



The Schiphol Plaza (central entrance hall) at Schiphol Airport in Amsterdam is the first object in the Netherlands combining a green roof with a solar system.

Project Data

Area: ca. 8.600 m²

Construction Year: 2011

Client:
Schiphol Group, Airport Schiphol

Contractor:
Wieringen Prins Hoveniers,
Amsterdam

System Build-up:
"SolarVert®"

Coordinates:
52°18'34.34"N 4°45'44.61"E

Conception

Green roofs have been playing an important role at the Airport Schiphol. Already back in the 80s the Schiphol Plaza, the central entrance hall, was planted extensively. But now there was need for renovation.

The renovation works represented a greater challenge, as the approximately 8.600 m² large roof has a slope of 4-10°. Several triangular skylights interrupt the large roof surface, their sloped back sides are greened as well.

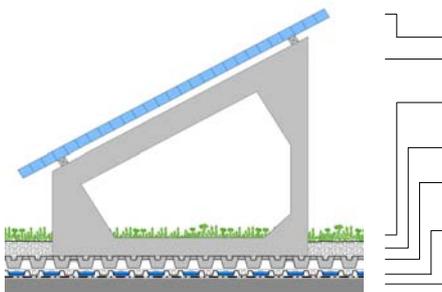
The system build-up "SolarVert" was the perfect solution for the desired combination of a green roof and a solar system. This system solution developed especially for large roof areas is based on the drainage and water storage element Fixodrain® XD 20 with a filter sheet attached on its top side, delivered in rolls. To take account of the existing roof slope, the Fixodrain® XD 20 was previously equipped with a protective rubber mat as anti-slip protection on the underside.

Development



The Solar Bases® SB 200 allow for the installation of the solar modules, kept in place only by the weight of the green roof substrate itself.

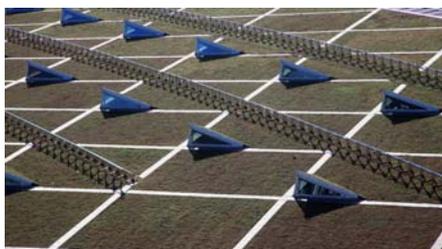
System Build-up "SolarVert®"



- Solar Panel
- Solar Base Frame SGR 30
- Vegetation Mats "Sedum Carpet"
- System Substrate "Sedum Carpet"
- Solar Base® SB 200
- Fixodrain® XD 20 with protective rubber mat on the underside
- Roof construction with root resistant waterproofing



Especially for the Schiphol project ZinCo delivered the drainage element Fixodrain® XD 20 equipped with an additional protective rubber mat attached on the underside.



An immediate green coverage was achieved by applying pre-cultivated vegetation mats on the roof surface.



The Solar Base Frames were well adapted to the slight inclination of the roof construction.



The System Substrate "Sedum Carpet" was brought up to the roof and distributed evenly by means of silos.

