



Protestant Elementary
school Karlsruhe, Germany

Allplan in practice

LEARNING IN A PLAYFUL MANNER BEHIND COLORFUL WALLS

A unique learning concept also often places specific requirements on the structure of a school building.

The wulf architekten project for the Protestant Elementary school Karlsruhe, which follows the Montessori concept, is a good example of this. The construction project of the school foundation of the Protestant Church in Baden consists of two clearly defined, two-story individual buildings (elementary school and sports hall), grouped around a shared courtyard. At the same time, this central schoolyard is the entrance to all areas and creates a concise and highly recognizable outdoor area. In the construction of the elementary school,

the Montessori concept can be felt in the room layout in particular: For example, what are known as «support areas», in which the children are given specific support if necessary, are directly linked to the four 80-square-meter classrooms. The generous, open-plan corridor area of the school building will become what is known as a «Learning House», in the style of Montessori education. This learning house accommodates games and teaching materials under one roof and combines these areas into a single function. The learning house is



designed to enable pupils to experience greater freedom of learning and is equipped accordingly with purpose-built seating and standing furniture that can be used in a flexible manner. Because evacuation routes do not form part of a busy learning house such as this, wulf architekten are reverting to evacuation balconies and evacuation stairs for this purpose.

As far as the external facade is concerned, the colors red and green as well as the grid play a dominant role. The «staccato» effect of the facade was created to protect the pupils' privacy. The building grid creates the «free rhythm» of the building, at 60-centimeter intervals. The facade grid becomes denser depending on the use of the space behind it, thus forming a type of «curtain» which stretches around the entire building.

Another important aspect of the design of the facade is its colors. The buildings should be friendly and inviting without looking «childish». Pupils should feel that they are being taken seriously. In the end, various shades of green and red, which make the buildings look a different color depending on the angle, were chosen for the facades. The silver slats in between also always reflect the color of the opposite facade a little, thereby highlighting the ever-changing overall impression of the building. The color concept continues inside the

building. The skylights were designed in such a color that an entirely different impression of the building can be created depending on the time of day.

The sports hall forms the second element of the school complex. The hall is sunk into the ground about three meters, and access to equipment stores and changing rooms is only available on one longitudinal side. The school administrators are located above. Above ground, a pavilion invites passers-by to pay a visit. The first construction phase involving the elementary school and the sports hall is now complete and the school houses pupils from first to fourth grade. In a second construction phase, a high school will then be added to the building complex to create an integrated high school.

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- > **Focus: Public construction/school construction**
 - > **Client: School foundation of the Protestant Church of Baden**
 - > **Planning start date: March 2011**
 - > **Completion: April 2013**
 - > **Project phases: 2 to 9**
 - > **Construction costs: 8.25 million euros**
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"The entire project was developed three-dimensionally in Allplan. We were able to review important architectural decisions on the 3D model."

Ingmar Menzer, wulf architekten

THE CLIENT

wulf architekten originated from the architecture firm founded by Tobias Wulf in 1987 and is managed by Professor Tobias Wulf, Kai Bierich, Alexander Vohl, Jan-Michael Kallfaß, Ingmar Menzer and Steffen Vogt. The spectrum ranges from public buildings such as cultural buildings, schools and colleges, agencies, and health and sports centers, but also residential and social buildings and CI commercial buildings. The firm

has also been working on construction in existing contexts, innovative energy concepts and major infrastructural projects such as trade fairs and transport facilities, as well as on general plans, for over 10 years. In addition to these focuses, wulf architekten is also active in teaching, professional organizations, and as an assessor. The increasingly international firm currently employs around 100 employees.

ABOUT ALLPLAN

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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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