

MAKING THE LINK:



PUBLIC SPACE AND FLEXIBLE DWELLING ON RONETTENTERREIN

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LOCATION



Ronettenterrein is the only location of this design studio that is within the A 10 Ring.

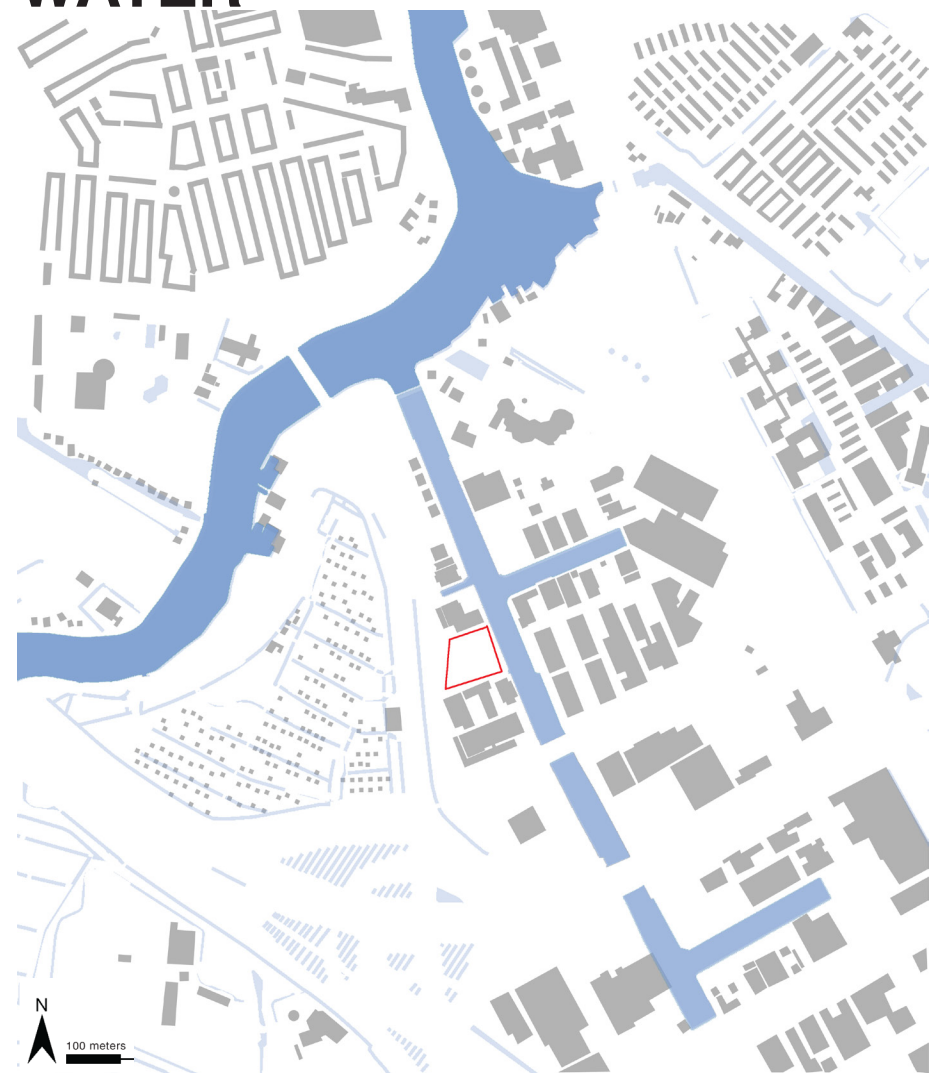
URBAN MORPHOLOGY



On closer inspection, we can see that Ronettenterrein is in a fringe location, its position marked by fragmented urban morphology.



WATER



The site is further isolated from the city of Amsterdam by the river Amstel and from its immediate surroundings by the Duivendrechtse vaart.

URBAN FUNCTIONS



- RECREATION
- RESTAURANT
- DWELLING
- HOTEL
- IN DEVELOPMENT



Functionally, we are situated in a light industrial area with few public functions nearby.

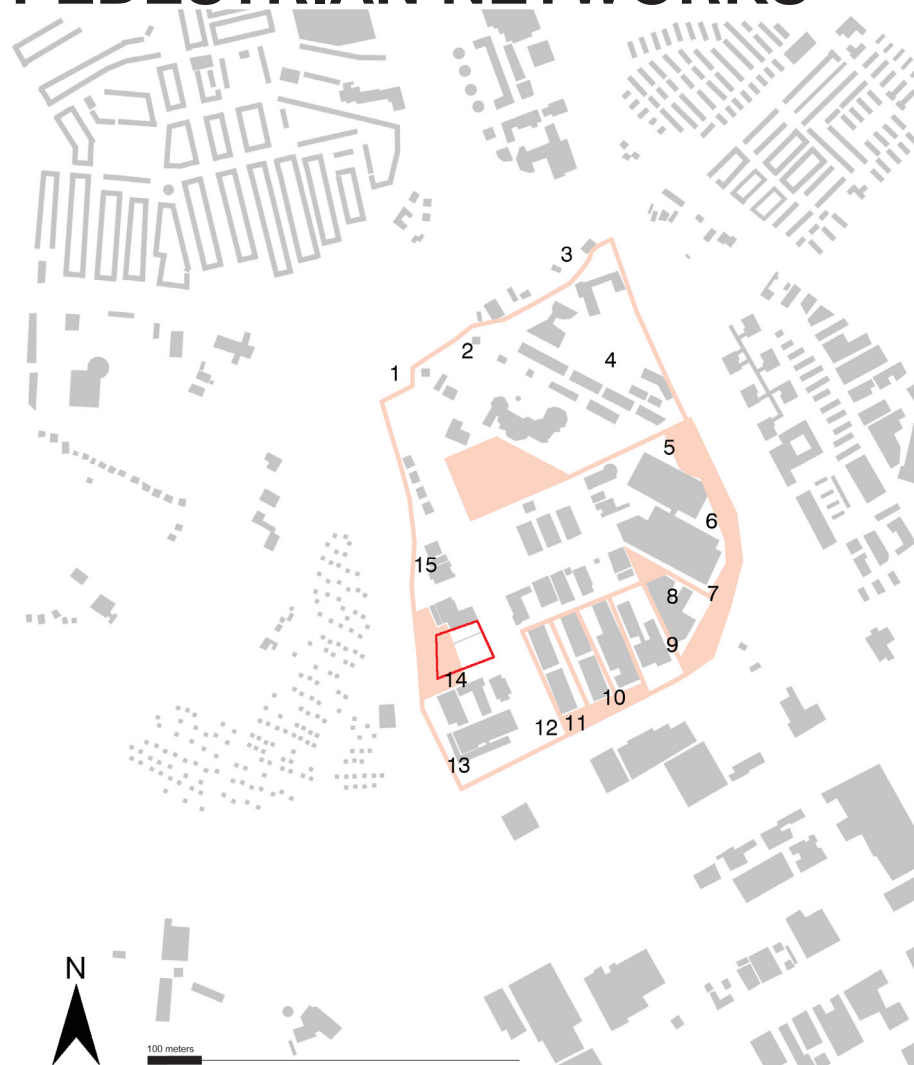
URBAN NETWORKS

- RECF
- REST
- DWEI
- HOTE
- IN DE



The proximity of large scale transport infrastructure (trains, metro, highways) means that the site is functionally well connected to the city centre of Amsterdam, Zuidas Business district, or recreational area of Amstelsteg.

PEDESTRIAN NETWORKS



However, the pedestrian network in Overamstel remains poor. As a light industrial area, there is a lot of “space”, however, this mainly constitutes parking or left-over spaces near the edge of large infrastructure.

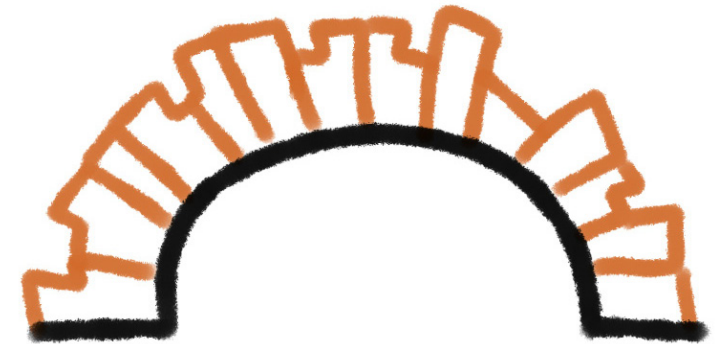
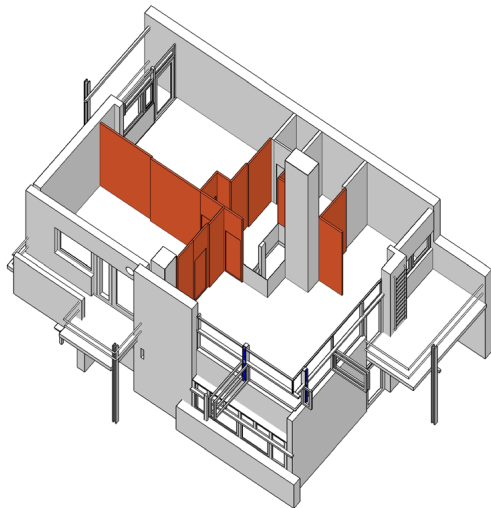
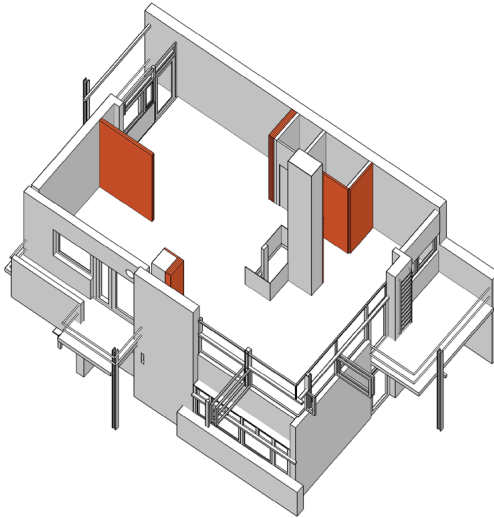


Our own location is just another leftover space with few spatial qualities in the immediate vicinity.

PROBLEM STATEMENT

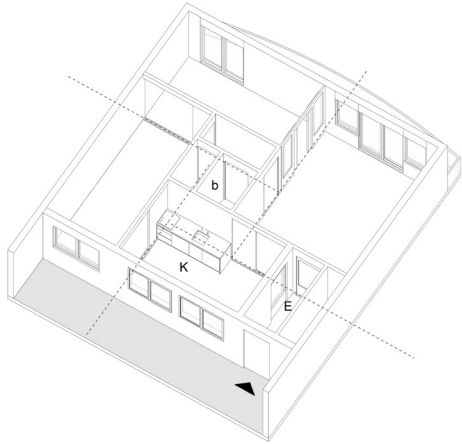
The main challenge of the site is the pedestrian and functional disconnect from the consolidated urban fabric of the city of Amsterdam.

RESEARCH: Designing appropriation & adaptation within dwellings

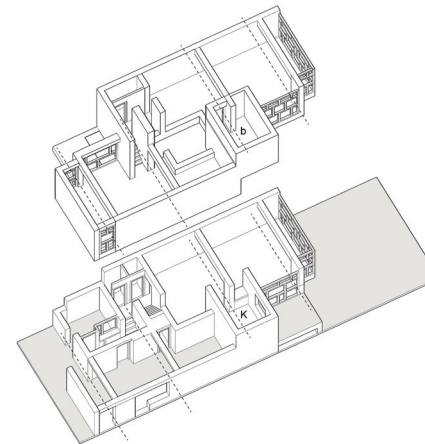
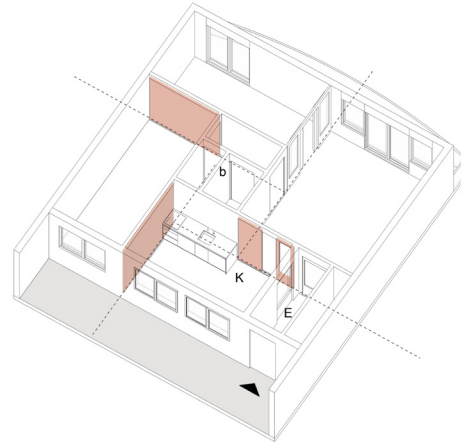


In our research we looked at different ways in which architects encourage appropriation and adaptation within dwellings and mapping actual use of these dwellings by their inhabitants over time. We looked at diverse dwellings and approaches by the architects to find out which factors effect the amount of dweller's adaptations and changes done during time.

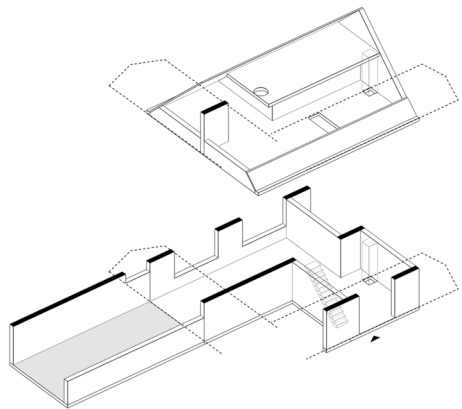
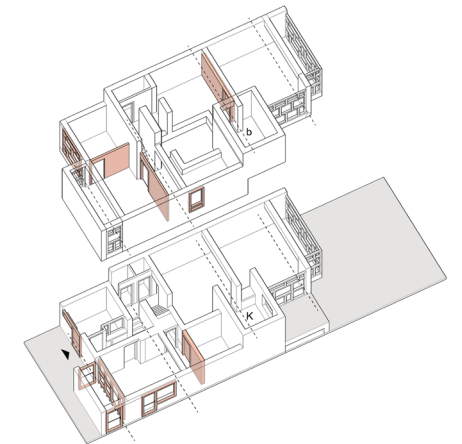
CASE STUDIES



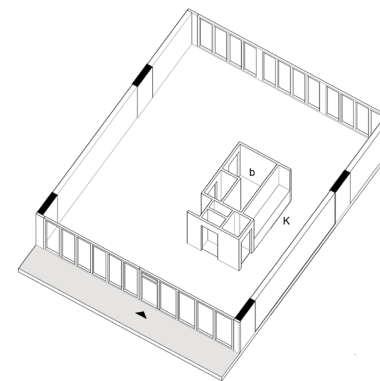
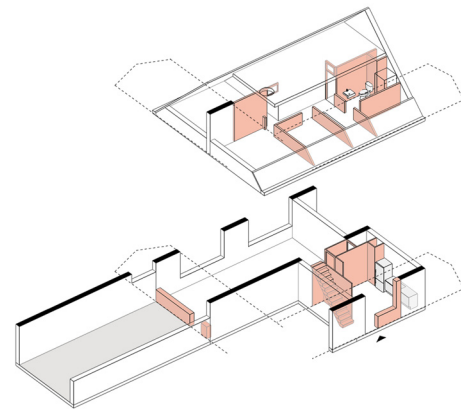
Duinker Van Der Torre, Dapperbuurt, 1988



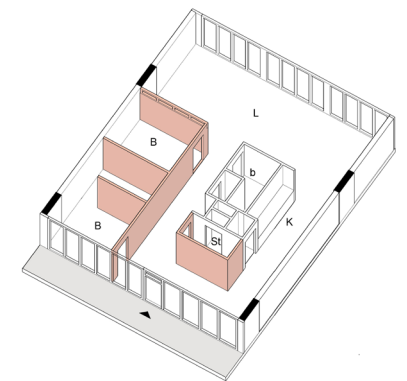
Herman Hertzberger, Diagoon dwellings, 1970



Frans van der Werf, Molenvliet 1977



Mei Architecten, Schiecentrale, 2008

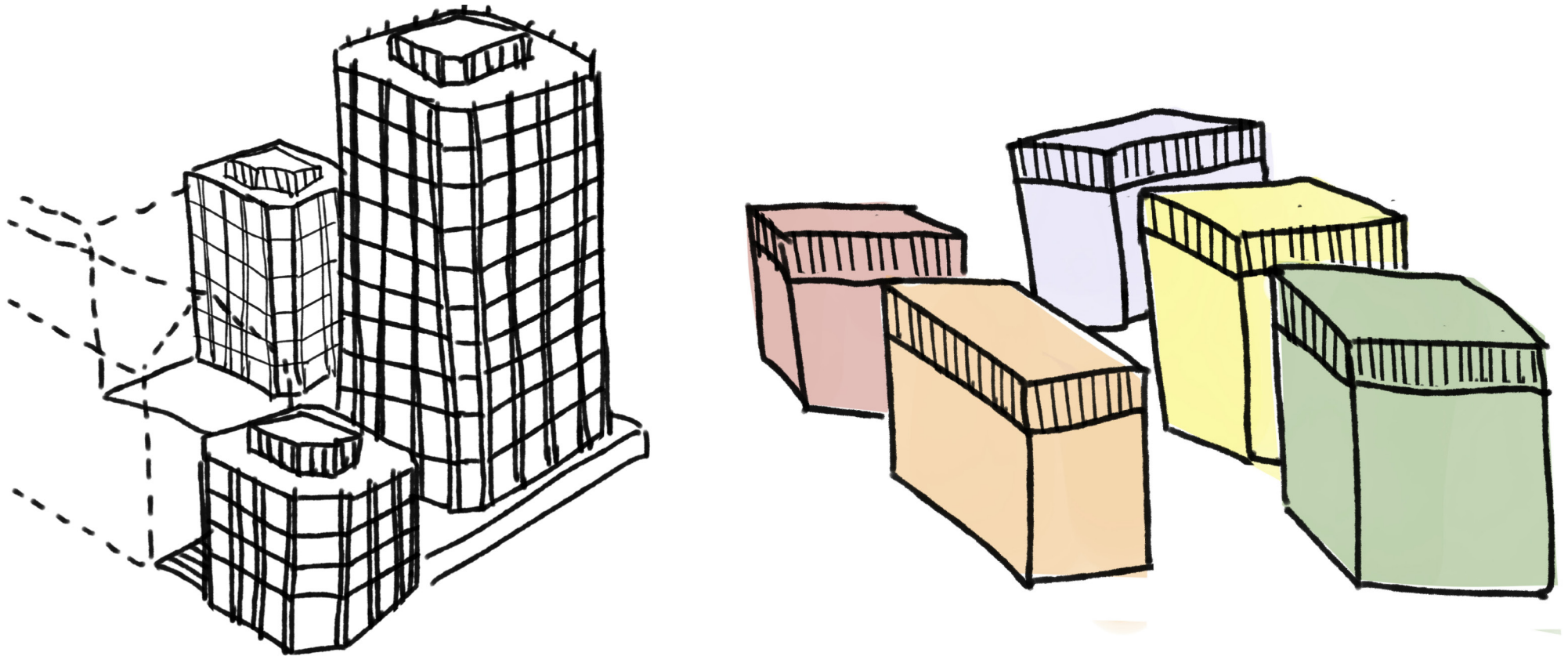


By studying various case studies of dwellings designed with active adaptation by the inhabitants in mind, we came to two important conclusions. Firstly: Initial diversity of dwelling layouts is not lost in time. Secondly: Inhabitants who make changes to their dwellings do not expect to be able to make them overnight.

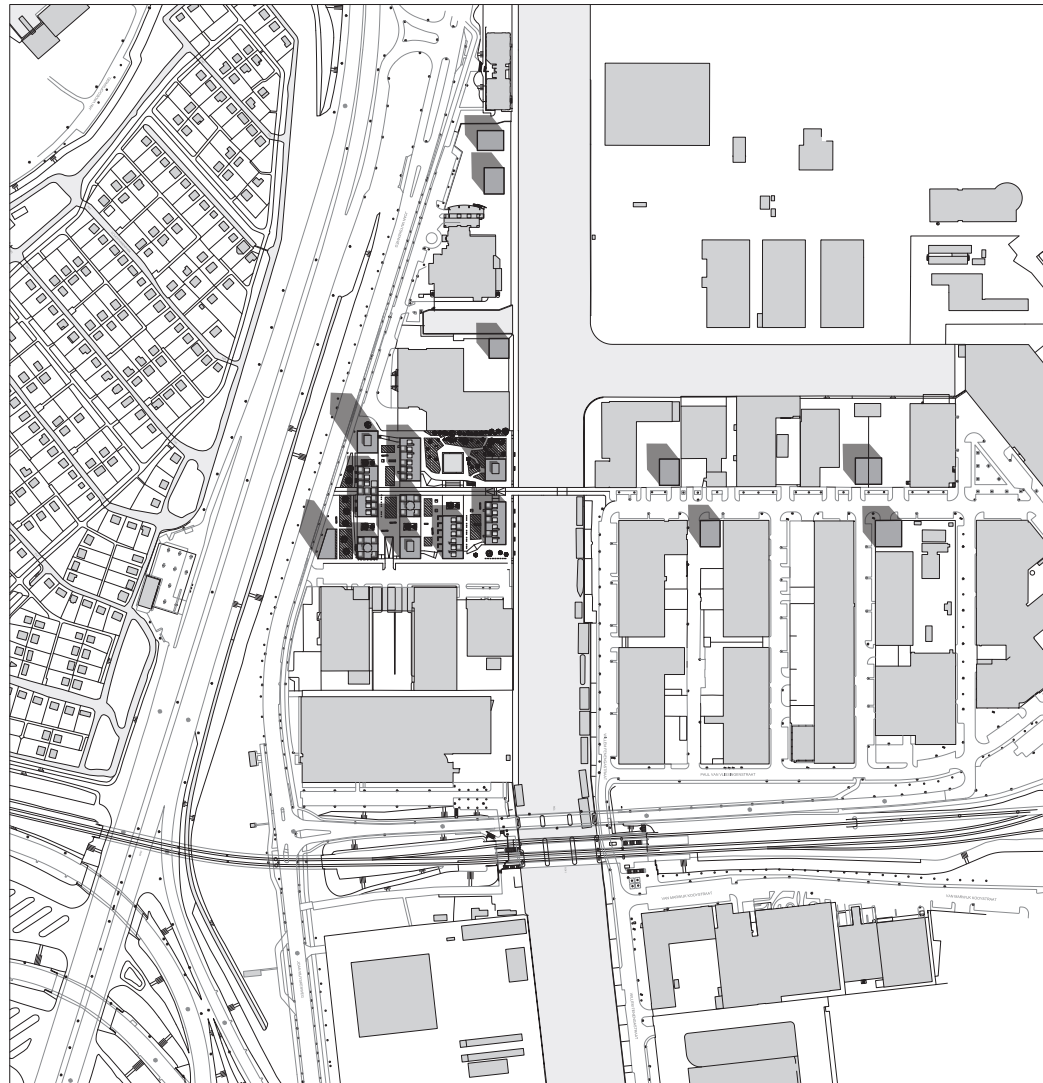
DESIGN ASSIGNMENT

An architectural intervention which enables pedestrian connection within and beyond the site, while fostering a functionally and spatially diverse dwelling environment.

CONCEPT: GROUP FORM



We have chosen a concept of group form, a family of buildings which connect with the existing urban fabric, and organise public space among themselves. Well known examples are the Economist Group in London by Alison and Peter Smithson and The City of Justice in Barcelona by David Chipperfield.



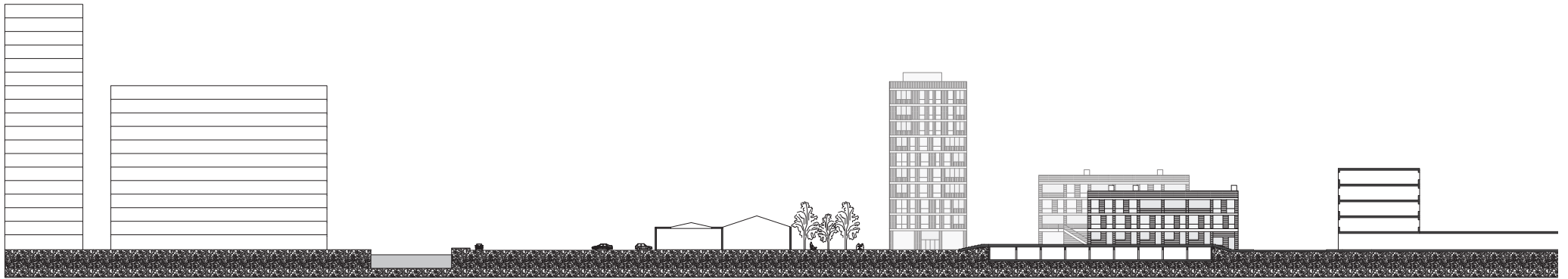
On an urban level, the masterplan creates a pedestrian and cyclist connection across the site. We propose further injection of extra urban programme along the two axes to further activate the area.

SCHEME URBAN PLAN



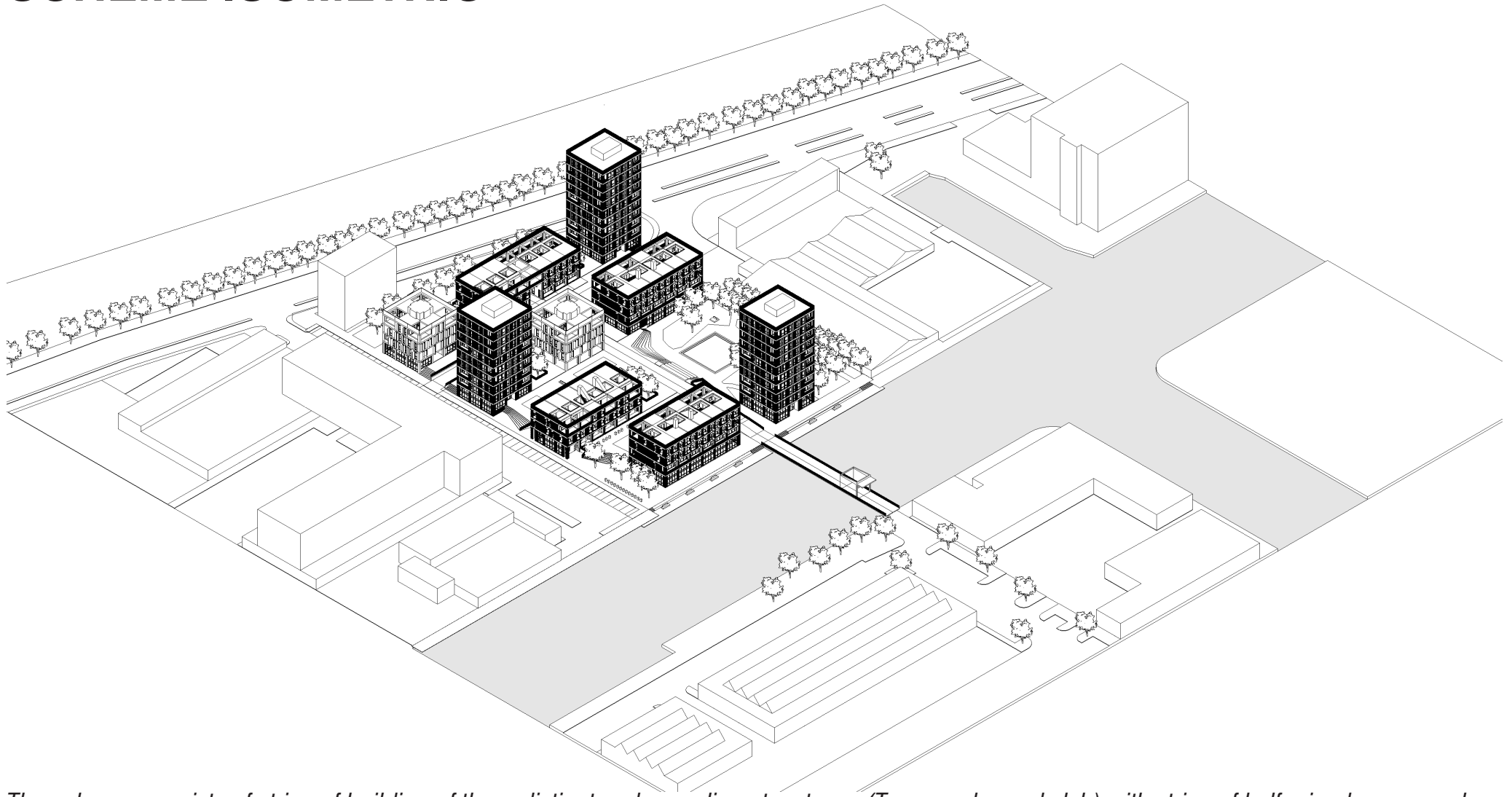
Internally, the scheme proposes strips of buildings, alternating with strips of public space which is slightly raised above the ground level and creates a public podium for the inhabitants and visitors. This space is non-hierarchical and responds to the conditions of the site.

SECTION URBAN PLAN



The half-raised platform houses a parking garage underneath.

SCHEME ISOMETRIC



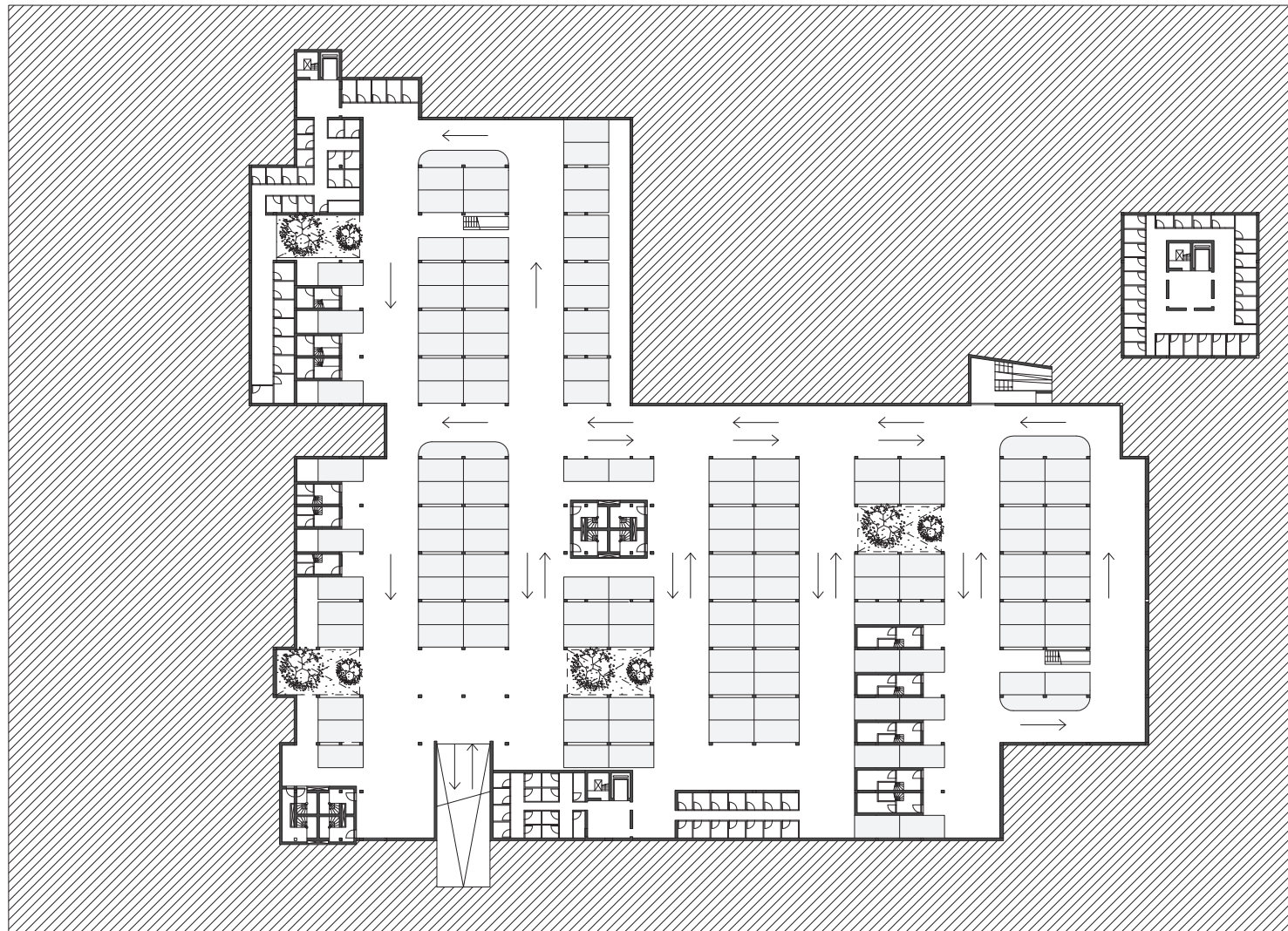
The scheme consists of strips of building of three distinct and complimentary types (Tower, cube and slab) with strips of half-raised communal space organized along the connecting spine. The massing of the ensemble responds to the demands of the site (waterfront, street, pocket park), but the scheme remains recognizable and uncompromised. Each of the types is articulated in its own particular way.

IMPRESSIONS



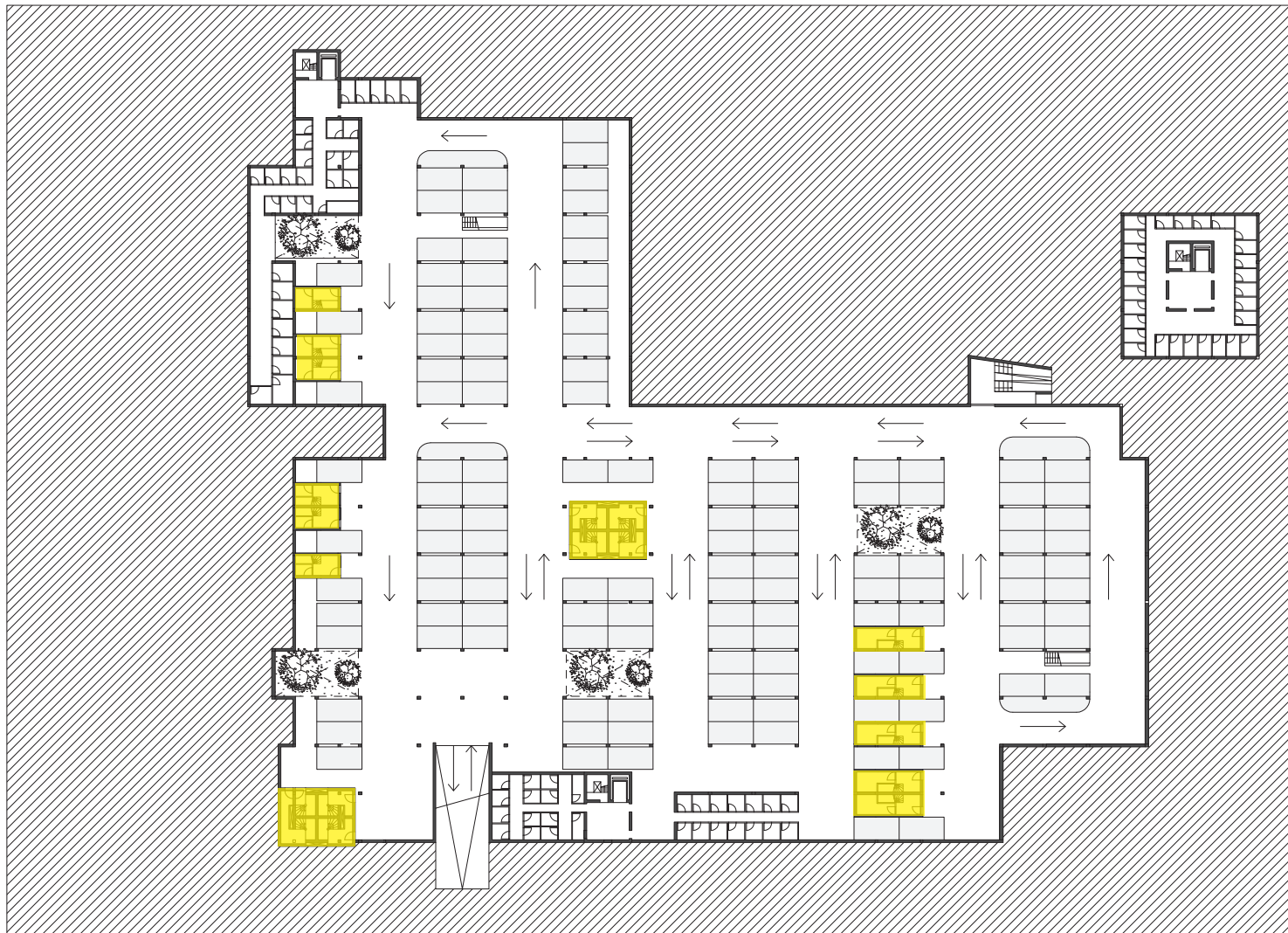
A view from the water to the site across the Duivendrechtse vaart.

PARKING



The Parking is mainly organized below the platform as well as on the street level on the south side of the scheme

PARKING: PRIVATE ACCESS



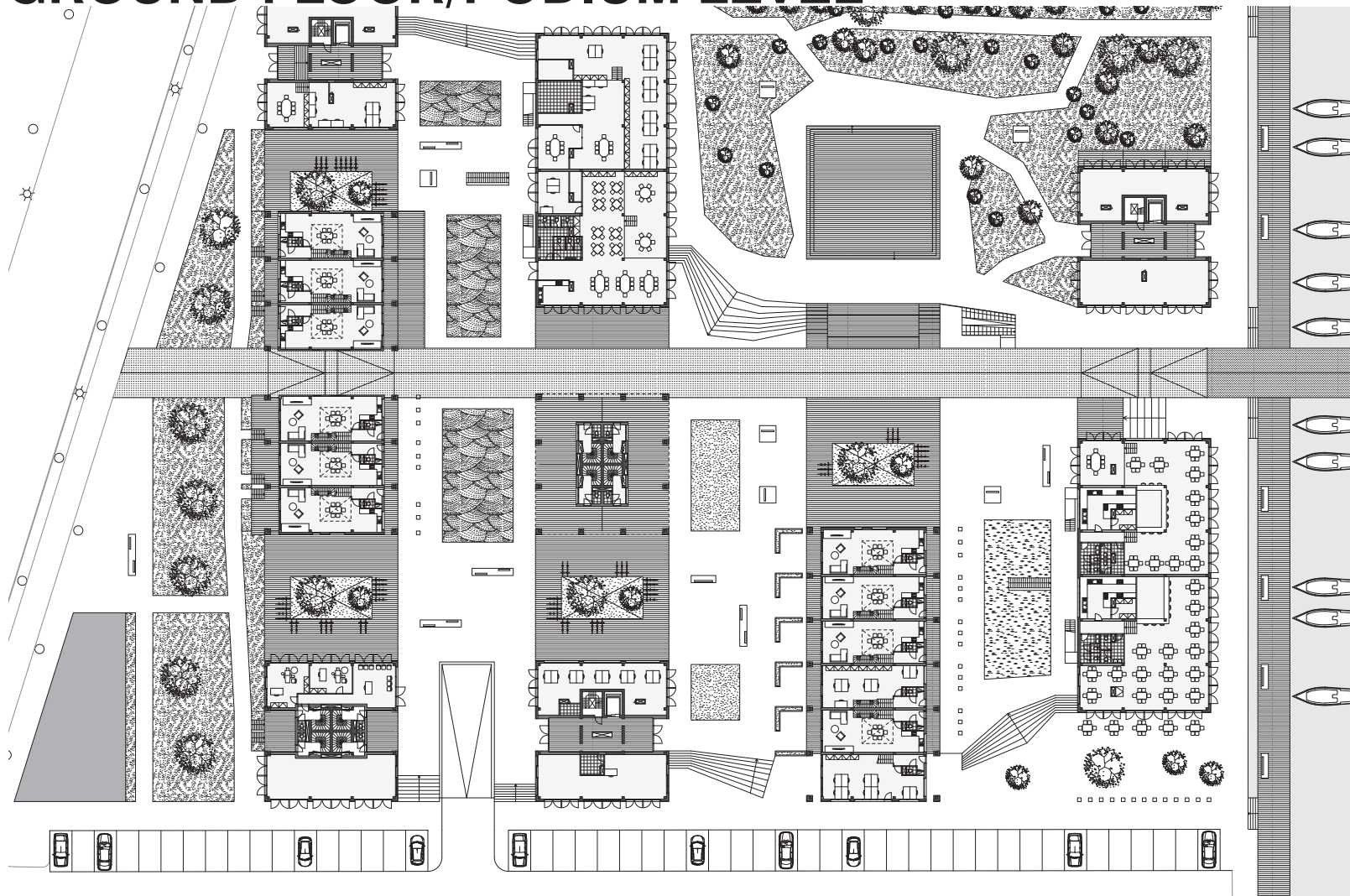
The dwellers in the platform-bound slabs and cubes have private direct access to the garage

PARKING: COMMUNAL ACCESS



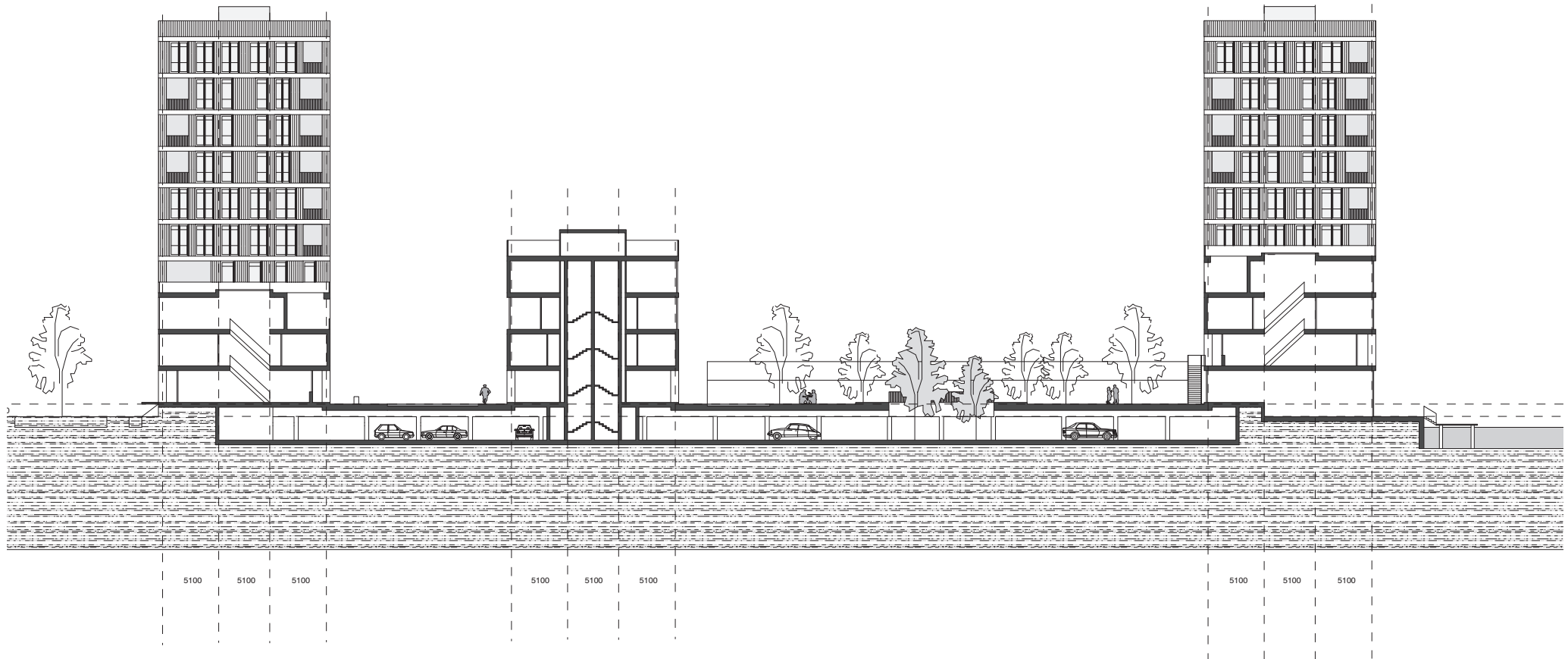
Two of the Towers have communal access directly from their communal circulation core to the parking. There are also stairs for the dwellers of the slab maionette which lead onto the platform level, and a communal entrance which leads to the tower and the park.

GROUND FLOOR/PODIUM LEVEL



The strips of public space on the platform are organised perpendicular to the connecting pedestrian/cyclist strip. On the deck itself, the variety of access types creates a varied and charged communal space which the inhabitants can appropriate in different ways.

SECTION PODIUM

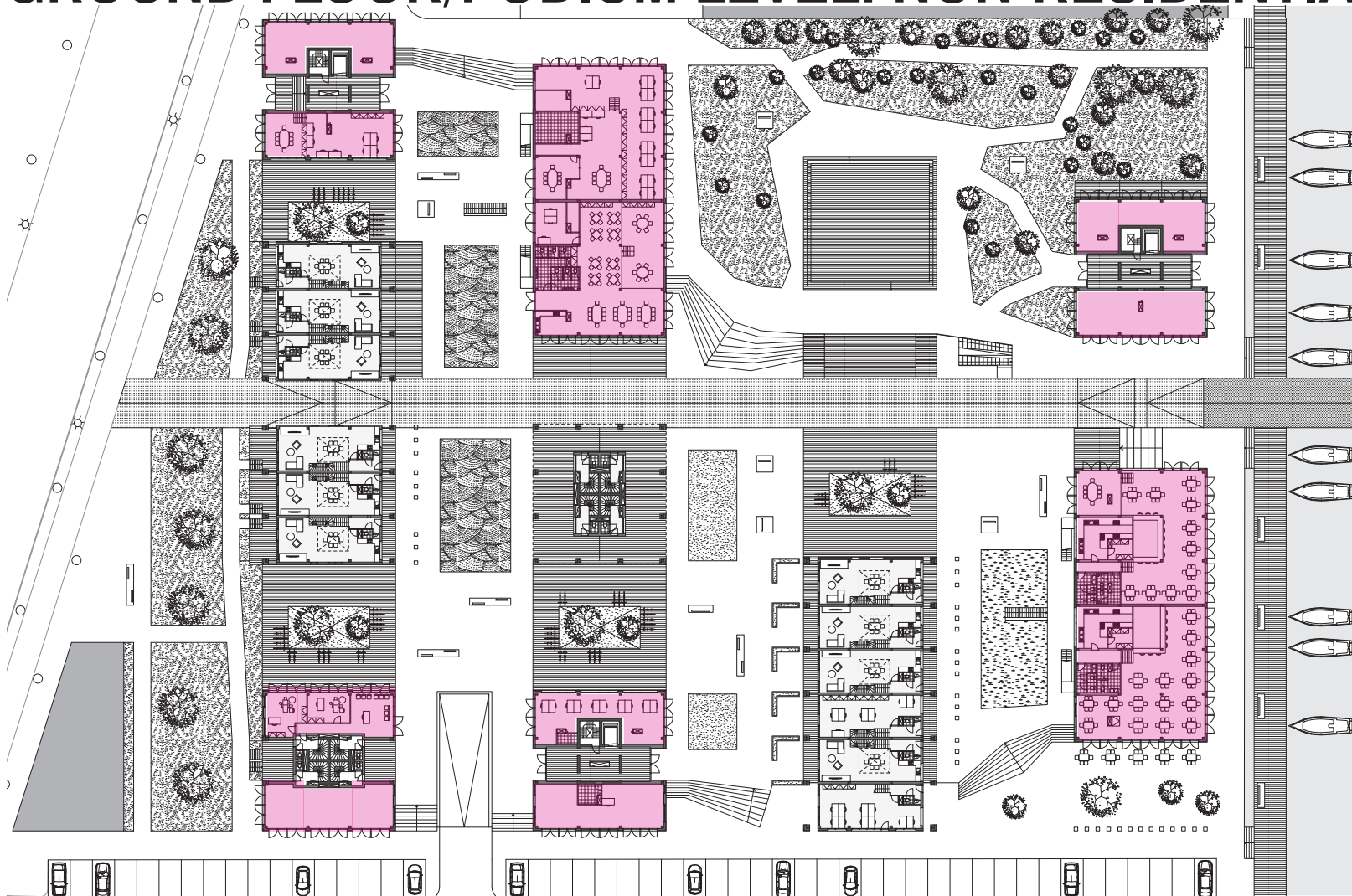


Here we can observe how the plinth mediates between the podium level and street level (difference of 1200mm) as well as the different access for the slab type: either directly from street/platform level, or a raised gallery above the non-residential programme. The buildings can help mediate this difference by having a higher plinth on the edges and thus provide more suitable space for some non-residential functions.

GROUND FLOOR/PODIUM LEVEL: RESIDENTIAL



GROUND FLOOR/PODIUM LEVEL: NON-RESIDENTIAL



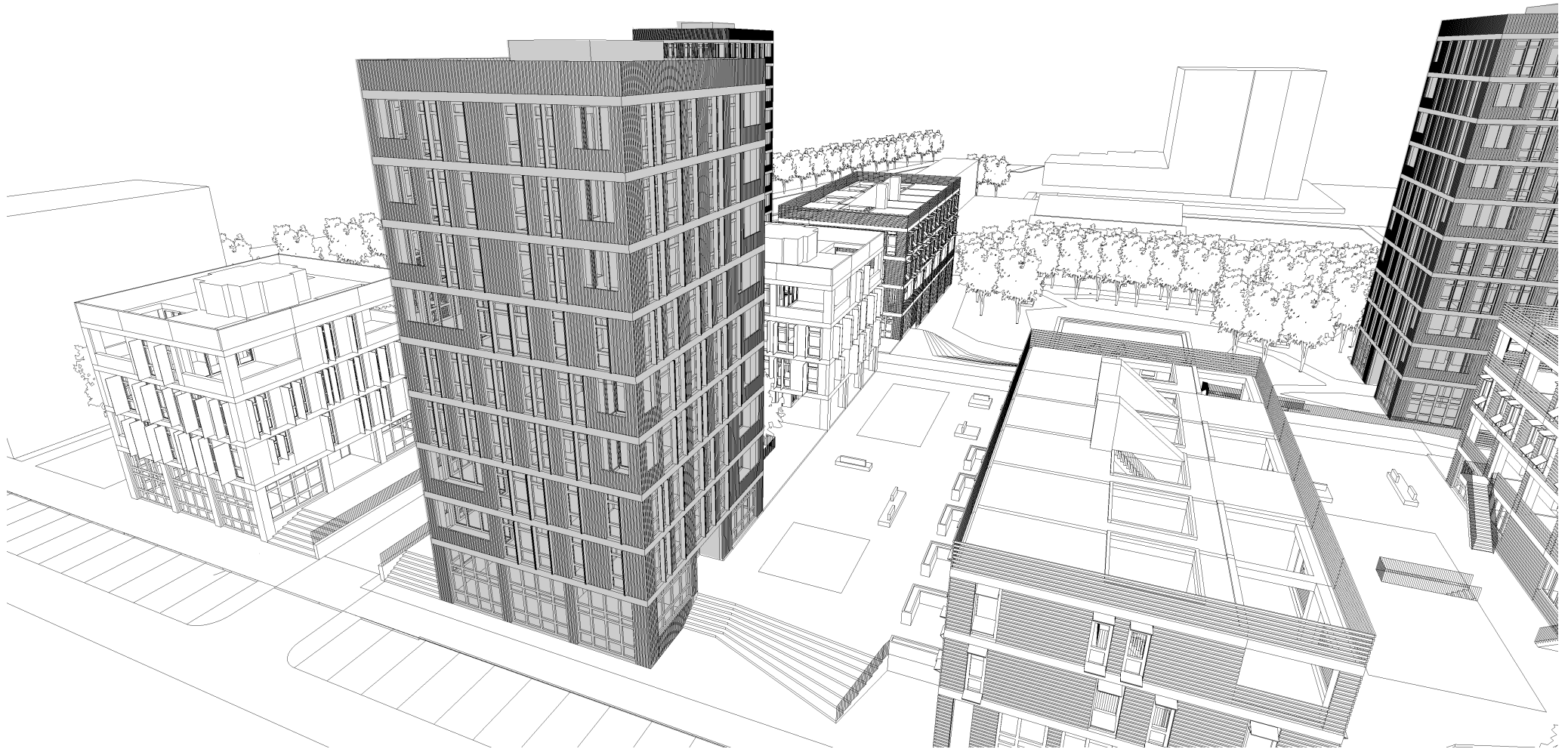
Non-residential functions are mostly located around the edges of the site. A variety of small scale functions, such as small-scale services, small offices, workshops, restaurants can be housed here.

IMPRESSIONS



The variety of functions and dwelling types that connect onto the platform create a varied, welcoming and defined public space.

TOWER



The plinths of the towers house no-residential programme. The facade is articulated vertically.

TOWER



The dwellings in the Tower are organised around a central access core. One floor of this plan can be subdivided into either four, three or two dwellings. In this way, the tower can accommodate young families, young singles and couple or simply people who prefer the ease of one level living.

CUBE



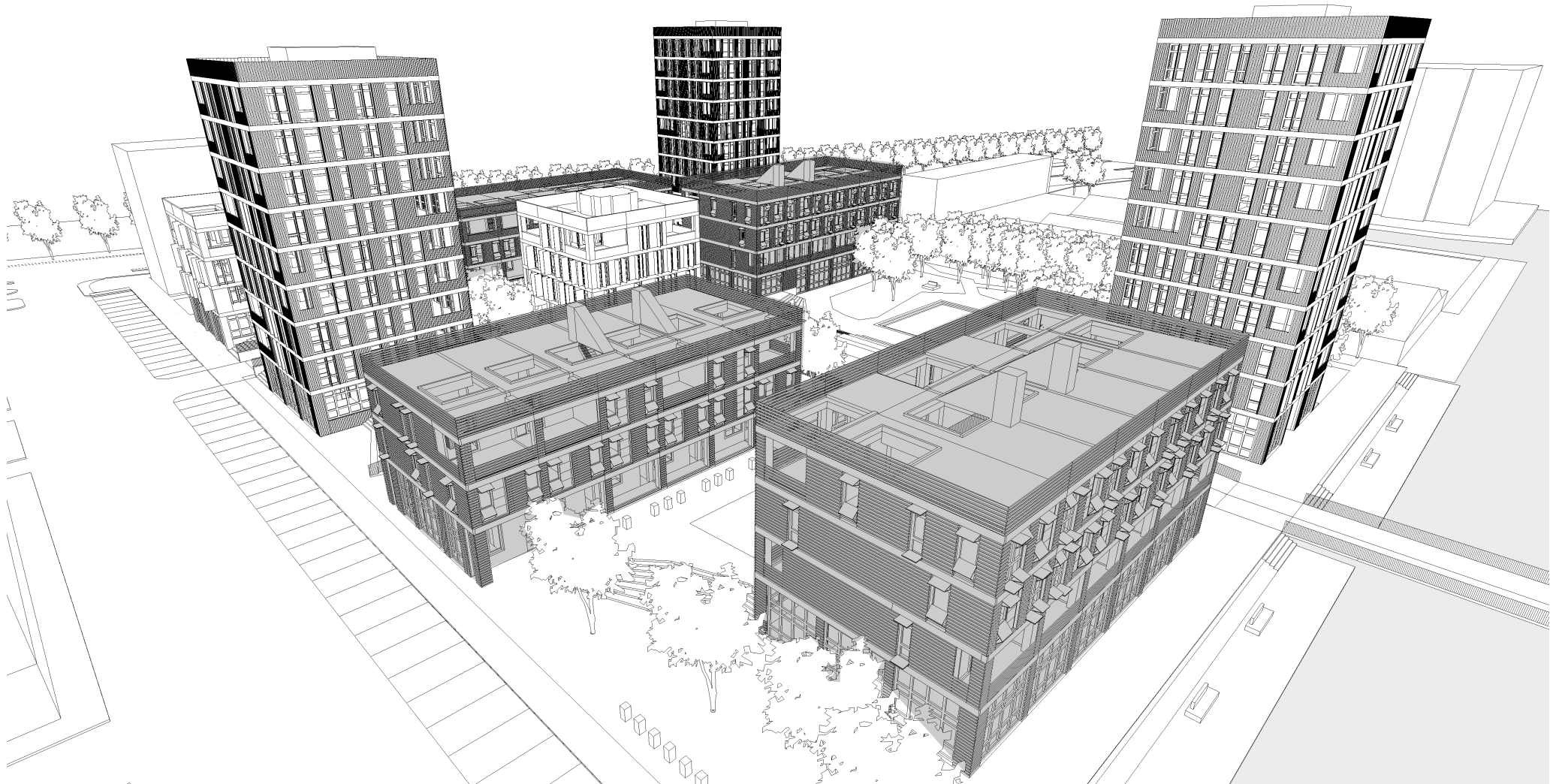
The Dwellings in the cube begin on the first floor, though in one of the cubes, it is possible to have non-residential programme in the plinth to be connected to the dwelling. The cubes are clad in smooth panels.

CUBE



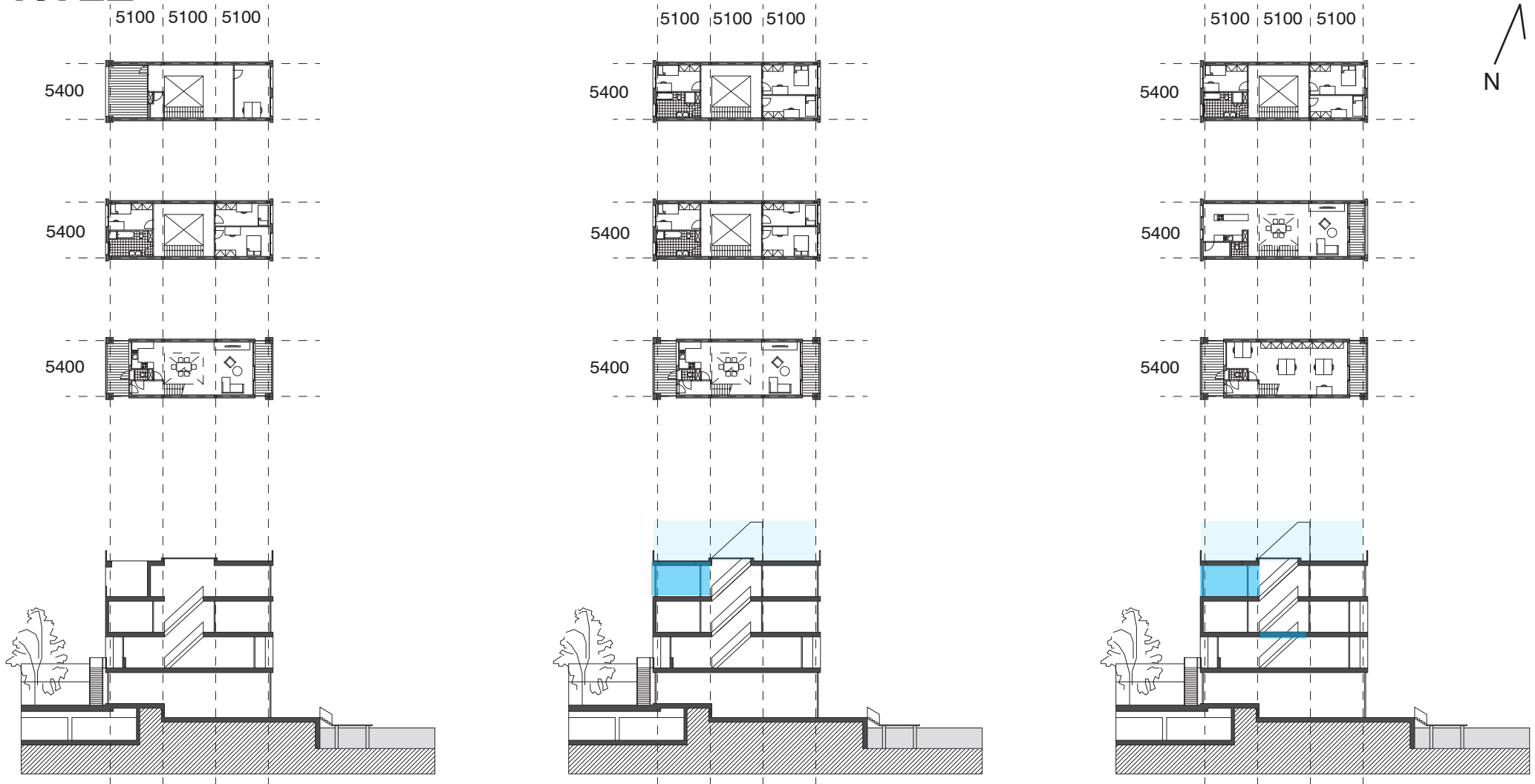
The four central staircases allow negotiation between resident's wishes to achieve customized floorplans for every part of the programme (small home offices, hobby rooms, large living area, etc).

SLAB: ROWHOUSE/MAISONNETTE



The slab dwelling come in two varieties, maisonettes connected by a gallery or row houses that connect directly onto the podium level.

TITLE



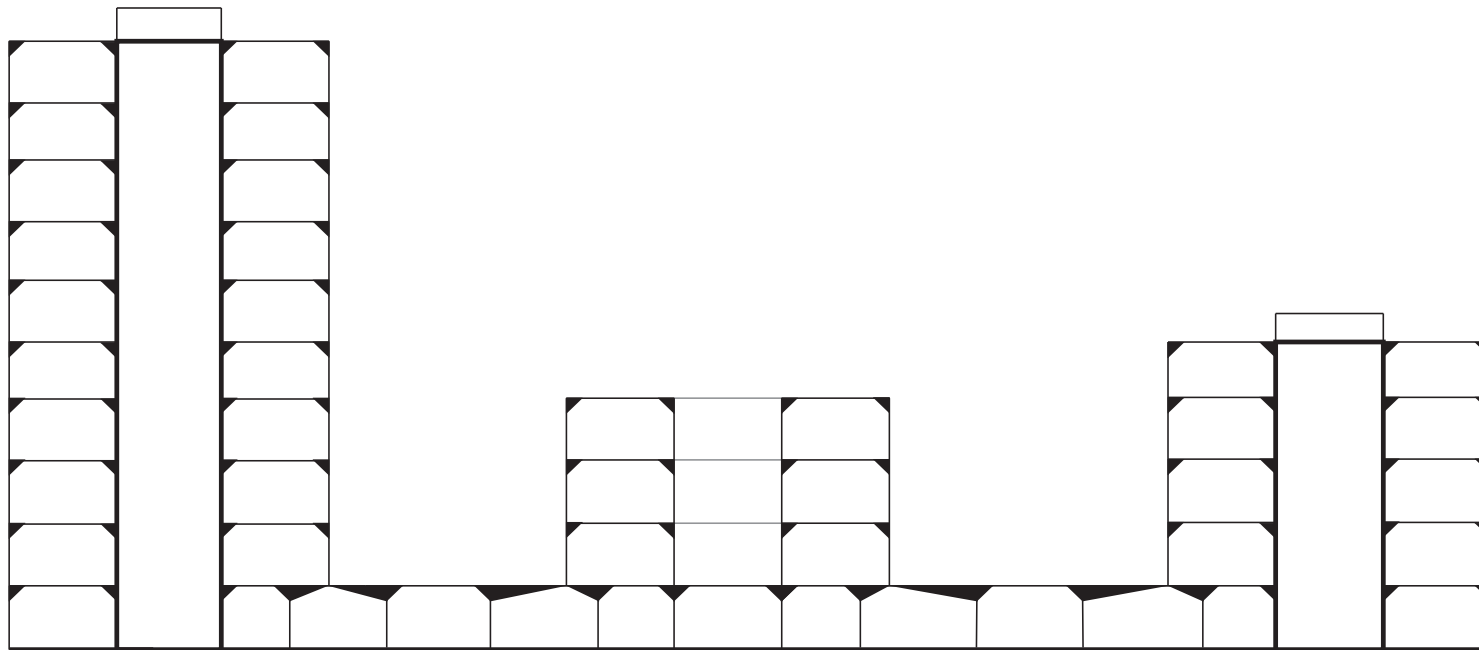
The slab dwelling comes with the possibility to extend the dwelling within its envelope, as well as to convert the ground floor level of the dwelling into an office which can be wholly separated from the living upstairs. This is facilitated by the central void which can be filled in by the dweller and so create this division. The central bay of the dwelling is actually empty: the staircase and the circulation space are infill elements.

TITLE



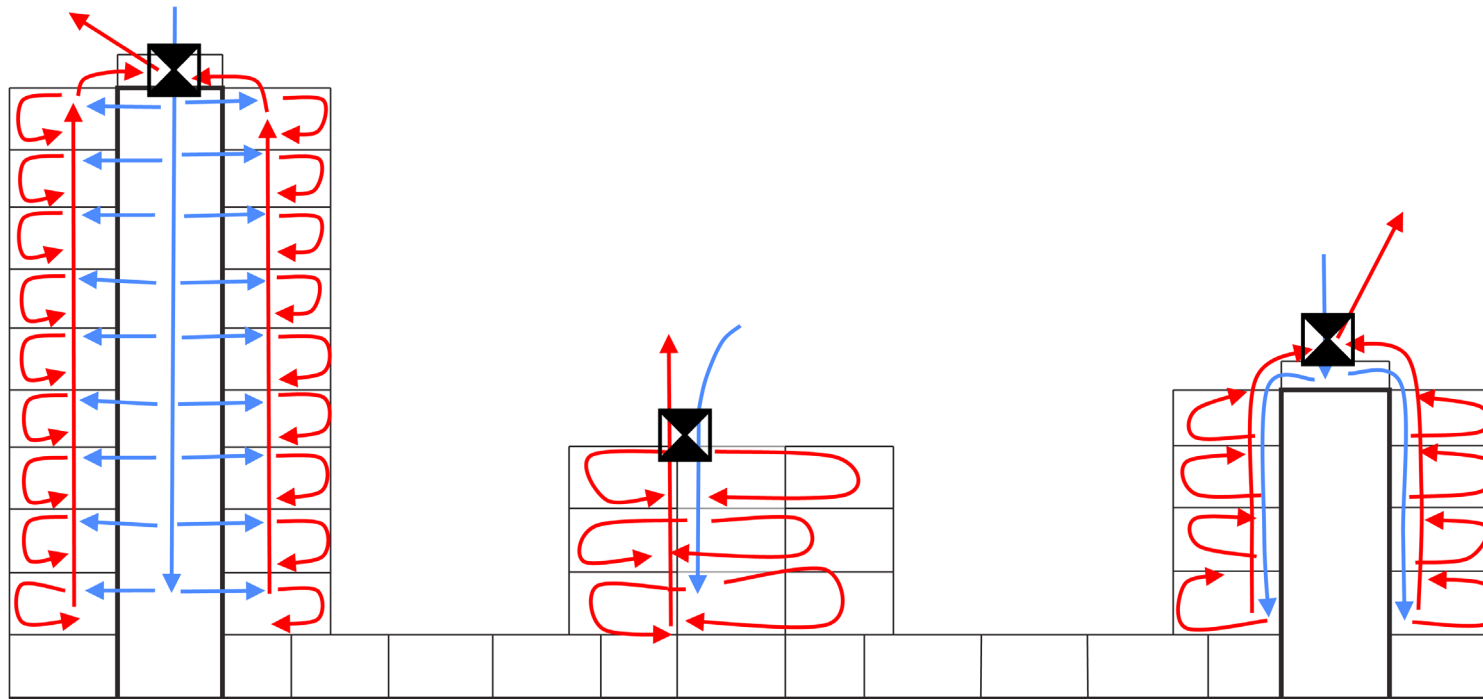
View from a tower balcony onto the podium below.

LOAD BEARING PRINCIPLES



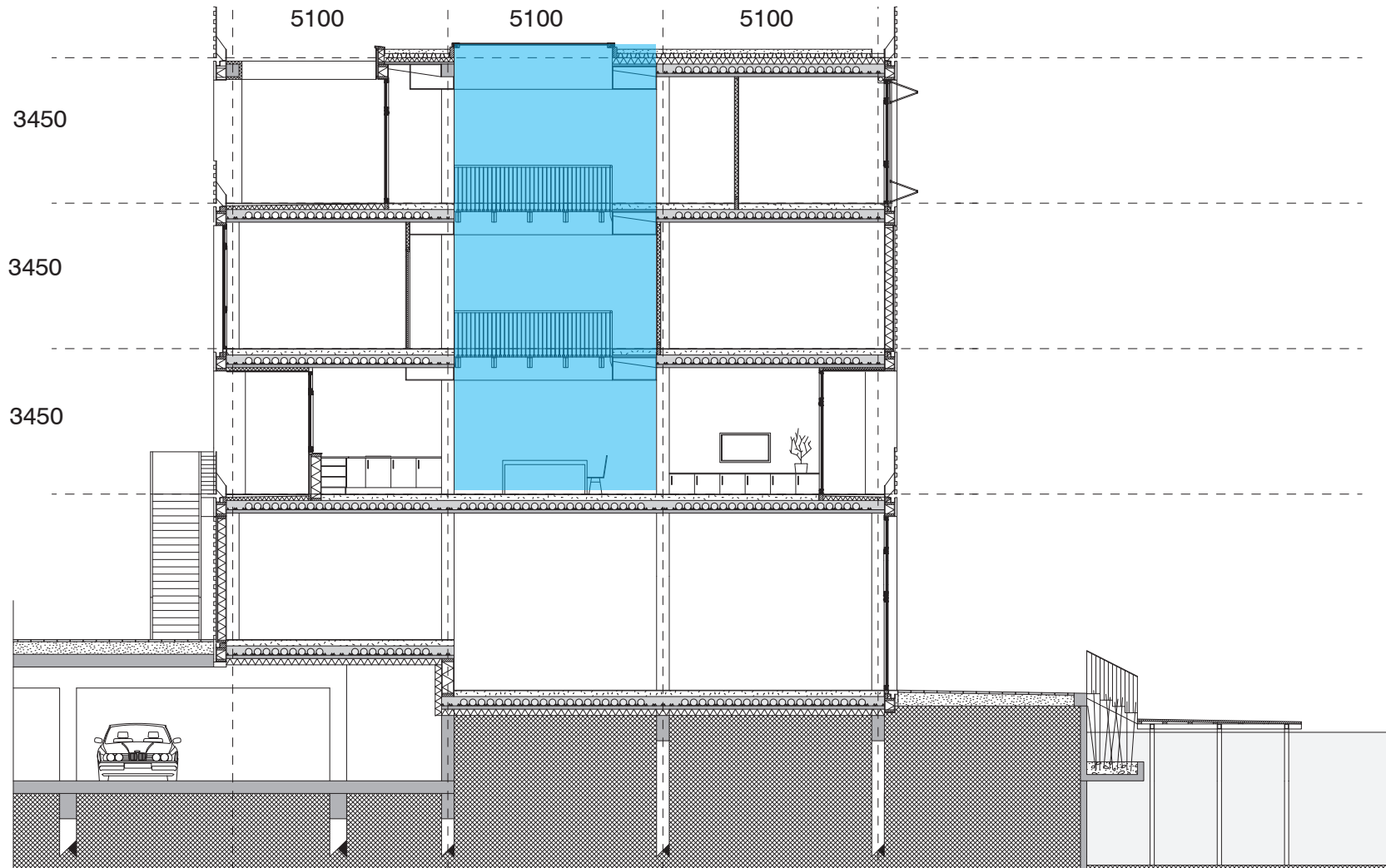
In order to enable the flexibility, we chose a stiff skeleton structure, which would enable the desired level of flexibility in all of the cases.

VENTILATION PRINCIPLES



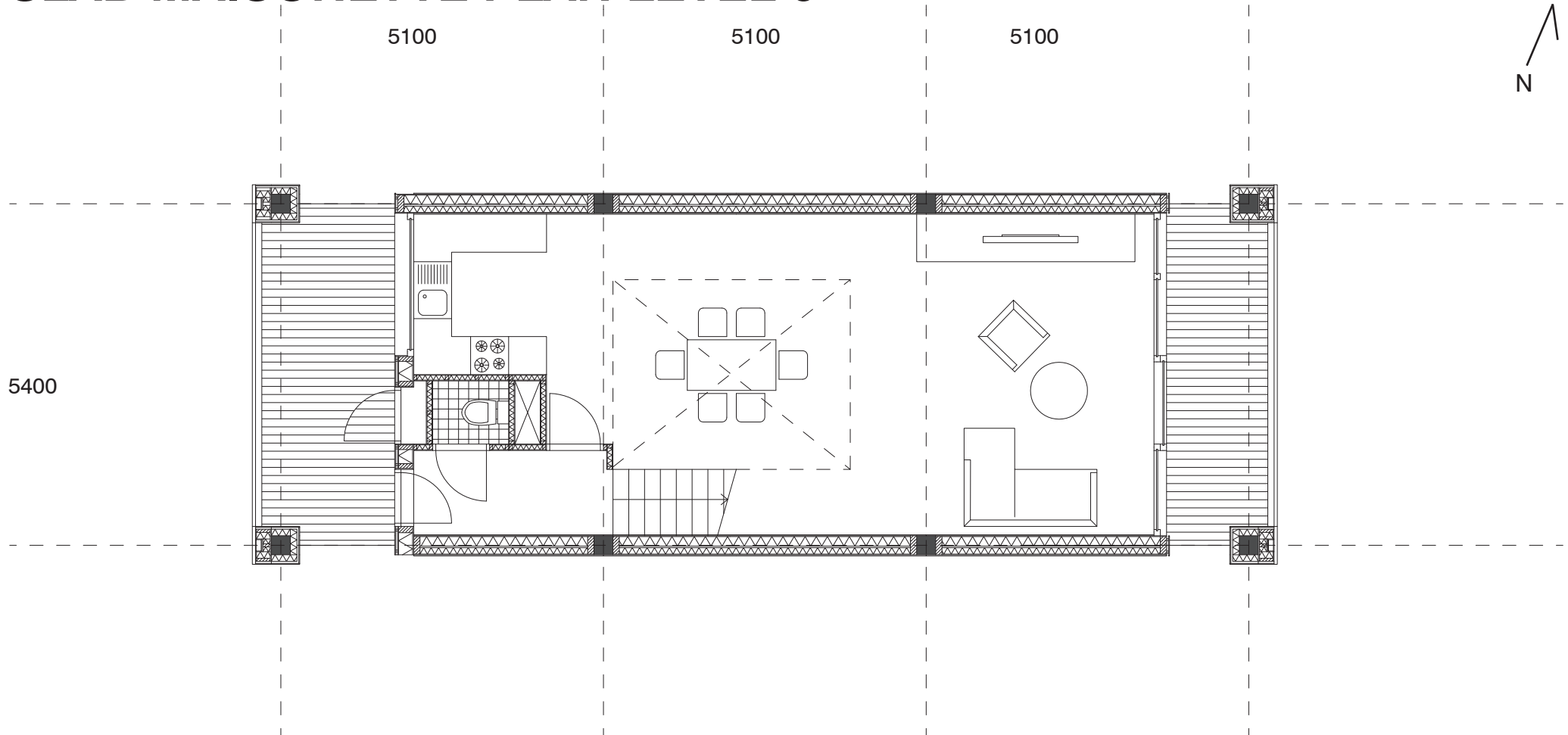
The ventilation concept uses mechanical ventilation as the primary source of fresh air on the scheme. This technical infrastructure is independent of the load bearing structure in order to accommodate changes in the future.

SLAB MAISONNETTE(1:50)



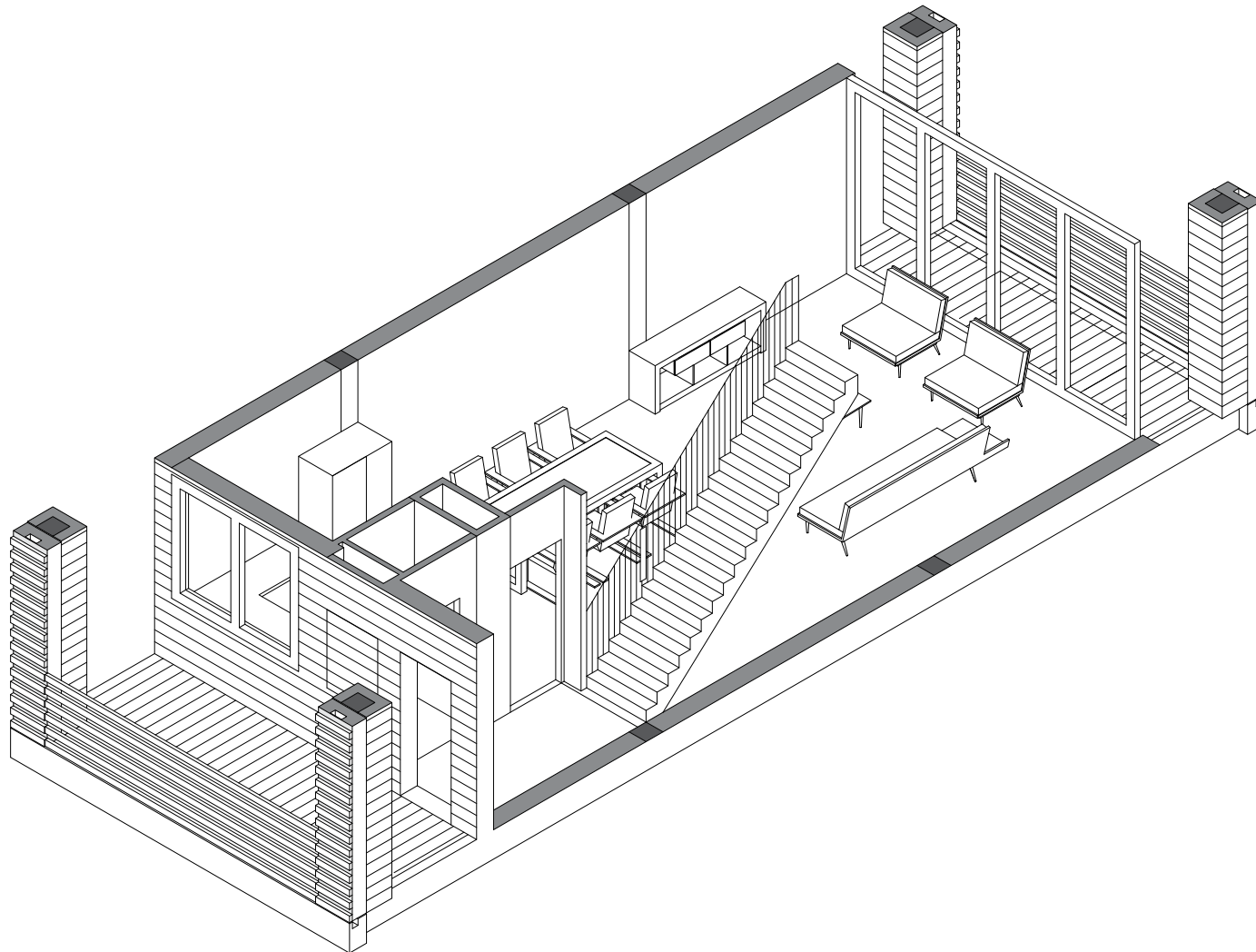
We will now look at the slab maisonette as it demonstrates technical and architectural principles throughout the plan. The building structure is a concrete skeleton with precast concrete columns connected to bubbledeck floors. This provides structural stability without need for additional dracing and smooth ceilings which better facilitate a change in layouts (different placement of walls).

SLAB MAISONETTE PLAN LEVEL 0

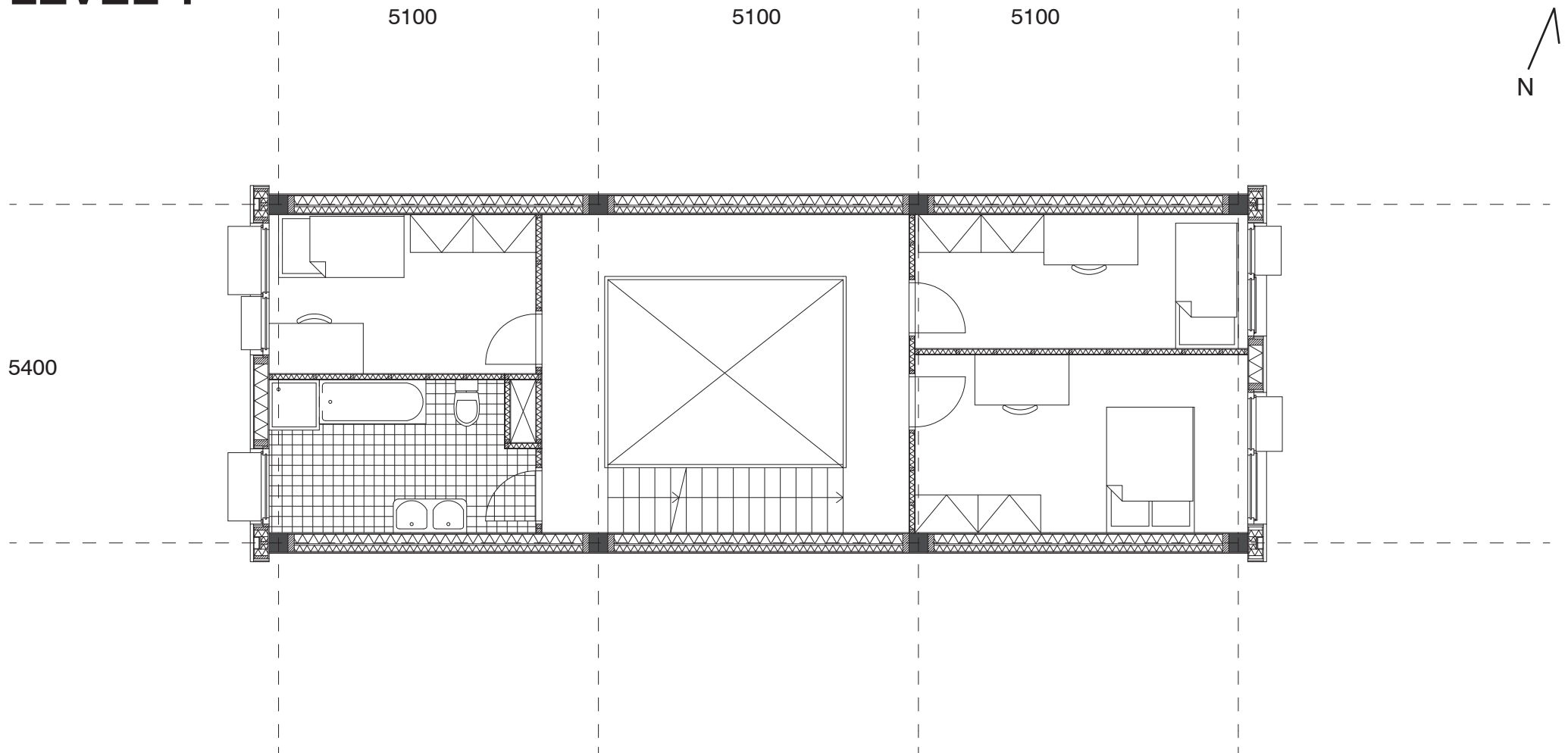


The maisonettes are all connected via a broad gallery, the kitchen is orientated towards this space, the living area is on the other side to provide increased privacy.

LEVEL 0 AXONOMETRIC

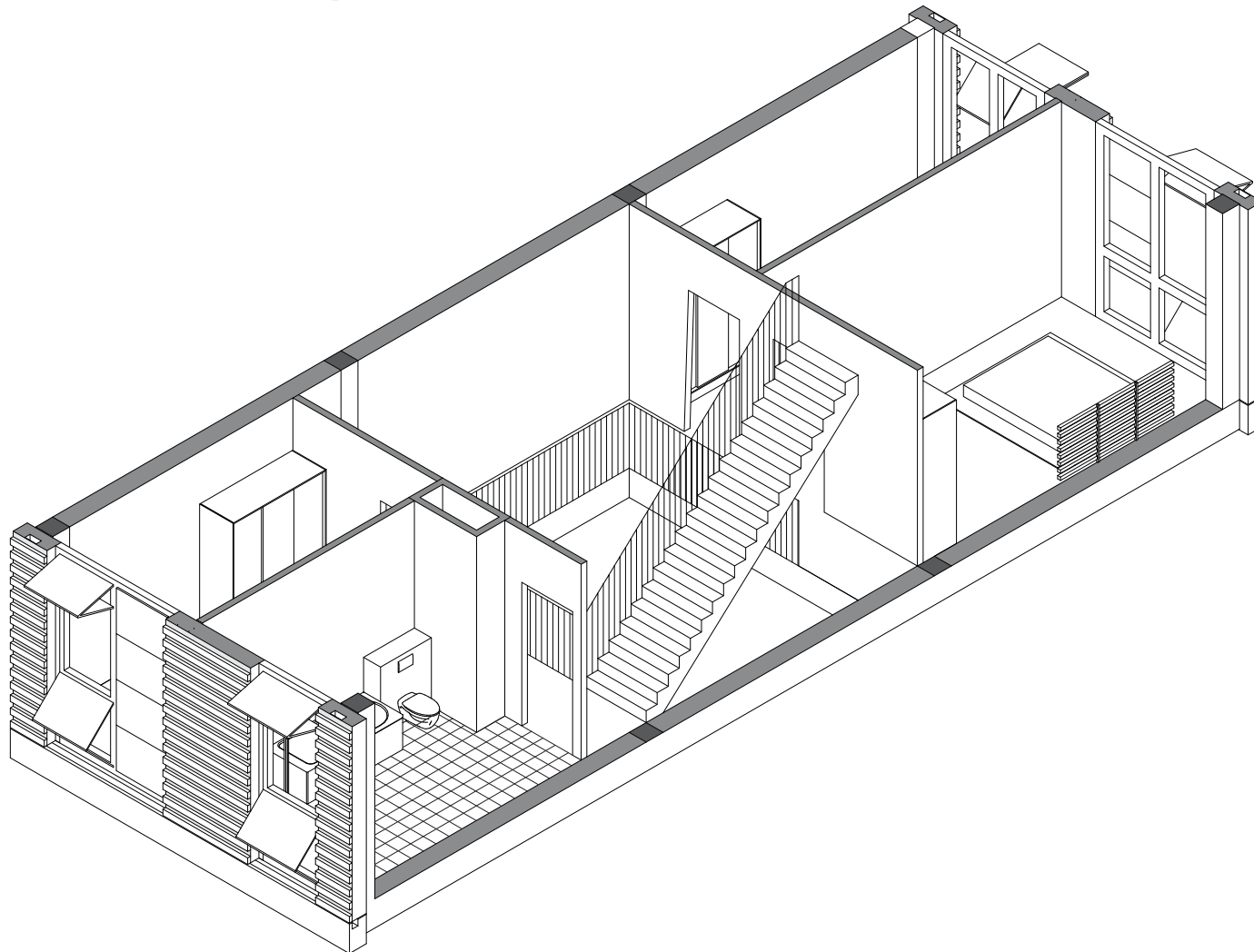


LEVEL 1



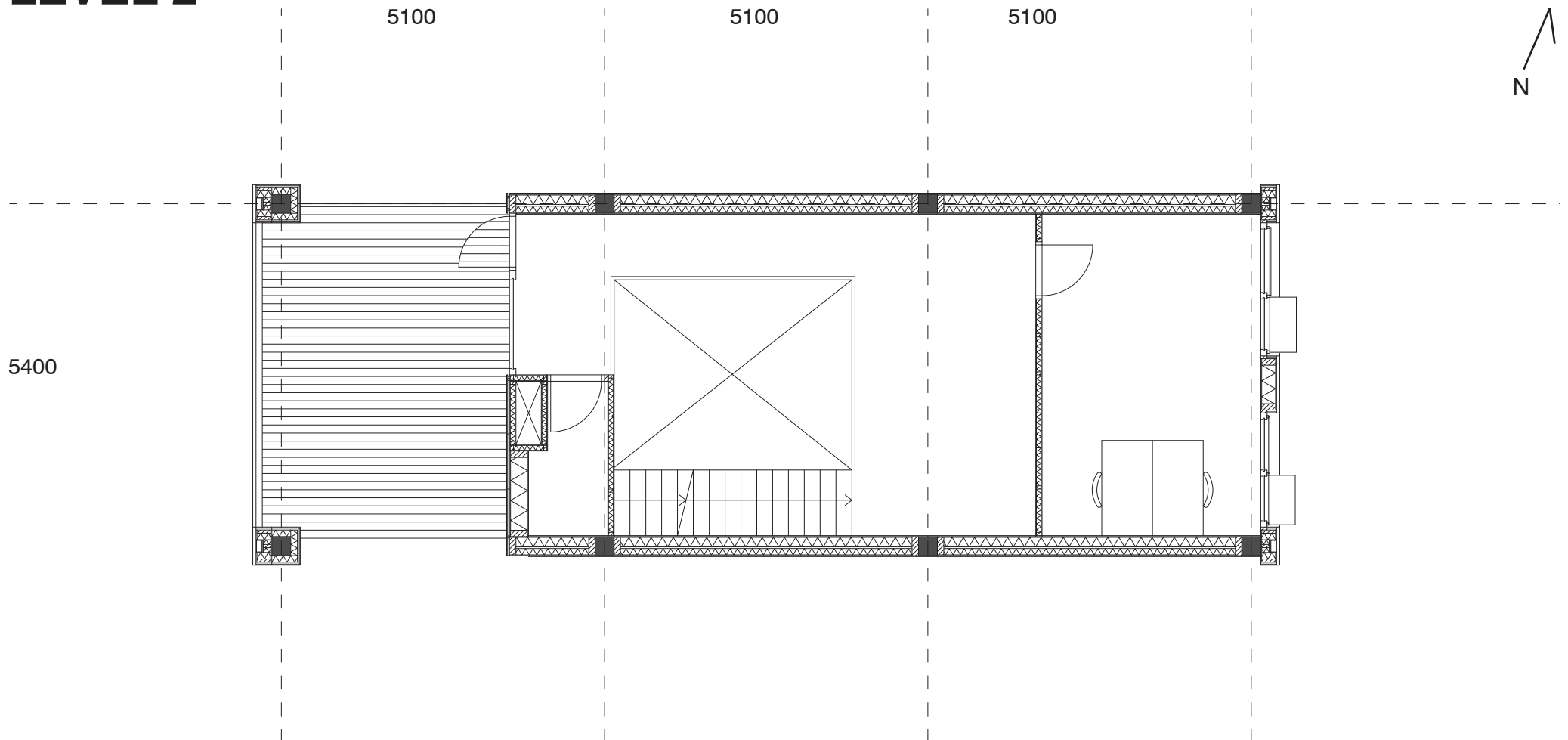
The circulation is organised around the central void, allowing for the connection to the living space, as well as across the level between different rooms. The party walls are constructed of insulating materials and membranes of different thicknesses. The fact that the columns are made of 300mm thick concrete means they do not need extra sound insulation, as would be the case with steel, for example.

LEVEL 1 (AXONOMETRIC)



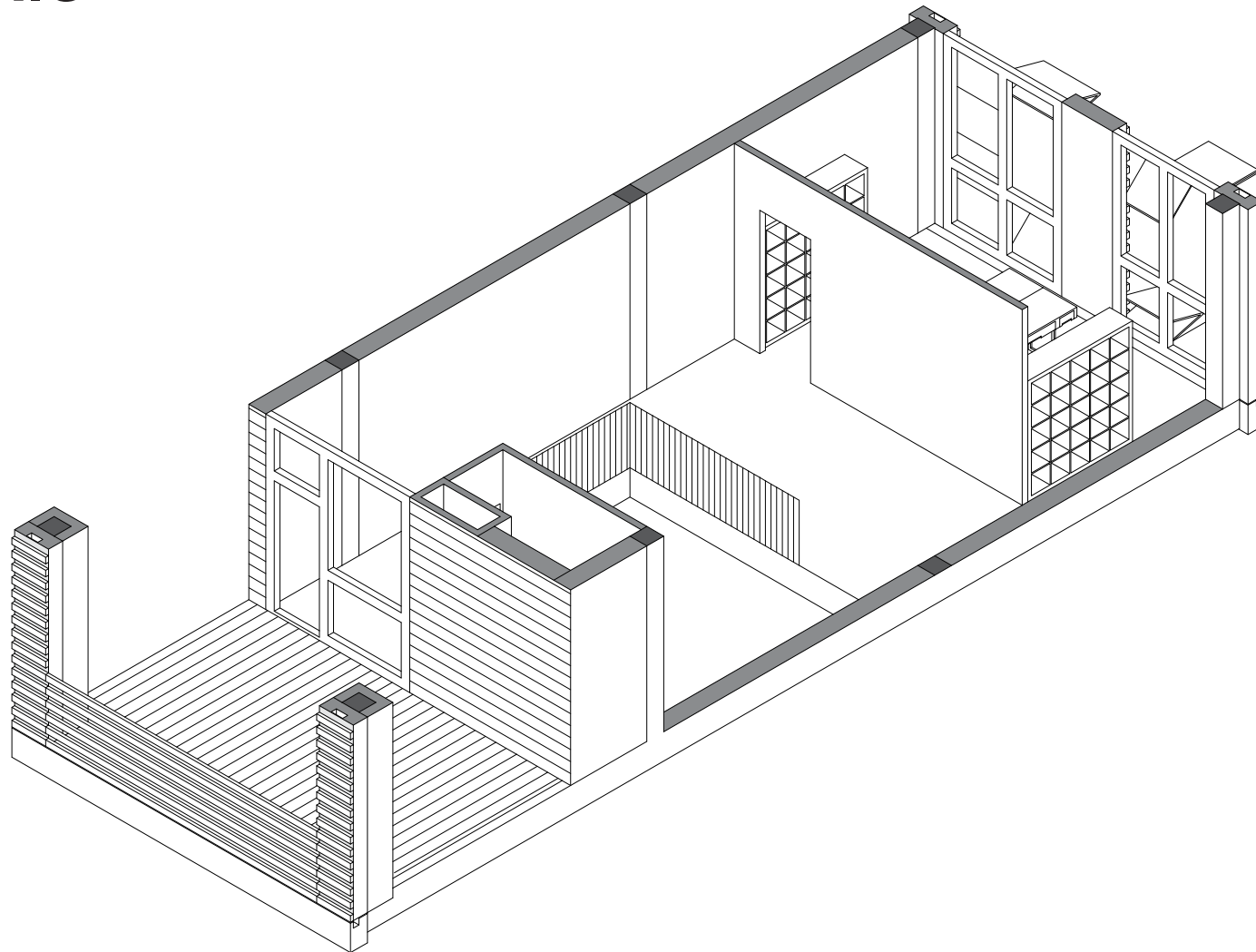
The skeleton structure can thus be wholly preserved while all the infill elements can be changed so that in the future, completely new dwelling/working typologies can be housed within the skeleton.

LEVEL 2



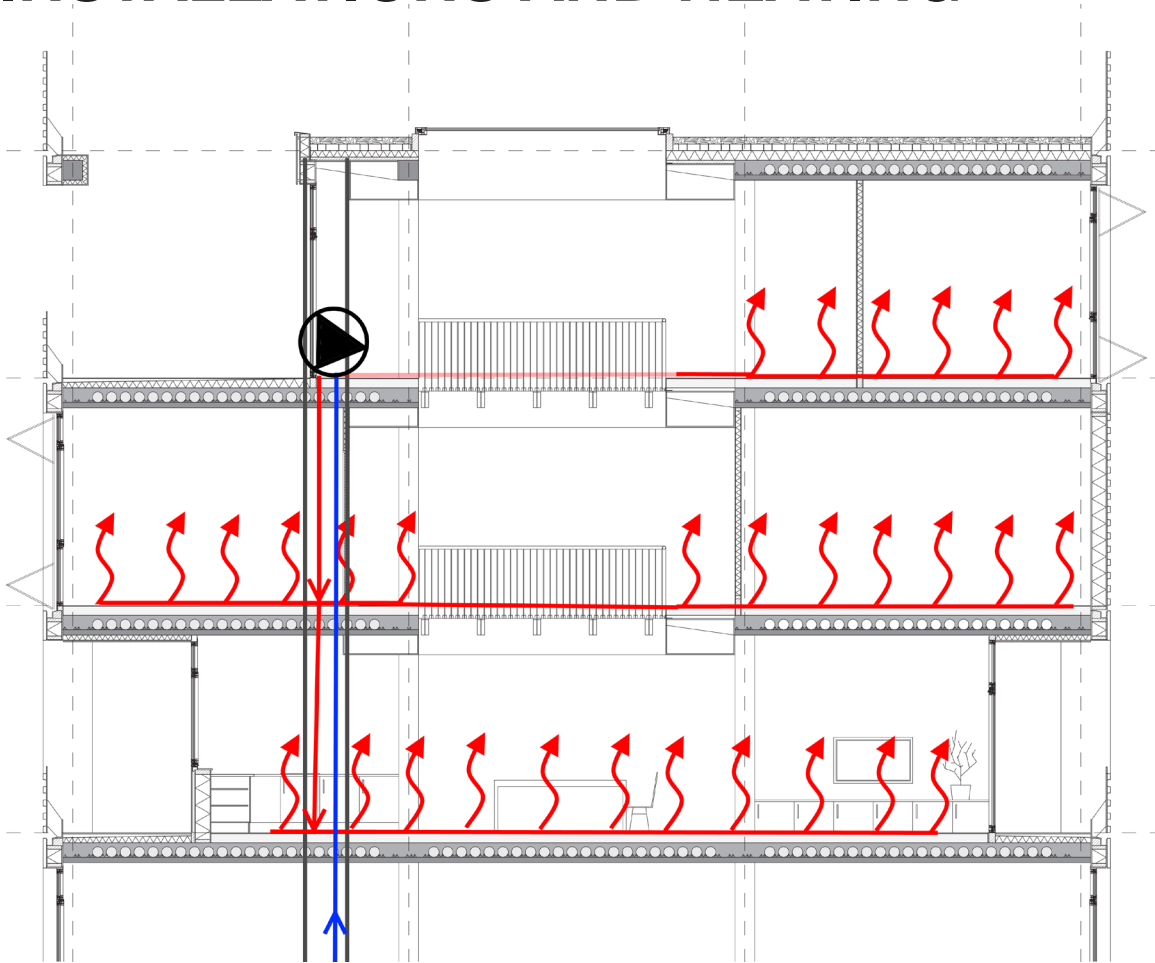
The upper floor features a workroom/hobbyroom/guest room as well as space for installations.

AXONOMETRIC



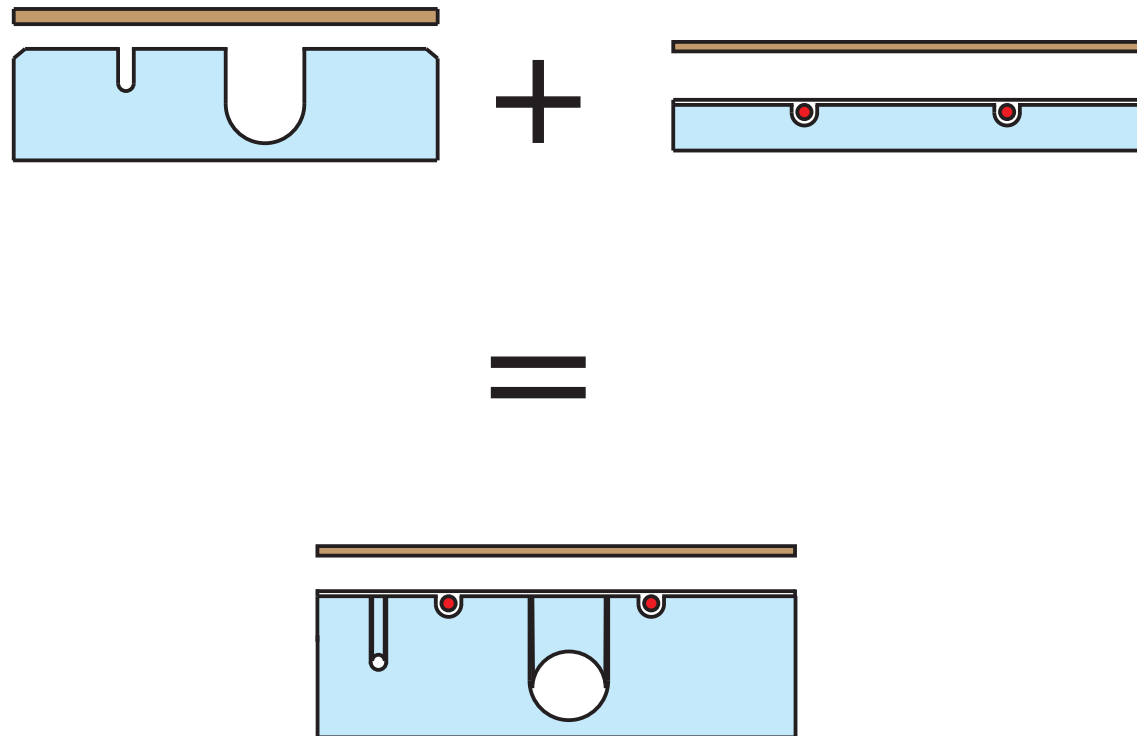
Dwellings in all types feature generous amounts of private outdoor space, which is materialised in wood, the same type as the insides of the building strip on the urban level. (Refer to details later).

INSTALLATIONS AND HEATING



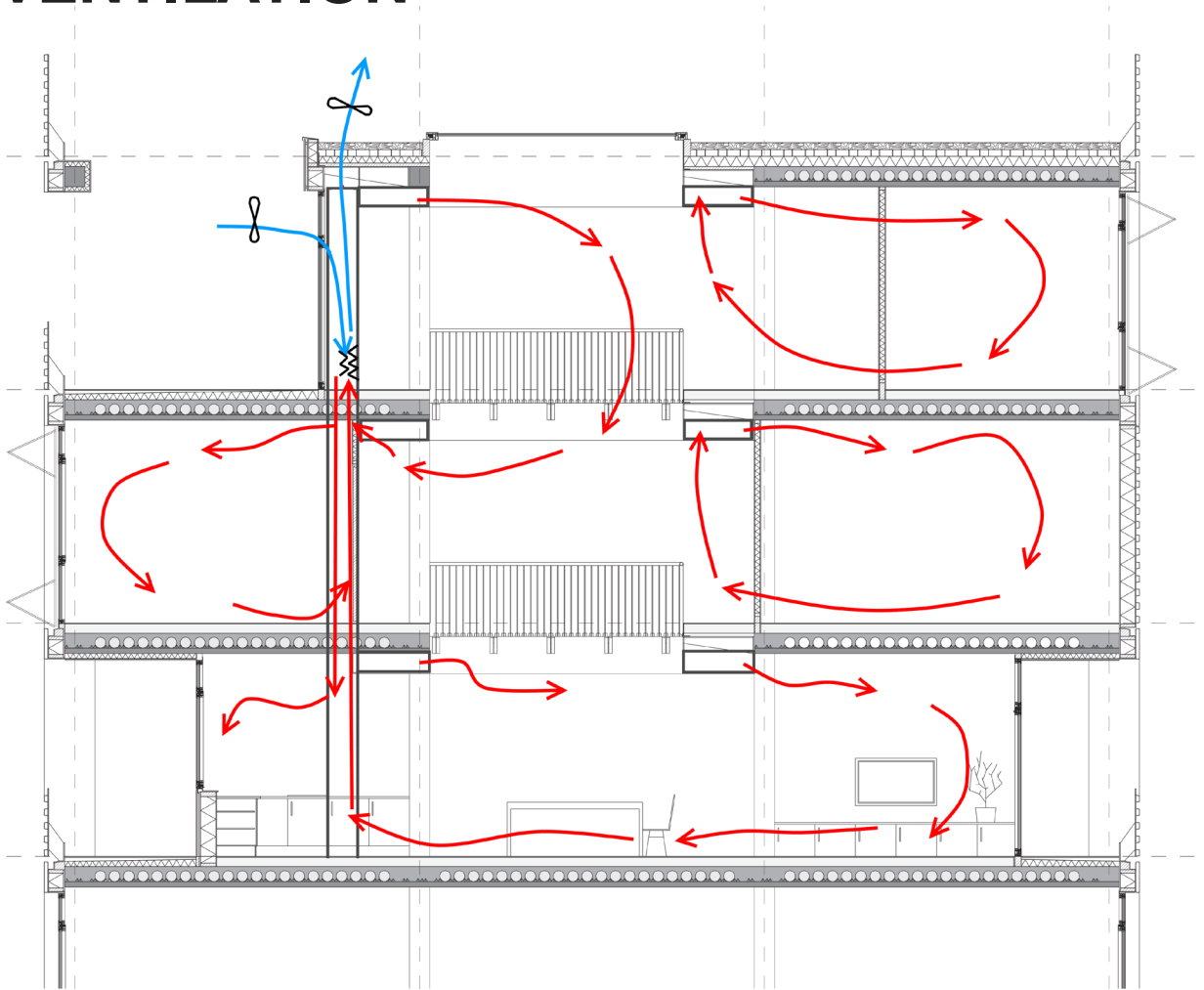
The dwellings use radiant floor heating (cooling in the summer). The reason for this choice was the increased level of comfort it offers to the dwellers.

HEATING



The scheme combines two system in one. The matrix floor ensures flexibility of smaller scale ducts, while the heat diffuser floor allows radiant floor heating without an addition of a concrete deck floor. We could combine these two systems in one panel, provided that ducts within it are thermally insulated.

VENTILATION



Although windows are openable, the scheme uses mechanical ventilation with heat recovery throughout.

CONCLUSION/THE END

