



## More than living Hunziker Area, Zurich

A total of 370 apartments, shops, restaurants, workshops and artist's studios, day care centres, and a guesthouses have been constructed at the Hunziker Areal in Zurich. Besides the urban master plan, Duplex Architekten have been responsible for the design of two buildings on the site, the Cluster House («House A») and the Housing Community («House M»). The vision was to create a part of the city rather than an estate.

Instead of the usual large-scale forms of rows and blocks, the urban planning concept proposes a cluster of smaller detached buildings, their close arrangement forming a system of routes, squares and open spaces with a marked urban character.

The tension-filled sequence of the outdoor spaces as well as the public-oriented use of ground floor areas livens up the quarter. Besides the ample provision of a wide variety of common areas, the quarter also requires individual places of retreat. The special characteristic of this project lies exactly between these opposite priorities: security and privacy on the one hand, and varied opportunities to engage in activities of the community on the other.

In the dialogue phase, which followed after the urban planning competition, the projects were revised by the participating architectural practices (Duplex, Futurafrosch, Müller Sigrist, pool, Miroslav Šik) according to the agreed set of rules. A variety of residential forms and floor plans is thus implemented in the Hunziker Area, which fulfil the demands on living together cooperatively in various ways.

The cluster apartments of the «House A» are a new type of modern flat-sharing community with a generous common area (living/dining) and sleeping areas each with a separate bathroom. Smaller, private apartment satellites are coupled to larger common areas. Since the kitchens and living rooms need not be fully laid out for each private unit, less space is required. As a result, shared kitchens and joint living rooms can be planned more generously. The retreat to one's private sphere is nonetheless possible at all times because each private room also includes an individual bathrooms and a small kitchenette.

The compact building shape and the decision in favour of a single-layer wall construction made it possible to achieve very low energy consumption values without additional insulation. However, the limited load-bearing capacity of the porous blocks normally allows only three to four storeys. For the six-storey building, this difficulty was solved by means of windows strictly arranged above one another, a weight-saving



construction with only 20cm thick floor slabs as well as the design of a stiffening concrete core in the centre of the building.

### Thoughts about the construction

The single-layer wall construction or more precisely speaking, the used Porothersm clay block was introduced to the project during the feasibility analysis in 2010. At that time, the building block was rather unknown in Switzerland. We came across a product brochure by chance and presented the idea to the clients, who supported us immediately. From that moment on we have tried to give this project a «clay block-suited» design.

One of the challenges was to observe the maximum pressure resistance of the building block. The recommendation by ZZWancor was specified as 3-4 storeys, whereas we had planned six levels. So we started to reduce weight: Since the building should be built of brick, we reduced the number of concrete walls to four earthquake-proof walls, which simultaneously form the staircase. In order to reduce the thickness of the floor slabs, the span is restricted to slightly more than 6 metres. The cells of the floor plan concept provide the load-bearing structure.

Owing to the ventilation systems required today for buildings with favourable energy consumption, the thickness of floor slabs is usually not determined by the span but the building services placed inside them. Today, specialised technical planners demand a floor slab thickness of 26cm, so that acoustic specifications for ceilings with ventilation ducts and their intersections can be complied with. We have removed the ducts from the ceilings, rearranged the vertical ducts and laid out the air circulation by applying a kind of cascade principle. The floor slab thickness could thus be reduced to 20cm. Related to all storeys this equals a whole floor slab with a thickness of 30cm.

In the next step, we introduced a building block format into the planning. This was no requirement and caused a surprise when we first announced that we wanted to re-plan the building according to the block format. We had two reasons to do so: firstly, we had initially planned to leave the pattern of the building blocks visible on the façade and only protect the brickwork through, for example, whitewashing. For technical reasons, however, this was not possible. The brick is too porous and absorbs water. Secondly, it was obvious that it would probably be painstaking to cut such a big and heavy brick. By revising the layout according to the block format, we were able to plan storey heights, wall lengths and window dimensions to fit. The exterior wall was thus divided into wall segments, for which - with the exception of ceiling front areas - not a single stone had to be cut.



## **Project information:**

### Location:

House A: Dialogweg 6, 8050 Zurich, Switzerland

House M: Genossenschaftsstrasse 16, 8050 Zurich, Switzerland

Architecture: Duplex Architekten Zurich, Düsseldorf, Hamburg

Building cooperative: building cooperative «mehr als wohnen»

### Urban master plan:

Duplex Architekten Zurich, Düsseldorf, Hamburg

in cooperation with Futurafrosch GmbH and Müller Illien Landschaftsarchitekten

Category: housing, commerce, services

Floor area: 77,500 m<sup>2</sup>

Volume: 242'000m<sup>3</sup>

Project period: 2009–2015

Plot area: 40'200 m<sup>2</sup>

Usable floor space: ca. 47'400 m<sup>2</sup>

Living space per resident: 35m<sup>2</sup> (urban plan)

Apartments/Flats: 13 buildings with 370 Flats, 1'200 residents and 150 workstations

Parking: 106 (urban plan)

Total costs (excluding the land): SFR 185 Mio.

### **Building A:**

Gross floor area (GFA): 6'883 m<sup>2</sup>

Usable floor space: 4'352 m<sup>2</sup> (3'937m<sup>2</sup> living and 415m<sup>2</sup> commercial space)

Apartments: 11 «Cluster Flats» (ca. 400m<sup>2</sup>/ap. with 9 «clusters», 10-12 people/ap.)

### **Building M:**

Gross floor area (GFA): 6'484m<sup>2</sup>

Usable floor space: 3'923 m<sup>2</sup>

(3'097m<sup>2</sup> living and 826m<sup>2</sup> commercial space – manger)

Apartments: 29

(4 Studios, 5×3,5-room ap., 10×4,5-room ap., 5×5,5-room ap., 5×6,5-room ap.)

### Team

Anne Kaestle, Dan Schürch, Konrad Mangold,

Jonas Hertig, Andreas Kopp, Simon Schoch, Praktikanten: Sofia Kalafatis,

Inga Steinbüchel, Noah Traber



#### Project Participants:

General contractor: Steiner AG

Construction engineer: Edy Toscano AG / Ernst Basler + Partner AG

Building technology: HLKKS Müller, Bücher Ingenieure FH Gebäudetechnik

Electrical engineering: IBG B. Graf AG Engineering

Energy-simulation: Lemon Consult GmbH

construction physics / acoustics: Mühlebach Akustik + Bauphysik

#### Awards:

- DEUBAU-Preis für Junge Architektur 2014, Laureate  
(DEUBAU Award for innovative young architecture 2014)
- Wienerberger Brick Award 2016  
<https://www.youtube.com/watch?v=fF4sncyecC8>
- Auszeichnung für gute Bauten der Stadt Zürich 2011–2015, Laureate 2016  
(Distinction for Good Buildings in the City of Zurich 2011–2015)  
<https://youtu.be/NqWjU9nb8Ac?list=PLPnfv8Nh5Jxuxuc4gUqyndkjCExIHTtWF>
- World Habitat Awards 2017, Winner
- Baffa Rivolta European Architecture Award 2017, Winner
- DAM Award "Wohnen für Alle", Laureate 2018

#### A Film about the Project:

«With Other's Eyes»

A Film by Anne Kaestle, Dan Schürch and Levente Paal

Film premiere as part of the associated exhibition (4 September to 17 October 2015):

September 3, 2015, «Architektur Galerie Berlin»

<http://mitdenaugenderanderen.com/en>

Trailer: <https://player.vimeo.com/video/137943948>



## Duplex Architekten Approach and Motivation

The architectural practice Duplex Architekten was founded by Anne Kaestle and Dan Schürch in Zurich in 2007. Besides the headquarters in Switzerland, Duplex has run branch offices in Düsseldorf and Hamburg since 2011. The management level is supported by three associates, Konrad Mangold (Zurich), Sarah Escher (Düsseldorf) and Christof Weber (Hamburg).

Duplex Architekten plan and design projects of various scales and building tasks, with their expertise ranging from private homes to commercial buildings, office and residential complexes, school buildings through to whole urban districts. They are as interested in the large scale with long-term development processes as in detailed research into material, light and space. Wherever one cannot or doesn't want to draw on a standard repertoire, Duplex Architekten see their strengths. Another focus of their work is the transformation of existing buildings. The existing building structure is preserved and something new is generated through modifications. Architecture may once again tell a story. A recurring motif in the work of Duplex Architekten is their search for the identity of a building, a façade or a whole urban quarter. It can be developed from a special feature of the room schedule, a difficult characteristic of the site, legal restrictions or from one's own typological fascination. It is this careful «listening» that distinguishes the work of Duplex Architekten and has become an essential design-generating engine in all their projects. Different aspects and perspectives are playfully overlaid until a harmonious whole emerges. The result in an architecture that provides surprising or surprisingly self-evident but always multi-faceted answers to the formulated questions. So it is not so much the concrete appearance of their buildings but their methodology that can be identified as the signature of Duplex Architekten.

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