# Modular construction education center (BZM), Muttenz

2023



Due to a lack of school space, a two-storey modular building was constructed on a hard surface sports field. Timbatec supported the timber constructor in statics, in particular earthquake safety, construction and building physics.

## The project

In order to enable the renovation of other buildings, the Muttenz Education Center had to create temporary classrooms for five years. For this purpose, a two-storey modular building was erected, consisting of six classrooms and a common room for up to 60 people. Due to the radon contamination of the soil, a conventional foundation was dispensed with and the building was placed on a hard surface. Together with the timber constructor, an optimized system was developed for the modular construction, which allows quick and safe (dis)assembly.

# The construction method

Modular construction has various advantages. Prefabrication guarantees quality, shortens the construction time and enables easy relocation at the end of the useful life. However, transportation requires logistical effort. The floor plan and connections between modules can entail restrictions and structural complexity. The temporary building was planned as a modular construction from the outset, which minimizes the restrictions.

# The challenge

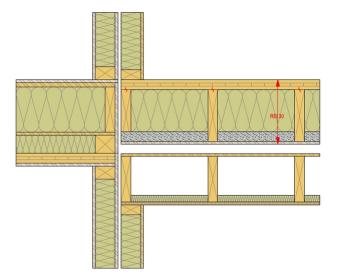
As no foundations could be anchored into the ground, strip foundations had to be used to connect the modules to each other in the event of an earthquake. The connections between the modules can be easily and safely loosened, making it easier to relocate them at a later date.











Photography: Stamm Bau AG

#### **Construction Data**

- Building volume 2370 m<sup>3</sup>

#### **Services of Timbatec**

- SIA Phase 32 Construction project
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Statics and construction
- Specialist planning building physics

### Construction cut

#### Timber construction engineer

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