



TICHELGASSE 17, VIENNA

AUSTRIA

The existing house Tichtelgasse 17 in 1120 Vienna is undergoing an extensive renovation, during which the building is topped up with two storeys (supporting structure made of structural steel), a new staircase made of reinforced concrete (incl. elevator shaft) and a balcony.

On behalf of the owner, convex ZT GmbH was responsible for the structural design. The building was comprehensively modelled in 3-D for assessing its load-bearing capacity in seismic condition, taking into account the increase in the number of inhabitants and the two additional storeys.

In a diploma thesis at the FH Joanneum (DI Andreas Skazedonigg, supervised by DI Dr. techn. Wolfgang Nesitka and DI Florian Knobloch), the behaviour of the brickwork walls in seismic condition was numerically analysed based on the available material data. In a further diploma thesis at the FH Joanneum (DI Marianne Weiß, supervised by DI Dr. techn. Wolfgang Nesitka and DI Florian Knobloch) the dynamic behavior of the structure has been determined by in situ vibration measurements. The results were compared with those of the 3-D structural model and showed good agreement.

Owner:

Krenn & Pongratz Bau GmbH

General designer:

Baumeister Leitner Gesellschaft mbH

Basic data:

13 apartments

Gross area:



800 m²

Completion:

December 2015

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photos:

F. Knobloch