

Firestone

Firestone Building Products



SkyScape™ Vegetative Roof Systems

MAINTENANCE PLAN AND CHECKLISTS

MAINTENANCE INSTRUCTIONS

Please note: These instructions apply to Extensive Systems, Pregrown Modular Systems and some Semi-Intensive Systems. Contact Firestone for additional requirements necessary for maintaining Semi-Intensive Systems with multiple planting methods or native plants and for Intensive Systems.

INITIAL WATERING

During the establishment period immediately following installation, the following watering guidelines are required:

- Sedum Cuttings
 - » Twice daily for the first two (2) weeks
 - » Once a day for the third week
 - » Once a week for the next four (4) weeks
- Plugs – Twice a week for the first six (6) weeks
- Sedum Mats – Twice a week for first six (6) weeks

REGULAR MAINTENANCE

- **Watering (Irrigation)** - It's best to keep watering to a minimum, as dry soil encourages tougher plants that can resist extremes. Focus your watering efforts during the establishment period – generally the first two months following installation – and during the first full summer growing season.
 - » Make sure to check for wilting or stress on a monthly basis, and water immediately if these signs are evident.
 - » Irrigation may not be needed during periods of rain or milder temperatures.
 - » Be prepared to water during periods of extreme heat, but one or two irrigations per year may be all that is needed.
 - » In warmer climates, more regular watering may be required.

In hot, dry weather, conditions can dry out soils and cause plants to go dormant; or in extreme cases could cause plants to dry completely and die. Prolonged hot dry weather is generally defined as one (1) month of 75°F/24°C or warmer weather with less than one (1) inch of rainfall. If the plants appear wilted, especially if this is seen in the morning, water the soil to a fully saturated point. Prolonged temperatures above 75°F (24°C), garden roof systems installed on sloping roofs and/or roofs exposed to persistent winds or reflected sunlight may require even more frequent care and watering. Appropriate watering also enhances the evaporative cooling effect of the vegetative roof.

- **Fertilizers** - Between April 1-15, and annual soil test should be performed. If the pH of the soil falls under 6.5, apply Osmocote Pro fertilizer with micronutrients (13-10-13; 5-6 month release) at a rate of 3 lbs/1000sf to your vegetative roof. It may be easiest to spread using a handheld broadcast spreader; divide the roof into 1000sf sections, weigh out 3 lbs of fertilizer, and apply evenly across the section. Repeat until entire vegetative area is fertilized. Do not fertilize during fall, as this may stimulate soft growth and compromise the hardiness of the plant material.
- **Weed Control** - Weed control is absolutely essential to the vitality of your vegetative roof, yet is quickly and easily performed. Twice a month, simply inspect the vegetative area, and carefully remove all weeds. Any spent flowers should also be trimmed off (*“deadheaded”*), either by hand, or with scissors or pruners. Perennial weeds (*clover*) and woody plants can be especially invasive, and must be fully removed, including all of their roots. It’s very important to remove any and all weeds before they have opportunity to either flower or set seed.
- **Debris Removal** - Organic debris can smother garden roof plants. Remove any fallen or matted tree leaves, seeds, dead limbs, or any other organic debris on a regular basis.
- **Drainage Inspection** - Impaired drainage is a very serious condition. Roof drains should be inspected at least every two weeks, and any debris (*pebbles, sticks, leaves, trash, etc.*) should be removed from the drainage system, and all drain paths cleared.
- **Vegetative-Free Zones** - Inspect the areas adjacent to the vegetative roof, as well as any walkways, decorative stone areas, or other vegetative-free zones within the vegetative roof, to ensure that vegetation has not migrated into these areas. Remove any unwanted vegetation.
- **Irrigation System Inspection** - Irrigation systems should be inspected regularly to ensure that they are not leaking at any point in the system, and that the water is flowing properly from all areas.
- **Coverage Expectations** - Plant coverage can vary greatly, depending on the planting method, plants selected and many other variables in general. Expect coverage rates to vary with the season and expect ongoing maintenance to boost coverage. Sedum Cuttings will typically take two (2) - five (5) years to cover the planting area. Plugs will typically take two (2) - four (4) years, and pre-vegetated Sedum Mats will typically cover the planting area fully within one (1) year.

NOBODY COVERS YOU BETTER™



SPECIAL REQUIREMENTS FOR THE TWO YEAR PLANT COVERAGE WARRANTY

- **Post-Installation Inspection** - A Firestone representative and the Building Owner or their representative will perform a post-installation inspection of the vegetative roof system. All punch list items identified during this inspection must be completed within 30 days of the inspection.
- **Initial and Ongoing Maintenance** - Follow the maintenance instructions indicated in this document and record all maintenance tasks that are performed on the provided Checklist (pg. 7).
- **Year One and Year Two Inspections** - At the end of each of the first two years following installation, the Building Owner or their representative should perform a complete inspection of the vegetative roof system to identify any issues regarding plant health, watering/irrigation, and overall progress on plant coverage goals.
- **Determining Plant Coverage** - Coverage percentage is determined for each 1000 square foot grid area of roof surface. Overall coverage is based on a visual inspection under these terms and is subject to Firestone review. The Building Owner is responsible for all labor and labor costs necessary to maintain the garden roof system during the Two Year Plant Coverage Warranty Rider period. Non-covered areas must exceed minimum ½-square-foot to be counted against the coverage percentage. Warranted coverage is:
 - » Plugs and Cuttings
 - End of Year One: less than 50%
 - End of Year Two: less than 80%
 - » Sedum Tiles
 - End of Year One: less than 75%
 - End of Year Two: less than 90%
- **Reporting** - At the end of each of the first two years following installation, submit copies of the completed Maintenance Checklist (pg. 5, 7) and the corresponding Year Report (pg. 4, 6) to Firestone, including six (6) photographs of the vegetative roof from different perspectives showing evidence of plant growth progression and any major maintenance problems. To ensure the continuance of warranty coverage, these annual submittals must be submitted in their entirety to:

Firestone Building Products

Attn: Firestone Technical Services

200 4th Ave. South, Nashville, TN 37201

YEAR ONE REPORT (print this page)

Date Inspected:

General Comments:

Soil Testing

Date(s) Performed:

Comments:

Growing Media Replacement

Date(s) Performed:

Comments:

Fertilizer Application

Date(s) Performed:

Comments:

**Estimated Plant
Coverage:** %

Photographs - Attach six photos of the vegetative roof from different perspectives.

Checklists - Attach the Maintenance Checklist showing the first year of maintenance.

YEAR ONE VERIFICATION

I hereby verify that inspections and maintenance have been performed in accordance with the Firestone SkyScape Vegetative Roof Systems Maintenance Plan.

Building Name:

Warranty #:

Name:

Title:

Signature:

Date:

12 MONTH / TWICE MONTHLY MAINTENANCE CHECKLIST



Firestone Building Products

Print This Page

See the Maintenance Plan for Complete Instructions

Building Name:		
Address:	City:	State:
Warranty #:	Project #:	
Installation Completion Date:		

Vegetative Roof Maintenance	General Inspection	Drainage Inspection	Irrigation System Inspection	Watering	Debris Removal	Free Zone Inspection	Weeding
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YEAR TWO REPORT (print this page)

Date Inspected:

General Comments:

Soil Testing

Date(s) Performed:

Comments:

Growing Media Replacement

Date(s) Performed:

Comments:

Fertilizer Application

Date(s) Performed:

Comments:

Estimated Plant Coverage: %

Photographs - Attach six photos of the vegetative roof from different perspectives.

Checklists - Attach the Maintenance Checklist showing the first year of maintenance.

YEAR TWO VERIFICATION

I hereby verify that inspections and maintenance have been performed in accordance with the Firestone SkyScape Vegetative Roof Systems Maintenance Plan.

Building Name:

Warranty #:

Name:

Title:

Signature:

Date:

12 MONTH / TWICE MONTHLY MAINTENANCE CHECKLIST



Print This Page

See the Maintenance Plan for Complete Instructions

Building Name:		
Address:	City:	State:
Warranty #:	Project #:	
Installation Completion Date:		

Vegetative Roof Maintenance	General Inspection	Drainage Inspection	Irrigation System Inspection	Watering	Debris Removal	Free Zone Inspection	Weeding
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