

# School building extension Gallenbühl, Aeugst am Albis ZH

2019

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Thanks to an extension and a storey addition, the Gallenbühl school building in Aeugst am Albis once again offers sufficient space for all pupils. Timbatec was responsible for the statics and fire protection.

## The project

With the addition of the second floor, the school building received a new upper floor. For this purpose, the existing roof was converted into a floor slab, and the new floor is now located above it. The intercepting beams were installed in the old roof because the floor plans on the new floor are different from those on the existing floors below. The joists and ribs in the stud walls and roofs were optimized. The interception of the different cross-sections compensated for the differential deformation.

## The construction

The extension was built in timber construction. The ceilings and the roof structure were executed with box girder elements, the walls with stud structures.

## The challenge

The long spans of the roof and the ceilings as well as the differential deformation of the interception beams were the exciting challenges for the engineers.



### Construction Data

- Two storey
- Gross floor area approx. 1500 m<sup>2</sup>
- Glulam approx. 4 m<sup>3</sup>
- structural timber approx. 20 m<sup>3</sup>
- three-layer boards approx. 700 m<sup>2</sup>

### Construction costs

- BKP (timber construction): 250,000.Swiss francs

### Services of Timbatec

- Statics and construction
- Fire protection planning
- Fire protection quality assurance QSS2
- cost estimation
- product development
- Technical site supervision and site inspections
- SIA Phase 51 Implementation project
- Technical planning of building physics
- SIA Phase 41 Tendering and comparison of offers
- Work planning 3D and 2D

### Client

Schulgemeinde Aeugst  
8914 Aeugst a. A.

### Architect

Baucal AG  
8910 Affoltern am Albis

### Timber constructionengineer

Timbatec Holzbauingenieure (Schweiz) AG Zurich  
8005 Zurich

### Timberconstruction

Köfler Holzbau  
8909 Zwillikon

### Construction management

Baucal AG  
8910 Affoltern am Albis