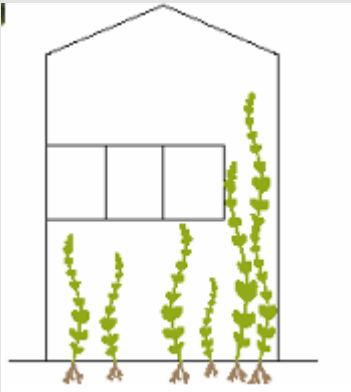
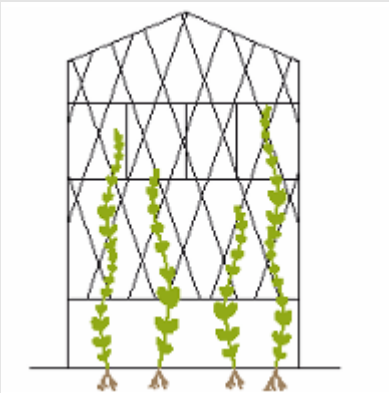


Urban

Creation, Enhancement and Management Summary (UR-T01) Provide details of the approach to delivering each of the targeted condition criteria and habitat.

Target Habitat:		Ground Based Green Wall – Good				
Condition Assessment Criteria		Targeted	Relevant Features	Creation Approach	Enhancement Approach	Management Approach
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	Yes	14	The dimensions of the planting beds and specialist growing substrate shall be specified to ensure long term health of the plants. Climbers will be container grown, pre-trained on a temporary trellis structure and planted in pits topped with a gravel mulch to restrict weeds and loss of soil moisture. A framework of wires will be secured to panels set away from the building. Planting will take place between November to March (inclusive) with a preference for completion prior to the end of December in any one year, when the ground is free from frost and snow, when there is no drought and in the absence of severe water-logging. Types of green wall Free climber on the wall The simplest form of ground-based façade greening is direct growth. Self-climbing plants such as ivy, wild vine and climbing hydrangea form adhesive roots, adhesive feet or adhesive discs and climb up the wall. In five to ten years, the plants can reach a height of up to 25 metres. Crack-free surfaces made of concrete or fully grouted masonry, as well as other stable		Management of the green walls shall continue in perpetuity following planting. Irrigation and fertilisation Species have been selected for the hardiness and have moderate drought resistance, however manual watering or use of an automatic irrigation system fed primarily from rainwater will be required in the growing season to maintain good health. In case of prolonged drought, a well-maintained drip irrigation or watering system (manual or automatic) is recommended. Especially in the case of larger wall-bound projects and container planting, irrigation should be automatic. Additional fertiliser can cover the annual nutrient requirement of the wall-bound planting. The respective quantity and type of fertilisation depends on the nutrient supply of the substrate and the yearly nutrient demand. Care of ground-based greening Ground-based façade vegetation must be visually inspected once or twice a year to ensure healthy growth and vitality. It may be necessary to prune and direct façade vegetation to protect the building, prevent uprooting, achieve the desired area coverage and keep sensitive areas such as windows and doorways clear. Pruning measures for growth heights of up to two metres can be carried out by one person, by hand. This will ensure the vegetation growth does not extend beyond the edge of the panels and/or becomes congested. Cutting will be undertaken in late January or February to avoid the nesting bird season.

			wall structures without open joints, are also suitable for direct growth.  Growth with climbing aid If the wall is unsuitable for direct growth, greenery can be developed with so-called scaffold climbing plants on a trellis system. There are many different climbing plants that grow up the wall with the support of climbing aids. Climbers wind their main shoots around ropes, poles, etc., like lianas; well-known examples are blue-ago and honeysuckle. Spreading climbers, such as climbing roses and blackberries, hook themselves onto a climbing aid. Petiole climbers, e.g. the many species of woodland vines, wind their petioles around thin objects. Shoot tendrils, such as true grapevine, on the other hand, wind themselves around things with tactile appendages. Correctly designed climbing aids give the climbing plant optimum support and ensure a sufficient protective distance from the wall. Scaffolding climbers are suitable for greening pergolas and pavilions. The climbing aid must be adapted to	Yearly tasks Visual inspection at least once or twice a year. Watering and fertilising the plants. If necessary, system-related maintenance work on climbing aids etc. Check the shoots, prune and guide if necessary, dispose of biomass as required.
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				the plants' characteristics in order to achieve the desired greening goal.  See: On the Walls - Ready Green Manual for detailed specifications - relevant to the site.		
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Yes	14			
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Yes	14			

Additional Management Prescriptions (UT-B01)

Please use this space to detail any additional management measures to be conducted along with the above measures. These may for example include (but are not limited to) measures specifically relating to the presence of protected species or may be additional measures that are in support of local nature recovery targets and, or, planning policy.

Monitor the condition of the urban green wall and implement necessary action.

Urban

Creation, Enhancement and Management Detailed Methods (UR-T02)

Provide detailed prescriptions for the creation and management of the habitat.

Action	Relevant Features	Timing	Prescriptions
Ground based green wall contains various species and structure is varied.	14		Creation Suitable species selection of local provenance to enhance site specific adaption and resilience. Remove vegetation from the planting area if present. Prepare soil and dig a hole to accommodate root ball - use bare root trees. Plant roots with some organic compost and add a two-inch layer of mulch to retain moisture and suppress competition during establishment. Stake and train plant and remove after one year's growth. Watering in the initial phase as needed and in the first summer if needed - monitor for signs of drought stress. Management Watering - water initially and then through the first summer if needed to allow suitable establishment. Years 1 - 3, maintain a layer of mulch of approximately 4cm thick to help the climbers establish. Pruning vegetation and removal of extraneous vegetation Year 2 - 3, Removing and replacing failed vegetation If necessary, supplement and replace substrate. Pruning vegetation and removal of extraneous vegetation Pruning is kept to a minimum and only done to shape and train pruning, e.g. of woody plants. Yearly - At least two care and maintenance visits per year.

Urban Species Lists (UR-T03)

Provide a detailed species list for the habitat to be created

Common Name	Scientific Name	Abundance / %	Comments
Wild Honeysuckle	(Lonicera periclymenum)	30%	
English Ivy	Hedera helix	30%	
Firethorn	Pyracantha Sp.	20%	
Lilac	Syringa Sp.	20%	

What Does Success Look Like? (UR-F01)



A two-dimensional system is installed on an ETICS rendered façade in Freiburg's Turmcafé.

Ref: [d-manual-green-walls-data.pdf](#)