

Project Report Steep Pitched Green Roof, Escaldes-Engordany, Andorra



Residential complex built in the Catalan-Pyrenean architecture style in the resort of Escaldes-Engordany in the Pyrenees.

Project Data

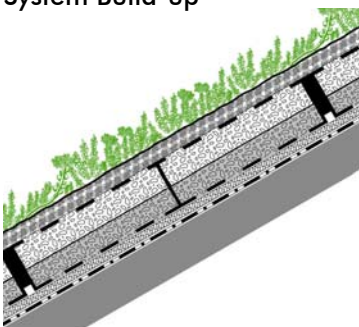
Area: ca. 70 m²
 Construction Year: 2011
 Architect/Design:
 Stefano Colli, Barcelona
 Landscape architect:
 Josep Farriol
 Contractor:
 Jardinatura S.L., Terrassa
 System Build-up:
 "Steep Pitched Green Roof" with
 Georaster®
 Coordinates:
 42°30'58.03"N 1°32'28.31"E

Conception

After working with a relatively inexperienced installer at the beginning, the owner and the architect came to realize during the construction phase, that an experienced specialist had to be involved if the vegetation was to endure this harsh mountain climate. The experts of ZinCo's long-time roof gardener partner Jardinatura S.L. redesigned the green roof build-up from scratch. Finally the decision was made for the system build-up "Steep

Pitched Green Roof". The Protection Mat WSM 150 and the ZinCo Georaster®-Elements, filled with the system substrate "Heather with Lavender-Light" were installed on a root resistant waterproofing. The plant selection meets the requirements of the local climate and consists of different types of Sedum as well as *Iris lutescens*, *Iris palida*, *Festuca glauca*, *Gaura lindheimeri*. Drip irrigation has been installed for critical periods.

System Build-up



- Plant layer
- System Substrate "Heather with Lavender-Light"
- Georaster®
- Protection Mat WSM 150
- Roof construction with root resistant waterproofing



Despite the alpine mountains of Andorra, with their frequent rainfalls, the roof gardeners decided to install a drip irrigation.



The difficulty for the roof gardeners was the professional handling of shear forces on this steep roof area.



The drip irrigation makes sure that the roof retains its green character even during hot summer months.



The green roof with its plant diversity mitigates the severity of the bare stone facades.

