

Sedum Cuttings Installation, Care & Maintenance Guidelines

Establishing a green roof with bulk Sedum cuttings is very cost effective. Doing so requires very close and frequent attention, as cuttings are vulnerable to the harsh conditions on a green roof. Each green roof site is unique, with different regional conditions and seasonal variations. Below are some key points to successful installation and maintenance of a bulk Sedum green roof.

Preparing the Green Roof for Planting

Bulk Sedum cuttings can be grown over virtually any type of green roof system with good drainage and a quality growth media engineered for green roofs. Growth media should be a minimum depth of 2" but 4" or more is recommended.

Having ample water and an overhead irrigation system is critical to establishing a green roof with bulk Sedum cuttings. Sub-surface drip can provide useful amounts of water long term, but is inadequate for establishing cuttings. Double-check the irrigation system to make sure it can provide the water and coverage needed.

After installation of the green roof system, prepare the proper green roof media by leveling with a rake, screed or other method. Do not over compact the media at this time. Slightly overfill the media to allow for anticipated compaction when rolled once the cuttings are applied. Thoroughly saturate the media during its placement and again immediately before planting to ensure adequate water is available to plants during the establishment period. Frequent irrigation may be required to sufficiently saturate the media.

Care of Bulk Sedum Cuttings until Planting

At delivery, it's critical to properly care for the cuttings. 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, dissipating any residual heat and allow airflow through the cuttings. Run your hands through the box mixing & tossing the cuttings to help accomplish this.

Having the green roof ready prior to the delivery of the cuttings is ideal. It is highly recommended that the cuttings are installed immediately. If planting is not possible within a day or two, spread the cuttings out on a tarp or concrete floor in a cool protected location. If cuttings need to be held a few days longer, mist the cuttings lightly every couple of days.

Planting, Irrigation & Establishment

Broadcast the cuttings on freshly irrigated saturated media. Do not plant on dry soil. Once cuttings are distributed, use a light roller to compact the media and help the cuttings have greater soil contact. A light top mulch of peat moss, organic media or light weight jute material can be helpful in retaining moisture levels. If repairing an existing green roof, work the cuttings down through the existing foliage to make contact with the soil so they can root in. You may want to lightly loosen the soil prior to broadcasting the cuttings for better soil contact. Use a rake or other tool with very short tines so as not to accidentally puncture the roof membrane or other roofing components.

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Irrigation should be light, frequent and sufficient to maintain a high moisture level for three to four weeks. Different climates, seasons and site situations may require different amounts of irrigation. The following is a recommended irrigation schedule:

- Week 0-3:** Irrigate 2-3 times per day, keeping the cuttings evenly moist. Roots will begin forming on some varieties during this period.
- Week 4-5:** Irrigate 1-2 times per day. More roots forming, some varieties rooting into media.
- Week 5-8:** Irrigate 1-2 times per week. All varieties should have roots formed with most rooting into media.
- Week 9 & beyond:** Irrigate every 2-3 weeks or less depending upon how quickly you want the roof to fill-in.

The first 2-3 months of irrigation is critical and the cuttings 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. Be prepared to irrigate during periods of extreme heat.

In the longer term, it is usually better to keep irrigation to a minimum, as dry soil encourages tougher green roof plants that resist extremes, 3-4 irrigations per year may be all that is needed. Hotter or dryer climates may require more attention. A green roof that receives irrigation as needed performs better for the purpose it was intended for: storm-water capture, heat mitigation, support of biodiversity & pollinators and the beautification of the urban environment.

Long-Term Maintenance

Maintenance after plants have properly established and filled-in is minimal. It's recommended that a site visit be conducted by a plant professional a minimum of twice annually to assess the condition of the green roof. At these times, simple maintenance activities can be accomplished such as cleaning drains, removing weeds and preventing future issues.

Irrigation

Once established, irrigation can be by drip, overhead, automatic, manual or whatever suits the project. Extended irrigation requirements are dependent on project location, conditions, and plant selection. It is recommended that if permanent irrigation is not installed, a backup system (ex. hose bibs located on the roof) be available for use during prolonged periods of drought (more than 4 weeks with less than a total ¼" precipitation). In many regions, that means an established roof can survive with irrigating once a month during the drought season. For best results, do not overwater.

Fertilization

An extensive green roof can be quite successful without fertilization and over-fertilization can encourage weeds and vulnerable growth in plants. However, sometime fertilizer can be used to push new growth or correct low soil fertility. We recommend an organic, balanced, slow release fertilizer applied at a low rate no more than once per year.