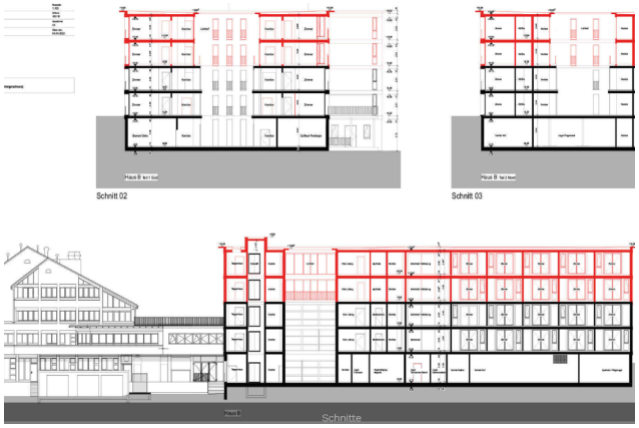
Extension of care center in Loo, Esslingen

2024



The retirement and care center in Esslingen needed additional space. Thanks to the innovative TS3 technology, the existing load-bearing structure could be taken over and the building extended by 2 storeys. The short construction time, use of regional timber and flexible room design thanks to TS3 technology make the building a showcase project for sustainable construction

The project

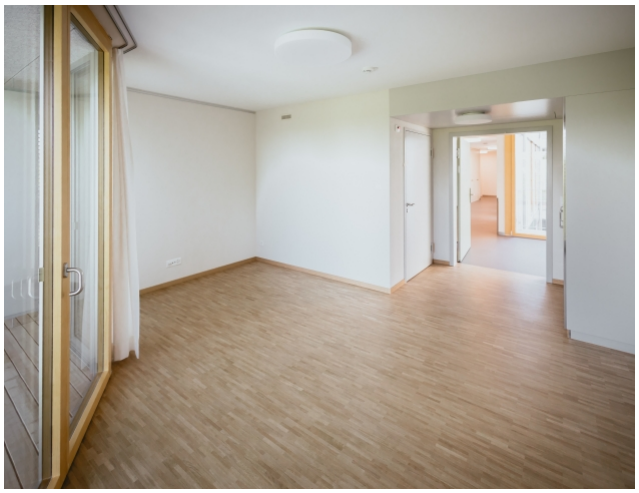
The care center consists of two buildings from different years of construction. In the first stage, two full storeys will be added to one building. Thanks to TS3 technology, the existing point-supported load-bearing structure designed for solid construction can be retained. In a second stage, the remaining storey will be replaced by a new replacement building. The TS3 system enables the TS3 ceilings and columns to be installed quickly and quietly, so that operations and residents are only affected for a short time.

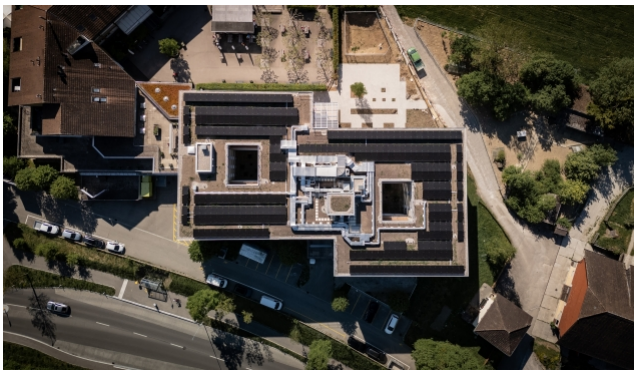
The construction method

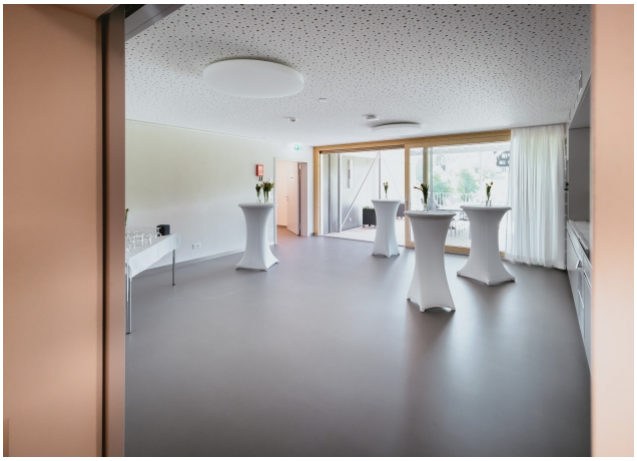
A total of 2870m2 of CLT will be used, which corresponds to around 746m3 of timber. The TS3 system is used in a total of 978 linear meters. Fire protection poses a challenge. The TS3 ceilings and the prefabricated wall elements are planked with plasterboard. Precise, safe and quick construction is essential for new replacement buildings and extensions, which is why the TS3 system was used for the project.

The challenges

The challenge was the logistics and the construction process. The extension was built during ongoing operations. A high degree of prefabrication and precise processing guarantee short assembly times. The elements are delivered to the construction site and moved just in time. This minimizes the impact on ongoing operations The TS3 system helps to overcome the challenges of building in urban areas by focusing on safety, speed, flexibility and sustainability.







Construction data

- Number of storeys: 2
- Gross floor area: 2870m2
- Cross laminated timber: 746m3
- TS3 technology: 978 linear meters of joints
- CLT: 280mm storey
- 240mm Roof

Architecture

ARGE Loogarten asa AG, Rapperswil Reichle Architekten AG, Uster

Client

Loogarten Foundation / Quality of life in old age

Timber engineer

Timbatec Holzbau Ingenieure Schweiz AG, Zurich

Timber construction

Kübler Holzbau AG, Oetwil am See

CLT manufacturer: Schilliger Holz AG, Küssnacht am Rigi