

# SkyScape™ Vegetative Roof Systems

BRING THE BENEFITS OF SUSTAINABLE ROOFING TO YOUR NEXT PROJECT.



## **Experience True Peace of Mind**

SkyScape™ Vegetative Roof Systems provide designers and building owners a full range of design solutions that meet the vision for the space. And SkyScape systems are eligible for protection under the strength of the industry's leading warranty, the Firestone Red Shield™ Warranty.

#### A Full Range of Design Solutions

From vision to reality, Firestone can support your design with our Extensive, Semi-Intensive and Intensive performance-based vegetative roof solutions:

- SkyScape Pregrown Modular Systems
- SkyScape Built-in-Place Systems

#### **Easy to Install**

SkyScape Pregrown Modular Systems are compact, lightweight and simple to install. Our Built-in-Place systems integrate filter fabric, drainage panel, and geotextile into an all-in-one drainage panel to reduce labor. All SkyScape systems are designed to install easily, giving the building owner a complete and beautiful vegetative roof from the day of installation.

### Field-Proven, Lab-Approved

More the 15 years of field experience in vegetative roofing has enabled Firestone to provide thriving systems that we confidently warrant for up to 30 years.

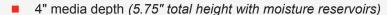
- Firestone Growing Media is blended to German FLL international standards and is regionally formulated to maximize sustainable plant growth in multiple climatic conditions
- SkyScape vegetation is specifically selected for rooftop survivability
- SkyScape Pregrown Modular Systems are FM approved for fire resistance

## SkyScape Pregrown Modular Systems

All modules are made from 100% recycled HDPE materials, and are FM approved for fire resistance.

#### **Extensive Pregrown Modular Systems**

- 2.5" media depth (4.25" total height with moisture reservoirs)
  - » Estimated weight at maximum water holding capacity: 19-22 lb/ft²
  - Estimated module water storage volume 0.09 ft³ or 0.71 gal/ft²
  - » Wind rating: Not applicable
  - » Available in 15" x 20" platform only
  - » Vegetation are drought tolerant plant communities, such as those found in dry mountain environments, coasts, semi-arid deserts, and or dry meadows. Succulent ground cover species found in the genus Sedum, Delosperma perform the best at this media depth.
  - Depending on project location, an irrigation system may be recommended.



- » Estimated weight at maximum water holding capacity: 28-32 lb/ft²
- » Estimated module water storage volume 0.14 ft<sup>3</sup> or 1.05 gal/ft<sup>2</sup>
- » Wind rating: 133 psf
- » Available in 15" x 20" and 12" x 24" platforms
- » Vegetation are drought tolerant plant communities, such as those found in dry mountain environments, coasts, semi-arid deserts, and or dry meadows. For accent species, conventional perennials and grasses can also be used to add diversity. Careful selection and appropriate ratios of succulents to accents should be adhered to.
- Depending on project location, an irrigation system may be recommended.

### **Semi-Intensive Pregrown Modular Systems**

- 6" media depth (7.75" total height with moisture reservoirs)
  - » Estimated weight at maximum water holding capacity: 38-45 lb/ft²
  - Estimated module water storage volume 0.20 ft³ or 1.51 gal/ft²
  - » Wind rating: > 133
  - » Available in 15" x 20" platform only
  - » Vegetation is a combination of succulent ground cover; conventional perennials, grasses, and native forbs can also be used to create a very diverse vegetative roof.
  - Depending on the vegetation used, an irrigation system may be necessary.

### Intensive Pregrown Modular Systems

- 8" media depth (9.75" total height with moisture reservoirs)
  - » Estimated weight at maximum water holding capacity: 52-60 lb/ft<sup>2</sup>
  - Estimated module water storage volume 0.26 ft³ or 1.97 gal/ft²
  - » Wind rating: > 133
  - » Available in 15" x 20" platform only
  - » Vegetation is a combination of succulent ground cover; conventional perennials, grasses, and native forbs can also be used to create a very diverse vegetative roof.
  - Depending on the vegetation used, an irrigation system may be necessary.









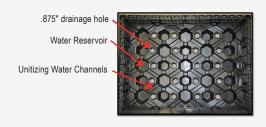


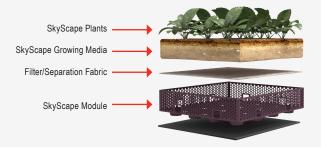


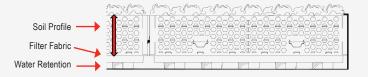
## SkyScape Pregrown Modular Systems

#### **A True Engineered Environment**

- Manageable size intended for one person handling for safe, fast, and simple installation. Also, all modules are removable to make roof repair and maintenance simple.
- Performance-based Modular design:
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  - » Perforated sidewalls on all four sides of the entire length of the growing profile that promotes rooting between modules and system interconnectivity.
  - » Below grade inter-locking on all 4-sides of the module that prevents tray separation and media spillage, pulls modules together to ensure interconnectivity, and creates a "complete" system to prevent uplift.
  - » Large drainage holes promotes ample air and water movement though the system.
  - » 4" media depth system exceeds 133 lbs/sf uplift pressure. 6" and 8" media depth have a ≥ 133 lbs/sf uplift pressure. Uplift testing on 2.5" is not available.
- Modules are pre-grown at our partner nurseries in accordance with your specifications, delivered to the job site, and installed for an instant mature vegetative roof.
- Formed from 100% recycled HDPE with UV inhibitors and UV stabilized.
- Your modular design (extensive to intensive) is covered by the strength of our Red Shield Warranty.
- Optional: Integrated irrigation rotary heads can be pre-installed into the module equipped with quick connect supply line hookups.







### SkyScape Built-in-Place Systems

The Skyscape Built-in-Place (BIP) Systems provide limitless possibilities, whether the design is a functional, a "designed" space, or a dramatic rooftop garden; the SkyScape BIP Systems can support your design. The SkyScape BIP Systems allow for monolithic coverage over the entire roof for both low-slope and sloped applications.

#### **Benefits**

- BIP solutions to meet the vision for the space
  - » Simplified systems to meet your design
  - » Performance focused systems to meet and/or exceed the stormwater retention requirements
  - » Light-weight performance focused systems to meet and/ or exceed stormwater retention requirements
- SkyScape All-in-One Drainage Panel (0.5" or 1.0") features filter fabric bonded to the top and geotextile bonded to the base or retention system for easy installation
- SkyScape Sedum Mats used for instant aesthetics
- Firestone vegetative roof experts are available to assist in the design process from start to finish
- Your BIP design (simple to very complex assemblies) will be covered by the strength of our Red Shield Warranty

#### **Extensive Systems**

The Extensive Systems (3-6" depths) are suited for roofs with limited load bearing capacity and is typically installed on nonvisible roof surfaces. The SkyScape 0.5" or 1.0" drainage panels are recommended to support this design style.

#### **Semi-Intensive Systems**

The Semi-Intensive Systems (6-8" depths) are typically installed on visible roof surfaces aiding in softening the building apperance with enhanced aesthetics. The SkyScape 1.0" drainage panel is recommended to support this design style.



### **Intensive Systems**

The Intensive Systems (≥8" depths) are typically installed on roofs with substainial loading capacity to accommodate a rooftop garden. The SkyScape 1.0" drainage panel or the SkyScape 1.25" drainage grids (with added void space and filtration layers) are recommended to support this design style.



### **Growing Media and Plants**

#### **SkyScape Growing Media**

Blended according to FLL guidelines, SkyScape Growing Media includes high-quality, aggregates and organic components that optimize sustainability. Each blend is regionally formulated to meet the climatic conditions of your project location and to ensure that your vegetative roof acclimates and thrives from day one.



#### **SkyScape Sedum Mats**

The SkyScape Sedum Mats are a great solution to achieve instant aesthetics for your Extensive BIP project. Mats are grown on an artificial fiber carrier and within an engineered substrate vegatated with a proven variety (9 to 16 species of Sedum) of succulent ground cover species. The species mix is composed of an appropriate ratio of semi-evergreen, shallow rooting species and deep rooting, broadleaf, deciduous species to create a sustainable vegetative solution for your vegetative roof project.

#### **Vegetation Options**

A nearly unlimited selection of species are available, including natives, grasses, perennials, forbs, shrubs and even small trees. Let us know how you envision your rooftop garden design, and we will work with you to meet your vision, with site-appropriate plants that will thrive in the project's climatic conditions.

#### Plant Selection

Selecting the right varieties of plants for your vegetative roof is critical to its longevity. They must meet the climatic conditions of each project while also growing cooperatively with one another.

That's why Firestone offers our customers professional assistance in selecting plants, and will work with your design team to create a custom plant palette that remains beautiful and robust for years to come.

### **Design Assistance**

Firestone specialists in horticulture, landscape architecture, plant and soil science, roofing systems and products, and roofing installation, can provide you with:

- Complete system specifications
- Design suggestions
- Plant selection assistance
- Detail drawings
- Technical documentation
- Storm water calculations
- Budgeting assistance
- Operations and maintenance procedures
- Remediation support





## SkyScape Accessories

#### **Irrigation Components**

SkyScape pop-up sprinkler rotator heads can be fitted to the base of the modules before planted and grown in the field. The heads may either be attached using pipes provided by Firestone, or via an existing sprinkler system on the roof.

■ A complete line of irrigation options are also available for BIP systems

#### **Sloped Components**

SkyScape Sloped Cleats, Sloped Capillary Mats, Sloped GeoGrids and Sloped Drainage Panels, give your design team the specifically-engineered products they need to bring all of the beauty of a rooftop vegetative environment to the project's sloped conditions.

#### **Pavers**

- SkyPaver™ Composite Roof Pavers
  - » Made from 95% recycled rubber and plastic
  - » Weigh a third less than concrete pavers
  - » Available in five stunning colors
  - » Brick-like shape and appearance allows for multiple installation patterns, including curved designs (with special wedge pavers)

#### **Related Accessories**

- » Planters
- » Concrete Pavers and Pedestals
- » Wood Pavers
- » Benches









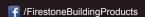
Partnering with Firestone Building Products means superior support that goes beyond the materials you need for your projects. We look at the big picture with you, taking the entire building envelope into consideration, so we can provide you with a complete solution. For exceptionally performing building materials backed by the services, warranty and expertise you need...

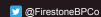
### Count on Firestone.



For more information, ask your local Firestone sales rep or visit firestonebpco.com.

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