# **Project Report**

## United World College, Dilijan





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

### **Project Data**

Area: 4.750 m<sup>2</sup>

Construction Year: 2014

Architect/Design:

Tim Flynn Architects, London

Landscape Architect: Glaßer und Dagenbach Landschaftsarchitekten, 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

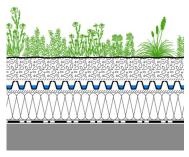
includes green roofs and facades consisting to a high degree of locally available raw materials.

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.



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

#### 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



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

#### 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.



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

