

Shelter Herferswil, Mettmenstetten

2023



The wooden shelter for agricultural machinery designed by Trachsel Technik AG was planned and constructed to be both aesthetically pleasing and cost-effective, while meeting all functional requirements.

The project

This impressive timber-frame structure was built in the picturesque surroundings of Herferswil near Mettmenstetten in the Säuliamt region. It meets functional requirements while also impressing with its aesthetic appeal. The project involves the construction of a new shelter with a floor area of 12 by 10 meters and a height of eight meters. What sets this building apart are its unique structural features and innovative design.

The construction method

The shelter consists of three continuous wooden truss structures. Thanks to the significant and deliberate reduction in posts and supports, the usable and maneuvering space for vehicles remains as unobstructed as possible, allowing for tight turning radii. The 12 × 10-meter floor area rests on a foundation anchored only 3 meters deep, meaning that 7 meters of the building complex are cantilevered.

The challenge

One of the biggest challenges in designing and implementing this project was that the structure had to withstand interacting forces: significant loads (the roof structure, including additional snow loads in winter) as well as substantial tensile forces (wind loads).



The structure must also be designed to withstand heavy snow loads.



Close-up view of the internal truss structure of the timber frame



View of the truss structure of the timber frame



Roof structure with a long overhang

Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Structural analysis and design
- Technical supervision and site inspections

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