



Sedum Plug Installation, Care & Maintenance Guidelines

Creating a green roof with Sedum plugs is cost effective and relatively easy. To get full vegetative coverage, it may take up to 2+ years depending on planting density and your particular cultural practices. During the fill-in period, regular maintenance is necessary to remove weeds in the open areas and to check that plants are actively growing and healthy. Green roof sites are harsh environments and each site is unique. Plants are subject to extreme regional weather conditions and seasonal variations. Careful attention will pay great dividends in creating a beautiful, well established green roof. Below are some key points to successful installation and maintenance of a Sedum green roof from plugs.

Care of Plugs until Planting

At delivery, it's critical to properly care for the plugs. Promptly move the boxes to a shady protected area. Do not allow the boxes to remain in direct sunlight or be exposed to extreme conditions. Immediately open the boxes to dissipate any residual heat. If the boxes are hot, remove the trays from the boxes to cool. Having the green roof ready prior to the delivery of the plant material is ideal. It is highly recommended that the plugs are planted immediately or as soon as possible. If planting is not possible within a couple of days, you must remove the plug trays from the boxes. If plugs need to be held longer than a few days, they'll need to be irrigated.

Preparing the Green Roof for Planting

Sedum plugs can be planted over virtually any system that has good drainage and a quality growth media engineered for green roofs. Growth media should be a minimum depth of 2" but 4" is recommended. After installing the specified green roof components, prepare the media by leveling with a rake, screed, light roller or other method. Do not over compact the media.

Thoroughly saturate the media during its placement and again immediately before planting the plugs to ensure adequate water is available to plants during the initial establishment period. Frequent irrigation may be required to sufficiently saturate the media. Don't plant into dry soil.

Having ample water and an overhead irrigation system is critical to establishing plugs in a green roof. Sub-surface drip irrigation is inadequate for establishing plugs on a green roof, however, once plants are well established it can provide useful amounts of water long term. Double check the irrigation system to make sure it can provide the water and coverage needed.

Planting the Plugs

Once the green roof media is in place and the overhead irrigation checked for coverage, you're ready to plant. Verify the plant spacing, density and any special design features. It's usually best to plant those unique features first, then plant the general mix on the remaining green roof.





Be sure your plugs and green roof media were well irrigated the evening before or at least 3-4 hours ahead of planting. Again, this may take multiple applications for good saturation. Plant so the soil level of the plug is the same height of the green roof media. Don't bury the plugs too deep or have any of the plug's soil sticking above the finished grade. If plugs are planted too high, they will dry more quickly from wicking, may not establish and possibly die. Good soil contact is very important for adequate moisture and establishment. Irrigate plugs immediately after planting. If planting a large project, begin irrigating after the first section is completed.

Establishment - Irrigation

Sedum plugs should become established on the rooftop relatively quickly depending on time of year and weather conditions. With proper irrigation, plugs should begin to root and grow into the green roof media within 2- 3 weeks. After 4-6 weeks, you should be able to slightly tug on the plants and they should hold into the media without easily being removed. Check to be sure none of the plugs are higher than the final grade due to the media settling. If so, push them down into the media.

Irrigation should be frequent and sufficient to maintain a good moisture level in the top 2" of the media for 3 - 4 weeks. Different climates, seasons and sites may require different amounts of irrigation. Check plugs regularly and adjust irrigation as needed based on your particular situation. The following is a suggested irrigation schedule:

Week 0-2: Irrigate 1-2 times per day, keeping the plugs and surrounding area evenly moist.

Week 3-4: Irrigate 1-2 times per week. More roots forming, most varieties rooting into media.

Week 5-8: Irrigate 1 time per week. All varieties should have roots formed with most rooting into media.

Week 9 & beyond: Irrigate every 1-2 weeks depending upon how quickly you want the roof to fill-in.

The first 2-3 months of irrigation is critical for the plugs to fully establish and should be watched closely for the first entire summer. Water enough to prevent or correct wilt, but if plants are not stressed or wilted, let them go a while longer. Continue to adjust and reduce irrigation based on plant conditions. Once established, irrigation can be by drip, overhead, automatic, manual or whatever suits the project. For best results, do not overwater. Additional irrigation maybe necessary during periods of extreme heat and/or in hotter or drier climates.

Maintenance

Maintenance after plants have properly established and filled-in is minimal. Until then, there's significant area exposed which is more susceptible to weed germination and growth. It is recommended that regular routine site visits be conducted by a plant professional weekly for the first two months, twice a month for the following two months, then monthly for the first year. This will help to assess the condition and growth of the plants and address any weed issues. Routine maintenance should prevent large maintenance issues from establishing.

Fertilization

An extensive green roof can be quite successful with very minimal fertilization. Over-fertilization can encourage weeds and soft, vulnerable growth. However, sometime fertilizer can be used to push new growth and/or correct low soil fertility. We recommend an organic, balanced, slow release fertilizer applied at a low rate no more than once per year.

