

# **Vegetative Roofs/Living Roofs** — Plants thrive in WaterGrip which provides superior water

management and reduced maintenance

WaterGrip - A stabilized, lightweight media which provides roots with a ready supply of air, nutrients, and most importantly, water

Root respiration occurs even when media is fully saturated

WaterGrip - Able to hold up to 8x its weight in water for enhanced water management and reduced overall water use

Holds 10.5 lbs. of water per sq. ft. at maximum Water Holding Capacity

WaterGrip - Macro/micro pores provide a reservoir, supplying water and oxygen to plants as needed

#### WaterGrip — simply growing more, with less

WaterGrip is a technological advance in green roof construction that changes the paradigm.

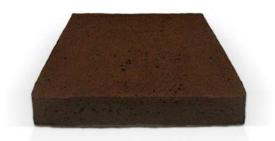
#### **WaterGrip Advantages:**

- ♠ Increases expected life of the roof
- ♠ Delays, reduces and filters storm water run-off
- ♠ Reduces energy costs (acts as insulation)
- ♠ Reduces HVAC equipment repair/service costs (machinery runs cooler)
- Improves solar installation performance (reduces temperature)
- ♠ Ideal for retrofits or new construction works on flat or sloped roofs

## Rapid absorption and exceptional water holding capacity provide incomparable storm water management:

- 12" x 24" x 3" brownies weigh only 11.8 lbs/sq. ft. fully saturated
- Water is stored, taken by plants as needed, then it is returned to the atmosphere through transpiration or evaporation
- ₱ WaterGrip maintains porosity over time and does not compact.
- ♠ Rapid growth speeds roof coverage
- ♠ Fewer weeds reduces maintenance





WaterGrip Roof Brownie 12" x 24" x 3"



#### **WaterGrip Roof Brownie**

The Water Grip "brownie" is ideal for Green Roof applications and is also the only foundation for Vegetative Walls.

WaterGrip is made with intellectual properties to provide a perfect ratio of water and air to the root system, which yields a healthier plant.

WaterGrip absorbs large amounts of storm water which makes water readily available to the plants.

### WaterGrip™ Roof Brownie Specifications\*

#### Physical measurements per WaterGrip Brownie

Length x Width x Depth	24 x 12 x 3	in.
Cubic Dimensions	864	cu. in.
Cubic Dimensions	0.5	cu. ft.
Area Dimensions	288	sq. in.
Area dimensions	2.0	sq. ft.
Weight – dry	3.4 - 3.8	lbs.
Weight – drained	16.62	lbs.
Weight – at max. water holding capacity (WHC)	18.2 - 23.6	lbs.
Water held at drained WHC	12.82 - 13.22	lbs.
Water held at max. WHC	20.92	lbs.
Water held at drained WHC	1.6 - 2.26	gal.
Water held at max. WHC	2.2 - 2.82	gal.
Equivalent inches of rainfall held at drained WHC	2.57 - 3.63	in.
Equivalent inches of rainfall held at max. WHC	3.52 - 4.54	in.

#### Physical measurements per Square Foot

Weight – dry	1.7 - 1.9	lbs.
Weight – drained	8.31	lbs.
Weight – at max. WHC	9.1 - 11.8	lbs.
Water held at max. WHC	7.4 - 9.9	lbs.
Water held at max. WHC	1.1 - 1.41	gal.
Equivalent inches of rainfall held at max. WHC	1.76 - 2.27	in.

#### **Density measurements per Cubic Foot**

Bulk density – dry weight basis	6.8 – 7.6	lbs.
Bulk density – drained weigh basis	33.24	lbs.
Bulk density – at max. WHC	36.4 – 47.2	lbs.

#### Water measurements

Percent water held at drained WHC	518% - 600%	vol.%
Percent water held at max. WHC	581% - 799%	vol.%

#### рΗ

рН	6.2	

#### **Electrical Conductivity**

#### **Cation-Exchange Capacity**

CEC	3.4	

## WaterGrip Roof Brownies hold 50,000 gal. of water per acre\*

<sup>\*</sup> per testing by Umass Center for Agriculture



