



Project Profile Data

Pieso Poagen, Nine Mile Falls, Washington, WA, USA



Project Data

Area: 7,500 sq. ft. (700 m²)

Construction Year: 2012

Architect/Design:
Olson Kundig Architects, Seattle, WA

Contractor:
McPeak Roofing, Lewiston, ID

System Build-up:
"Sloped Green Roof" with Georaster®
and Floradrain® FD 40-R

Coordinates:
47°51'11.73"N 117°40'19.73"W

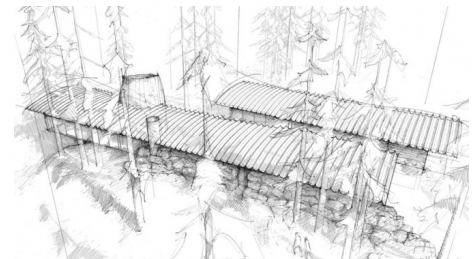


The green roof integrates the building perfectly into its surroundings.

Conception

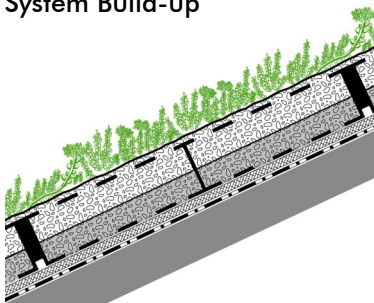
This high end residential green roof is broken up into 3 separate areas. The roofs are all barrel shaped with slopes in excess of 30 degrees. There is a custom fabricated steel parapet wall that encloses the entire green roof build-up. On the steepest slopes (the bottom of the roof edges) the parapet wall is perforated with 1" (25.4 mm) slots that feed to an internal gutter system to insure consistent drainage away from the exterior walls.

The ZinCo Georaster® system stabilizes 5" (127 mm) of extensive growing media on the steepest sections of the roof and rolls of Floradrain® FD 40-R were used on the "top of the roof barrels" where stabilization was less important, but water retention was critical. The roof utilized pre-cultivated sedum mats that provided nearly 100% coverage on the day of installation and will continue to flourish with a variety of colors as the roof ages.



The first architectural draft did not include a green roof.

System Build-up



- Vegetation Mat "Sedum Carpet"
- Growing media Zincoblend
- Georaster®-elements
- Protection Mat WSM 150
- Roof construction with root resistant waterproofing

Development



In the steeper areas the Georaster®-elements have been placed on the Water Retention Mat WSM 150, starting from below.



In the flatter areas above the Georaster®-elements Floradrain® FD 40-R have been installed.



In order to obtain a complete green coverage immediately pre-cultivated vegetation mats have been applied on the growing media.



In the next step the drainage elements were completely filled with the growing media.

