AquaCell in the US

Boca Chica, TX | August, 2024

- **Application:** Detention under parking lot at carwash
- **Capacity:** 2,440 CF
- **Assembly time:** 1 day

Athens, GA | 2024

- **Application:** Detention system under parking lot
- **Capacity:** 24,023 ft³
- **Assembly time:** 2 days

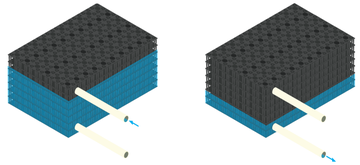
Nashville, TN | 2024

- **Application:** Detention system at landscaped area
- **Capacity:** Tank 1 (7,973 ft³); Tank 2 (7,205 ft³)
- **Assembly time:** Both tanks, 1 day

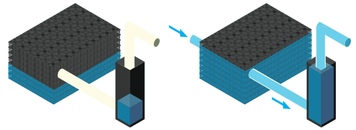
Houston, TX | 2024

- **Application:** Detention under parking lot
- **Capacity:** 20,629 CF
- **Assembly time:** 2 days

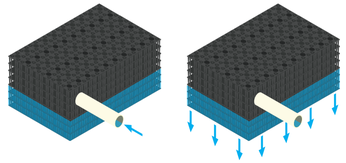
Retention and Detention System



Reuse System



Infiltration System



System Benefits

Environmental:

- Ideal for rainwater reuse.
- Reduces the water footprint.
- Does not contaminate the subsoil.
- Does not alter water characteristics.
- Low installation impact.

Structural:

- On-site performance is superior to concrete and metal.
- Manual installation, no accessories required.
- The solution can be tailored to any geometric structure.
- It is ideal for areas with limited access and heavy rainfall.
- Access for inspection and cleaning activities.

Urban Development:

- Mitigates the effects of flooding.
- Ideal for sustainability certifications.
- Reduces dependence on potable water.
- Reduces saturation of drainage networks.
- Alternative source for non-potable uses.

Product Quality:

- Long service life.
- Lightweight and highly structurally resistant.
- Large storage capacity: stackable cells.
- Resistant to water and soil activities.

Contact

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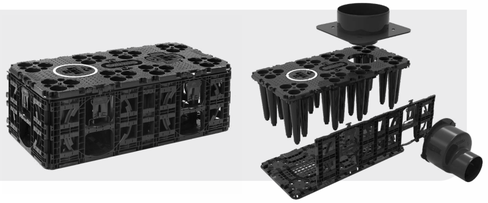
AquaCell

Stormwater Management System

Product Description

Geocellular units for detention and infiltration of rainwater.

The optimal solution for fast installation and total access for inspection and cleaning.



Technical information

Dimensions		
Length	48 in	1200 mm
Width	24 in	600 mm
Height	16 in	400 mm
Net volume (without bottom)	77 gallons	290 liters
Void ratio*		94% - 96%
Weight main unit	24 lb	11kg
Pipe connections	6-12 in	160-315 mm
Tank volume per truck	<11406 ft³	<323 m³

*Void ratio varies based on number of system layers & side panels

Window of Application*		
Type of Load	Regular	Extra strong
H-10 Traffic Loading	d=12 in. / H= 14.4 ft	d=12in. / H=26.2 ft
HS-20 Traffic Loading	d=24 in. / H=14.4 ft	d=18 in. / H=26.2ft
HS-25 Traffic Loading	d=32 in. / H=14.1 ft	d=22in. / H=26.1 ft.

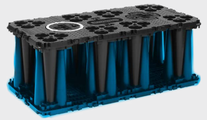
*General indication for installation above groundwater level, according to instructions for single layer tanks. For multi-layer tanks, the window of application may be limited. Wavin always recommends a minimum cover of 12 inches (0.3 meter). For specific projects, seek advice of Wavin.

Accessibility		
Vertical access	10 in	250 mm
Width inspection channel (bottom)	8 in	200 mm
Accessible surface area	54%	

General	
Material	Recycled polypropylene
Color	Black
Connectors	Integrated
Standard	EN17152-1

Regular Configuration

Extra strong Configuration



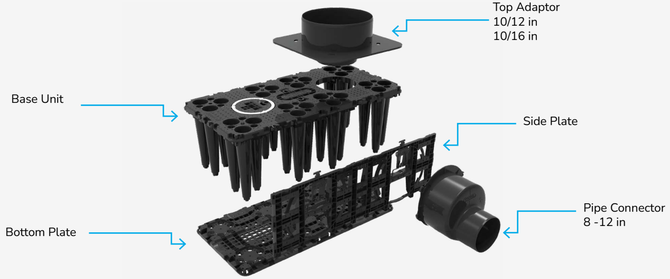
Hydraulic function

AquaCell is a geocellular unit used to build subsurface rainwater detention, retention, infiltration and storage tanks. It's the optimal solution for faster installation and full access to inspection and cleaning activities.

Void rate
95%
77 Gallons/
10.25 CF

Infiltration to recharge groundwater

Temporary storage to prevent flooding



Storage capacity

Regular Configuration	
Gross Volume / (without bottom plate)	10.81 cf
Net volume / (without bottom plate)	10.25 cf
Void Ratio / (varies by layer/side plates added)	94% - 96%

Extra strong Configuration	
Gross Volume	11.70 ft³
Net Volume	10.84 ft³
Void Ratio / (without bottom plate)	92.7%

Weight, pipe connections and number of layers

Base Unit Weight (lbs)	24
Pipes NPS (in)	6" - 8"- 12"
Vertical Access (in)	10
Maximum number of layers (with a minimum cover depth of 12 in for landscaped areas)	8 layers

Performance and installation

Installation speed[1]	1413 ft³/ hour/ per person
Coupling mechanism	Manual – Push fit
Bedding material (base)	Sand, Stone or other approved backfill (Compacted and leveled material)
Minimum depth (base)	4 in
Percent Compaction (SP)[2]	90% - 95% - 98%

Note: (1) Measured performance for cell assembly, obtained with material supplies and trained personnel on-site. Based on tank size (20' L x 10' W x 4' H)
(2) Percent compaction varies according to the type of loads (no traffic, light traffic and heavy traffic, respectively).

Installation depth by load[3]

Minimum/ (Maximum Cover Depth)	Regular	Extra strong
H-10 Traffic Loading	12 in. / 14.4 ft.	12 in. / 26.2 ft.
HS-20 Traffic Loading	24 in / 14.4 ft.	18 in. / 26.2 ft
HS-25 Traffic Loading	30 in / 14.1 ft.	22 in. / 26.1 ft.

Note: (3) Each project must conduct a stress analysis to ensure the system's stability based on the acting loads, soil type and water table involved. Wavin recommends a minimum cover of 12 inches over the top of the tank. For details on use in the regular or extra strong versions, or if you need further information, contact your Designated Technical Marketing Consultant.

Maximum Installation Depth