

BLUE-GREEN ROOF MAINTENANCE GUIDANCE

Maintenance of blue-green roof systems emphasizes maintaining drainage capacity, the health of vegetation, and prevention of clogging via periodic removal of sediment and debris from outlet areas. To maximize the blue-green roof's lifespan, inspect all facility components, including vegetation, growing medium, filter fabric, drainage layer, and visible portions of the waterproof membrane.

General recommended maintenance activities for blue-green roof systems are summarized in Table 4.14-1.

During the plant-establishment period, conduct at least three to four maintenance visits yearly for basic weeding, fertilization, and in-fill planting. Thereafter, conduct at least two annual inspection and light weeding visits (irrigated assemblies will require more frequent maintenance).

Herbicides must be avoided to prevent root penetration of waterproofing.

Apply organic or chemical fertilizer according to soil-testing results to maintain soluble nitrogen (nitrate and ammonium ion) levels between one and four ppm. Mature compost is the best nutrient source for fertilization.

Exercise spill prevention measures from mechanical systems located on roofs when handling substances that can contaminate stormwater.

The designer is referred to Section 4.12, Outlet Controls, and Section 4.13, Landscaping, for information on maintenance guidance for outlet controls and landscaping.

**TABLE 4.14-1:
Blue-Green Roof Maintenance Guidelines**

	ACTIVITY	FREQUENCY
EARLY	Inspect outlet structures, and storage areas for trash and sediment accumulation.	<i>Monthly for first year after installation to determine ongoing maintenance frequency</i>
	Water vegetation in the early morning.	<i>Every day for first two weeks after planting. Every four days for first year after planting.</i>
	Hand-weed non-target/invasive plants.	<i>Every three months for the first two years after planting.</i>
	Inspect vegetation for signs of disease or distress. Treat or replace as necessary.	<i>Every two weeks for the first year after planting.</i>
ONGOING	Remove debris from drainage outlets and outlet screens to prevent clogging.	<i>During inspections or as needed to ensure performance</i>
	Remove debris from secondary drainage/overflows.	
	Remove excessive buildup of sediment around the outlet controls or within the storage cells.	
	Break up ice formation around outlets and overflows.	<i>As needed during winter months</i>
	Thin any overgrown areas of vegetation	<i>As needed</i>
	Inspect for leaks	<i>During inspections or as needed to ensure performance</i>
	Inspect permanent irrigation system and adjust irrigation dosing rates as needed to optimize plant performance and water-use efficiency.	<i>Quarterly</i>
In early spring, manually cut dormant herbaceous vegetation from the previous growing season to four to six inches above the ground.	<i>Annually</i>	
Inspect drain-inlet pipe and containment system.		
	Maintain records of all inspections and maintenance activity.	<i>Ongoing</i>