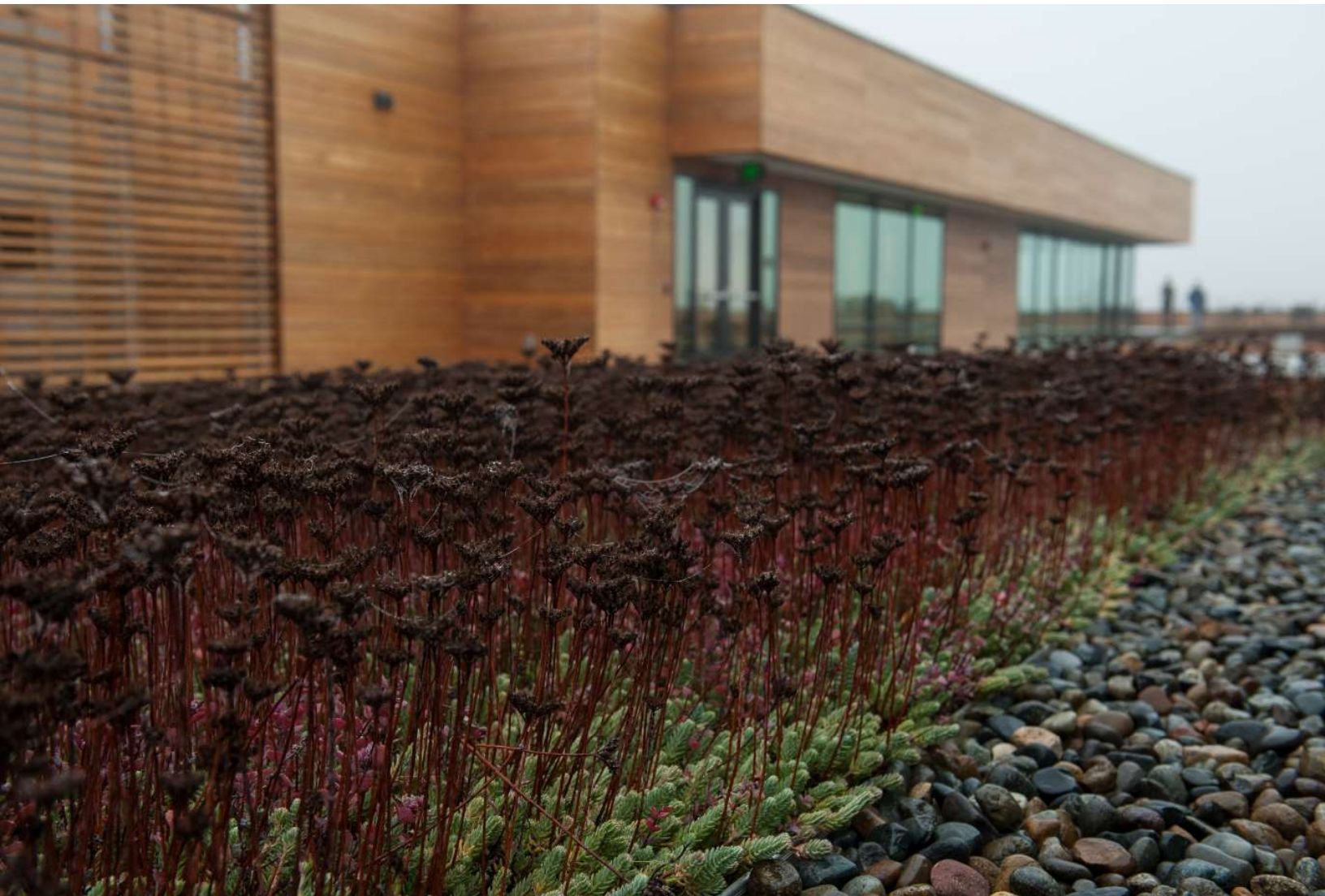




Innovative Green Roof Technology

PLANTED-IN-PLACE TRAY SYSTEM

WITH INTEGRATED DRIP IRRIGATION



Simple to Install and Easy to Maintain

Shorter Lead Time

Lower Cost of Ownership

Maximum Design Possibilities



PLANTED-IN-PLACE TRAY SYSTEM

WITH INTEGRATED DRIP IRRIGATION

The Planted-in-Place Tray system with built-in irrigation is easy and efficient to install and maintain. The unique way the Columbia Green trays overlap, interlock, lock-in drip lines, and pin together keeps the tray system from shifting, allows the trays to be overfilled to hide tray lines while preventing growing media from spilling on the roof. For installation, empty trays are laid out and irrigation lines are installed, then trays are filled with growing media and planted.

This process is cleaner, less wasteful, and requires less labor than other options on the market. Traditional pre-grown tray systems have longer lead times, and must be installed immediately upon arrival. The Planted-in-Place Tray system can be installed in phases with materials available on-demand, making it the most dynamic, flexible option available.

The Planted-in-Place Tray system offers variable growing media depth, (from 5 to 8 inches), which allows more planting options and flexibility than a traditional pre-grown tray. The system has optional integrated drip irrigation, eliminating the need for time-intensive hand-watering, ensuring the lasting health of the green roof.

Columbia Green's trays were developed to maximize stormwater retention. Their design slows down and decreases overall roof run-off with a pattern of micro-holes and continuous troughs at their base. The trays are made from 88% recycled materials and are capable of retaining an average of 70% of precipitation.



Why Columbia Green?

- Comprehensive green roof solutions; from Extensive to Intensive
- Layered and Tray-based systems.
- Multiple warranty options including Single-Source Warranty provided through our Roofing Partners
- Plaza Decks and Rooftop Gardening

**COLUMBIA
GREEN**
TECHNOLOGIES
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PLANTED-IN-PLACE TRAY SYSTEM INSTALLATION



Step 1

Empty overlapping trays are delivered to the roof, laid out, fit and pinned together



Step 2

Drip irrigation is installed and hooked into place. Edging is installed and held in-place by the weight of the system.



Step 3

Growing media is delivered by crane or blower truck and spread over the tray system. Overlapping trays keep media off roof surface.



Step 4

Plants are delivered to the rooftop, planted, and watered.

FLEXIBLE PLANTING OPTIONS



Pregrown Sedum

Sedum mats or tiles are laid out like sod, giving instant full effect. Custom color and plant type options available.



Perennials, Groundcover & Shrubs

Plants per landscape design and details



Plugs

Plant rootballs even with top of growing media. Space per Plants.

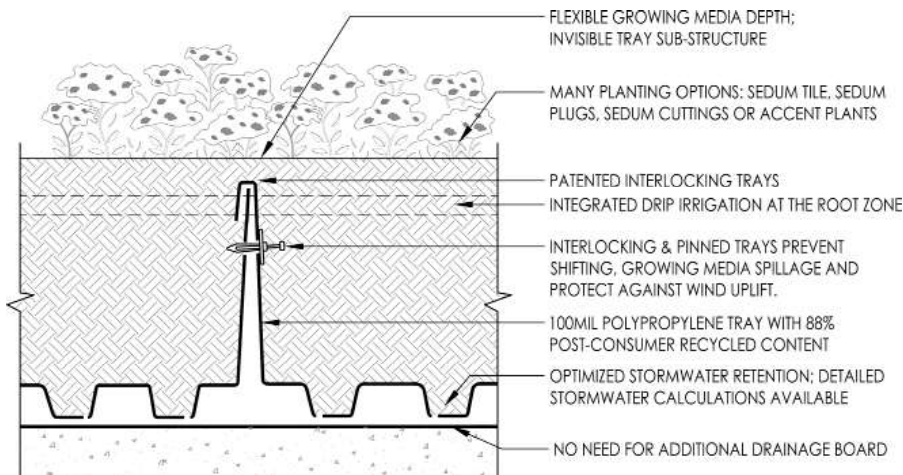


Sedum Cuttings

Sedum pieces are spread over media at specified rate. Require overhead water to root in.

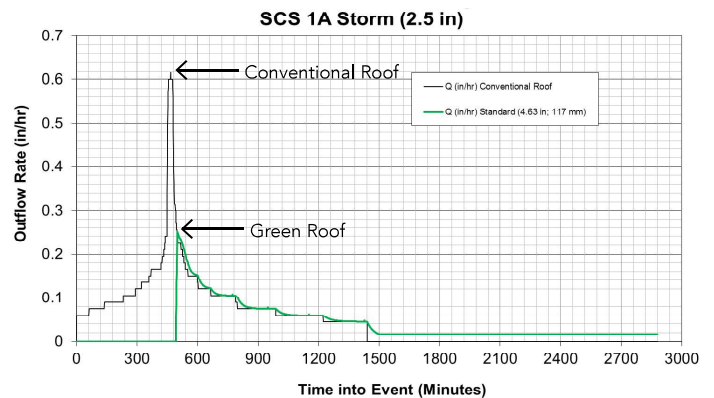
COMPARING PLANTED-IN-PLACE TRAYS TO PRE-GROWN TRAYS

	Pre-grown Tray System	Planted-In-Place Tray System
Product Availability	• Multiple Vendors	• Sold exclusively by Columbia Green Technologies
Ease of Installation	• Heavier, more cumbersome to install • Time sensitive	• Lighter, more flexible installation • Allows for phased installation • Less mess, less waste
Flexibility	• Predetermined media depth • Can't combine with layered green roof system	• Variable 5"-8" media depth • Can combine with layered green roof system
Material Cost	• Varies	• Varies
Labor	• 100 s.f. per man hour installation	• 100 s.f. per man hour installation
Irrigation	• Irrigate by hand	• Integrated drip irrigation
Plant Options	• Set number of plant mixes	• Pregrown sedum, perennials, groundcover, shrubs, plugs and cuttings
Stormwater Retention Calculations	• Maybe	• Water retention performance data available based on green roof ASTM testing



Our Stormwater Services

Columbia Green Technologies offers **complimentary, project-specific** stormwater calculations to help your project demonstrate Return-on-Investment for a green roof. Utilizing the green roof for stormwater retention may allow the project to downsize or even eliminate other costly stormwater treatment infrastructure, such as underground detention tanks.



Contact: