

# ***Product catalogue***

*Beilharz Road Equipment*



*To get you  
home safely ...*



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**To get you  
home safely ...**

# Quality from manufacturer

To get you home safely ...

## 01 Ideas for greater safety

Every new product is based on Beilharz's known innovative drive. Whether a simplified design, greater road safety or sustainability – products from Beilharz solve problems and improve safety.

## 02 Development

The name Beilharz stands for top-quality, customer-driven and practically-oriented solutions. Thanks to our specific know-how and our high level of vertical integration, we can easily produce not only our standard products but also small batches and special series.

## 03 Prototyping and testing

Beilharz sets new standards in the field of road equipment and takes this responsibility seriously. Which is why new products are subject to various test scenarios.

## 04 Production

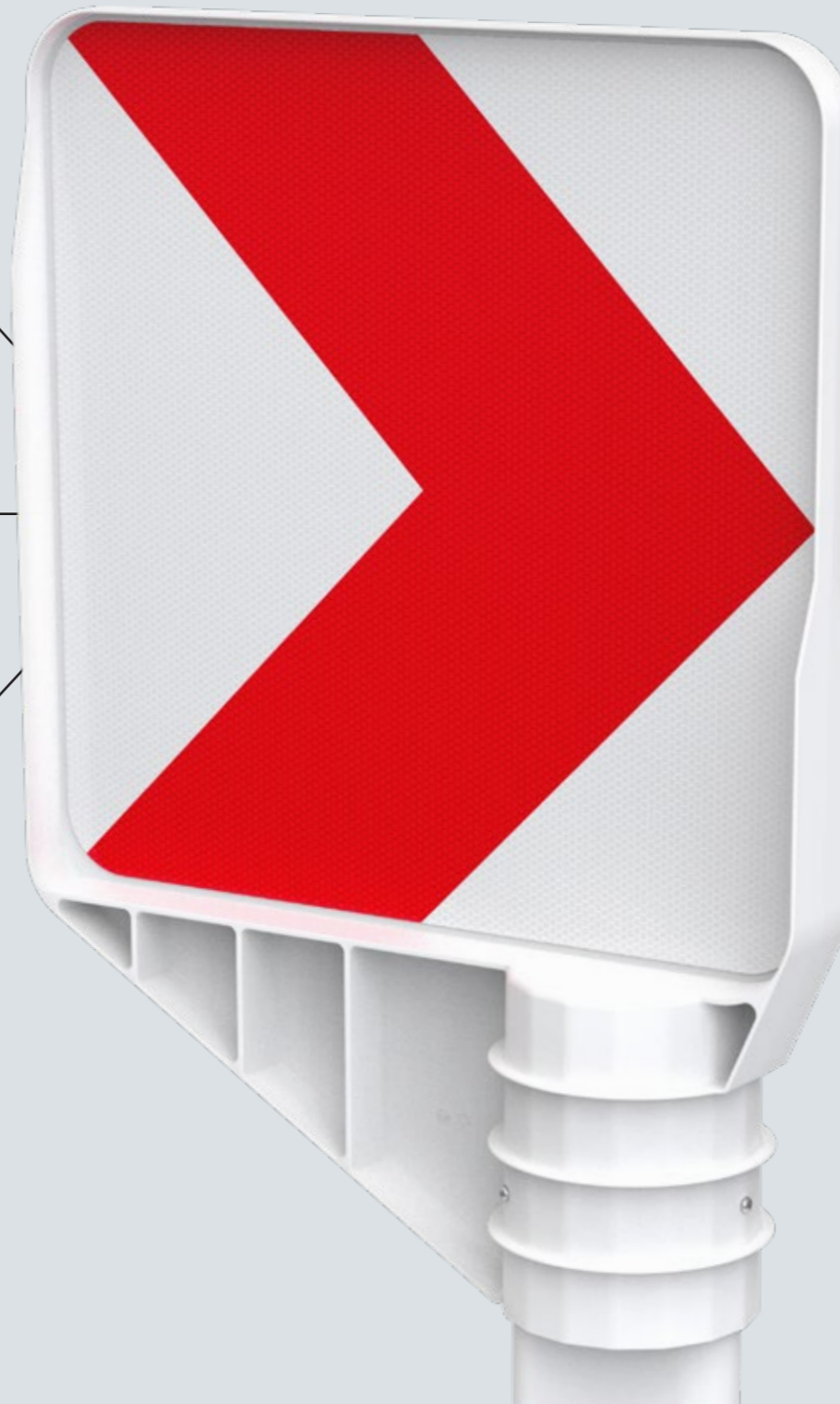
A process-reliable production method is crucial for a top-of-the-range product. Apart from manufacturing plastic products (extrusion, blow moulding and injection moulding), Beilharz are also masters of the further processing of steel (forming, welding, milling etc.).

## 05 Quality assurance

Our products are characterised by the highest level of quality and reliability. Every single component is monitored and tested during the production process. Beilharz has been certified in accordance with ISO 9001:2015 and ISO 14001:2015, amongst others.

## 06 Service

Our employees are always a good contact in terms of qualification and professional competence. We are happy to make our know-how available to you during consultation, in the quotation and order phase, and in after-sales.





# Vorwärts!®

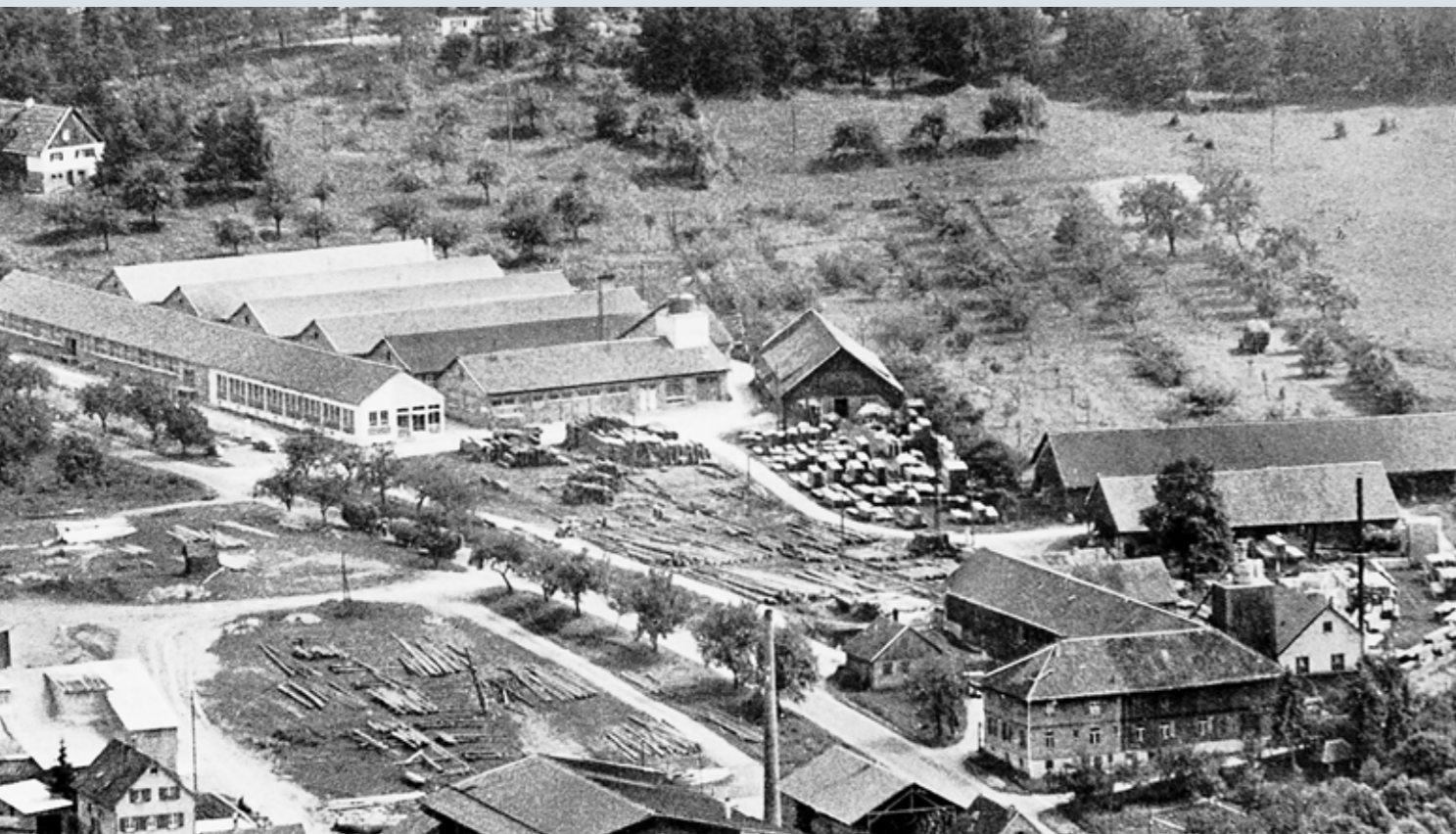
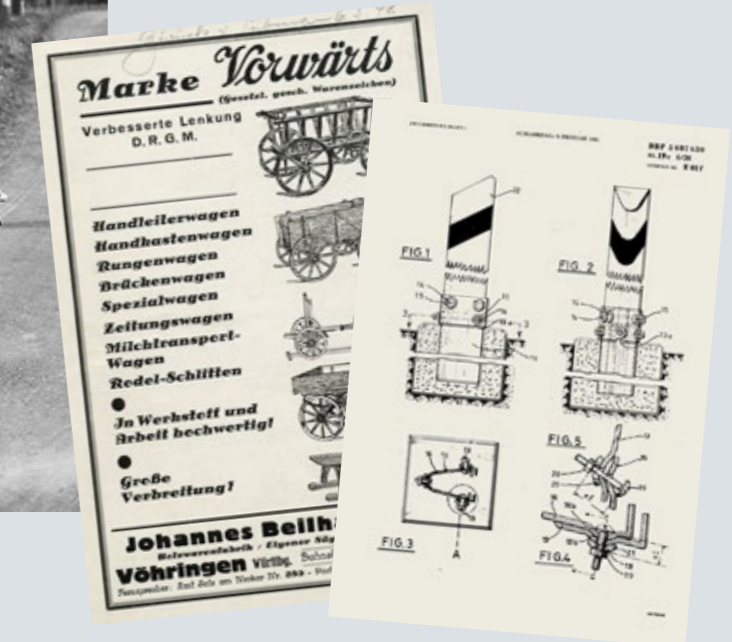
Our mission since 1907



## Brand Vorwärts® (Forwards) – our mission since 1907

In 1907, Friedrich and Johannes Beilharz took over their father Johannes' business and continued to manage it under the name Gebrüder Beilharz. The foundation of Johannes Beilharz KG in 1938 mark the start of a lasting success story. Since 2008, Beilharz has been managed as a family-run enterprise in the fourth generation.

As a result of the continuous and consistent expansion of the product portfolio, the company developed into a leading supplier of road equipment – and not just in Germany. Beilharz offers one-stop quality with its broad-based product catalogue.



In its early years, the company initially manufactured malt mills, washing machines and handcarts under the well-known brand name "Vorwärts®". Beilharz took out its first patent for triangular delineators in 1957.

This was the first milestone in the company's history and the basis for today's success.

**Vorwärts - Straßenkarren**  
**Splittkarren - Schotterkarren - Straßenkehrerkarren**  
 leicht laufend, strapazierfähig

*Jetzt wie Abb. auf Rückseite zeigt:*  
**Doppelte Fußstützen**



# Vorwärts!®

Sustainable thinking

## Our sights are always set on the future

As a company with a high innovative drive, we constantly have our sights on the market needs, though also the sustainability of our actions. We are already using plastics we have recycled ourselves in our products and the majority of these are manufactured using self-generated power.

Thank to the use of innovative technologies, we are constantly lowering our CO<sub>2</sub> emissions – all of this for the sake of the environment.

## The new Vorwärts® delineator is standard with us!

We help you to achieve your environmental goals:

- **Closed cycle of life** – old guide posts are turned into new Vorwärts® guide posts. And that with equivalent technical properties, appearance and quality.
- Through the use of the Vorwärts® delineators are on average about 1.5 kg of CO<sub>2</sub> each Delineator cover saved. Compared to conventional delineators, which predominantly are made from new material this is a **saving of approx. 72% of CO<sub>2</sub>**.
- Only on the German delineator post market related, could by using the Vorwärts® delineator posts an impressive **CO<sub>2</sub> saving of approx. 1,710 t per year** be reached.



## Return

In the course of delivering new goods to our customers, we take back old, damaged delineators in a cycle. The return is normally done by our own vehicles on swap frames, which ensures that the material does not end up in waste incineration plants.

## Recycling

The material taken back is separated from foreign substances such as earth, metal, wood or glass at our company location in Vöhringen - Germany. The old delineator post covers are then shredded, cleaned and dried in our in-house recycling facilities. At the end of these operations, HDPE flakes remain for further processing.

## Remanufacturing

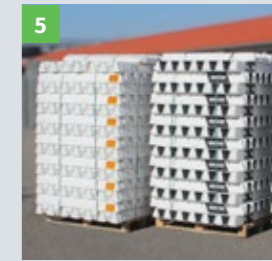
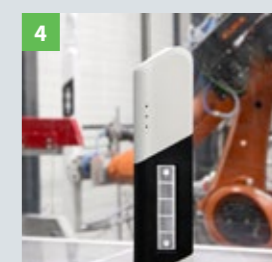
The HDPE flakes are melted, homogenized and subjected to further filtration in order to safely remove any foreign matter that remains. At the end of this work process, it is further processed into gray granules, a recyclate made of white delineators with black day markings and reinforcements.

## Reprocessing

In our in-house production facilities, the gray recyclate, with the addition of HDPE new material for the outer white top layer, are used to make our Vorwärts® delineator posts in the well-known BEILHARZ quality. In the entire production process, we thus significantly reduce the use of raw materials and energy and thus save approx. 72% CO<sub>2</sub> per delineator.

## Reuse

At the end of the production chain are our Vorwärts® delineators, tested and certified according to DIN EN 12899-3, which are now being used again on roads and traffic routes. By the way, also Vorwärts® delineators can be completely processed into new Vorwärts® delineators after use in our closed material cycle. Vorwärts® – Sustainably good!



# Vorwärts!®

Thinking ahead

The name Beilharz stands for innovative delineators. Our company history is peppered with numerous milestones. Be prepared for the next ones....



**1953**  
Wooden delineators



**1957**  
Shear-off delineators  
of wood with a wedge



**1965**  
Delineators  
made of plastic



**2022**  
*Vorwärts!*  
Delineators



# Road equipment

Approved worldwide

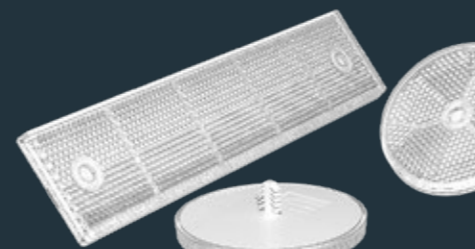
Delineators

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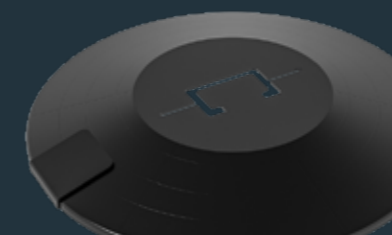
Reflectors

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Grass stop plates

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VARIO system

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VARIO delineator cap for curves

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VARIO support system

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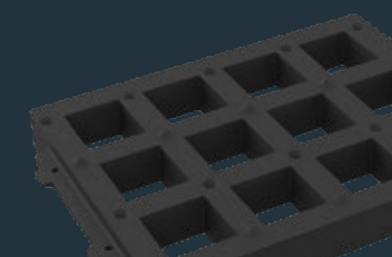
VARIO modular

42



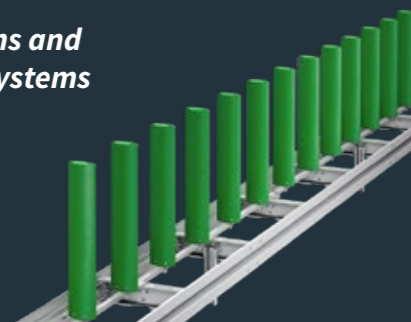
Honeycomb pavers

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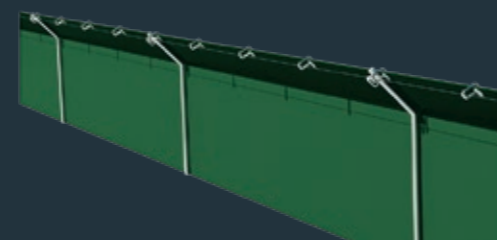
Anti-glare screens and curve marking systems

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Amphibian protection systems

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Parking lot equipment

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**Quality**  
"Made in Germany"

Roadworks security 58

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# Delineators

The optimum solution for any situation

Quality  
directly from  
Manufacturer

Beilharz has been manufacturing and developing delineators for over 60 years. Apart from their high functionality, our delineators are also characterised by long-lasting quality.

Beilharz delineators are manufactured in one piece with a perfectly smooth surface. Consequently, the delineators have no weld seams at which they could break.

Tested and approved in accordance with DIN EN 12899-3 (CE certified).

**bast** BAST-tested in accordance with EN 12676

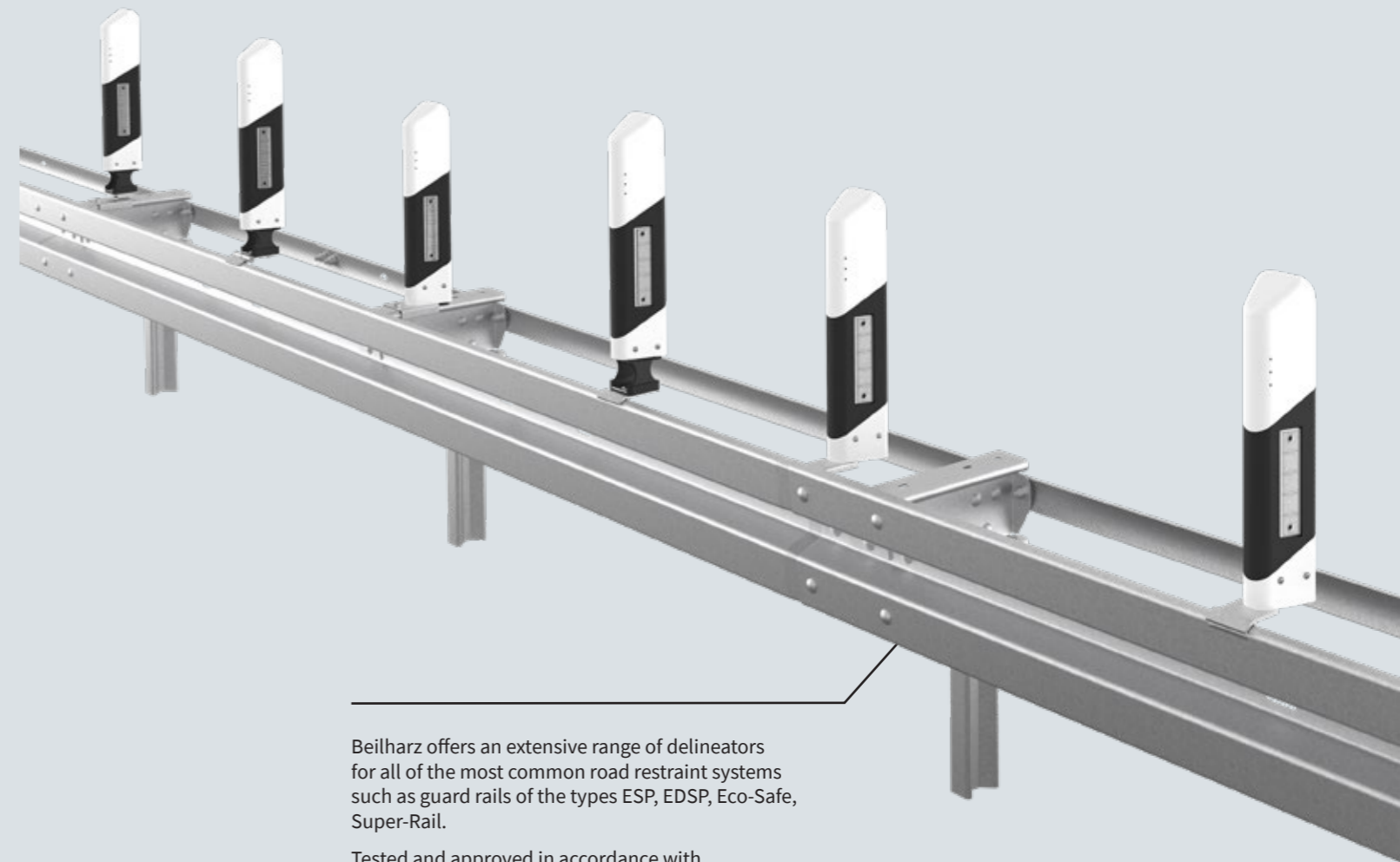


## Quality from BEILHARZ

- delineator post made of high-molecular low-pressure polyethylene (PE-HD-HM)
- white surface with black day number plate, which is flat and welded in over the entire surface
- delineator post covers made from one piece without welds
- extremely robust, UV and ozone resistant
- resistant to cold and heat
- resistant to acids and alkalis
- resistant to exhaust fumes and salt
- resistant to mechanical loads and stone chipping
- reinforcement of the wall thickness in critical areas for even greater stability
- smooth surface, making it easy to clean and care for Reflectors in recessed pockets
- serial hole for receiving the telephone information arrows
- tested and approved according to DIN EN 12899-3 (CE-certified)

## Tailored to your needs

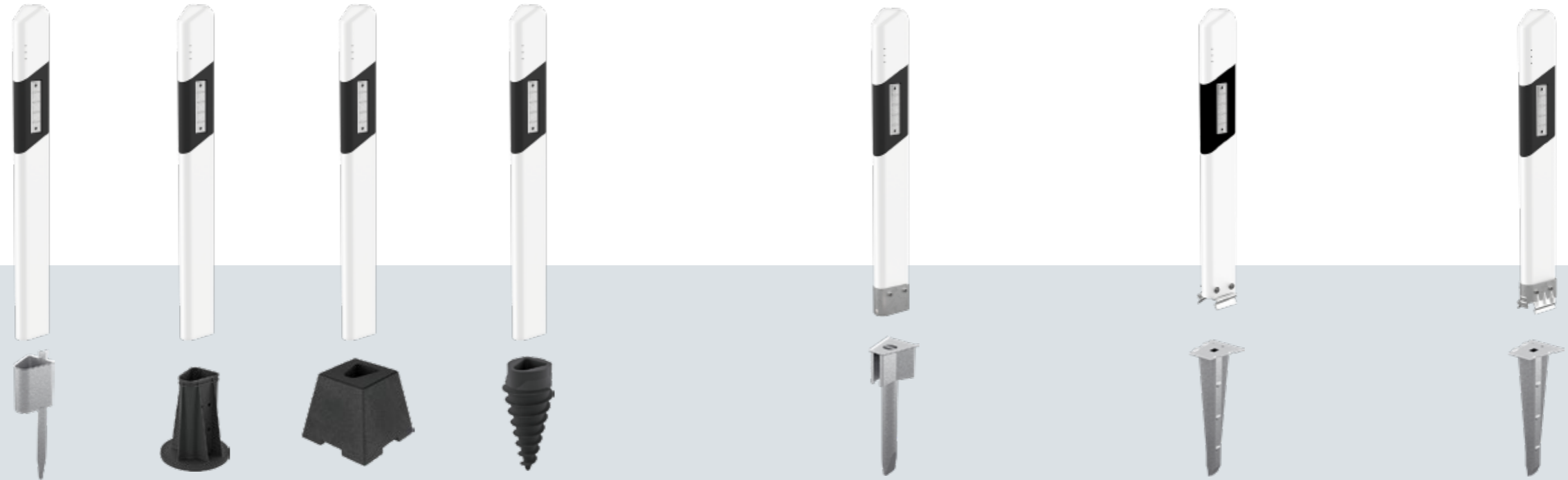
- delineator posts in different variants for installation in the street verge
- delineator post for mounting on various vehicle restraint systems
- optional accessories for extended control functions
- different wall thicknesses for different requirements
- various stiffeners for even greater resistance to mechanical stress
- reflectors in different classes and colors







Beilharz offers an extensive range of delineators for all of the most common road restraint systems such as guard rails of the types ESP, EDSP, Eco-Safe, Super-Rail.

Tested and approved in accordance with DIN EN 12899-3 (CE certified).






	Ground-mounted delineators				Shear-off delineators		
Type	LP 611				LP 311	LP 315	LP 316
Delineator length	120 cm				105 cm		
Thicknesses	3 mm / 4.5 mm / custom thicknesses				3 mm / 4.5 mm / custom thicknesses		
Bottom	open / closed				 with wedge and break-off clip	 to tip up	 to pitch up
Reinforcement	without / tubular core / profiled core with hole for snow poles up to Ø 50 mm				without / tubular core / profiled core with hole for snow poles up to Ø 50 mm		
Reinforcement length	50 cm / 75 cm / 100 cm				50 cm / 75 cm		
Options	Metal drive-in base with iron T on rear <sup>1</sup> Metal drive-in base with semi-circular plate on rear <sup>2</sup> Metal drive-in base with round pipe <sup>3</sup>	Plastic dig-in base <sup>4</sup> with 6 vertical reinforcing ribs Weight approx. 0.55 kg Dimensions D x H approx. Ø 25 x 30 cm Recyclable base Type 120 <sup>5</sup> Weight approx. 10.5 kg Dimensions L x W x H ca. 30 x 30 x 25 cm	Concrete base stone <sup>6</sup> Weight approx. 20 kg Dimensions L x W x H approx. 24 x 24 x 18 cm Concrete base stone Type LPF-0 <sup>7</sup> with integrated grass stop plate Weight approx. 42 kg Dimensions D x H approx. Ø 38/25 x 36 cm	Plastic screw base <sup>8</sup> Weight approx. 3 kg Height approx. 46 cm (with square slot 6 x 6 x 10 cm in addition to the delineator holder) Steel screw base <sup>9</sup> Weight approx. 2.2 kg Height approx. 46 cm	Circular tube base part <sup>10</sup> specially made for LP 311 with wedge, break-off clip and fixing metal strap Universal base part with wedge and break-off clip <sup>11</sup> Universal base part for anchor bolts with wedge and break-off clip <sup>14</sup>	Universal base part <sup>12</sup> Universal base part for anchor bolts <sup>14</sup>	Universal base part <sup>13</sup> Universal base part for anchor bolts <sup>14</sup>
Option – profiled core safety catch	 The profiled core safety catch is blown into the delineator at the top and bottom – environmentally friendly and long-lasting reliability				-	-	-



# Further options for Beilharz delineators



Type	Self-righting delineators		Dig-in delineators	
	LP 317		LP 621	LP 624
Delineator length	105 cm		160 cm / 150 cm / 145 cm	160 cm (casing 105 cm)
Thicknesses	3 mm / 4.5 mm / custom thicknesses			
Bottom	 to pitch up		open / closed	open
Reinforcement	Profiled core with self-righting mechanism		without / tubular core / profiled core with hole for snow poles up to Ø 50 mm	Profiled core with hole for snow poles up to Ø 50 mm
Reinforcement length	-		100 cm / 155 cm	155 cm
Options	Universal base part <sup>15</sup> Universal base part for anchor bolts <sup>14</sup>		Recyclable base Type 160 <sup>16</sup> Weight approx. 10.5 kg Ø 20 cm, Height 60 cm Insertion depth 55 cm Recyclable base Type 150 <sup>17</sup> Weight approx. 9 kg Ø 20 cm, Height 50 cm Insertion depth 45 cm Recyclable base Type 145 <sup>18</sup> Weight approx. 8.5 kg Ø 20 cm, Height 45 cm Insertion depth 40 cm Pull-out safety mechanism <sup>19</sup> (with / without)	-



**Delineator with integrated wildlife warning reflector**  
possible for all models



**Delineator with top hole for snow poles**  
(also possible in combination with profiled core reinforcement for maximum delineator stability)



**Delineator with indentation for location signs**  
as riveted, screwed or clip-in version possible for all models



**Delineator with integrated telescopic snow pole**  
in a triangular or round design



**Delineator with different coloured daytime marking on one or both sides**




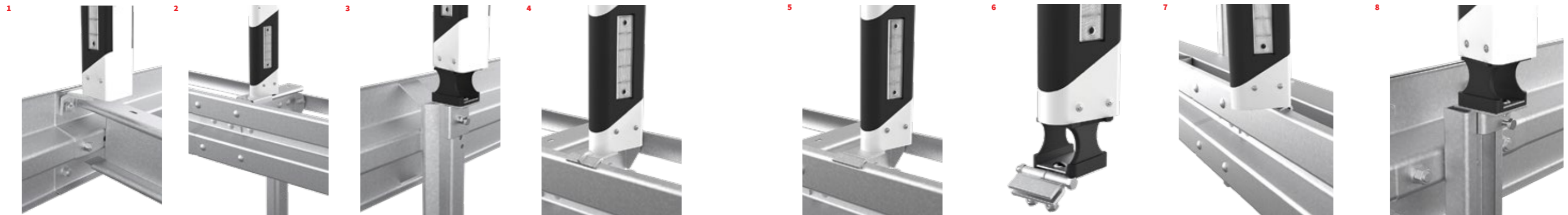
**The integrated profile core safety catch**  
– environmentally friendly and long-lasting reliability

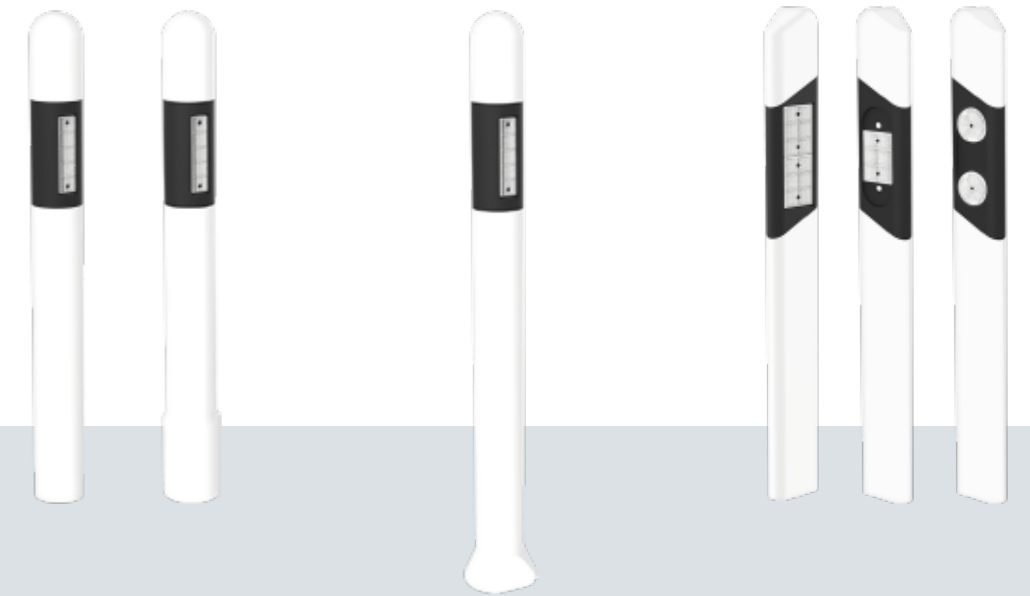
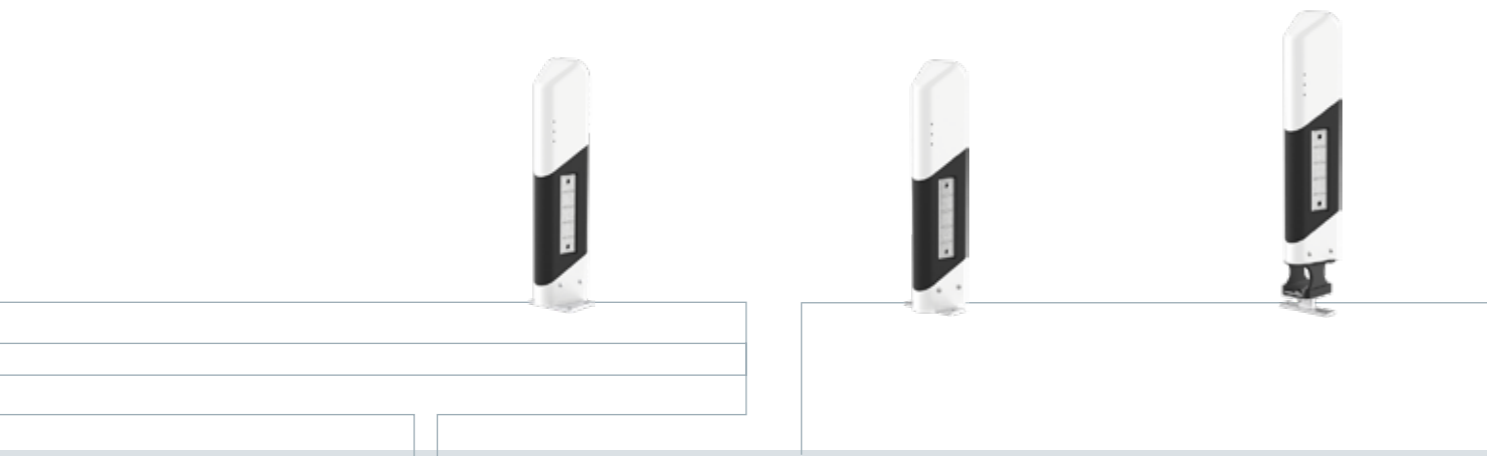





**Guard rail delineators**

Type	LP 536	LP 536 FLEX	LP 539	LP 539 FLEX	LP 540	LP 540 FLEX	LP 544	LP 544 FLEX	LP 544 Multi-Flex	LP 548	LP 549	LP 549 FLEX
Delineator length	55 cm						55 cm					
Thicknesses	3 mm / 4.5 mm / custom thicknesses						3 mm / 4.5 mm / custom thicknesses					
Holder	Steel holder <sup>1</sup> for all guard rail types ESP, DSP, EDSP, DDSP Mounted on the guard rail joint using the existing M16 screw	Steel holder <sup>1</sup> with self-righting function via FLEX element for all guard rail types ESP, DSP, EDSP, DDSP Mounted on the guard rail joint using the existing M16 screw	Screw clip <sup>2</sup> for spaced guard rail types EDSP, DDSP Mounted on the guard rail spacer	Screw clip <sup>2</sup> with self-righting function via FLEX element for all spaced guard rail types EDSP, DDSP Mounted on the guard rail spacer	Twin pawl holder <sup>3</sup> for guard rail types with open-top posts Mounted directly on the Sigma 100 or IPE 100 posts of the guard rail	Twin pawl holder <sup>5</sup> with self-righting function via FLEX element for guard rail types with open-top posts Mounted directly on the Sigma 100 or IPE 100 posts of the guard rail	Malleable cast iron holder <sup>4</sup> or steel holder <sup>5</sup> for all guard rail types ESP, DSP, EDSP, DDSP, Super-Rail Mounted on the spar at any point on the guard rail with two M10 hex bolts	Malleable cast iron holder <sup>4</sup> or steel holder <sup>5</sup> with self-righting function via FLEX element for all guard rail types ESP, DSP, EDSP, DDSP, Super-Rail Mounted on the spar at any point on the guard rail with two M10 hex bolts	Steel holder with self-righting function <sup>6</sup> via FLEX element and infinitely variable hinge for different angles For all guard rail types ESP, DSP, EDSP, DDSP, Super-Rail Mounted on the spar at any point on the guard rail with two M10 hex bolts	Steel clamp bracket <sup>7</sup> offset to the front for mounting on guard rails with a handrail Mounted on the spar at any point on the guard rail with two M10 hex bolts	Steel holder for mounting on guard rail types with open-top C-posts (e.g. C-100 or C-125), Sigma-100 post	Steel holder with self-righting function via FLEX elements for mounting on guard rail types <sup>8</sup> with open-top C-posts (e.g. C-100 or C-125), Sigma-100 post
Options	 Fastening for casing and holder with screw bridge (for guard rails w/o FLEX)						Fastening for casing and holder with screw bridge (for guard rails w/o FLEX)					







**Guard rail delineators**

Type	LP 546	LP 541	LP 541 FLEX
Delineator length	55 cm		
Thicknesses	3 mm / 4.5 mm / custom thicknesses		
Holder	Screw clip for guard rails with box section <sup>9</sup> Mounted on the box section	Steel holder for concrete barriers <sup>10</sup> Mounted on the concrete barrier	Steel holder for concrete barriers with self-righting function via FLEX element Mounted on the concrete barrier
Options	 Fastening for casing and holder with screw bridge		none



**International delineators**

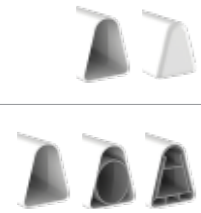
Type	Round delineator Ø 120 mm, 1.20 m	Round delineator Ø 120 mm, 1.40 m	Swiss freeway / motorway
Description	Ground-mounted delineators	Dig-in delineators	Ground-mounted/dig-in delineators
Delineator length	120 cm	140 cm	120 cm to 160 cm
Thicknesses	3 mm / 4.5 mm / custom thicknesses	3 mm / 4.5 mm / custom thicknesses	3 mm / 4.5 mm custom thicknesses
Bottom	 open / closed	open / closed	open / closed
Reinforcement	 without	without	without / tubular core / profiled core with hole for snow poles up to Ø 50 mm
Reinforcement length	-	-	50 cm / 75 cm / 100 cm / 155 cm
Profile	round Ø 120 mm	round Ø 120 mm	triangular
Reflectors	40 x 180 mm Ø 60 mm	40 x 180 mm Ø 60 mm	80 x 120 mm / 80 x 240 mm Ø 80 mm
Options	with/without integrated wildlife warning reflector with/without rotation lock bottom flared to Ø 140 mm (Type Grisons)	with pull-out safety mechanism with/without integrated wildlife warning reflector	pull-out safety mechanism with/without integrated wildlife warning reflector All types are also possible as guard rail delineators with all holders





**International delineators**

Type	EAST	Belgium, triangular	Belgium, flat	Netherlands, flat	Sweden nordic	Poland
Description	Dig-in delineators	Dig-in delineators	Dig-in delineators	Dig-in delineators	Dig-in/ground-mounted or guard rail delineators	Dig-in/ground-mounted or guard rail delineators
Delineator length	100 cm to 200 cm	120 cm	112 cm and 140 cm	112 cm and 140 cm	0.55 to 1.60 m	0.55 to 1.60 m
Thicknesses	3 mm	3 mm	3 mm	3 mm	3 mm / 4.5 mm / custom thicknesses	3 mm / 4.5 mm / custom thicknesses
Bottom	-	open / closed	-	-	open / closed	open / closed
Reinforcement	-	without / tubular core / profiled core with hole for snow poles up to Ø 50 mm	-	-	without / tubular core / profiled core with hole for snow poles up to Ø 50 mm	without / tubular core / profiled core with hole for snow poles up to Ø 50 mm
Reinforcement length	-	50 cm / 75 cm / 100 cm			50 cm / 75 cm / 100 cm / 155 cm	50 cm / 75 cm / 100 cm / 155 cm
Profile	120 x 3 mm, semi-circular/flexible	triangular	100 x 3 mm, semi-circular/flexible	100 x 3 mm, semi-circular/flexible	triangular	triangular
Reflectors	e.g. 40 x 100 mm or 40 x 180 mm, other dimensions possible	80 x 120 mm, on both sides	40 x 180 mm	40 x 180 mm	40 x 180 mm, on both sides	40 x 180 mm, on both sides
Options	with/without black marking Custom lengths possible	with/without pull-out safety mechanism	with pull-out safety mechanism, installation and stacking aid	with pull-out safety mechanism, installation and stacking aid	Mounted in bases or on guard rails (see the respective guard rail design) with/without integrated snow pole with/without integrated wildlife warning reflector	Mounted in bases or on guard rails (see the respective guard rail design) with/without integrated snow pole with/without integrated wildlife warning reflector





# Reflectors

Tested to EN-12899

Good reflectors made a major contribution to improving road safety at night and in poor weather. Our reflectors comply with the latest European standards.



## Reflectors for concrete barriers


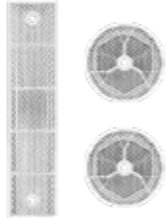
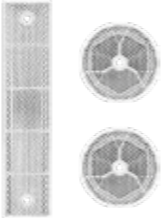
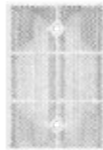
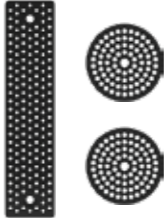
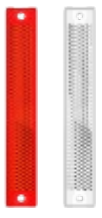






Type	TOP reflector	SIDE reflector	Reflector for mobile protection systems
Design	Multiple-cell or glass bead reflector (reflective on one or both sides)	Multiple-cell or glass bead reflector (reflective on one or both sides)	Plastic reflector (reflective on one or both sides)
Dimensions	80 x 120 mm	80 x 120 mm	Casing 130 x 22 mm Reflector 120 x 18 mm Hole diameter 5.5 mm
Reflector colour	white / yellow / red *	white / yellow / red *	white / yellow
Coefficients of luminous intensity	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	-
Tested	acc. to EN 12899	acc. to EN 12899	BAS test acc. to reflectors for mobile protection systems
Plastic body	white	white	white / yellow
Mounting	Can be mounted on concrete barriers, guard rails with a box profile	For mounting on the side of concrete barriers and tunnel walls	Can be screwed or stuck into place



\*Custom colours possible

# Reflectors

Tested to EN-12899

	Reflectors for delineators				Reflectors for snow poles	
Type	Click reflector	Reflector with hole	Extra strong reflectors	Reflector 80 x 120 mm	Glass bead reflectors	Reflector for snow poles
Design	Multiple-cell reflector	Multiple-cell reflector	Multiple-cell reflector	Multiple-cell reflector	Glass bead reflectors	Multiple-cell reflector
Dimensions	40 x 180 mm Ø 60 mm	40 x 180 mm Ø 60 mm / Ø 80 mm	40 x 180 mm Ø 60 mm / Ø 80 mm	80 x 120 mm / 80 x 240 mm	40 x 180 mm / 80 x 120 mm Ø 60 mm / Ø 80 mm	18 x 120 mm
Reflector colour	white / yellow *	white / yellow / red *	white / yellow *	white / yellow / red *	white / yellow *	white / red *
Coefficients of luminous intensity	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	-	Class 1 acc. to EN 12899
Tested	acc. to EN 12899	acc. to EN 12899	acc. to EN 12899	acc. to EN 12899	acc. to EN 12899	BAS test acc. to reflectors for mobile protection systems
Mounting	with fixed snap-in element	with rivets or screws	as a click reflector, with rivets or screws	with rivets or screws	with rivets or screws	with rivets or screws
						
	Reflectors for guard rails					
Type	Snap reflector	Snap reflector 2	Double angle bracket	Reclip reflector	Trapezium reflector	Trapezium snap reflector
Design	Multiple-cell or glass bead reflector	Semi-circular RA2/RA3 foil	Multiple-cell or glass bead reflector	Multiple-cell or glass bead reflector	Multiple-cell reflector	Multiple-cell reflector
Dimensions	Ø 60 mm	40 x 160 mm	Ø 60 mm	80 x 120 mm	180/45 mm, 70 mm (side x height)	180/45 mm, 70 mm (side x height)
Reflector colour	white / red / yellow *	white / red *	white / yellow / red *	white / yellow / red *	white / yellow / red *	white / yellow / red *
Coefficients of luminous intensity	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899	Class 2 acc. to EN 12899
Tested	acc. to EN 12899	acc. to EN 12899	acc. to EN 12899	acc. to EN 12899	acc. to EN 12899	acc. to EN 12899
Body	Black plastic	Black plastic	Galvanised steel	White plastic	White plastic	Black plastic
Mounting	On guard rails with oblong holes	On guard rails with oblong holes	Steel guard rails with an M16 bolt in the guard rail joint	Clip onto guard rails without screws, for guard rails with an A-profile	On an M16 bolt for guard rails with an A-profile	On guard rails with oblong holes and an A-profile
						

\* Custom colours possible

# The general wildlife warning reflector

A system with numerous advantages



## Optimum reflection properties

### Colour

The combination of the blue transparent or transparent body with aluminium film deposited on the rear create the colours light-blue or silver-white. These colour schemes allow a maximum light reflection and at the same time an optimal optical perception by wildlife.

### Horizontal reflection

The horizontal radiation angle of 120° ensures the illumination of the complete area behind the delineator, thus creating the biggest possible barrier for wildlife.

### Vertical reflection

Fins that are integrated in the reflector produce light flashes and thus compensate slopes and inclines of between -20° and +20° in the area behind the delineator. What's more, the reflector's slightly curved central lens guarantees a constant, homogeneous light at ground level.

## All of the product advantages at a glance

- Wildlife warning reflector of impact-resistant plastic, aluminium film deposited and sealed on rear
- Flattened semi-circular shape, 250 mm long, large reflective area for all wildlife warning systems
- Absolutely smooth surface guarantees the best possible self-cleaning effect and stability
- Low weight
- Light-blue, silver-white, custom colours possible
- Universal use in all terrains (level ground, slopes and valleys)
- Photometrically tested by LTI of Karlsruhe University
- Resistant to road salt and weathering
- Can be retrofitted with a plastic casing or integrated in the delineator





# Grass stop plates

to contain plant growth

## Cyclic recycling

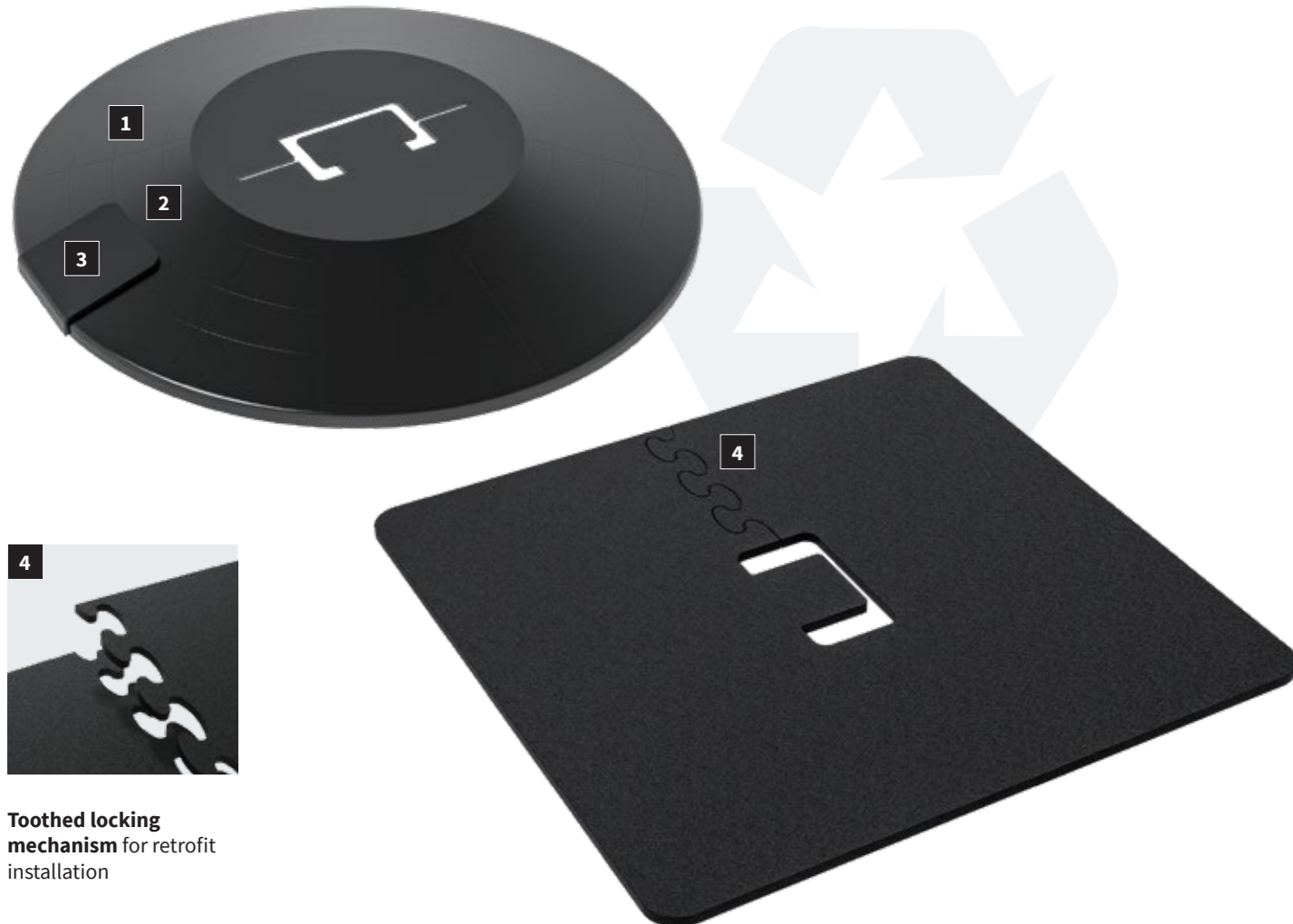
We only use recycled materials for sustainable and resource-friendly production.



1 Reinforcing ribs for high stability

2 Perforated parting line for retrofit installation

3 Locking element for retrofit assembly



4 Toothed locking mechanism for retrofit installation

## For delineators (round)

- Ø 500 mm, central cut-out and fully closed
- Cut-out with clamping effect
- 100 % recycled plastic material with reinforcing ribs



## For delineators (square)

- 300 x 300 mm, central cut-out and fully closed
- Perfect fit for recyclable base type 160, 150, 145
- 100 % recycled plastic material



## For delineators (square)

- 500 x 500 mm, 8 mm thick material and fully closed
- Position of cut-out as requested
- Rubber granules



## For Sigma 100 guard rail posts

- Ø 500 mm, central cut-out
- Fully closed on delivery
- Pre-punched parting line with locking element for retrofit installation
- 100 % recycled plastic material with reinforcing ribs



## For C-100 guard rail posts

- Ø 500 mm, central cut-out
- Fully closed on delivery
- Pre-punched parting line with locking element for retrofit installation
- 100 % recycled plastic material with reinforcing ribs



## For C-125 guard rail posts

- Ø 500 mm, central cut-out
- Fully closed on delivery
- Pre-punched parting line with locking element for retrofit installation
- 100 % recycled plastic material with reinforcing ribs



## For tubular posts Ø 42 mm, Ø 60 mm and Ø 76 mm

- Ø 500 mm, central cut-out
- Fully closed on delivery
- Pre-punched parting line with locking element for retrofit installation
- 100 % recycled plastic material with reinforcing ribs



## For C-100/C-125, Sigma 100 guard rail posts, tubular posts or individual cut-out

- 500 x 500 mm, 8 mm thick material and fully closed or optionally available with toothed locking mechanism
- Position of cut-out as requested
- Available for all common guard rail posts, e.g. C-100, C-125, Sigma and tubular posts (illustration shows C-100)
- Rubber granules



# VARIO system

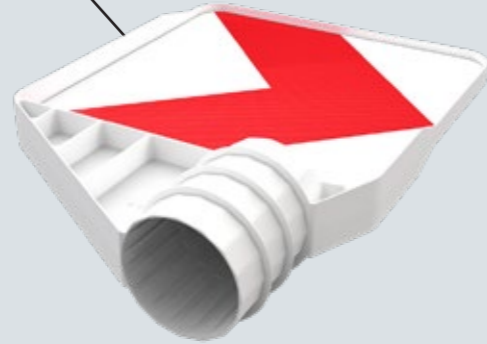
Accident prevention and reduction



## VARIO delineator cap for curves

The VARIO delineator cap for curves – developed at the initiative of and in close cooperation with the **Ministry of Transport and Infrastructure in Baden-Württemberg** – is used as a marker and signal in a variety of applications. It is primarily used to mark curves with a tight radius and on dangerous stretches of road for motorcycles and is instrumental in helping to avoid and reduce injuries in accidents involving two-wheeled road users.

On account of the positive experiences, the VARIO delineator cap for curves has been adopted as the **new standard in the MVMot 2021**. In the meantime, the VARIO delineator cap for curves is now in successful use on numerous German Federal States (e.g. Bavaria, Baden-Württemberg, Hesse etc.) as well as in other European countries (e.g. Austria, Switzerland).



## VARIO angled delineator cap for curves

Developed at the instigation of the FGSV Working Group MVMot 2018, the VARIO angled delineator cap for curves makes a major contribution to preventing and reducing injuries to motorcyclists in accidents and has been approved by the Federal State Ministries of Transport. The VARIO angled delineator cap for curves supplements our existing assortment, thus enabling **tight corners** to be signposted quickly and in the best possible way.

## VARIO modular

Our VARIO modular system is the further development of our popular VARIO interchangeable signs.

On the one hand, it is us for **stationary use** and helps improve general road safety at roundabouts, entrances an exits as well as traffic islands.

On the other hand, VARIO modular allow even more flexible, faster and safer signposting and safeguarding of **mobile and temporary roadworks**.



## VARIO support system

We recommend that the system components be attached to our VARIO support posts for installation in delineator bases or to VARIO tubular posts for installation in steel ground sleeves for signs.

The overall solution is a traffic control device that is prescribed and not a road sign in accordance with the German Road Traffic Regulations (StVO). No special authorisation is required.



# We test!

To get you home safely ...

Nearly one in five road fatalities in Baden-Württemberg are motorcyclists (2019 & 2020). The normal metal curve signs represent a huge potential hazard for motorcyclists. This is why Beilharz has developed and successfully tested the VARIO systems made of plastic.

## Crash test 1: Delineator cap for curves and tubular post made of metal



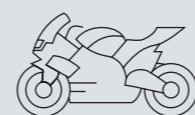
Person hits the tubular post with the chest/arm area



Metal tubular post (installed in core hole bore with Ø 60 mm)



Curve sign made of metal



Per crash test 1 motorcycle



Approach speed 60 km/h



Crash-test dummy with protective gear

## Crash test 2: VARIO angled delineator cap for curves on VARIO support post of plastic



Person hits the support post with the chest/arm area



Recyclable base Type 160



VARIO support post made of plastic with profiled core reinforcement



VARIO angled delineator cap for curves made of plastic

## Crash test 3: VARIO modular SQUARE on VARIO round post made of plastic



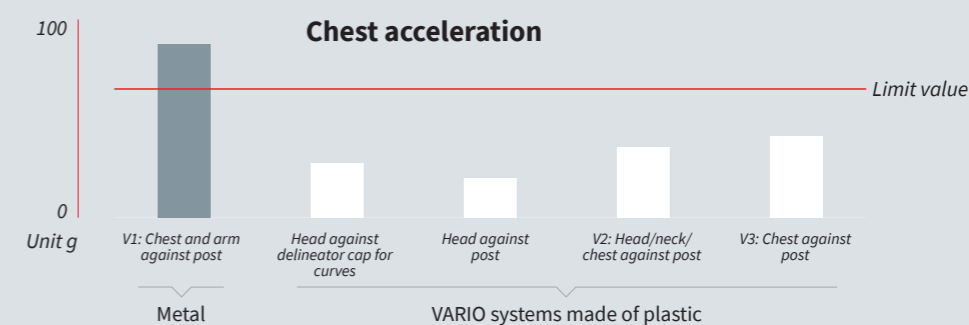
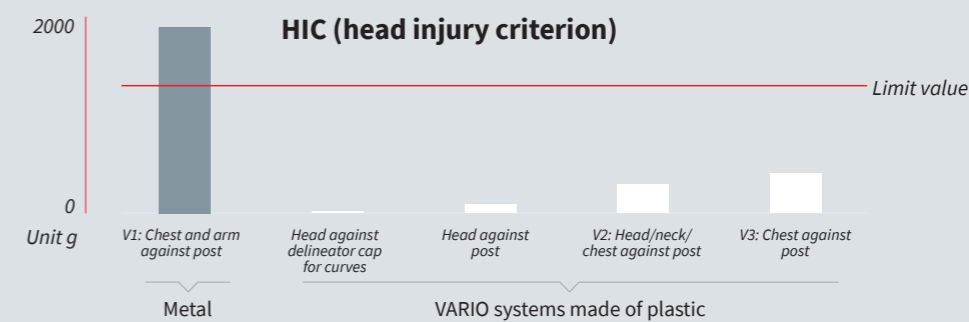
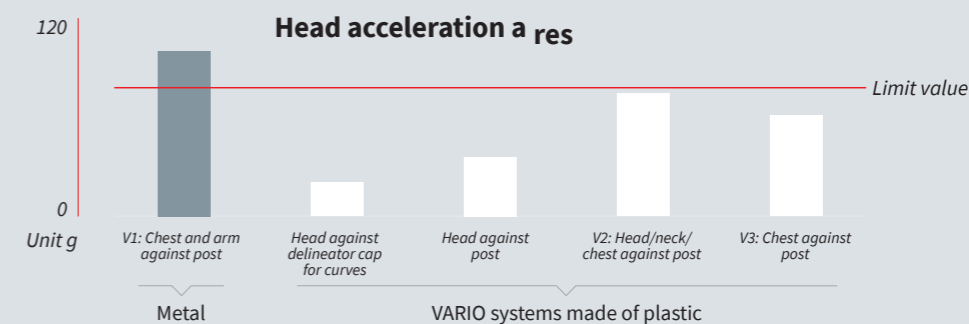
Person hits the support post with the chest area



VARIO round posts made of plastic (mounted in core hole bore with Ø 60 mm)

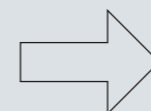


VARIO modular SQUARE made of plastic



## Convincing result

The motorcyclist has little chance of survival above the biomechanical limit value. Based on the available measurement results, a person who hits a metal tubular post would not survive. On the other hand, based on the available measurement results, a person who hits a plastic tubular post would have a good chance of survival.



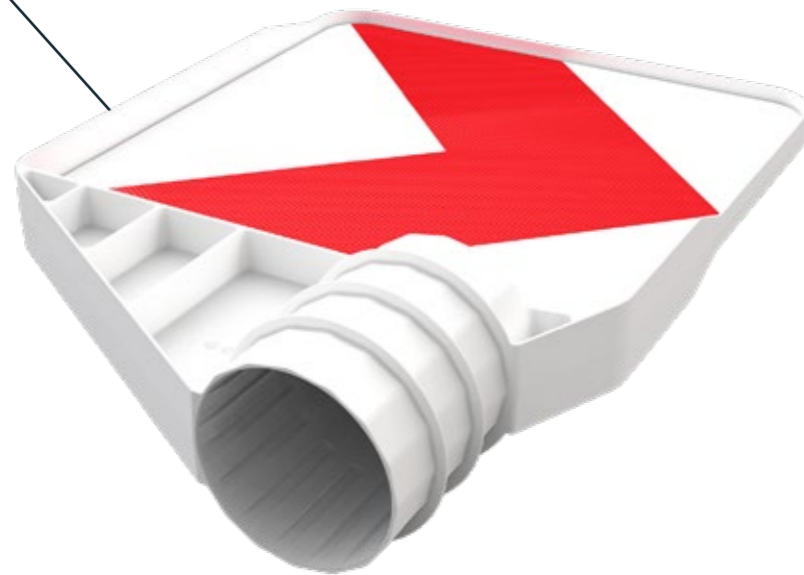


# VARIO delineator cap for curves

Accident prevention and reduction

## Product properties

- Traffic sign support to fit triangular VARIO support posts and VARIO round posts
- Clip-on collar with an insertion depth of approx. 200 mm and internal locking elements
- Adjust different angles in 22.5° steps (can be fixed with screws)
- Safe installation with simultaneous optimum alignment to the road
- Foil road sign 625 on one or both sides
- High visibility and optimum perception
- Quick and easy installation
- Easy to replace if damaged



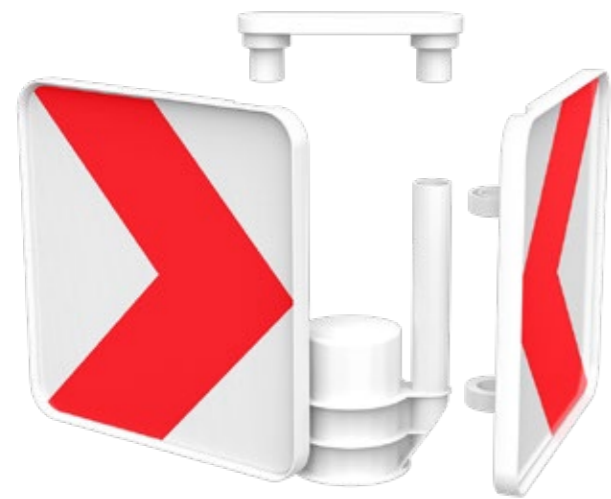
## Technical properties

- Impact-resistant and shatterproof plastic
- Plastic, dyed white
- Dimensionally stable and flexible
- Resistant to UV and acids and impacts at low temperatures
- Rounded corners and all-round protective foil edge
- Overall dimensions approx. 720 x 520 x 165 mm with adhesive area approx. 510 x 510 mm
- Road sign foil Type RA2/C 500 x 500 mm
- Weight approx. 1.65 kg incl. the foil

Installation	Foil sticker	Rear	Front
Right side of road for left-hand curves	Rear points to the right Front points to the left		
Right side of road for left-hand curves	Rear without Front points to the left		
Right side of road for right-hand curves	Rear without Front points to the right		
Left side of road for right-hand curves	Rear points to the right Front without		

# VARIO angled delineator cap for curves

Accident prevention and reduction



## Technical properties

- Impact-resistant and shatterproof plastic
- Plastic, dyed white
- Dimensionally stable and flexible
- Resistant to UV and acids and impacts at low temperatures
- Rounded corners and all-round protective foil edge
- Foil size 500 x 500 mm
- Road sign foil Type RA2/C
- Total weight approx. 3.2 kg incl. the foil

## Product properties

- Traffic sign support to fit triangular VARIO support posts and VARIO round posts
- Clip-on collar with an insertion depth of approx. 200 mm and internal locking elements
- Adjust different angles in 22.5° steps (can be fixed with screws)
- Variable adjustment of the angle of both individual signs on site
- Quick and easy installation
- Easy to replace the four individual components if damaged



# VARIO support system

Compatible with products from the VARIO family

## VARIO support post

- Plastic triangular post
- Basic profile same as delineator VZ620 (w/o daytime marking and reflectors)
- Material and properties same as delineator VZ620 (CE-compliant acc. to EN 12899-3)
- Lengths from 0.30 – 1.60 m possible
- Resistant to UV and acids and impacts at low temperatures, flexible and dimensionally stable
- Mounting in standard delineator bases (recommended recyclable base Type 145 or 160)
- Mounting with steel holder for fastening to existing road restraint systems



## VARIO round post

- Plastic post with a diameter of approx. 150 mm
- Lengths from 1.50 – 1.80 m possible
- Lower socket for ground sleeves with a diameter of 60 mm
- Resistant to UV and acids and impacts at low temperatures, flexible and dimensionally stable
- Optional design with red-white cylinder foil Type RA2/C
- Mounting in commercially available sign ground sockets with diameter 60 mm in cast iron design with clamping ring or adapted for quick-locking mechanism



# VARIO modular

for stationary use



### VARIO modular SQUARE

- Foil size 500 x 500 mm
- Weight approx. 1.5 kg
- Available with all road sign foils
- Special prints to customer specifications possible

### VARIO modular ROUND

- Foil diameter 600 mm
- Sign size 2
- Weight approx. 1.5 kg
- Available with all road sign foils
- Special prints to customer specifications possible

### Product properties

- Traffic sign support to fit triangular VARIO support posts and VARIO round posts
- Quick and easy installation
- Easy to replace if damaged
- Impact-resistant and shatterproof plastic
- Plastic, dyed white
- Dimensionally stable and flexible
- Resistant to UV and acids
- Rounded corners and all-round protective foil edge
- Road sign foil Type RA2/C



# VARIO modular

to safeguard mobile and temporary roadworks

### Product properties

- Clip-on road sign support to fit all standard delineators in Germany
- All individual elements can be clipped on separately or used in combination with each other
- Quick and easy installation
- Impact-resistant and shatterproof plastic
- Plastic, dyed white
- Dimensionally stable and flexible
- Resistant to UV and acids
- Rounded corners and all-round protective foil edge
- Road sign foil Type RA2/C
- Stable according to the German "TL-Aufstellvorrichtung", depending on version acc. to the application table
- VARIO boom to comply with the clearance gauge and installation heights as per RSA



### Stability according to the German "TL-Aufstellvorrichtung"<sup>1)</sup>

Combinations	Requirements of Beilharz delineators as a support system
1 x triangular (or round)	min. ground-mounted delineator 3.0 mm
1 x triangular 1 x additional sign	min. ground-mounted delineator 3.0 mm with tubular core 0.75 m
2 x round 1 x additional sign	min. ground-mounted delineator 3.0 mm with profiled core 0.75 m
1 x triangular, 1 x round 1 x additional sign	min. ground-mounted delineator 3.0 mm with profiled core 0.75 m
1 x triangular 2 x round	min. ground-mounted delineator 4.5 mm with profiled core 0.75 m

<sup>1)</sup> Delineator as good as new / in working condition and sufficiently anchored to the ground





**VARIO modular TRIANGULAR**

- Foil size side length 900 mm
- Sign size 2
- Weight approx. 1.4 kg

**Can be combined with**

- VARIO modular ADDITIONAL SIGN with integrated coupler
- VARIO modular ROUND with separate coupler
- VARIO modular SQUARE with separate coupler
- VARIO modular BOOM with integrated coupling



**VARIO modular ROUND**

- Foil diameter Ø 600 mm
- Sign size 2
- Weight approx. 1.5 kg

**Can be combined with**

- VARIO modular ADDITIONAL SIGN with integrated coupler
- VARIO modular TRIANGULAR with separate coupler
- VARIO modular SQUARE with separate coupler
- another VARIO modular ROUND with separate coupler
- VARIO modular BOOM with integrated coupling



**VARIO modular ADDITIONAL SIGN**

- Foil size 330 x 600 mm
- Sign size 2
- Weight approx. 1.2 kg

**Can be combined with**

- VARIO modular TRIANGULAR via integrated coupler in the ADDITIONAL SIGN
- VARIO modular ROUND via integrated coupler in the ADDITIONAL SIGN
- VARIO modular SQUARE via integrated coupler in the ADDITIONAL SIGN
- further VARIO modular ADDITIONAL SIGNS with integrated coupler
- VARIO modular BOOM with integrated coupling



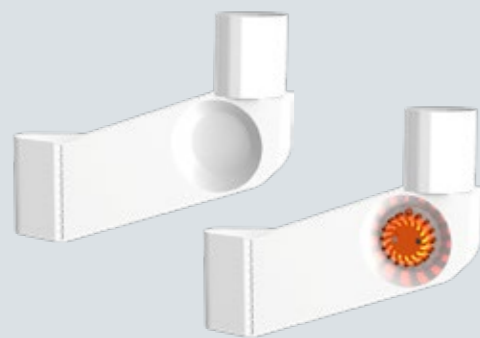
**VARIO modular SQUARE**

- Foil size 500 x 500 mm
- Weight approx. 1.5 kg

**Can be combined with**

- VARIO modular ADDITIONAL SIGN with integrated coupler
- VARIO modular TRIANGULAR with separate coupler
- VARIO modular ROUND with separate coupler
- further VARIO modular SQUARE with separate coupler
- VARIO modular BOOM with integrated coupling

Available with all road signs size 2. Special prints to customer specifications possible



**VARIO modular BOOM**

- To comply with the clearance gauge and installation heights as per RSA
- To increase the distance to the edge of the road
- Attachment option for LED flashing light

**Can be combined with**

- Triangular roadside delineator
- VARIO modular components

**VARIO modular COUPLER**

- Connecting element for VARIO modular TRIANGULAR, ROUND and SQUARE



# Honeycomb pavers

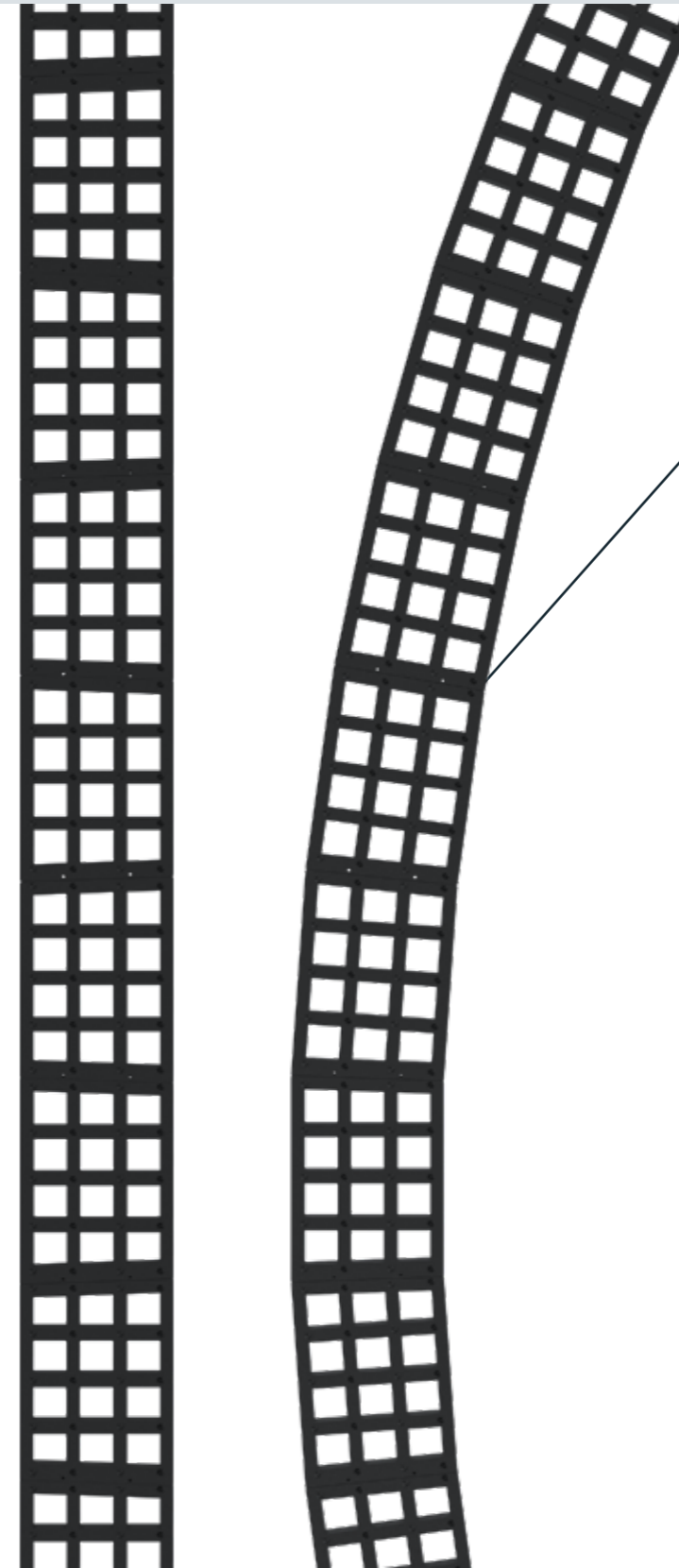
for straight roads and in curves

Recommendations  
for installation  
can be found on  
[beilharz.eu](http://beilharz.eu)



Easy installation thanks to a **tongue and groove system** with two bores for optimum longitudinal fastening

**Acoustic ride-over studs**



## Product properties

- High resilience of up to 700 t/m<sup>2</sup> of laid area, corresponding to a car weight of approx. 48 t with four contact points (4 wheels)
- Ideal cohesion and easy installation through tongue and groove system
- Resistant to oil and acids
- Possible greening on 49 % of open area
- Can be laid in curves in 2° - 4° steps
- Natural seepage of precipitation thanks to little surface sealing
- Compressive strength of honeycomb paver certified by TÜV
- Each paver has 2 holes in the tongue and groove for optional longitudinal fastening
- Increased road safety through acoustic ride-over studs
- Recycled material used in its production

## Technical properties

- Dimensions 654 x 460 x 65 mm
- Installation dimensions 620 x 460 x 65 mm
- Cavity size 96 x 96 mm
- Web width 40 mm
- 12 square cavities
- Weight approx. 14.5 kg
- recycled mixed plastic
- Black
- Straight-line installation for straight sections
- Circular installation for curves or bendy roads

# Anti-glare screen and curve marking systems

offering optimum safety for road users

## Quality

Beilharz anti-glare systems have been tested and approved in accordance with EN 12676. They have also been tested successfully in wind tunnels at wind speeds of 160 km/h (44.44 m/s). Our anti-glare systems have also passed the UV test according to EN 12676 as well as an additional colourfastness test with flying colours.

## Dimensional stability and flexibility

The vanes are both dimensionally stable and flexible. The vanes also bounce back into their initial position immediately if bent forcibly up to 90 degrees because they are pre-stressed in the clamping area.

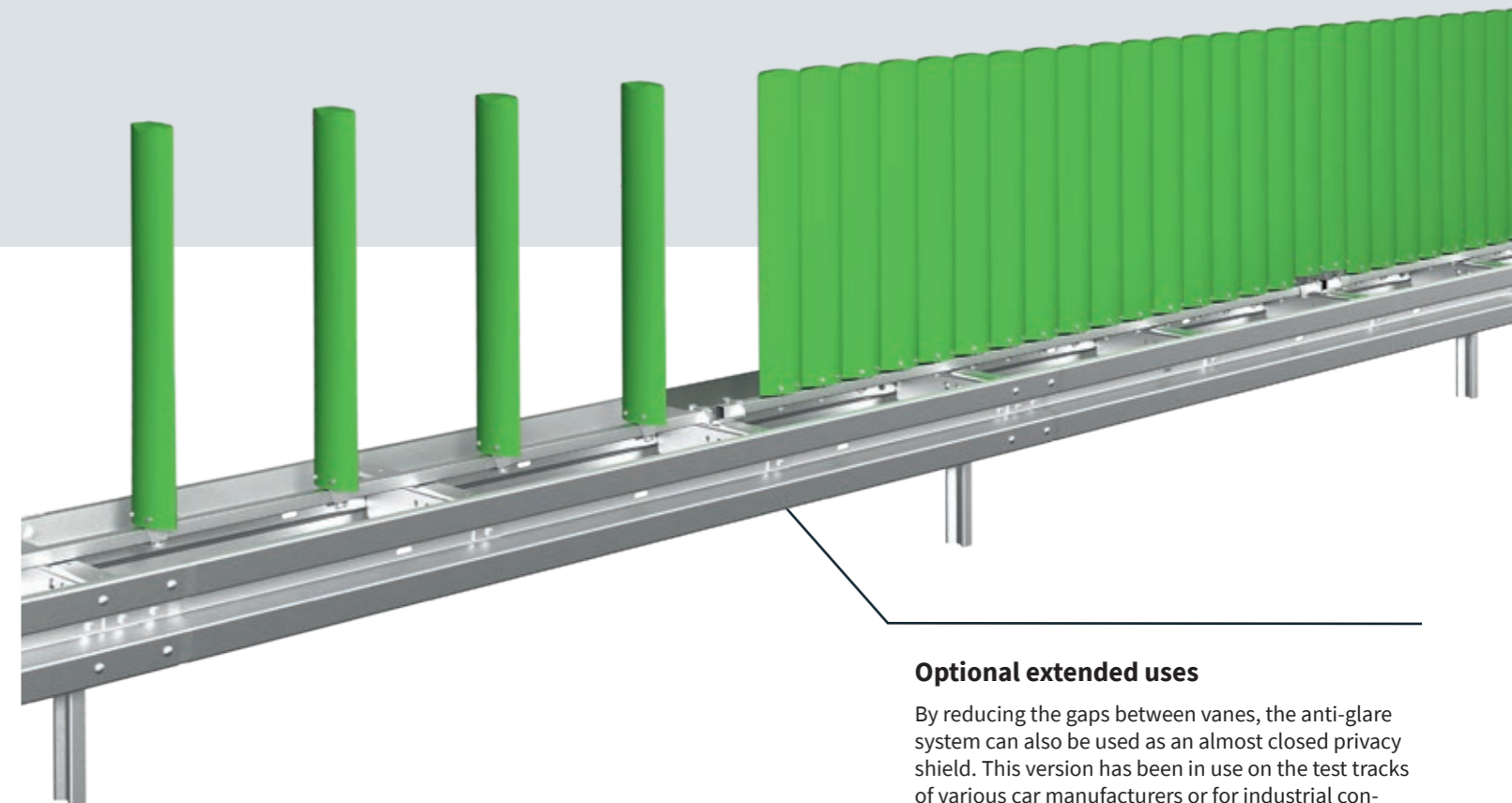


## Behaviour on contact or impact

The anti-glare screens systems generally behave passively, according to the substructure. The systems have no sharp edges on their impact area that could cause damage or injuries. The systems are fastened in place in such a way that no parts of the vanes are thrown off when they are hit by a vehicle.

## Passage in the event of accidents

The anti-glare systems can be climbed through easily at any point by rescue teams with stretchers if they are installed with a standard spacing of 666 mm.



## Optional extended uses

By reducing the gaps between vanes, the anti-glare system can also be used as an almost closed privacy shield. This version has been in use on the test tracks of various car manufacturers or for industrial constructions for many years.

## Performance

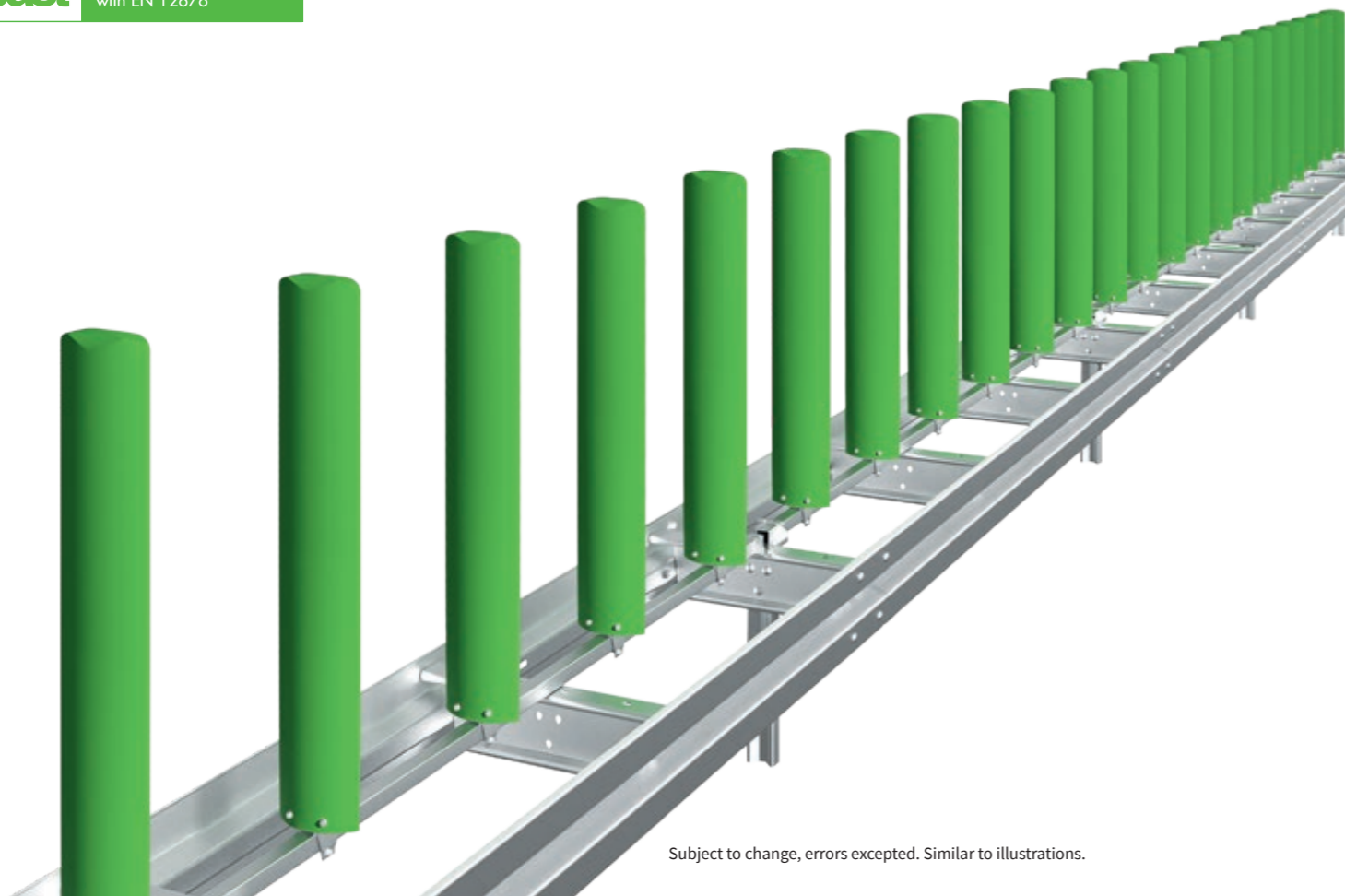
- Oval-shaped, completely closed hollow-body vanes made of green low-pressure polyethylene (PE-HD-HM)
- High-precision manufacturing
- A high material density and the perfectly smooth surface require no maintenance – self-cleaning effect
- Substructures for all common types of guard rails and concrete barriers
- The protective and visibility effect is dimensioned depending on the place of use and purpose

## Service life

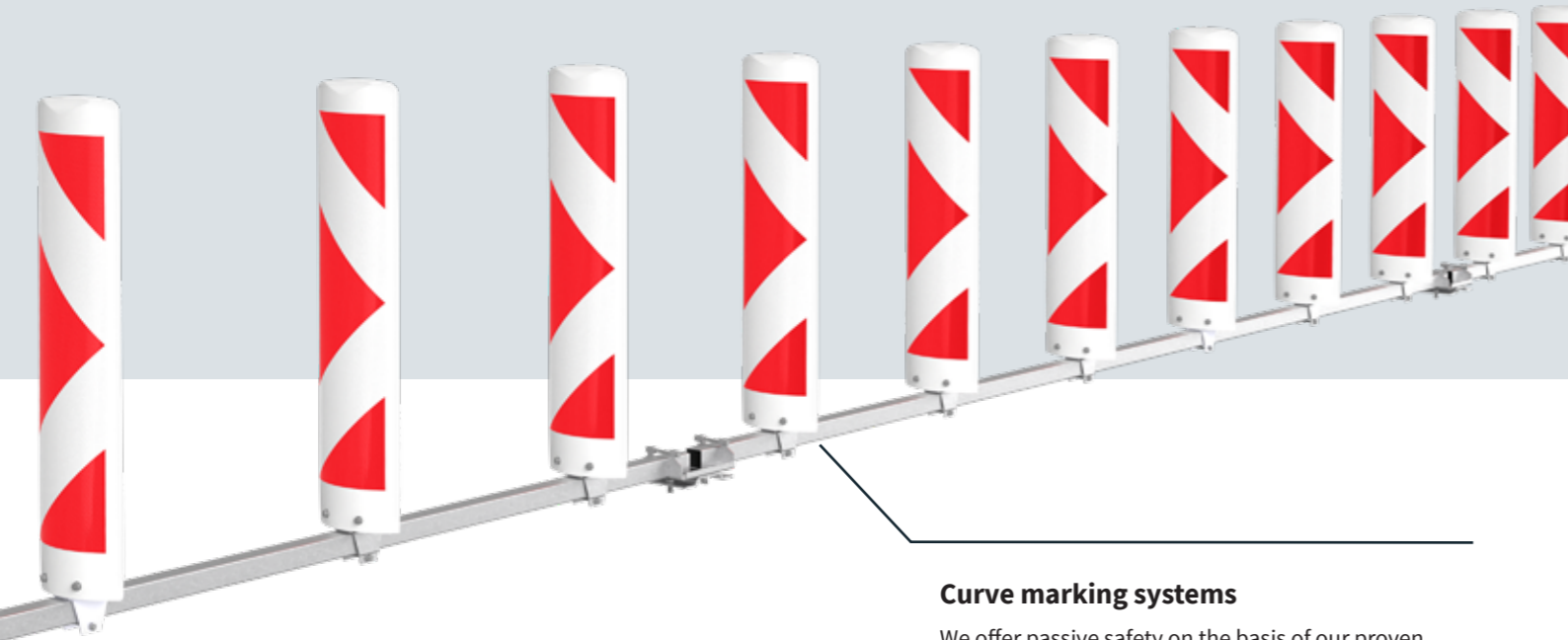
- Resistant to UV radiation, exhaust fumes, de-icing salts and other environmental influences
- Temperature-resistant from minus 30°C to plus 60°C
- Dimensionally stable, impact-resistant and shatterproof
- Long-lasting safety

## Pre-assembled design for time-saving installation

Beilharz anti-glare systems are usually delivered in pre-assembled 4 m long clusters. If they have to be transported over longer distances, e.g. across borders, they are delivered in a partly pre-assembled design. The vanes and vane holders are already firmly connected to each other. These units then only have to be fixed to the supporting tube on site with a screw.







### Curve marking systems

We offer passive safety on the basis of our proven anti-glare systems to warn road users of dangerous curves and sections of road reliably and in due time. The anti-glare vanes are hereby produced in white and bear a reflective foil that points in the direction the road takes. Thanks to this safety system, road users are specifically warned of hazardous situations on a large scale and guided safely through traffic.

### Anti-glare screen and curve marking systems

Type	EDSP/DDSP	ESP-IPE	ESP-Sigma	ECO-Safe	BGW	Special holders
Substructure designs	Single or double-spaced safety barrier <sup>1</sup>	Single safety barrier, IPE post or C-post <sup>2</sup>	Single safety barrier, Sigma post <sup>3</sup>	Single safety barrier C-post, rotated <sup>4</sup>	Concrete barrier or box profile <sup>5</sup>	A holder for special designs is also possible, e.g. DSP, Z-post, Alkmaar <sup>6</sup>
Vane height	600, 900, 1,200 mm / custom lengths possible					
Vane spacing	666 mm with 6 vanes on supporting tube 3,960 mm / custom spaces possible					
Vane angle	90° / vertical to road axis / vane can be moved					
Rotating vane angle	Up to 180° / vane cannot be moved					
Vane angle inclined, fixed	Up to 180° / vane can be moved					



Custom designs available on request Important notice: If converting from one safety barrier type to another, you only have to replace the supporting tube holders and not the supporting tubes themselves with Beilharz systems.

### The right anti-glare screen or curve marking system for every protection system

#### Main components

Supporting tube holder, supporting tube, vane holder, plastic vanes.

#### Supporting tube holder

The different supporting tube holders are fastened to the corresponding substructure (usually guard rails). The supporting tube holder also compensates difference in length of the substructure.

#### Supporting tube

Hot-dip galvanised square tube 45 x 45 x 2 mm, 3,960 mm long, is clamped onto the supporting tube holder with two screws.

#### Vane holder

The vane holder is the connecting piece between the supporting tube and plastic vane. It is clamped to the supporting tube with a screw and can be moved longitudinally.

#### Plastic vanes

The plastic vanes are made from a high-molecular, low-pressure polyethylene (PE-HD-HM) and manufactured as oval-shaped hollow bodies that are closed at the top. They are green (custom colours possible) and have a perfectly smooth surface. The plastic vanes are fastened to the vane holder with four screws. The bottoms of the vanes are hereby splayed. This prevents any crescent-shaped distortion when sunlight only affects one side of the vane.

#### Vane spacing

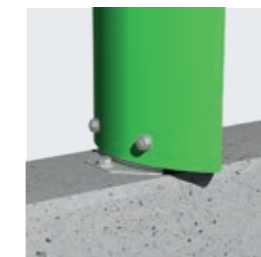
The gap between all vanes with a fixed angle can be adjusted at any time, for example shorter in curves and longer on straight stretches of road.

#### Screws and washers

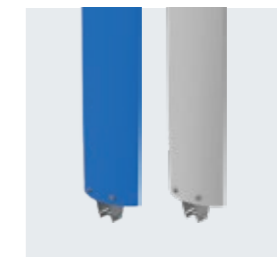
All connecting parts are hot-dip galvanised.

#### Special designs

Individual vane heights of between 300 and 1,200 mm can be supplied at any time. If an anti-glare system higher than 1,200 mm is required, multiple supporting tubes with vanes can be mounted on top of and beneath each other. Rotating designs (up to 180°) are also possible, as are mobile vane holders with vanes that can be inclined at any angle.



**Half-shell holder** for mounting directly on concrete barriers or other fixed bases (free choice of vane spacing and mounting angle)



The plastic vanes are available in **custom colours** on request.



# Stationary amphibian guide wall

Our contribution to animal and species protection

Installation instructions can be found on [beilharz.eu](http://beilharz.eu)

## Product properties

- 1-shape, vertical and horizontal reinforcement
- Dimensions 1,080 x 650 mm
- Installation dimensions 1,000 x 500 mm
- Material thickness 10 – 11 mm
- Weight 8 – 9 kg
- Colour black / custom colours possible
- Tread 350 mm wide, 4° slope
- Corner hinge for to produce angles of 20°– 340°

## Material properties

- recycled mixed plastic of polyolefins
- Colour black or custom colours
- No PVC shares or metallic residues
- Temperature-resistant and dimensionally stable at -30° to +50° C
- UV-resistant
- Hydrophobic – this resistant to frost and de-icing salt
- Resistant to bites from rodents and small game
- Supports of hot-dip galvanised steel or U-shaped plastic supports

## Your benefits at a glance

- Insurmountable guide wall thanks to 1-shape
- Permanent positive-lock connection between the guide wall and tread
- Impossible to climb through due to large overlapping joints
- Can be adjusted to any terrain with standard tools
- No road closures or heavy plant needed for the installation
- The guide wall can be dismantled and erected elsewhere if the migratory behaviour of the amphibians or the terrain changes
- Available with perforations on request to drain any water that accumulates. The amphibians are still held back reliably.

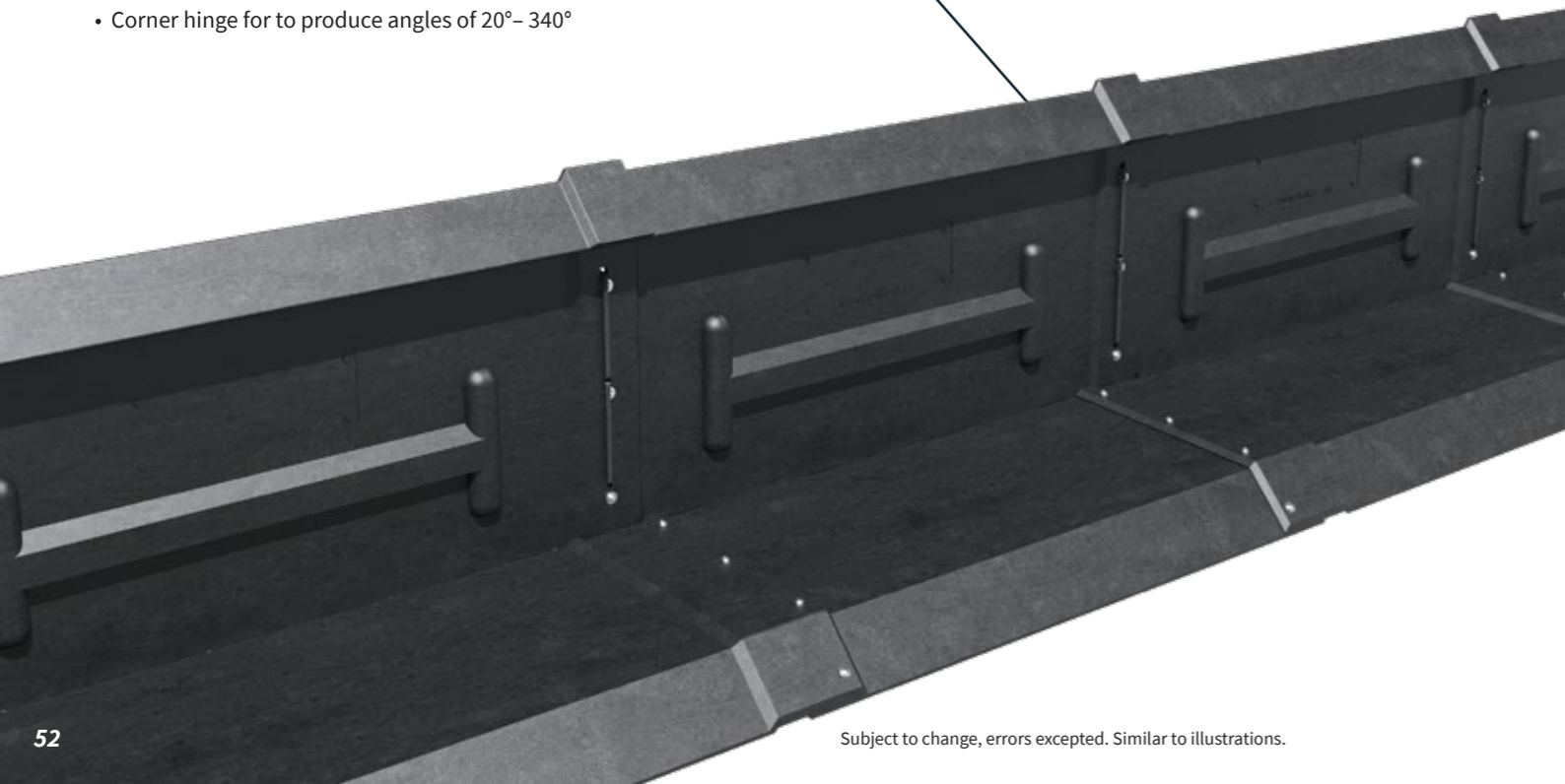
## Types of installation

- AL 1 A: Installation on existing mesh fence, no tread, no possibility for backfilling.
- AL 1 A L: Installation on existing mesh fence, with tread, no possibility for backfilling.
- AL 1 B: Installation in open fields on steel or plastic posts, no tread, no possibility for backfilling.
- AL 1 B L: Installation in open fields on steel or plastic posts, with tread, no possibility for backfilling.
- AL 1 C: Installation in open fields on reinforced steel posts, no tread, with possibility for backfilling.
- AL 1 C L: Installation in open fields on reinforced steel posts, with tread, with possibility for backfilling.



## Option

Perforation also possible with embedded and over-molded stainless steel grating to drain any water that accumulates.



Subject to change, errors excepted. Similar to illustrations.

# Mobile amphibian and reptile protection fences

are an contribution to animal sand species protection

## Design

Type	Amphibian protection fence type A	Amphibian protection fence type B
Type of assembly	On existing mesh fence	Self-supporting in open fields
Type of installation	With chain links on existing mesh fence	With hot-dip galvanised metal supports incl. depth stop, tensioning rope, pegs and chain links to hang the fence. Burying the lower end of the amphibian protection fence approx. 10 cm in the ground and not just pegging it down at short intervals has proven sensible because amphibians try to crawl under the fence with the latter solution.
Climb-over protection	-	optionally available: Posts bent 45° at the top
Options	-	Post spacing 2 m for a longer service life or windier locations Post spacing 5 m, e.g. for the temporary protection of construction sites

## Material

Type	Amphibian protection fence with mesh permeable to air	Amphibian/reptile protection fence with closed foil
Material	Polyethylene/polypropylene mesh	Closed PE foil, reinforced and coated mesh, edges folded and welded all round with aluminium eyelets at the top and bottom (for retaining device) at intervals of 50 cm
Section length	Reels of 100 m	Reels of 50 m
Reel height	approx. 60 cm (effective height approx. 50 cm)	approx. 60 cm (effective height approx. 50 cm)
Weight approx.	0.135 kg/sqm	0.230 kg/sqm
Colour	green	green
Mesh size	almost opaque	completely closed & opaque
Permeability	permeable for wind / impermeable for light	impermeable for wind / impermeable for light
UV stabilisation	<b>UV-resistant min. 300 kly</b>	<b>UV-resistant min. 400 kly</b>
Condition	tear-proof, water-repellent, resistant to rotting	reinforced mesh, tear-proof, water-repellent, resistant to rotting
Stability	resistant to salt water, frost, acids and alkalis	resistant to salt water, frost, acids and alkalis



### Important

Thanks to its high UV-protection and sturdy quality, the amphibian protection fence can be left in place the whole year without any maintenance under certain circumstances.

### Type A - installation instructions

- Dig an approx. 10 cm deep ditch
- Attach the fabric/foil top the fence using the chain links and lay in the ditch at the bottom
- Fill the ditch back in and compact

### Type B - installation instructions

- Dig an approx. 10 cm deep ditch
- Knock in the steel supports (straight support up to knock-in mark or angled support up to the end of the welded-on sword) at intervals of 2-5 metres – depends ion the scope of delivery
- Thread the longitudinal tensioning rope through the eyelets of the steel supports, tension the rope and fasten in place at both ends with pegs
- Attach the fabric/foil to the top the fence using the chain links and lay in the ditch at the bottom
- Fill the ditch back in and compact



### Option

Tool to simplify installation of the angled steel support

# Parking lot equipment

Table and benches for parking lots and urban furniture



## Accident-proof

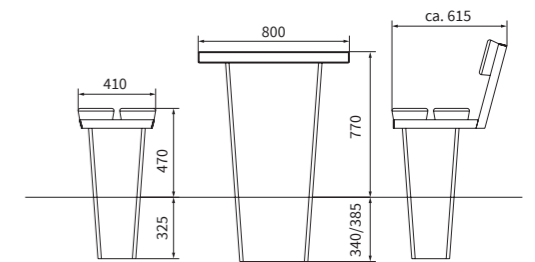
All of the wooden or plastic edges on the benches are rounded and the concrete parts as well as cast stone slabs have bevelled edges. None of the parts will topple over if installed correctly.

## Theft-proof

We can supply the units with non-removable screws on request to prevent theft and vandalism. Great effort is then required to dismantle the units using a special tool – absolute theft protection.

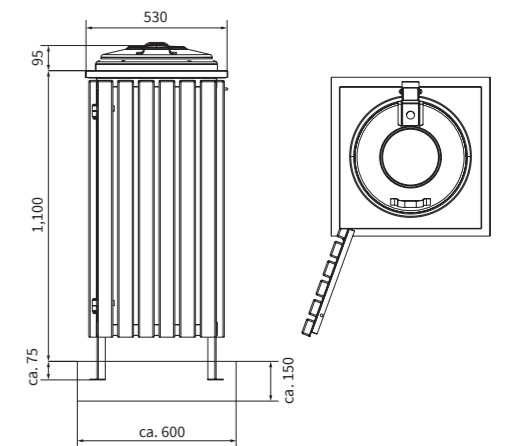
### Munich series (plastic)

Type	Dimensions
BM 200 K – Bench w/o backrest	2,000 x 420 x 795 mm
BML 200 K – Bench with backrest	2,000 x 615 x 1,100 mm
TM 200 K – Table with 3 strips of plastic	2,000 x 640 x 1,155 mm
TM 200 S – Table with cast stone slab 6 cm	2,000 x 800 x 1,110 mm



### Litter bin MB 120 (plastic)

- Inner body made of hot-dip galvanised, brown painted steel
- Pivoted side wall with lock for easy removal of the bin bag
- Plastic-coated clamp for the bin bag
- Strips of dyed recyclable plastic
- External dimensions approx. 530 x 530 mm
- Overall height 1,200 mm (set in concrete) or 1,270 mm (bolted on)
- Bin bag size 700 x 1,100 mm
- Bin bag capacity 120 l
- With galvanised protective plate for top wooden cover frame

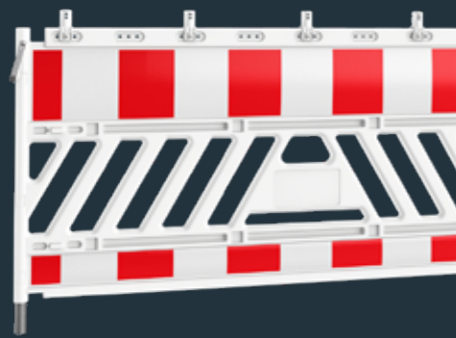


# Roadworks security

TL-tested products for flexible use

Barriers

60



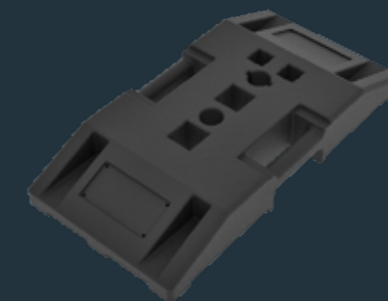
Beacons/delineators

64



Base plates

68



Mobile base plates/fence bases

74



Warning lights

78



Traffic cones

80



Collapsible delineators

82



Cross for traffic signs

84



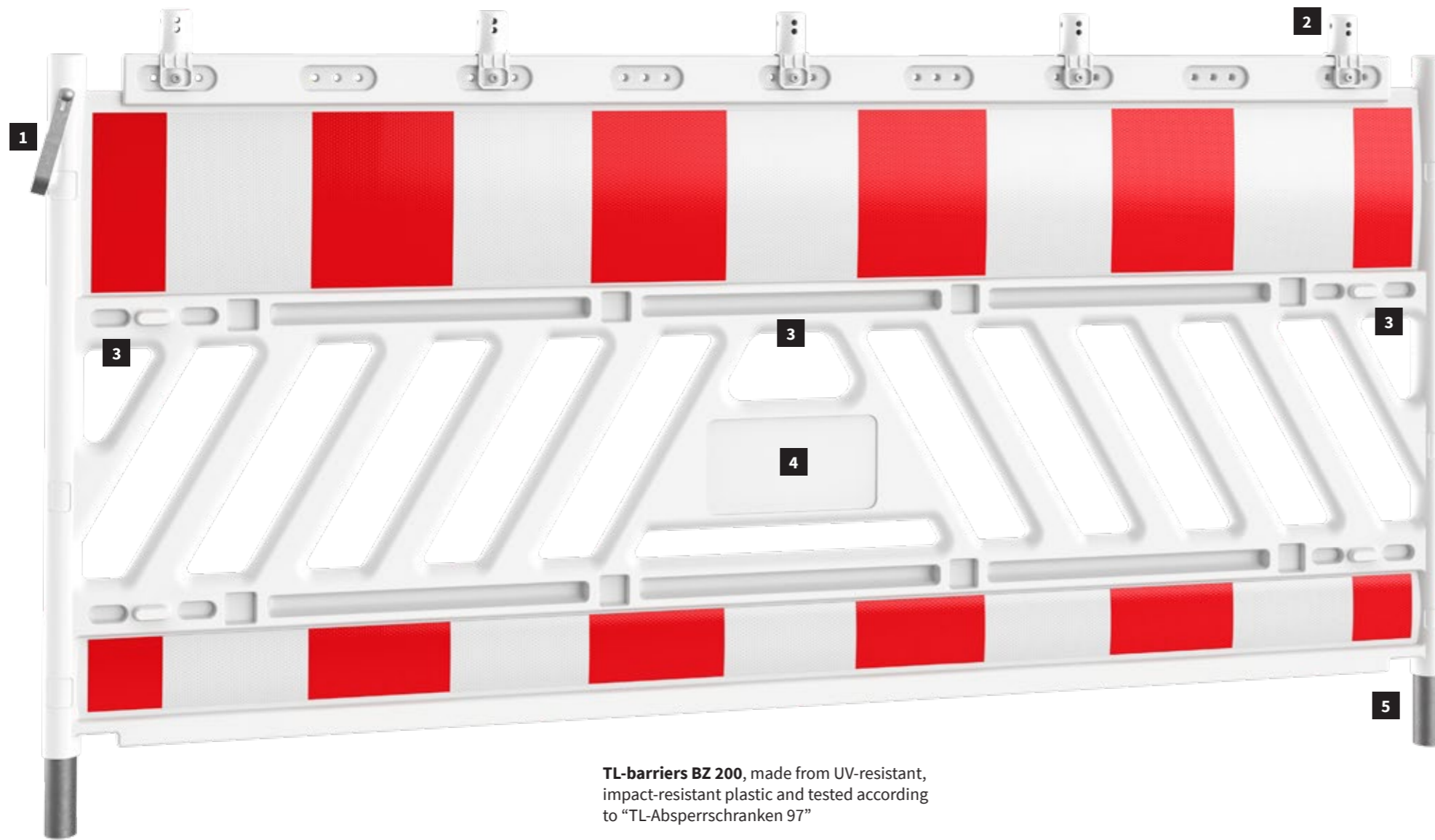
← **12 Road equipment**

**Winter equipment 86** →



# Mobile TL-barriers BZ 200 made of plastic

Optimum safety in roadworks

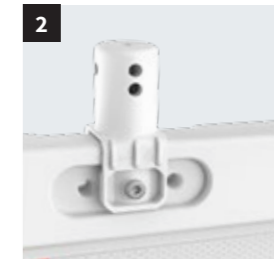


TL-barriers BZ 200, made from UV-resistant, impact-resistant plastic and tested according to "TL-Absperrschranken 97"

Connecting bracket of steel with length compensation



Light adapter for retrofitting



Large carrying handle for quick erection and ergonomic transport



Individual marking on logo panel

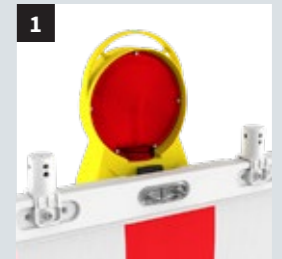
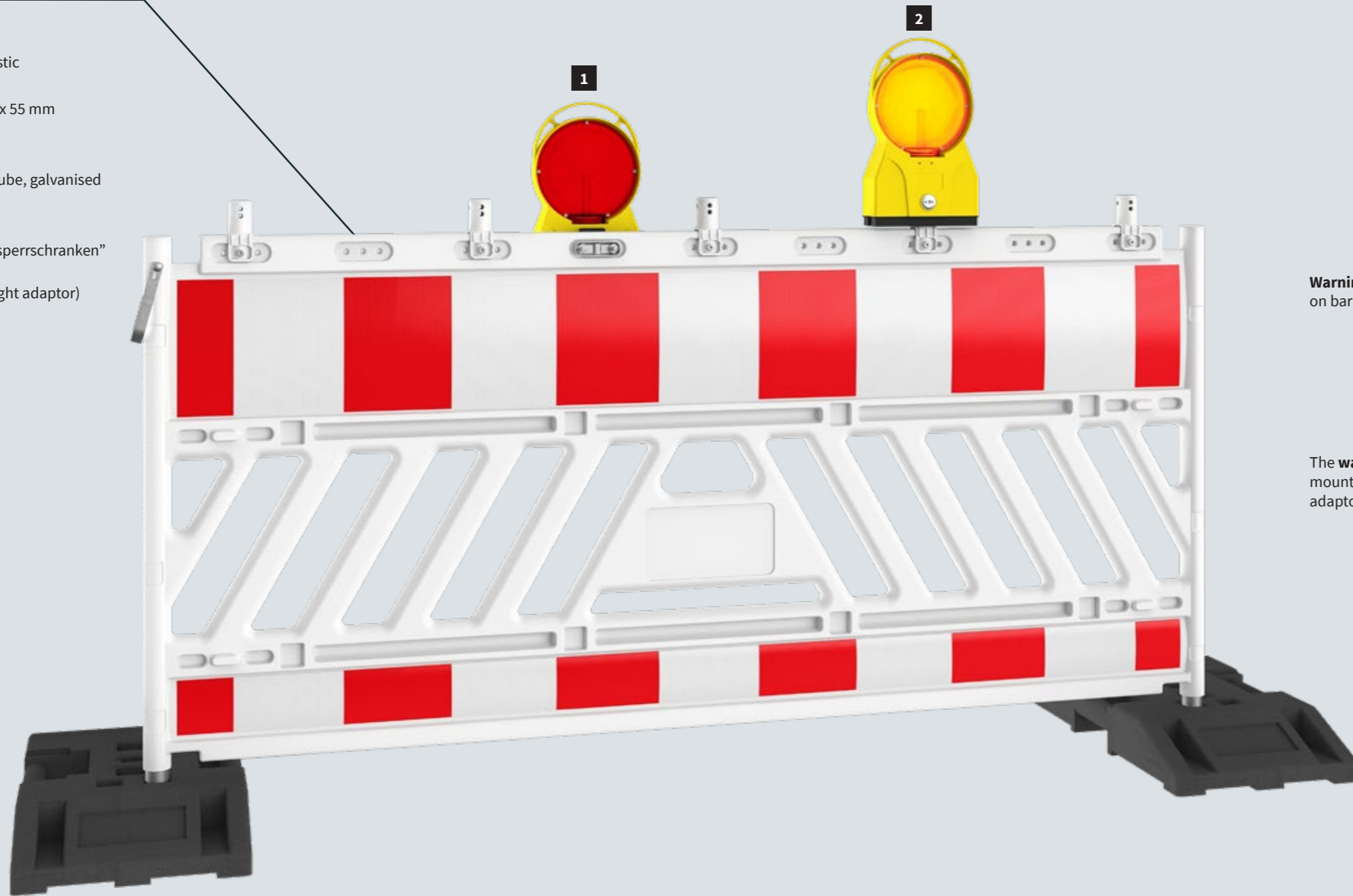


Continuous and replaceable steel tube



**TL-barrier BZ 200**

- UV-resistant, impact-resistant plastic
- White, individual colours possible
- Dimensions approx. 2,120 x 1,140 x 55 mm
- Foil length 2,000 mm
- Foil type RA1 or RA2
- Stanchion with continuous steel tube, galvanised
- Weight approx. 15.5 kg
- Packed in bundles of 10
- Tested in accordance with "TL-Absperrschranken"
- 9 integrated light holders (prepared for attachment of the light adaptor)



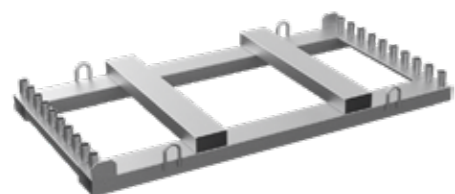
Warning light directly on barrier



The warning light is mounted using the light adaptor

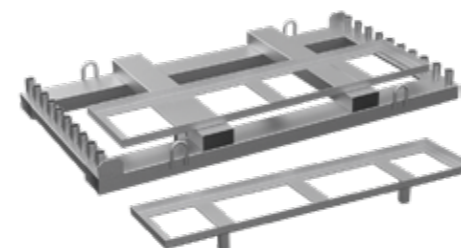
**Storage and transport rack for barriers**

For 20 plastic or steel barriers, hot-dip galvanised steel construction, suitable for transportation by fork-lift truck or crane.



**Option for storage and transport rack**

Clip-on attachment for up to 20 bases and 10 barriers.



# Beacons/ delineators

Tough and durable



## TL-reversible safety beacon with rotary system

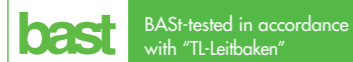
The TL-reversible safety beacon with rotary system has a rotary adaptor on both sides to lock the beacon firmly in the base.

Equipped with arrow foil, the TL-reversible safety beacon can change the direction of traffic in a matter of seconds with a simple rotation.

The beacon body, bases or reflective foils are available with individual embossed names or colours.

The beacons are made of UV- and ozone-resistant HD-PE plastic and are produced in the standard colour white as blown hollow bodies.

- BAST-tested in accordance with "TL-Leitbaken V4-05/2015" with the warning light Future
- Tested with the DE-TL base (marking75)
- Rotary adaptor on both sides for easy rotation
- Rotary adaptor with holes for the attachment of all standard warning lights on the market
- Wide, ergonomically-shaped protective foil edge



Individual marking on foil



Individual marking, integrated on beacon body



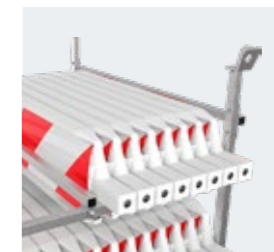
Wide and ergonomically-shaped protective foil edge



Individual colours possible



Transport rack available for beacons







**Beacons/delineators**

Type	TL-reversible beacon	Standard beacon 60	Standard beacon 40	Standard beacon 60 with round supports	Reversible beacon 60	Reversible beacon 40
TL-tested	Yes	No	No	No	No	No
Connection piece at top	Rotary system	40 x 40 mm	40 x 40 mm	Ø 42 mm	60 x 60 mm	40 x 40 mm
Connection piece at bottom	Rotary system	60 x 60 mm	40 x 40 mm	60 x 60 mm	60 x 60 mm	40 x 40 mm
Warning lights attachment	Yes	Yes	Yes	Yes	No	Yes
Reinforcement	Steel tube	without	Steel tube	without	without	Steel tube
Reversing option	Yes	No	No	No	Yes	Yes
Dimensions	approx. 1,350 x 65 x 300 mm	approx. 1,255 x 65 x 300 mm	approx. 1,235 x 65 x 300 mm	approx. 1,250 x 65 x 300 mm	approx. 1,310 x 65 x 300 mm	approx. 1,280 x 65 x 300 mm
Foil types	Diagonal stripes / arrow foils in RA1, RA2, RA3 and colour of customer's choice			Diagonal stripes / arrow foils in RA1, RA2, RA3 and colour of customer's choice		

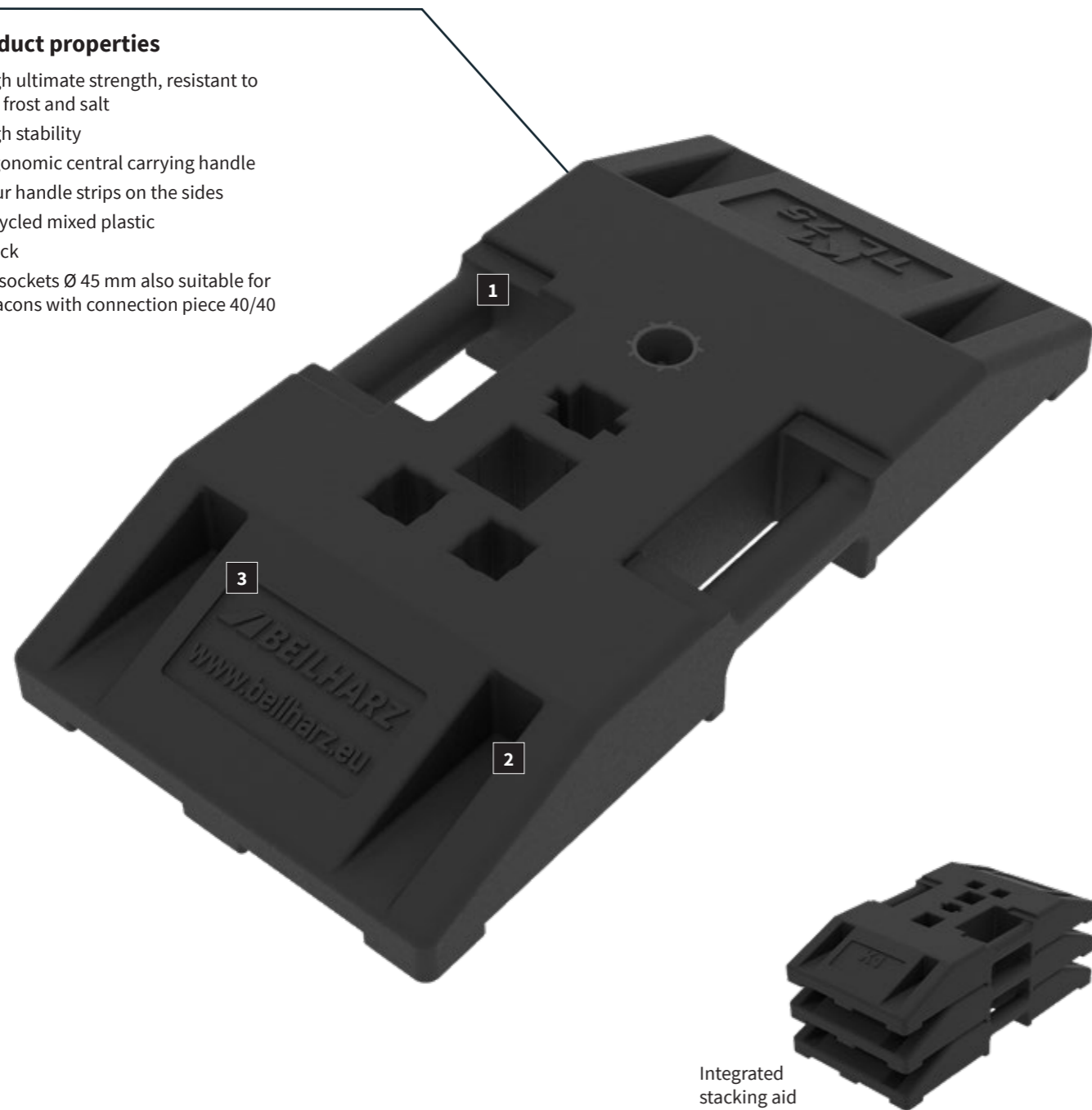


# Base plates

Flexible use thanks to a variety of openings

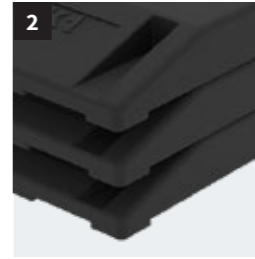
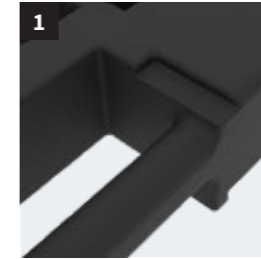
## Product properties

- High ultimate strength, resistant to oil, frost and salt
- High stability
- Ergonomic central carrying handle
- Four handle strips on the sides
- recycled mixed plastic
- Black
- All sockets Ø 45 mm also suitable for beacons with connection piece 40/40



Integrated stacking aid

Ergonomic central carrying handles



Handle strips on the sides

## Customised individual marking

Beilharz offers a wide variety of customisable marking options.

Base with integrated marking



Integrated socket for retrofitting a logo panel

Logo panel with embossed marking



Standard colours for logo panel and lettering: white, black, red, yellow (custom colours possible)

Logo panel with raised marking



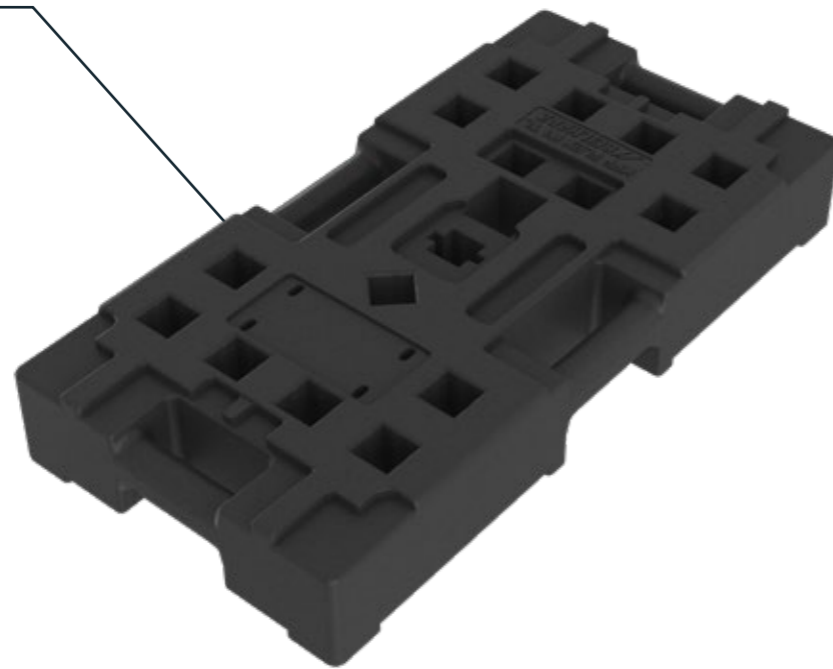
# TL-case base plate Type FLEX K1

Maximum flexibility during installation and reduced risk of tripping

For maximum flexibility and reduced risk of tripping

## Product properties

- A large number of openings saves time and manpower during assembly and dismantling
- 4 ergonomic carrying handles, each in the middle
- Reduced risk of stumbling in public spaces, e.g. for pedestrians, cyclists
- Optimum utilization of the traffic route width e.g. for wheelchair users



Individual **customer embossing** via logo plate or fixed integrated logo possible

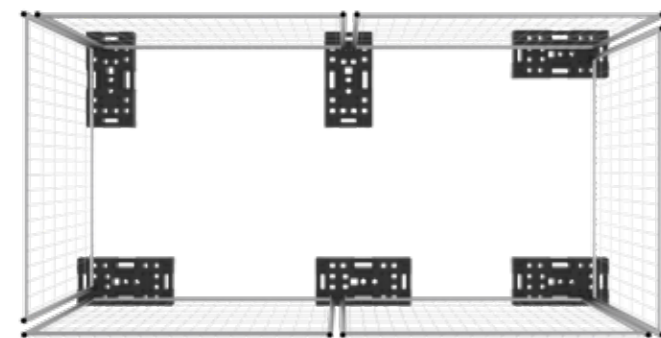
**Central openings for signposts 40x40**, once straight and at an angle of 45°, which meets the requirements for erecting signs 283 and 286 pointing to the road in accordance with VwV-StVO and RSA



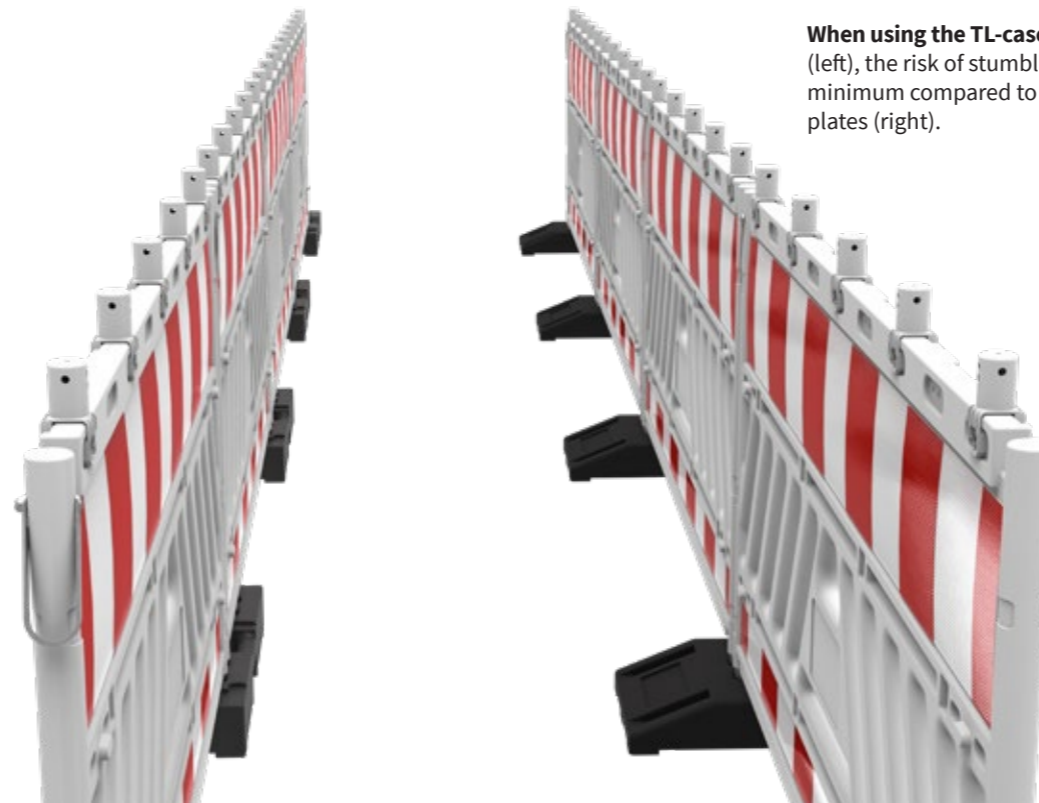
**Most flexible combinations** with site fence feet, Base plates for beacons and case base plates different manufacturers possible



**When using the TL-case base plate FLEX K1** (left), the risk of stumbling is reduced to a minimum compared to using "normal" foot plates (right).



**Maximum flexibility during installation and reduced risk of stumbling** in public spaces, e.g. for pedestrians and cyclists, compared to the use of normal base plates





**Base plates**

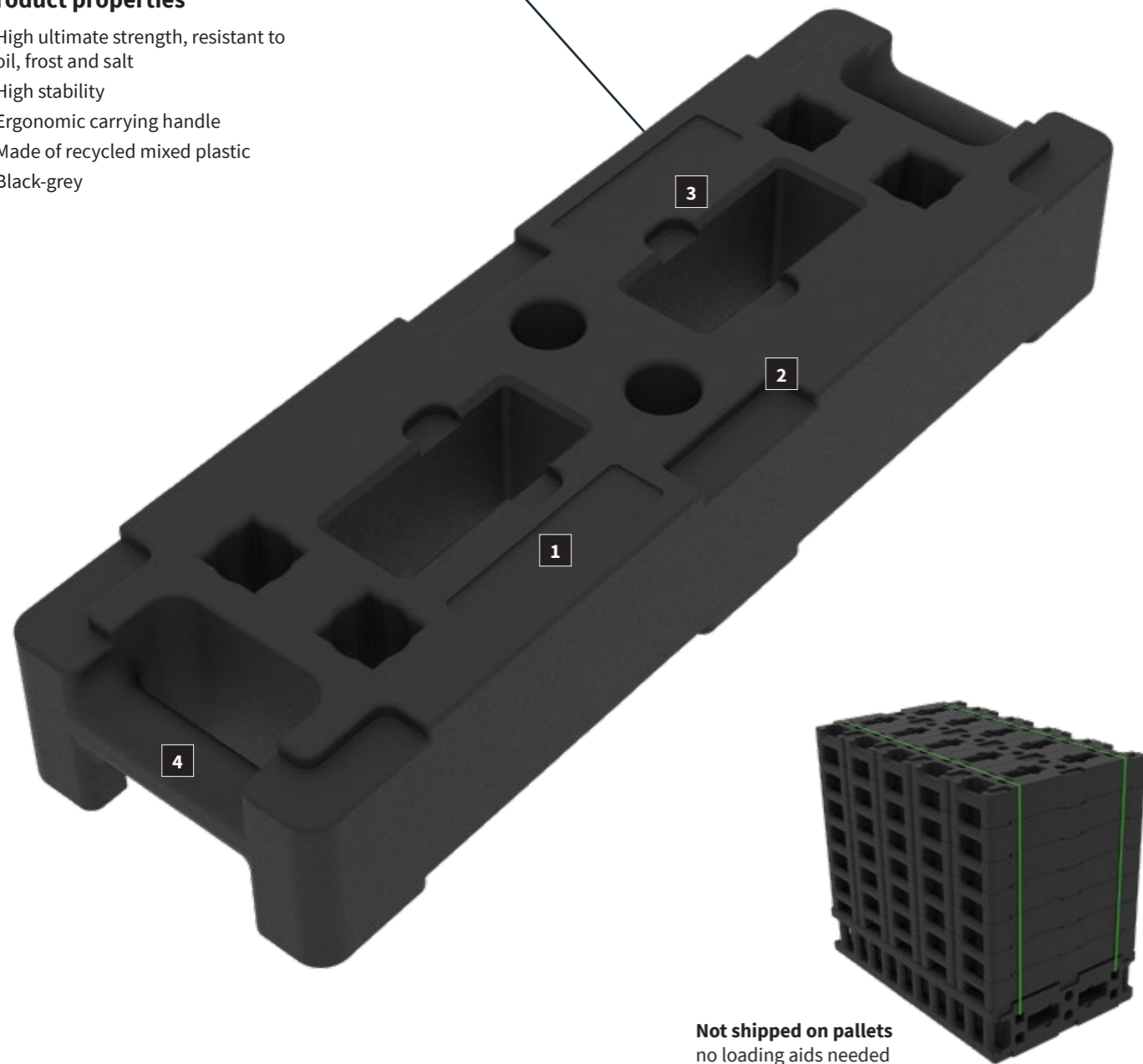
Type	TL-base plate Type DE TL K1 28KG	K1 base plate Type DE K1 28kg	Base plate Type NL 25 kg	TL-case base plate Type FLEX K1 <sup>3)</sup>
Dimensions <sup>1)</sup>	800 x 400 x 110 mm	800 x 400 x 110 mm	800 x 400 x 110 mm	780 x 400 x 120 mm
Weight	28 kg, weight class K1	28 kg, weight class K1	25 kg	32 ± 2 kg
Hole pattern / openings	1 x TL-adaptor for rotary system 1 x 60x60 mm 1 x 40x40 mm with slot 2 x 40x40 mm (= Ø 45 mm) 1 battery compartment approx. 175 x 150 x 95 mm	2 x 60x60 mm, 1 x 40x40 mm with slot 2 x 40x40 mm (= Ø 45 mm) 1 battery compartment approx. 175 x 150 x 95 mm	2 x 60x60 mm 2 x 40x40 mm (= Ø 45 mm) 2 x Ø 50 mm (1 with slot)	1 x 60x60 mm 1 x 40x40 mm with slot 1 x 40x40 45° turned 14 x 42x42 mm (combination opening = Ø 45 mm)
Special features	BAS-test number 75 Weight class K1 Base with integrated rotary adaptor for TL-reversible beacon	Weight class K1	Lighter base plate	Weight class K1
Packaging unit	30 units/pallet	30 units/pallet	36 units/pallet	30 units/pallet
Material <sup>2)</sup>	recycled mixed plastic	recycled mixed plastic	recycled mixed plastic	recycled mixed plastic

# Mobile base plates/fence bases

for mobile barriers and fences

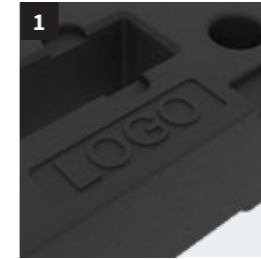
## Product properties

- High ultimate strength, resistant to oil, frost and salt
- High stability
- Ergonomic carrying handle
- Made of recycled mixed plastic
- Black-grey

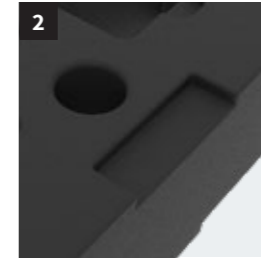


Not shipped on pallets  
no loading aids needed

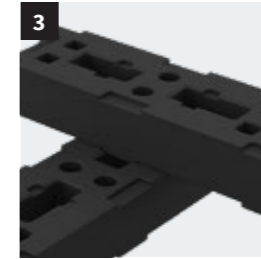
Individual **marking**,  
integrated on  
fence base



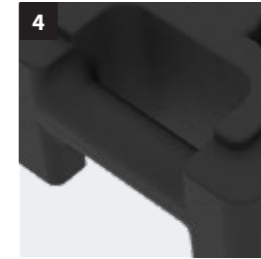
**Stacking aid** for  
lengthwise and  
crosswise stacking



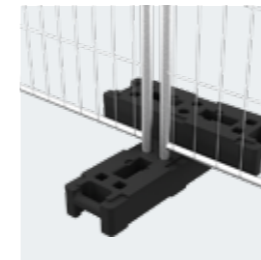
**Crosswise stacking** for  
greater stability



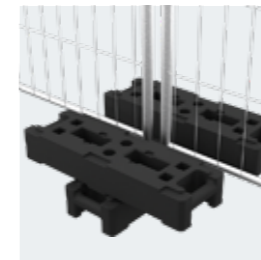
Ergonomic **carrying**  
**handle**



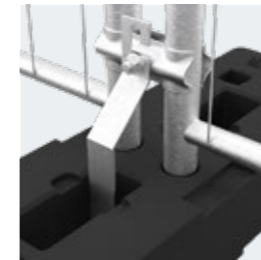
**Crosswise stacking** with  
a mobile fence base



**Crosswise stacking** with  
two mobile fence bases



Optimised for the  
attachment of **pull-out**  
**safety mechanism/theft**  
**protection**

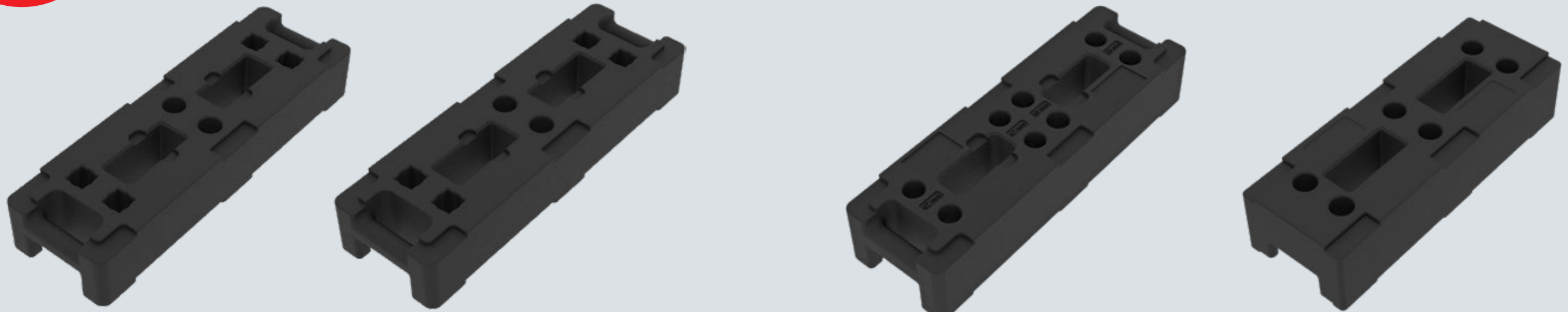


Installation of  
**beacons** possible for  
increased safety





**BZF 16 / BZF 20 /  
BZF-25 DUO  
can be stacked on  
top of each other**



**Mobile base plates/fence bases**

Type	BZF 16	BZF 20	BZF-25 DUO	BZF-25 Compact
Dimensions <sup>1)</sup>	770 x 240 x 130 mm	770 x 240 x 130 mm	770 x 240 x 150 mm	680 x 245 x 160 mm
Weight	16 kg	20 kg	approx. 25 kg	approx. 25 kg
Hole pattern / openings	2 x Ø 45 mm central 4 x Ø 45 mm for fences (= 40 x 40 mm for beacon) Pull-out safety mechanism / sockets for fork-lift truck forks	2 x Ø 45 mm central 4 x Ø 45 mm for fences (= 40 x 40 mm for beacon) Pull-out safety mechanism / sockets for fork-lift truck forks	4 x Ø 42 mm 4 x Ø 45 mm Pull-out safety mechanism / sockets for fork-lift truck forks	6 x Ø 45 mm Pull-out safety mechanism / sockets for fork-lift truck forks
Special features	2 handles Stacking aid, lengthwise & crosswise	2 handles Stacking aid, lengthwise & crosswise	2 handles Stacking aid, lengthwise & crosswise	2 handles Stacking aid
Packaging unit	Packed in bundles of 45 Shipping w/o loading aids (pallet) 1,210 x 770 x 1,090 mm 720 kg	Packed in bundles of 45 Shipping w/o loading aids (pallet) 1,210 x 770 x 1,090 mm 900 kg	Packed in bundles of 40 Shipping w/o loading aids (pallet) 1,130 x 770 x 1,230 mm 1,000 kg	Packed in bundles of 33 Shipping w/o loading aids (pallet) 1,220 x 680 x 1,000 mm 825 kg
Loading	max. 1,500 units / truck	max. 1,200 units / truck	max. 960 units / truck	max. 960 units / truck
Material <sup>2)</sup>	recycled mixed plastic	recycled mixed plastic	recycled mixed plastic	recycled mixed plastic

# Warning lights

bring light into the darkness

## TL-warning light Future LED

Tested	BAST-tested according to "TL-Warnleuchten", EN 12352
Housing	sturdy, shatterproof lamp housing with carrying handle, yellow, custom colours possible on request
Versions	WL 1 (light emission on one side), WL 2 (light emission on both sides) yellow, red, blind disk
Light source	LED, exchangeable electronics
Operating voltage	6 – 12 V, 2 batteries
Function check display	LED
Reverse polarity protection	present
Automatic dusk-to-dawn function	present
Switching option	Flashing / steady light
Mounting	directly on the beacon or with mounted clamp
Miscellaneous	Can be operated with a battery



# TL-traffic cone

with ergonomically shaped recessed grip

## TL-traffic cone 500 two-piece / 750 two-piece

- Height 500 mm / 750 mm
- BAST-tested according to "TL-Leitkegel" and EN 13422
- Weight class III
- Weight approx. 3 kg / 6.3 kg
- Foil sticker with customer logo on request
- Cone body red
- Ergonomically shaped recessed grip
- Sturdy cone base with anti-slip system
- Stacking knobs allow the cones to be stacked perfectly without damaging the foil and without them sticking together
- Cone body made of UV and ozone-resistant, blow-moulded HD-PE, and thus shatterproof and resistant to cold and heat



Ergonomically shaped recessed grip



Individual marking on foil

**bast** BAST-tested in accordance with "TL-Leitkegel"



## TL-traffic cone 750, one-piece

- Height 750 mm
- BAST-tested according to "TL-Leitkegel" and EN 13422
- Weight class III
- Weight approx. 5.3 kg
- With customer logo on the foil or cone base
- Cone body orange
- Ergonomically shaped recessed grip
- Stacking knobs allow the cones to be stacked perfectly without damaging the foil and without them sticking together
- Cone body made in one piece of UV and ozone-resistant material



Ergonomically shaped recessed grip



Individual marking on foil



Individual marking on cone base

**bast** BAST-tested in accordance with "TL-Leitkegel"

# TL-collapsible beacon/delineator Type 750

BAST-tested according to "TL-Leitbaken"

## Product properties

- BAST-tested in accordance with "TL-Leitbaken V4-03/2015"
- Beacon body made of UV and ozone-resistant HD-PE plastic
- Overall dimensions approx. 1,000 x 650 x 300 mm
- Foil dimensions approx. 750 x 187.5 mm
- Weight approx. 12 kg
- Arrow and diagonal stripes foil in RA1, RA2 and RA3 with customer logo on request
- Sturdy, safe and positive-locking folding mechanism for a long service life
- Base plate made of 100 % recycled plastic with rubber-coated anti-slip system
- Carrying handles on both sides of the base plate to make it even easier to pick up and put down the system
- Storage and transport options available separately



Large and comfortable carrying handle

Ergonomic carrying handles attached on both sides of the base plate

Individual marking on foil

Integrated anti-slip system using rubber feet

## Storage and transport box for 5 collapsible beacons/delineators

- Dimensions approx. 65 x 35 x 30 cm
- Weight approx. 8.0 kg
- Hot-dip galvanised steel

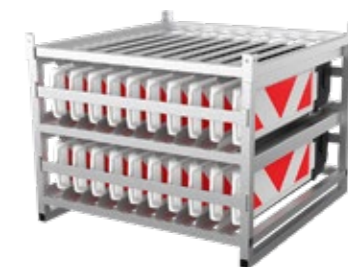
Up to 5 collapsible delineators can be stored comfortably and safely in the storage/transport box. The box has two carrying handles and can be carried by two people.



## Storage and transport rack for 20 collapsible beacons/delineators

- Dimensions approx. 124 x 126 x 100 cm
- Weight approx. 160 kg
- Hot-dip galvanised steel

The larger version can be used to safely transport and store up to 20 collapsible delineators. The rack is made from hot-dip galvanised tubular steel and has a total of 20 slots for collapsible delineators. Two locking rails ensure that the collapsible delineators are held firmly in place. The racks can be stacked to allow two units to be transported or stored on top of each other.





# Mobile cross for traffic signs

of varying sizes

## Product properties

The mobile cross for traffic signs is used to cross out road signs of various sizes.

- UV-resistant, cold impact-resistant and very flexible plastic dyed white
- The high flexibility ensures that the device can also be mounted on broad sign frames
- Foil Type RA2/C red, special foils on request

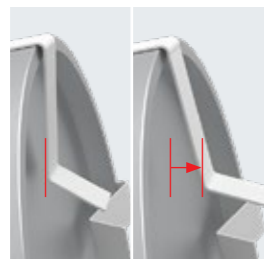
Long service life thanks to **protective foil edge**



Can be extended with a **retrofit extension**



High **breakage resistance** due to the extreme pliability of the rear wing – also suitable for ALFORM sign holders with a broad profiled frame



The cross angle can be adjusted individually with a star grip



Type 750 with 800 extension



## Type 600 / 750

- Length 600 mm / 750 mm, foil width 75 mm, overall width 82 mm
- Variable cross position can be adjusted with a star grip
- To cross out round Ø 600 mm / 750 mm or triangular SL 1260, for example
- Option: 800 mm extension can be retrofitted, total length then 1,400 mm / 1,550 mm

## Type 1.000

- Length 1,000 mm, foil width 75 mm, overall width 82 mm
- Variable cross position can be adjusted with a star grip
- To cross out additional signs, for example, 750 x 750 mm
- Option: 800 mm extension can be retrofitted, total length then 1,800 mm

## Type 1.200

- Length 1,200 mm, foil width 75 mm, overall width 82 mm
- Variable cross position can be adjusted with a star grip
- To cross out, for example, triangular SL 1260 and additional sign 412 x 750 mm or triangular SL 1260 with round
- Option: 800 mm extension can be retrofitted, total length then 2,000 mm

## Extension 800

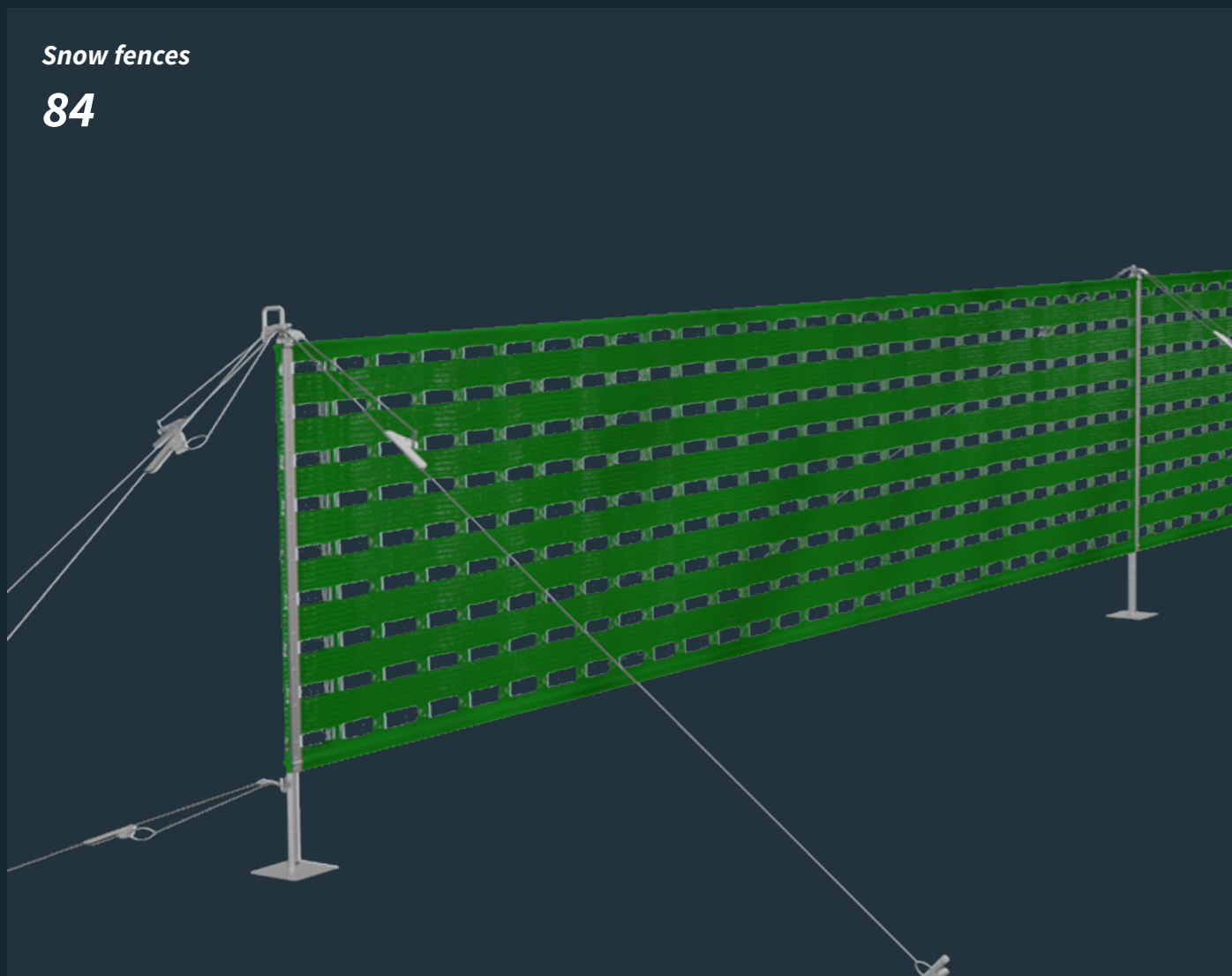
- Length 800 mm, foil width 75 mm, overall width 82 mm
- The extension can be retrofitted to the types 750, 1.000 and 1.200 with a star grip.

# Winter equipment

for greater safety in the snow

Snow fences

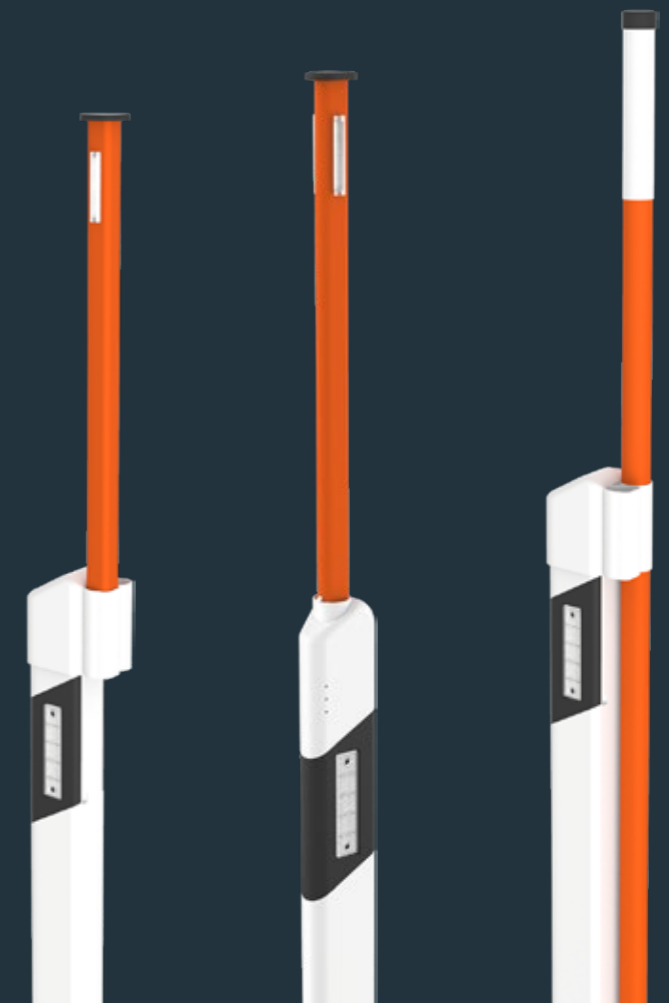
84



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Snow poles

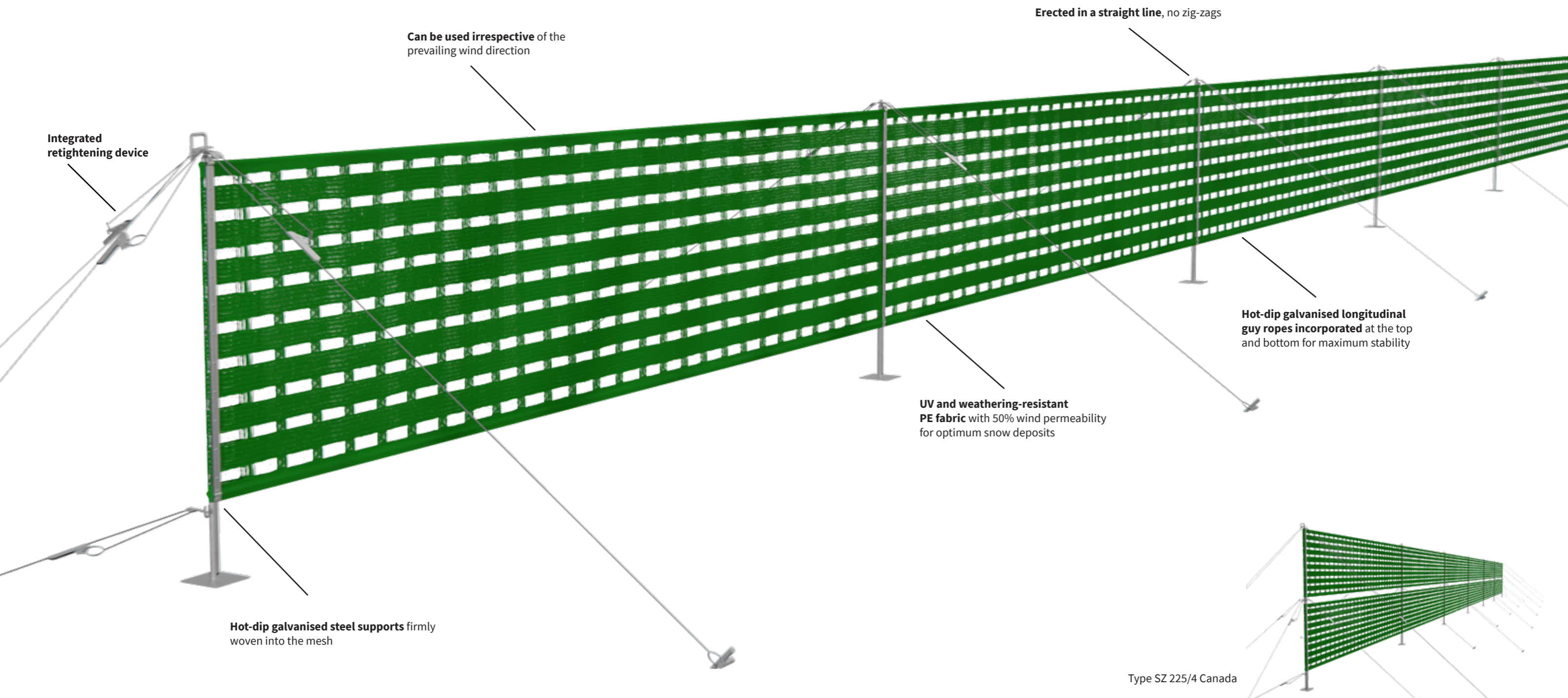
88



# Snow fences

Mobile snow protection to prevent snow drifts across roads

Versions available for mechanical installation



Integrated retightening device

Can be used irrespective of the prevailing wind direction

Erected in a straight line, no zig-zags

Hot-dip galvanised longitudinal guy ropes incorporated at the top and bottom for maximum stability

UV and weathering-resistant PE fabric with 50% wind permeability for optimum snow deposits

Hot-dip galvanised steel supports firmly woven into the mesh

Type SZ 225/4 Canada



**Easy handling**

- Supplied on handy rolls: fast installation and removal, cost-effective storage. The system can be installed and removed by only one person if necessary
- The snow fence does not have to be cleaned and dried after its removal in Spring. It can be put away dirty and wet without having to fear any damage to the snow fence



**Long-life quality**

- The steel support posts are firmly woven into the fabric and are held in place at several points by mat retaining plates
- Chafing strips have been worked in between the support posts and fabric so that the fabric does not chafe even after many years of use



**Integrated retightening device**

- The guy ropes are not tensioned and released by hammering the pegs in deeper or pulling them out, but by patented rope tensioning devices. So there is no problem if the ropes have to be retightened, and you don't have to search for the pegs in deep snow
- Lateral bracing of the fence is only necessary from one side, the other side tensions itself automatically

**Stability**

- Longitudinal bracing is by means of the hop-dip galvanised steel ropes that are incorporated at the top and bottom of the fence. These steel ropes prevent the snow fence from sagging under load and at the same time offer optimum theft protection for the snow fence mats



**100% benefits**

- Snow fences are erected in an upright position so that 100% of their length can be used
- Since the pegs are hammered into the ground fully on installation, they are not subjected to any bending moment. They sit tight – even in ploughed fields – and are still small and handy
- On account of the small pegs and bases plates, that are only 20 cm long, onto which the support posts are placed, the fences can be installed easily in even hard or stony soils

**Overview of types**

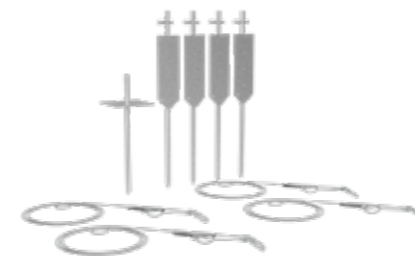
Type	SZ 120/6	SZ 120/4	SZ 130/6	SZ 150/6	SZ 150/4	SZ 225/4
Overall height	1.20 m	1.20 m	1.30 m	1.50 m	1.50 m	2.25 m
Mesh height	0.90 m	0.90 m	0.90 m	1.20 m	1.20 m	1.85 m
Coil length	24 m	24 m	24 m	24 m	24 m	24 m
Distance between supports	6.00 m	4.00 m	6.00 m	6.00 m	4.00 m	4.00 m
Weight/coil incl. support posts approx.	19.60 kg	21.30 kg	19.60 kg	22.10 kg	25.80 kg	48.5 kg
Weight/m incl. accessories approx.	1.60 kg	1.95 kg	1.60 kg	1.70 kg	2.15 kg	4.20 kg

**Tacker for mechanical installation**

Reinforced pegs and our base plates can be driven in quickly and comfortably with the tacker.

Your advantages at a glance:

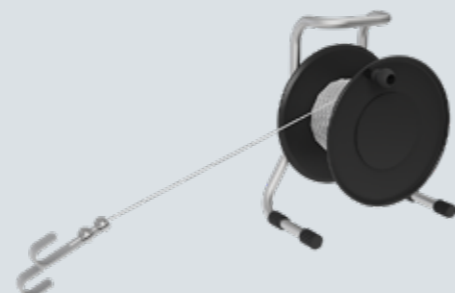
- Save time by driving in pegs and base plates faster
- Reduced workload through effortless mechanical driving of pegs
- Less material wear through mechanical driving
- Higher stability of the erected system
- Safer work for the installation personnel



**Interruption** for additional installation sections



**Tensioning device** for even easier tensioning of the guy ropes.



**Standard winch** is used to easily mark the correct intervals for the base plates during installation.



**Peg puller** makes it easier to pull pegs out of the ground.



**Mat winder** for fast and tidy removal.



# Snow poles

Guarantee optimum guidance



## Product properties

- UV-stabilised plastic, resistant to oil, frost and salt
- Dimensionally stable and resistant to impacts at low temperatures
- Do not absorb water, can be used all year round (marking post)
- Diameter ø 50 mm
- Thickness approx. 3 mm
- Standard lengths: 1.00 m / 1.25 m / 1.50 m / 2.00 m / 2.50 m (custom lengths possible)
- Standard colour orange (custom colours possible)



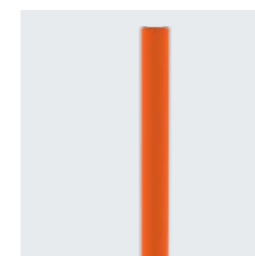
## Option: Cap made from special plastic

- Impact-resistant black cap
- Cap can be retrofitted
- Positive locking and exact fit
- Included in versions with reflection film



## Option: Fully enclosed cone tip

- Easy to drive into the ground
- Cone tip can be retrofitted
- Dirt cannot collect in the snow pole



## Version 1: w/o reflection film

- Snow pole, completely orange
- Open at the top, optionally with impact-resistant cap



## Version 2: with reflection film

- Thanks to the all-round reflection film, the snow pole is easily visible during both the day and night – guaranteeing ideal guidance for road users and snow clearing services
- Film height 30 cm, white, silver-white reflection RA2/B



# Accessories

for Beilharz snow poles



## Stand bracket made of hot-dip galvanised steel to hold a snow pole

- Hot-dip galvanised round steel, Ø 15 mm
- Sockets: 2 x circular tube with an inner diameter of 51 mm
- Total length 1,200 mm

## Attachment cap for snow poles

- For the easy retrofitting of snow poles to all kinds of delineator
- Attachment cap with two holding fixtures
- Restricted holding fixture into which a round snow pole with a diameter of 50 mm or a triangular snow pole (length 1–1.50 m) can be inserted
- Unrestricted holding fixture through which a round snow pole with a diameter of 50 mm (length 2–2.50 m) can be inserted down to the ground



## Plastic ground sleeve

Allows the fast insertion of a snow pole. It is installed directly in the ground or into a concrete foundation, e.g. on traffic islands or parking areas.

- Total length 430 mm
- Inner diameter approx. 54 mm, for pole diameters up to 52 mm
- Cap closes automatically, dyed red



## Steel ground sleeve

Allows the fast insertion of a snow pole. It is installed directly in the ground or into a concrete foundation, e.g. on traffic islands or parking areas.

- Hot-dip galvanised steel
- Total length 300 mm
- Inner diameter approx. 52 mm, for pole diameters up to approx. 50 mm
- Cap available as optional extra

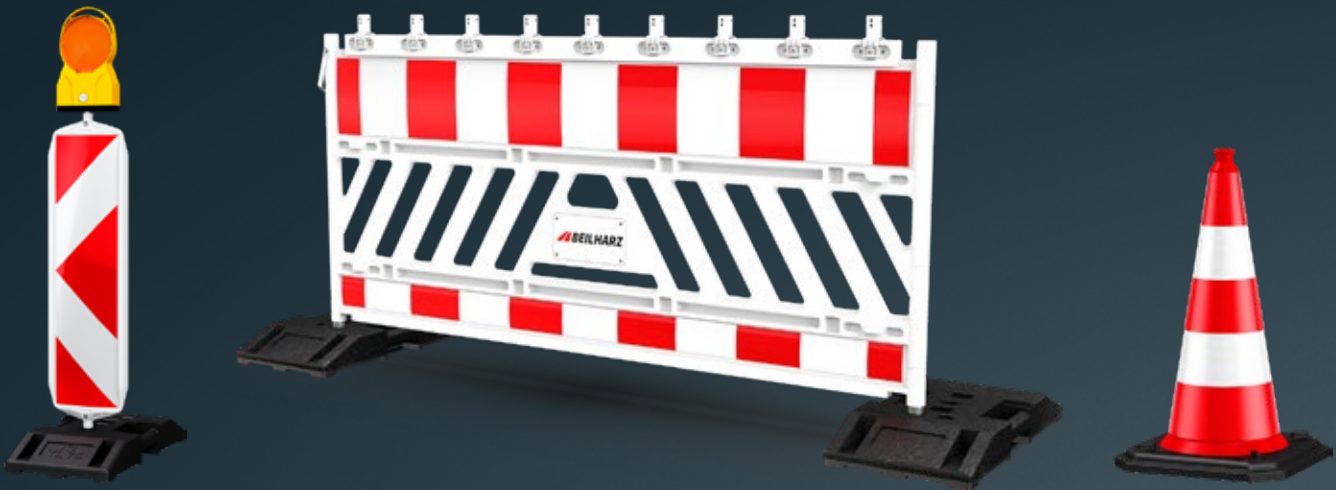


## Snow pole clamp bracket for mounting on guard rails

- To hold a snow pole up to Ø 50 mm
- Hot-dip galvanised steel
- With fastening screws



Optionally available as a guard rail marker with 50 cm pole incl. reflection film and through-bolt



The latest information  
can be found at [beilharz.eu](https://www.beilharz.eu)

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