WATER MANAGEMENT

MEA

BUILDING SUCCESS

MEASTORM

SEEPAGE TUNNEL WITH DIBT-APPROVAL

Deutsches Institut für Bautechnik DIBt

MEASTORM SEEPAGE TUNNEL MADE OF PE-HD

Chambers for local rainwater seepage

Seepage of rainwater from the terraçe and roof

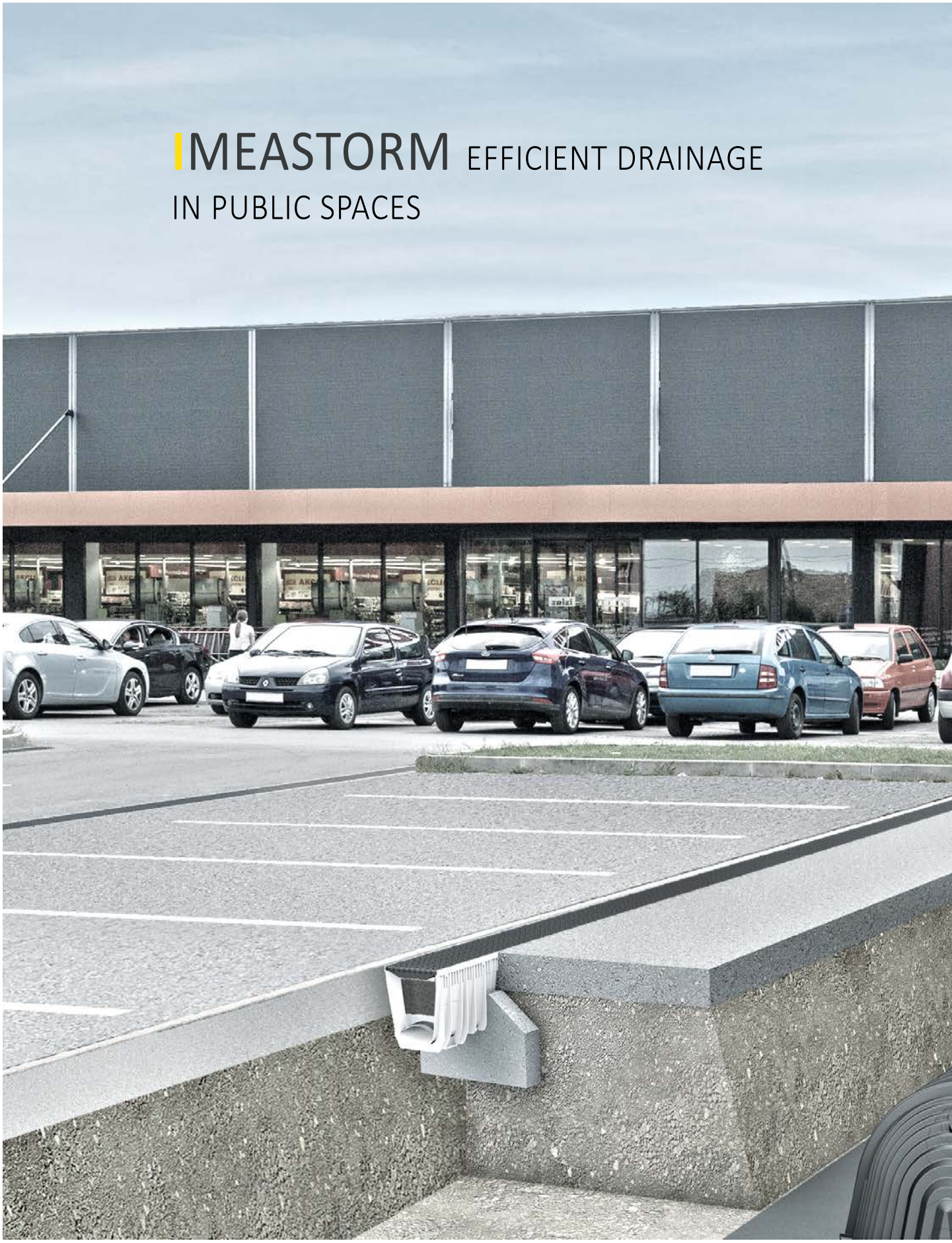
MEASTORM

DRAINAGE IN THE PRIVATE AREA

Advantages

- Load capacity of the surface above up to SLW 60
- Simple, efficient planning and constructional implementation through a modular design
- Reduced wastewater fees
- Low costs
- Protection of the groundwater level

MEASTORM EFFICIENT DRAINAGE IN PUBLIC SPACES



Trafficked areas, pedestrian areas, connection of roof drainage

MEASTORM SYSTEM OVERVIEW

MEASTORM R chamber 1600 with DIBt approval

Width: 1375 mm
Height: 805 mm
Length: 2340 mm

- Material: High-density polyethylene (PE-HD)
- Weight: 32 kg
- Loading class: SLW 60 with DIBt approval
- Vent port: DN 100

Start and end caps for MEASTORM chamber 1600

Width: 1375 mm
Height start/end cap: 767/736 mm
Length start/end cap: 443/444 mm

- Material: High-density polyethylene (PE-HD)
- Weight start/end caps: 5.50/5.60 kg
- Loading class: SLW 60 with DIBt approval
- Connectivity: DN 100 to 300

MEASTORM chamber 300

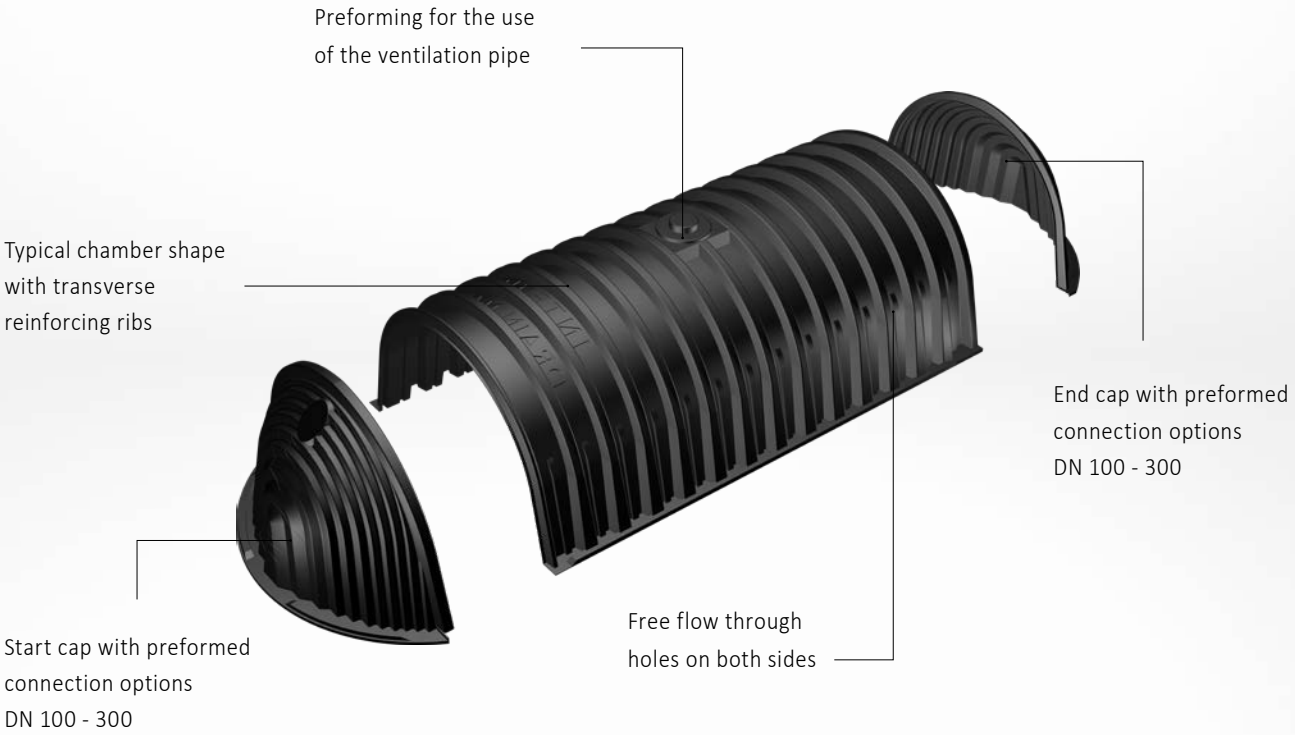
Width: 800 mm
Height: 400 mm
Length: 1200 mm

- Material: High-density polyethylene (PE-HD)
- Weight: 10.45 kg
- Vent port: DN 100

Start and end caps for MEASTORM chamber 300

Width: 700 mm
Height: 400 mm
Length: 60 mm

- Material: High-density polyethylene (PE-HD)
- Weight: 1.94 kg
- Connectivity: DN 60 to 300



MEASTORM 1600 with DIBt approval,
Loading classes SLW 60 with appropriate installation, permissible processing temperature: +2°C to +30°C

	Centre chamber	Start cap	End cap
Length:	2340 mm	443 mm	444 mm
Width:	1375 mm	1375 mm	1375 mm
Height (rib shoulder):	781 mm	767 mm	736 mm
Height (dome connection):	805 mm	--	--
Effective working length:	2250 mm	--	--
Weight:	32.00 kg	5.50 kg	5.60 kg
Material: (100% recycled)	PE-HD	PE-HD	PE-HD
Connections:	1 x DN 100 (Dom)	DN 100-300	DN 100-300
Hallow volume:	1.6 m³	0.1 m³	0.1 m³

MEASTORM 300
Working temperature: +2°C to +30°C

	Centre chamber	End cap
Length:	1200 mm	60 mm
Width:	800 mm	700 mm
Height (rib shoulder):	400 mm	400 mm
Effective working length:	1170 mm	-
Weight:	10.45 kg	1.94 kg
Material: (100% recycled)	PE-HD	PE-HD
Connections:	1 x DN 100	DN 60- 300
Hallow volume:	0,3 m³	-

MEASTORM LIGHT, STABLE AND DURABLE

MEASTORM 1600 is particularly suitable for use in public areas such as parks and car parks. The MEASTORM chamber system, manufactured in Germany, is characterised by extreme stability and durability.

MEASTORM 1600 chamber has the general building authority approval of the German Institute for Building Technology DIBt.

ADVANTAGES

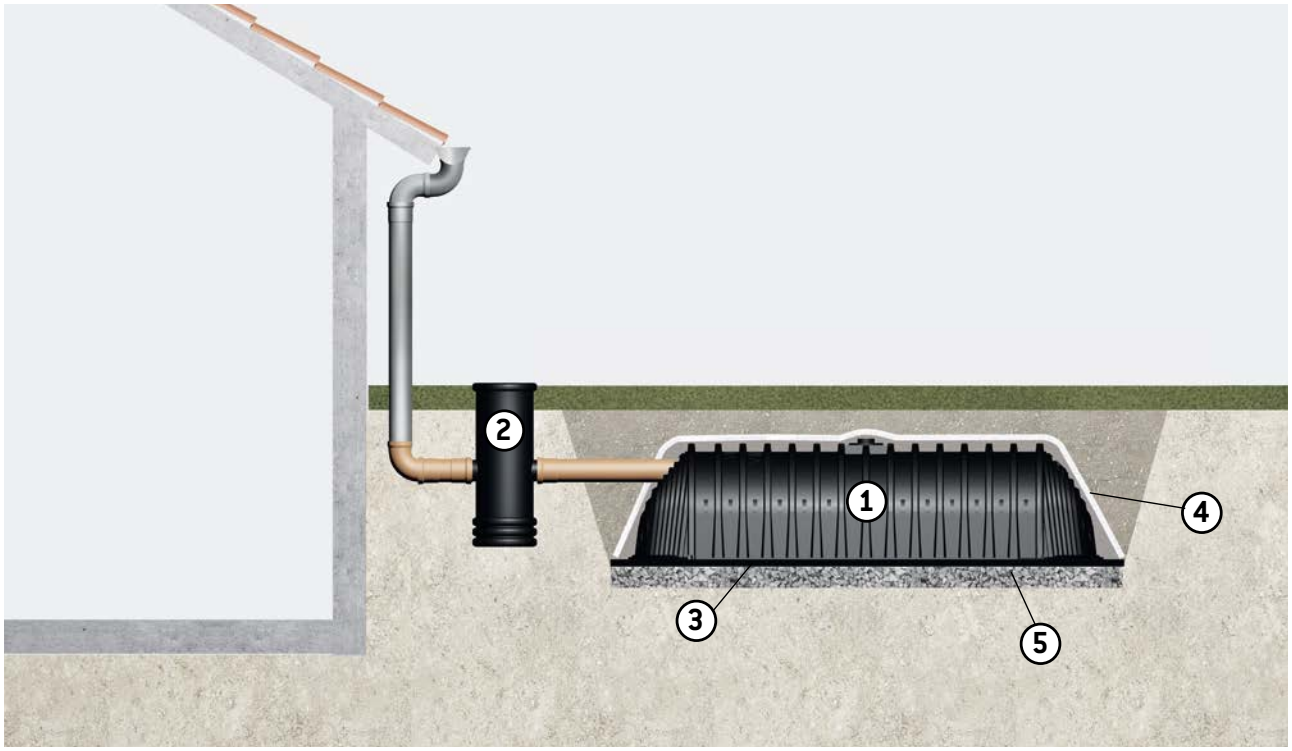
- Capacity 1.6 m³ / element
- Extremely stable and durable
- Low maintenance
- With DIBt approval
- Long-term loading of more than 50 years

Deutsches Institut für Bautechnik DIBt

MEASTORM RAINWATER MANAGEMENT

The MEASTORM chamber was especially designed for rain water retention and seepage. MEA offers with this product a smart and uncomplicated solution for groundwater protection. Through the seepage rainwater directly on site, this decentralised seepage solution is not only economical and environmentally friendly, but also requires little maintenance and is extremely resilient.
The MEASTORM stormwater management system protects existing sewer systems from overloading, minimizes sewer construction costs and flood control expenses. The water is discharged in smaller quantities and seeps away.

MEASTORM HOW IT WORKS



1- MEASTORM chamber incl. start and end caps
2- Settling filter shaft
3- Geotextile fabric 190 g/m² as a base for the rinsing process
4- Geotextile fleece 300 g /m² laid over the chamber as protection against siltation
5- Gravel layer

The MEASTORM chamber system is suitable for new construction sites or for retrofitting in existing sites. The system can be installed in a very short time either by the customer or by a civil engineering company.

How it works

The rainwater from the connected areas is filtered in the sedimentation, filtration and separation shaft, fed into the MEASTORM chamber and then into the ground for final seepage. To protect the chamber from soil penetration, it is covered with a Geotextile.

- Easy and fast installation: With an own weight of 32 kg, installation by 2 persons is possible without any problems
- Minimum space requirement: Compared to conventional gravel trenches with a containment volume of approx. 35%, MEASTORM chambers have a containment volume of 100%
- Extremely stable and durable (loading class up to 60 t)
- Minimal maintenance required due to pre-cleaning with sedimentation, filter and separation chamber
- Simple retrofitting
- Made in Germany: manufactured in one of the most modern and largest thermoforming production facilities in Europe

MEASTORM SOIL SUITABILITY TEST

FOR THE FIRST ESTIMATION OF THE SOIL CONDITION FOR SEEPAGE

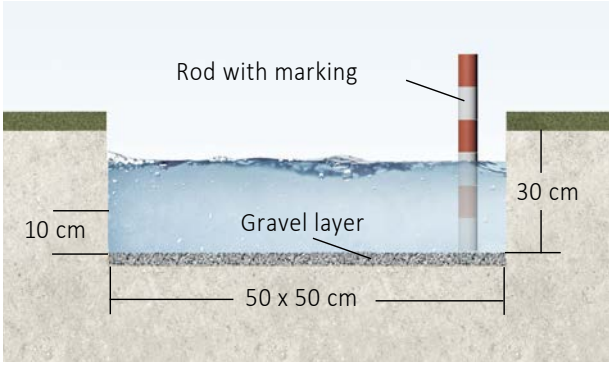
Short test for the seepage capacity of the soil

This short soil test serves as a rough estimate of the water permeability of the soil. An expert must assess whether the soil is suitable for the use of a Rigolen system.

> Dig a 50 x 50 cm and approx. 30 cm deep pit at the level of the later base of the seepage system. Please do not step into the recess to avoid compaction.
> To prevent the soil from being washed away, cover it
> with a thin layer of gravel. Fix a measuring rod in the soil and mark it approx. 10 cm above the pit bottom.
> The pit is filled with water. Please re-water regularly every 1-2 hours.
> Now fill the water up to the mark. Let the water seep away. After 10 minutes, use a measuring bucket to fill the water level back up to the mark. The amount of water replenished gives an indication of the water permeability of the soil.
> Repeat this procedure at least 3 times until a constant value is formed.

Evaluation of the refilled water quantity:

> < 1.5 litres in 10 minutes
hardly any seepage possible (silt)
> = 1.5 litres in 10 minutes
seepage possible (silty sand)
> > 3 litres in 10 minutes
seepage well possible (sand, gravel)



IMEASTORM QUICK AND EASY INSTALLATION DUE LOW WEIGHT

MEASTORM 1600 INSTALLATION MANUAL

Easy handling and quickly ready for use

A MEASTORM chamber weighs only 32 kg and can therefore be easily transported by two people. The chambers are connected to each other in an overlapping manner, thus ensuring a high degree of stability, even in the case of long chamber constructions.

For the installation you need the following components:

> Geotextile fabric 190 and Geotextile fleece 300
> MEASTORM chamber
> MEASTORM start and end caps
> Inlet pipe for connection to a filter shaft

Installation steps:

1- Lay out black geotextile fabric 190 and place end cap
2- Place chamber on the end cap
3- Connect the chamber and connect it to a filter shaft
4- Cover the entire trench system with Geotextile fleece 300 and then cover it in layers with cover and compact the soil

IMEASTORM
APPLICATION AREAS

URBAN AREAS

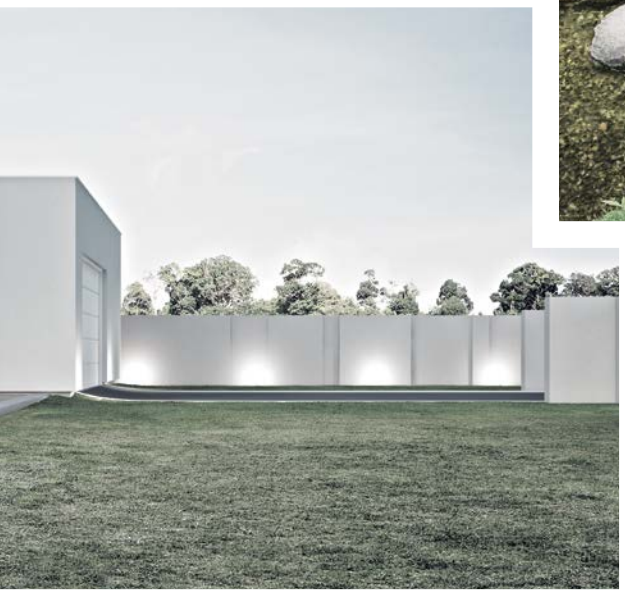
NEW CONSTRUCTIONS

FLOOD HAZARD AREAS

PRIVATE HOUSEHOLDS

OPEN SPACE DRAINAGE

GARDENING AND LANDSCAPING



BUILDING SUCCESS

MEA Bautechnik GmbH ■ Sudetenstraße 1 ■ D-86551 Aichach ■ www.mea-group.com
Business unit MEA Water Management

EASTORM | EN | 08.2022