

Apartment Building on Stampfenbachstrasse, Zurich

2022



High-quality living space in a compact setting—with the help of our engineers, the «Performative House» by the architectural firm Edelaar Mosayebi Inderbitzin has been realized in the heart of Zurich.

The Project

The six-story replacement building on Stampfenbachstrasse in Zurich houses small households in units of just over 55 square meters. Thanks to a cleverly placed rotating wall, movable wardrobe cabinets, and drawers in the raised floor, the living space is adaptable and versatile; residents need to bring only a few pieces of furniture. The building is constructed entirely of wood starting from the ground floor; the existing basement was preserved and repurposed. A 1:1 scale mock-up was used to test various structural and acoustic properties of this innovative construction method.

Construction Method

The floor slabs and walls of the performance venue are largely constructed from cross-laminated timber panels. The cross-laminated timber walls are load-bearing and transfer heavy loads from the upper floors to the ones below. To prevent the wood from being compressed at the support points on the floor slab—a phenomenon known as transverse compression—the loads are transferred via a beech dowel with a diameter of 6 centimeters.

The Challenge

Due to the high noise levels on Stampfenbachstrasse, the requirements for the facade are stringent (De 39 dB). These requirements can be met with an exterior wall made of cross-laminated timber and acoustically decoupled exterior insulation that acts as a cladding shell. Timbatec prepared the noise assessment; since the limit values were exceeded, a special permit was required.

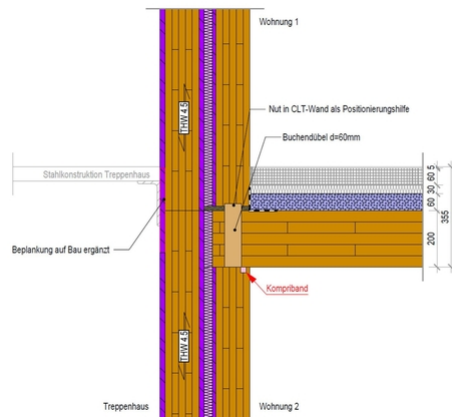
[Hochparterre Article - The Moving House](#)



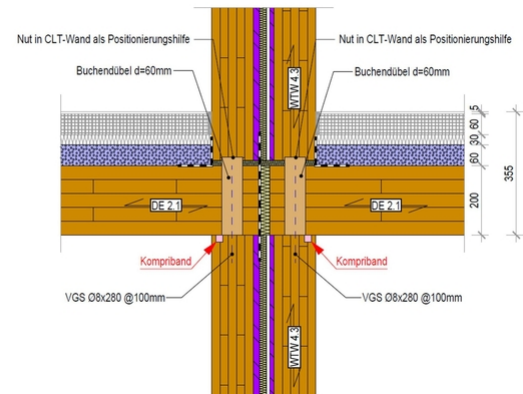
Rotating wall



Sound measurement in the mockup



Stairwell wall construction



Interior detail

Construction Data

- Number of floors: 6
- Floor area: 2,036 m²
- CLT: 503 m³
- Cross-laminated timber: 8 m³
- DUO: 35 m³

Construction costs

- BKP 214 CHF 1.2 Million

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
- SIA Phase 52 Execution
- SIA Phase 53 Commissioning
- 3D and 2D construction drawings
- Technical planning for building physics
- Technical planning for fire protection
- Structural engineering and design

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