

# Technical Information Sheet



## SkyScape™ Wave Modular Tray

### Item Description

Pre-Grown or Post-Planted Tray

### Description

The Elevate SkyScape Wave Modular Tray provides a building owner with a quick and easy way to turn any new or existing Elevate membrane roof into an environmentally friendly and aesthetically pleasing vegetative roof system. The SkyScape Wave Modular tray can contribute to a building’s LEED Certification by the USGBC (United States Green Building Council).

Constructed from heavy-duty polypropylene, the SkyScape Wave Modular Tray is designed to be easily placed directly on top of the Elevate roofing membrane system (an approved root barrier is required for certain membrane types). The channeled bottom allows metered drainage for storm water management, while the upper injection-molded drains enable airflow and overflow drainage while inhibiting roots from penetrating the roofing system.

Prior to installation, it is the Owner’s responsibility to determine whether the structure is adequately reinforced to withstand the added weight of a fully-saturated modular tray. This decision should be completed with the aid of a registered structural engineer. Perform tray installation only after the Elevate roofing system has been inspected and found to be in accordance with current Elevate specifications.

The SkyScape Wave Modular Tray System can be delivered either pre-grown (pre-vegetated) or post-planted (growing media and plants are assembled and installed on-site).

### Pre-Grown Option

- Pre-grown SkyScape Modular Tray system can meet plant coverage specifications up to 95%.
- Trays are grown at a partner nursery in accordance with the specifications, delivered to the job site, and installed according to the design for an instant mature green roof.
- Plant species are typically established from cuttings or plugs and pre-grown in the modules for a period of no less than 3 months prior to delivery. Appropriate application rates of cuttings and plugs shall be used to ensure a long-term sustainable green roof. Sedum cuttings will be randomly distributed throughout the array of trays to achieve the desired look. The Skyscape standard sedum species mix consists of a minimum of 9 carefully selected species. Work-in-progress photographs can be supplied to document plant coverage prior to delivery for approval.
- In addition to providing instant aesthetics, fully-established mature trays are also less susceptible to weed encroachment and aid in protecting the growth media from potential wind scour.

## Post-Planted Tray Option

This option is best used on access-challenged projects where it is logistically easier to bring materials to the roof in their component state for assembly on roof, or on those projects where the tray is utilized as a stormwater management basin for a deeper media profile system.

## Method of Application

1. Place the trays directly on the roofing membrane or on an approved root barrier. Speak to a Building Systems Advisor to determine if the root barrier is required.
2. Secure the trays to each other using the  $\frac{3}{8}$ " (9.5 mm) removable drive-pin fastener.
3. For post-planted trays, add growing media to a depth in accordance with the design plans and specifications. Depths range from  $3\frac{1}{2}$ " – 5" (89 – 127 mm). Add vegetative cover and sufficiently water vegetation to ensure growth.
4. After installation, the system shall be sufficiently watered to ensure growth.
5. Irrigation (if applicable)
  - With trays secured in place, lay out drip irrigation lines, emitter side up, on top of retention layer.
  - Make connections of irrigation lines to water supply provided and install regulator to govern pressures exceeding 15 psi (1.055 kg/cm).
  - Conduct testing procedures to verify performance prior to installing growing media.

**NOTE:** General maintenance (including watering and weeding) is the responsibility of the building owner. See the SkyScope Maintenance Guide on the Holcim Solution and Products US, LLC website: [www.holcimelevate.com](http://www.holcimelevate.com)

## Precautions

- A certified Structural Engineer must be contacted prior to installation to ensure that the deck can withstand the weight of the SkyScope Wave Modular Trays when fully saturated.
- To facilitate drainage, a minimum roof slope of  $\frac{1}{8}$ " : 12" (1%) must be provided.
- Vegetative Roofing Trays shall be installed between April 1 and November 1, but not when the weather is below 45 °F (7 °C) or above 95 °F (35 °C).
- Do not drag modules into position.
- Use caution when lifting trays.
- Check roof drains regularly to ensure there are no obstructions to impede water flow.
- Refer to Safety Data Sheets (SDS) for additional information.

## LEED® Information

Post-Consumer Recycled Content:	Tray: 100%
Post Industrial Recycled Content:	Tray: 0%
Manufacturing Location:	Tray: Williamston, SC



**NOTE:** LEED® is a registered trademark of the U.S. Green Building Council

Typical Properties	
Property	Description
Tray Size	2 1/2" (64 mm) module: 15" x 20" x 4 1/4" (308 mm x 508 mm x 108 mm) 4" (102 mm) module: 15" x 20" x 5 3/4" (308 mm x 508 mm x 146 mm) 6" (152 mm) module: 15" x 20" x 7 3/4" (308 mm x 508 mm x 197 mm) * 8" (203 mm) module: 15" x 20" x 9 3/4" (308 mm x 508 mm x 248 mm) * 4" (203 mm) module: 12" x 24" x 5 3/4" (305 mm x 610 mm x 146 mm) *Lead time of 6 – 8 weeks
Expected Weight	Unsaturated: 27 lb/ft <sup>2</sup> (12.25 kg/m <sup>2</sup> ); Saturated: 41 lb/ft <sup>2</sup> (18.6 kg/m <sup>2</sup> )
Tray Color	Semi-gloss black
Tray Material	150 mil Polypropylene
Drainage Holes	10 through-holes at 3/8" (9.52 mm) diameter with 117 perforations on ridge
Tray Clearance Above Roof	5/8" (15.8 mm)

Please contact Holcim Technical Services at 800-428-4511 for further information.

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