

MEA[®] Rainwater Collection and Utilization System



MEA Group GmbH

SUCCESS IN BUILDING, BUILDING SUCCESS

- Founded in Bavaria, Germany, in 1886
- Over 130 years of experience
- Global supplier of drainage systems
- Production bases in : Germany, France, Czech Republic, China

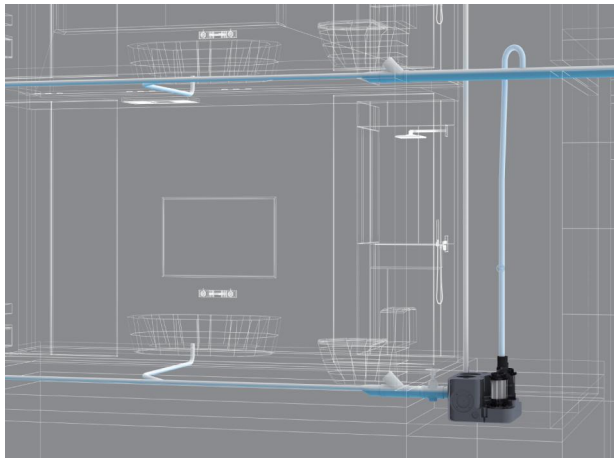
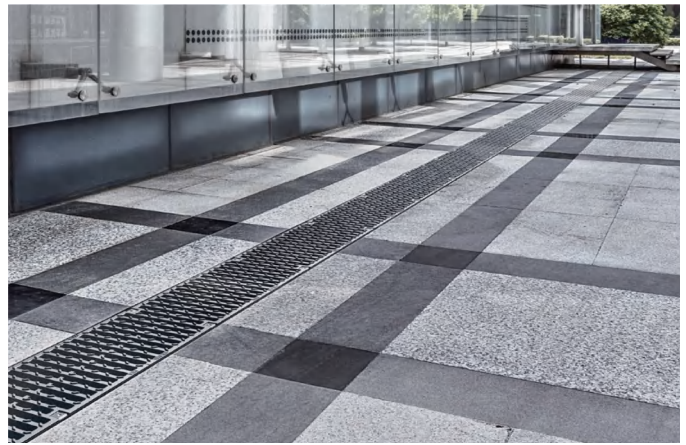




- Adhere to German quality, 15 years experience in Chinese market
- Businesses cover Asia-Pacific, Australia, North America
- Provide the best drainage system solutions and products to customers



- Linear drainage system
- Stainless steel drainage system
- Grease separators
- Sewage lifting system



MEA Rainwater Collection and Utilization System

According to statistics, the proportion of fresh water in the earth's water resources is only 2.6% to 3.5%. Therefore, the reuse of rainwater is a growing topic, Will become increasingly important in the future.

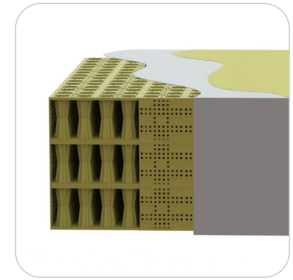
MEA has designed and developed a series of integrated rainwater management systems for rainwater infiltration, storage and utilization, which can perfectly cope with rainwater runoff pollution control demand for urban flood control and ecological environment improvement.



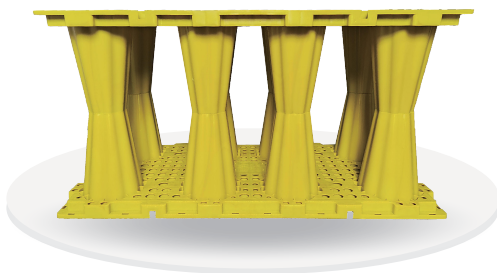
Environmental



Creative



High-quality



MEA rainwater collection and utilization system refers to the rainfall runoff collected on the hardened surface of buildings, roads, squares, etc., storage and purifying, providing rainwater recharge for greening, landscape water, washing and underground water sources.



Large community



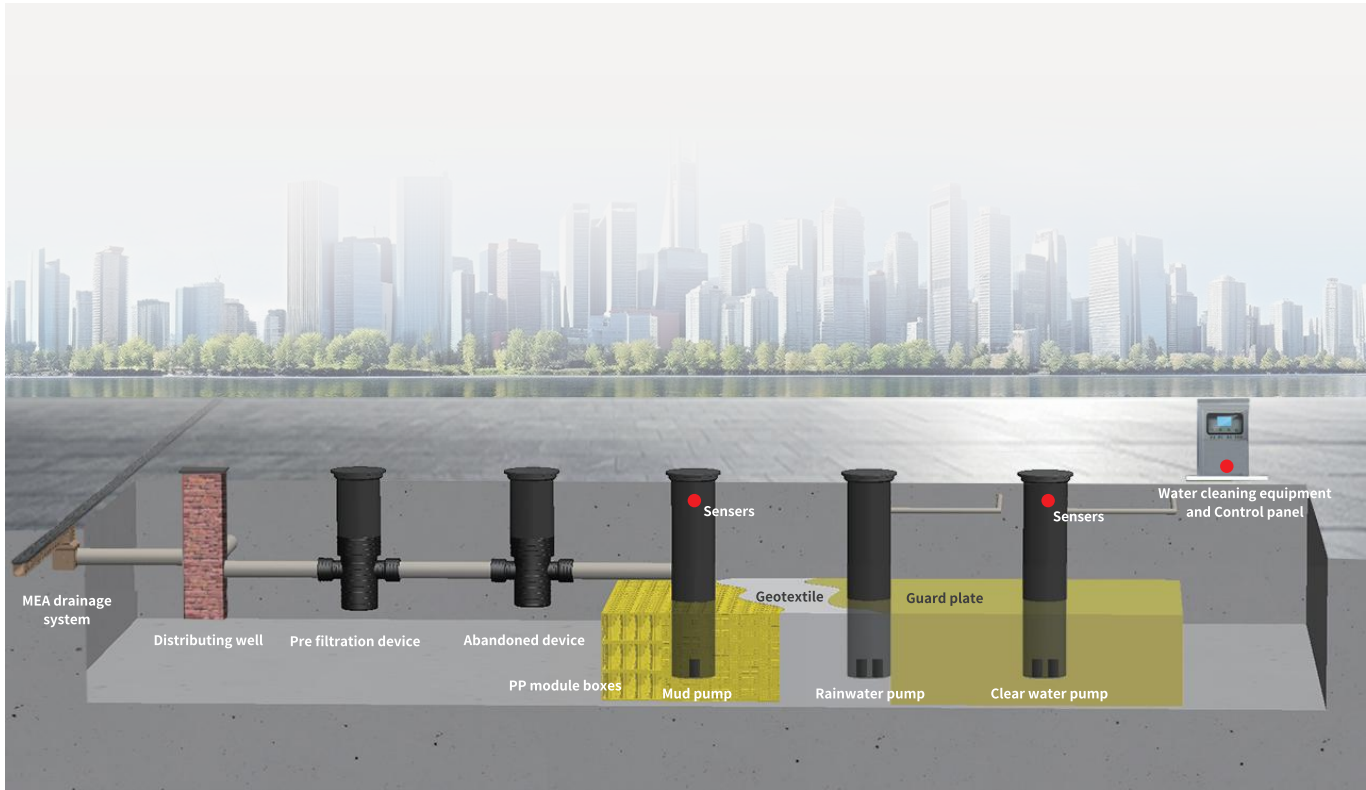
Landscape architecture



Municipal engineering



Industrial factory

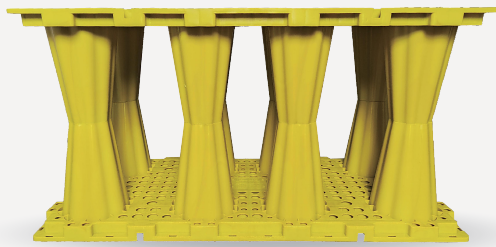


MEA Rainwater Collection and Utilization System is used in various large and medium-sized water harvesting areas or places where collection and reuse are needed, such as large communities, municipal engineering, landscape, industrial factories, etc.

System Advantages

- > Comprehensive utilization of rainwater resources
- > Control rainwater runoff pollution
- > Save water resources
- > Improve the urban ecological environment
- > Slow down rain, flooding and groundwater level decline in urban areas

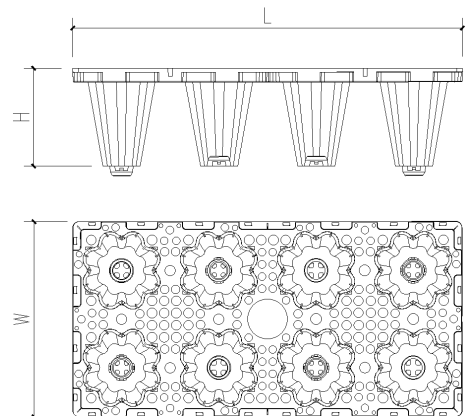
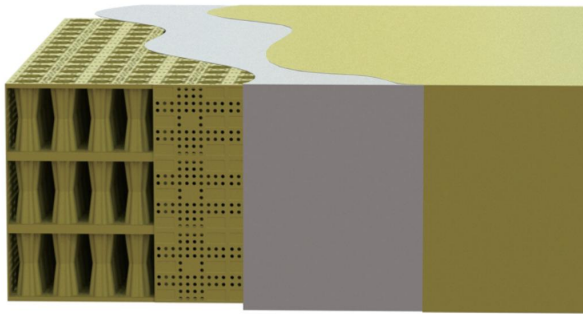
PP modular box



The PP modular box is an important part of the rainwater collection and utilization system

High-quality PP polypropylene material:

Compression and corrosion resistance, strong bearing capacity, stable performance, environmental protection, easy installation, long service life.



Product Advantages

- > High quality PP polypropylene material, long service life
- > High Void ratio, up to 95%
- > Overlap assembly, flexible layout, stable structure
- > Modular design, easy and efficient installation
- > Stable placement and low transportation cost

	Technical parameter		
Size	L 1200mm * W 600mm * H 300mm		
Compressive strength	A: Vertical breaking strength $\geq 400\text{KN/m}^2$ Horizontal breaking strength $\geq 150\text{KN/m}^2$	Yellow	Cover height 0.8-4m
	B: Vertical breaking strength $\geq 250\text{KN/m}^2$ Horizontal breaking strength $\geq 90\text{KN/m}^2$	Yellow	Cover height 0.25-2.5m
Void ratio	95%		

Rainwater pre filtration device



> Including the main body and shaft

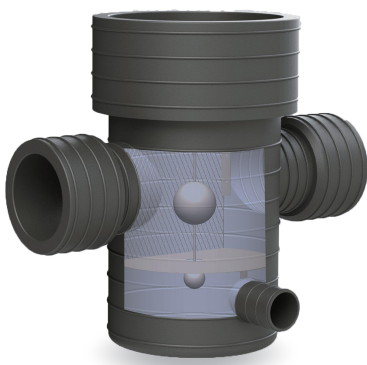
Shaft height can be adjusted according to the different depth of soil cover; backfill and compact after pipeline connection.

> PE main body with SS basket and filter net

The filter can intercept large solid pollutants to protect the normal running of back-end device.

> Mainly used for rainwater drainage networks, rainwater outlets, or the front-end of rainwater collection and reuse.

Rainwater abandoned device



> Including the main body and shaft

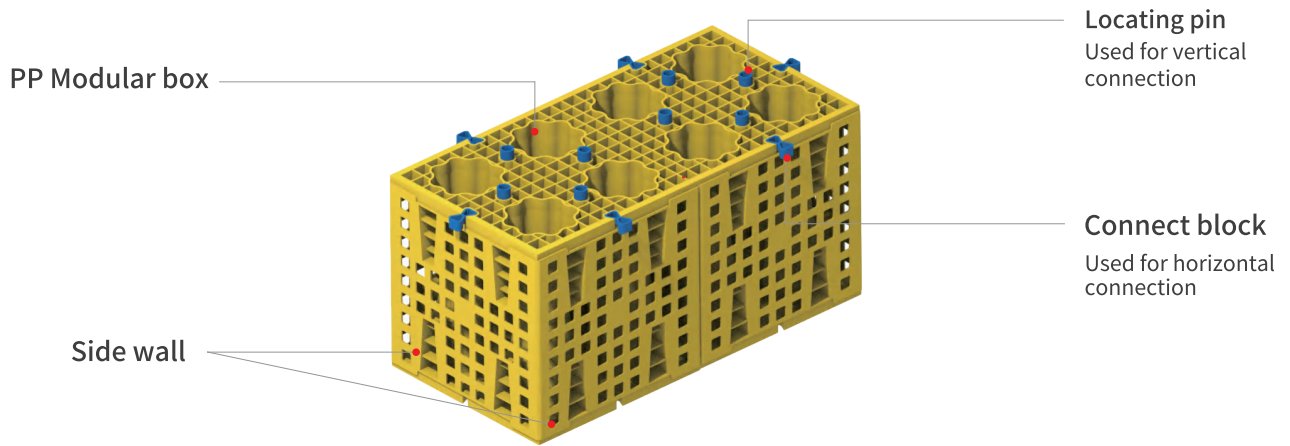
Shaft height can be adjusted according to the different depth of soil cover; backfill and compact after pipeline connection.

> PE main body with SS filter and floating device

2mm suspended particles that were not intercepted in the early stage of interception will be filtered;

Floating ball control, discharge rainwater with poor quality in the early stage of rainfall, and later collect rainwater with good quality into a collection tank.

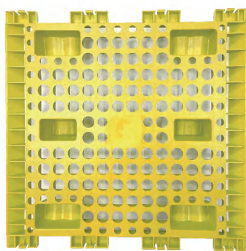
Spare parts and connect parts



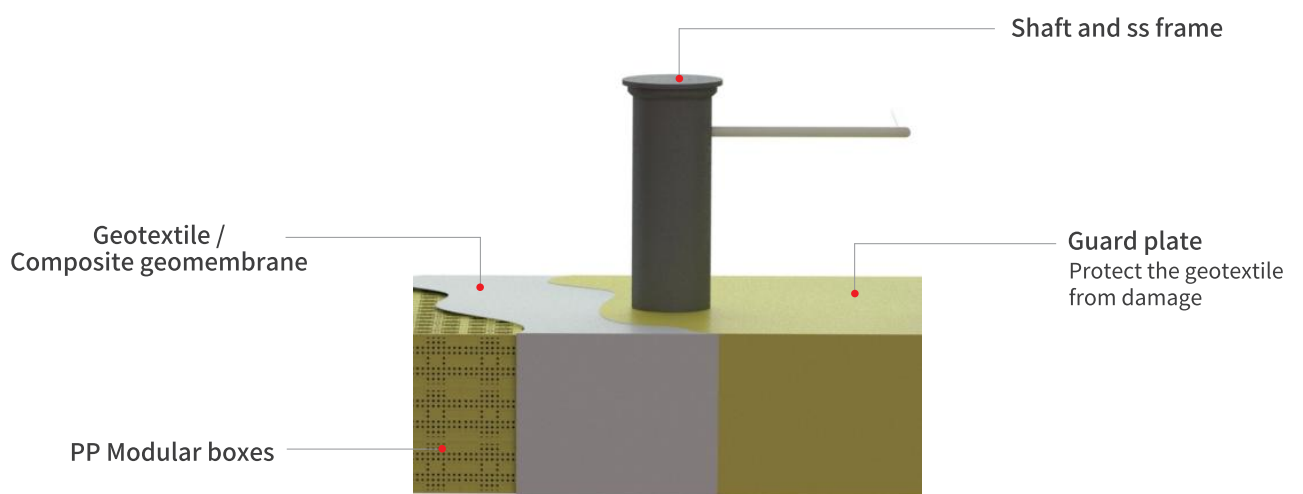
Side wall




Connect block

Locating pin



Other construction material



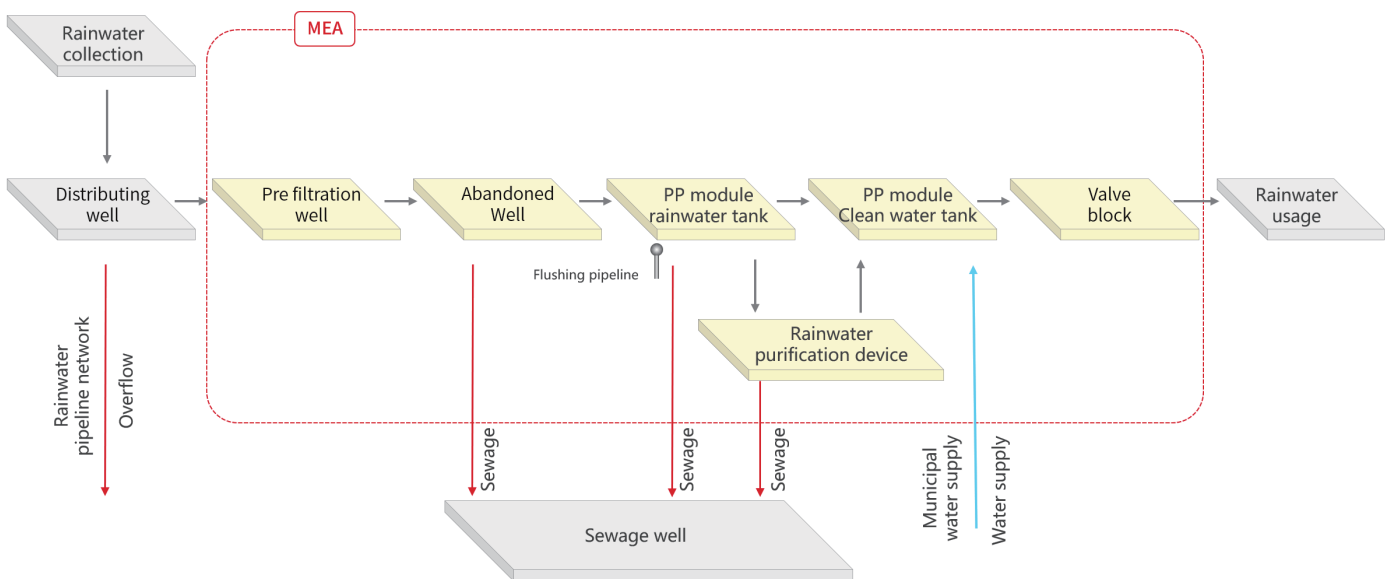
Geotextile	Guard plate	Shaft and ss frame	Others
			<p>Electric wire Pipes Valves</p>
<p>Geotextile: 300 g/m² Used for infiltration tank Composite geomembrane: 900 g/m² Used for retention and storage tank</p>	<p>Material: extruded polystyrene Length: 1000~1500mm Width: 1000~1500mm Thick: 4 cm</p>		

Process diagram

Rainwater harvesting and reuse

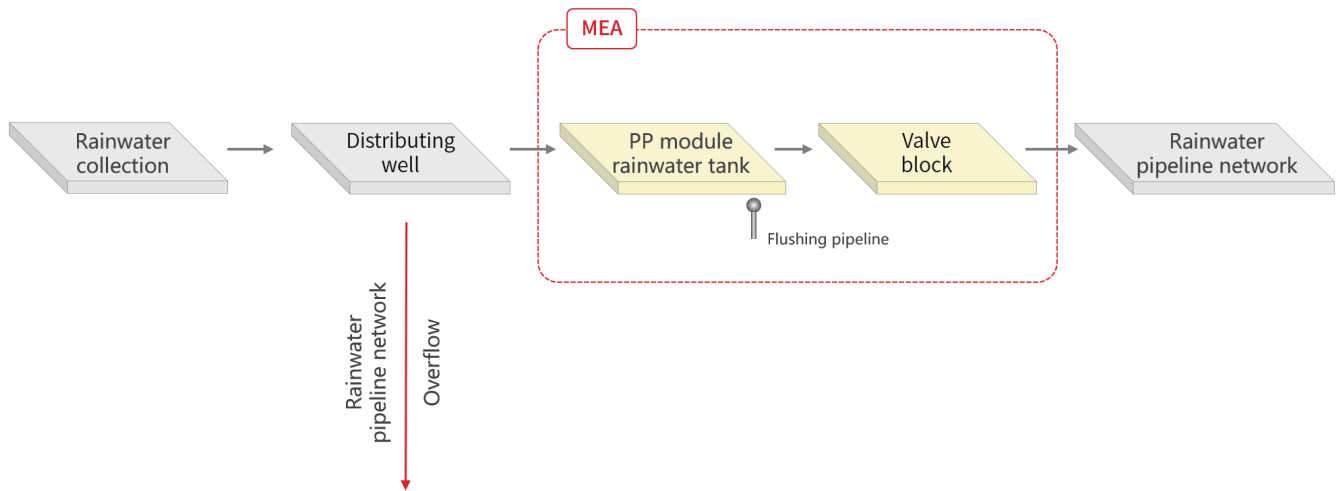
Collect and store rainwater, which can be used for vehicle washing, greening irrigation, road sprinkling, landscape water supply, etc.

The system is equipped with supplementary water sources, which are connected to the municipal water supply network.



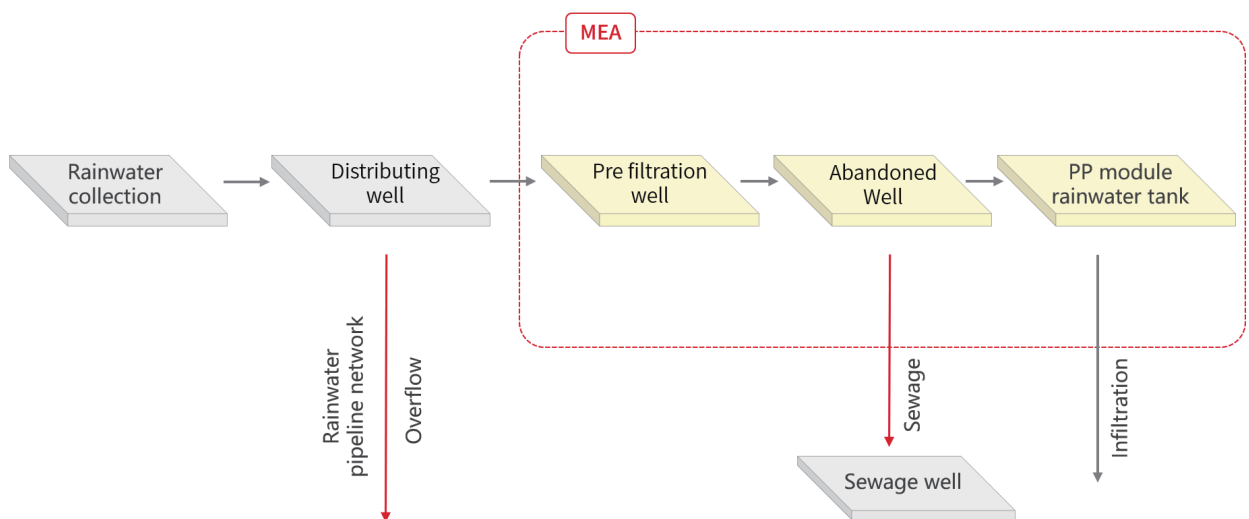
Rainwater attenuation system

Rainwater attenuation system can temporarily store the peak flow of rainwater in the tank, and slowly discharge the rainwater from the tank after the maximum flow rate decreases, which can avoid the flood peak of rainwater.

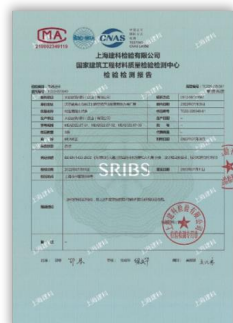
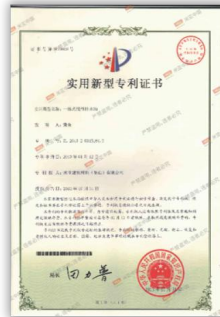
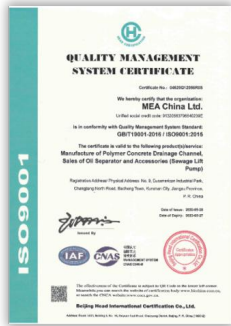
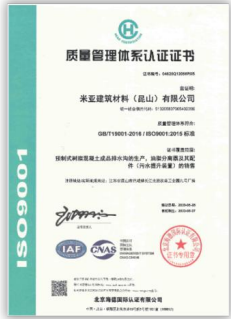


Rainwater infiltration system

The system was especially designed for rainwater retention and infiltration.



Certification And Test Report





Official Website



Official Wechat

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