

Green Roofs Maintenance Procedure Based on 2-4 visits per Annum

This set of procedures is a guide outlining the minimum maintenance measures required to keep a green roof in its designed state.

An IKO Green system is designed to meet specific client requirements for any project and will provide a long-term solution with varying habitats at roof level. With some basic maintenance, the roof will continue to deliver the intended environmental benefits.

Most living roofs contain a plant community with a variety of native species to meet local planning and building code requirements. However, some roofs can also be designed to meet aesthetic design criteria.

General Maintenance

The plant selection on each project includes a species mix which will provide a balanced plant community on the roof. This will require basic maintenance to ensure a sustainable system for the long term.

Living roof maintenance is best carried out twice to four times annually, during springtime and in late autumn, or as required. Monitoring/controlling the effect of leaf litter to the vegetation is important; this can be deemed to be beneficial to biodiversity, but may need to be removed if this begins to affect plant life.

The following procedures should be carried out to ensure the roof is well maintained. Failure to provide maintenance may result in the invalidation of guarantee(s).

<u>Note:</u> - specifically-designed living roof areas should be disturbed as little as possible whilst maintenance is carried out. This is to try not to upset any microhabitats which may have colonised on the roof.

Preliminary Maintenance:

- Ensure safe access can be gained to the roof and that all relevant health and safety procedures are followed at all times.
- IKO Green recommends the removal of leaf litter which has fallen from any surrounding trees, particularly during spring and autumn. This is to prevent the leaves from smothering the vegetation.
- To remove excess bio-mass, strim any dead vegetation. This should be subsequently removed and disposed of at ground level.
- Check all trims are fixed securely.
- Ensure any new items of plant or machinery have a necessary fire break between them and the vegetation.

- Should there be any damage to the vegetation or green roof system generally, IKO Green should be contacted immediately.
- Ensure all outlets are unblocked and the roof is able to drain freely. This is of particular importance since 'waterlogging' can be as damaging to a wildflower sward as drought. Drainage outlets should be inspected regularly to ensure drainage outlets are working as designed. This will help keep the roof moist but not waterlogged.

Maintenance on the Vegetation and Green Roof System

- Removal of any unwanted vegetation that may have encroached the drainage outlets, walkways or Firebreaks.
- If any movement or settlements to the fire/vegetation break has occurred, these areas should be topped up with more pebbles.
- Remove any tree saplings.
- Green roofs are generally left to grow naturally, taking their own course. If there are certain plant types that are un-desirable, these can also be removed.
- Fertiliser can be added as a last resort if plants are looking distressed.
- We would suggest the removal of invasive plant types, including but not limited to tree saplings, nettles, wild grasses, thistles and buddleia.
- If the vegetation grows in excess of 250-300mm we recommend this should be trimmed back to 75-100mm. High growth suggests a high nutrient level present in the substrate; although this is blended to be low-nutrient or to stop such growth, this must be monitored to keep the biodiversity high (cuttings should be bagged up and removed from the roof to prevent the release of nutrients back into the substrates.
- Although irrigation is not needed regularly, a water point should be present at roof level.
 During particularly dry periods, watering the system may be necessary to avoid drought stress.
- * These guidelines should be used for reference only. IKO Green will not accept any responsibility for a roof which is not under a maintenance contract with IKO Green.