

Conversion gymnasium, Bure

2020



The old metal structure was reinforced. Timbatec was responsible for the structural details and dimensioning of the roof and the building envelope. Likewise, Timbatec controlled the thermal bridges and surface condensation risks.

The project

The triple hall at the Bure armory was completely renovated. The existing metal structure was preserved and reinforced to meet the new parasismic standards. Prefabricated caissons were built for the roof, directly integrating the hall's soundproofing. Insulation was added to the caissons, as well as counter-battening. The roof covering was made of metal sheets. The exterior envelopes consist of insulated wood frames, with acoustic cladding and ventilated Eternit facade on the exterior. The gymnasium equipment was integrated into the wood frames to be flush with the walls, a requirement of the gymnasiums.

The construction

The entire shell was made of wood, and the existing metal structure was refurbished and reinforced. Part of the technical rooms, locker rooms and machine rooms are made of reinforced concrete and reinforced with carbon fiber.

The challenge

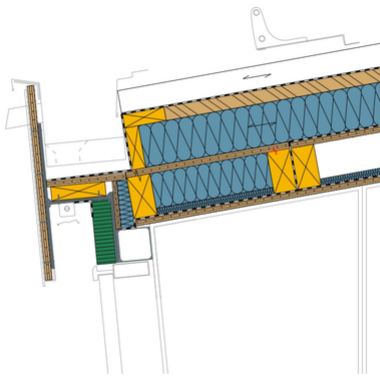
There were no special challenges in this project. According to this principle, several sports halls of Armasuisse of the same size have been renovated in recent years.



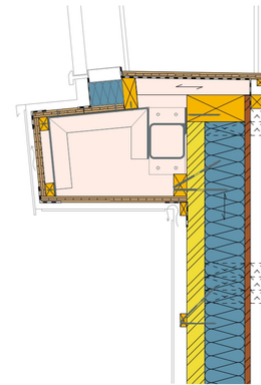
Interior view



Close up



Detail above the window



Detail roof edge

Construction Data

- Three-layer boards 75 m³
- OSB boards 13 m³
- spruce / fir 130 m³
- Wood fiber insulation 137 m³
- Rock wool 283 m³

Construction costs

- Shell and roof
- without structure: 1 million Swiss francs

Services of Timbatec

- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Statics and construction
- Technical planning building physics

Client

Armasuisse Immobilier
1006 Lausanne

Architect

SIRONI&ASSOCIÉS SA
2900 Porrentruy

Timberconstruction engineer

Timbatec Holzbauingenieure (Schweiz) AG Bern
3012 Bern

Timberconstruction

Batipro SA
2882 St-Ursanne

Civil engineer

Buchs et Plumey SA
2900 Porrentruy

Building physics

Timbatec Holzbauingenieure (Schweiz) AG Bern
3012 Bern