WATER MANAGEMENT



MEAKERB BRIDGE BRIDGE DRAINAGE

DRAINAGE SYSTEM FOR NEW CONSTRUCTION AND RENOVATION OF BRIDGES

25

COMPLETE DRAINAGE SYSTEM MADE OF POLYMER CONCRETE



Bridges connect

and therefore have a very special place in our infrastructure. In order to make these engineering structures even better, extend their service life and provide engineers and planners with highquality products, we have expanded our MEAKERB product family to include the MEAKERB BRIDGE product range.

The MEAKERB BRIDGE was specially developed for the drainage of bridges. The combination of kerb and drainage element makes it possible to create wider sidewalks and more space for the roadway. When using MEAKERB BRIDGE, the safety and durability of bridge structures can be significantly increased, as fewer penetrations are required in the waterproofing and supporting structure. The risk of aquaplaning and black ice is also reduced thanks to the direct drainage of rainwater at the edge of the carriageway.

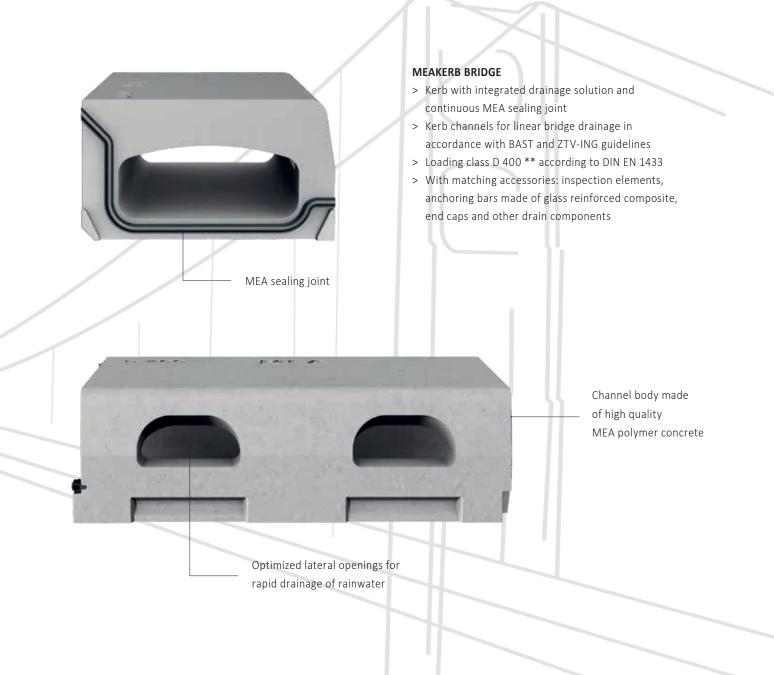
MEAKERB BRIDGE BRIDGE DRAINAGE



MEAKERB BRIDGE FOR NEW CONSTRUCTION AND RENOVATION OF BRIDGES

MEAKERB BRIDGE products are ideal for both new bridge construction and bridge renovation. With MEAKERB BRIDGE, MEA offers a complete range in which all components are perfectly coordinated to meet the requirements of planners. With its low weight, the polymer concrete material used is ideal for use in bridge construction The MEAKERB BRIDGE combine a Kerb and a drainage channel in one single product. Lightweight, easy to install the MEAKERB BRIDGE channels practical installation instructions and technical support are available from our application technology team.

MEAKERB BRIDGE COMPLETE BRIDGE DRAINAGE SYSTEM



- > Traffic situation-dependent variants according to BAST (KAP 12)
- > Extra-urban areas V>50 km/h: MEAKERB BRIDGE 200-75 (7.5 cm shelf height)
- > Inner-city areas V<50 km/h: MEAKERB BRIDGE 160-150 (15 cm shelf height)



MEAKERB BRIDGE QUICK DRAINAGE OF HIGH PRECIPITATION VOLUMES

ADVANTAGES OVER POINT DRAINAGE

- > The number of downward water drains can be reduced compared to point drains due to the larger hydraulic capacity (longer lengths of the pipe)
- Reduced number of drain penetrations increases the safety and durability of the structure, fewer penetrations in the waterproofing and supporting structure
- > No formwork on the roadway side during casting and new construction of the cap
- > Existing drain openings can be used during renovation
- > More effective OPA dewatering thanks to shorter paths for the water

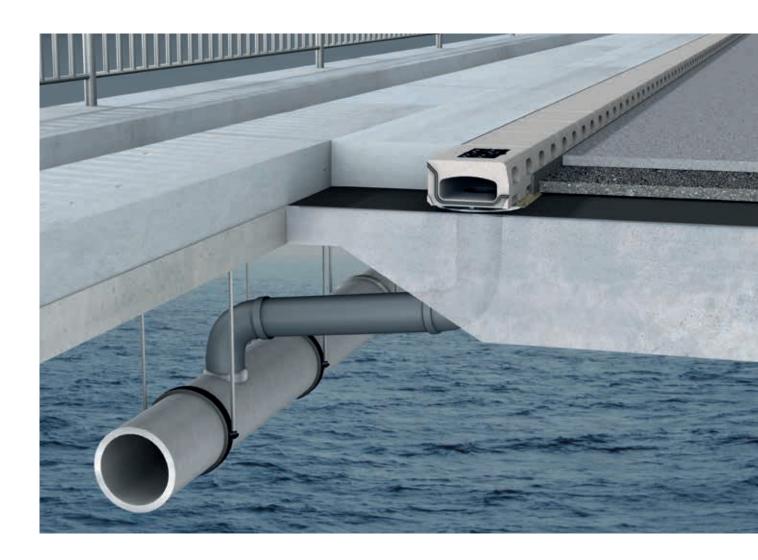
- > Combines drainage channel and Kerb in one product
- > No overrun drains defective drains in the trafficked area excluded
- No longitudinal gradient required in the road surface/ edge area
- > Wider footpaths possible due to widening of the canopy
- > Conversely wider lanes possible, as integrated in cap
- > Water disappears into the cap does not run off onto the road
- Prevention of aquaplaning, no formation of black ice on the road surface
- > Lighter cap due to hollow channel, thus saving weight and construction costs

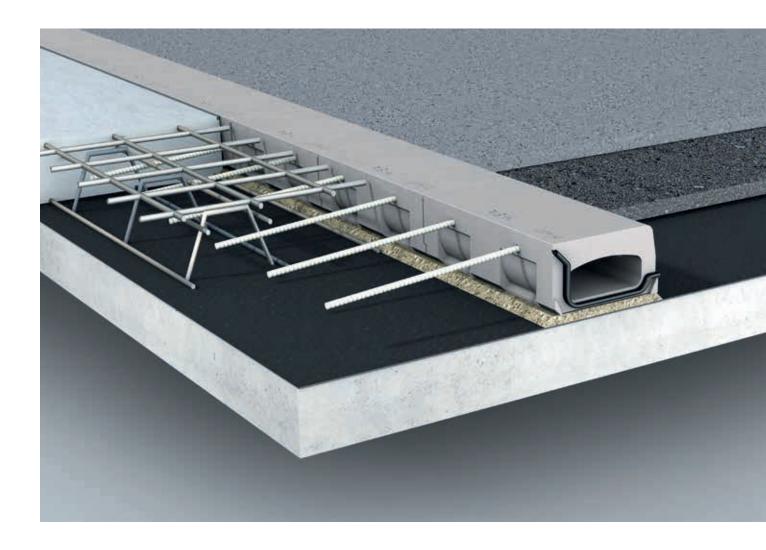
MEAKERB BRIDGE INSPECTION ELEMENT WITH DRAIN CONNECTION

INTEGRATED DRAIN NOZZLE

- > Vertical nozzle Ø 160 according to ZTV ING Part 8 Section 5 2.1 (4)
- > One-piece connection piece less installation work
- > Tightly molded
- > Pre-assembled
- > 100% tight
- > Stainless steel (No. 1.4571 according to DIN EN 10088 with at least 2 mm wall thickness) according to ZTV ING Part 8 Section 5 2.3 (1)
- > 9 cm nozzle length







MEAKERB BRIDGE ANCHOR INCLUDED

GRP ANCHOR RODS

The MEA GRP anchor rods are used to securely fix the hollow deck channel in the bridge deck:

- Prepared for optional mounting according to BAST (KAP 12 & DICHT20)
- > GRP anchor rods (L = 40 cm)
- Material ideally suited to prevent corrosion of the bridge reinforcement
- > Material according to ZTV ING Part 8 Section 5 2.3 (1)
- > 4 x per meter & Diameter 14 mm
- > Quick installation using Resifix adhesive
- Bonding behavior tested by means of pullout tests (incl. certificate)
- > Compliance with the minimum concrete cover

MEAKERB BRIDGE ACCESSORIES

MEAKERB BRIDGE 160 & 200 ACCESSORIES

MEA offers all the necessary accessories to create a complete, functioning system:

- > Stainless steel (No. 1.4571) acc. to DIN EN 10088 with at least 2 mm wall thickness) acc. to ZTV ING Part 8 Section 5 2.3 (1)
- > Dirt sieve
- > End caps
- > Press seal flange





MEAKERB BRIDGE 160 End cap AISI 316Ti

MEAKERB BRIDGE 200 End cap AISI 316Ti



MEAKERB BRIDGE Dirt grill AISI 316Ti Ø 160 mm



MEAKERB BRIDGE Press seal flange drain AISI 316Ti Ø 160 mm



MEAKERB BRIDGE ABSOLUTELY TIGHT



MEAKERB BRIDGE EPDM GASKET

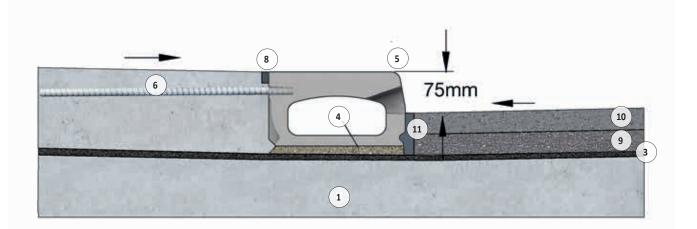
- > Optimized shape of the of the sealing joint prevents water from seeping into the structure
- > No maintenance required
- > The flexible seals make it easier adapt to bridge torsion

MEAKERB BRIDGE CURVE REALIZATION

> With a channel length of 500 mm and the integrated sealing joint, it is possible to achieve optimum shaping of different curve radii



MEAKERB BRIDGE 200-75 INSTALLATION



- 1 Structural Concrete
- 3 2-Layer Sealing, Bitumen Welded Membrane on Epoxy Resin Primer Seal
- (4) Water-permeable reaction resin concrete with epoxy resin and aggregate (8mm) in accordance with DIN EN 12620 (BAST: KAP 12) at least 400 N/cm²
- 5) MEAKERB BRIDGE200-75 channel-0,5m (010152205)
- 6 Anchor (BAST: KAP12), MEAKERB BRIDGE Reinforcing Bars M12-0,5m, GRP (010152226)

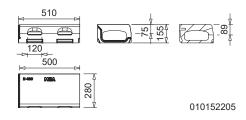
- (8) Construction Joint According to BAST: DICHT 20/ ZTV Fug Stb 15
- (9) Asphalt Protective Layer
- (10) Asphalt Surface Layer
- $\widehat{(11)}$ Sealing Joint According to BAST: DICHT 9/ ZTV Fug Stb 15

For detailed installation instructions and project-related planning support, please contact our application engineering department at: AnwendungstechnikMWM@mea-group.com

MEAKERB BRIDGE 200-75

MEAKERB BRIDGE 200 BRIDGE DRAINAGE MONOLITHIC POLYMER CONCRETE CHANNELS WITH EPDM SEALINGS



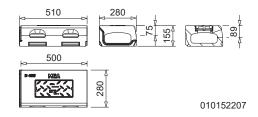


MEAKERB BRIDGE 200-75 Kerb channel, 75 mm height, flow cross-section 147 cm² with reinforcement preformed on the rear side

Article	Length (mm)	Height (mm)	Inl. sect. area Ø cm²/m laterally	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 200-75 kerb channel incl. butt joint seal	500	155	208	010152205	28,50	1	MD

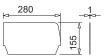
ACCESSORIES FOR MEAKERB BRIDGE 200





MEAKERB BRIDGE 200-75 Inspection elements, scraper flange height 75 mm, flow cross-section 107 cm², with reinforcement preformed on the rear side

Article	Length (mm)	Height (mm)	Inlet sect. area Ø cm²/m laterally	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 200-75 kerb channel with inspection opening incl. closed cover and butt seal	500	155	208	010152207	25,70	1	MD
MEAKERB BRIDGE 200-75 kerb channel with inspection opening, incl. closed cover and impact seal with vertical socket \emptyset 160 mm stainl. steel (AISI 316), stainless steel 1.4571	500	155	208	010152210	25,70	1	MD

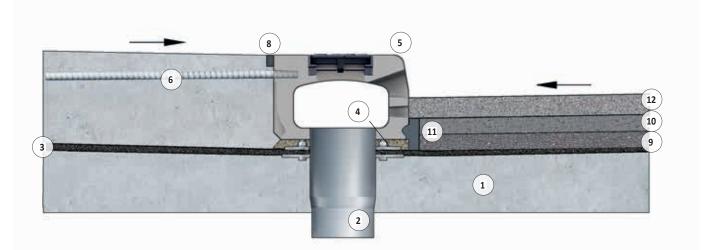


010152220

MEAKERB BRIDGE 200 End cap

Article	Material	Height (mm)	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 200.SE end cap made of stainl. steel (AISI 316) for channel start/end	Stainl. steel (AISI 316)	-	010152220	0,30	1	MD

MEAKERB BRIDGE 200-75 OPA INSTALLATION



- (1) Structural Concrete
- 2 Press seal flange ø160 mm
- (3) 2-Layer Sealing, Bitumen Welded Membrane on Epoxy Resin Primer Seal
- (4) Water-permeable reaction resin concrete with epoxy resin and aggregate (8mm) in accordance with DIN EN 12620 (BAST: KAP 12) at least 400 N/cm²
- (5) MEAKERB BRIDGE 200-75.AP/A-OPA-Ø160-0,5m (010152216), nozzle 1.4571
- 6 Anchor (BAST: KAP12), MEAKERB BRIDGE Reinforcing Bars M12-0,5m, GRP (010152226)

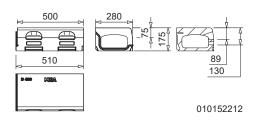
- $\fbox{(8)}$ Construction Joint According to BAST: DICHT 20/ ZTV Fug Stb 15
- (9) Asphalt Protective Layer
- (10) Asphalt Surface Layer
- (1) Sealing Joint According to BAST: DICHT 9/ ZTV Fug Stb 15
- (12) Open-pored Asphalt

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MEAKERB BRIDGE 200-75 OPA

MEAKERB BRIDGE 200 BRIDGE DRAINAGE MONOLITHIC POLYMER CONCRETE CHANNELS WITH EPDM SEALINGS





MEAKERB BRIDGE 200-75 Kerb channel, 75 mm height, flow cross-section OPA 147 \mbox{cm}^2

with reinforcement preformed on the rear side

Article	Length (mm)	Height (mm)	Inl. sect. area Ø cm²/m laterally	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 200-75 kerb channel OPA for porous asphalt incl. butt joint seal	500	175	296	010152212	30,00	1	MD

ACCESSORIES FOR MEAKERB BRIDGE 200

MEAKERB BRIDGE 200-75 Inspection elements, scraper flange height 75 mm, flow cross-section OPA 147 cm² with reinforcement preformed on the rear side

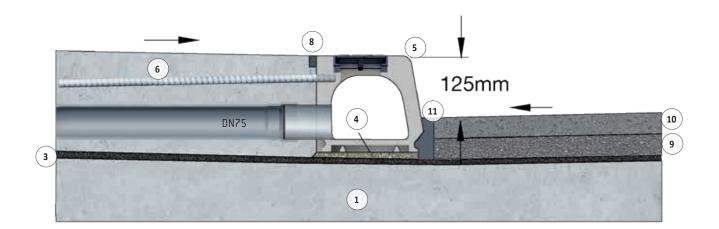
Article	Length (mm)	Height (mm)	Inlet sect. area Ø cm²/m laterally	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 200-75 kerb channel OPA with inspection opening for porous asphalt, incl. closed cover and butt joint seal	500	175	296	010152214	29,60	1	MD
MEAKERB BRIDGE 200-75 kerb channel OPA with inspection opening for porous asphalt, incl. closed cover and impact seal, with vertical spigot Ø 160 mm AISI 316, stainless steel 1.4571	500	175	296	010152216	30,30	1	MD



MEAKERB BRIDGE 200 End cap

Article	Material	Height (mm)	EAN-Code	kg/unit	unit/pallet	MG	
MEAKERB BRIDGE 200.SE OPA end cap made of stainl. steel (AISI 316) for channel start/end	Stainl. steel (AISI 316)	-	010152222	0,40	1	MD	

MEAKERB BRIDGE 160-125 INSTALLATION



- (1) Structural Concrete
- (3) 2-Layer Sealing, Bitumen Welded Membrane on Epoxy Resin Primer Seal
- (4) Water-permeable reaction resin concrete with epoxy resin and aggregate (8mm) in accordance with DIN EN 12620 (BAST: KAP 12) at least 400 N/cm²
- (5) MEAKERB BRIDGE160.AP/A Revi Ø75 H-0,5m (010152194), nozzle 1.4571
 - MEAKERB BRIDGE160.AP/A Revi Ø110 H-0,5m (010152202), nozzle 1.4571

- $(\widehat{\textbf{8}})$ Construction Joint According to BAST: DICHT 20/ ZTV Fug Stb 15
- (9) Asphalt Protective Layer
- (10) Asphalt Surface Layer
- $\fbox{(1)}$ Sealing Joint According to BAST: DICHT 9/ ZTV Fug Stb 15

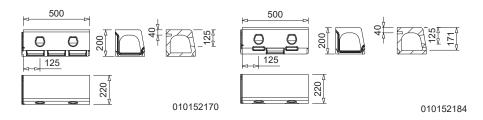
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MEAKERB BRIDGE 160-125

MEAKERB BRIDGE 160 BRIDGE DRAINAGE

MONOLITHIC POLYMER CONCRETE CHANNELS WITH EPDM SEALINGS





MEAKERB BRIDGE 160-125 Kerb channel, height of curb 125 mm, flow cross-section 190 cm², with reinforcement preformed on the rear side

Article	Length (mm)	Height (mm)	Inl. sect. area Ø cm²/m laterally	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 160-125 kerb channel, incl. butt joint seal with connector for vertical outlet Ø 160 mm	500	200	125	010152170	22,58	1	MD
MEAKERB BRIDGE 160-125 OPA kerb channel, for porous asphalt, incl. butt joint seal with connector for vertical outlet Ø 160 mm	500	200	185	010152184	22,80	1	MD

MEAKERB BRIDGE 160 ACCESSORIES

MEAKERB BRIDGE 160-125 Expansion joint set

Article	Material	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 160.expansion joint set-1.3 m for unimpeded water flow over expansion joints	Polymer concrete	010152237	60,50	1	MD

MEAKERB BRIDGE Accessories

Article	Material	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE Dirt grille in stainl. steel (AISI 316) for drain outlets Ø 160 mm	Stainl. steel (AISI 316)	010152224	0,30	1	MD
MEAKERB BRIDGE reinforcement bars M12, 0.5 m long, for gluing into the back of MEAKERB BRIDGE 200 kerb channel	GRP	010152226	0,14	1	MD
MEA ResiFix PY composite mortar (styrene-free) 165 ml cartridge + 2 mixing outlets *)	Polyester resin 2-component	010504205	0,35	1	MD
For installation with mastic asphalt: MEA pressed gasket flange drain. Floor/ceiling drain stainless steel, outer Ø 274 mm, incl. mortar barrier. Connector for vertical outlet Ø 160 mm.	Stainl. steel (AISI 316)	010152228	7,70	1	MD

MEAKERB BRIDGE 160 End cap

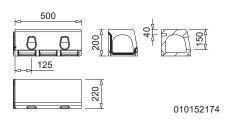
Article	Material	Height (mm)	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 160.SE end cap made of stainl. steel (AISI 316) for channel start/end	Stainl. steel (AISI 316)	-	010152218	0,30	1	MD

*Delivery time on demand

MEAKERB BRIDGE 160-150

MEAKERB BRIDGE 160 BRIDGE DRAINAGE MONOLITHIC POLYMER CONCRETE CHANNELS WITH EPDM SEALINGS





MEAKERB BRIDGE 160-150 Kerb channel, kerb height 150 mm, flow cross-section 43 cm², with rear reinforcement preforming

Article	Length (mm)	Height (mm)	Inl, sect. area Ø cm²/m laterally	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 160-150 kerb channel, incl. butt joint seal with connector for vertical outlet Ø 160 mm $^{*)}$	500	200	175	010152174	22,48	40	MD

*Delivery time on demand

MEAKERB BRIDGE 160 ACCESSORIES

MEAKERB BRIDGE 160-150 inspection elements

Article	Length (mm)	Height (mm)	Inl. sect. area Ø cm²/m laterally	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 160 kerb channel with inspection opening, incl. closed cover, incl. butt joint seal with connector for vertical outlet \emptyset 160 mm	500	200	-	010152172	23,78	1	MD
MEAKERB BRIDGE 160 kerb channel with inspection opening, incl. closed cover, incl. butt joint seal, with vertical socket Ø 160 mm stainl. steel (AISI 316), stainless steel 1.4571	500	200	-	010152186	23,78	1	MD

MEAKERB BRIDGE 160-150 Expansion joint set

Article	Material	EAN-Code	kg/unit	unit/pallet	MG
MEAKERB BRIDGE 160.expansion joint set-1.3 m for unimpeded water flow over expansion joints	Polymer concrete	010152237	60,50	1	MD



MEAKERB BRIDGE 160 End cap

Article	Material	Height (mm)	EAN-Code	kg/unit	unit/pallet	MG	
MEAKERB BRIDGE 160.SE end cap made of stainl. steel (AISI 316) for channel start/end	Stainl. steel (AISI 316)	-	010152218	0,30	1	MD	



BUILDING SUCCESS

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