

# Renovation «Alte Trotte», Zürich

2019



The listed building «Alte Trotte» from the 16th century has been extensively renovated. The 12 private rooms with shared kitchen, large living room as well as wet cells and common rooms offer space for up to 14 people.

## The project

The property at Nordstrasse 331 in Zurich-Wipkingen was extensively renovated. High priority was given to the preservation of the existing substance due to the protection of historical monuments. Before the renovation, the building was in poor condition. It had been continuously altered in the past and in part unprofessionally adapted to the user needs. The annex with a trailing roof on the west side is not protected and has been replaced by a new building in wooden element construction. After the renovation, the 3-storey residential building with a loft in the attic will be used by a residential community of up to 14 people. For this purpose, the maximum possible quality of the living conformation, such as spatial qualities, infrastructure, surfaces, indoor climate and sound insulation, which was possible with the existing substance, was set.

## The construction

Very little was changed in the construction of the existing building. The load-bearing structure, consisting of infill framing, quarry stone walls and timber framing, was retained. The beam layers and the roof truss structure were retained and have been partially supplemented and upgraded. The single-story extension was built in new wood element construction.

## The challenge

The first major challenge was to foresee in the planning phase which building components would still meet the requirements of the use and the architecture after the renovation. During construction, the floor slabs were dismantled down to the primary load-bearing structure and could be recorded and strengthened accordingly. At the same time, the considerable settlements within the ceilings were slightly compensated. For the load transfer of the floor slabs, the existing pincer layer was replaced and supplemented with new beams.



Existing roof truss



Reinforced supporting structure above the kitchen



Transition old building-new building (Photos © Ariel Huber)

### Construction Data

- Construction period 2018-2019
- New timber approx. 20m<sup>3</sup>
- Reinforced floor slabs approx. 300m<sup>2</sup>
- Renovated and new roof areas approx. 360m<sup>2</sup>

### Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- Statics and construction
- Site management and site inspections

### Architect

Felder Architektur 8004 Zurich

### Client

City of Zurich Office for Structural Engineering 8001 Zurich

### Timberconstruction engineer

Timbatec Holzbauingenieure Schweiz AG 8005 Zurich

### Timberconstruction

A. Steiner Carpentry & Joinery 8050 Zurich

### Photography

Ariel Huber 8004 Zurich