

GREEN ROOF REPAIR

WITH SEDUM CUTTINGS

Repairing and re-mediating a green roof with bulk Sedum cuttings is cost effective but requires proper preparation and attention to detail as cuttings are vulnerable to the harsh conditions on a roof. Each green roof site is unique, with different regional environmental conditions, exposures, irrigation and drainage variations. Below are some key points to help you be successful:

- Remove all weeds and moss. If there is clover, be sure to remove all the media beneath and around the clover to avoid leaving any root pieces that may regrow. Scrap, rake or sweep the weeds and moss to remove it from the roof. Be careful not to spread it over other areas of the green roof when removing.
- Carefully rake areas of bare media to loosen a 1/4"- 1/2" for better soil contact with the cuttings for better rooting. Be careful not to puncture the waterproof membrane.
- Add additional green roof engineered media to fill-in holes and low spots and level the area if required.
- Verify the irrigation system provides the necessary coverage .
- Check prevailing wind direction and identify high wind areas.
- Overhead irrigation is critical to establishing a green roof with Sedum cuttings.
- Fully saturate the media before adding Sedum cuttings. This may take multiple applications. Do not plant on dry soil.
- Apply Sedum cuttings based on the existing plant density and how quickly you would like the green roof to fill-in.
- For mostly bare areas and faster fill, use a heavy application of 150-200 lbs/1,000 sf. For sparse areas, use a medium application of 100 lbs/1,000 sf.
- For general upkeep and minimal bare areas, use a light application of 50 lbs/1,000 sf.
- Work cuttings down around existing plants and foliage, press into the media for good soil contact. Consider adding a thin layer of green roof media or mulch over the cuttings. This will increase soil contact for rooting and help retain moisture. Do not bury the cuttings as they need light to root.

GENERAL IRRIGATION GUIDELINES

The following is a recommended irrigation schedule. Overhead irrigation is a must. Sub-surface drip can provide useful amounts of water long term, but is completely inadequate for establishing cuttings:

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, most rooting into media.

Week 9 & beyond: Irrigate every 2- 3 weeks. Cuttings should be watched closely for the first summer.

For the longer term, it is usually better to keep irrigation to a minimum. Drier soil encourages tougher green roof plants that are more resistant to extreme elements. Water enough to prevent or correct wilt, but if plants are not stressed or wilted, let them go a while longer. Be prepared for irrigation during periods of extreme heat, but three to four irrigations per summer may be all that is needed in areas like the Pacific Northwest. More frequent irrigation may be necessary in drier climates. A green roof that receives irrigation as needed performs better in the service it was intended for, storm water capture, heat mitigation and greening of the urban environment.