

Project Profile Data

VanDusen Botanical Garden, Vancouver, Canada



Project Data

Area: ca. 20,000 sq. ft. (1,800 m²)

Completion: August 2011

Architect/Design:
Perkins + Will, Vancouver

Landscape architect:
Cornelia Hahn Oberlander, Vancouver

System build-ups:
Floradrain® FD 40-E, Floraset® FS 75 and
Georaster®, with 6–8 in. (150–200 mm)
growing media Zincoblend

Coordinates:
49°14'22.60"N 123° 7'44.12"W



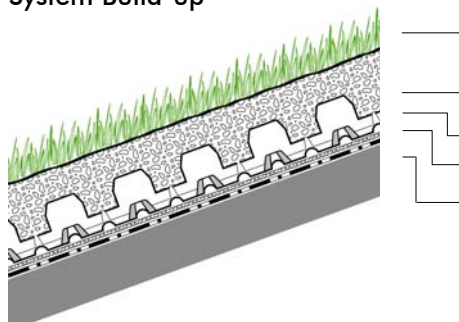
The green roof of the new visitor center at the opening ceremony in October 2011.

Conception

In 2011, the approximately 54 acres large VanDusen Botanical Garden, existing since the 1970s, was provided with a new representative visitor center in the size of approximately 20,000 sq. ft. (1,800 m²). The peculiarity of the design is the roof shape, imitating the leaves of an orchid flower. The flower stem is represented by the central atrium. The idea for this roof shape was developed by the famous landscape architect

Cornelia Hahn Oberlander, known for the perfect integration of her landscaping into the overall architectural concept. Due to the varying inclinations and curvatures of the roof surface three different systems were applied: on the flat areas a build-up based on Floradrain® FD 40-E, on the sloped roof areas a build-up with Floraset® FS 75 and on the steep roof areas a build-up with Georaster®.

System Build-up



Plant layer with perennials, native grasses and bulbs

Growing media Zincoblend, ca. 6–8 in. (150–200 mm)

Floraset® FS 75

Protection Mat
Roof construction with
root resistant waterproofing

Development



The roof of the visitor center shortly after the installation of the Floraset® FS 75 elements.



The Floradrain® elements adjacent to the sloped roof area where Georaster® was applied.



The architect's model shows the shape of orchid leaves;

The visitor center has already been awarded the LEED Platinum Status for environmentally friendly and sustainable constructions.



This photograph made in October 2011 shows the lawn that already had developed well.



Shortly before completion of the roof surfaces.