

SOPRANATURE®

BUILT-IN-PLACE VEGETATIVE SYSTEMS

SOPRANATURE® vegetated roof systems provide a variety of benefits, from enhancing building performance to increasing property value all while improving the surrounding environment. Performance Roof Systems offers built-in-place systems for extensive, semi-intensive and intensive profiles.

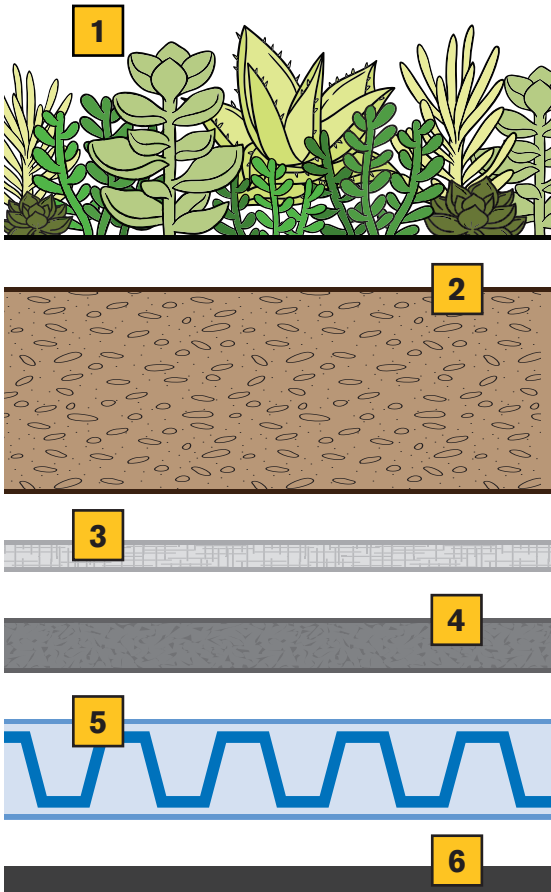


DISCOVER THE BENEFITS

- **Stormwater Retention:** Green roofs provide a rainwater buffer reducing the burden on sewer systems.
- **Energy Savings:** Green roofs systems can provide potential energy savings by improving a building's insulation characteristics.
- **Combats Urban Heat Island Effect:** Dark roofs hold onto the heat while plants naturally cool their surrounding environments.
- **Improved Air Quality:** Green roofs filter air and produce oxygen.
- **Membrane Sustainability:** A green roof protects the waterproofing membrane from UV rays, freeze-thaw cycling, temperature fluctuations and doubles or triples the life span of your roof.
- **Sound Insulation:** A green roof acts as a sound barrier for your building. It absorbs sound providing a quieter environment, both inside and out.
- **Aesthetics:** Green roofs are visually stimulating and can make great areas for recreation and pleasure.
- **Increased Property Value:** Installing a green roof can increase property value by providing a valuable building asset.

SYSTEM LAYERS FOR VEGETATIVE ROOFS

The basic components of green roof systems are similar. All green roof systems include a waterproofing membrane adhered to a stable substrate, protection course, root barrier, drainage layer, insulation, aeration layer, moisture-retention layer, reservoir layer, filter fabric and some type of growth medium or engineered soil.



1 VEGETATION

Vegetation can include edible plants, perennials, grasses, shrubs and trees. Planting type and size determines required irrigation system and soil depth.

2 GROWING MEDIA

A specially blended soil engineered to sustain long-term plant growth in a lightweight, shallow profile, and capture a significant amount of rainfall while allowing excess water to drain freely.

3 FILTER/SEPARATION LAYER*

Porous, non-woven geotextile made from a blend of polypropylene and polyester fibers. The internal pore size distribution is carefully controlled to retain green roof planting media without restricting root penetration or water drainage.

4 MOISTURE RETENTION* (Optional)

The word retention in water management refers to the balancing effect of storage space on the run off of stormwater into watercourses. The need for retention is becoming more frequent with changing weather conditions.

5 DRAINAGE LAYER*

Proper drainage is the true backbone for any green roof system. Drainage refers to the ability of a green roof assembly to move water not only downward but laterally across a roof during a heavy rain event.

6 ROOT BARRIER

A root barrier does exactly what it sounds like; it prevents roots from penetrating waterproofing membranes and jeopardizing the building envelope's integrity.

ROOFING SYSTEM

SOPRANATURE® vegetative systems are fully compatible with Performance Roof Systems roofing and waterproofing systems including DERBIFLASH RS liquid-applied membranes.

Contact your Performance Roof Systems Sales Representative to learn more about SOPRANATURE® vegetative roofing systems or to discuss green building solutions or your individual needs.

800-727-9872 | www.performancerooftsystems.us

* The separation sheet (3), moisture retention (4) and drainage (5) layers can also be combined into a single product based on the systems' design.

BUILT-IN-PLACE SYSTEMS COMPARISON GUIDE

There are three main types of vegetated roofs: intensive, semi-intensive and extensive. These are usually differentiated by their soil depth and vegetation. Each of these systems have their own advantages and disadvantages.



TITLE	EXTENSIVE	SEMI-INTENSIVE	INTENSIVE
SUITABLE FOR	Our extensive system is designed to have excellent water retention ability. The sedum plants require little maintenance, additionally no water irrigation system is required. This is a great system if your objective is to reduce costly stormwater run-off as well as mitigate the effects of urban heat island.	With deeper growing depths and drainage solutions, our semi-intensive system offers an expanded plant palette and greater design flexibility. These systems generally require additional maintenance and irrigation, but it does provide increased stormwater retention.	Our intensive system has the best water retention ability and creates an aesthetically pleasing heavy overburden garden, adding unmatched value to your property. This system reduces costly stormwater run-off and mitigates urban heat island effects.
SPECIFICATION DRIVERS	<ul style="list-style-type: none"> Stormwater management Reduce Heat Island Effect Minimal maintenance requirements Relatively inexpensive Extending roof life 	<ul style="list-style-type: none"> Stormwater management Reduce Heat Island Effect Wildlife habitat Environmental Aesthetics 	<ul style="list-style-type: none"> Air & water quality Aesthetics Increase property value Wildlife habitat Gathering or recreational spaces
PLANT SELECTION	<ul style="list-style-type: none"> sedums ground cover grasses succulents wildflowers 	<ul style="list-style-type: none"> sedums grasses perennials urban agriculture small shrubs 	<ul style="list-style-type: none"> lawn perennials urban agriculture shrubs small trees
SOIL DEPTH	2 - 6 inches	6 - 12 inches	> 12 inches
DRY WEIGHT	10 - 35 lb/ft ²	35 - 50 lb/ft ²	50 - 100+ lb/ft ²
WATER RETENTION	0.5 - 1.5 gal/ft ²	1.0 - 2.5 gal/ft ²	2.0 - 5.0 gal/ft ²
MAINTENANCE	Minimal: Inspect one or two times per year. Water and nutrients usually supplied by natural processes.	Annual: Maintenance such as mowing, fertilizing, watering, weeding, etc. Irrigation is usually necessary.	Routine: Maintenance such as mowing, fertilizing, watering, weeding, etc. Irrigation is necessary.

DESIGN FLEXIBILITY

There's no one-size-fits-all approach when it comes to designing green roof systems. Specifically developed for the rooftop environment, our systems maximize plant health, stormwater retention and thermal performance. SOPRANATURE's diverse line of products offers comprehensive green roof solutions to help meet your project goals and specific site requirements.

SOPRANATURE® SYSTEM PRODUCTS

COMPONENTS	PRODUCTS
Vegetation	SOPRANATURE® Sedum Mat
	SOPRANATURE® Sedum Tile
Growing Media	SOPRAFLOX
	SOPRAFLOX I
Separation Sheet	SOPRAFILTER
Moisture Retention	SOPRANATURE® Moisture Retention Mat
Drainage Layer	SOPRADRAIN™ Ecovent
	SOPRADRAIN™ Ecovent 2
	SOPRADRAIN™ 100
	SOPRADRAIN™ 102
	SOPRADRAIN™ 104
	SOPRANATURE® Drain Plate 25
	SOPRANATURE® Drain Plate 40
	SOPRANATURE® Drain Plate 60
	SOPRANATURE® Geonet
Root Barrier	SOPRANATURE® Root Barrier



ACCESSORY PRODUCTS

- **Pavers:** Available in concrete, IPE Wood and Ceramic tile options
- **Pedestals:*** Adjustable deck & paver support system
- **Aluminum Edge Restraint System**
- **Inspection Chambers and Drain Boxes**

* Consult the SOPRANATURE® VersiJack C-Series sales sheet for more information and complete product offering.