



VEGETATED

SOPRANATURE®

VEGETATED ROOF SYSTEMS

ROOFS





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VEGETATED ROOF SYSTEMS

SOPRANATURE vegetative roof systems provide a variety of benefits, from enhancing building performance and increasing asset value to improving the environment. SOPREMA® offers both modular, all-in-one systems and built-up systems for extensive, semi-intensive and intensive profiles, with several depths available.

SOPRANATURE systems are compatible with SOPREMA roofing and waterproofing systems, including SBS-modified bitumen membrane systems, ALSAN RS® PMMA/PMA liquid membrane systems and COLPHENE H hot rubberized asphalt built-up systems.

ADVANTAGES

- Stormwater management
- Protects the roof
- Mitigation of the “heat island” effect
- Creates beautiful, functional amenity space
- Increased energy-saving benefits
- Protects the integrity of the waterproofing layer

INNOVATION

ECOLOGICAL AND ECONOMIC BENEFITS

Exposed roof membranes absorb solar energy during the day and release it at night, expanding and contracting with fluctuating temperature. This cycle degrades material integrity and shortens roof life. In addition, the absorbed energy radiates into the building, increasing cooling costs, and back out into the environment, creating an urban heat island. Green roofs capture rainwater, cooling buildings and the surrounding air by evapotranspiration, or through evaporative cooling by the plants during photosynthesis and by the soil as it dries. By doing this, they also reduce temperature volatility and expansion/contraction cycling in the membrane, extending roof life. Green roofs also reduce the volume and rate of stormwater runoff, reducing loads on municipal sewer systems and protecting surrounding waters.

SUCCESS STORY

909 Walnut Fidelity Tower
Kansas City, Missouri

A landmark on the National Register of Historic Places, the 909 Walnut Fidelity Tower Building has been refurbished to provide thirty-four floors of beautiful, spacious luxury suites for high-rise living. Connecting the 909 Walnut Tower and the 929 Walnut building is a new eight-story parking garage with a lush garden that provides an outdoor and community space typically only found at a nearby park. This rooftop garden is yet another example of the vegetated roofs that are popping up throughout Kansas City. "They act as a great insulator, reduce storm run-off, dampen noise and can even lengthen the life of the roof" said Jeffrey Bruce. Jeffery L. Bruce & Company was responsible for the design of the rooftop garden and is a local landscape architecture firm and national leader in green roof design.





BENEFITS OF VEGETATED ROOFING SOLUTIONS

STORMWATER MANAGEMENT

Vegetated roofing systems are an effective stormwater management solution. During times of heavy rainfall, the vegetated system collects excess water and stores it as a water source for the plants. This minimizes the amount of water that is running off the building into local waterways or causing sewage overflow situations.



URBAN HEAT ISLAND EFFECT

When designing a roof in a city, the urban heat island effect must be taken into account. In cities that experience high temperatures year-round or even just in the summer months, it is important to find a roofing solution that cools the building and environment around it. Vegetated roofing systems offer an excellent solution for the urban heat island effect because the vegetation on the roof will absorb the heat instead of displacing it into the surrounding environment.



AESTHETICS & FUNCTIONAL SPACE

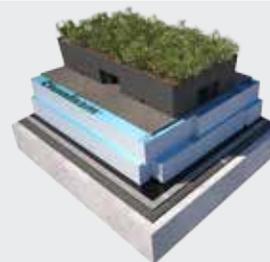
An added benefit to a vegetated roof is aesthetics and additional functional space. By adding vegetation to a roof, it increases the design options to improve the building's aesthetics. This also offers the opportunity to add extra functional square feet to the building, and the added amenity space will in turn increase the property value. Whether it is an apartment complex wanting to provide residents with a rooftop garden or a restaurant looking to utilize the space to provide fresh herbs, the possibilities are endless.



FLEXIBLE SYSTEM OPTIONS FOR ANY DESIGN

MODULAR TRAY

The SOPRANATURE Modular system is a premium, easily installed vegetated roofing solution. These trays are all-in-one systems that consist of a drainage layer, filter fabric, and pre-vegetated system. SOPRANATURE Modular Trays offer time and labor savings due to ease of installation.



BUILT-IN-PLACE SYSTEMS

SOPRANATURE built-in-place systems allow more flexibility in designing vegetated roofs and can help meet project and specific site requirements. Nominally divided by soil depth into extensive, semi-intensive, and intensive systems, they can be customized to accommodate requirements such as wind uplift, steep-slope stabilization and enhanced water detention and retention.

EXTENSIVE SYSTEM

Extensive systems are designed for projects that require a lightweight vegetated roofing solution. The types of vegetation seen on extensive systems generally include sedum, herbs and other low-maintenance plants. Depending on the geographical location, these assemblies may not require the installation of an irrigation system.



SEMI-INTENSIVE SYSTEM

Semi-intensive systems allow for additional plant diversity including small shrubs, grasses and some flowers. These systems generally require additional maintenance and irrigation, but increase stormwater retention.



INTENSIVE SYSTEM

Intensive systems require the most maintenance and must have an irrigation system, but they offer endless design opportunities. They allow for the creation of on-structure landscapes with deep soil profiles, which can sustain large shrubs and trees. These systems can be turned into a rooftop garden on top of a restaurant for fresh vegetables, or a park for residents of an apartment complex. Intensive systems also retain the largest amount of stormwater of the three assemblies.



INNOVATION SINCE 1908

SOPREMA has developed around the idea that the quality, durability and reliability of materials must match builders' ambitions and expectations. For more than 100 years, SOPREMA has been using its expertise to develop a variety of high-end products that meet or exceed all the requirements of the construction field.

ROOFING WATERPROOFING WALLS CIVIL ENGINEERING

