



# ENERGY-SAVING CONCRETE BUILDING WITH GLASS COVER | Architrend Office

身披玻璃的节能混凝土建筑 —— Architrend办公楼

项目地点: 意大利西西里拉古萨 建筑设计: 意大利Architrend建筑师事务所 摄 影: Umberto Agnello Location:Ragusa, Sicily,Italy
Architectural Design: Architrend Architecture
Photography:Umberto Agnello

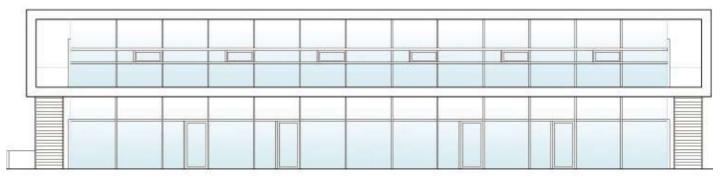
## 项目概况

项目由加固的混凝土建筑而成,周身玻璃覆盖,以求用最小能耗、最简捷的手法实现终极实用功效。

## 规划布局与建筑设计

项目位于拉古萨的郊区。二楼有个大大的框架,50cm高的混凝土立面界定了二楼的范围,使之与一楼的玻璃立面有别。宽大的悬臂结构让临窗部分避开了阳光的直射。铝框幕墙、光热控制的氩气双层玻璃窗、铝板条间电力调节的外部百叶窗,这些都充分利用了太阳辐射。

光电面板组合而成的系统布置在地块开阔处,50 KM的功率满足了整座楼的能量需求。所有的系统部件都由家居智能系统管理,包括室内外灯具的开关、调节日光强度的幕墙升降以及报警系统。降落在屋顶的雨水被收集起来用以绿化灌溉。







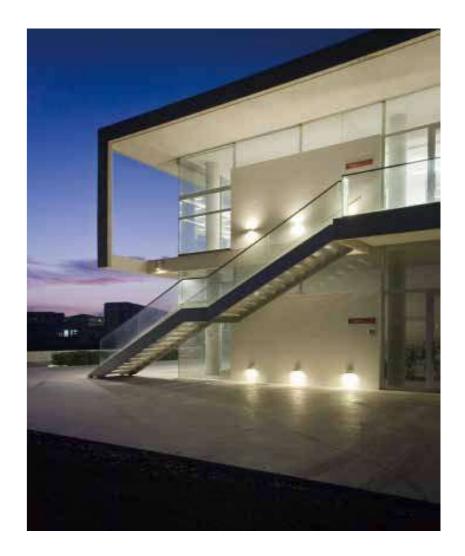
#### **Profile**

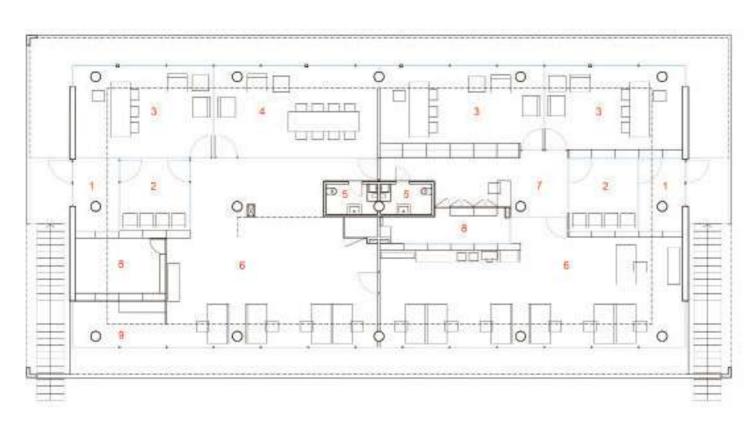
Made of reinforced concrete and covered in glass, this building with a strong character tends to get minimal, with the least formal means, the ultimate functional outcome.

# Layout Design & Architectural Design

The project is located in an area of urban sprawl on the outskirts of Ragusa. The building has a large frame on the first floor, concreteface view of 50 cm height, placed flush with the external shock defines the volume of the first floor, creating a gap with the glass facades of the ground floor. Wide overhangs to protect the entire perimeter of the building's windows from the sun, the curtain walls are made of aluminum frames with thermal and solar control double glazing with argon gas, along with a system of exterior blinds in aluminum slats, electrically adjustable, maximizing the contribution of solar radiation.

A system made up of photovoltaic panels, installed in an open area of the lot, by the power of 50 KW, fully complies with the building's energy requirements. All system components are managed by the building of a Vantage home automation system that acts on the sensors for the lights inside and outside, on the opening or closing the curtains to adjust the intensity of daylight and the alarm system. The water of rainfall collected from roofs is collected in a special reserve and reused for irrigation of green.





## FIRST FLOOR

- ENTRY

  RECEPTION

  OFFICE AREA

  SETTING ROOM

  OFFICE AREA

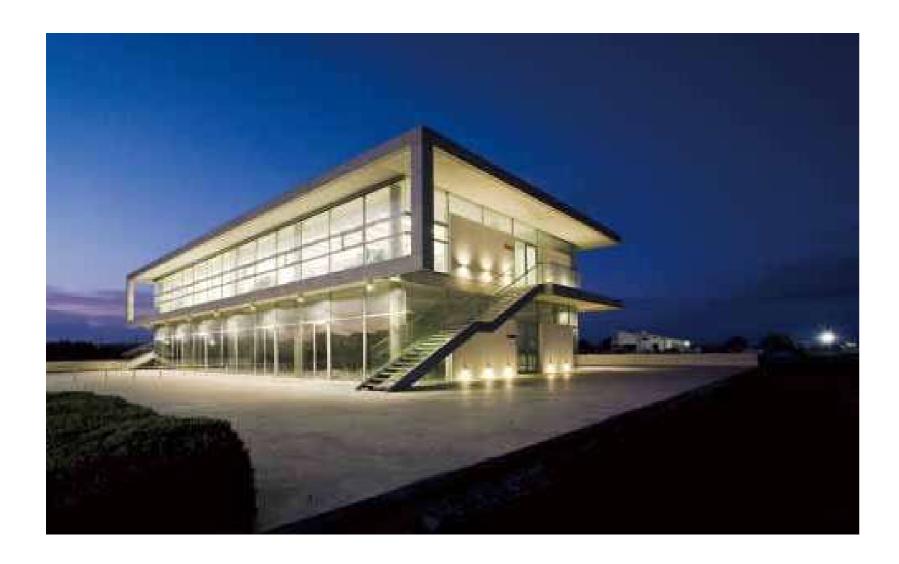
  ARCHIVE

  OFFICE AREA

  COFFEE AREA



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