

Version:

2026/0107

# Yude Rain Ecological Technology Co., Ltd



Linkedin



Youtube



Web:<https://www.yuderaineco.com/>

Email:[daisy@yuderaineco.com](mailto:daisy@yuderaineco.com)

Fax:+0086-0757-8203 7987

Office add: Room 302A-02, Block 1,Zhihui Road,Zhangcha Street,Chancheng District,Foshan City ,Guangdong Province.CN

Manufacturing add: Workshop 5-1, inside Guangfeng (Zhaoging) Steel Co.,Ltd.. North District, Jinli Town (Jintao Industrial Park), Gaoyao District, Zhaoqing City,Guangdong Province, CN



# Yude Rain Eco. Transform rainwater into your manageable asset with innovation solutions & unmatched quality.

Yude Rain Eco – Your Most Trusted Expert in Rainwater Management.

## 🔗 About Yude

Yude is a leading enterprise in rainwater management in China, providing one-stop solutions from rooftop to ground. In 2014, the company was established in Xiamen, focusing on sponge city rainwater collection projects and initially undertaking engineering contracts.

In 2018, we built our own factory and expanded into overseas trade, improving production, quality inspection, and control systems. Independent R&D and technical departments were established, enabling coordinated operations between manufacturing and sales.

Since 2019, we have adhered to independent innovation, gradually building a diversified product system, and accumulating intellectual property such as trademarks, patents, and copyrights in rainwater-related technologies.

To this day, our domestic and international markets remain stable. We consistently undertake government and infrastructure projects in China and maintain long-term cooperation with numerous importers and project contractors across various regions overseas.

## 🔗 Our Mission



***Water is the Source of the Future –  
Innovating Rainwater Solutions!***

Yude is dedicated to providing innovative rainwater management solutions, turning rainwater into a valuable, manageable asset.

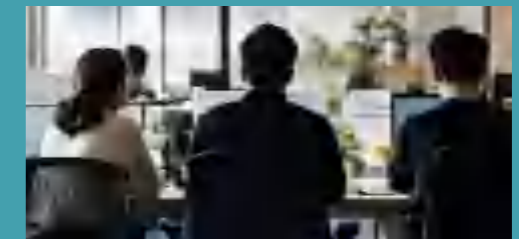
We focus on helping businesses save water costs, protect buildings, prevent flooding, and optimize urban planning through advanced technology and tailored systems.

## 🔗 Yude Worldwide

Yude provides comprehensive rainwater management solution design and product export services worldwide, integrating R&D, production, sales, and services to offer end-to-end solutions. With a customer-first approach, we are confident in meeting the certification requirements of different countries. YD tailor rainwater management solutions for each client to ensure optimal results. Regardless of the market, YD always committed to providing high quality products and professional services to ensure seamless and reliable performance.



## 🔗 Cooperation with YD



- **Comprehensive Solutions with Industry Experts**  
End-to-end rainwater management solutions designed and delivered by professionals with deep industry knowledge.
- **Rich Expertise in Export & Qualifications:**  
Extensive experience in global markets, meeting various international certification and qualification requirements.
- **Tailored to Your Needs:** Customized rainwater management solutions to meet your unique business and project requirements.
- **Commitment to Quality:** High-quality products and services that guarantee reliable performance and optimal results.
- **Customer-Centric Approach:** A focus on customer satisfaction, offering responsive support and expert guidance throughout the process.

## Specialized in Premium Polypropylene Materials and Advanced Production Technology

Yude Rain Eco is committed to providing high-quality rainwater management solutions. We exclusively select premium Polypropylene (PP) raw materials, ensuring that our products meet the highest standards of durability and safety throughout their lifecycle.

### Key Advantages of Yude



#### State-of-the-Art Manufacturing Technology

The core of our technology are advanced Haitian injection molding machines (JU16000/16600SE models), renowned globally for their precision, reliability, and performance. These cutting-edge machines, coupled with module pressure testing equipment, ensure every product meets the highest standards of strength, durability, and consistency.

#### Commitment to Quality

Yude exclusively uses premium Polypropylene (PP) raw materials and implements stringent quality control measures across all production stages. This dedication guarantees that our products excel in strength, sustainability, and longevity, meeting the demands of diverse applications.



#### Established Expertise and Proven Experience

With over a decade of experience, Yude has established itself as a trusted leader in China's Greater Bay Area, the nation's largest economic hub. Our extensive portfolio of high-standard government and commercial projects demonstrates our reliability and capability in delivering innovative rainwater management solutions.

#### Global Competitiveness

Yude offers tailored solutions designed to meet the specific needs of urban infrastructure and ecological projects. Our products comply with international standards, making them suitable for seamless integration into global markets. By leveraging advanced technology and a focus on quality, we position ourselves as a world-class supplier.



#### Sustainability and Reliable Supply Chain

Sustainability is central to our mission. Yude's solutions promote efficient rainwater utilization, eco-friendly urban development, and long-term cost savings. Additionally, our robust production capacity and efficient logistics ensure consistent supply and on-time delivery, providing peace of mind for our global partners.

## Empowering Sustainable Development with Advanced Rainwater Recycling Systems

Yude Rain Eco specializes in comprehensive rainwater management and recycling solutions. With over a decade of expertise, we provide advanced systems designed for municipal projects, commercial developments, industrial facilities, and residential communities. Unlike traditional drainage systems focused solely on flood mitigation, Yude's solutions prioritize the reuse of rainwater for non-potable applications, contributing to sustainable resource management and cost savings.

Our rainwater management approach follows a systematic process of Collect, Clean, Store, and Reuse/Release, ensuring both ecological and economic benefits while supporting clients in reducing their environmental impact.

### Yude Stormwater Management Solutions - StormBreaker® Series



#### Collect

Our superior rainwater harvesting & attenuation tanks effectively capture surface runoff, ensuring reliable protection for personal & commercial properties, infrastructure and urban planning. The system is designed to capture and reuse rainwater for domestic use, turning it into a manageable asset while preventing flooding.

#### Clean

The collected rainwater undergoes a layered filtration system and ultraviolet disinfection to remove debris, pollutants and some bacteria and viruses to ensure that it meets safety standards for reuse in domestic water. This step transforms rainwater into a valuable resource for non-potable uses such as irrigation, cooling systems and cleaning.

#### Storage

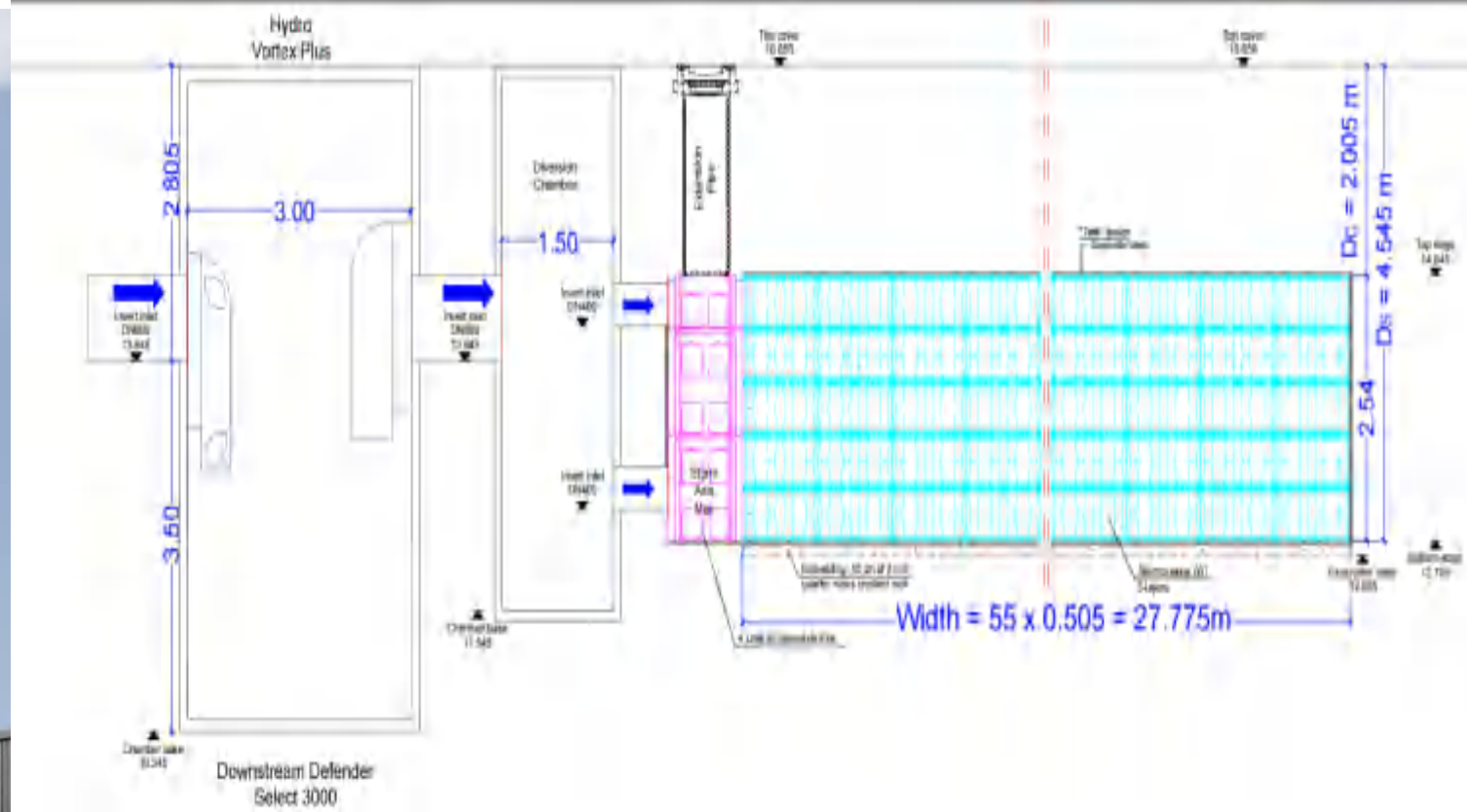
Yude's modular StormBreaker system stores rainwater with up to 95% efficiency. It captures large volumes of water during rainfall and reuses it in dry periods or when you're needed, helping businesses save on water costs while supporting resource recycling and sustainability.

#### Reuse or Discharge

Treated and stored rainwater can be reused for non-potable applications, such as irrigation, cooling systems, and cleaning, contributing to resource conservation and cost savings. Alternatively, rainwater can be safely released for flood mitigation, ensuring urban & building remain protected during heavy rainfall while supporting downstream drainage systems or ecological restoration efforts.

Yude's rainwater management solutions are designed to balance efficient water reuse and effective flood control, offering flexibility to meet diverse project requirements with sustainability at the core.

# Overview-Infiltration System



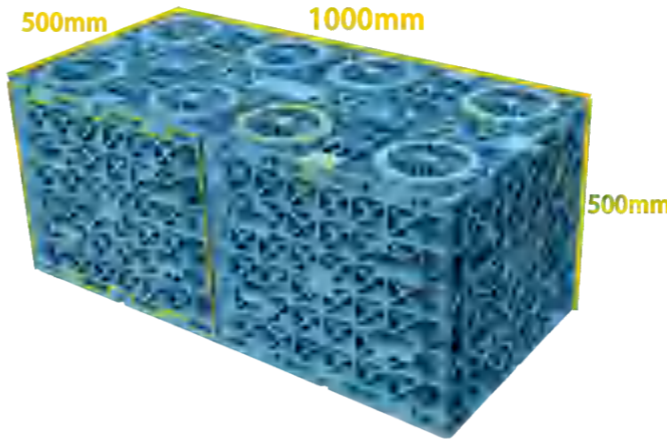


StormBreaker 60T®

Stormwater Attenuation Tanks | 600kN/Load Capacity

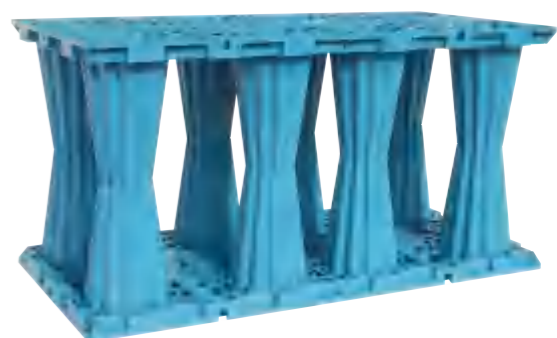
Yude is committed to providing safe, durable, and reliable solutions for rainwater management. Our module design not only meets the load-bearing requirements of different levels of 32T, 45T, and 60T, but also ensures long-term stable operation through precision manufacturing and strict testing, providing the most solid foundation for various engineering projects.

StormBreaker60T®



Material	Popypropylene (recyclable)
Dimension	1*0.5 full black length*width (m)
Height	0.5m
Weight	11.2full black (kg)
Storage Capacity	95% full block
Volume	Gross volume: 250 Net storage volume: 238 (liters)
Side plate	Material:Popypropylene Size:495*485*55mm
Small Buckle	Material:Popypropylene Size:45*35*20mm
Big Buckle	Material:polypropylene Size: 35mm,H65mm
Top cover	Size: 160mm Material:polypropyle

- Side Plate**  
The side panels of stormwater tanks provide structural reinforcement, prevent leaks, ensure separation of water flow, offer corrosion protection, and control sediment accumulation.
- Top Cover**  
The top cover of a stormwater tanks protects it from debris, distributes load, manages water flow, enhances structural stability, and ensures safety.
- Connecting Big Buckle**  
A connecting column in stormwater tanks links individual modules together, ensuring structural stability, proper alignment, and seamless water flow between tanks.
- Small Buckle**  
Butterfly buckle in stormwater tanks is used to securely fasten and connect modules together, providing stability and preventing separation while allowing for easy installation and maintenance.



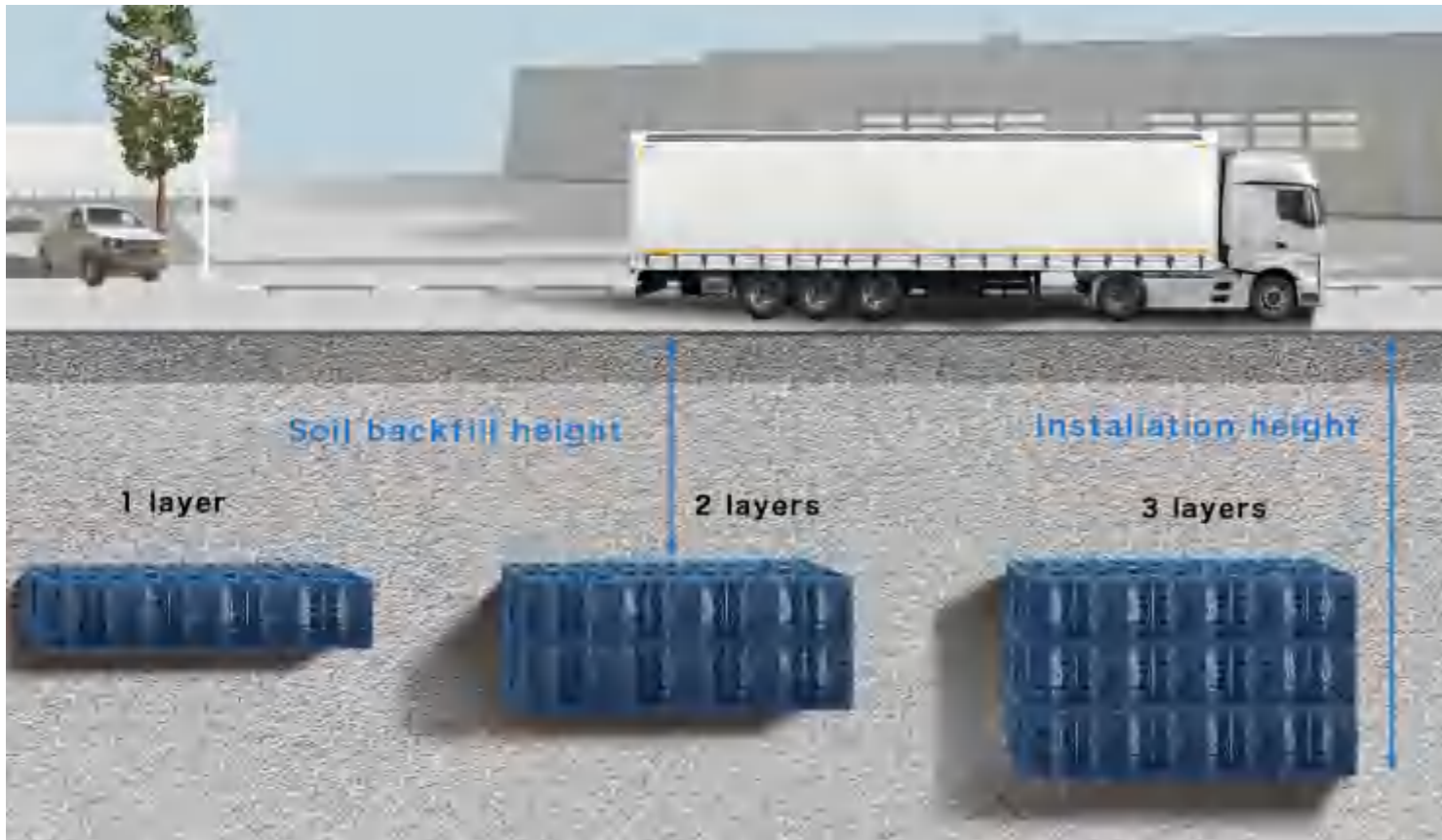
Typical applications

YD StormBreaker60® is the ideal choice for high-traffic large commercial facilities, main roads and highways, large industrial areas, logistics hubs, and similar locations.



The contractor must strictly follow the installation data in the following detailed instructions. The following figure shows the requirements for heavy truck application scenarios (HGV 60)

**Figure 1: Installation Guide of 600kN**



**Table 1**

Layers	Backfill Height(HGV 60)		Installation Height
	Min(mm)	Max(mm)	Max(mm)
1	800	4000	5500
2	800	4000	6000
3	800	4000	6500

The Stormbreaker unit has been designed to have specific loading capacities that define the maximum depth parameters for which it is suitable.

The minimum depth of cover varies according to whether or not the installation will be subject to trafficking by vehicles.

However, in some situations, installations may have to be located with greater cover depths. Reasons may include:

1. Deep-running drainage network
2. Other buried services running above tank location
3. Installation into banked/sloping ground
4. Upper layer of clay preventing infiltration.

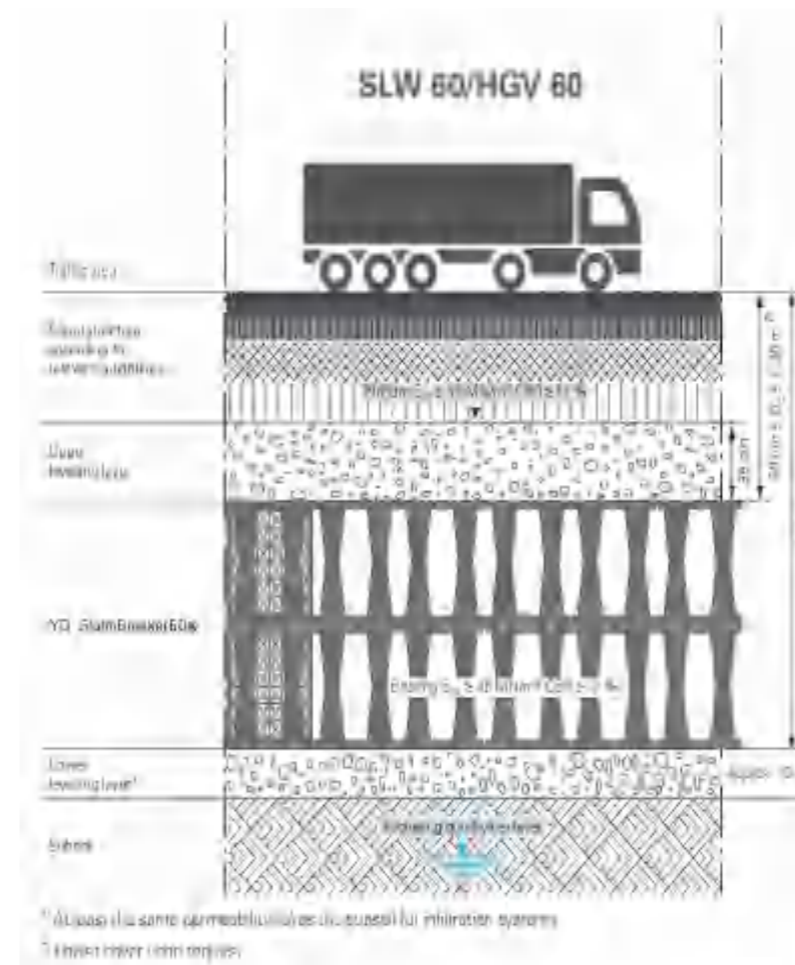
The table shows a summary of typical cover depths and installation depths as an indicative guide.

The storage/infiltration system must be covered according to design specifications. Non-cohesive, compactable, graded earthwork material with a maximum grain size of 32 mm should be used for the cover, which is a mandatory requirement under traffic areas!  
**Frozen soil is not permissible!**

### Stability analysis

Storage/infiltration systems are underground structures that must have adequate load-bearing capacity to resist soil impacts and traffic loads. Their stability must be demonstrated in accordance with Eurocodes, taking into account partial safety factors and/or limiting factors.

Using conventional installation parameters\* the DC cover depth for infiltration systems is a maximum of 4 meters and the DS soil depth is a maximum of 6.5 meters. The soil cover must comply with a minimum DC cover of 60-80 cm.



**StormBreaker 60T®**  
Installation depth up to 6.5 m

National guidelines, must always be observed for installation under traffic areas. To build the planum for the subsequent road construction, an upperlevelling layer must be provided, preferably gravel sub-base with a thickness of at least 35 cm, which depends on the required modulus of deformation. Other construction materials normally lead to greater carrier layer thicknesses. Unless defined otherwise by national guidelines, at the surface of the cover (= planum), a uniform modulus of deformation  $E_{vz} > 45 \text{ KN/m}^2$  or  $\text{CBR} \geq 12 \%$  must be achieved. Other required moduli of deformation lead to greater or smaller thicknesses of the upper levelling layer.

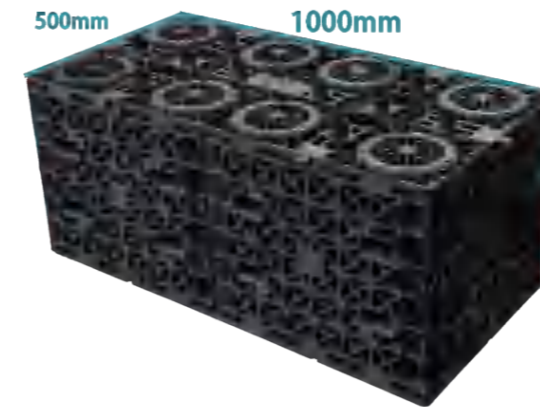
Soil layers must always be provided and compacted in layers of no more than 30 cm. The compaction level D should be larger than or equal to 97%. Carry out compacting using light or medium area vibrators only!

**Compacting using vibratory rollers and explosion rammers is not permissible!**

**Figure 2: Installation Guide of SLW 60/HGV 60**

## Stormbreaker32®

Material	Polypropylene(recyclable)
Dimension	1*0.5 full block length*width(m)
Height	0.5m
Weight	9.12 full block(kg)
Storage Capacity	95% full block
Volume Weight	Cross volume: 250(liters) Net Storage Volume: 238(liters)
Side plate	Material:Popypropylene Size:495*485*55mm
Small Buckle	Material:Popypropylene Size:45*35*20mm
Big Buckle	Material:polypropylene Size: 35mm,H65mm
Top cover	Size: 160mm Material:polypropyle



### Side Plate

The side plate of stormwater tanks provide structural reinforcement, prevent leaks, ensure separation of water flow, offer corrosion protection, and control sediment accumulation.



### Top Cover

The top cover of a stormwater tanks protects it from debris, distributes load, manages water flow, enhances structural stability, and ensures safety.



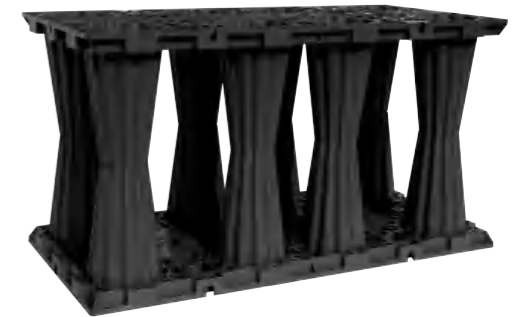
### Connecting Big Buckle

A connecting column in a stormwater tanks links individual modules together, ensuring structural stability, proper alignment, and seamless water flow between tanks.



### Small Buckle

A butterfly buckle in a rainwater module is used to securely fasten and connect modules together, providing stability and preventing separation while allowing for easy installation and maintenance.



## Typical Applications

It is suitable for areas with low traffic flow for both pedestrians and vehicles, such as apartment and residential parking lots, public sidewalks, small commercial establishments, community centers, and local parks, where load-bearing requirements are relatively low.



## StormBreaker32T®

# Stormwater Attenuation Tanks | 320kN/Load Capacity

Yude is committed to providing safe, durable, and reliable solutions for rainwater management. Our module design not only meets the load-bearing requirements of different levels of 32T, 45T, and 60T, but also ensures long-term stable operation through precision manufacturing and strict testing, providing the most solid foundation for various engineering projects.

Figure 3: Installation Guide of 320kN

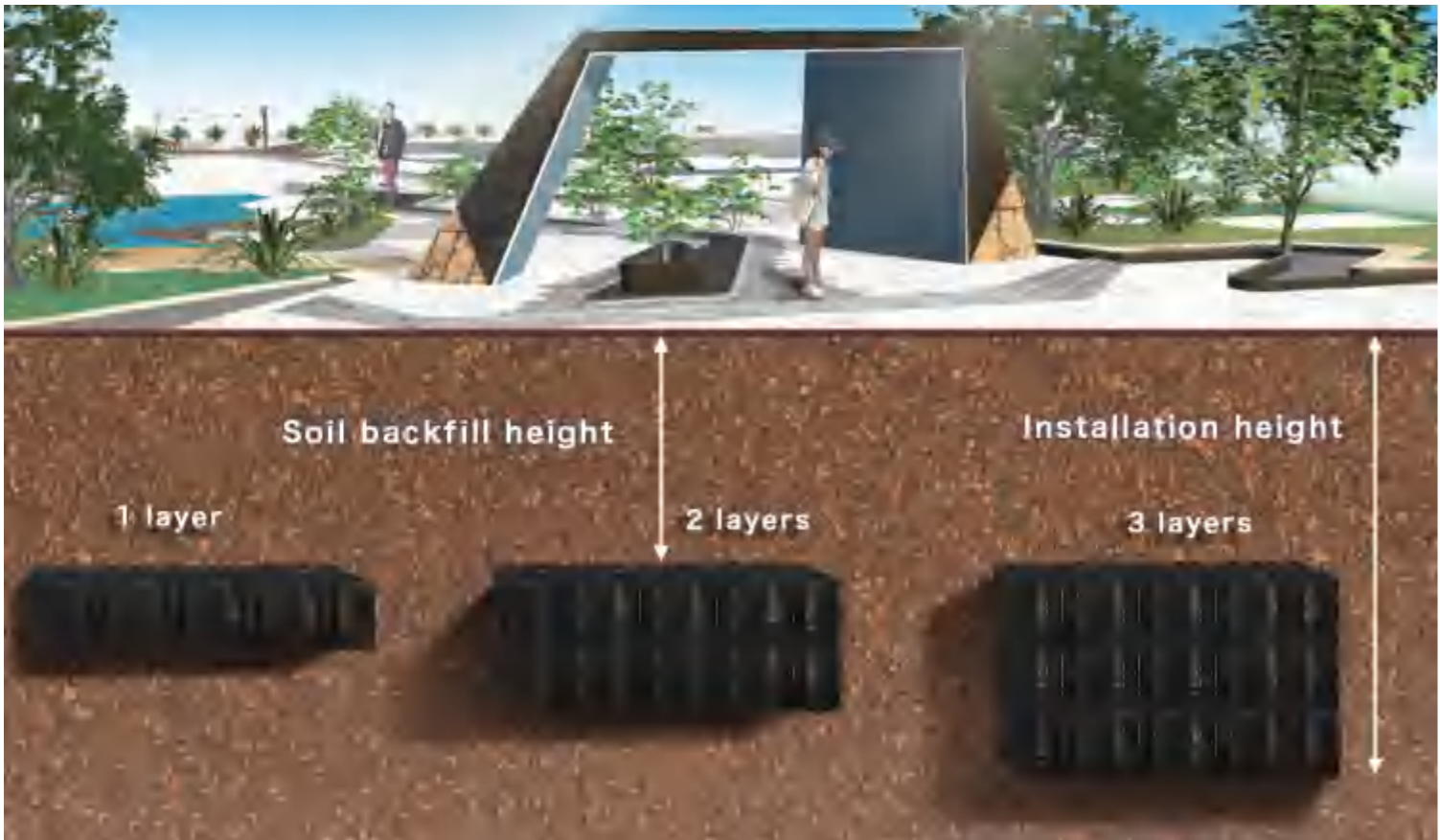


Table 2

Layer	Backfill Height		Installation Height
	Min(mm)	Max(mm)	
1	800	3000	3500
2	800	3000	4000
3	800	3000	4500

**Stormbreaker 32®**  
 For Landscape Loads

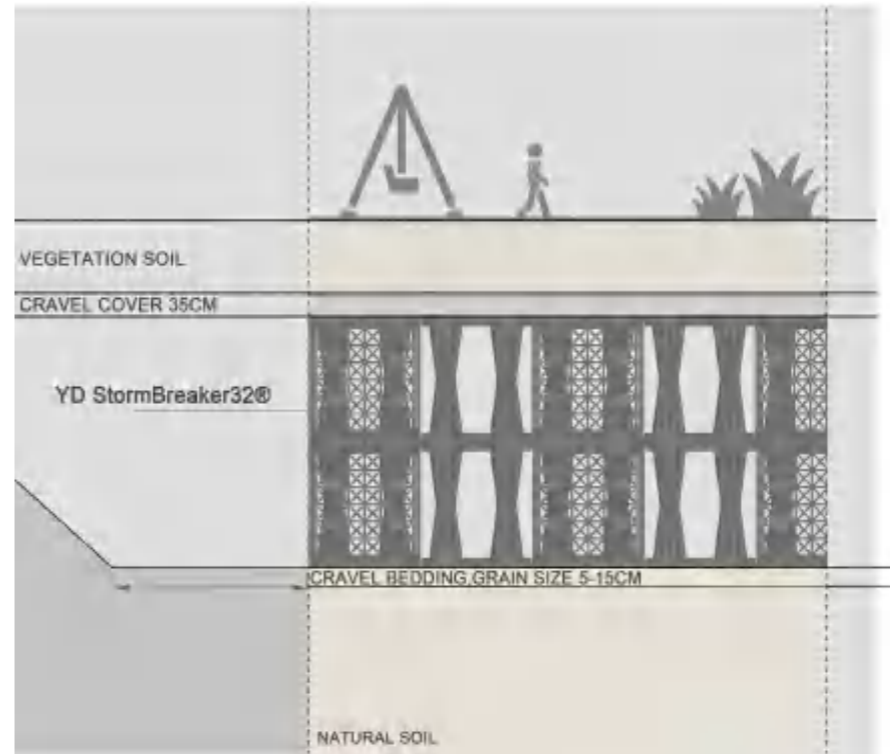
The choice of Stormbreaker 32® is based on the depth of the excavation, the storage volume required and the type of applied loads. Underground drainage basins with stormbreaker 32® allow the overlying surfaces to be used for the following purposes:

- GREEN AREAS**
- LANDSCAPING AREAS**
- WALKWAYS AND PARKS**
- RECREATIONS AREAS AND PLAYGROUNDS**

**StormBreaker32T®**

Storm breaker 32® is a product made of Graplene, a 100% recycled polypropylene blend.

It is the best choice for cases where extreme technical characteristics are not required, in areas dedicated to greenery and without vehicular traffic. Stormbreaker 32® has the same excellent access and inspection characteristics as the rest of the range: for this reason, and thanks to its high useful volume, the system is suitable for reuse storage for irrigation of green areas and gardens.



The minimum cover of Stormbreaker 32® underground basins is mainly related to the type of flooring or the vegetation expected on site. In the case of vegetation, care should be taken to ensure sufficient soil depth for the chosen plant species. It is also advisable to avoid tall trees or shrubs with deep roots to avoid intrusion into the basin.

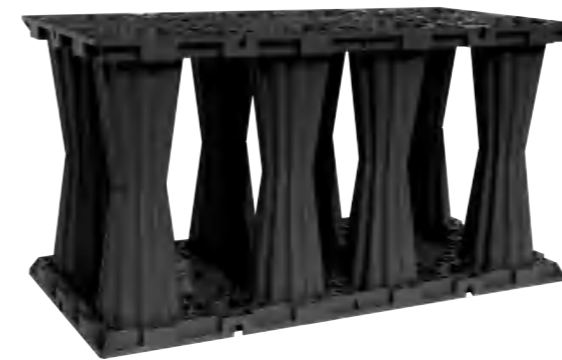
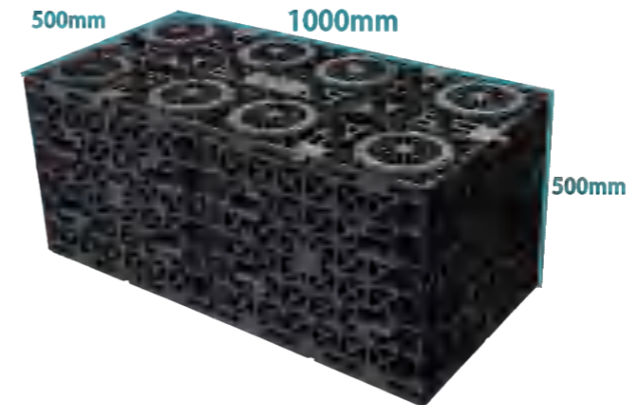
A project of specific stability analysis can be prepared by Yude department which, depending on the project, can assess the maximum depth of installation.

Figure 4: Installation Guide of Green Landscape

## StormBreaker45®

# Stormwater Attenuation Tanks | 450kN/Load Capacity

Yude is committed to providing safe, durable, and reliable solutions for rainwater management. Our module design not only meets the load-bearing requirements of different levels of 32T, 45T, and 60T, but also ensures long-term stable operation through precision manufacturing and strict testing, providing the most solid foundation for various engineering projects.



Material	Polypropylene(recyclable)
Dimension	1*0.5 full black length*width (m)
Height	0.5m
Weight	11.04 full block(kg)
StorageCapacity	95% full block
Volume Weight	Cross volume: 250(liters) Net Storage Volume: 238(liters)
Side plate	Material:Popypropylene Size:495*485*55mm
Small Buckle	Material:Popypropylene Size:45*35*20mm
Big Buckle	Material:polypropylene Size: 35mm,H65mm
Top Cover	Size: 160mm Material:polypropyle



### Side Plate

The side plate of stormwater tanks provide structural reinforcement, prevent leaks, ensure separation of water flow, offer corrosion protection, and control sediment accumulation.



### Top Cover

The top cover of a stormwater tanks protects it from debris, distributes load, manages water flow, enhances structural stability, and ensures safety.



### Connecting Big buckle

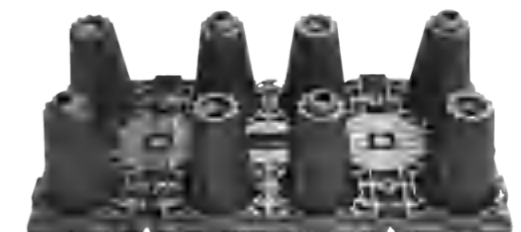
A connecting column in stormwater tanks links individual modules together, ensuring structural stability, proper alignment, and seamless water flow between tanks.



### Small Buckle

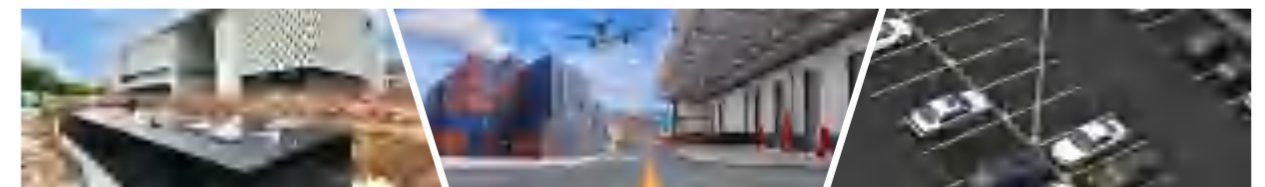
Butterfly buckle in stormwater tanks is used to securely fasten and connect modules together, providing stability and preventing separation while allowing for easy installation and maintenance.

- **Collecting Rainwater:** Efficiently captures and stores rainwater, reducing runoff.
- **Water Storage:** High storage capacity (up to 95%) to alleviate pressure on drainage systems.
- **Retention & Infiltration:** Slows down water flow and allows groundwater recharge.
- **Flow Regulation:** Controls water release to prevent drainage system overload.
- **Water Reuse:** Stored rainwater can be used for irrigation and industrial purposes.
- **Pollution Control:** Reduces soil erosion and water pollution by managing runoff effectively.



## Typical applications

It is suitable for areas with moderate vehicle and pedestrian traffic, such as shopping centers and office buildings, public squares, parking lots, and roads around schools.



StormBreaker45T®

Figure 5: Installation Guide of 450kN/m<sup>2</sup>

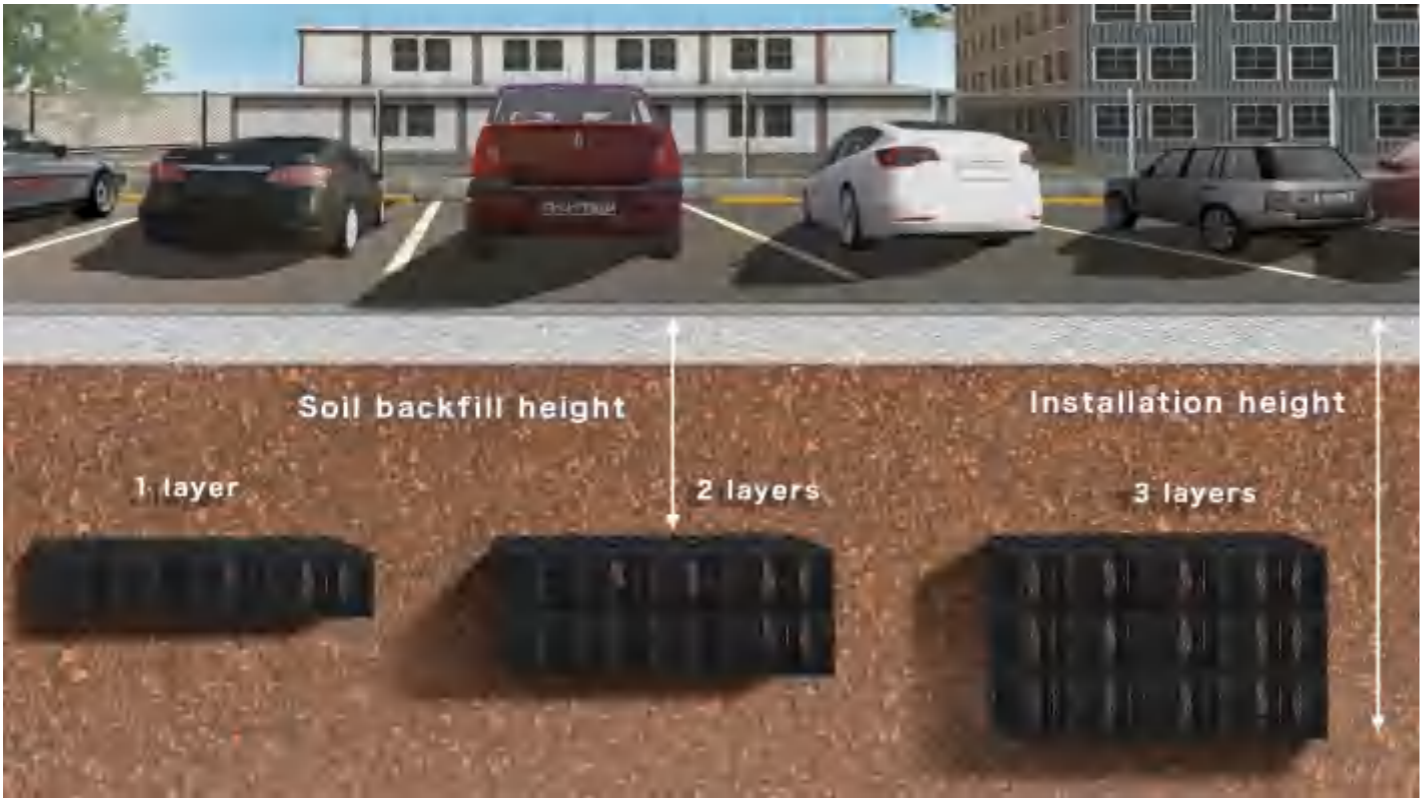


Table 3

Layer	Backfill Height		Installation Height
	Min(mm )	Max(mm)	Max(mm)
1	800	3000	3500
2	800	3000	4000
3	800	3000	4500

Stormbreaker 45®

It is suitable for areas with moderate vehicle and pedestrian traffic, such as

- Shopping centers
- Office buildings
- Public squares
- Parking lots
- Roads around schools

StormBreaker45T®-Stability Analysis

Stormbreaker45® is made of recyclable environmentally friendly polypropylene through an injection machine.

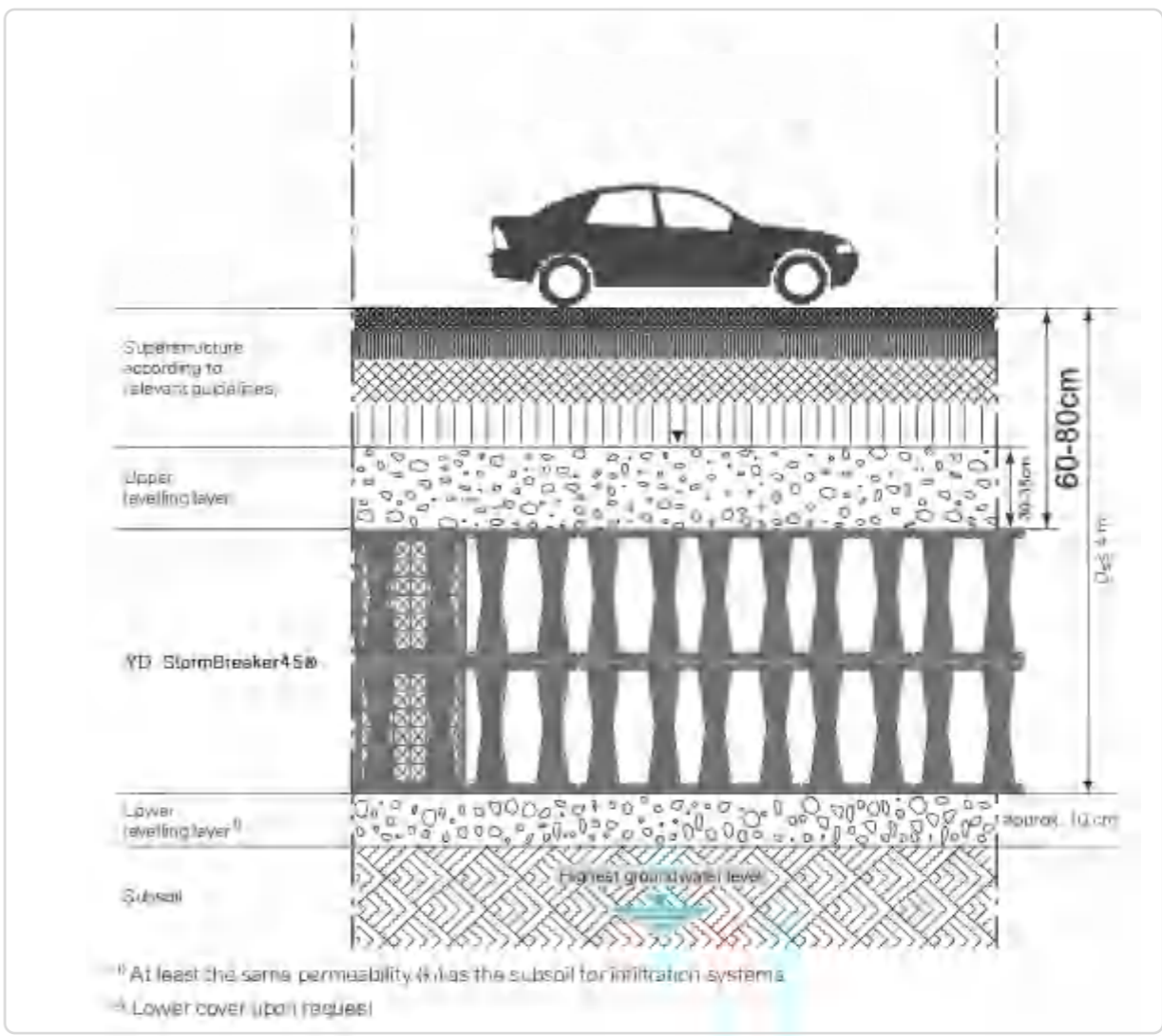
When using 450kn/m<sup>2</sup> modules, Yude team recommends that the minimum depth of the upper gravel backfill is 30-35cm. The overall installation height is 60-80cm. The gravel padding at the bottom of the foundation is at least 10cm.

The maximum installation depth of Yude stormbreaker modules can be up to 4.5m.

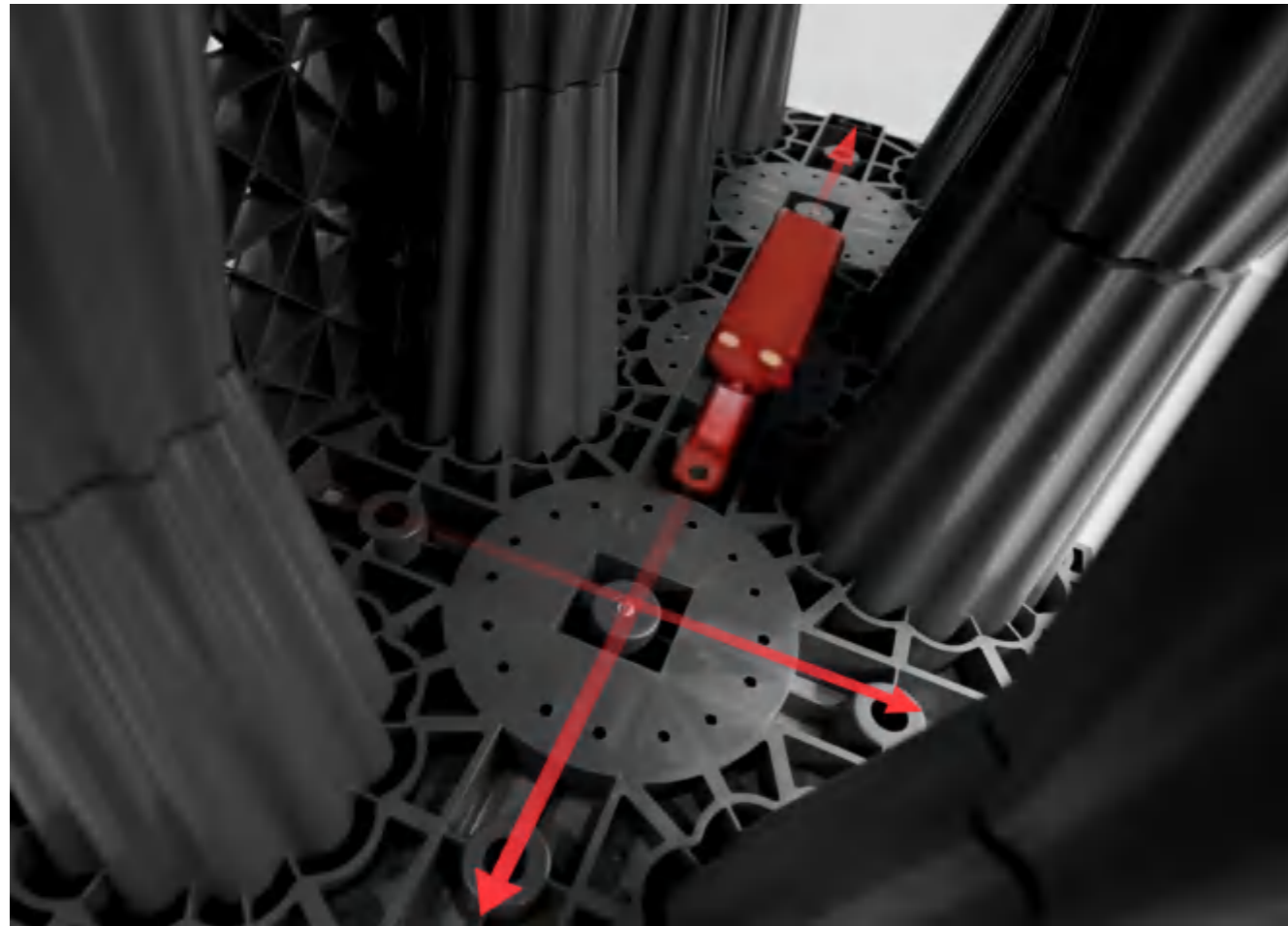
If you have any questions, please send PDF/CAD/STEP files to consult Yude's technical team

**StormBreaker 45T®**  
Installation depth up to 4.5 m

Compacting using vibratory rollers and explosion rammers is not permissible!



## Advantages



The load-bearing capacity of a rainwater management system is essential for effective and durable system design.

The system was designed for soil backfill up to HS 4m and installation depths of 6.5m up to. The honeycomb structure is solid and rigid, thanks also to the integrated fastening system and high-strength connectors.

The Stormbreaker system allows storage volumes of rainwater equal to 95% of the nominal volume of the basin, guaranteeing a void ratio that is 3 to 4 times higher than gravel, with consequent savings in the surfaces used and reduction in excavation depth.

Stormbreaker will reduce the risk of flooding in impervious urban areas.

The internal configuration of the modules makes the system easily accessible for inspection, routine maintenance and cleaning.

The cavities are designed to allow the entrance of a wheeled camera to make a video inspection of the basin in any direction and on all levels.

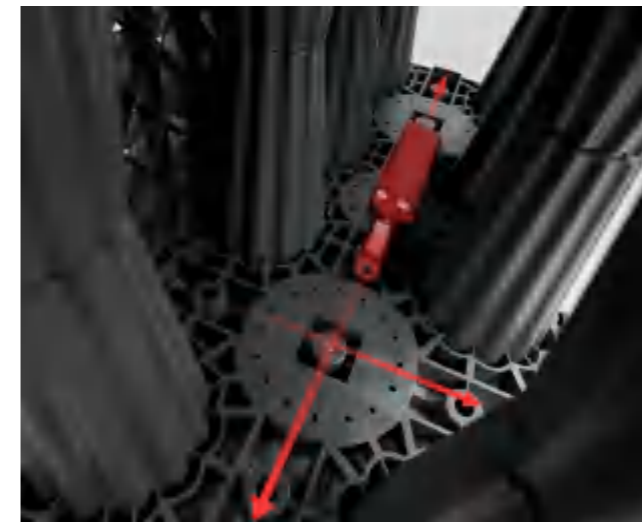
## 360° Inspection and Cleaning



### INSPECTION WITH SWIVEL CAMERA

Both during testing and once in operation, the basin must be inspected by a specially designed camera. Accessibility is always guaranteed by the Stormwater SS maintenance shafts that allow access to the basin in depth.

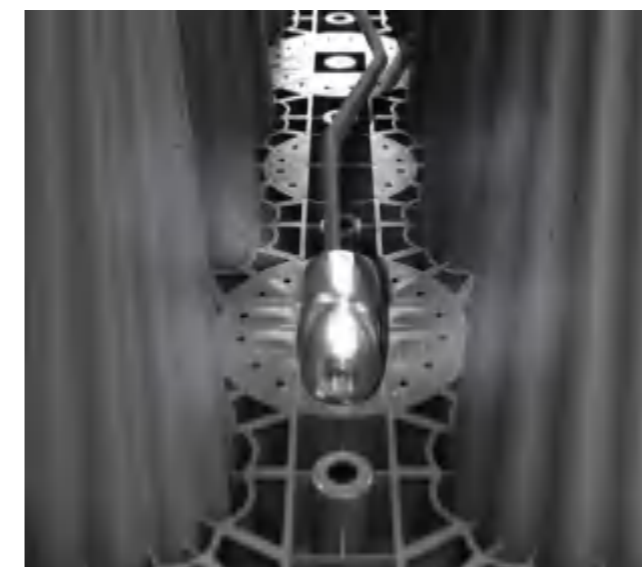
The structure of Aquabox offers great visibility and accessibility in every axis of the basin. The operator on the surface receives a live video stream on the whole inspection operation of the basin and the tubes, which can be recorded for off-line viewing.



### 360° INSPECTION ON ALL LEVELS AND IN ALL DIRECTIONS

Inspection with a special wheeled camera gives the opportunity to verify the true internal situation of the basin, evaluating its state of repair and the presence of silt deposits.

The concave surfaces of the Stormwater tunnels guarantee the easy passage of an inspection robot.



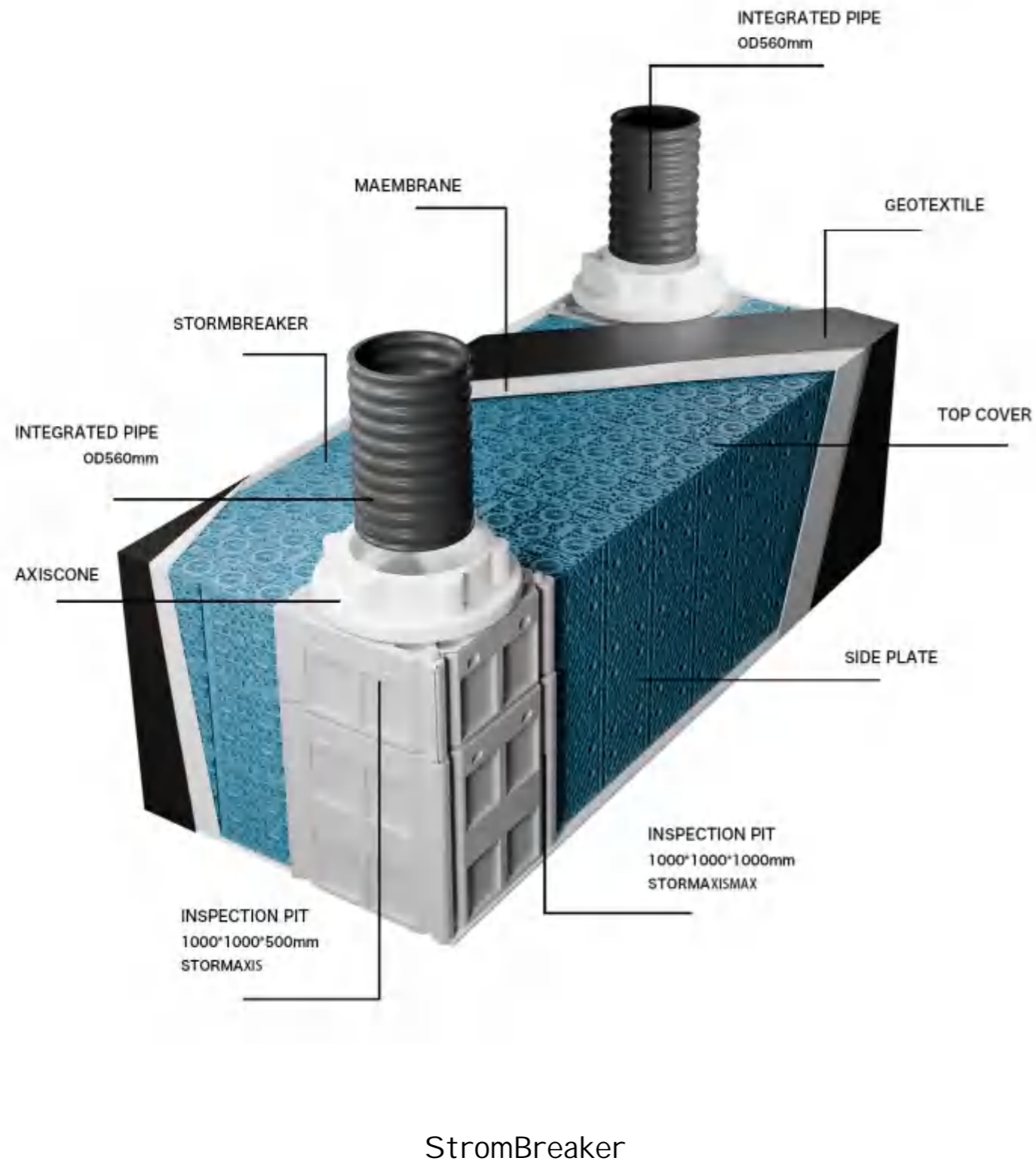
### HIGH PRESSURE WASHER OF INTERNAL CHANNELS

The internal structure should be cleaned by means of a high-pressure jet cleaner, accessing the basin through the Stormwater SS shafts located downstream. Depending on need and situation, the jets can be directed forwards or backwards.

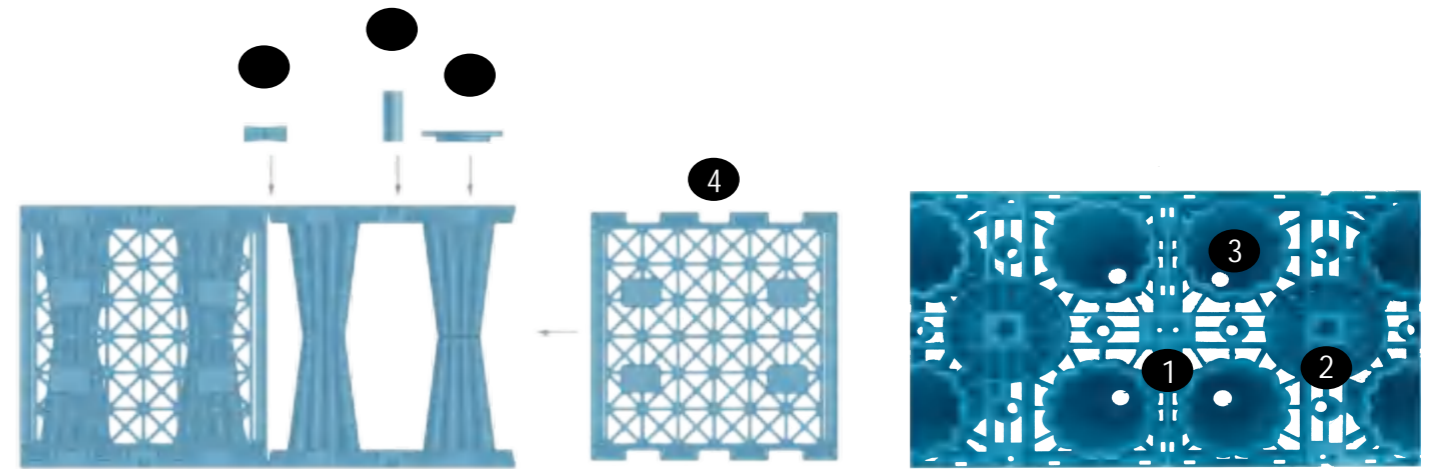
With more than 1000 ft of hose length the nozzle of the pressure washer will reach every point of the basin and perform a complete cleaning.

# Stormwater System and System Components

## Stormwater System and System Components



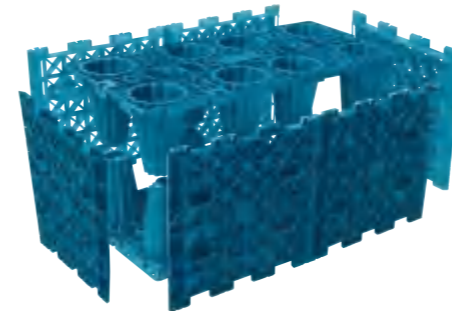
## Unit Module Installation



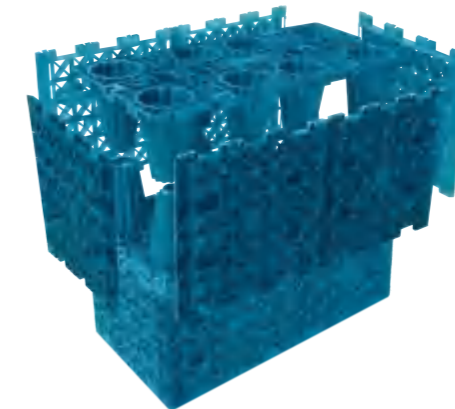
Before installing the pool, you need to know the connections between the module accessories. Please calculate the quantity of each accessory and its modules with the supplier (Yude before installing the tanks to ensure that no accessories are missed and cause delays in the project.

## 4.2 Modules Display of Single to Triple

Single Full Black Module



Double Full Black Module



Triple Full Black Module

