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GENERAL BIODIVERSITY

Green roofs and living walls



A green roof is a thin soil layer covered with mosses, succulents and herbs. Other options include a biosolar roof and a living wall system. Installation requires the use of specialist contractors.

Suitability	Low, medium and high density housing.
Management type	Increase site biodiversity and sustainability.
Supplier information	Many different commercial companies offer products/services to design and build green roofs/living wall systems. Livingroofs.org is an independent organisation to promote green roofs and living walls in urban areas in the UK and around the world. They offer advice and information https://livingroofs.org .
Community engagement?	No – requires specialist contractor.
Benefits	<ul style="list-style-type: none"> • Increase habitat and promote biodiversity by attracting wildlife. • Flood attenuation and improved water quality. • Temperature regulation: reduces heat loss in winter and keeps building cooler in summer. Also helps to cool air and reduce the 'urban heat island' effect. • Improves sound absorption in the top floors of buildings. • Improves air quality. • Reduced energy consumption, helping to reduce energy bills. • Lifespan of the roof is significantly extended due to protection from weathering (e.g. UV rays).
Costs/Disbenefit	<ul style="list-style-type: none"> • Financial cost: High. • Installation and ongoing specialist maintenance costs. • Access to roof/upper sections of walls for ongoing maintenance. • Any leaks are harder to trace and fix.
Level of ongoing maintenance	Medium to high: depends on the type of green roof/living wall system installed.



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		Notes
How achieved	Install 'extensive' green / brown roofs (i.e. thin soil layer covered with mosses, succulents and herbs so lightweight and requires minimal maintenance), biosolar roof and/or living wall system. Specialist contractor required to design and install green/ brown roof, living wall or biosolar (solar panels) roof correctly and provide an aftercare service.	
Timing of activity	Any time	
Long-term management	<p>Green roofs require limited maintenance, but may require supplementary watering. The timing of supplementary watering depends on the type of roof and weather. Your contractor will be able to advise you on this.</p> <p>Twice yearly maintenance visits by a specialist contractor to clear gutters and drainage channels and cut or remove season's growth (biodiverse roofs) and clear any invasive species. Intensive green roofs will have greater maintenance requirements.</p> <p>Living wall systems require regular maintenance, which is likely to require input from a specialist contractor, depending on the type of living wall installed.</p> <p>The level of maintenance for biosolar roofs will depend on whether the solar panels are integrated into extensive or intensive green roof systems.</p>	
Monitoring success	Flower-Insect Timed (FIT) counts can be conducted as part of the National Pollinator Monitoring Scheme (PoMS) https://www.ceh.ac.uk/pollinator-monitoring .	