

Project Report

Municipal Utilities, Weilheim i. OB



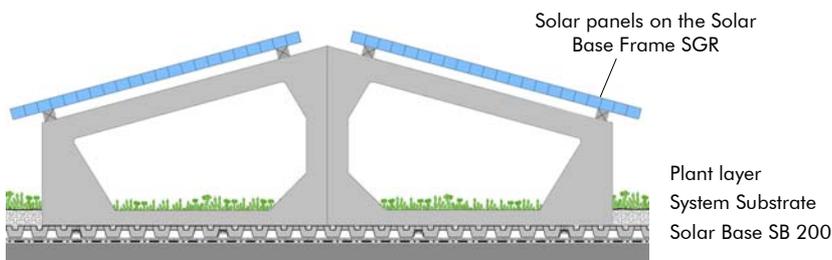
In order to have a uniform energy yield throughout the day, one part of the solar panels was oriented to the south, the other part, which is visible on the picture, was installed with an east-west alignment.

Conception

The Municipal Utilities Weilheim in Oberbayern (Upper Bavaria) are following a particularly environmentally friendly and sustainable path in their new depot. Each of the four new buildings, administrative, workshop, storage and garage building, was equipped with photovoltaic panels with a total performance of 400 kWp in addition to 7.500 m² of extensive green roofs. One part of the photovoltaic system was installed with a "classic" southern orientation, for the other part an east-west

alignment was chosen. The storage building was furthermore equipped with solar thermal collectors, a wood-chip based heating system, a heat pump and an ice bank. The solar plants were installed without any perforations of the roof membrane using a mounting system integrated into the green roof build-up, consisting of the Solar Base SB 200 and the Solar Base Frame SGR. For safety during maintenance courses Fallnet® SB 200-Rail was installed along the roof edges with a total track length of 660 linear meters.

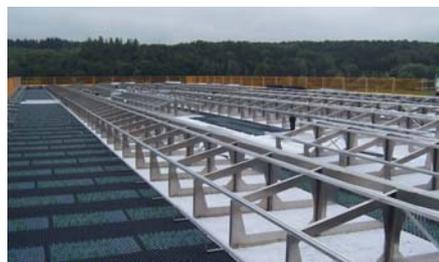
System Build-up



Development



The Solar Bases SB 200 were first covered with a filter sheet, then the Solar Base Frames SGR were attached.



The drainage element Floradrain® FD 40-E was installed between the Solar Base boards.

Project Data

Area: ca. 7.500 m²

Construction Year: 2014

Architect/Design:
Rehwaldt Landschaftsarchitekten,
Dresden and
actensys GmbH, Ichenhausen

Contractor:
GDT Gründach Technik GmbH
Südwest, Unterensingen

System Build-up:
"Sedum Carpet" with Floradrain®
FD 40-E

Coordinates:
47°49'53.77"N 11°10'5.38"E



On the roof of the left building the solar panels were installed with an east-west alignment, on the other two buildings, the "classic" orientation to the south was chosen.



One year after completion a slight green coverage is visible. The photovoltaic system covers not only the consumption of the buildings themselves, but also supplies nearly 100 households with "green electricity".



A rail system for fall protection was attached additionally to the Solar Base SB 200.

