

Roof Garden Stormwater Retention System

Carlisle SynTec Systems' Roof Garden Stormwater Retention System has been specifically designed for maximum moisture retention and meets the most stringent stormwater management requirements. Carlisle's Roof Garden Stormwater Retention System has been approved by both the Maryland Department of the Environment and Montgomery County, Maryland, as an alternative surface for environmental site design in new development, redevelopment, and retrofit applications by reducing stormwater runoff and mimicking natural hydrologic conditions.

SYSTEM DESCRIPTION

Carlisle's Roof Garden Stormwater Retention System is a built-in-place, traditional green roof system that gets its superior stormwater retention properties from a combination of two primary retention products: a 1-inch-thick, needled mineral wool moisture retention blanket called Hydro-blanket D13, and 4 inches of engineered extensive Growth Media blended to FLL standards. When combined with Carlisle's HP Protection Mat and MiraDRAIN 9800 Drainage Board, the system boasts a runoff curve number (RCN) of 77. When installed over a properly designed and warranted Carlisle roofing system, the Roof Garden Stormwater Retention System is eligible for up to a 20-year, single-source overburden warranty.

VEGETATION OPTIONS

Sedums are the primary vegetation used in Carlisle's Roof Garden Stormwater Retention System. Carlisle's available sedum options include sedum mats, sedum tiles, or sedum plugs. For alternative vegetation options, contact Carlisle.

Typical Properties and Characteristics

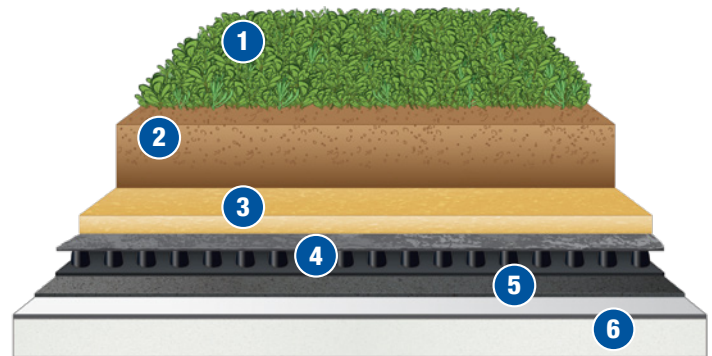
Property	Units	Result
Overall System Height*	Inches (cm)	5.4 (13.7)
Average Dry System Weight**	lbs. (kg)	20.3 (9.2)
Average Saturated System Weight**	lbs. (kg)	34.8 (15.8)
Average System Stormwater Retention	gal/ft ² (L/m ²)	1.96 (79.9)
	inches/ft ² (cm/m ²)	3.15 (86.1)
	ft ³ /ft ² (cm ³ /m ²)	0.263 (80,162)

*Does not include the height of vegetation or underlying roofing system.

**Weights are for overburden materials only and do not include the weight of vegetation.
Contact Carlisle for accurate system weights based on specific project parameters.

For more information on Carlisle's Roof Garden Stormwater Retention System, or for project design assistance, contact Carlisle.

TYPICAL ASSEMBLY



- 1** Sedum Mats, Tiles or Plugs
- 2** Carlisle Growth Media
- 3** Mineral Wool, 1" (25mm) Thick
- 4** MiraDRAIN® 9800
- 5** HP Mat or 200V Protection Mat
- 6** Approved Carlisle Roof Assembly
Featuring Adhered Sure-Seal®
EPDM, Sure-Weld® TPO,
or Sure-Flex™ PVC Membrane