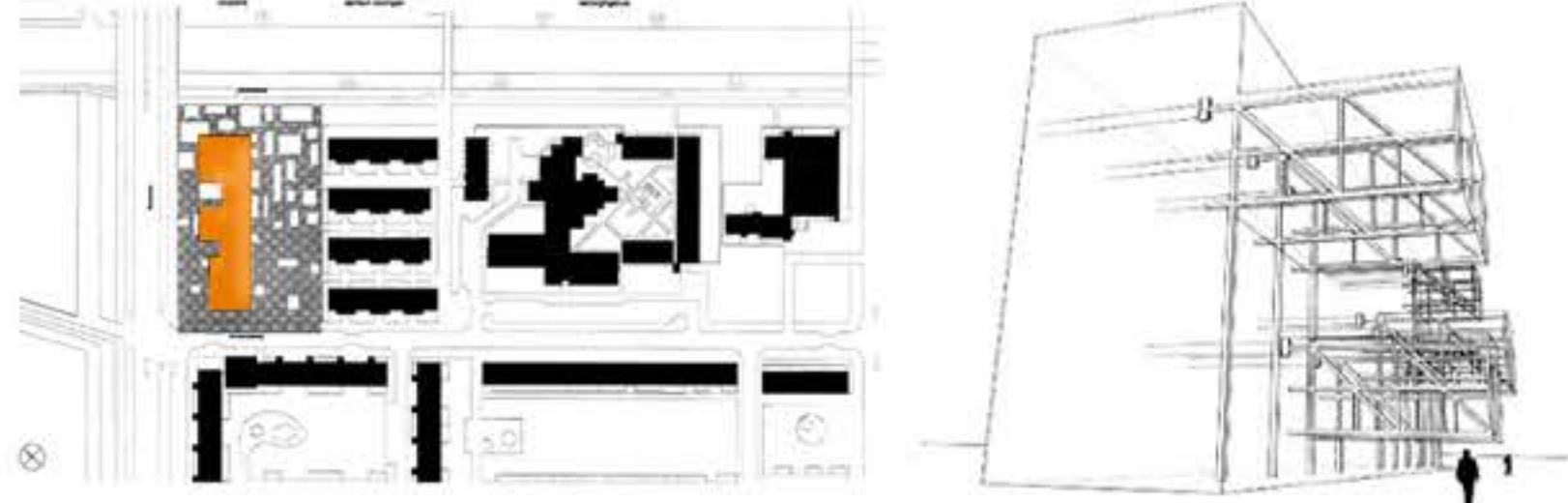
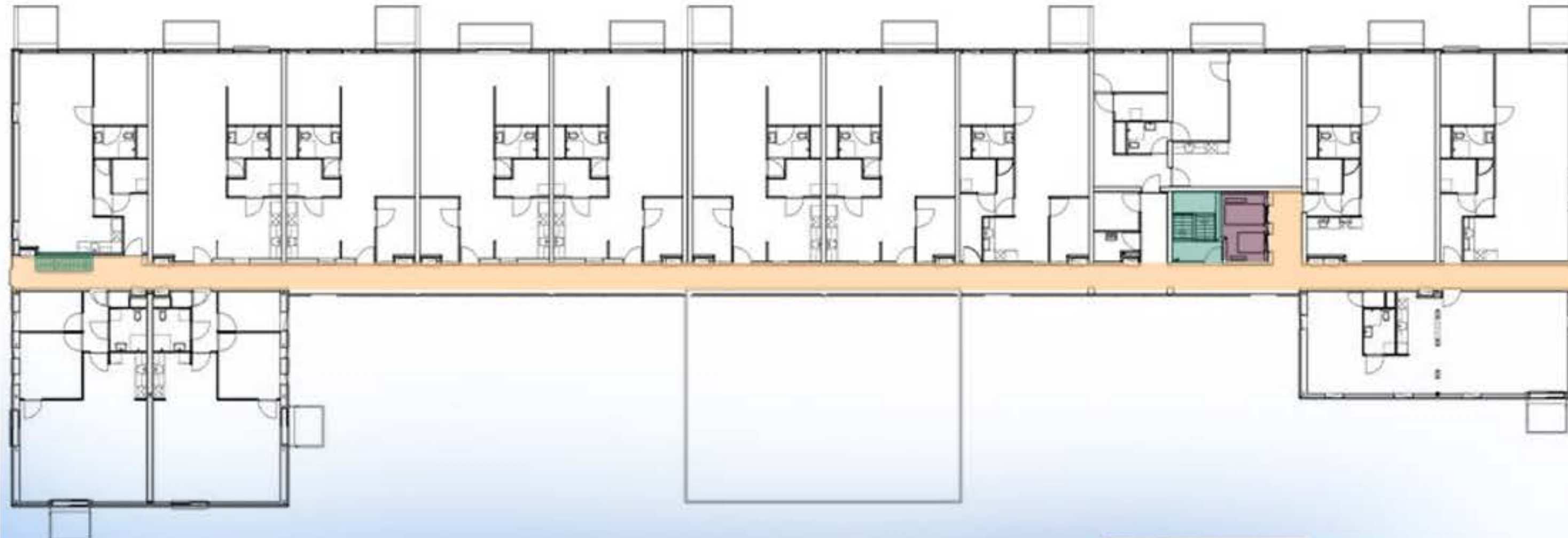


WOZOCO APARTMENTS

MVRDV, AMSTERDAM



Project Data

Location: Amsterdam-Osdorp, Netherlands

Architect: MVRDV

Owner: Het Oosten Housing Association

Completed: 1997

Project Type: Gallery flats, apartments for elderly inhabitants

Total SF: 7,500 m² (24,606 sq. ft)

Total Cost: EUR 4.5 million

Resident Profile: Units reserved for elderly above the age of 55

Unit Count: 100 Total Units, 13 cantilevered off north facade

Home Qualities

The site limited the number of apartments per block to 87 units, and required adequate sunlight for all of the tenants. Later the client added an additional 13 units reaching a total of 100, but where would the extra 13 units be positioned? The site was already limited, so adding additional units would only disrupt the intended open space. A deeper slab with narrower units was explored, but did not seem possible. Dutch housing restrictions prevent housing buildings above nine stories, so building up was also not possible. The solution came to cantilever the remaining 13 units on the north facade, putting a single-loaded corridor in place to access the main building and the 13 additional units. An economic layout for the main slab allowed for costs to be aimed towards the more expensive hanging units.

Each unit comes with its own level of personalization. By changing window positions, balcony sizes and varying balcony materials, each flat begins to take on its own character.

Sustainability

Wozoco apartments took a passive approach to sustainability. It does not have any flashy systems, or photovoltaics, it simply uses proper orientation to give each flat adequate natural lighting. Reducing the building site allowed for several small community gardens and public open space to be created. MVRDV was able to use local wood for construction.

Context and Community

The goal was to maintain the bulk of the plot as a free common area where the inhabitants could enjoy themselves. This meant the building itself would sit in a smaller footprint. The surrounding context aids itself to many open green spaces, something MVRDV wanted to preserve. Three different bus routes are just a few blocks away, allowing the elderly to travel down the street to a small ball park, or take a quick ride into the heart of Amsterdam. The suspension units not only define outdoor spaces, but also bring the monolithic scale down to the domestic level. People are able to pass under the large cantilevered structure, allowing for a connection between the building and the streetscape. Underneath the two story overhang on the west facade, bike racks sit along the main entrance.

Organization

The basic organization is a single-loaded scheme, that doubles up when coming into contact with one of the 13 additional cantilevered units. An elevator and main stair act as the major circulation, connecting down to the lobby and shared public space on the bottom floor. Inside consists of four different room types, adapting to the different areas on the plan. Minor wall shifts and additional storage closets are some of the minor differences that take place. For the most part, rooms are mirrored to get a common service wall for water and gas lines. Parking is available parallel to both the north and south facades.

Materials and Assemblies

Wozoco apartments offer a variety of materials including: wood siding, colored glass balconies, metal railings, reinforced cement panels, and a very diverse pattern of different sized windows and balconies. Because most of the budget was spent for the structural aspects of the cantilevered units, the building uses cheap, local wood siding and a curtain wall system for the north facade. Roughly seventeen years of life has weathered the wood to look very dark, and to some fairly unattractive.

Structure: The walls that form the "extruded" boxes connect to the main structure by cantilevered beams running the length of the projection. Each of the walls are acting as a big truss, tied back into the columns of the main structure. To accommodate a beam large enough to structurally support the overhang, the walls were made 8cm thicker than required for better acoustics. As a result, some of the stresses were taken off of the central columns.