

Gfellerhof, Stettbach ZH

2018



At the Gfellerhof in Stettbach near Zurich, a feed store and a coach house were each replaced with a larger structure. In addition, the existing barn was structurally strengthened.

The project

The Gfellerhof in Stettbach is located on the edge of the forest with a view of Schwamendingen and is part of the socio-educational school Gfellergut. The organic farm is home to around 60 cows and a bull, as well as calves and boarding horses. Since great importance is attached to species-appropriate animal husbandry and since the buildings on the Gfellerhof were reaching their capacity limits, the existing feed store and the coach house were replaced, and the barn was structurally upgraded. The two new buildings are each about twice as large as their predecessors. For the City of Zurich, as the building owner, it was clear from the outset that as much wood as possible must be used as an ecological building material on the Gfellergut. The wood used for the facades comes from the Swiss forest and also protects the climate thanks to short transport routes.

The construction

The two new replacement buildings for the feed store and the coach house were realized with a pincer construction on supports. In the case of the feed store, in addition to the uprights and the rafters, the braces are also made of glulam, whereas in the case of the coach house with its large canopy, a steel bar is responsible as a tension band for absorbing the static forces. The facade was realized with a cover strip formwork made of Swiss spruce.

The challenge

One of the major challenges in this project turned out to be the track of the crane system for hay transprotection, which is attached to the roof structure. Due to the loads eccentric to the supporting structure and the movements of the crane, demanding load cases had to be calculated for the supporting structure.



Close view front feed store



Front shed



Interior view feed store



Interior view coach house

Construction Data

- Structural timber for fodder storage walls 80 m³
- Glulam for truss system 60 m³
- Glulam for rafter purlins 65 m³
- Cover strip formwork 1000 m²

Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- Technical site supervision and site inspections
- Structural analysis and design
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project

Architect

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Client

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Construction management

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