



VEGETATION

SOPRANATURE MAINTENANCE GUIDE



Each green roof is unique and requires specific attention to ensure long-term performance. Maintenance managers must meet certain proficiency requirements and have landscaping management experience. The qualifications of maintenance professionals include but are not limited to:

- Horticultural training
- Training in safety requirements for working at heights
- Extensive practical experience in landscape maintenance
- Excellent knowledge of weed and pest management
- Understanding and knowledge of the use and application of fertilizers
- Understanding of the installation and operation of irrigation systems
- Knowledge and understanding of vegetative green roof components and assemblies

PLANNING MAINTENANCE OPERATIONS

GENERAL

- The frequency of inspection and maintenance visits must be adjusted according to the environmental conditions, time of year, type of vegetation, aesthetic requirements and exposure to sun and wind.
- Extensive and semi-intensive green roofs require minimal fertilizing, watering and mowing.
- Intensive green roofs require maintenance similar to conventional landscaping.
- Automated irrigation systems equipped with rain and humidity sensors are recommended for effective water management.
- A suitable vegetation fertilization plan must be developed.
- Pesticides may only be applied by a qualified professional.
- Seedlings and other weeds must be removed as soon as possible.

MAINTENANCE PLAN FOR THE FIRST YEAR

SPRING

- Remove all dead and dying plant material.
- Replace dead plants by replanting or over seeding.
- Activate the irrigation system where applicable.
- Test media for fertility to determine if fertilizing is required.
- Spread a slow-release fertilizer if required.
- Test and adjust the irrigation schedule if necessary.
- Inspect and clean roof drains.

SPRING–SUMMER

- Perform a visual surface inspection at least once a month.
- Make any necessary corrections for lack of water or fertilizer.
- Hand weed during inspection.
- Replant all bare spots with appropriate plant material.
- Inspect and clean roof drains.

AUTUMN

- Mow or cut if necessary.
- Remove stems, branches and dried leaves.
- Spread a fall fertilizer as needed.
- Close the main irrigation feed. Drain and blow out the irrigation system to prevent damage from freezing over winter.
- Inspect and clean roof drains.

MAINTENANCE PLAN FOR SUBSEQUENT YEARS

MAINTENANCE AND CLEANING

Over the course of subsequent years, repeat the same weeding and other landscape maintenance procedures as needed. Extensive vegetative green roof systems must be inspected and maintained at least four times a year. Depending on the species and variety of plant material planted, intensive and semi-intensive green roofs require inspection and maintenance checks every two weeks. Inspect and clean roof drains during every maintenance visit.

IRRIGATION

All vegetative green roof systems require regular irrigation during the first year to allow the plant material to fully root into the growing media. In addition, all systems will require irrigation during periods of drought to maintain good plant health.

Extensive green roofs don't generally need frequent irrigation after the beginning of the second full growing season. Semi-intensive systems may require supplemental irrigation to ensure good plant health depending on the plant species and the environmental conditions of the site. Intensive green roof systems will require more frequent irrigation. A permanent programmable irrigation system is highly recommended for semi-intensive and intensive systems. An automated irrigation system equipped with rain sensors is recommended. Automated systems give the maintenance staff the flexibility to change irrigation programs to meet the needs of the vegetative green roof during periods of extreme weather. Automated irrigation systems also provide the tools needed for effective water management.



FERTILISATION

SOPREMA has engineered a growing medium and a sedum mats that have sufficient fertility to ensure that your vegetative green roof will not require any additional fertilizer for the first full growing season. After the first full growing season, the media should be tested to determine if additional fertilizer is required. Regular soil testing will allow the maintenance staff to develop a fertilizing regime to maintain plant health. Typically, intensive and semi-intensive green roofs will grow successfully for many years with a single yearly application of slow-release fertilizer.

The plants chosen for extensive vegetative green roofs will grow successfully with very low fertility depending on local rainfall and other conditions. Soil tests performed every second or third year may be used to determine when to apply additional fertilizer. Typically, slow-release fertilizer applied every three or four years will be sufficient.

Additional applications of fertilizer may be required depending on local conditions. Using well-trained horticulture staff and following a fertilization plan that best suits the needs of your vegetation will enable your vegetative green roof to provide many years of enjoyment.

CONTRÔLE DES INSECTES ET DES MALADIES

The plant species and varieties of green roof vegetation in SOPREMA's sedum mats and tray systems that have been carefully selected for their resistance to disease and insects. In rare cases where an insect or disease issue arises, use only trained horticulture or certified pest control staff to treat the issue. Pesticide chemicals may only be applied by a certified pesticide professional.

CONTRÔLE DES MAUVAISES HERBES

SOPREMA's sedum mats and pre-grown tray systems provide a fully covered green roof system that will, with proper care, resist weed invasion. Regular monitoring and maintenance are required to ensure weed species do not settle in.

When vegetative green roof systems are planted with seeds, cuttings and potted plants, etc., regular weeding is essential. As the green roof grows in, the frequency of weeding will lessen.