

Green Roof Maintenance - Extensive Green Roofs

Background

Extensive green roofs typically have a growing medium between 70 –150mm deep. Vegetation is generally provided in the form of either selected plug plant, pre grown blankets, vegetation cuttings or seeds and dependent upon the depth can support a wide variety of species. These include wild flowers, grasses and herbs in addition to the more traditionally used alpines and sedums. An increased amount of dead vegetation is created from a more varied species mix following flowering. This will need to be cut back and removed, reducing the bio-mass on the roof and encouraging germination from the dead flower heads.

In the early spring the first signs of life returning to the vegetation on the roof are lead by any grasses present, quickly followed by a general "colouring up" of the sedum foliage, with other species following suit shortly thereafter. The growth and flowering of the individual species within the vegetation mix through the late spring and summer will be dependent upon the climatic conditions which will also determine which species will be most prominent in any given year.

In the winter, sedum plants for example will appear to shrink back, the leaves become smaller and usually turn red/brown in colour as they prepare themselves to withstand the winter months.

General Maintenance

General maintenance is normally carried out twice annually - Spring and Autumn. The following points should be followed to keep the roof maintained in a healthy condition and to protect the validity of the guarantee.

Maintenance Procedures:-

Remove all dead vegetation and debris from the roof and ensuring all outlets, gutters and downpipes are clear. Where the species mix incorporates wild flowers and grasses it is recommended that all dead vegetation is mown / strimmed down and the waste is removed from the roof and disposed off.

Any vegetation which has encroached into drainage outlets, walkways and the vegetation barriers (pebbles) should be removed. Weeding an extensive green roof is necessary to maintain a healthy roof and all aggressive species of shrub sapling and undesirable plants should be removed.

Note: Some weeds are helpful to the biodiversity of the roof and considered as a problem only of aesthetics. If considered excessive, they can be removed ensuring that care is taken to follow specific instructions as to the type and species of vegetation removed.



abg Ltd E7 Meltham Mills Road, Meltham, Holmfirth, HD9 4DS, United Kingdom UK Sales +44(0)1484 852096 Export Sales +44(0)1484 852250 www.abgltd.com Areas of dead vegetation / bare patches can be easily repaired and this is best done during the main growing seasons of March/April or from late August until the end of September. Take plug plants (new) or vegetation cuttings from surrounding areas of healthy mature plants and place on bare patches, pressing gently into the soil. A light sprinkling of sand mixed with compost should then be dressed over the affected area and watered to improve the uptake of the cuttings. If the vegetation is showing signs of distress, but have received regular rainfall, then the most likely problem is a lack of nutrient and a fertiliser should be applied.

Remove the lids of all Inspection chambers, ensure that all rainwater outlets and downpipes are free from blockages and that water can flow freely away, clean filters to outlets twice yearly and replace every three years.

Plants suitable for an extensive green roof which will colonise in partial and full shade will generally be greener in colour and grow "leggier" in these locations. There will be a significant variance in the growth and colour between the plants growing in full or partial shade and those exposed to full sunlight and this should be recognised as a feature of the biodiversity of each individual roof.

Irrigation

Extensive Substrate Installations

It is generally not considered necessary to regularly irrigate extensive green roof systems; however, It is 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. Additional watering will be required during sustained dry periods including where vegetation is to be achieved through seeding to allow the plants to establish.

Note: Fully automated irrigation systems are available upon request and may be required in areas where access to the roof is limited or the roof pitch limits water retention.

For maintenance advice specific to your Green Roof please contact ABG or



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