

New construction sports hall Auenfeld, Frauenfeld

2006



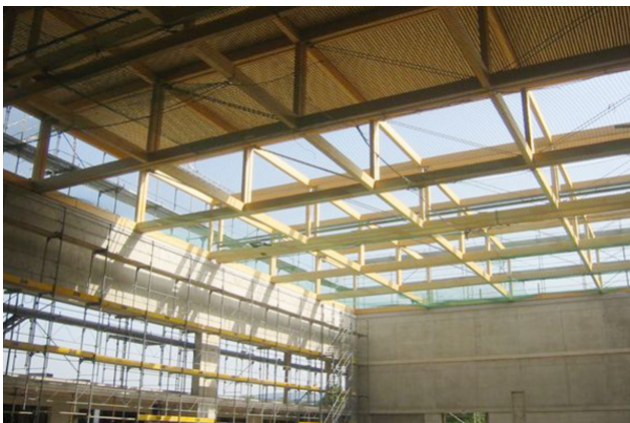
According to the initial plans, the roof structure of the triple gymnasium was to be realized as a shed roof with six large sheds in steel construction. After other structural variants, also in wood, had been examined in detail, the client decided in favor of a flat roof in wood construction.

The project

The main supporting elements of the roof are formed by trusses arranged in pairs at 5.40 m grid. The top chord (18 / 36 cm), bottom chord (18 / 36 cm) and posts (18 / 18 cm) are made of glulam, while the struts are steel tension struts.

The construction method

This construction method allows a continuous rooflight to be realized all around and over the static height of the trusses. Different variants existed for the roof structure. The outer wall of the hall consists in the area of the supports for the main girders of clamped reinforced concrete columns, in between of a double-shell masonry.



Assembly of roof elements



Assembly of roof elements



Detail with GSA technology Transport Binder: It's narrow in Appenzellerland

Construction Data

- Main structure truss hall 32 x 45 m
- Total area: 2295 m²

Services of Timbatec

- Cost estimation
- Statics and construction
- SIA phase 41 tendering and comparison of offers
- Works planning 3D and 2D
- Variant study in wood
- quality assurance



Production of roof elements

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