

# Expansion of the Care Center in Loo, Esslingen

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The senior care center in Esslingen needed additional space. Thanks to innovative TS3 technology, the existing structural framework could be reused, and the building was expanded by two stories. The short construction time, the use of locally sourced wood, and the flexible interior design made possible by TS3 technology make the building a showcase project for sustainable construction.

## The Project

The care center consists of two buildings constructed in different years. In the first phase, two full stories will be added to one of the buildings. Thanks to TS3 technology, the existing point-supported load-bearing structure—designed for solid construction—can be retained. In the second phase, the remaining building will be replaced with a new structure. The TS3 system enables quiet and rapid installation of TS3 ceilings and columns, ensuring that operations and residents are only briefly disrupted.

## Construction Method

A total of 2,870 m<sup>2</sup> of CLT is being installed, which corresponds to approximately 746 m<sup>3</sup> of wood. The TS3 system is used over a total of 978 linear meters. Fire protection poses a challenge. The TS3 ceilings, as well as the prefabricated wall elements, are clad with gypsum board; precise, safe, and rapid construction is essential for replacement buildings and additions, which is why the TS3 system is being used for this project.

## The Challenges

The challenge lay in logistics and the construction process. The addition was constructed while the building remained in operation. A high degree of prefabrication and precise fabrication ensure short installation times. The elements are delivered to the construction site and installed on a just-in-time basis. This minimizes the impact on ongoing operations. The TS3 system helps overcome the challenges of building in urban areas by prioritizing safety, speed, flexibility, and sustainability.





### Construction data

- Number of floors: 2
- Gross floor area: 2,870 m<sup>2</sup>
- Cross-laminated timber: 746 m<sup>3</sup>
- CLT-280 mm floor slab
- CLT-240 mm roof
- TS3 technology: 978 running meters of joints

### Architecture

ARGE Loogarten asa AG, Rapperswil Reichle Architekten AG, Uster

### Client

Loogarten Foundation / Quality of Life in Old Age

### Timber engineer

Timbatec Timber Construction Engineers Switzerland AG, Zurich

### Timber construction

Kübler Holzbau AG, Oetwil am See

CLT manufacturer Schilliger Holz AG, Küssnacht am Rhein