



CARLISLE'S  
**HYDROPACK**<sup>®</sup>  
ROOF GARDEN SYSTEM

INTEGRATED • PRE-VEGETATED • MODULAR



## Carlisle's Hydropack® Roof Garden System

Carlisle's Hydropack Roof Garden System offers distinct advantages over more complex systems with its simplicity in design, pre-vegetated modules and removable modular features.



With the introduction of its Hydropack Roof Garden System, Carlisle has given contractors and owners a premium, easy-to-install roof garden solution, giving all of the benefits of a traditional Roof Garden with the ease of a modular system.

## Carlisle's Hydropack Advantages

Carlisle's Hydropack incorporates all of the advantages of a traditional, planted-in-place system while providing the ease of a modular system. Hydropack uses a dedicated aggregate drainage layer, filter fabric and FLL compliant growth media. Hydropack Modules lock together and allow sharing of moisture and nutrients, but do not permit the roots to grow from tray to tray, allowing for ease of removal if needed.

## Stormwater Management

Roof Garden systems help to alleviate stormwater runoff through absorption and retention of precipitation. Hydropack is designed to maximize stormwater retention using an intelligent reservoir system. The reservoirs contain expanded aggregates that allow wicking of stored stormwater to the plants' root systems, making Hydropack the most advanced modular Roof Garden stormwater solution on the market.

## Lowered Heating & Cooling Costs

Roof Gardens are proven to lower the costs of heating and cooling your building. During the summer, plants in the Hydropack modules transpire water and become a "sponge" for heat energy. For this reason, the temperature at the membrane and insulation level can be as much as 10°F below the ambient air temperature.

## Prevents Sound Infiltration

Roof Gardens are incredibly effective at making your building a more serene location in which to reside. Hydropack can help to reduce noise infiltration through the roof by up to 40 dB. This feature can be very valuable to building occupants by helping to create an environment devoid of excess noise.

## Air Quality

Hydropack Roof Garden systems help to purify the air by converting CO<sub>2</sub> into O<sub>2</sub>, which can help to reduce greenhouse gases.

## Extends Roof Life

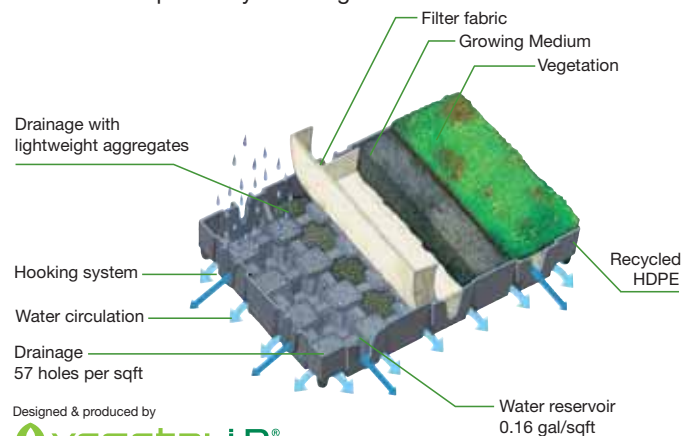
Hydropack Roof Garden modules can protect roof membranes from ultraviolet radiation, extreme temperature fluctuations and puncture or other physical damage. Minimization of such exposure can improve the long-term performance of the roofing system.

## Added Aesthetic Value

Hydropack Roof Garden Systems provide urban environments with visually pleasing vistas and rooftop gardens. In urban environments, roof gardens also add value by converting space into areas usable for recreation by building occupants. In such locations, the scarcity of real estate makes the addition of a roof garden for such recreation a competitive alternative.

## Maintenance

Carlisle's Hydropack provides a very low-maintenance Roof Garden. Arriving fully vegetated with established plantings all but eliminates weeding and watering. Maintaining your Hydropack Roof Garden system will help you maximize the benefits associated with a vegetated roof. Maintenance levels will be dependent upon the design of your Hydropack Roof Garden. Since your Hydropack Roof Garden is a living system, a specific maintenance program needs to be adopted and performed on a regular basis. Consult Carlisle for a specific maintenance plan for your design.





## Benefits

- Single-source responsibility – roofing contractors can install both the waterproofing and Roof Garden in one installation
- No planting on the roof – modules are pre-vegetated prior to arriving on the jobsite.
- Lightweight, easy to handle and fast to install
- Modules are easily moved for modifications or roof repair
- Building owners receive single-source warranty coverage
- Only 17.5 pounds per square foot fully saturated making Hydropak one of the lightest Roof Garden modules on the market

## Features

**Dimension per unit:** 2 ft x 1.3 ft x 3.6 in  
(60 cm x 40 cm x 9 cm)

**Tray Material:** Black 100% recycled HDPE

**Depth of water reserve:** 1.2 in (3 cm)

**Filter fabric type:** Non woven 3 oz/sq yd (100 g/m<sup>2</sup>)

**Water reserve sub drainage:** 0.16 gal/sq ft (8 L/m<sup>2</sup>)

**Maximum water retention capacity:** 0.56 gal/sq ft  
(27.6 L/m<sup>2</sup>)

**Number of drainage holes:** 47 holes/sq ft (500 holes/m<sup>2</sup>)

**Total drainage surface:** 4.5 sq in per sq ft (318 cm<sup>2</sup>/m<sup>2</sup>)

**Dry weight:** 11.5 lbs/sq ft (56 kg/m<sup>2</sup>)

**Saturated weight:** 17.5 lbs/ sq ft (85 kg/m<sup>2</sup>)

**Maximum weight per tray:** 45 lbs (20.4 kg)

**Installation time:** 860 sq ft/day/person

## Standard Plantings

- Sedum Album Coral Carpet
- Sedum Reflexum Blue Spruce
- Sedum Sexangulare
- Sedum Rupestre Angelina
- Sedum Ellacombianum
- Sedum John Creech
- Sedum Aizoon
- Sedum Spurius
- Allium Shoenooprasum



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800-479-6832 | P.O. Box 7000 | Carlisle, PA 17013  
Fax: 717-245-7053 | [www.carlisesyntec.com](http://www.carlisesyntec.com)

R. Viamão, 1095 | Grajaú | CP: 30431-253 | BH/MG  
Tel.: +55(31) 3297-7110 | Fax: +55(31) 3297-7114  
[www.roofway.com.br](http://www.roofway.com.br)