhesive coating	No Information

EPD Declaration number:

Fradiflex® coated metal waterstop system premium	IBU
Hot-dip galvanised sheet	No Information
Fradiflex® adhesive coating	No Information

**EPD Issue date:**

<b>Fradiflex® coated metal waterstop system premium</b>	IBU
Hot-dip galvanised sheet	No Information
Fradiflex® adhesive coating	No Information

**EPD valid to:**

<b>Fradiflex® coated metal waterstop system premium</b>	IBU
Hot-dip galvanised sheet	No Information
Fradiflex® adhesive coating	No Information

**■ ENV 1.2 Local environmental impact (Updated on: 05.01.2022)**
**Achieved quality level in DGNB 2018 Criteria ENV 1.2 Local environmental impact for the entire product:**

<b>Fradiflex® coated metal waterstop system premium</b>	<b>Quality level 4 of 4</b>
---	-----------------------------

**Achieved quality level in DGNB 2018 Criterion ENV 1.2 Local environmental impact:**

<b>Fradiflex® coated metal waterstop system premium</b>	Quality level 4
Hot-dip galvanised sheet	Quality level 4
Fradiflex® adhesive coating	Quality level 4

**Coatings - on NON-mineral interior sub-surfaces (DGNB ENV1.2 Row 1):**

<b>Fradiflex® coated metal waterstop system premium</b>	No Information
Hot-dip galvanised sheet	No
Fradiflex® adhesive coating	No Information

The product does not fall under any of the above listed product groups according to DGNB 2018 ENV 1.2

The entire product does not fall under a DGNB 2018 requirement in ENV 1.2 Local environmental impact. The product helps to achieve the following quality level:

<b>Fradiflex® coated metal waterstop system premium</b>	<b>4</b>
---	----------

The product does not fall under a DGNB 2018 requirement in ENV 1.2 Local environmental impact. The product helps to achieve the following quality level:

<b>Fradiflex® coated metal waterstop system premium</b>	Quality level 4
Hot-dip galvanised sheet	Quality level 4
Fradiflex® adhesive coating	Quality level 4

The product does not fall under any of the above listed product groups according to DGNB 2018 ENV 1.2 or the relevant product group is evaluated on the components:

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	Yes

#### ■ ENV1.3.1 Responsibly sourced raw materials

The product achieves the following quality level in criterion ENV1.3.1 (Responsibly sourced raw materials).

Fradiflex® coated metal waterstop system premium	quality level 1 of 3
--	----------------------

The raw materials for the production of the product were extracted, mined or manufactured free of child and forced labor.

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	Yes

For the raw materials used for the production of the product, illegal raw material mining / manufacturing can be excluded.

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	Yes

Material extraction and further processing takes place entirely in Europe.

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	Yes

The product meets the requirements of quality level 1:

Fradiflex® coated metal waterstop system premium	quality level 1 of 1
Hot-dip galvanised sheet	quality level 1 of 1
Fradiflex® adhesive coating	quality level 0 of 1

The manufacturer takes responsibility for responsible and transparent resource extraction and can demonstrate this through CSR reports and proof of origin of the raw materials.

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	No



### ■ ENV1.3.2 Secondary raw materials

The product achieves the following quality level in criterion ENV1.3.2 (Secondary raw materials).

Fradiflex® coated metal waterstop system premium	quality level 1 of 2
--	----------------------

The raw materials for the production of the product were extracted, mined or manufactured free of child and forced labor.

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	Yes

For the raw materials used for the production of the product, illegal raw material mining / manufacturing can be excluded.

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	Yes

Material extraction and further processing takes place entirely in Europe.

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	Yes

#### metal

The metal fraction in the product is obtained from secondary raw materials of the following quality level:

Fradiflex® coated metal waterstop system premium	1 of 1
--	--------

The product is mainly made of metal

Fradiflex® coated metal waterstop system premium	Yes
Hot-dip galvanised sheet	Yes
Fradiflex® adhesive coating	No

Metal content in the product

Fradiflex® coated metal waterstop system premium	95 %
Hot-dip galvanised sheet	100 %
Fradiflex® adhesive coating	No Information

**Proportion of secondary material in the metal (Recycled Content)**

<b>Fradiflex® coated metal waterstop system premium</b>	10 %
Hot-dip galvanised sheet	0 %
Fradiflex® adhesive coating	No Information

**othermaterials**

The product meets the quality level in the category of other material groups:

<b>Fradiflex® coated metal waterstop system premium</b>	No Information
---	----------------

The product does not consist of any of these materials

<b>Fradiflex® coated metal waterstop system premium</b>	No
Hot-dip galvanised sheet	No
Fradiflex® adhesive coating	Yes

Recycled content pre-consumer:

<b>Fradiflex® coated metal waterstop system premium</b>	5 wt%
Hot-dip galvanised sheet	No Information
Fradiflex® adhesive coating	No Information

Recycled content post-consumer:

<b>Fradiflex® coated metal waterstop system premium</b>	25 wt%
Hot-dip galvanised sheet	N/A wt%
Fradiflex® adhesive coating	No Information

## ■ Contact Details Manufacturer

### Max Frank GmbH & Co. KG

Mitterweg 1  
94339 Leiblfing  
DE  
<http://www.maxfrank.de/>



## ■ Disclaimer

This verification is the evaluation and ranking of products in terms of the certification system DGNB 2018 (New construction building). The DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen) generally does not certify products. Therefore the project team or the manufacturer is responsible to declare compliance with respect to the DGNB criteria. Notice: This verification is generated by the Assessment Service of BMS. The distribution or publication by third parties is not permitted. The data sheet is not a DGNB certification document. The information is based on the manufacturer's specifications. Despite a diligent treatment of all information BMS can not make any warranties about the completeness, reliability and accuracy of this information. The requirements of DGNB can be interpreted differently and depend on the project and scope of application. Therefore, BMS cannot accept any liability for the evaluation in terms of the DGNB criteria. The user of the data sheet, the user / purchaser of the product and the consultant / planner, who is advising on this product has the duty to check the product for the intended application at their own responsibility. When a new version of this product verification is produced, the previous version loses its validity.