

# Underground "tank" storage for stormwater.

#### PRODUCT DESCRIPTION

#### **Basic Structure**

Rainstore3 is a structure of thin-walled cylindrical columns injection molded of recycled resins of either high impact polypropylene (HIPP), or high density polyethylene (HDPE) plastic for strength, durability, and green industry benefit. For potable water storage, virgin plastic is used. Cylinders are 10cm (4") diameter, 5mm(0.2") average wall thickness, 10 cm (4") tall, and spaced 16.7 cm (4.6") apart. T-shaped beams connect the cylinders and resist external lateral soil/water pressure. Compression fittings between layers create a rigid structure for ease of transport and installation. Four archway openings in the bottom of each cylinder allow water to move

freely throughout

assembled columns.

A single Rainstore <sup>3</sup> injection molded unit is comprised of 36 cylindrical columns that occupy one square meter (40" x 40" x 4"). A stack of 10 units will comprise one cubic meter (35.31 cubic feet), with approximately 250 gallons of net water storage.

One Unit

Volume = 0.1 cubic meter

(3.531 cubic feet)

Weight = 14.0 pounds (30.87 kilograms)

25 gallons of net water storage

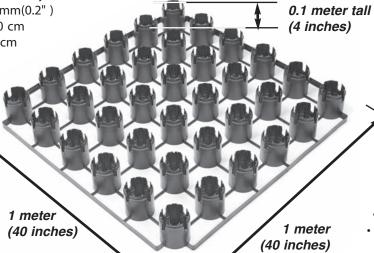
RS3 allows for water containment depths from 10 cm to 2.4 meters (4" to 94" or 7.9'). Standard depths of 0.5 m (1.6'),1 m (3.2'),1.5 m (4.9'), and 2 m (6.6') are stocked and custom depths are also available. Side bumpers provide foolproof, accurate spacing. Structures may be moved by hand cart. A level compacted gravel base will insure proper alignment. RS3 withstands repeated freeze-thaw cycles, will not rust, break down, crack, is not affected by chemicals, extremes of pH, oils, salts, or fertilizers. Ethylene plastics have a projected service life in excess of 100 years provided they are not exposed to UV light.

### **Applications Include:**

- Subsurface Water Storage--Detention, Retention
- Water Reuse and Recycling
- Process Water Storage--Heating and Cooling
- Combined Water Conveyance and Storage
- Energy Dissipation at Pipe Outfall
- Septic Leach Fields and Wetlands Treatment
  - Dry Wells, Wet Vaults, and Cisterns

## Benefits Include:

- Heavy Load Capacity Above Chamber
- Maximum Excavation to Storage Efficiency
- 94% Void Space
- Large Surface Area for Rapid Exfiltration
- Simple and Low Cost Liner Materials
- Modular for Design Flexibility
- Rapid Installation



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