



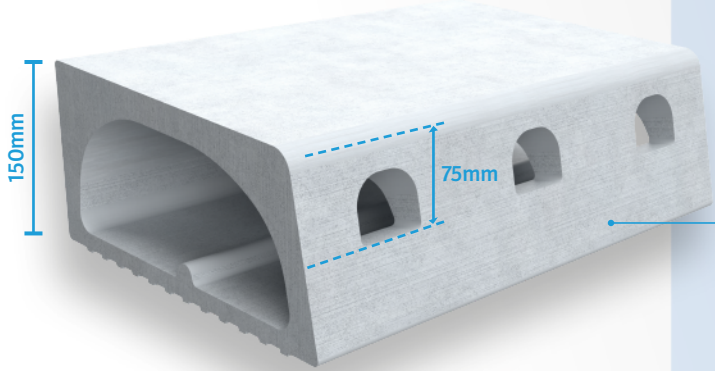
Suitable for
75 and 150 mm
Kerb height and
all heights in
between

BRIDGE DRAINAGE UNIT

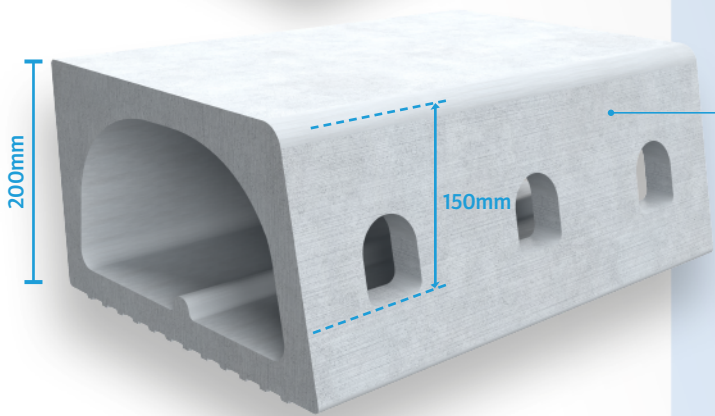
The bridge drainage channel Type M is designed to collect and discharge surface and structural water from bridges and elevated roads, used by all types of road vehicles.

AVAILABLE HEIGHT OPTIONS

The height of the inlet openings is milled to project-specific dimensions.



BD350x150 = 150mm high element
Top slope 4%
(according to BAST guideline Kap12)



BD350x200 = 200mm high element
Top slope 2%
(according to BAST guideline Kap12)



TECHNICAL FEATURES AND ADVANTAGES



The bridge drain elements are made of one material and are moulded monolithically. In other words, they are manufactured in one piece, which ensures a stable structure with high impact resistance.

LOADING CLASSES

Can be used up to group 4 (min. class D400) type M in accordance with the manufacturer's installation instructions (see installation instructions for bridge drainage). Test basis EN1433:2005-09 Section 7.15.). 40 tonnes load capacity.

CONFORMITY

Conformity with EN1433:2005-09

MATERIAL AND DURABILITY

Recycled plastic composite material.
It can be paved or asphalted.



WATERPROOF

No leakage according to 9.3.6 of the standard (see installation details of the bridge drainage). Test basis EN1433:2005-09 Section 7.5.1

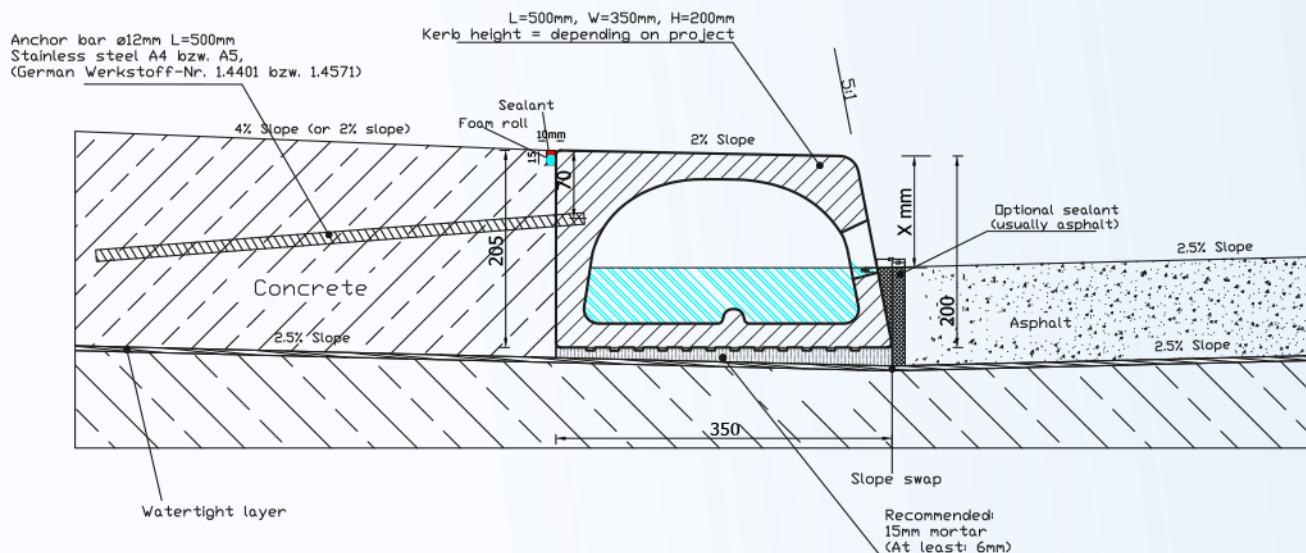
Light weight allows manual installation by one person. No machinery required. High installation capacity per day.

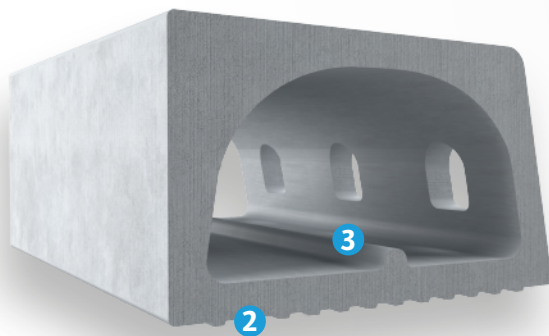
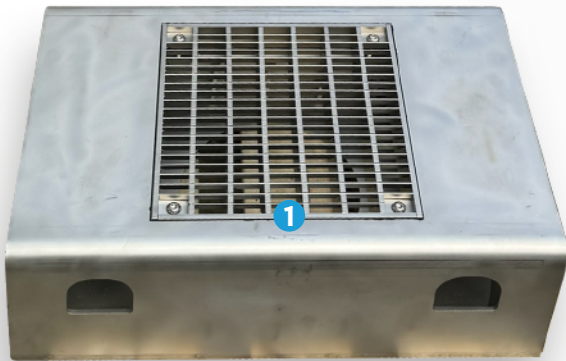
System advantages:

- Environmentally friendly, made from 70% recycled plastic.
- Versatile applications.
- Large inlet cross-section ensures high drainage capacity, rapidly removing water.
- Well-suited for installations involving numerous cables and pipes.
- 2-in-1 solution: curb and drainage pipe installed in one step.
- Prevents aquaplaning through rapid drainage.
- Prevents corrosion of the structure since the bridge body is not perforated.
- Ideal for renovation and new construction of bridge projects.

Placement advantages:

- Lightweight ($\pm 15-18$ kg) makes the built in elements easy to transport and quick to install.
- No heavy lifting tools required.
- Easy connection to the sewer system.
- Up to 60% lighter than concrete.
- Flat placement.





MAINTENANCE

Easy maintenance through inspection and suction elements.

Advantages of maintenance:

- Simple cleaning using flushing methods.
- Resistant to frost and de-icing salts.
- Easily accessible via inspection elements from the road surface.

1 INSPECTION OPENING

For maintenance work, the cover of the inspection element can be opened. This allows the bridge drainage system to be inspected and cleaned with a high-pressure water jet.

2 RIBBED BASE FOR BETTER ADHESION

Since the elements are installed on a mortar bed, they are equipped with a ribbed base plate that enhances adhesion to the mortar and improves the stability of the channel.

3 INTERNAL FLOW DIVIDER

The additional internal flow divider generates a dry-weather drainage channel. During minor rainfall events, only the dry-weather drainage channel is activated. This results in higher flow velocity and increased shear stress for the removal of contaminants.

CUSTOM SOLUTIONS

We specialize in customization. Depending on your requirements, we determine which element best fits your project. We can utilize various production locations, material types, and manufacturing methods to meet your schedule and needs. Below are some examples of custom products:



Riga, Kekava (LT)
Taller model



Kamen A1 (DE)
120mm recessed unit



Aarburg (CH)
Stainless steel unit
with anti-slip structure



Kirchdorf (DE)
SMC unit with
anti-slip structure



STAINLESS STEEL DOWELS (according to RiZ kap12)

If necessary, and to increase the stability of the unit in the event of snow ploughs being used, we can optionally add stainless steel anchor rods that connect to the bridge cap.



Weight load
40 tons load capacity
Class D-400

COMPLIES WITH CLASS D-400

The elements have been tested in collaboration with Kiwa Berlin and are capable of withstanding weight loads of up to 40 tons.

Weather resistance: +R

CERTIFICATES AND REPORTS

- Declaration of Conformity EN1433:2005-09, including Annex A, Annex ZA, Annex B and Annex C
- Kiwa Test Certificate EN1433:2005-09 Class D400
- Ecoras Quickscan LCA Impact Report Bridge Drainage Unit

CE Konformitätserklärung

NORM EN1433 VERORDNUNG (EU) 305/2011 BAUPRODUKTE

Brückenentwässerungsrinne des Typs M zum Sammeln/Abführen des Oberflächen- und Schichtenwasser von Brücken und Hochstraßen die durch alle Arten von Straßenfahrzeugen genutzt werden.

| | |
|--------------------------------------|---|
| PRODUKT: | BRIDGE DRAINAGE BD350 und BD350/150 |
| BELASTUNGSKLASSE: | Anwendbar bis Gruppe 4 (Klasse min. D400) Typ M gemäß den Installationsanweisungen des Herstellers (siehe Installationsdetails Bridge Drainage). Prüfgrundlage EN1433:2005-09 Abschnitt 7.15) |
| KONFORMITÄT ZU: | EN1433:2005-09 Inklusief Annex A, Annex ZA, Annex B, Annex C |
| MATERIAL UND DAUERHAFTIGKEIT: | Verbundwerkstoff aus recyceltem Kunststoff |
| ABMESSUNGEN: | L=500mm, B=350mm, H=200/205mm oder H=150/164mm |
| WASSERDICHTHEIT: | Keine Leckage gemäß Abschnitt 9.3.6 der Norm (siehe Installationsdetails Bridge Drainage). Testgrundlage EN1433:2005-09 Abschnitt 7.5.1 |
| ZERTIFIZIERTES PRÜFINSTITUT | KIWA GmbH Zweigniederlassung MPA Berlin-Brandenburg Nr. 0770 |
| WETTERBESTÄNDIGKEIT | + R (KIWA KOAC ref: la22.3299) |
| RAUHIGKEIT | Pendulum Test Value: 38 (ermittelt nach der Pendelmethode gemäß RAW 2000 Test 76 mit Gummiplatte "96") |

Innovative Drainage Solutions Business
Park Stein 108, Elsloo, The Netherlands

Impact Report

2023

Assignment: Calculator LCA Bridge Drainage Unit
Date: 12-07-2023
Version: Final Report

Bridge Drainage

Bridge Drainage is a company that supplies and address clients on water drainage solutions on bridges. The solutions focus on quickly but gradually draining water, increasing safety of the road and its users. The products are placed in such a way that no separate system has to be incorporated in the structure of the bridge deck, meeting maintenance and possible repairs more easily and accessible.

Unterszeichnet:

Datum: 2. Februar 2024

Post: Erik van Garsel,
Technischer Leiter
IDS-Group / Bridge Drainage

Testbericht No P000373956

Certificate of the tests performed

- Test certificate Nr. P000373956-1 -

For the construction product

"BD350" and "BD350/150"

Designing: 3889103 (2016/2021), BD350P, 3891000 (06/15/2023), BD350/150P

produced for

BRIDGE DRAINAGE SOLUTIONS BV
Belegstraat 32
6174 RZ Swithouten
Netherlands

Code: 001

at the plant

according to the test report no.: P000373956 (02/02/2024)

and the underlying evidence confirms that the following tests have been carried out on the construction product with the results stated below:

| Test | Standard | Result |
|----------------------|--------------------------------|---------------------------|
| Weightiness | EN 1433:2005-06, Section 7.5.1 | passed |
| Maximum Load (Bridg) | EN 1433:2005-06, Section 7.15 | passed Load class D400 |

The above drawings are on file at Kiwa.
The certificate is valid until 01/02/2026.
The manufacturer is therefore authorized to label the product in accordance with this certificate as follows:

Bvba, 08020204
02/02/2024

IV Dr. Henk Stille