

# Zwyssigstrasse 5+7, Zürich

2018

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The new replacement buildings in Zurich Altstetten are among the first projects that can do without concrete in the stairwell as well. This has been possible since the revision of the fire protection guidelines in 2015.

## The project

The initial situation was the same as in many other places: old apartment buildings from the 1950s on a site that could be much better utilized according to today's standards and requirements. The architects recommended a replacement building in timber construction. The two apartment buildings, each with 14 apartments, are purely wooden structures from the first floor slab upwards. The combination of polycrystalline photovoltaic modules on the balcony parapets and the horizontal wooden facade give the buildings a distinctive character.

## The construction

The two apartment buildings consist mainly of prefabricated wooden elements filled with rock wool insulation. The floor slabs are made of solid wood. The staircase was also constructed from the renewable raw material: It consists of cross-laminated timber that was encapsulated with a gypsum fiberboard for fire protection.

## The challenge

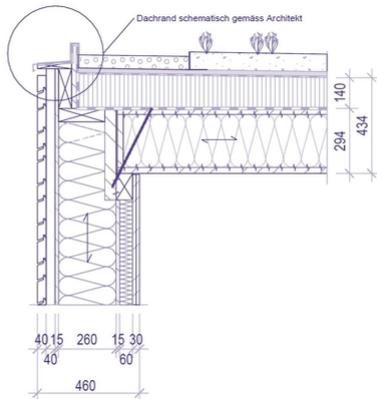
There were very few right angles in the architects' design. This led to a complex structural concept. Furthermore, the rooms were to be flooded with light as much as possible. Therefore, Timbatec planned the beams into the ceiling.



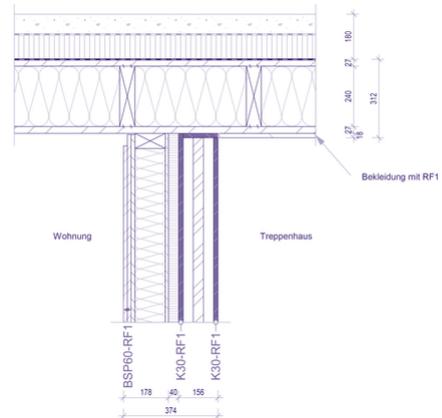
Insight into the kitchen with visible wooden ceiling (Photos: ©kämpfen für architektur ag, Zurich)



Spacious terrace with ground level exit



Walls and roof are made of wooden construction



The staircase is made of encapsulated wooden construction

### Construction Data

- Cross laminated timber 600 m<sup>3</sup>
- wooden stud walls 3'800 m<sup>2</sup>
- Wooden formwork 1'900 m<sup>2</sup>

### Services of Timbatec

- SIA phase 31 preliminary project
- Cost estimate
- SIA Phase 32 Construction project
- SIA Phase 51 Implementation project
- Fire protection planning
- SIA Phase 41 Tendering and comparison of offers
- Statics and construction
- Technical site management and site inspections

### Timber contractor

Hector Egger Holzbau AG  
4900 Langenthal

### Architect

Kämpfen für Architektur AG  
8048 Zurich

### Photos

Kämpfen für Architektur AG  
8048 Zurich

### Timber construction engineers

Timbatec Holzbauingenieure Schweiz AG, 8005 Zurich