

MAINTENANCE PROCEDURE

BAUDER BIO-DIVERSITY GREEN ROOF SYSTEMS

What to Expect from Your Bio-diverse Green Roof System

The number of variations that a Bio-diverse green roof can be designed to meet, combined with the wide range of flora and fauna that can either be incorporated into or encouraged onto the finished installation, make it impractical to offer a general description of how a Bauder Bio-diverse extensive green installation might look and perform. Some are designed for the specific number of native species present within the plant community to meet planning or building code requirements, whilst others are intended to address a specific aesthetic design imperative.

A Bauder Bio-diverse landscaped extensive green roof is designed to meet the specific client requirement for any project and to provide a viable, long-term ecology at roof level that with some basic maintenance will continue to deliver the environmental and aesthetic benefits for which it was initially proposed.

General Maintenance

The level of maintenance of the horticultural element of this type of green roof will vary significantly, dependant upon the various species of vegetation incorporated and the purpose for which it was initially installed. Whilst the original intent may have been to allow the green roof to grow wild, the problems that this can create with the build-up of bio-mass and the changes that will happen to the appearance and type of vegetation on the roof will often force the need for basic maintenance to be carried out.

The Bauder biodiversity green roofs which are currently being installed to meet either BREEAM or Sustainable Homes codes, will have a species mix selected to provide a balanced plant community on the roof and will require basic maintenance if this is to be sustained long term.

Maintenance is best carried out annually, during springtime and additionally in late autumn should the particular roof location be affected by local trees that produce surface leaf litter. Some deposited leaf litter may be considered as contributory to the bio-diverse environment, which is fine so long as provision is made for ensuring that this has no negative effect on the drainage performance.

The following procedures should be carried out in order to ensure the roof is maintained in good condition and to protect the validity of the guarantee.

Note!

Specifically designated biodiversity areas should be disturbed as little as possible during maintenance so as not to upset any micro-habitats that may have colonised.

Preliminary Maintenance Procedures

- Ensure safe access can be gained to the roof and that relevant Health and Safety procedures are followed when working at roof level. It is advised that the contractor should always seek proof of current maintenance for any man-safe roof access systems prior to proceeding with the work on site.
- In order to avoid a build-up of bio-mass on the roof it is recommended that all dead vegetation is removed with a strimmer and provision made for the debris to be safely lowered to the ground and disposed of.
- We recommend removing dead leaves that have fallen onto the roof surface from overhanging trees in the spring and autumn, to ensure that they do not damage the roof vegetation.
- Remove the lids of all Inspection chambers, ensure that all rainwater outlets and downpipes are free from blockages and that water can flow away freely.
- Ensure that any protective metal flashings and termination bars remain securely fixed in place. Advise the client of the need to repair or renew as necessary.
- Examine all mastic sealant and mortar pointing for signs of degradation. Advise the client of the need to repair or renew as necessary.
- Check that all promenade tiles and paving slabs are securely fixed to the roof surface and in good condition.
- Ensure that any new items of plant/equipment on the roof are mounted on suitable isolated slabs and that any fixings used to secure the plant/equipment in place do not penetrate the waterproofing. If in doubt, please contact Bauder for further advice.
- The Building owner should keep a record of all inspections and maintenance carried out on the roof. Any signs of damage or degradation to the waterproofing should be reported to Bauder immediately, in order that arrangements can be made for remedial work to be carried out if necessary.
- Damage to the landscaping should be reported to the building owner. If this damage includes Bauder components, then Bauder may be contacted for remedial advice.
- Works to adjoining areas - When carrying out any maintenance to adjoining roof areas, care must be taken not to damage either the green roof landscaping or the waterproofing system. If it is considered that either element has been affected, then Bauder should be contacted for advice. Any waterproofing damage caused after completion of the original installation may invalidate the guarantee.
- Alterations - Any unauthorised alterations to the waterproofing system will invalidate the

guarantee. If such a situation should arise, then Bauder should be contacted so that we may advise on the alteration and how it should be incorporated without affecting the guarantee.

Plant related maintenance tasks required

1. Plant encroachment.

Any vegetation which has encroached into drainage outlets, walkways and the vegetation barriers (pebbles) should be removed. If movement/settlement of the pebble vegetation barrier has occurred, additional washed stone pebbles similar to the existing are to be added.

2. Plant Maintenance.

In the absence of specific instructions from the client, advice should be sought from both the project landscape designer and the plant supplier and any maintenance carried out according to their specific recommendations.

3. Weeding.

With the exception of saplings, which should always be removed, weeds in a bio-diverse green roof should be considered as a problem only of aesthetics. If considered excessive, they can be removed either manually or by using a 'spot weed wipe', ensuring that care is taken to follow specific instructions regarding the use of any proprietary products. All bio-diverse green roof installations will include some moss and grass.

4. Fertiliser.

Where the vegetation has been specified to meet an aesthetic requirement, advice should be sought from both the project landscape designer and the plant supplier and any fertiliser required be applied according to their specific recommendations. All other biodiversity roofs will not normally require any fertiliser.

5. Irrigation.

It is generally not considered necessary to irrigate bio-diverse green roof systems. It is, however, always advisable to ensure that there is a water supply point adjacent to the green roof, both to assist with general maintenance and as a precaution against extreme drought conditions.

Support

Bio-diversity roofs require only minimal maintenance. Bauder is happy to offer advice on any issues concerning your green roof and any enquiries should be forwarded to our Green Roof Technical Department at the address below. We believe our products and systems are of the highest standard and are always prepared to discuss any queries or concerns that may arise. Providing photographs or drawings to accompany your queries will help speed our response.

Please note: In the event of any query arising which it is thought may affect the condition of the system, then Bauder should be contacted at the address below. We cannot accept responsibility for any problem or failure due to use outside those parameters for which the system was designed or 'acts of god' beyond our control e.g. extreme weather conditions or damage through pests.