New construction apartment house Walker, Bitsch

2007

The building plot is centrally located on Furkastrasse in Bitsch. Its prominent neighbor in the direction of Goms is the new Raiffeisenbank building: a white, monolithic cube. This presented an architectural challenge to create a valid counterpart to this strong presence. The plan was for a Minergie-standard apartment building with a parking garage.

The Project

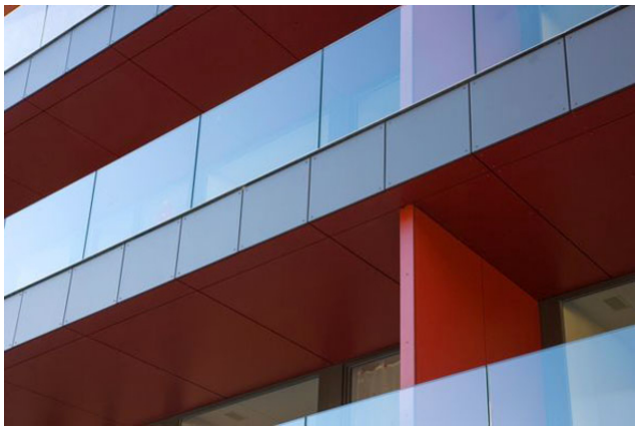
The wishes The client wanted a spacious attic apartment in a multi-family house with an ecological, contemporary construction and flexibly designed apartments. An occasion to work with a timber construction system and a clear grid from the very beginning. The result is a four-story structure with a flat roof. The load-bearing flexibility in the residential floors is created when only a few interior walls are load-bearing. The primary load-bearing structure is provided by columns in the walls, by a beam in the ceiling and by the exterior walls. Installations for plumbing, heating, ventilation and electrical systems are routed in the facing shells or in the false ceiling in such a way that subsequent retrofitting, maintenance or additions are possible at any time. The concept The ceilings and the roof are formed with prefabricated box elements and cantilevered beams for the balcony construction. They rest on the longitudinal facades and the central axis.

The Construction

The roof is extensively greened and can be walked on in the sun deck area. For the roof construction, the load from the whirlpool (sun deck) becomes the load case. The walls are constructed floor by floor in timber frame construction and prefabricated as elements. The stabilization of wind/earthquake forces is done via truss constructions in the bracing walls. The anchoring of the forces into the massive basement is ensured with inserted steel anchor shoes. Fire protection With regard to fire protection, the implementation is based on a standard structural concept. The basement is built in exposed concrete, as are the stairwell and the elevator shaft. The supporting structure of the wooden construction as well as the fire-section-forming building components between the individual apartments have a fire resistance of 30 minutes.

Living area

Kitchen



Facade cladding Formboard

Anchoring earthquake bracing

Construction Data
- 1 MFH
- Three-storey
- 9 meters high
- Minergie standard
- timber frame construction
- box elements

Services of Timbatec
- Structural analysis
- Earthquake proof bracing/overall stability details/detailed solutions
- Works planning for the timber constructor in 3D
- Planning/division of the form board facade
- Accompanying and consulting contractor/architect

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