# Hybrid construction for elementary school, Bonstetten

2015

Wood characterizes the children's everyday school life at the Schachenmatten school building in Bonstetten. Built in 2015, the school building is a hybrid construction with concrete ceilings and load-bearing exterior walls made of wood. The example shows: Wood construction is also becoming increasingly important for public buildings.

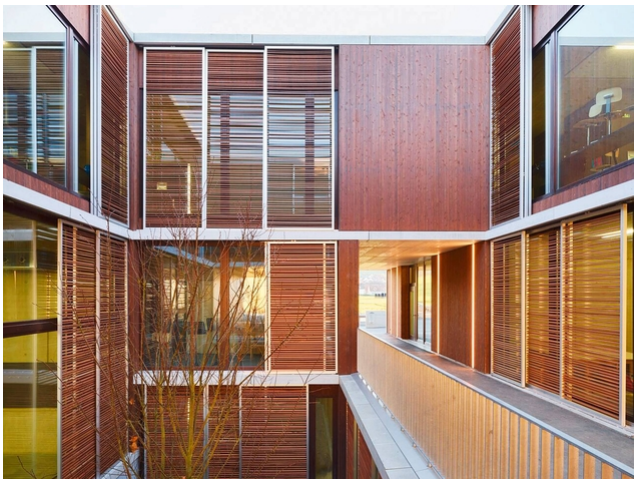
## The project

A few years ago, it became clear to the school authorities of Bonstetten near Zurich that the school space would soon no longer be sufficient for the increasing number of pupils. The number of inhabitants in the municipality has risen to over 5300 in the last 25 years, almost doubling. The school authorities of Bonstetten therefore announced a competition for a new school building, which was won by the office of Zurich architect Peter Moor with his project "Sociotop". The new school building has space for kindergarten rooms, plus classrooms and group rooms for the elementary school, as well as a music room and a singsaal. In the basement, which is open on one side to the playground, there are rooms for handicrafts, block times and therapy, among others.

## The construction method

The new Schachenmatten school building in Bonstetten is a hybrid construction of wood and concrete. The ceilings are made of concrete, while the exterior walls are made of wood. According to the architect, this solution was chosen on the one hand because wood in combination with exposed concrete creates an architecturally high-quality appearance and wood in the classrooms creates a pleasant atmosphere for the students. In addition, wood has the advantage that this building material allows a dry construction and that the construction time is significantly shorter with wood compared to solid buildings. In the school building in the Zurich suburb, wood was used as a load-bearing material. This made it possible to solve both the thermal insulation and the load-bearing structure with very narrow exterior walls.

A lot of wood: pleasant atmosphere in the classroom



View into the inner courtyard: Filigree wooden sliding elements protect from the sun

Shorter construction times thanks to wood (pictures by Roger Frei)

**Construction Data**
- Glulam 25 $m^3$
- Structural timber 25 $m^3$
- Wooden panels 1700 $m^2$
- Wooden formwork 820 $m^2$

**Services of Timbatec**
- SIA phase 31 preliminary project
- Cost estimate
- SIA Phase 32 Construction project
- Technical site supervision and site inspections
- Structural analysis and design
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- Technical construction management

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