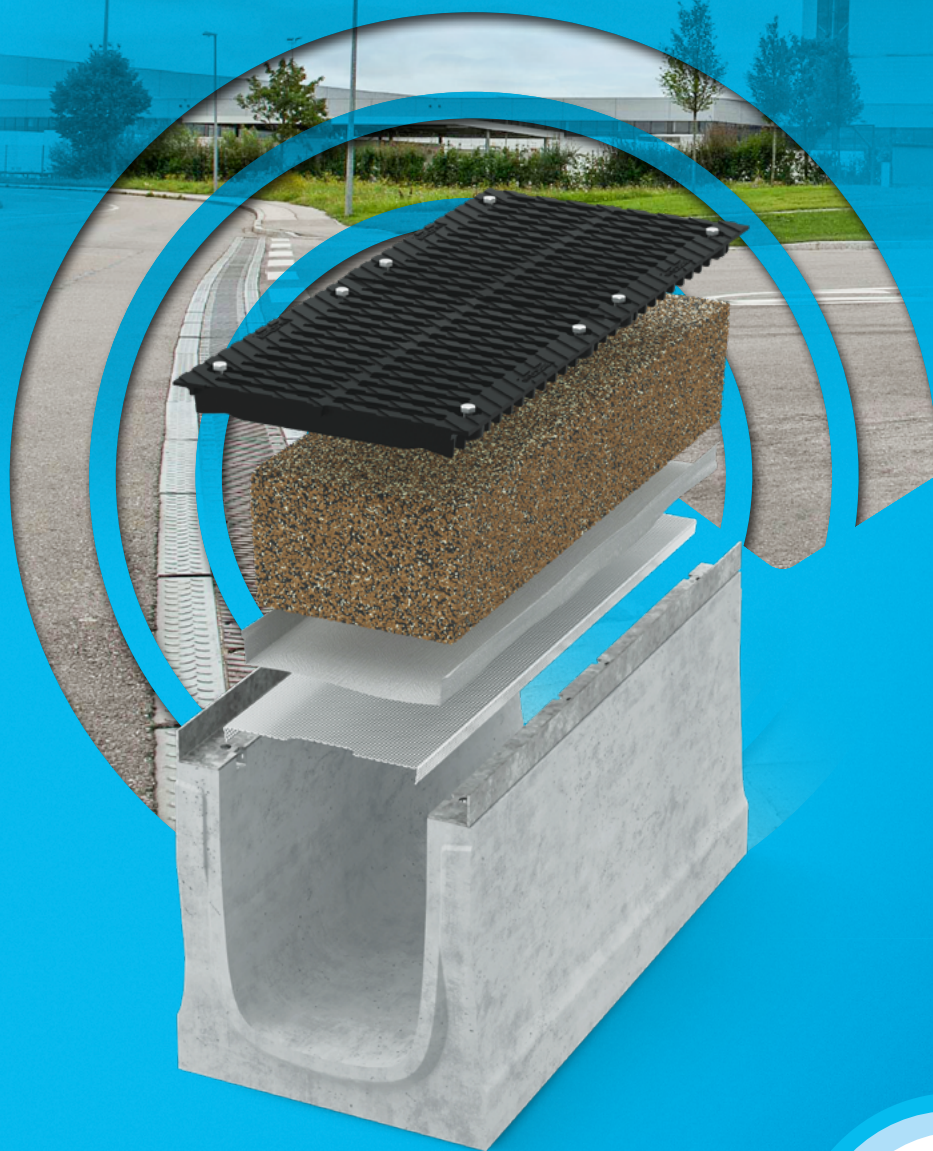


BIRCOevo[®]

FILTRATION PURE AND SIMPLE

The decentralised system for rainwater treatment directly in the drainage channel



BECAUSE WATER
IS PRECIOUS.



Why treat rainwater?

RAINWATER MANAGEMENT IS A PRIORITY. FOR EVERYONE.



Sealed surfaces dominate the landscape: car parks, logistics sites, roads and industrial estates. Rainwater runs off everywhere, picking up pollutants along the way, such as tyre abrasion, petroleum hydrocarbons, heavy metals like zinc and copper, microplastics and very fine particles.

If left untreated, this water causes lasting damage when it enters watercourses or the groundwater. Legislators and professional associations are responding: the German Water Works Association (DWA) standards A 102, A 138 and M 179 set out clear requirements for the treatment of rainwater. And they are continuously updated.

For planners, architects and developers, this means that surface drainage is no longer sufficient. What is needed are systems that both drain and treat. And which are also space-saving, cost-effective and future-proof. The condition of the filter can be checked at any time by a simple visual inspection.

Another advantage: many existing BIRCO channels can be easily retrofitted with BIRCOevo® – without civil engineering work, without new pipeline infrastructure. Sustainability that pays off.

**BIRCOevo® INTEGRATES
FILTRATION DIRECTLY INTO THE CHANNEL**

No need for additional treatment space. No detours.
Cost-effective and efficient.

What is BIRCOevo®?

A FLEXIBLE, COMPLETE FILTRATION SYSTEM.

BIRCOevo® is a decentralised filtration system that integrates seamlessly into compatible BIRCO concrete channels. It combines surface and depth filtration in a compact design. It is decentralised and located directly in the path of the rainwater flow.

The system consists of five components that work together:

1 GRATING COMPLIANT WITH THE LOAD CLASSES AS PER EN 1433 STANDARD

- + Standard load classification, fully compatible with the existing BIRCO channel system

2 BIRCOtrioolith® FILTER SUBSTRATE

- + The specially developed filter substrate consists of three carefully balanced natural components. It retains pollutants through adsorption and ion exchange
 - Loose filling with a minimum depth of 200 mm

3 GEOTEXTILE (NON-WOVEN FABRIC)

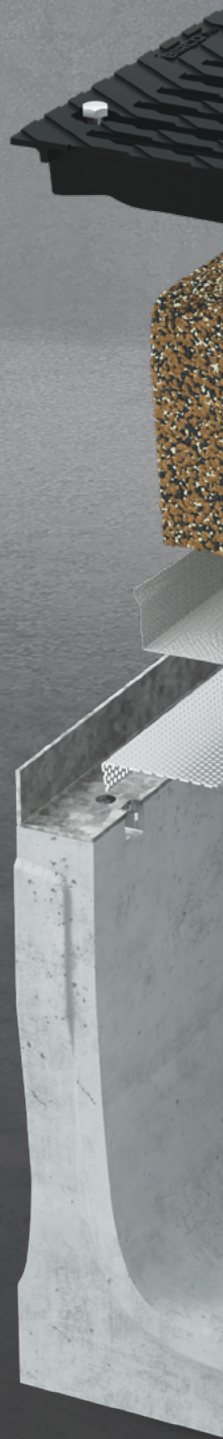
- + Prevents the filter substrate from spilling into the channel and ensures a smooth flow of water

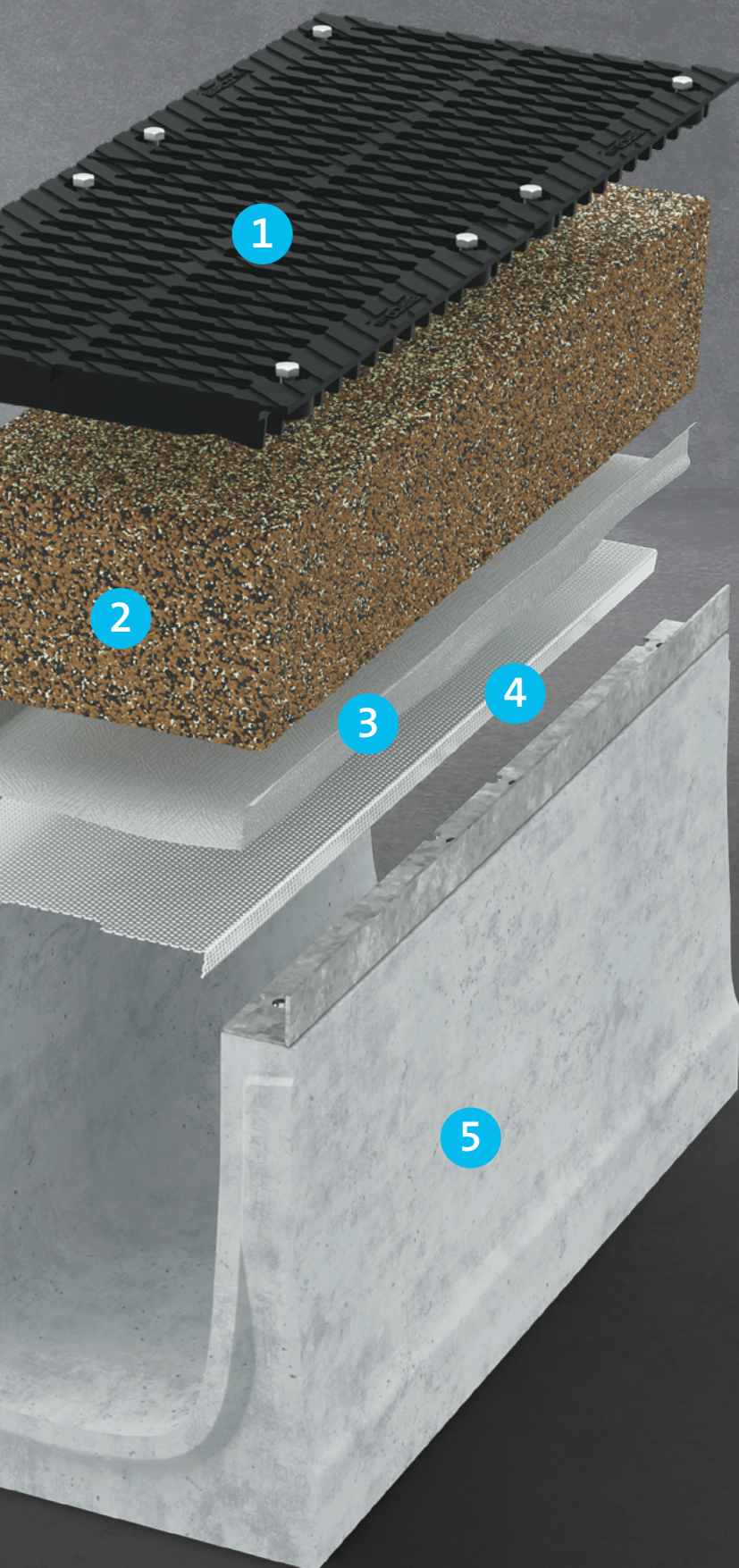
4 SUBSTRATE SUPPORT PLATE MADE OF STAINLESS STEEL (V2A)

- + Statically dimensioned perforated stainless steel sheet as a substrate carrier with two recessed handles for easy handling. Available in two edge-folding variants or two thicknesses (1.5 or 3.0 mm), depending on the nominal diameter of the channel

5 CONCRETE CHANNEL IN ACCORDANCE WITH EN 1433 STANDARD

- + Compatible BIRCO concrete channels with space for a substrate depth of at least 200 mm. Suitable for use in new builds. Or for retrofitting, provided the required installation height is available (see page 8).





-
- + Technical approval pending (DIBt)*
 - ▲ EXPECTED TO BE AVAILABLE FROM SUMMER 2026
 - + Complies with German DWA standards in accordance with technical data sheets A 102, A 138 and M 179
-

* German Institute for Building Technology

Why BIRCOevo®?

FIVE ARGUMENTS OF CHOICE

1. LARGER SURFACE AREA PER LINEAR METRE

Thanks to its larger connection surface area compared to similar filter systems on the market, BIRCOevo® achieves more over a shorter distance. There is less risk of backwater (no backwater at all when tested up to 125 l/(s ha)), higher flow capacity and lower costs per square metre treated.

2. A WIDE RANGE OF PRODUCTS TO SUIT ALMOST EVERY NEED

With four compatible channel ranges in nominal widths from 100 to 520 mm and a wide variety of configuration options, BIRCOevo® covers a broad spectrum of design tasks and applications. Whether for light traffic areas or heavy-duty industrial sites, there is a suitable BIRCOevo® solution for almost every requirement.

3. CAN BE RETROFITTED TO EXISTING BIRCO CHANNELS

Existing BIRCO channels can be easily retrofitted with the evo filter system, provided that the drainage system allows for a minimum installation height of 200 mm for the filtrate. This saves costs and enables cost-effective system refurbishment without the need for civil engineering works.

4. COMPATIBLE WITH NARROW NOMINAL WIDTH CHANNELS

With its nominal diameter of NW 100 (BIRCOsir® 100), BIRCOevo® offers a clear unique selling point. Anyone needing to filter in the tightest of spaces will find a solution here. Without compromise.

5. FILTER PERFORMANCE WELL ABOVE THE STANDARD

Independent tests show that BIRCOevo® significantly exceeds the standard requirements in all relevant parameters.



The heart of the filtration process

THE BIRCOtriolith® FILTER SUBSTRATE

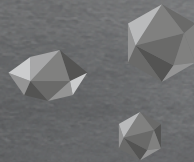


The filtering performance of BIRCOevo® depends entirely on the right substrate. That is why BIRCO has developed its own filter substrate: BIRCOtriolith® – a combination of three natural components tailored to the system, which together retain a wide range of pollutants.

BIRCOtriolith® is a registered BIRCO brand and is intended exclusively for use in the BIRCOevo® filter system. Its filtration performance has been independently tested and exceeds the standard requirements in all relevant parameters.

BIRCOtriolith® REMOVES THE FOLLOWING SUBSTANCES:

- + Filterable substances (AFS filterable solids < 63 µm)
- + Tyre wear
- + Microplastics
- + Mineral oil hydrocarbons
- + Polycyclic aromatic hydrocarbons
- + Heavy metals (zinc, copper, etc.)



SERVICE LIFE AND MAINTENANCE

BIRCOtriolith® has a service life of up to 10 years, depending on the project-specific pollutant loads and the chosen maintenance interval. Regular inspection and maintenance are essential for ensuring long-term filtration performance.

The detailed maintenance instructions in accordance with the DIBt approval are available for download at:

www.birco.com/service/downloads/maintenance-instructions/



AVAILABLE FORMATS

- + Big bag: approx. 1 m³ – for larger projects and efficient processing
- + Bagged product: 20-litre bags – for smaller quantities and refills



BESPOKE ADAPTATIONS

For special applications, customised substrate mixtures and project-specific modifications to the geotextile are available on request.

Important note: The building authority approval (applied for – expected to be available from summer 2026) applies exclusively to the use of BIRCOtriolith® in its standard configuration. In the case of customised substrate mixtures, the approval may not be applicable.

Applications & Compatibility

Whether it's a new build or a renovation: BIRCOevo® is the perfect fit

BIRCOevo® is designed for applications where rainwater from sealed surfaces is conveyed into drainage channels and requires treatment before discharge or infiltration.

TYPICAL APPLICATIONS

- + High-traffic roads and car parks
- + Logistics centres and commercial sites
- + Industrial estates
- + Municipal development sites
- + Suitable for treating sites classified as Category II (DWA-A 102) and Category III (DWA-A 138) as per German rainwater law

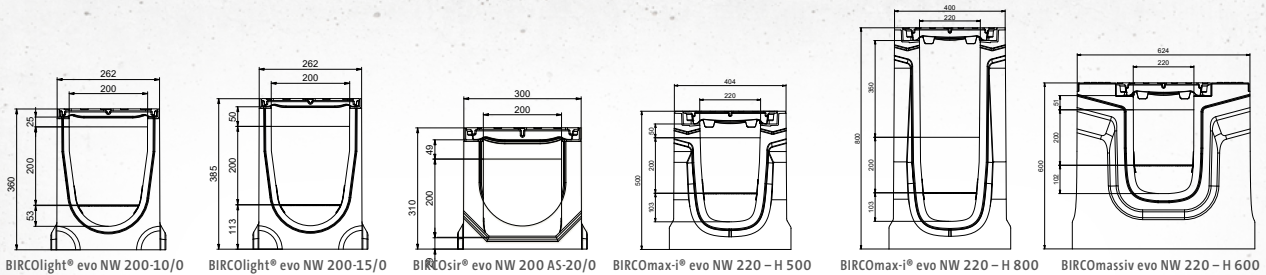


RENOVATION OF EXISTING BUILDINGS

Existing BIRCO channels that meet the minimum installation height can be retrofitted with the BIRCOevo® system without the need for extensive construction work. This means that even older drainage systems can be brought into line with local rainwater law requirements.

BIRCOevo® PRODUCT OVERVIEW

SETS



NW	LOAD CLASS	BIRCOevo® PRODUCTS	HEIGHT	ARTICLE NO.	CONNECTION SURFACE A_{red} [m ²]	LENGTH [mm]	WIDTH AT TOP [mm]	WIDTH AT BOTTOM [mm]
100	C 250	BIRCOsir® evo	370	552003072	6.6	1000	200	205
	D 400			552003074	6.6			
	E 600			552003075	6.6			
	F 900			552003078	6.6			
200/220	C 250	BIRCOlight® triloc evo	360	552122872	13.3	1000	262	294
	D 400			552122874	13.3			
	C 250	BIRCOlight triloc® evo	385	552122972	13.3	1000	262	294
	D 400			552122974	13.3			
	E 600	BIRCOsir® evo	410	552023274	13.3	1000	300	332
	F 900			552023278	13.3			
	D 400	BIRCOmax-i® evo	500	55682052974	14.4	3000	400	440
	E 600			55682052975	14.4			
	F 900			55682052978	14.4			
	D 400	BIRCOmax-i® evo	800	55682082974	14.5	3000	400	440
	E 600			55682082975	14.5			
	F 900			55682082978	14.5			
	D 400	BIRCOmassiv evo	600	551621874	14.5	3000	570	610
	F 900			551621875	14.5			
F 900	551621878			14.5				
300/320	D 400	BIRCOlight triloc® evo	400	552132874	19.9	1000	363	395
	D 400	BIRCOmax-i® evo	600	55683062974	21.0	3000	500	540
	E 600			55683062975	21.0			
	F 900			55683062978	21.0			
	D 400	BIRCOmax-i® evo	800	55683082974	20.8	3000	500	540
	E 600			55683082975	20.8			
	F 900			55683082978	20.8			
	D 400	BIRCOsir® evo	550	552032874	21.2	1000	450	490
	E 600			552032875	21.2			
F 900	552032878			21.2				

SETS

NW	LOAD CLASS	BIRCO ^{evo} PRODUCTS	HEIGHT	ARTICLE NO.	CONNECTION SURFACE A _{red} [m ²]	LENGTH [mm]	WIDTH AT TOP [mm]	WIDTH AT BOTTOM [mm]	
420	D 400	BIRCOmax-i [®] evo	700	55684072974	27.4	3000	600	640	
	E 600			55684072975	27.4				
	F 900			55684072978	27.4				
	D 400	BIRCOmax-i [®] evo	1000	55684102974	27.4	3000	600	640	
	E 600			55684102975	27.4				
	F 900			55684102978	27.4				
	D 400	BIRCOmax-i [®] evo	1200	55684122974	27.4	3000	600	640	
	E 600			55684122975	27.4				
	F 900			55684122978	27.4				
	520	D 400	BIRCOsir [®] evo	550	552042874	27.9	1000	550	590
		E 600			552042875	27.9			
		F 900			552042878	27.9			
D 400		BIRCOmax-i [®] evo	800	55685082974	34.1	3000	700	740	
E 600				55685082975	34.1				
F 900				55685072978	34.1				
D 400		BIRCOmax-i [®] evo	1000	55685102974	34.1	3000	700	740	
E 600				55685102975	34.1				
F 900				55685102978	34.1				
D 400		BIRCOmax-i [®] evo	1200	55685122974	34.1	3000	700	740	
E 600				55685122975	34.1				
F 900				55685122978	34.1				
520	D 400	BIRCOsir [®] evo	550	552052874	34.6	1000	650	690	
	E 600			552052875	34.6				
	F 900			552052878	34.6				

SUBSTRATE LEVELLING TOOL AND SUBSTRATE HOLDER

NW	BIRCO ^{evo} PRODUCTS	HEIGHT	ARTICLE NO.
100	BIRCOsir [®] evo	370	552003010
200/220	BIRCOLight triloc [®] evo	360	552122810
	BIRCOLight triloc [®] evo	385	552122910
	BIRCOsir [®] evo	410	552023210
	BIRCOmax-i [®] evo	500	55682052910
	BIRCOmax-i [®] evo	800	55682082910
300/320	BIRCOmassiv evo	600	551621810
	BIRCOLight triloc [®] evo	400	552132810
	BIRCOmax-i [®] evo	600	55683062910
	BIRCOmax-i [®] evo	800	55683082910
	BIRCOsir [®] evo	550	552032810
420	BIRCOmax-i [®] evo	700	55684072910
	BIRCOmax-i [®] evo	1000	55684102910
	BIRCOmax-i [®] evo	1200	55684122910
	BIRCOsir [®] evo	550	552042810
520	BIRCOmax-i [®] evo	800	55685082910
	BIRCOmax-i [®] evo	1000	55685102910
	BIRCOmax-i [®] evo	1200	55685122910
	BIRCOsir [®] evo	550	552052810

FILTER SUBSTRATE

BIRCO ^{evo} PRODUCTS	ARTICLE NO.
BIRCOtrilith [®] (20-litre bags)	5560002
BIRCOtrilith [®] (1 m ³ Big Bags)	5560001

Installation & setup

SIMPLE. PRECISE. STANDARD-COMPLIANT.

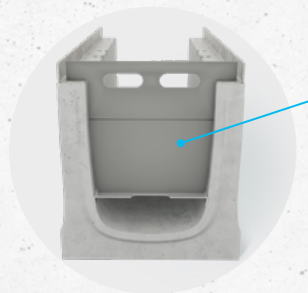
The installation of BIRCOevo® follows a systematic approach and can be carried out efficiently on site. A channel-specific levelling template is available for every compatible channel type.

Installation in four steps

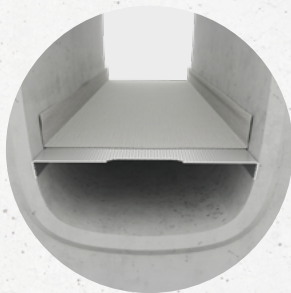
1

INSERT THE SUPPORT PLATE

The perforated stainless steel plate (V2A) is inserted into the channel body. The recessed handles on both sides make it easier to handle. The levelling tool ensures that the plate is securely and horizontally seated.



Levelling tool



2

GEOTEXTILE

The geotextile is positioned on the support plate and prevents the substrate from spilling into the drainage channel.

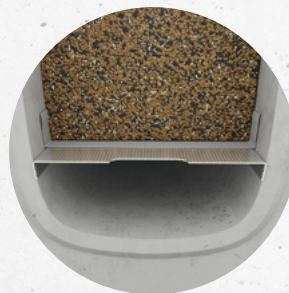
The BIRCOevo® levelling tool has two functions:

- + Secure positioning of the support plate (force-fit, horizontal fit)
- + Precise levelling of the filter substrate to the required installation height

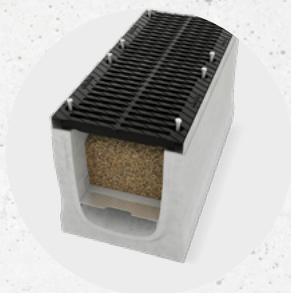
3

FILL IN BIRCOtriolith® AND LEVEL IT

The filter substrate is poured into the channel body. The levelling tool serves as a gauging tool: it is guided along the channel and ensures that the substrate height meets the required 200 mm with precision.



Available for each type of BIRCOevo® channel



4

INSTALL THE GRATINGS

The suitable gratings, in accordance with EN 1433, are positioned and fastened. The system is ready for use.

BECAUSE WATER IS PRECIOUS.

Find out more about BIRCOevo® and discover the right drainage system for your project.



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