

ve Roof System

**Quality You Can** Trust...From North America's Largest Roofing Manufacturer!

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## Why the LiveRoof<sup>®</sup> System?

GAF is partnering with LiveRoof® to combine the proven performance of EverGuard<sup>®</sup> Single-Ply Membranes with LiveRoof's patented, proven, hybrid green roof system.

- Each LiveRoof<sup>®</sup> module arrives to the jobsite fully grown and is simply set in place on the rooftop.
- LiveRoof<sup>®</sup> modules can be used over mechanically attached, fully adhered, and RhinoBond® TPO and PVC systems. TPO and PVC are loose laid over the roofing system with a 6 in. (15.25 cm) overlap to act as a slip sheet.
- During installation, the unique patent-pending LiveRoof<sup>®</sup> Soil Elevator™is removed to allow for a seamless fit to provide the look of a "built-in" system, but without the extensive, ongoing costs of maturation.
- Systems are locally grown by a network of over 20 licensed growers across the USA and Canada, under the care of professional horticulturists, who select RoofTop Proven™ plant mixes suitable to each project and climate.
- LiveRoof<sup>®</sup>modules can be custom cut to create natural-looking green roofs with sweeping curves and full vegetation.

### Systems:

LiveRoof<sup>®</sup> systems offer a variety of plant options with four system depths:

- LiveRoof<sup>®</sup>Lite For retrofit projects where load limitations exist
- LiveRoof<sup>®</sup>Standard Maximizes storm water management; integrates perfectly with new construction and existing buildings
- LiveRoof<sup>®</sup> Deep Irrigated to expand plant biodiversity to an array of drought-resistant, conventional, and native perennials, grasses, and vegetables
- LiveRoof<sup>®</sup>MAXX Meets municipal codes in locales with 8 in. (20.3 cm) soil depth requirement. Perimeter ballast supports drought-resistant perennials, grasses, and vegetables, and can be used to optimize biodiversity





# **Delivery and Installation:**

Each LiveRoof® module arrives to the jobsite with fully established plants inside the module and is simply set in place on the rooftop. The unique, patent-pending Soil Elevator™ is then removed for a seamless fit. There is no need to start with a brown roof and farm it for years, hoping and waiting for it to become a green roof. The GAF LiveRoof® system can be installed over EverGuard® TPO and PVC membranes.

#### Step 1





The licensed grower inserts the LiveRoof® Soil Elevator™ into the module.

#### Step 3



LiveRoof<sup>®</sup> plants are grown to maturity approximately 1 inch above the LiveRoof<sup>®</sup> module.

Step 5



LiveRoof<sup>®</sup> Soil Elevator™ is removed for a beautiful, seamless, instantly mature green roof

Step 2



LiveRoof® module is filled to the top of Soil Elevator <sup>™</sup> with LiveRoof<sup>®</sup>engineered growing medium.

Step 4



Certified Installer sets LiveRoof® modules tightly in place on the roof within RoofÉdge® aluminum edge restraint.

Step 6



Water thoroughly to settle any loose growing medium and to get your green roof off to a great start.

SYSTEM	LITE	STANDARD	DEEP	MAXX
Soil Depth	2.5 in (65 mm)	4.25 in (110 mm)	6 in (150 mm)	8 in (200 mm)
Dry Weight	±12 lbs/ft² (±0.6 kPa)	±20 lbs/ft² (±1.0 kPa)	±30 lbs/ft² (±1.4 kPa)	±40 lbs/ft² (±1.9 kPa)
Fully Saturated Weight Maximum, varies by vegetation type and maturity level	≤17 lbs/fi² (≤0.8 kPa)	≤29 lbs/ff² (≤1.4 kPa)	≤50 lbs/ff² (≤2.4 kPa)	≤65 lbs/ft² (≤3.1 kPa)
Maximum Water-Holding Capacity (ASTM E2397)	48.3%			
Wilt Point of Plants	10%			
Maximum Available Capacity of Growing Medium to Hold Water	38.3%			
Growing Medium Maximum Moisture Storage	.96 in (24 mm) 0.6 gal/ft² (24.4 L/m²)	1.6 in (40 mm) 1 gal/ft² (41.3 L/m²)	2.2 in (55 mm) 1.3 gal/ft² (55.9 L/m²)	3 in (76 mm) 1.8 gal/ft² (76.2 L/m²)
Plant Moisture Storage (Sedums)	0.4 in (10 mm) 0.25 gal/ft² (10.1 L/m²)			
System Total Storm Water Storage (Assuming Initial Moisture 0.25 in/6mm)	1.11 in (28 mm) 0.7 gal/ft² (28.2 L/m²)	1.75 in (44 mm) 1.1 gal/fi² (44.4 L/m²)	2.35 in (60 mm) 1.5 gal/ft² (59.7 L/m²)	3.15 in (80 mm) 2 gal/ft <sup>2</sup> (80 L/m <sup>2</sup> )
Water Permeability (saturated hydraulic conductivity)	0.434 in/min (0.018 cm/s)			
WITH ROOFBLUE™ RISER (for use with	control-flow drain system)			
Maximum Water Depth	3.5 in (89 mm)			
Void Space	90.5%			
Maximum Water Volume Detained	456 in³ (7472 cm³) 1.97 gal/ft² (80.4 L/m²)			
Maximum Water Volume Managed with Retention and Detention Actual water retained/detained will vary with drain selection, spacing, and roof pitch	615 in³/ff² 2.6 gal/ff² (108 L/m²)	708 in³/ft² 3 gal/ft² (125 L/m²)	793 in³/ff² 3.4 gal/ff² (140 L/m²)	908 in³/ff² 3.9 gal/ff² (160 L/m²)
WIND AND FIRE RESISTANCE				
FM Approval Standard for Vegetative Roof Systems (FM 4477)		FM Approved		
Fire Resistance (ASTM E108) with Succulent Plantings * Test Performed ** Performance Expected Based on Similar Testing	Class A**	Class A**		Class A*
External Fire Design Standard for Vegetative Roofs (ANSI/SPRI VF-1)	Meets requirements for generic fire-resistive vegetative systems (4.1)			
Wind Uplift Resistance (CAN/CSA A123.24-15) * Full Scale Test Performed ** Performance Expected Based on Similar Testing of Lighter System(s)	200 PSF (9.6 kPa) sustained* (133 PSF (6.4 kPa) rating after 1.5 experimental factor)	200 PSF** (133 PSF after 1.5 experimental factor)		
Wind Flow Resistance (CAN/CSA A123.24-15) * Test Performed – Sustained <b>maximum</b> <b>wind speed</b> produced by testing equipment. ** Performance Expected Based on Similar Testing of Lighter System(s)		124 mph (200 km/h) sustained* (83mph (133 km/h) rating after 1.5 experimental factor)	124 mph (200 km/h)** (83mph (133 km/h) after 1.5 experimental factor)	
Wind Design Standard for Vegetative Roofing Systems (ANSI/SPRI RP-14)	#4 Ballast (3.13.1)	#2 Ballast (3.13.2) and #4 Ballast (3.13.1)		

Contact your local representative for details.



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