

HOMER

HOMER tries to address the challenges of the future by proposing a dense Sopenkorpi, preserving its historical layers and typological diversity and upgrading the quality of the urban environment, as the home of a socially heterogeneous sustainable community. The programmatic distribution of the proposal, based on the mixing of functions, emphasizes small households, common spaces and local services. The proposal consists of four building types generic enough to accommodate an endless range of programmatic variations.



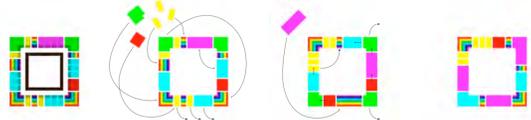
Four typologies: the slab, the block, the tower and the cluster

In 1975, 37 years ago, the average rent for an Arava-apartment was around 1,5 €/m²/month. Today the average rent is about six times higher, 9,5 €/m²/month (Tilastokeskus, 2011). HOMER is an attempt to achieve a decline in average rents for ARA-housing and to find a solution for more affordable social housing in Finland in the year 2049, 37 years from now, without reducing apartment sizes. Currently, building companies make most of their profit in housing by equipping apartments at a very high standard level. The solution is based on the tenant renting and paying for only the raw space of his apartment. The tenant can then determine the amount of money to spend on fixtures, and attach them to a "wet wall" for technical installations.



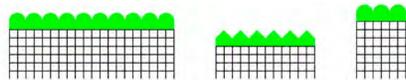
Each typology is divided into zones (black: traffic, grey: wet wall, light grey: living, green: balcony)

Flexibility in the typologies is achieved by dividing the building into zones, with the "wet wall" separating traffic and living zones. The zones are comprised of modules that can be isolated or combined to achieve the optimal distribution of unit typologies and sizes. The units can further be modified to fit the needs of the tenant by attaching external prefabricated modules to the structure. To ensure flexibility during the entire life span of the building, a sufficient number of neutral "spare" units, hosting any range of collective activities, are accounted in the room program, providing a buffer for reconfigurations of the apartment distribution.



1. The zones are based on modules that are combined to achieve the optimal dwelling distribution.
2. Room for new apartments is created by relocating apartments and giving up "spare" units.
3. Additions to existing apartments are achieved by relocating and shuffling adjacent units.
4. The system allows indefinite changes of emphases on the apartment distribution.

Rooftop greenhouses are utilized for local food production. The rooftop greenhouses additionally contribute to tap water supply, wastewater treatment and energy production. Semi-cold circulation atriums are directly connected to the rooftop greenhouses for a reduced part of the building volume requiring heating.



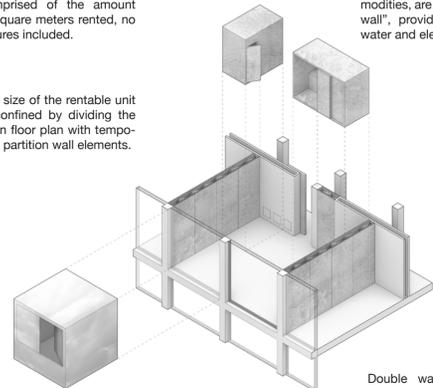
Rooftop greenhouses on the slab, the block and the tower.

Instead of trying to predict an accurate scenario for the year 2049 and designing a scheme specific to that scenario, HOMER aims to create a housing system flexible enough to adapt to any circumstances before, during and after 2049. The alternative presented in the proposal is based on studies on where social housing and society in general in Finland is coming from and heading towards at the moment.

Any amount of raw floor area is rented. The rent is only comprised of the amount of square meters rented, no fixtures included.

Prefabricated plug-in fixture elements, varying in size and accommodations, are installed to the "wet wall", providing each unit with water and electricity.

The size of the rentable unit is confined by dividing the open floor plan with temporary partition wall elements.



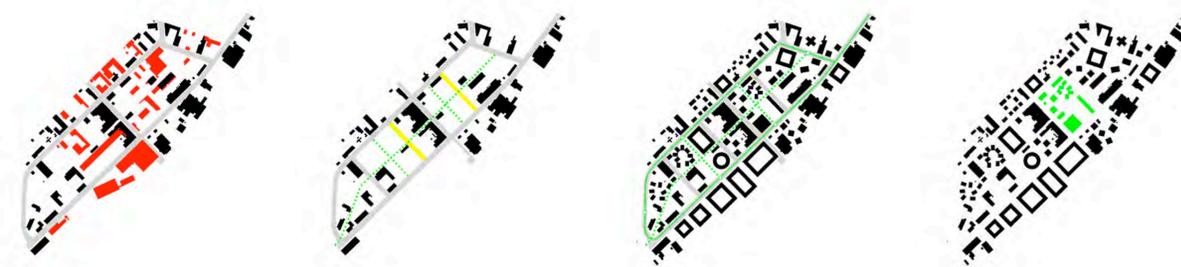
Prefabricated multi-purpose boxes of additional space provide the apartment with for example a balcony, a bedroom or a working space.

Double wall panels with an acoustic curtain in between form a sound-proof partition wall between rentable units and also work as sliding doors between rooms within the same unit.



VIEW FROM THE PEDESTRIAN STREET LOOKING NORTHWEST

SOPENKORPI STRATEGY



The process of converting Sopenkorpi into an attractive residential area begins with the evaluation of the existing building stock. Historically valuable and locally relevant buildings are preserved whereas buildings in poor condition and of less value are demolished.

Additional crossing streets divide the two big loops of the current traffic network into smaller blocks and provide improved access to the sites. Pedestrian lanes are created longitudinally along the old railroad track and laterally across each new block. The pedestrian network divides each central block into four subdivisions.

The remaining building stock is supplemented with new urban infill. Historical layers, urban density and typological diversity form the main characteristics of future Sopenkorpi. The dense urban grid together with improved public transport enable a car-free area with services and traffic connections at a walking distance.

The site for the proposal is situated in the central block between Mestarininkatu and Sopenkorvenkatu. Four of the existing buildings on the site are preserved. The site is divided into four subdivisions by pedestrian lanes and a different building typology is dedicated to each subdivision.

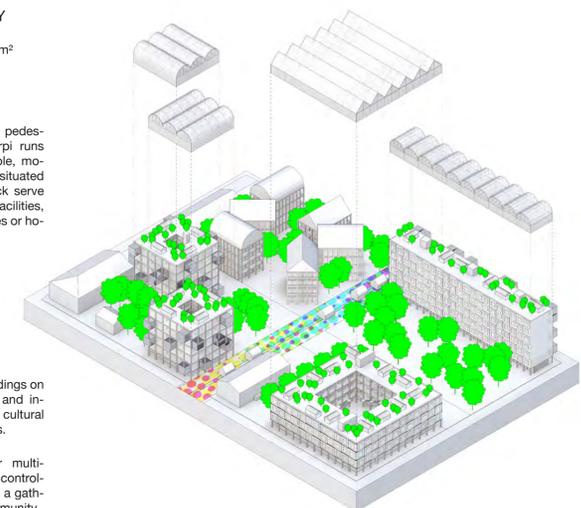
SITE AXONOMETRY

Total floor area: 20 400 m²
Site area: 19 600 m²
Density rate: 1,0

The main longitudinal pedestrian lane of Sopenkorpi runs across the site. Rentable, mobile, wooden pavilions situated on the old railroad track serve as small commercial facilities, working spaces, galleries or hotel rooms.

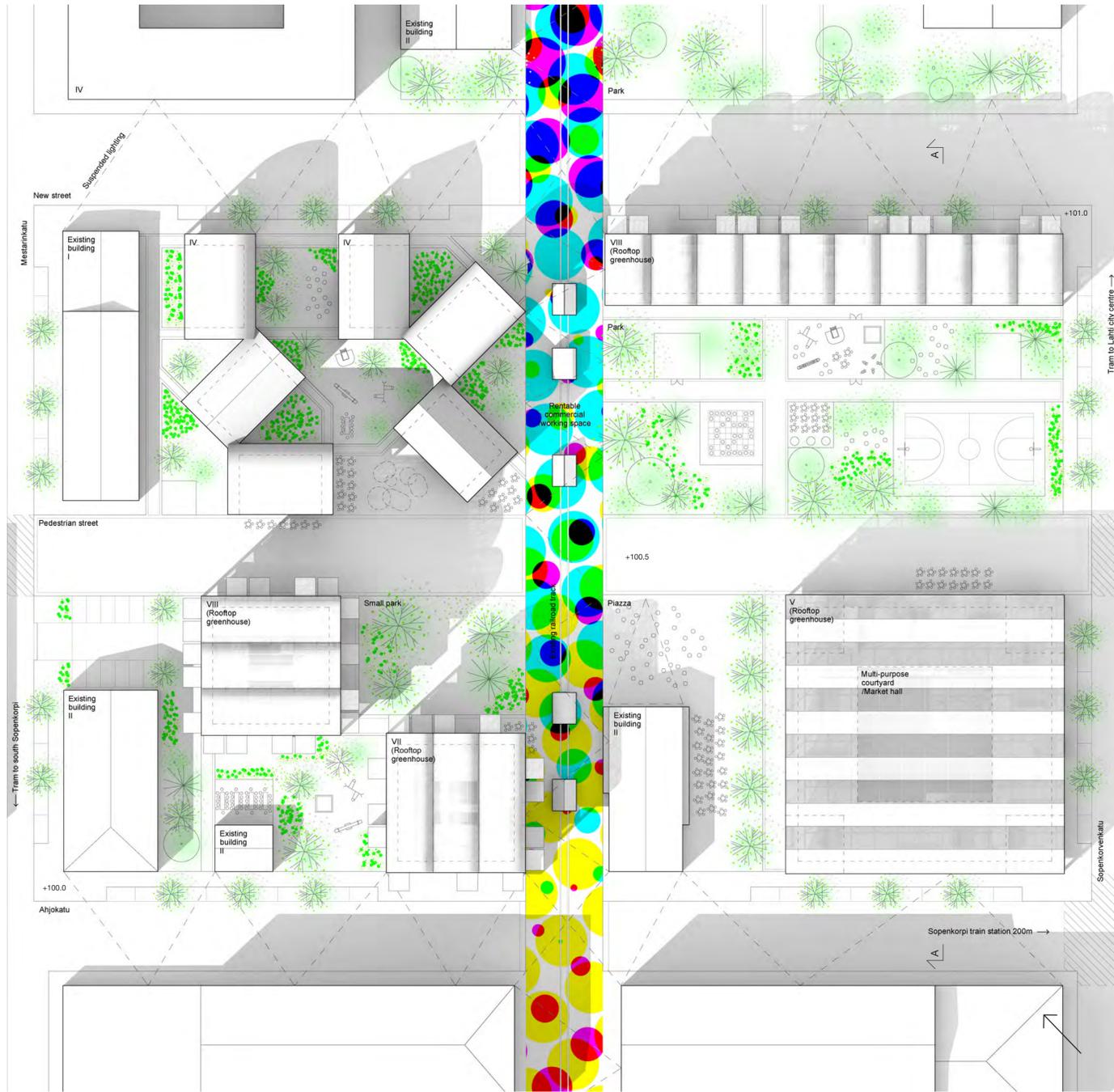
Four of the existing buildings on the site are preserved and injected with commercial, cultural and communal activities.

The semi-cold interior multi-purpose courtyard with controlled climate functions as a gathering space for the community.



In addition to providing the community with locally produced vegetables, the rooftop greenhouses also contribute to tap water supply, wastewater treatment and energy production. Polycarbonate roofing enables the capturing of excess heat from solar radiation. Smaller greenhouses inside the semi-cold rooftop greenhouses are heated around the year to ensure the supply of vegetables requiring warmer conditions.

The crossing traffic lanes together with old and new buildings form a versatile range of public and semi-public urban outdoor spaces on the site.



SITE PLAN 1:500



VIEW FROM THE INTERIOR COURTYARD DURING A SATURDAY MORNING MARKET



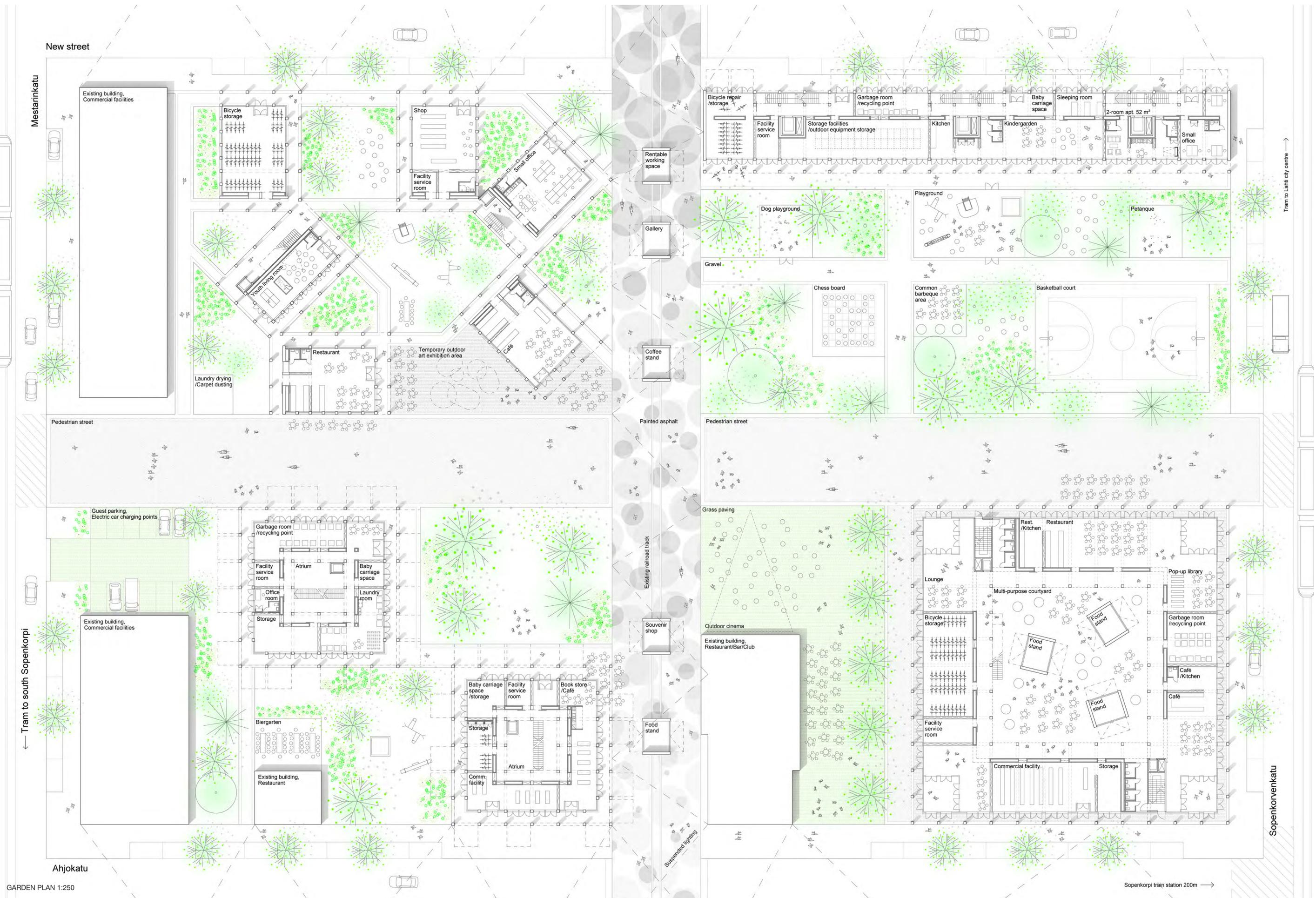
VIEW FROM A 2-MODULE TOWER APARTMENT WITH TWO MULTI-PURPOSE BOXES



SOUTHWEST ELEVATION 1:500



SITE SECTION 1:500



GARDEN PLAN 1:250

Sopenkorpi train station 200m →

The Block is a side corridor 5-story atrium block with an interior courtyard, a rooftop greenhouse and a balcony zone along the perimeter of the building.



THE BLOCK, TYPICAL FLOOR PLAN 1:200

The public semi-cold interior multi-purpose courtyard with controlled climate can host a wide range of events and functions as a gathering space for the community year round.

The use of the "slack spaces" is defined by the residents through a closed democratic process.

The tenant can choose not to acquire any appliances and use common kitchen and bathroom facilities, in which case the rent of the apartment would be at an absolute minimum.

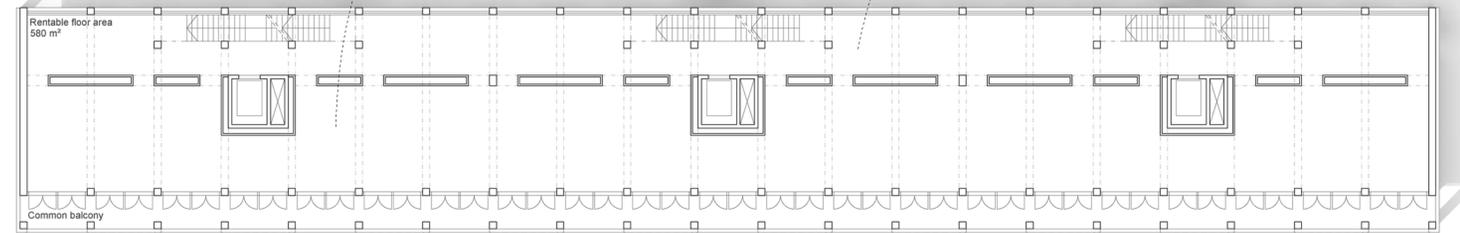
Facade materials:

1. Polycarbonate sheet, opaquely revealing timber structure (The Block)
2. Polycarbonate sheet, recycled copper weave behind (The Slab)
3. High performance glazing



THE BLOCK, SOUTHEAST ELEVATION 1:200

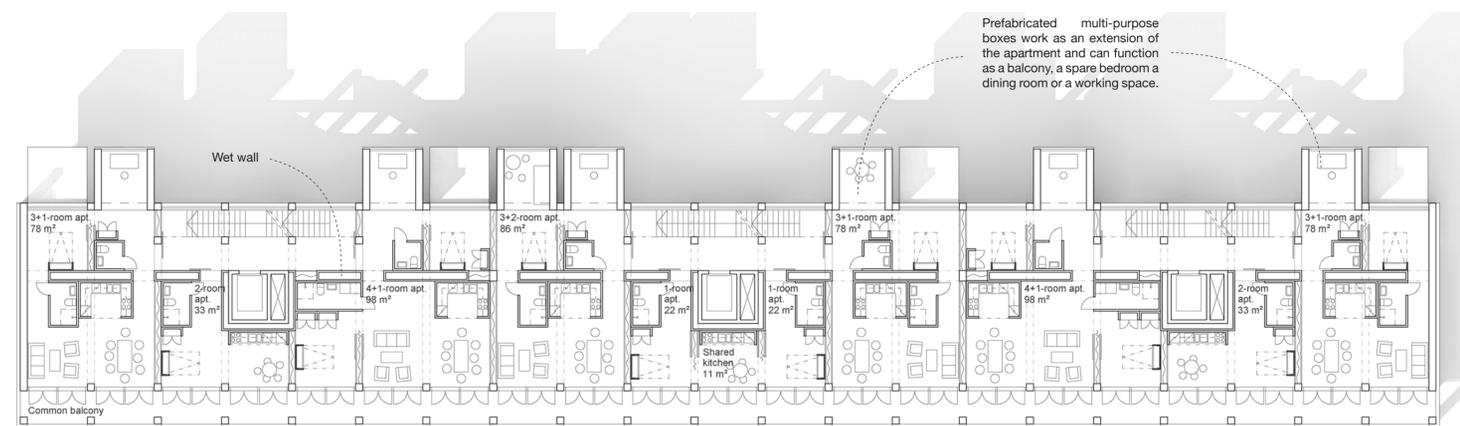
The Slab is an 8-story lamella house with a rooftop greenhouse and a balcony zone along the perimeter of the building. The typology offers the possibility of having apartments facing opposite directions.



THE SLAB, RAW FLOOR PLAN 1:200

The flexible open floor plan gives the landlord the opportunity to rent apartments by the meter and to alter emphases regarding the distribution of apartments.

The building can also function as an office building thanks to the open floor plan, flexible circulation and the independence of partition walls and fixed furniture.



THE SLAB, TYPICAL FLOOR PLAN 1:200

Prefabricated multi-purpose boxes work as an extension of the apartment and can function as a balcony, a spare bedroom, a dining room or a working space.

The climate of the balcony zone is controlled with an adjustable facade system of sliding window elements that can be opened in the summertime and closed in winter, providing a climate buffer zone.



THE SLAB, SOUTHWEST ELEVATION 1:200

The Clustetr is an 4-story cluster of six mini-towers, forming two groups of three towers around an intimate courtyard, connected by an outdoor side corridor.



The mini-tower typology can be divided into two apartments, work as a family apartment, a communal apartment for three persons, an artist's studio or an office of an entrepreneur or a small company.

The central tower acomodates solely collective activities.

Each one of the mini-towers has a panoramic balcony.

THE CLUSTER, TYPICAL FLOOR PLAN 1:200

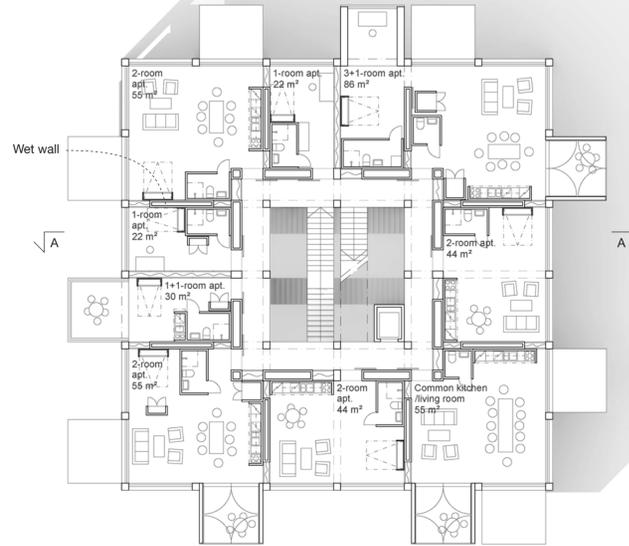
Facade materials:

1. Recycled brick; red, brown, white, and dark grey (The Cluster)
2. Colourful concrete, wet-mixed layered colours
3. High performance glazing
4. Mirror glass (Multi-purpose boxes)
5. Polycarbonate sheet



THE CLUSTER, SOUTHWEST ELEVATION 1:200

The Towers are two 7- and 8-story high buildings with a circulation atrium directly connected to the rooftop greenhouse.



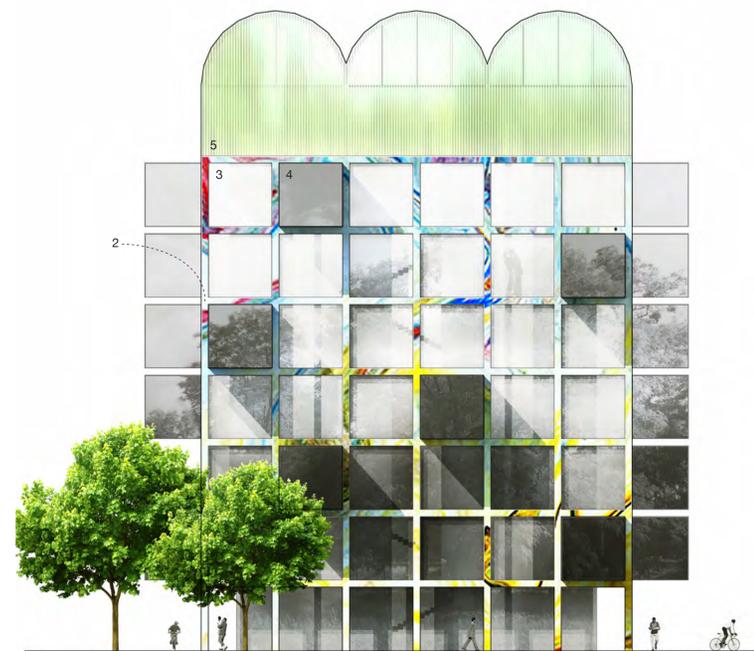
THE TOWER, TYPICAL FLOOR PLAN 1:200

The rooftop greenhouses are also used for recreational activities by the residents.



THE TOWER, ROOFTOP GREENHOUSE FLOOR PLAN 1:200

Smaller greenhouses inside the semi-cold rooftop greenhouses are heated around the year to ensure the supply of vegetables requiring warmer conditions.



THE TOWER, SOUTHWEST ELEVATION AND CROSS SECTION A 1:200

