POLITECNICO DI TORINO SECOND SCHOOL OF ARCHITECTURE Master of Science in Architecture Honors theses

Sustainable design features a conference center in Grugliasco

by Federica Bione and Marta Ghia

Tutor: Mario Grosso

Co-tutor: Domenico Bagliani

The first approach to the project was established in February 2009 after a meeting with teacher Mario Grosso in the office of architect Giancarlo Pavoni, concerning the interview on Proposed Legislation to variant P.R.G.C. of Grugliasco Urban subzone Z11b (production, office and commercial) about the private property between Corso Allamano, Via San Paolo, Via Rivalta e Strada del Portone.

Morphologically the area, clear and without any building, looks like a long narrow lot facing, with the longest side, along the high sliding Corso Allamano.

Our proposal takes shape through the creation of a place for relationships, defined by an urban park from which the building leaks, so as to create a new landscape within the architecture of the area and a new relationship with the countryside still existing.



General view of project

The orientation of our proposal, which characterizes the design of settlement intervention, meets the purpose of reducing exposure to summer sunlight for the public use spaces, and of protecting the ability to enhance winter solar inputs. The building, which has a central duplex and two side arms at one level, seems to be the result of a modeling work done on an extruded material, spilled from the ground on which we worked by cutting the moulding and casing.

The new volume is shaped by three arms, which seems to want to detach from the central body and end with a shell-shaped shell, which plunges into the ground and imparts a dynamism and lightness to a refined tectonic configuration. The park wraps around the building and cover it with a natural grass that can be toured by visitors. The windows are present only on the fronts north and south, and they touch the ground, creeping beneath the envelope, and as a sail, tapering up to take the cover thickness of the shell.

All the south prospect is dominated by a double skin facade with integrated sunshade "Sunshade", while the opaque vertical surfaces are characterized by a ventilated facade covered with planks of wood.

The movement which is perceived externally, can be found inside as well. Once you have crossed the main entrance, there is a wide space that welcomes visitors, it leads to the area dedicated to temporary exhibitions, café and wing for the restaurant.

A central double height space, with a garden and a small permanent exhibition area, leads to the auditorium / conference room, incorporated in the two levels of the central building.

The upper level of the central body houses four meeting rooms, multipurpose room and office management. All the rooms overlook the courtyard garden, overlooked by a glass roof, a solar cell.

Features of the project proposal is the green roof floor on which people can walk on. Along the terrain relief bore the auditorium, through the paths that come from the park, you can access to cover the main body, going up in the corner and where the surface becomes a curved wall becomes vertical.

The project aims to make the new building as independent as possible regarding the production of energy for lighting through solar panels, heating, using solar water heating and ventilation, using a ventilated cooling system geothermal. Architectural features were provided, either about compositions, or plants in order to exploit the natural resources offered by the environment.

For further information:

Federica Bione: feb1@hotmail.it Marta Ghia: xemx@hotmail.it

Maintained by:

CISDA - HypArc, e-mail: hyparc@polito.it