



Project: Quinto Vicentino
School, Italy

Allplan in practice

A SCHOOL DESIGNED WITH IMAGINATION

Demanding projects require powerful software. Compliance with the strict school building regulations, and earthquake and fire safety were top of the priority list in the planning process for the Quinto Vicentino primary school in Italy.

Accessibility for people of all physical abilities and low-cost energy consumption were also central requirements. To do justice to this complex project brief, the designers called on Allplan.

The construction of a primary school in Quinto Vicentino is one of the latest project implementations of the GPA architecture firm. The building has received particular acclaim both from local institutions and, most importantly, the children. GPA was founded in 1990 and today consists of two architects, an engineer and a surveyor. Most of their planning work is for private and public buildings, with a focus on kindergartens, schools, sports halls, conference centers and swimming

pools. "State-of-the-art hardware and software are basic prerequisites at GPA. That's why for ten years now, we have been using Allplan Architecture, CINEMA 4D and On-Site Photo," explains Gianluca Perottoni, who was responsible for the planning of the school.

The project in Quinto Vicentino consisted of the construction of a new building for the town primary school to be located beside the existing, free-standing sports hall. The school contains ten classrooms, five special-subject rooms and three group-work rooms. The building also has a large multi-function room that forms the heart of the school, and a school cafeteria. The complex



is surrounded by a green recreational area, and a covered corridor connects the school to the adjoining sports hall.

MEETING THE CHALLENGE

The main focal points of the project were technical safety, compliance with the strict school building regulations, and earthquake and fire safety. Accessibility for people of all physical abilities was also important, as were the specific construction technology used and the need for low-cost energy consumption. To meet the challenge of these complex project requirements, the planners called on the multi-faceted functionality of Allplan. "Using Allplan for visualizations means that I can demonstrate my ideas to all the project members quickly and simply," says Gianluca Perottoni.

In order to do justice to the requirements and needs of the building client, the final design of the Quinto Vicentino school was arrived at only after several preparatory sketches and plans that incorporated the suggestions of the various parties involved in the project. These alternatives were discussed regularly with the building committee, the town council, the schools inspector and the school board of management. Ultimately, the decision was made for a modern, functional architectural approach.

"We created the concept for the school building so as to allow sufficient space for cross-subject group projects and a large play area. The pupils spend a large part of their time in this building, so it has to offer them a lot of space to develop

freely and just be themselves," says Gianluca Perottoni. For this reason, surfaces consisting of simple, flowing lines and an imaginative façade with a deliberately chaotic structure are important elements of the new school complex.

The project planning team had ten members who collaborated on the design of the creative structure. One particular challenge that arose was the need to convince the town council of the advantages of a modern architectural style. The council's members initially preferred a traditional architectural approach with "Barchessa-style" components that are typical of the Venice region. Thanks to the impressive visualizations created with Allplan and CINEMA 4D, GPA ultimately succeeded in winning the client's approval for an innovative project. GPA's project concept showed a realistic model with views, plans and schedules for creating the final structure. Integrating the architecture into the environment and fulfilling the competition brief were also central considerations in the modeling process.

OPTIMIZED WORK PROCESSES WITH WORKGROUP MANAGER

The entire project in Quinto Vicentino was based on collaboration with all the experts involved. "The Allplan Workgroup Manager enabled everyone to access the same project data, to add new information or change existing data," says Gianluca Perottoni. Thanks to this enhanced collaboration and the consistent, always up-to-date data basis, the Allplan Workgroup Manager greatly speeded up the progress of the project. After completion, the



"The building model gives us all the information we need. Besides plans, views and sections, it gives us a wide range of data on surfaces, volumes and construction costs planning for individual building components. And this information is available at each individual stage of the construction, not just at the end of the project."

Gianluca Perottoni,
GPA Architecture Firm

plans could then be checked by the engineers and building technicians from the construction viewpoint. For this to be possible, the various parties had to be able to exchange data in various formats. "This was hassle-free to do using the 2D and 3D formats, as everyone, including the private building client, can open and understand these formats at the click of a mouse," explains the Italian architect. "Thanks to its incredible accuracy and precision

in the planning process, Allplan has become an absolutely indispensable tool for me. I also use it to train new and less experienced staff. The professional visualizations also enable me to make a favorable impression on my client long before building work starts. The views are so realistic that when you see the finished building, it's almost like a déjà-vu experience." Construction work on the school project began in 2006 and was completed at the beginning of 2008, and the total investment amounted to 2.25 million Euro.

ABOUT ALLPLAN

ALLPLAN is a global provider of BIM design software for the AEC industry. True to our "Design to Build" claim, we cover the entire process from the first concept to final detailed design for the construction site and for prefabrication. Allplan users create deliverables of the highest quality and level of detail thanks to lean workflows. ALLPLAN offers powerful integrated cloud technology to

support interdisciplinary collaboration on building and civil engineering projects. Around the world over 500 dedicated employees continue to write the ALLPLAN success story. Headquartered in Munich, Germany, ALLPLAN is part of the Nemetschek Group which is a pioneer for digital transformation in the construction sector.

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