



Their curving roofs make the school buildings blend perfectly into the environment.

Project Data

Area: 4.750 m²

Construction Year: 2014

Architect/Design:
Tim Flynn Architects, London

Landscape Architect:
Glaeßer und Dagenbach Land-
schaftsarchitekten, Berlin

System Build-up:
"Rockery Type Plants" with Floradrain®
FD 40-E on an Inverted Roof

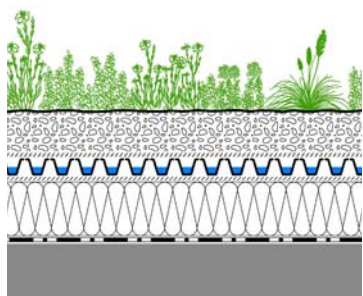
Coordinates:
40°44'19.34"N 44°50'5.99"E

Conception

The United World College is located in Dilijan, in the mountains of the Lesser Caucasus and has been in operation since October 2014. In 2016 more than 200 students from over 40 nations were accommodated and trained there. In the near future this number is to be increased to 650. The challenge for the architects was to integrate the building as far as possible into the surrounding environment. The former orchard in a fertile valley was to be re-established as soon as possible. Therefore, the project

includes green roofs and facades consisting to a high degree of locally available raw materials. A build-up based on the drainage element Floradrain® FD 40-E was realized on the entire roof surfaces. Since Armenia's soils contain material of volcanic origin, the substrate was mixed from local material. Strips of turf were peeled manually from nearby flat pastures and were laid along the edges of every roof to achieve protection from wind. On the inner surfaces seeds were brought out.

System Build-up



- Plant layer "Rockery Type Plants"
- System Substrate "Rockery Type Plants"
- Filter Sheet SF
- Floradrain® FD 40-E
- Separation Membrane TGV 21
- Thermal insulation of extruded polystyrene
- Roof construction with root resistant waterproofing

Development



The drainage elements were laid butt jointed on all roof surfaces.



The substrate which was mixed on-site previously was applied all over the system filter.



In 2015 upon completion of the school buildings the planners have received the International Green Roof Leadership Award for green roofs and walls.



In order to preserve and increase biodiversity the roofs are mowed only twice a year.



The plants on the roof surfaces are supposed to grow as naturally as possible.