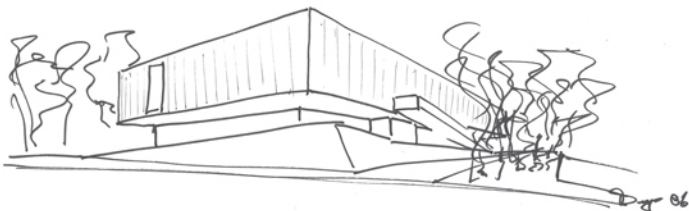


# Civic Centre and Library Ranica [BG] Italy

DAPstudio / elena sacco - paolo danelli  
+ studio architetto paola giaconia  
client: Municipality of Ranica

collaborators: P. Gallo, A. Mosci, L. Tagliabue, P. Vimercati  
schedule: design 2005-2006  
construction: 2007-2010



The Civic Center Roberto Gritti rests in a strategic position half way between the historical heart of the city and the new expansion areas and it is conceived as a new catalyst of urban life.

The building -housing a public library, an auditorium, a kindergarten, and a school for dance and theater- is made of two volumes, one laid on top of the other, centering on two interior courtyards. The lower volume is transparent, revealing the activities which take place inside to passersby, the upper volume sits on its top and becomes an urban signal. Its translucent polycarbonate sheets glow with vibrant tints and allow the silhouettes of people to be seen through the colorful watery facade.

The snow-white and sober interiors reveal a complexity which endows the spaces and the activities taking place in them with a powerful dynamism.

The interior spaces become a representation of a lively urban scene where the various places are connected by a grid of paths, to be walked through as well as enjoyed in moments of pause and encounter.

The bioclimatic project is based on low tech solutions and components, characterized by low-cost realization and management.

We have preferred passive solutions and this approach has impacted both on the architectural design (as regards the morphology and the articulation of the volumes) and on the choice of materials.

In this sense, the elongated and compact form of the building have a fundamental role as well as the two courtyards around which we have organized the interior spaces. These "outdoor rooms" provide a natural air circulation and the light

diffusion into the building.

In summer the upper opening windows of the courts, facilitate a natural cooling down in the library, which is organized with double-height spaces.

About the project of the building envelope it has been focused on the following aspects:

1. glasses with high thermal resistance and large windows on the south side
2. shielding systems made of polycarbonate panels in front of the windows and projections in correspondence of glass surfaces on the ground floor
3. ventilated façades in polycarbonate
4. elimination of thermal bridges and creation of polystyrene rigid board insulation in various parts of the building (exterior envelope, flooring, roofing, basements...)

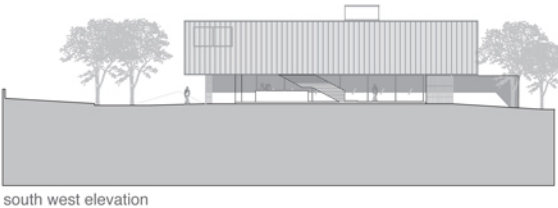
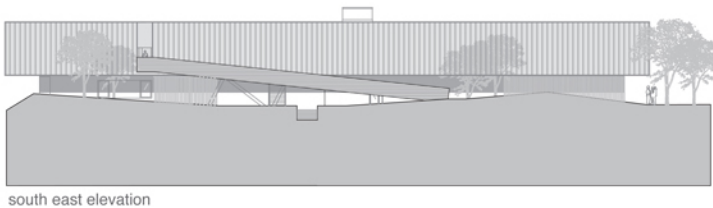
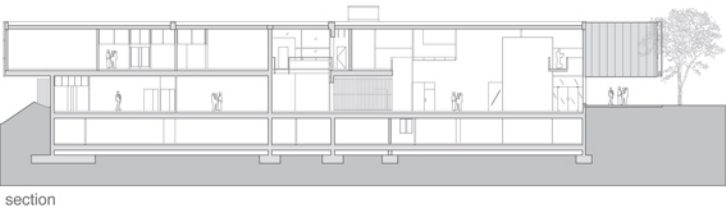
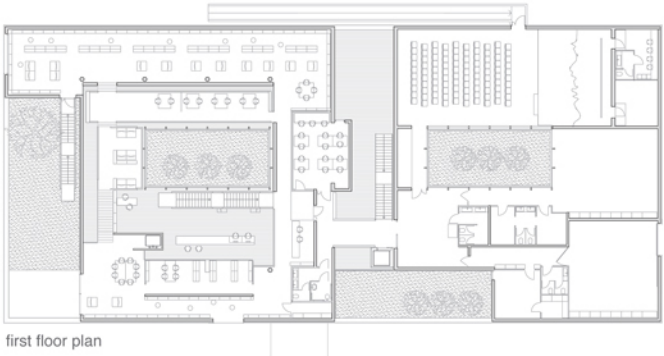
The external insulation boards in some parts are finished with plaster, but they are mainly covered with polycarbonate (ventilated facades) or wooden slats (ground floorvolumes)

As regards to the plants, the building is managed by a radiant floor heating and cooling, with heat pump

The system is also equipped for remote management system with devices for the automatic regulation of temperature in different areas.

Library and conference room are equipped with forced ventilation systems.

The production and distribution of domestic hot water is effected by reversing the refrigeration cycle and circulation pumps. The building is equipped with solar panels on the roof.



International Prize for Sustainable Architecture  
2013 Competition - Built Projects Division



Project name: Civic Centre and Library  
Project location: Ranica [BG], Italy  
Designer/s: DAP Studio / elena sacco - paolo danelli + studio arch. paola giaconia  
City - Country: Milan, Italy



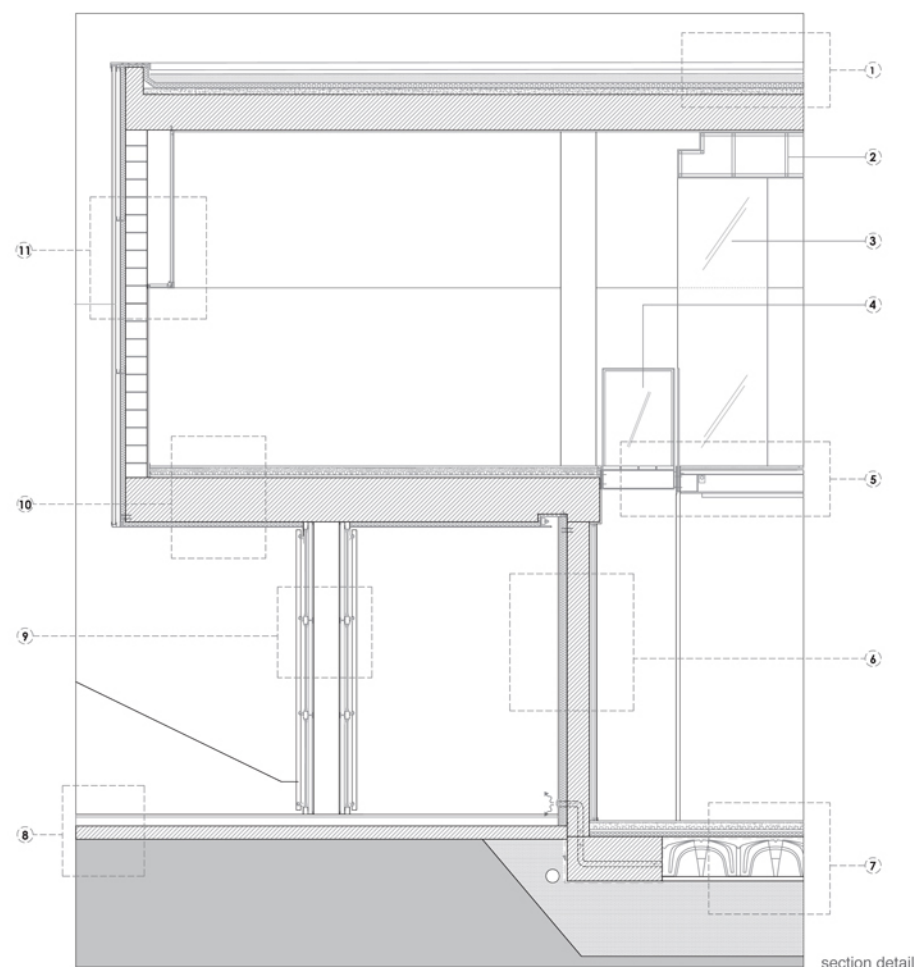




DAP studio based in Milan since 1992 and is directed by Paolo Danelli and Elena Sacco. The studio operates on various scales in both the public and private sectors. The consistent quality of achievement is the result of research and experience that led to the publication of many projects and provision of prizes and awards. The studio has also participated in the XII Biennial of Architecture of Venice.

Paola Giaconia lives in Florence. She couples her activity as a designer with scholarly research: she is visiting professor at California State University and at Kent State University, Florence programs. DAP studio and Paola Giaconia have collaborated on other projects as well, such as the bike path and bridge on the Serio river in Nembro (Bergamo), the restoration of the Spedale di Sant'Antonio in Lastra

a Signa (Florence), and the competition of the new Urban Center in Florence. The project was awarded first prize by the Institute of Architects in Bergamo as the best building in Bergamo and in its province in the last ten years. The jury, chaired by Swiss architect Aurelio Galfetti, selected the project for the new Cultural Center in Ranica as the Best Public Building.



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|---|--|
| 01 steel slab   | polystyrene panels   |
| gravel  | exterior plastering  |
| thermal insulation and nonconductor                         | 07 interior flooring   |
| screed, on inclined plane                                   | hard aggregate screed  |
| lightweight concrete  | heating screed   |
| 02 galvanized sheet structure to bear plasterboard 32x32 mm | polystyrene thermal insulation panels                        |
| plasterboard panel 13 mm                                    | crawl space with iglù  |
| 03 laminated safety glass 8+8                               | 08 asphalt concrete 3cm on 10cm binder                       |
| 04 laminated safety glass parapet 8x1.3x8mm                 | ramp slope   |
| 05 rubber flooring "artigo"                                 | soil   |
| galvanized steel section, interaxis distance 25cm           | 09 timbers frame   |
| cut-out for escape-route lamps                              | 10 rubber flooring "artigo"                                  |
| "barrisol" suspended ceiling                                | concrete screed  |
| tubular warm galvanized steel pipe welded to the structure  | heating screed   |
| IPE 200 steel section                                       | lightweight concrete   |
| 06 interior plastering                                      | 11 polycarbonate panels, 4 layers form and 3 layers air      |
| plasterboard counterwall for escape-route wiring            | light expanded clay aggregate blocks "Leca" B/25 bioclimatic |
| concrete wall   |  |

section detail

