# *Specification 'Eco Green Roofs Wildflower Seeded Green Roofing System'*

## ECO GREEN ROOFS DRAINAGE, FILTER FLEECE LAYERS

*EGRDL Drainage Layers come in a range of sizes from 8mm stud to a 40mm board, which contains a reservoir layer. The drainage layer should be laid up till the vegetation barrier (300-500mm cobbled edging). The filter fleece is rolled out over the top of the drainage and retains the nutrients and fines within the substrate layer above.*

*These works should be carried out in accordance with Eco Green Roofs installation guidelines.*

## GROWING MEDIUM

*EGR Substrates are specifically designed for each different vegetation type. Our In-House specialist Dr Chloe Molineux holds a PhD in Green Roof Substrates and can design a substrate to support most suitable vegetation. The depth and nutrient levels are specific to each individual system.*

*The Substrate can be delivered in bulk bags, small carry bags or by Silo (which pumps the substrate directly onto the roof). Eco Green Roofs can look at the most viable and efficient option of laying the growing media depending on the access, time, etc.*

## VEGETATION

*Wildflower seeded roofs are roofs that have wildflower plant species seeds sown across them. Our wildflower roofs have 0.5g of seeds sown per meter square. We use a range of wildflower species, which take just a few months to develop.*

## VEGETATION BREAK - COBBLED EDGING

*With all green roof systems the GRO code and FLL guidelines specify between 300-500mm cobbled edging to act as a vegetation barrier and also a fire break, this should be around the perimeter of the system and also any protrusions on the roof including; any plant, machinery, sun-pipes, vents, drainage outlets etc.*

## OPTIONAL ACCESSORIES

*ALUMINUIM UPSTANDS – can be provided to contain the green roofing system if there is not a parapet wall or up-stand in place.*

*SLOTTED ALUMINIUM TRIM – Slotted aluminium trims can be used to separate the substrate and the vegetation break.*

*SLOW RELEASE FERTILISER – Fertiliser can be introduced if, a year after installation the green roof looks in need of a nutrient boost. As many environmental factors can affect green roof vegetation, this must be accessed on a roof-by-roof basis. We cannot advise in advance whether the roof will need this or not.*

## NOTES

*A water supply must be provided on installation. The vegetation requires watering for the first few weeks after installation to ensure the bedding-in of plant roots to the growing medium.*

*It is the responsibility of the roofing contractor to liaise on-site to ensure the water is in place.*

*Eco Green Roofs accepts no responsibility for the condition of the vegetation layer if it has not been properly watered in accordance with our recommendations.*

*Examples of this Roof Type*

# *Maintenance*

## GREEN ROOFS MAINTENANCE PROCEDURE

*This Set of procedures is a guide explaining the maintenance necessary to keep a green roof how it was initially designed.*

*An Eco green roof is designed to meet the specific clients requirements for any project and will provide a long-term solution with a vary of habitats at roof level. With some basic maintenance the roof will continue to deliver the environmental benefits it was intended for.*

*Most living roofs contain a plant community with a variety of native species to meet the planning and building code requirements. Some however can be desingned to meet an aesthetic design criteria.*

## GENERAL MAINTENANCE

*The plant selection on each project includes a species mix that will provide a balanced plant community on the roof, this will require basic maintenance if this is to be sustained in the long term.*

*Living roof maintenance is best carried out twice to four times annualy, during springtime and in late autumn. Monitoring the effect of leaf litter to the vegetation is important, it can be seen to add to the bio diversity but it may need to be removed if it is effecting the plant life.*

*The following procedures should be carried out to ensure the roof is well maintainded and to protect any guarantees.*

## NOTE

*Specifically designed living roof areas should be disturbed as little as possible whilst any maintenance is carried out. This is to try and not upset any of the micro-habitats that may have colonised on the roof.*

## PRELIMINARY MAINTENANCE

- *Ensure Safe access can be gained on the roof and that all of the relevant health an safety procedures are followed.*
- *Eco Green Roofs Recommends removal of leaf litter that has fallen from any surrounding trees both spring and autumn. This is to stop the leaves smothering the vegetation.*
- *To remove excess bio mass strim down any dead vegetation then this should be removed and disposed of at ground level.*
- *Ensure all outlets are unblocked and the roof is able to drain freely*
- *Check all trims are fixed safely*
- *Ensure any new items of plant or machinery have a necessary fire break between them and the vegetation*
- *Any damage made to the vegetation or green roof system Eco green roofs should be contacted immedialty*
- *Ensure all outlets are unblocked and the roof is able to drain freely, this is because a waterlogging is can be as damaging to a wild-flower sward as drought. Therefore it is a requirement to check the drainage outlets regualrly to ensure the roof drainage outlets are working as they should be. This will help keep the roof moist but not waterlogged.*

## VEGETATION & GREEN ROOF SYSTEM MAINTENANCE

- *Remove any unwanted vegetation that may have enroached the drainage outlets, walkways or Fire breaks.*
- *If any movement or settlement to the fire/ vegetation break has occurred simply top up these areas with more pebbles.*
- *Remove any tree saplings*
- *green roofs are generally left to naturally take 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 the plants are looking distressed.*
- *We would suggest the removal of evasive plant types, these include tyree saplings, nettles, wild grasses, thistles and buddleia*
- *If the vegetation grows in excess of 250-300mm we recommend this to be trimmed back to 75-100mm. The high growth suggests a high nutrient level in the substrate, which although is blended to be nutrient oor to stop such growth, this must be monitered to keep the bio diversity 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 in extreme dry periods a water supply should be present at roof level.*

* This should only be used a guide, Eco green roofs will not take responsibility for a roof that is not under a maintenance contract with Eco Green Roofs.

# *Terms & Conditions*

DESIGN TOOL

*If Eco Green Roofs products are not used in the roof build up, we cannot take any responsibility for any faults to the systems as our products haven t been used.*

*If the products are not maintained by eco green roofs we cannot guarantee the vegetation.*

IF YOU HAVE RECEIVED A QUOTATION FROM US OUR PRICES ARE BASED ON THE FOLLOWING TERMS AND CONDITIONS:

1. *Procurement of materials and programming of works will be on the basis of receipt of formal purchase order only.*
2. *At least 7 working days notice is required to ensure all materials are available for a specified on site date.*
3. *Roof areas where pitch exceeds 15° have cross-battening measures supplied and fitted by the waterproofing contractor.*
4. *A total roof area to be planted/shingled. Should the actual area to be planted vary by more than ±10% please reapply for prices.*
5. *Planted element to be installed during one period on site. If multiple installation periods are required this may affect the supplied prices.*
6. *Installation of the planted element only. This includes any required drainage, substrate, and planting.*
7. *This price includes supply and installation of any shingled break areas at roof perimeter, roof penetrations and roof outlets (300mm band).*
8. *The vegetation layer will require irrigation immediately after installation and potentially for a period of time post installation, this will dependent upon season and local climatic conditions. Provision of any irrigation has not been allowed for within this quotation.*
9. *We would not recommend installation of the plug, hydroplant or seed options during the period December 01 to February 28 since adverse weather conditions could lead to unacceptably high losses of the un-established plant material.*
10. *Edge protection is in place throughout the installation.*
11. *A 110V power supply is available at roof level (If needed)*
12. *The main contractor supplies craning and offloading services and the appropriate lifting equipment (see Note below). Supply of these services to Eco Green Roofs Ltd on site will not be limited.*
13. *One hour offload time allowed for all delivery vehicles. Unloaded or standing time in excess of one hour will be charged at £45 per hour per vehicle.*
14. *Waste removals (pallets, plastic off cuts, polypropylene big bags) are the responsibility of the main contractor. Unless Eco rubbish removal has been accepted.*
15. *Any parking charges incurred during the installation will be charged through at cost.*
16. *A 1" supply of mains water is available within 25 metres of the building delivering a minimum of 58l per minute.*
17. *All materials remain the property Eco Green Roofs Ltd, until paid in full. We reserve the right to access and to remove materials (fixed or otherwise) to the value of the outstanding debt.*
18. *Day work if not completed in the reasonable time due to access is charged @ £25 per hour per man, plus 15% on materials and additional costs.*
19. *Rates are fixed for Three months.*
20. *This quotation is open for acceptance for Three months.*
21. *Our prices are based on the drawings supplied and on a final site measure.*