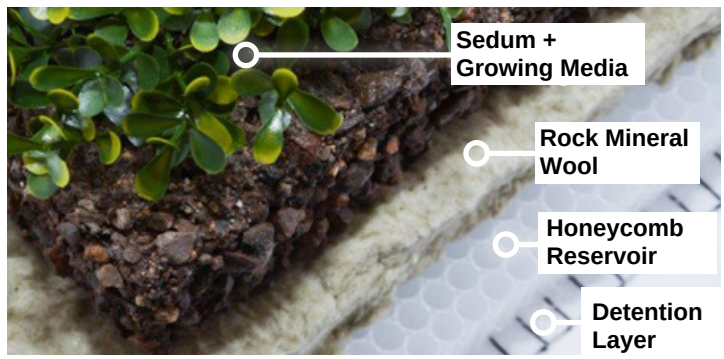
HYDROTECH

BUILDING TRUST

The Purple-Roof®

Vegetated and Ballasted Rooftop Stormwater Detention

Add return of investment (ROI) and reclaim valuable square footage by detaining water on the roof and reducing or eliminating traditional stormwater BMP's.

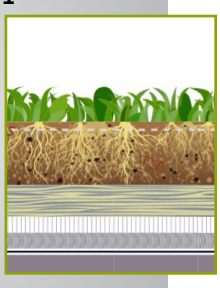


Typical Profiles

Vegetated "4+2+1"

Profile Layers:
Sedum (0.5") + Media (4")
Rock Mineral Wool (2")
Honeycomb Reservoir (1")
Detention Layer (0.2")

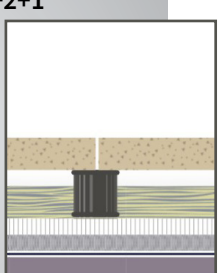
Profile Specs:
profile thickness - 8.0"
max live + dead load - 52.47 lbs/sf
max retention storage- 2.5 gal/sf (4.01"/sf)
max detention storage- 2.0 gal/sf (321"/sf)
anticipated max. outflow rate - 0.22 cf/s/ac



Hardscape "Paver+2+1"

Profile Layers:
Concrete Paver & Ped. (2") *thick. may vary*
Rock Mineral Wool (2")
Honeycomb Reservoir (1")
Detention Layer (0.2")

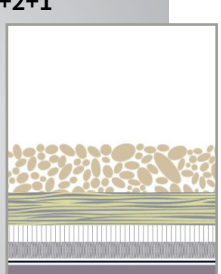
Profile Specs:
profile thickness - 6.5"
max live + dead load - 40.43 lbs/sf
max retention storage- 1.1 gal/sf (1.76"/sf)
max detention storage- 1.0 gal/sf (1.6"/sf)
anticipated max. outflow rate - 0.22 cf/s/ac



Hardscape "Ballast+2+1"

Profile Layers:
Gravel/Aggregate (3") *thick. may vary*
Rock Mineral Wool (2")
Honeycomb Reservoir (1")
Detention Layer (0.2")

Profile Specs:
profile thickness - 6.5"
max live + dead load - 50.16 lbs/sf
max retention storage- 1.3 gal/sf (2.09"/sf)
max detention storage- 1.8 gal/sf (2.89"/sf)
anticipated max. outflow rate - 0.22 cf/s/ac



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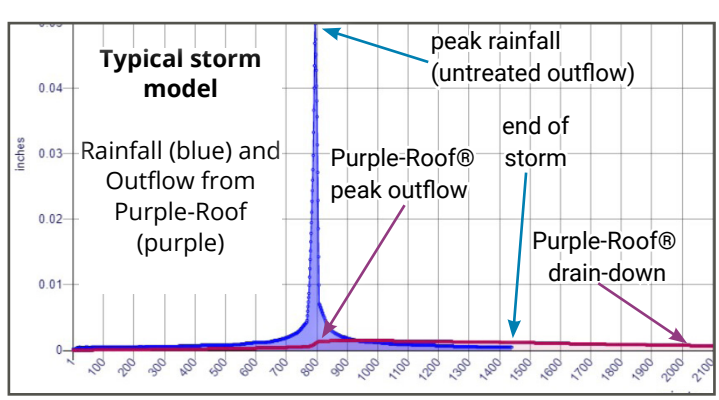
The Purple-Roof® assembly for stormwater management can provide the required detention volume and peak outfow reduction needed to eliminate or reduce other methods of stormwater management that may be less desireable due to various conditions, such as:

- lack of space (or square footage that could otherwise generate revenue)
- existing bedrock or hazardous fill
- current green roof not generating ROI
- site grading complications
- a high groundwater table or local wetlands
- high initial and/or long-term cost of other BMP's

The Purple-Roof® as marketed by Hydrotech utilizes Rock Mineral Wool, an optional honeycomb reservoir and a detention layer to provide retention, detention and outfow reduction across the entire roof surface Purple Roof® functions on flat and low-sloped roofs, and each profile is engineered to meet specific project needs.



The Purple-Roof®

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How it Works

Whether the overburden is Vegetation or Hardscape, the Purple-Roof® uses a profle of Rock Mineral Wool, an optional honeycomb reservoir, and a detention layer that is engineered to provide the specific storage and outfllow reduction requirements for each project.

Rock Mineral Wool

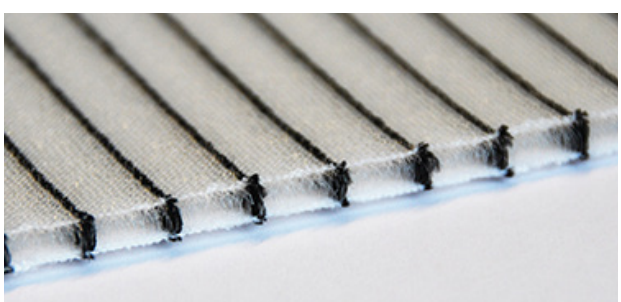
Retention & Filtration

Provides excellent filtration and retention properties, and can be used to reduce growing media depths without losing performance. It can be installed in single or multiple layers, typically 1" to 3" thickness.

Honeycomb Reservoir

Detention Storage

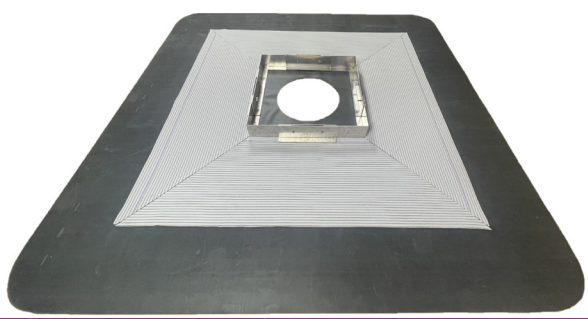
Provides (optional) detention storage volume via 10mm to 15mm diameter tubes which temporarily hold stormwater until released through the Detention Layer below, and ranges from 0.5" to 4" in thickness, depending on project requirements.



Detention Layer

Turbulence via Friction

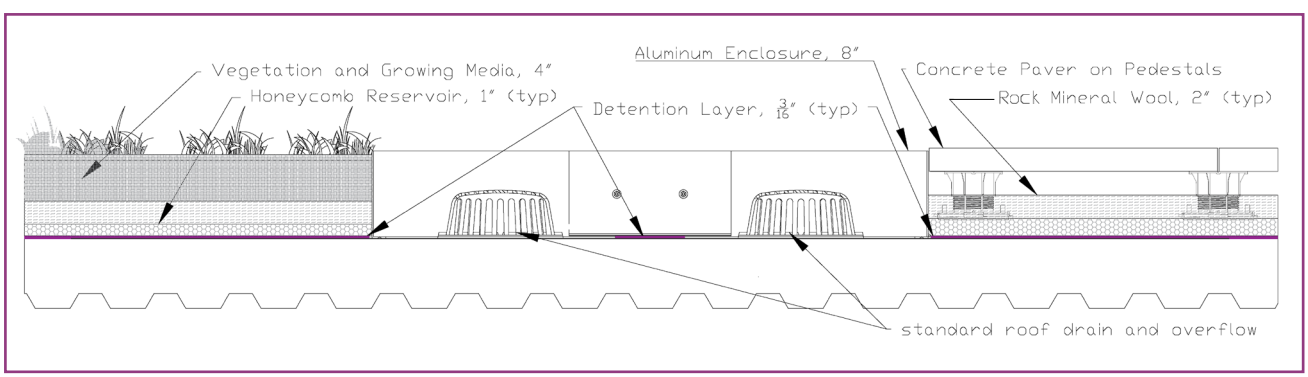
The detention layer is 0.2" (5mm) thick and has over 1,800 polyester treads per inch that create friction. That friction creates turbulence and restricts the flow of water at a drain.



Detention Drain Enclosure

Outflow Regulation

The Detention Drain Enclosure is a prefabricated unit consisting of base sheets and aluminum enclosure. Each unit is sized per stormwater calculations and one unit is installed at each roof drain location within the Purple-Roof® system.



Call Hydrotech for further details and pricing: 1.800.877.6125