



## MAINTENANCE OF GREEN ROOFS

Issue: 18th February 2025 - Version No: 1







General Maintenance	
Maintenance immediately following installation (by roofing contractor)	1
Maintenance post-establishment (by client/building owner)	
Useful References	3
Contact Details	3











## General Maintenance

All roofs require periodic maintenance to achieve their maximum roof life. While complex repairs and some maintenance should be performed by authorised MOY contractors (preferably the original installer), the owner can help maintain the roof by seeing that regular maintenance in the form of clean up procedures, are performed. The designer and installing roofing contractor should make the owner aware of these procedures after the roof is completed.

# Maintenance immediately following installation (by roofing contractor)

Sedum roofs require care and attention in the weeks following their installation. Each roof is subjected to various weathering conditions. Roofs do not wear uniformly since certain areas may be affected more severely than others. After a period of 6 to 8 weeks during the growing season, the edges of the sedum blankets will knit together, and the roots of the sedum plants will extend into the growing media. All living roofs must be carefully monitored through their first summer flowering cycle.

# 1

### Maintenance post-establishment (by client/building owner)

Certain procedures are recommended, particularly in the first year, to ensure the longterm success of the plants. As a general guide, it is recommended that maintenance be carried out three times in the first year and twice per year in each subsequent year, but this depends on the type of system installed and the rate of plant cover. Clients may engage the installing contractor or any other landscape maintenance contractor with suitable green roof experience. Inspect the roof at least twice yearly, in spring and autumn, and inspect all roofs after any severe storm. Make frequent inspections on buildings that house manufacturing facilities that evacuate exhaust debris onto the roof.

The following steps should be undertaken during each roof inspection:

- Clean roof drains of debris.
- Remove leaves, twigs, cans, balls, etc. which could plug roof drains.
- Bag and remove all debris from the roof as debris on the roof surface will be quickly swept into drains by heavy rains and drainage problems may occur.
- Notify the roofing contractor immediately if a roof leak occurs.





- If possible, note conditions resulting in leakage Heavy or light rain, wind direction, temperature and the time of year that the leak occurs are all important clues to tracing roof leaks.
- Note whether the leaks stop shortly after each rain event or if it continues to drip until the roof is dry.

If the owner is prepared with facts, the diagnosis and repair of roof problems can proceed more rapidly. File all job records, plans and specifications for future reference. Set up a maintenance schedule. Record maintenance procedures as they occur. Log all access times and parties working on the roof in case damage should occur.

#### Safe Access

Appropriate measures should be taken at both design and construction stages to ensure safe access and passage over the planted roof areas for maintenance personnel. To facilitate this a proprietary Diasafe or similar safety / fall-arrest system should be installed as part of the roof works.

#### **Gutters and Outlets**

The checking of gutters and outlets should be carried out routinely during any maintenance check to ensure drainage is not impeded. All rainwater outlets should be protected within an outlet inspection box with a lockable cover. Open the cover with a coin or screwdriver and ensure the leaf grate is in position and that no debris blocks the outlet. Lock the lid on completion.

#### Trafficking of the Plant Layer

Trafficking of the planted roof for maintenance 2-3 times a year will have no detrimental effect on the plant layer. If works are to be carried out on the roof surface or to adjacent structures care should be taken to minimise damage to the plant layer resulting from repeated trafficking. We would advise that should this be required access routes to the works are closely defined to ensure damage is minimized. If the plant material is damaged re growth normally occurs. However, the speed of recovery will be dependent upon the level of damage and the duration of the trafficking period. Do not leave items such as boards or planks on the planting layer.



#### Watering and Irrigation

The extensive green roof is quite resistant to drought. If an extended period of dry weather should occur (14 or more dry days), periodic checks should be made on the roof to examine the reservoir and drainage board to determine if all the water contained has been used by the plant layer. In periods of extended drought i.e more than six weeks without any rainfall, all green roofs will require watering.

Apply water using a sprinkler attachment or porous or perforated pipe until the substrate is thoroughly saturated and the reservoir cups are filled. Do not use power hose or fire hose units as they may damage the plants. Irrigate the plant layer at a minimum rate of 2 litres per M2 2-3 times weekly until established, during the growing season this may take 6-8 weeks.

Where there are concerns in relation to the potential ignition of green roofs in extreme temperatures, the roof may require dampening down on a regular basis, in addition to the normal irrigation and maintenance requirements.

#### Application of nutrient and soil conditioner

The correct level of nutrients in the growing medium is important. The fertilization procedure is determined by the following:

- Levels of previously applied fertiliser.
- Condition of the plant material.
- Type of growing medium.
- Location and season.

Extensive Roofs Nutrient Guidelines (Example - 35g/M2 Osmocote Exact) in April / May. If the ambient daily temperatures are greater than 5° the application of nutrient may proceed. Application of nutrient during colder periods may result in that nutrient washing out without effect.

Fertiliser should be applied sparingly, several light applications will give a better outcome, a single concentrated dose of fertiliser can be problematic. Other fertiliser products applied in accordance with manufacturers recommendations.



#### **Planting**

- Removal of undesirable plant material: The Sedum and other species planted at the time of installation are well adapted to life on the roof and quickly become established, however, a few other native species may intrude. Some people welcome the colonisation of so-called 'weeds' to promote biodiversity. However, you may prefer them to be removed. Dependent upon material and site requirements, this can be done by hand or by a careful point application of herbicide using a weed wipe device to target individual plants. The use of sprayers to apply herbicide is not advisable. Manufacturers guidance notes on the use of any chemicals or herbicides must be followed. There are invasive weeds and although biodiversity is important it is important to note the following weeds are known to be invasive, chickweed, clover, dandelion, thistle and sycamore shoots.
- **Removal of flower heads after flowering:** This depends on the individual aesthetic requirements of the client. Dead flowers will eventually disintegrate but the heads may be removed in late summer or early autumn if required by careful clipping.
- **Removal of leaf litter**: The ideal position for a green roof is in full sun. In certain situations, adjacent trees could shed leaves onto the roof surface resulting in sedum loss. Depending on quantity, these may need to be removed with a leaf-blowing machine. This would be a seasonal requirement.

#### Pests and diseases

Sedums are generally pest and disease resistant but, like many plants, can suffer from aphids or vine weevil. The care we take in production of our plants and the formulation of our Sedum Mat product discourages such problems but, if they occur, they can be controlled by environmentally friendly means. Advise Moy Materials Ltd. if an outbreak of pests or disease should occur. We can then advise on remedial measures appropriate to the problem.

#### **Fire Breaks**

Ongoing maintenance is important to ensure that firebreaks remain effective, but also to ensure the good health of the green roof. Maintenance for fire safety on extensive and biodiverse roofs should be carried out twice yearly to ensure:

- Fire breaks are kept clean and clear of vegetation.
- That on wildflower roofs the vegetation is cut back in the autumn and the thatch removed

#### www.moy.group

4



#### Cutting back or altering the green roof

It should be noted that Extensive green roofs have a very shallow layer of growth media (soil). If alterations are made to the layout of the green roof care must be taken not to damage the waterproofing membrane and the fleece layers and gravel trims must be reinstated properly. Where openings must be made to accommodate ducts or pipe work from within the building, the installing roofing contractor must be engaged to weather the opening and trim the green roof elements around any such penetrations.

#### Use of edged tools

The maintenance of the extensive green roof does not require the use of any sharpedged tools. The use of shovels, spades, edging tools, rakes, hoes etc. are not required and should not be used in the maintenance of the extensive green roof. Care should always be taken not to damage the underlying waterproofing.



## Useful References

At the time of writing, there is no harmonised EN standard for green roofing. There are however, several useful resource documents, which are frequently referred to by designers, these include:

- FLL (2018) Guidelines for Planning Construction and Maintenance of Green Roofing. https://commons.bcit.ca/greenroof/files/2019/01/FLL\_greenroofguidelines\_2018.pdf
- GRO Code of Best Practice 2021. https://greenrooforganisation.org/wpcontent/uploads/2021/06/GRO\_Brochure\_v5.pdf
- GRO Fire Risk Guidance Document 2021. https://www.greenrooforganisation.org/wpcontent/uploads/2020/05/GRO-fire-risk-guidance-document.pdf
- FM Global Loss Prevention Data Sheet 1-35. https://www.fmglobal.com/researchand-resources/fm-global-data-sheets
- Department for Communities & Local Govt. UK. Fire Performance of Green Roofs and Walls. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attach ment\_data/file/230510/130819\_SW3529R\_-\_lssue\_3\_-\_Green\_Roofs\_and\_Walls\_Project\_web\_version\_v3.pdf
- Dublin City Council. Green & Blue Roof Guide 2021. https://www.dublincity.ie/sites/default/files/2021-12/dcc-green-blue-roof-guide-2021.pdf
- MOY Technical Guidance Note TGN 24.5 Dampening in Extreme Temperatures https://moy.group/wp-content/uploads/2024/09/TGN-24.5-Green-Roof-Dampening-in-Extreme-Temps-23.02.24-v1.pdf

### Contact Details

MOY Columbia Mills, Sir John Rogerson's Quay, Dublin 2



+353 (1) 463 3900





Roofing Contractor:	
Date of Issue	
Recipient	
Specifier / Designer:	
Date of Issue	
Recipient	
Building Contractor:	
Date of Issue	
Recipient	

MOY Materials Ltd has taken care to ensure that the information provided in their literature is correct and up to date. However, it is not intended to form any part of a contract or provide a guarantee. Purchasers/intending purchasers should contact MOY Technical to check whether there have been any changes to the information since publication of the literature. Please ensure you have read the specification, data sheets, hazard labels and material safety data sheets before using the products.