



Aftercare Considerations for:
Maldron Hotel, Charles street, Manchester

Extensive Living Roofs- SEDUM

Aftercare

SPS Flat Roof Systems recommend the Implementation of an aftercare package for all Green roof systems. We undertake specific procedures that are essential in maintaining the initial design, performance and associated benefits created at inception.

Maintenance

- ❖ Our extensive living roof maintenance package includes two visits per annum (Spring & Autumn)
- ❖ We allow the roof to evolve naturally and deem non-invasive species acceptable unless stated otherwise by the client. Invasive species such as woody shrubs will be removed to protect the integrity of the waterproofing and maintain a high percentage of the species originally installed.
- ❖ Remedial work and replace up to 10% of vegetation if failure occurs without external influences such as excessive footfall.
- ❖ Inspect irrigation equipment if the system is supplied & installed by SPS Flat Roof Systems Limited.
- ❖ Inspect outlets and clear if required.
- ❖ Trim sward if required and remove.
- ❖ Fertilise if deemed necessary.
- ❖ Full Report detailing remedials and inspections carried out during visits.

Irrigation

SPS Flat Roof Systems recommend that extensive living roofs such as sedum and wildflower systems should augment rainfall by incorporating an irrigation system. This should be for at least one growing season and be commissioned immediately if installed during late Spring/Summer or incorporated later during this period if the installation occurs in Autumn/Winter.

Why?

A rooftop can be a harsh environment to exist, the effect of strong wind, warm weather and minimal prolonged rainfall can be detrimental. Therefore, providing a regular water source can be crucial to ensure the establishment and long-term sustainability of your extensive green roof system.

Fire Risk

If roof areas are left unmaintained and arid conditions occur due to environmental factors, there is a genuine fire risk. This can occur through combustion of dead sward by cigarette ends or in rare cases the magnification of sun light reflecting through/off glass or polished surfaces.

*Please bear-in-mind, if the system is temporary and not permanent it will be removed post establishment (6-8 weeks) and therefore no additional irrigation will be available to counter dry or arid conditions.

Considerations

Sedum

During establishment, maintenance of sedum is highly recommended to ensure its long-term sustainability. Please be aware sedums do not remain green and lush all year. Sedum will change colour naturally due to changing seasons and also during extreme weather conditions that can result in stress - Too much sun can also cause the plants to produce red pigment to protect from UV rays. Clients are often alarmed by the green roof turning red, this is quite common in Autumn/Winter months or unbalanced climatic conditions. Providing no additional signs of stress are present, such as bare patches then this is quite normal and a revival to the usual green appearance will return.

Maintenance & Irrigation

The information provided is a brief overview of the aftercare required for a range of extensive green roofs. However, there are many factors to consider such as; budget, environmental and system type that will invariably impact upon the package selected. We are more than happy to tailor our offer in line with your requirements, while also keeping the health of the system paramount.

Advantages and Disadvantages for supplementary irrigation on Sedum roof systems;

Irrigation Type	Advantages	Disadvantages
No system	- Initial cost saving	- Strong possibility of failure, especially if installed during warmer periods - Potential for increased access during manual watering - Fire risk. Dry sward can combust easily during dry/arid conditions - Poor aesthetic appearance if left un-watered post installation - Higher cost for ongoing manual watering and remedial work
Temporary	- Aid establishment by ensuring young plants are watered sufficiently - Aesthetic appearance. Very likely to be lush with healthy growth following first growing season/PC - Allow the system to evolve naturally once established	- Although establishment is highly likely. Many of the factors above could return in the second or third year if adverse conditions persist.
Permanent (with sensors)	- Aid long-term establishment and sustainability - Augment rainfall during dry spells without intervention, reducing the risk of human error	- Upfront costs - May impact on BREEAM