

ECM Appendix W Vegetated (“Green”) Roof Performance Standards

Definition

Vegetated (“Green”) Roof: An assembly or system, over an occupied space, that supports an area of planted bed(s), built up on a waterproofed surface at any level that is contained separately from the natural ground by a human-made structure.

Credit

Under §25-2, Subchapter E, Section 2.7.3.D.5 (*Design Criteria*), up to 50 percent of the required private common open space may be located on a roof, balcony, or other area above ground level if at least 50 percent of the open space above ground level is designed as a Vegetated or “Green” Roof. To qualify for this credit, the Vegetated or “Green” Roof must comply with the following performance standards.

Consideration	Intent	Requirements for Credit
Water Use	Demonstrate facility wisely uses potable water.	<ul style="list-style-type: none"> Use drip irrigation when irrigation needed. Direct rainfall runoff to adjacent landscape at grade and/or collect & recycle back to green roof. Meet at least 50% of green roof irrigation using non-potable sources such as HVAC condensate, rain-water collection, or other auxiliary water sources.
Soil Depth	Conserve water by retaining moisture for plant health.	<ul style="list-style-type: none"> Minimum: 6 inches or demonstrate additional potable irrigation reduction. Demonstrate is sustainable with structural loading capability.
Plant Species	Provide appropriate plant species to save water, celebrate Central Texas flora & avoid invasives.	<ul style="list-style-type: none"> 90% native or adapted species (does not apply to plants for food production). No federal or state invasives or plants listed as the Top 24 Invasive Species in Austin by the City of Austin Invasive Species Management Plan. Suited to soil depth.
Maintenance Access / Safety	Ensure can be properly maintained, safely used.	<ul style="list-style-type: none"> Provide maintenance access (including transport of needed replacement materials in future, e.g., plants, soil, etc.) and safe conditions for users (per Building Code).
Operations & Maintenance (O&M)	Ensure longevity of system & benefits to community.	<ul style="list-style-type: none"> Provide permanent, ongoing maintenance of green roof elements. Must maintain at least 80% plant coverage of planted beds (within 2 years of installation). Document O&M commitment in a Restrictive Covenant.
IPM Plan	Reduce risk of water quality impacts.	<ul style="list-style-type: none"> Include Integrated Pest Management (IPM) Plan with submittal.
Fertilizer Use	Reduce risk of water quality impacts.	<ul style="list-style-type: none"> Use of compost tea is acceptable for long-term maintenance. May use a one-time, slow-release fertilizer application during plant establishment at conservative rate. Must not use fast-release fertilizers. Fertilizer use not restricted if use closed-loop rainwater harvesting system or discharge to landscaping at grade.
Adequate Drainage	Reduce risk of structural problems.	<ul style="list-style-type: none"> Commission the roof drainage system (must sustain 100-year storm, be able to handle blocked flows).
Public Access	Provide places for the public to enjoy.	<ul style="list-style-type: none"> If the vegetated roof is designed for public access, it must be clearly understood (e.g., entrance marked with signage).