

NOW AND THEN

ERNST MAY
PREIS 2025

THE SOCIAL HOUSING RETROFIT STUDIO

Awarded by



Unternehmensgruppe
Nassauische Heimstätte
Wohnstadt

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17. Ernst May Preis

der Unternehmensgruppe Nassauische Heimstätte | Wohnstadt gestiftet der Technischen Universität Darmstadt

Die Unterstützung junger Menschen in ihrer Ausbildung ist eine der Säulen des gesellschaftlichen Engagements der Unternehmensgruppe Nassauische Heimstätte | Wohnstadt (NHW). Der Ernst-May-Preis (NHW Award Süd), den wir seit vielen Jahren gemeinsam mit der Technischen Universität Darmstadt ausloben, steht exemplarisch für dieses Engagement.

Auch in diesem Jahr war es unser Ziel, die Studierenden mit einer realitätsnahen, gesellschaftlich relevanten Aufgabenstellung zu konfrontieren und damit den fachlichen und gestalterischen Diskurs über den sozialen Wohnungsbau weiterzuführen. Die diesjährige Auslobung lenkt den Blick auf eine Herausforderung, die immer drängender wird: die Transformation unseres umfangreichen Wohnungsbestands aus der Nachkriegszeit.

Die Aufgabe der Studierenden bestand darin, für sieben typische Gebäudetypen aus dem Wohnungsbestand der NHW aus den 1950er bis 1970er Jahren zukunftsweisende Entwurfsstrategien zu entwickeln. Dabei sollten sie sich mit sozialen, wirtschaftlichen und energetischen Herausforderungen auseinandersetzen und architektonische Lösungen erarbeiten, die sowohl kreativ als auch realistisch umsetzbar sind. Im Mittelpunkt stand die Frage, wie diese Gebäude gezielt an heutige und zukünftige Wohn- und Lebensbedürfnisse angepasst werden können – mit dem Ziel, neue Qualitäten zu schaffen, ohne den Bestand grundsätzlich in Frage zu stellen.

Die eingereichten Arbeiten zeigen eindrucksvoll, wie differenziert und verantwortungsvoll die Studierenden mit dieser komplexen Aufgabe umgegangen sind. Statt schematischer Lösungen entstanden kontextbezogene, typologisch fundierte und überraschend pragmatische Entwürfe. Dabei stand nicht nur die gestalterische Qualität im Vordergrund, sondern auch die Frage nach dem Beitrag, den die Architektur heute leisten kann, um unter eingeschränkten wirtschaftlichen Rahmenbedingungen zukunftsfähige Lösungen zu ermöglichen.

Gerade dieser forschende und zugleich praktische Blick auf den Wohnungsbestand macht den Ernst-May-Preis für uns so wertvoll. Er bietet Raum für neue Perspektiven und bringt junge Stimmen in den Dialog mit Planenden, Verwaltungen und Wohnungsunternehmen.

Unser besonderer Dank gilt allen Beteiligten, insbesondere den engagierten Studierenden, dem Team der TU Darmstadt am Fachgebiet Entwerfen und Wohnen sowie den Mitgliedern der Fachjury. Der Ernst-May-Preis ist eine Plattform, auf der innovative Ideen entstehen und weitergetragen werden können. Wir freuen uns, diesen Austausch zu fördern und Impulse für die Weiterentwicklung unseres Wohnungsbestands zu gewinnen.

Wir wünschen Ihnen eine anregende Lektüre.

Dr. Thomas Hain, Monika Fontaine-Kretschmer, Dr. Constantin Westphal

17th Ernst May Preis

awarded by the Unternehmensgruppe Nassauische Heimstätte | Wohnstadt to the Technical University of Darmstadt

Supporting young people in their education is one of the pillars of the Nassauische Heimstätte | Wohnstadt (NHW) Group's social commitment. The Ernst May Preis (NHW Award South), which we have been awarding for many years in collaboration with Darmstadt Technical University, is a prime example of this commitment.

This year, our goal was once again to confront students with a realistic, socially relevant task and thus continue the technical and design discourse on social housing today. This year's brief draws attention to an increasingly urgent challenge: the retrofit of our extensive post-war housing stock.

The students' task was to develop forward-looking design strategies for seven typical building types from the NHW housing stock dating from the 1950s to the 1970s. In doing so, they were required to address social, economic and energy challenges and develop architectural solutions that are both creative and realistic. The focus was on how these buildings could be specifically adapted to current and future residential and living requirements – with the aim of creating new qualities without fundamentally questioning the existing stock.

The submitted works impressively demonstrate how differentiated and responsibly the students approached this complex task. Instead of schematic solutions, context-related, typologically sound and surprisingly pragmatic designs were created. The focus was not only on design quality, but also on the question of how architecture can contribute today to enabling sustainable solutions under limited economic conditions.

It is precisely this investigative yet practical view of the housing stock that makes the Ernst -May- Prize so valuable to us. It offers space for new perspectives and brings young voices into dialogue with planners, administrations and housing companies.

We would like to express our special thanks to everyone involved, especially the dedicated students, the team at TU Darmstadt in the Department of Design and Housing, and the members of the expert jury. The Ernst-May-Prize is a platform where innovative ideas can be developed and shared. We are delighted to promote this exchange and gain inspiration for the further development of our housing stock.

We wish a stimulating read.

Dr. Thomas Hain, Monika Fontaine-Kretschmer, Dr. Constantin Westphal

JURY

Prof. André Kempe

Jury chairman, Head of the Institute of Design and Building Theory at Leibniz University Hannover, Partner at Atelier Kempe Thill Architects and Planners in Rotterdam

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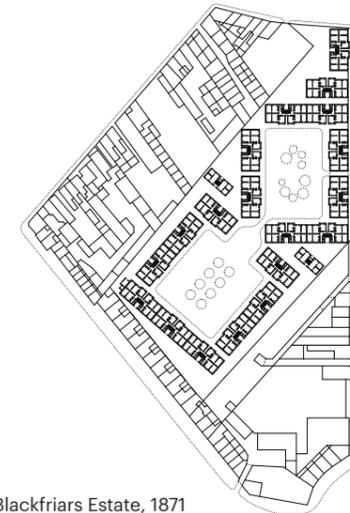
AWARDED PROJECTS

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Now and Then The Social Housing Retrofit Studio



Social housing starts with capitalism and with the rise of a new social subject: the working class. Giuseppe Pellizza da Volpedo, *Il Quarto Stato*, 1901



Peabody Blackfriars Estate, 1871



Collective facilities, laundries and playground for collective child-care in the Red Vienna projects, 1920s

INTRODUCTION

The design studio at the centre of the Ernst May Preis 2025 (NHW-award south) is grounded in a collaboration between the Institute of Design and Housing at TU Darmstadt and the Unternehmensgruppe Nassauische Heimstätte | Wohnstadt (NHW)—the social housing agency of the State of Hessen. Partnering with an active social housing agency like NHW is particularly valuable. On one hand, it allows students to engage with real-world challenges, to experience first-hand the buildings on which they worked, and to immerse themselves in the workings of a major housing organization. On the other hand, it encourages a broader critical reflection on the responsibilities of architects and their profession, allowing students to explore alternative models of professional engagement.

Considering the traditional focus of the Ernst May Prize and current urgencies, the studio aims to foster systemic thinking and a more “grounded” approach to housing design. To this end, the studio seeks to cultivate a deeper inquiry into what transformation means within specific socio-economic and physical conditions. Students are encouraged to explore a range of alternative approaches, each responding to different parameters, considerations, and positions.

BRIEF HISTORICAL REMARKS ON POSTWAR SOCIAL HOUSING

The history of social housing dates to early philanthropic efforts during the Industrial Revolution, but state-funded housing truly emerged after World War I to address social unrest and the needs of returning veterans. Rooted in long-standing class struggles and land privatization since the 16th century, social housing evolved from paternalistic control measures into a tool for urban planning and welfare.

While cities such as Vienna and Amsterdam saw remarkable architectural achievements in the first half of the twentieth century, social housing gained significant momentum after World War II, driven by the combined effects of urban reconstruction, economic development, and welfare policies, which created opportunities for mass construction. In many countries, including Great Britain, the Netherlands, Sweden, Germany and France, the sheer volume of social housing built helped partially de-commodify residential space by mitigating land speculation. However, the conditions under which the state could acquire land for housing were not always favourable. The scarcity of land compelled architects to adopt high-rise typologies, such as towers and slabs. This trend was influenced in part by Le Corbusier’s experiments, such as his proposal for the *Îlot Insalubre* in Paris, which served as a foundation for his influential *Unité d’Habitation* project, as well as by CIAM principles that emphasized the integration of housing and green spaces.

While the implementation of high-rise social housing improved many aspects of living standards, including views and natural light, it often fragmented the morphology of estates, resulting in inhospitable and undefined ground spaces. In many cases, the state was compelled to purchase land from private owners at market prices, leading to the construction of new social housing far from city centres. This was particularly evident in France, where the so-called grands ensembles were built in areas lacking basic services and poor connectivity to major transportation lines, contributing to a sense of alienation and exclusion among residents.

Another challenge was construction itself, which in many European countries was delegated to private companies. The profit-driven logic of these companies often led to cost-cutting measures that significantly compromised building quality. Moreover, maintenance of large-scale social housing presented a major long-term issue. Estates required comprehensive upkeep, from maintaining open spaces to repairing elevators and cleaning public passages.

Despite these challenges, social housing represented a unique moment when housing architecture was not entirely driven by market logic but was built to serve people in need. Claims that social housing represents a “failure” often stem from a superficial understanding of it as the product of architects’ and planners’ hubris. In reality, the decline of social housing that began in the 1970s was part of a broader economic restructuring, during which the liberal democratic state began to withdraw from its role as a welfare provider. While much of the housing stock was privatized, in many countries one of the most pressing questions for social-housing agencies is today the retrofit of those buildings built in the 50s, 60s and 70s, which are nearing the end of their life cycle.

SOCIAL-HOUSING TRANSFORMATION

The transformation of the postwar social-housing stock has recently become a central theme in current architectural debate, involving a multitude of professional figures, from urban planners and energy experts to social scientists and, at times, public administrators. This sudden spark of interest is generally motivated by the concrete urgencies related to the obsolescence of these buildings. The deterioration of construction materials and of technological installations has a visible impact on the living comfort of inhabitants; poor energy performances lead to skyrocketing bills that, especially in times of energy crisis, landlords and tenants can hardly sustain; and the more general and systemic rise of maintenance costs accentuates the continuous devaluation of this stock. These technical and economic reasons often go in parallel with the intention of planners to ‘rectify’ other issues, in particular matters at the crossroads between social conditions and spatial qualities, related for example to the vulnerable personal and economic conditions of residents and to the image, and level of inclusivity, of these urban neighbourhoods. As postwar residential buildings approaching their end-of-life cycle are ubiquitous, it should come as no surprise that the question of what to do with this physically but also numerically large housing stock is becoming urgent.

In recent years, a number of diverse projects for the transformation of this type of housing have been successfully completed in several European countries, from the Netherlands to France, from Belgium to Switzerland. Some have become exemplary, being broadly disseminated and widely acclaimed within the architectural debate. What is most valued by



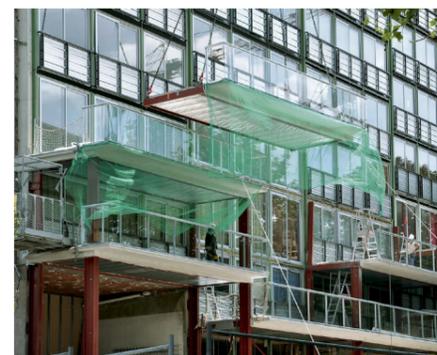
Holzmann-Coignet factory for serial prefabricated concrete elements, Neu-Isenburg, 1963



Jerry McMillan, *Ed Ruscha says goodbye to college joys*, 1967



The demise of post-War social housing was manifested in opposition to its monotonous and scary architecture and in the growing stigmatization of its population. In the picture, an iconic moment when a plane crashed into the Bijlmermeer, the largest social housing of Amsterdam, October 1992



To improve the facade performance and increase the size of each apartment a second layer was added at Tour Bois-le-Prêtre by Lacaton & Vassal. The self-supporting structure allowed for residents to remain in their units, each element needing one day of assembly

contemporary architectural culture is the capacity of these proposals to take advantage of the possibilities given by existing constructions to imagine a future of greater spatial quality while reducing the use of additional resources and lowering the impact on the planet in terms of energy and materials.

The groundbreaking work of French office Lacaton & Vassal is perhaps the best-known example in this direction. Aside from the undeniable effectiveness of their approach, the success enjoyed by the work of the French office has sometimes resulted in replicas of their design principles almost as ‘a given’, arguably revealing the need for a thorough reflection on the criteria and agenda behind refurbishment projects after decades of generalised disinterest by the architectural profession. However, what is perhaps most relevant to mention, despite the success stories of new projects and the unquestionable advantages they present, is that for many housing agencies and municipalities, the applicability of these models on the very large-scale and the question of whether to embark on a process of transformation (from retrofitting to rehabilitation) or to simply demolish and rebuild (as in the recent demolition of Alison and Peter Smithson’s Robin Hood Gardens in London) remains open and difficult to answer. This reticence suggests that the criteria, or preconditions, that responsible institutions evaluate to initiate a project are far more diverse and perhaps contradictory than those often assumed from the outside.

DESIGN BRIEF

The studio focuses on developing and critically assessing design possibilities for retrofitting and transformative approaches within a selection of buildings from the NHW housing stock. Given limited financial resources and technical constraints and considering that works has generally already been conducted on the building envelope some twenty years ago, students explore design strategies for seven case studies from the 1950s, 1960s, and 1970s located in the larger Frankfurt region. The task begins with key questions: How can we rehabilitate large social-housing stocks when financial constraints make full refurbishment impossible? How can architecture generate unexpected results despite rigid technical and financial limitations? Can architectural design serve as a catalyst for discussions on alternative future scenarios?

At the start of the semester, students are required to conduct a thorough diagnosis of their case by working in small groups and analysing each building in depth, considering structural possibilities, social issues, and management constraints. Through extensive fieldwork and detailed feedback sessions, students are then guided to develop feasible transformation scenarios, working individually to formulate key design approaches. These included design interventions that, despite limited resources, maximise impact in meeting the needs and expectations of both inhabitants and NHW. Students develop detailed and specific strategies that are directly embedded in the reality of the buildings they addressed, and that ultimately are able to question the ways in which transformation is performed today.

3 RETROFIT STRATEGIES

In developing their analytical and design work, students are asked to follow one of three alternative retrofit strategies. These strategies serve both as a source of support and as a general framework for shaping design proposals.

STRATEGY 1: RADICAL PRESERVATION

This strategy involves evaluating the existing building as an asset with spatial, formal, heritage, and performative qualities that should be preserved and valued rather than erased through refurbishment. It advocates for carefully considered, well-reasoned transformation actions that enhance these existing qualities with the aim of improving residents' quality of life while, as much as possible, increasing the building's energy performance.

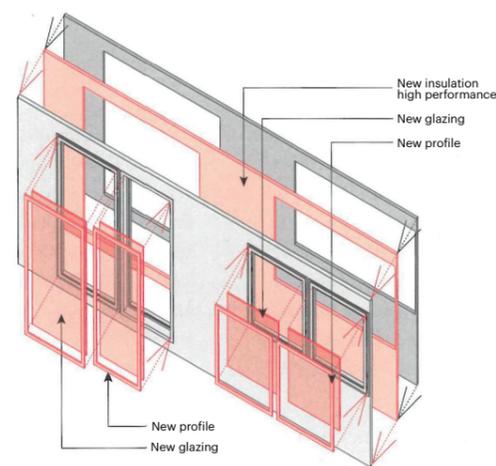
Working within this strategy primarily involves addressing issues caused by obsolescence or damage, thereby extending the building's lifespan and ensuring greater comfort for its inhabitants. The building's appearance should not be altered—or, if necessary, only minimally changed or even restored to its original state. Existing elements should, in principle, not be discarded but instead repaired or improved through critical additions or alterations. Any new component should be added as part of a detailed and strategic intervention which, despite its limited scale, can have a significant impact on the building's use, perception, and daily life.

This strategy is based on the following principles:

- Demolitions should generally be avoided unless they are punctual and justified by structural or technical reasons.
- The appearance of the building should be maintained or, where possible, restored to its original condition—externally and, as much as feasible, internally.
- The lifespan of existing elements and materials should be preserved and extended through operations such as: cleaning, when no damage is present; repair, when elements are still valuable but require minor fixes; replacement, when components are no longer functional; and improvement through addition, when replacement is not feasible or desirable.
- Living comfort should be brought up to current standards, including accessibility for barrier-free living. This involves addressing factors such as airtightness, window performance, prevention of mould and moisture, acoustic and thermal insulation (e.g., through special plaster), electrical upgrades, and reconfiguring the apartment using newly designed furniture or lightweight elements.



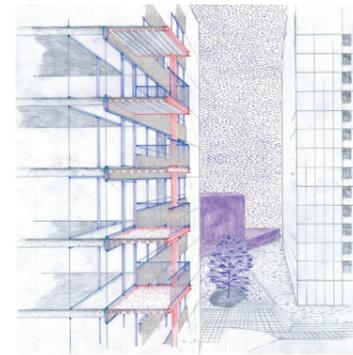
The 1060m long Cité de Lignon was transformed by adding minimal insulation and a new layer of glazing, focussing on a minimal impact strategy while creating 30% in energy savings.



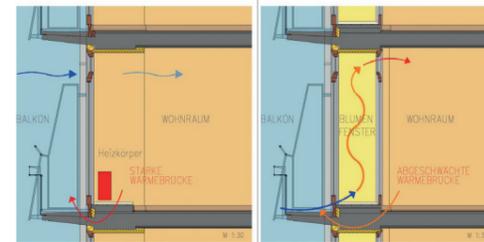
Scheme of structural and energy-related interventions on the building façade (insulation and glazing)



By adding a new layer of glazing and high performance insulation the historic facade could be preserved.



Renovation of a housing tower in Molenbeek-Saint-Jean, Brussels by AgwA and Zed, competition 2021



In a listed building by Hans Hoffmann in Berlin Brenne architects evaluated two alternatives for enhancing the facade performance, finally deciding on a 'blumenfenster' as buffer zone to reduce the impact of structural thermal bridges



While the appearance of the 'Glas-Hoffmann' buildings could be preserved the performance could be highly improved, now meeting new construction standards

STRATEGY 2: BETTER PERFORMANCES

This strategy views the building as a valuable architectural structure in terms of accessibility and the basic quality of the apartments, but one that must be updated for improved energy efficiency. Since the building envelope—despite existing insulation—is often the main source of energy loss and also the most expensive part of any renovation, this strategy focuses on the external boundaries of each apartment and the building as a whole. The existing walls serve as the first barrier between interior and exterior and should be preserved and enhanced wherever possible.

Rather than simply adding a few extra centimetres of insulation around the building, this approach prioritizes the identification and resolution of thermal bridges—caused either by insufficient insulation or by structural features such as cantilevers, balconies, and loggias that protrude from the main volume. Another key area of focus is the building's openings, especially windows and doors. The goal is to reduce energy loss while still allowing for natural ventilation and improving the interior spatial conditions in a way that is intuitive and accessible for residents.

The building envelope also has both an internal and external layer: materials must be selected to balance durability, ease of maintenance, and visual appeal. Additionally, careful consideration must be given to sun exposure, optimizing the orientation of the building and its openings for both thermal performance and overall livability.

This strategy is based on the following principles:

- Demolitions should generally be avoided unless they are specific and justified by structural or technical needs.
- Changes to the building's external and internal appearance are allowed, but must be the result of conscious decisions that weigh potential losses in materials, heritage, and spatial quality.
- Natural ventilation should be prioritized, avoiding fully mechanized ventilation systems (e.g., System D) whenever possible. Existing technical shafts should remain unchanged.
- The primary sources of heat loss—thermal bridges, windows, openings, and wall materials—must be identified and addressed first. Minimizing or eliminating the impact of thermal bridges is essential for maximizing thermal comfort within the constraints of the existing structure, before considering additional insulation layers.
- Sun exposure should be optimized to improve both energy efficiency and quality of life.
- Improved performance should be achieved through updated technical systems, more efficient and better-designed window elements, and the use of appropriate, preferably natural, finishing materials.

STRATEGY 3: TYPOLOGICAL UPDATE

This strategy focuses on reshaping housing typologies (and upgrading installations) to improve livability and comfort—an essential first step in adding long-term value to existing buildings. Structures built 50 to 70 years ago often no longer align

with contemporary expectations regarding spatial dimensions, domestic functions, and quality of life. However, retrofitting these buildings to match today's standards entirely is often unrealistic due to structural and spatial constraints.

Many of the modernist-era apartments in the selected project, despite differing material and social contexts, follow rigid spatial arrangements that are increasingly mismatched with contemporary household needs. With an aging tenant population, retrofitting strategies that enable residents to age in place—such as adapting private units or introducing shared areas—may be well received. The same applies to non-traditional households whose needs differ from the nuclear-family model on which these buildings were originally based.

Reconfiguring housing layouts should therefore be approached as an opportunity for experimentation, but also with great care. These interventions often require the temporary relocation of residents, which can be highly disruptive. As such, the goal should always be to maximize the impact of the transformation while minimizing its intrusiveness and cost.

The same careful consideration applies to updating technical systems such as bathrooms, kitchens, and laundry facilities. Meeting modern standards is desirable but not always feasible due to spatial or infrastructural limitations (e.g., shaft dimensions and placements). Still, striving to improve living conditions remains a guiding principle—balancing potential gains against possible losses is essential when undertaking more invasive renovations.

This strategy is based on the following principles:

- Partial or total displacement of inhabitants is permitted but not encouraged. If necessary, it must be part of a carefully planned and realistic phasing strategy.

- Demolitions, including of structural elements, are allowed but must be minimal. The principle of minimum disruption, maximum effect should guide all actions. Complete demolition of existing typologies is not acceptable; any changes must remain within 25–30% of the original structure.

- The building's volume must remain unchanged—adding additional levels is not permitted.

- The total number of households must be maintained in the final design, although the ratio and types of dwellings may reasonably change.

- A reasonable percentage of barrier-free units should be provided.

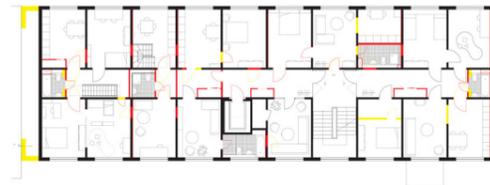
- Before altering existing apartment layouts, all underused or unused spaces—such as circulation areas, roofs, and ground floors—must be evaluated for potential conversion into additional living space, in order to minimize disturbance to current tenants.

- New apartment designs should meet the housing company's standards for new construction in terms of Net Floor Area (NFA), materials, spatial modules, and technical specifications. If departing from these standards, the rationale must be explicitly justified.

- Inhabitants' safety must be ensured through the adaptation of access routes and fire escape paths.



Through replacing the facade and extending the interior by 2m and adding balconies the energy performance as well as the quality of life could be improved while allowing for residents to remain in their units



Transforming a former STASI office building into a collective housing project the architects focussed on precise interior interventions to create variation in the repetitive slab construction

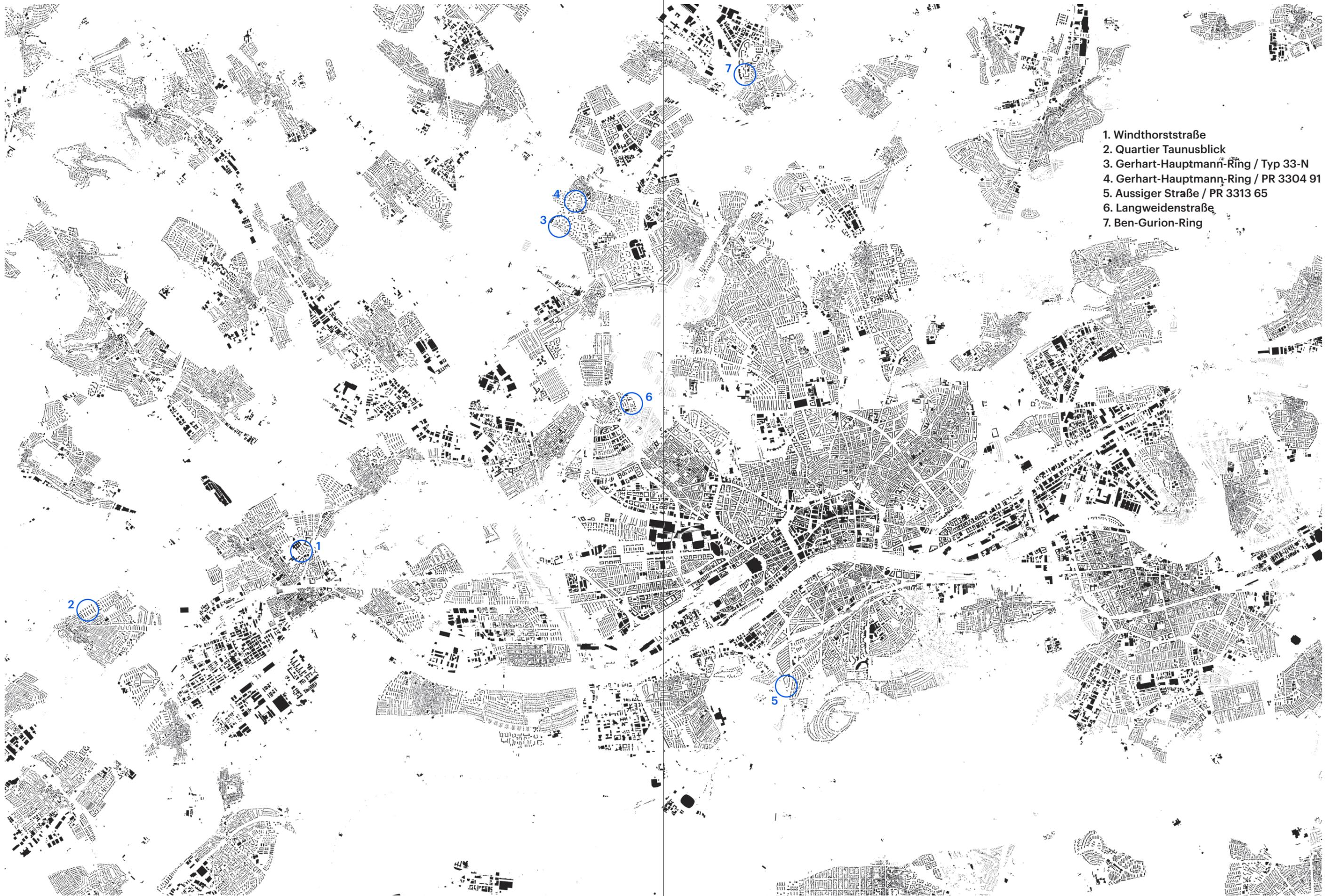


The openings create spatial depth where there were once 126 almost identical, separate rooms. In many cases, the functional boundary to the corridor is removed, making the corridor part of the communal or living areas

Ernst May Preis 2025

PROJECTS

7 CASE-STUDIES IN FRANKFURT A.M.



1. Windthorststraße
2. Quartier Taunusblick
3. Gerhart-Hauptmann-Ring / Typ 33-N
4. Gerhart-Hauptmann-Ring / PR 3304 91
5. Aussiger Straße / PR 3313 65
6. Langweidenstraße
7. Ben-Gurion-Ring

PROJECT Windthorststraße
CLIENT NHW
LOCATION Windthorststraße 20-50
Frankfurt-Höchst
YEAR 1952/53
TPOLOGY terraced houses
DWELLINGS 192
PER BUILDING 48
SIZE OF UNITS 44 m²

1



Windthorststraße 20-50, Frankfurt-Höchst, 1952/53

PROJECT Quartier Taunusblick
CLIENT NHW
LOCATION Pfortengartenweg 35-41
Frankfurt-Zeilsheim
YEAR 1959/60
TPOLOGY terraced houses
DWELLINGS 288
PER BUILDING 48
SIZE OF UNITS 47-80m²

2



Pfortengartenweg 35-41, Frankfurt-Zeilsheim, 1959/60

PROJECT Gerhart-Hauptmann-Ring / Typ 33-N
CLIENT NHW
LOCATION Gerhart-Hauptmann-Ring 266-272
Frankfurt-Nordweststadt
YEAR 1964
TPOLOGY terraced houses
DWELLINGS 32
SIZE OF UNITS 69 m²

3



Gerhart-Hauptmann-Ring 266-272, Frankfurt-Nordweststadt, 1964

PROJECT Gerhart-Hauptmann-Ring / PR 3304 91
CLIENT NHW
LOCATION Gerhart-Hauptmann-Ring 23-25
Frankfurt-Nordweststadt
YEAR 1965
TPOLOGY high-rise slab
DWELLINGS 48
SIZE OF UNITS 55/60/73m²

4



Gerhart-Hauptmann-Ring 23-25, Frankfurt-Nordweststadt, 1965

PROJECT Aussiger Straße / PR 3313 65
CLIENT NHW
LOCATION Aussiger Straße 10-14
Frankfurt-Sachsenhausen
YEAR 1966
TPOLOGY residential tower
DWELLINGS 96
PER BUILDING 32
SIZE OF UNITS 67-75 m²

5



Aussiger Straße 10-14, Frankfurt-Sachsenhausen, 1966

PROJECT Langweidenstraße
CLIENT NHW
LOCATION Langweidenstraße 32, 50
Frankfurt-Hausen
YEAR 1972
TPOLOGY high-rise slab
DWELLINGS 130
PER BUILDING 75/55
SIZE OF UNITS 44-93m²

6



Langweidenstraße 32/50, Frankfurt-Hausen, 1972

PROJECT Ben-Gurion-Ring
CLIENT Nassauische Heimstätte
LOCATION Ben-Gurion-Ring 120-138
Frankfurt-Bonames
YEAR 1976
TPOLOGY high-rise slab
DWELLINGS 167
PER BUILDING 24
SIZE OF UNITS 43-88m²

7



Ben-Gurion-Ring 120-138, Frankfurt-Bonames, 1976

PROJECT	Windthorststraße
CLIENT	NHW
LOCATION	Windthorststraße 20-50
	Frankfurt-Höchst
YEAR	1952/53
TYOLOGY	terraced houses
DWELLINGS	192
PER BUILDING	48
SIZE OF UNITS	44 m ²

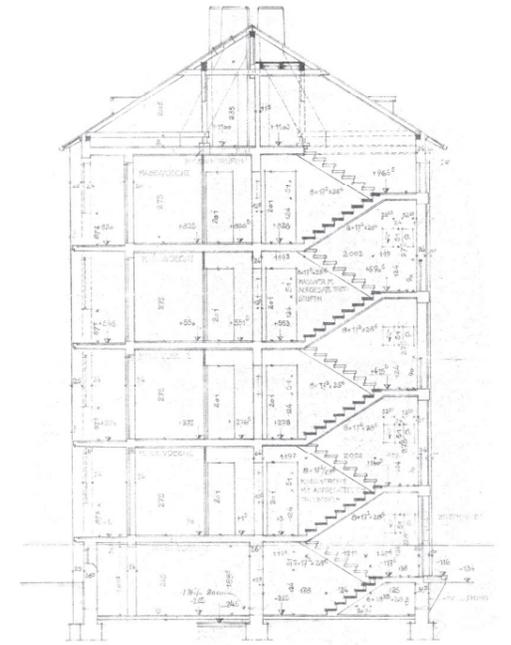
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DESCRIPTION

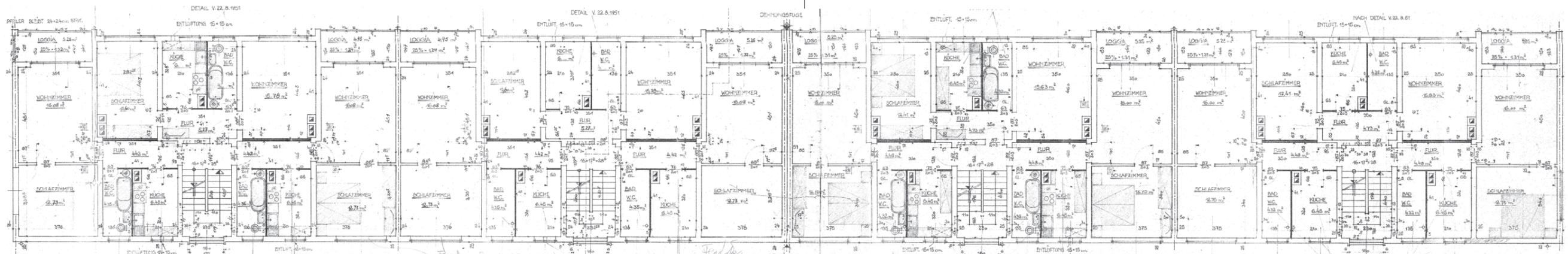
The four residential slabs on Windthorststraße in Höchst were constructed between 1952 and 1953. Located in the northern part of Höchst, they sit within a quiet residential neighborhood, in close proximity to a large hospital. Oriented along an east-west axis, the buildings have entrance doors positioned on their eastern façades. Generous green spaces, punctuated by large trees, lie between the slabs. To the south, two open blocks form a soft perimeter along the street.

The complex comprises 192 units, each accessed via a number of vertical circulation cores. Each core serves three apartments per floor. The units are uniform in size—approximately 44 m²—and layout, each including a living room, bedroom, kitchen, bathroom, and a small distribution area. The apartments flanking either side of the staircases are symmetrical and benefit from dual orientation: bedrooms, kitchens, and bathrooms face east, while living rooms and loggias face west. The third unit, positioned directly opposite the staircase, is solely west-facing. In addition to the private apartments, each building includes a basement and an attic beneath the pitched roof, offering space for drying laundry and extra storage.

The buildings underwent partial renovation of the envelope around twenty years ago, including the addition of a six-centimeter-thick layer of insulation and double-glazed windows.



The cross-section reveals four residential floors, along with a basement used for private storage space and an attic beneath the pitched roof, which provides space for drying laundry or additional storage



Each building contains four staircases, connecting three two-room apartments per floor, each measuring 43.5–44 m²

PROJECT Windthorststraße 20-50, Frankfurt-Höchst
CLIENT NHW
YEAR 1952/53
TPOLOGY terraced houses
STRATEGY Typological update

DESCRIPTION

Through conversations with residents and on-site analysis, it became evident that the existing apartments are highly inflexible. They consist solely of two-room units, many of which are small and cramped. The building is accessed via four evenly spaced staircases, each connecting all floors and leading to three almost identical apartments per level, offering no typological variety. Side apartments include loggias and are oriented north-south, allowing good cross-ventilation.

The central apartment lacks a loggia but has potential due to its position and the possibility of integration with neighboring units. In all apartments, kitchens and bathrooms are directly adjacent to the staircase and reached through narrow, dark entrance areas. These shortcomings motivated the design concept.

The proposal rethinks apartment typology through minimal floor plan interventions, aiming to remove dark, underused corners and create more comfortable, appealing spaces. The redesign follows a phased strategy, allowing step-by-step implementation and some changes while the building remains occupied.

The first step introduces a new façade in front of the existing one, forming a thermal buffer that improves insulation and energy performance. Its projection creates extra interior space, allowing some kitchens to be relocated outward into the buffer zone. This frees the original kitchen areas to become individual rooms, which can be enhanced using the southwest-facing buffer zone. Northeast extensions optimize space on that side.

Once apartments become vacant, a second phase improves living quality further. Built-in elements are added to outer apartments for storage and layout clarity. Flooring is renewed, unifying spaces including former loggias. One room from the central apartment is reassigned to an outer unit, adding variety to previously identical plans and accommodating both large families and single residents.

By removing internal walls or outdated windows, kitchens gain daylight, resolving dark entrance areas. Open-plan kitchen-dining layouts can be adapted to residents' needs. On the northeast side, a small communal balcony between extensions provides shared outdoor space.

As a result, the original identical units are transformed into diverse, flexible typologies that adapt to changing occupancy. Options for downsizing or expanding—within and beyond apartment boundaries—enable a gradual, adaptable renovation process meeting the needs of different user groups.



Site plan



Phase 1



Phase 2



Phase 3



View from existing interior towards added layer of buffer zone



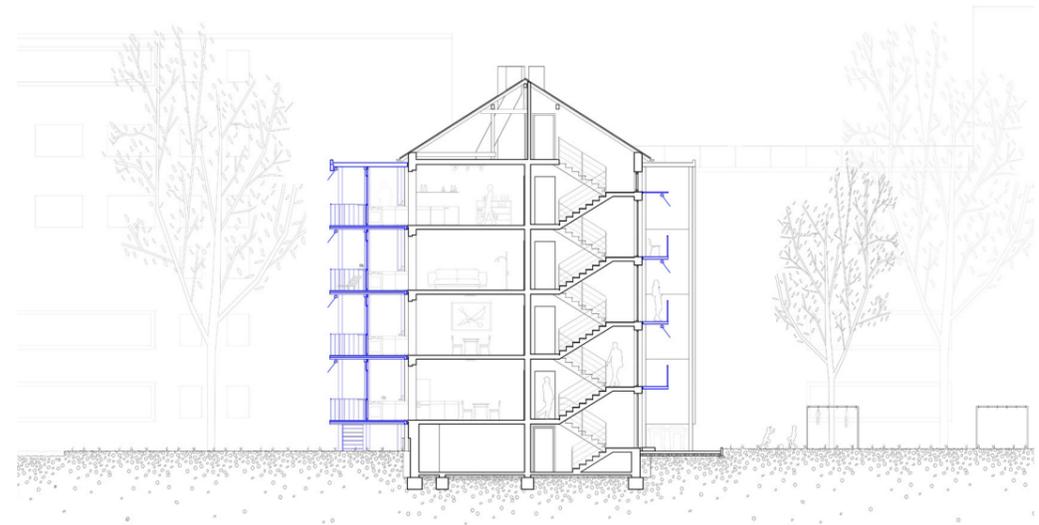
Isometry of exterior



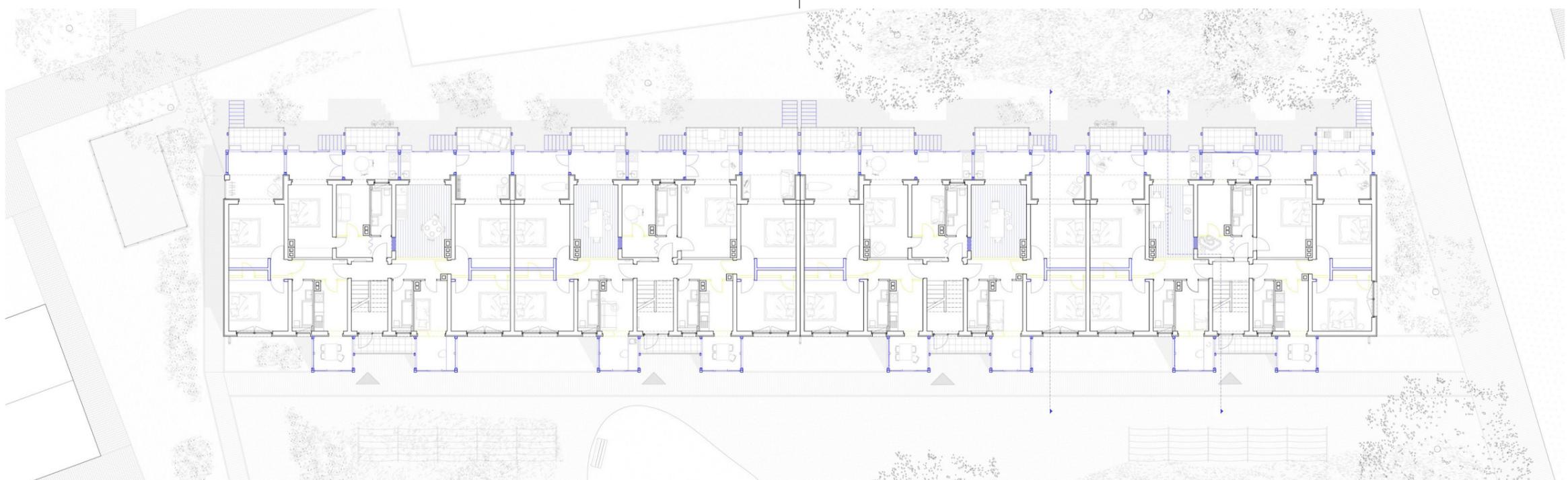
North-East elevation with added extensions



Section A-A



Section B-B



Regular floor



Southwest elevation



Northeast elevation

Tim Hesse

PROJECT Windthorststraße 20-50, Frankfurt-Höchst
CLIENT NHW
YEAR 1952/53
TYPOLOGY terraced houses

STRATEGY Radical retrofit

DESCRIPTION

Following the trend of the open and greener post-war city, the 1950s marked a shift away from traditional perimeter block development. Linear housing forms emerged, allowing generous open spaces and distancing buildings from street noise. The “Zeilenbau” was born: elongated buildings repeated in rhythm, facing away from roads and separated by green corridors. Built with solid masonry walls and timber gable roofs, these buildings provided urgently needed housing quickly and economically. Particularly dominant in West German cities, most still serve as homes today. However, due to poor maintenance, lack of modernization, and social imbalance, they now face new challenges—despite outliving their expected lifespan.

This design proposal focuses on the Zeilenbauten along Windthorststraße and develops a strategy to enhance living quality while adding housing through sensitive densification. Overgrown, neglected in-between spaces offer overlooked potential. These green corridors, enriched with mature trees, are reimagined as shared community areas. A new pathway layout introduces inviting access routes lined with low-maintenance planting, improving both microclimate and aesthetics. Each house receives a covered bike shelter with seating and greenery at the entrance, complemented by larger canopies to promote social interaction.

Ground-floor apartments gain direct access to the green space via new outdoor staircases, creating semi-private gardens separated by hedges and strengthening house communities. Upper floors connect via revitalized basement exits. Former laundry rooms are repurposed as passages and functional communal zones, encouraging more use of basement spaces.

Fire access routes are discreetly integrated into the landscape, improving tenant safety and meeting current building regulations. Three new central zones are introduced: a play area, a garden area, and infill buildings with shared spaces. The garden offers small plots for growing food and trellises for climbing plants. The infill buildings create 540 sqm of additional floor space and feature flexible ground-floor zones for communal use, childcare, or small businesses.

The existing buildings also offer potential: roof renovation with insulation and PV panels is recommended. Internally, two new apartment typologies are proposed through minor layout changes—one affordable for students, another suited for young families. The redesigned green spaces, shielded from street noise by the new buildings, significantly improve quality of life. Barrier-free access in the new units opens the quarter to people with mobility needs. With targeted interventions, these solid Zeilenbauten can be future-proofed and made attractive for new target groups.



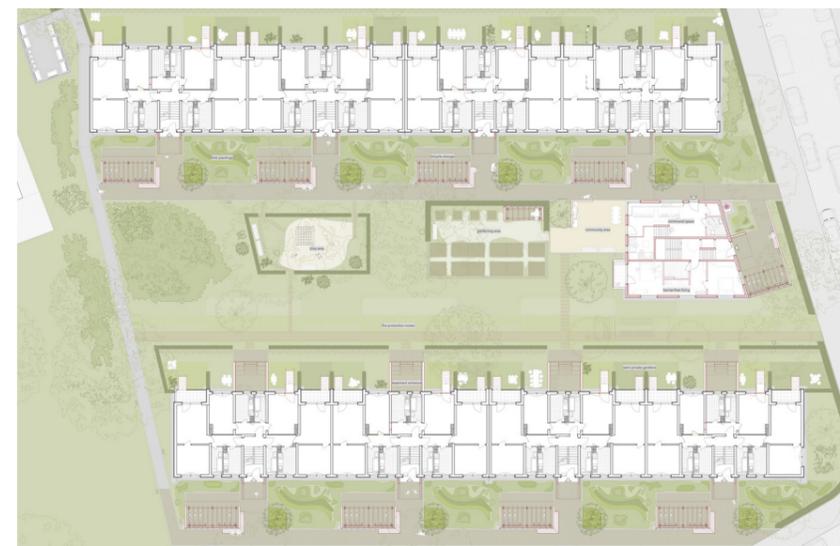
Site plan



Interior of communal space in infill building

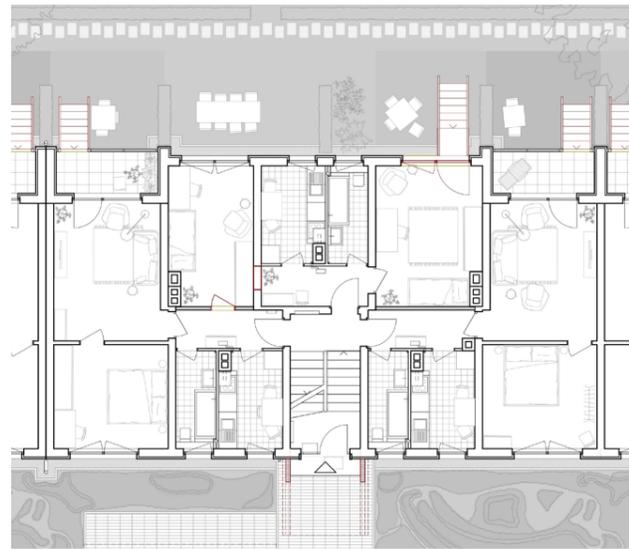


Isometry



Ground floor overview

Retrofit
Ground floor

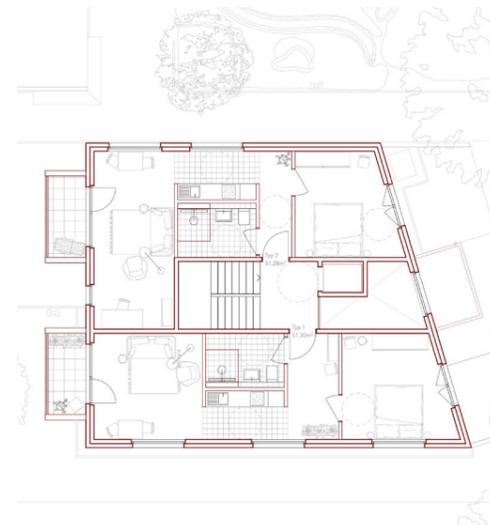


Retrofit
Entrance and basement

Section



Extension building
Ground floor



Extension building
First and second floor

PROJECT Windthorststraße 20-50, Frankfurt-Höchst
 CLIENT NHW
 YEAR 1952/53
 TYPOLOGY terraced houses
 STRATEGY Better performance

DESCRIPTION

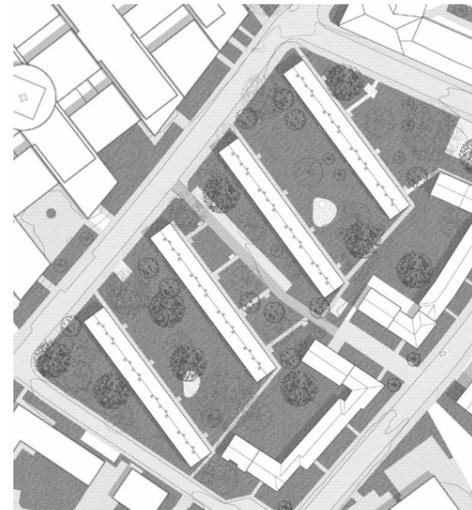
Windthorststraße 36 - 42 is part of a row of four residential buildings in Frankfurt-Höchst, owned by Nassauische Heimstätten Wohnstadt. The site is well connected to central Frankfurt via both public transport and car access. To the northwest lies a large hospital extension that was finished in 2023; to the southwest are temporary structures associated with the hospital. To the southeast, residential buildings border the row development, while to the northeast—across the street—there is an assisted living facility. Large green spaces lie between the row buildings, typical of this type of post-war development.

House numbers 20 - 50 each have 4 floors with 3 two-room apartments (total 192). The flats on the left and right sides of the staircase are two-sided, while the flat in the middle is one-sided. The two-sided apartments each have a loggia, the one-sided one doesn't have any private outdoor space. Each apartment is approximately 44 m².

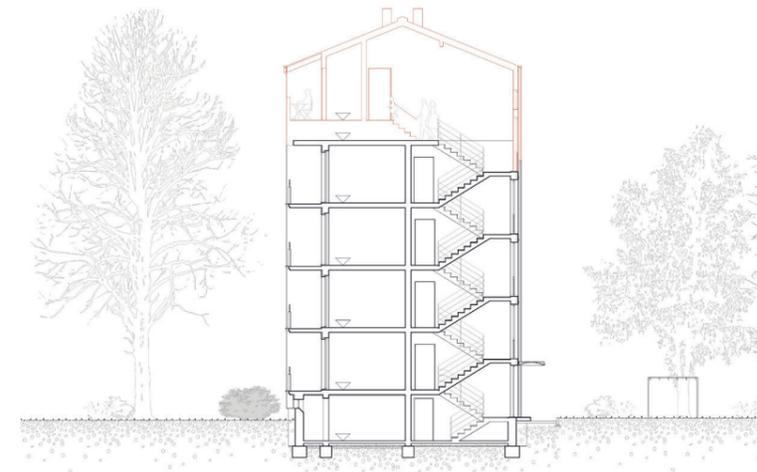
The row houses on Windthorststraße were built using the typical early 1950s construction method. They follow the principle of solid construction. The supporting structure consists of wall slabs and floor slabs. All of the building's loads are transferred through the thick basement walls into the strip foundations in the ground. The walls are made of concrete masonry, and the ceilings are made of reinforced concrete. The roof structure is a purlin roof supported by timber pillars and a bricked jamb wall. The gable roof is formed by rafters and battens with roof tiles. The attic is in poor condition. Both the top floor ceiling and the roof surface are uninsulated. The roof covering is leaking, letting in rain. Surrounding the attic are the old chimney shafts, which extend into thick walls up to the ridge.

The attic is rarely used. Some tenants have said they weren't aware they had a storage room there. The climb is too strenuous for the older residents. Due to the low roof, the usable area is very small compared to the floor space. The existing building measures 331.77m² out of 608.27m². This may be due to the fact that the development plan only permits four full floors. When converting the attic, care must also be taken to comply with the regulations stipulated in the German Building Code.

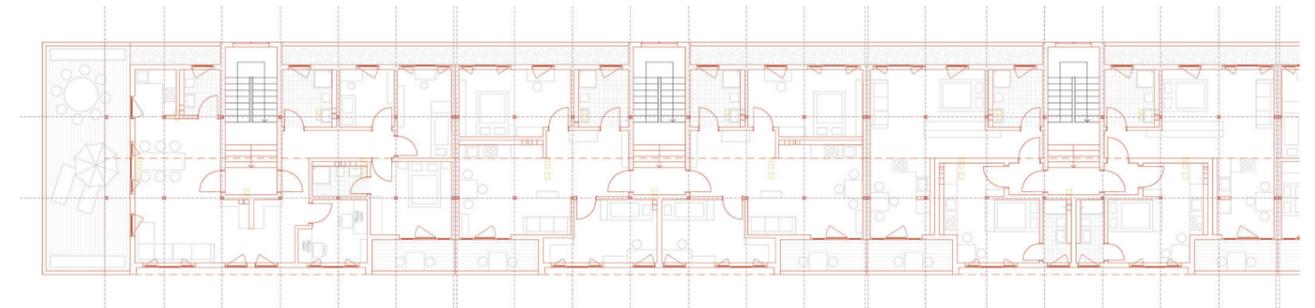
There is currently a severe housing shortage in Frankfurt. Building Politics is also pushing for the addition of storeys and the conversion of unused attics in post-war buildings. More than three-quarters of the household sizes forecast for 2024 are 1-2 person households. The apartments currently available offer space for one-person households; the apartments are almost too small for two people. There are also small families living in the existing buildings who definitely need more space, especially bedrooms. By adding storeys with apartments of different sizes, space can be created for different household sizes without tenants losing their familiar surroundings.



Site plan



Section



Roof extension



Interior of modular roof extension

PROJECT	<u>Quartier Taunusblick</u>
CLIENT	NHW
LOCATION	Pfortengartenweg 35-41 Frankfurt-Zeilsheim
YEAR	1959/60
TYOLOGY	teraced housing
DWELLINGS	288
PER BUILDING	48
SIZE OF UNITS	47-80 m ²

2

DESCRIPTION

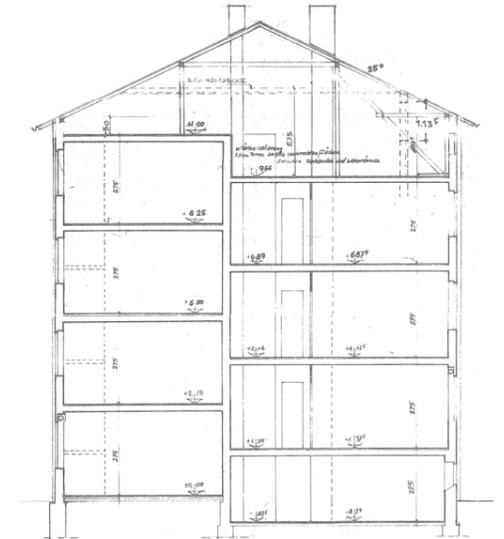
The Quartier Taunusblick is part of the greater Taunusblick neighborhood, a 35-hectare area located in the northern part of Frankfurt-Zeilsheim. Built between 1950 and 1962, the neighborhood was originally defined by its scenic view of the Taunus Mountains to the north. Unfortunately, this view is now obstructed by noise barriers installed along the adjacent Autobahn.

Before residential development, the area served as a labor camp for forced workers employed by the Hoechst paint works of I.G. Farben. Today, approximately 3,660 residents live in the residential slabs—three- to four-story buildings oriented east-west.

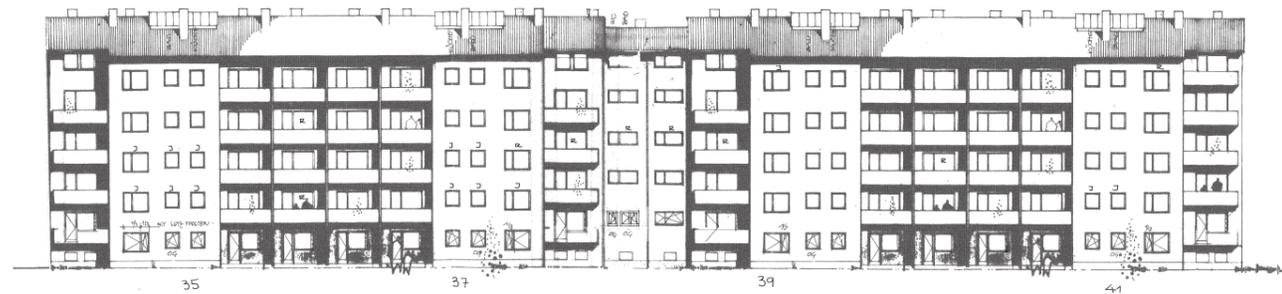
The six buildings along Pfortengartenweg were constructed between 1959 and 1960 in close proximity of an allotment garden, which provides a buffer zone from the nearby Autobahn 66. Accessed from the east, each of these short slabs contains four staircases, each connecting three apartments per floor.

The apartments at either end of each building and to the mid are positioned half a story higher, creating a split-level appearance. On each level, two apartments are accessible: a double-oriented unit of 62 m² featuring a kitchen and two rooms facing east, an interior bathroom, and a living room facing west; and a smaller, single-oriented unit of 47 m² with a bedroom, bathroom, kitchen, and living room all facing west. A half-story up, a second double-oriented unit is accessed. Every apartment includes a loggia directly connected to the living room.

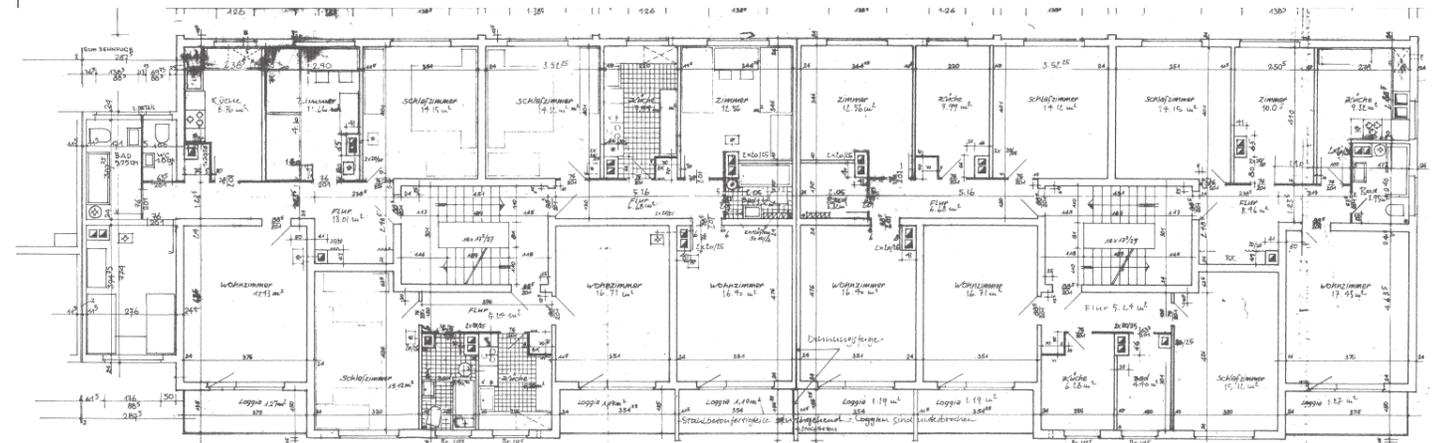
The buildings underwent partial renovation of the envelope around twenty years ago, including the addition of a six-centimeter-thick insulation layer and double-glazed windows.



The four-story buildings are elevated half a story at the north and south ends as well as to the mid section, enabling natural lighting in the basement areas



The elevation illustrates the raised positioning of the mid and end units, allowing natural light into the basement



In each building, four vertical circulation cores serve three apartments per floor, ranging from 47 to 80 m², each featuring a private loggia

PROJECT Quartier Taunusblick
Pfortengartenweg 2-24, Frankfurt-Zeilsheim

CLIENT NHW

YEAR 1959/60

TYOLOGY terraced houses

STRATEGY Radical retrofit

DESCRIPTION

The design “community first” is all about the title: the community! By barely touching the inside of the building and only reshaping the outer spaces the quality of life and the living together of the tenants is greatly improved.

First, breakthroughs are added to the north side of the building and replace the window by a door. This adds an additional front yard for the tenants, which is a space they share with their neighbour.

The entrances also received a roof, for a more inviting look and clear structure.

The back of the building where the loggias are located where turned into terraces, which allows the tenants open space and direct access to the community green space. The split level apartments which are slightly located higher have gotten an additional stair case, to directly access the ground floor. A strip of waterbound path surface connects all the terraces with each other, like an internal street. The fireworker access is left open, to create distance from public and private spaces.

The middle part, the huge open green space received a complete makeover. In the center a pavillon builds the main point. There, tenants can meet, work, party and have fun together. The wood skeleton construction is easy to build and cheap and allows for easy modification. For example, Polycarbonate walls could turn the space into a green house. Regular wood panels can turn the place into a storage space or a workshop shed. Additional flooring will turn the place into a stage, it is ideal for all ages. Next to the pavillon is the playground. The wooden play structures are cheap and timeless, the sand box in general is lowered for easy rain water infiltration. A wooden bridge connects the playground with the sunbathing lawn, ideal for relaxation.

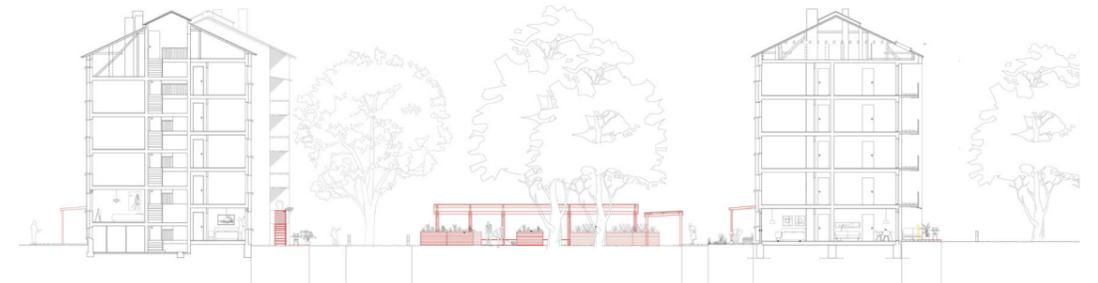
On the right of the pavillon are the urban gardening boxes. Each tenant can rent a box or share them with other tenants. The supplies can be stored in the basement or one of the new structures. The water is accessed from the cistern, which uses the rainwater therefore being low cost for the tenants. An additional roof structure, similar to the pavillon seperates the public from the green space.

In front of the front lawns other roof structures are situated. They provide shelter for bikes, strollers and other things.

The apartment complexes are greatly upgraded by these new features. Improving the community will help the tenants feel more at home and happy.



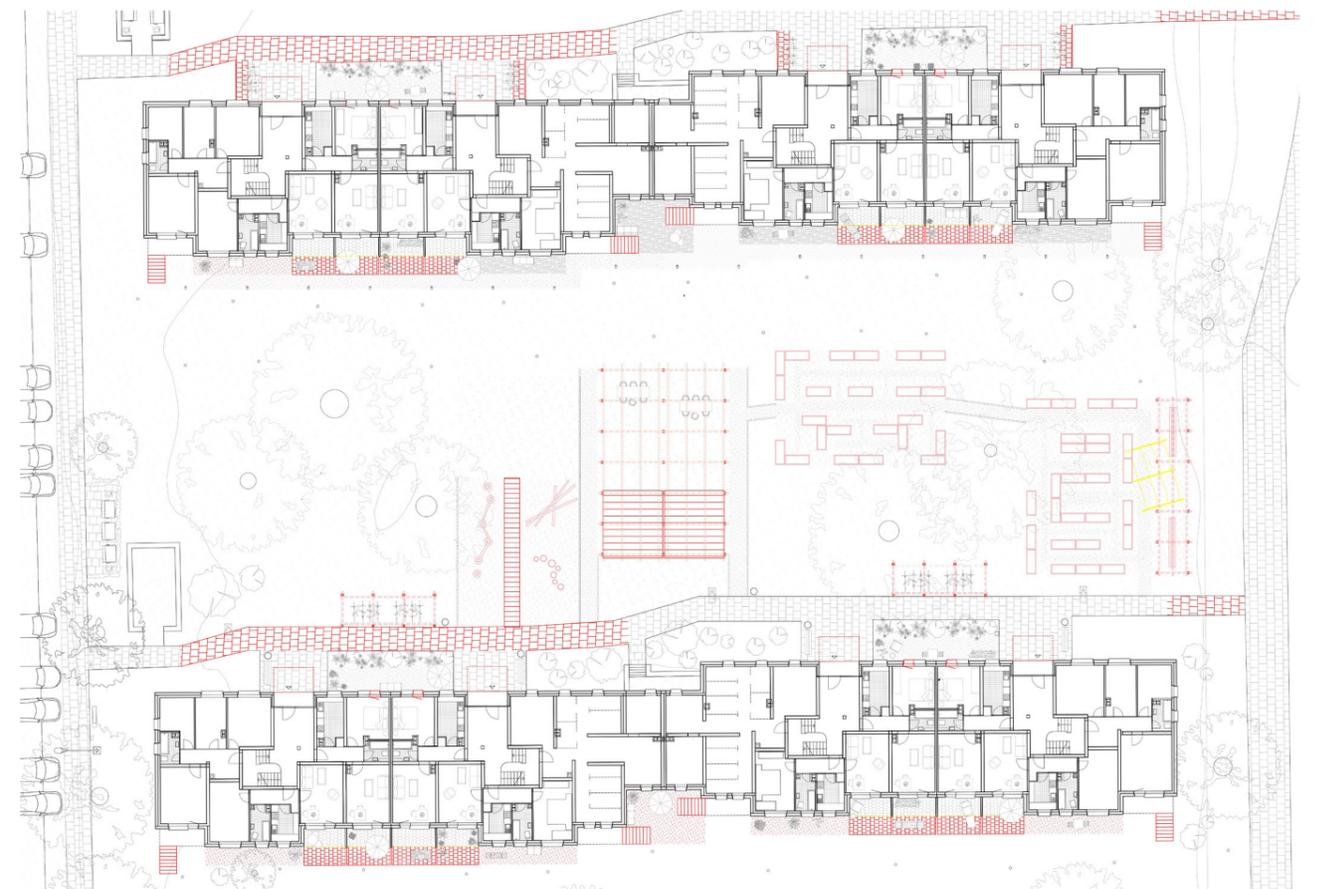
Site plan



Cross section



Longitudinal section



Ground floor

Selin Celik

PROJECT Quartier Taunusblick
Pfortengartenweg 2-24, Frankfurt-Zeilsheim

CLIENT NHW

YEAR 1959/60

TYOLOGY terraced houses

STRATEGY Typological update

DESCRIPTION

The existing row housing in Frankfurt-Zeilsheim is functionally solid but typologically outdated. Its traditional pitched roof offers no communal value and fails to meet current urban housing needs. In a diverse, family-oriented context like Zeilsheim, private apartments often lack quiet spaces for learning, working, or social interaction. The building typology no longer reflects the realities of contemporary, multi-dimensional living. The project envisions the complete removal of the existing roof and the construction of a new, usable flat roof: the "Community Roof Zeilsheim." Situated between the existing circulation towers, this newly created rooftop level becomes a semi-public space exclusively for residents. The concept redefines the roof as an architectural and social extension of the living space — transforming unused surface into shared value.

The new rooftop is divided into three key zones:

1. Learning & Working Space

A quiet, shared environment with desks, Wi-Fi, and daylight – accessible for all age groups. Especially for families with limited space, it creates essential infrastructure for home office and schoolwork. Responds to rising demands for decentralized workplaces and educational equity.

2. Neighbourhood Room with Communal Kitchen

A flexible space with a long table and kitchen, suitable for cooking, small events, birthday parties or community meetings. Encourages neighborly interaction and strengthens social bonds.

3. Terrace with Urban Greenery

An outdoor area with vegetation, informal seating, and room to meet, rest, or retreat. Creates a shared microclimate and replaces missing private green space.

Why Is It Necessary?

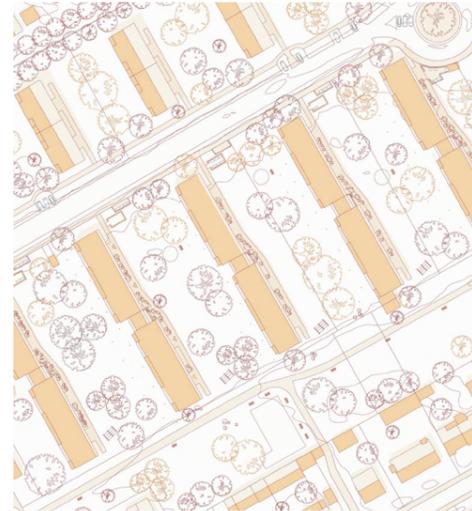
Social Transformation: Work, education, and private life increasingly converge at home. Architecture must reflect this shift with adaptable, shared spaces.

Resource-Efficient Space Usage: Unused rooftops offer a chance to densify sustainably and add shared infrastructure without expanding the building's footprint.

Community Building: In mixed urban districts, it's essential to provide low-barrier access to spaces that support exchange, self-organization, and inclusion.

Climate Resilience: Green rooftops help combat urban heat, improve air quality, and enhance the building's environmental footprint.

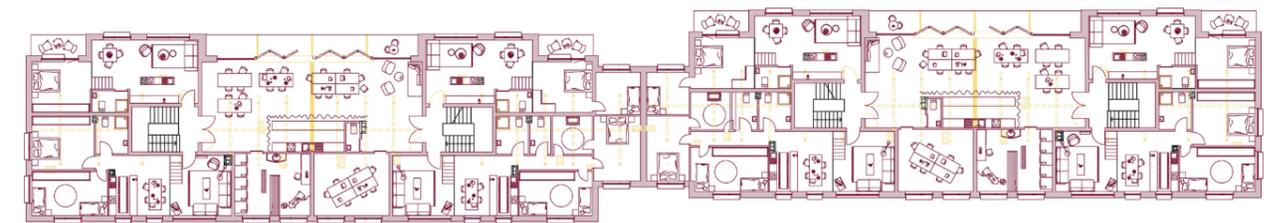
Urban Identity: The project doesn't just add function – it also gives the building new architectural presence and strengthens its connection to the surrounding neighborhood.



Site plan



Cross and longitudinal sections



Regular floor



Interior of communal area in roof extension

PROJECT Quartier Taunusblick
Pfortengartenweg 2-24, Frankfurt-Zeilsheim

CLIENT NHW

YEAR 1959/60

TYOLOGY terraced houses

STRATEGY Better performance

DESCRIPTION

The design deals with the transformation of a row building from the 1950s. The aim was to improve the potential of the existing structure through targeted interventions - functionally, spatially and atmospherically.

The focus is on the conversion from an internal split-level development to a new, external arcade system. This is complemented by an atrium that creates vertical connections and at the same time brings light and air into the depths of the existing building.

The removal of the old staircase makes it possible to create new living spaces on the former access side - such as an additional room. The apartments are reorganized, the lighting is optimized and new outdoor meeting spaces are created.

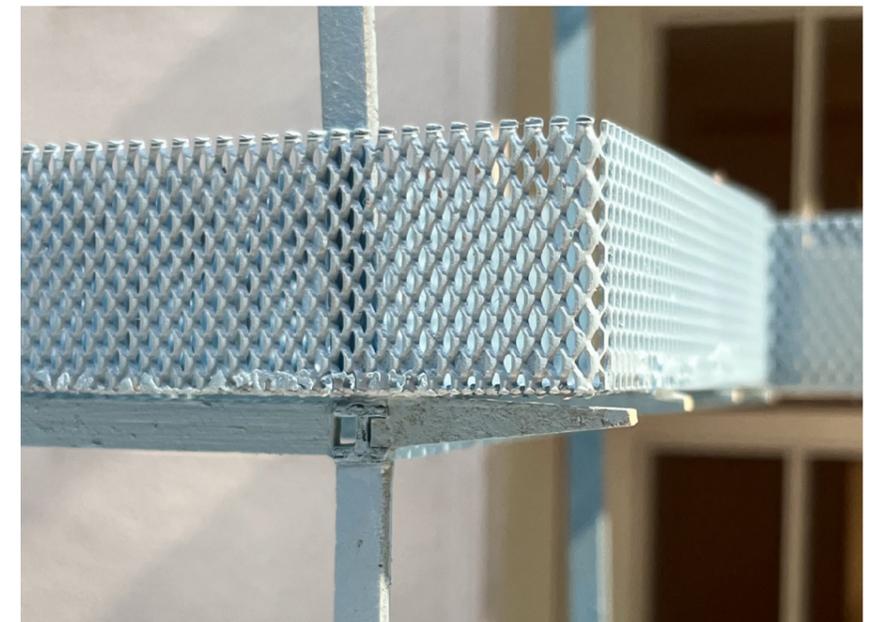
The conversion is designed in such a way that it can be carried out while the building is occupied - in clearly separated construction phases. The result is a sustainable housing model with social and spatial quality in the existing building.



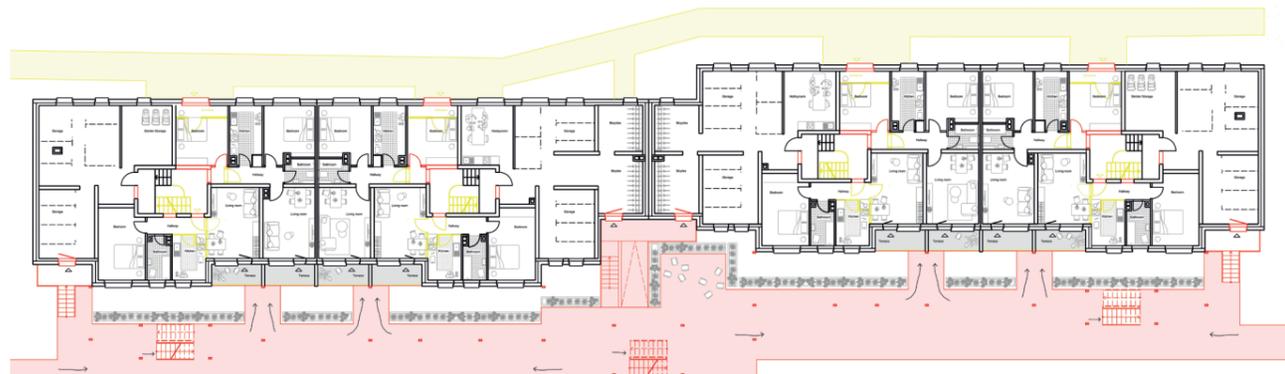
Site plan



View from open arcade towards former staircase, now transformed into a light well



Detailed of open arcade structure in steel



Ground floor



Regular floor

PROJECT	Gerhart-Hauptmann-Ring / Typ 33-N
CLIENT	NHW
LOCATION	Gerhart-Hauptmann-Ring 266-272 Frankfurt-Nordweststadt
YEAR	1964
TYOLOGY	terraced housing
DWELLINGS	32
SIZE OF UNITS	69 m ²

3

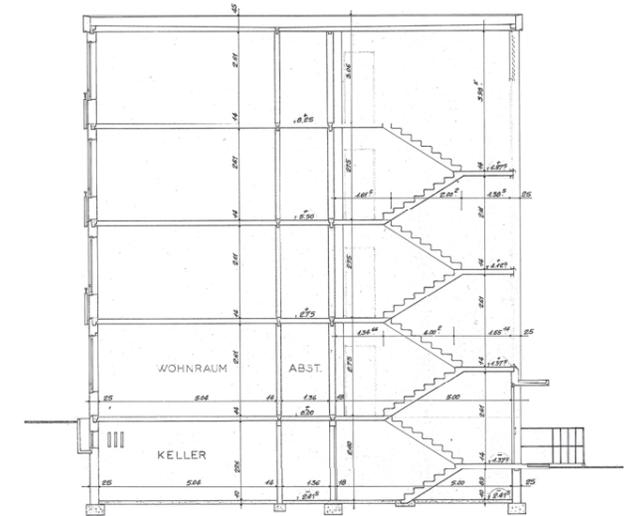
DESCRIPTION

The building on Gerhart-Hauptmann-Ring is part of Nordweststadt, the largest housing development in Frankfurt from the 1960s, accommodating approximately 16,000 residents. The construction of this area followed strict principles of typification, with this particular building classified as "Typ 33-N."

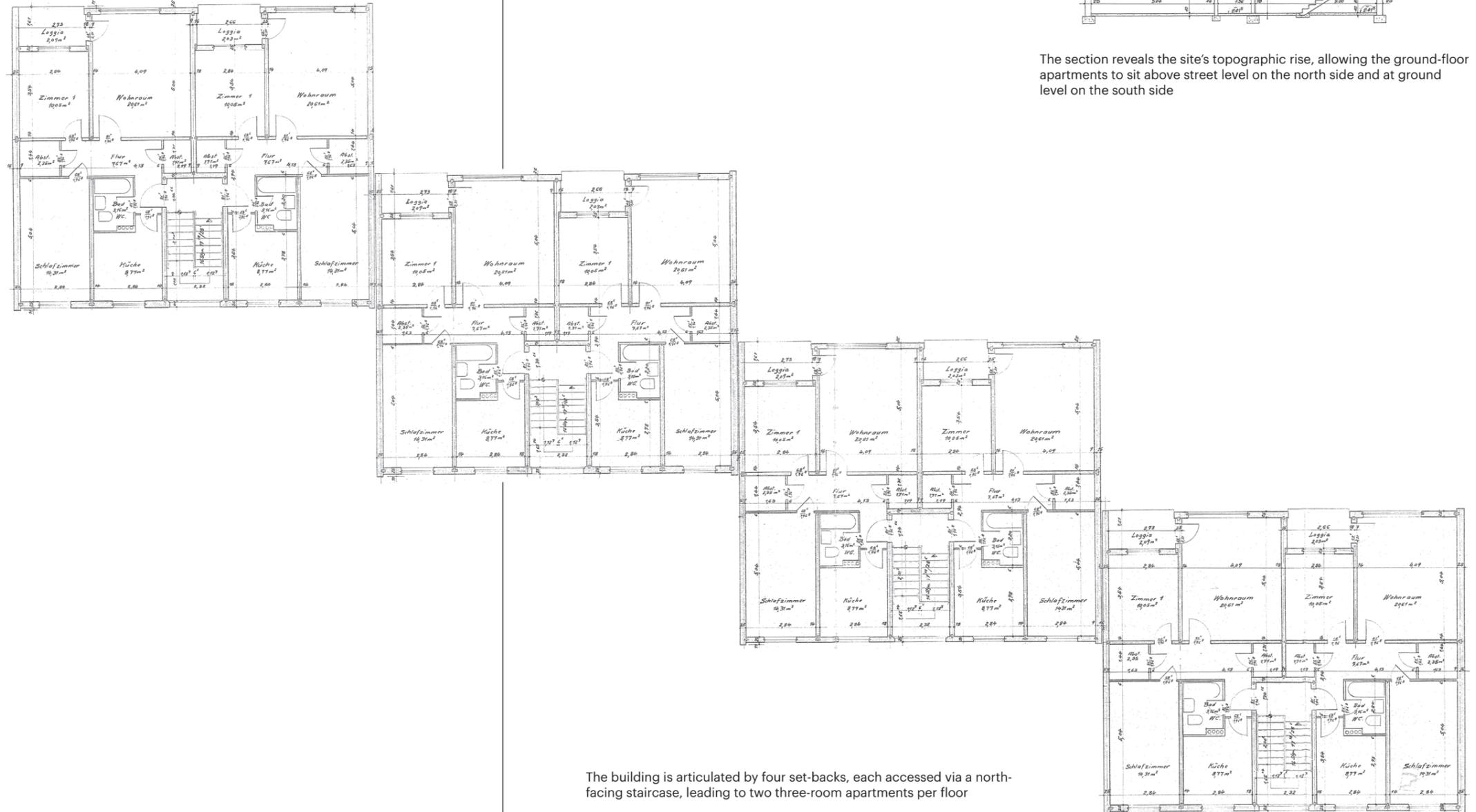
Situated in the southwest section of the neighborhood—characterized by a mix of 3- to 4-story slabs and residential high-rises—the north-south-oriented slab stands out due to its four structural set-backs, which articulate the 60-meter-long volume.

Each of these segments is accessed from the north via a staircase, which serves two double-oriented apartments per floor. Each 69 m² unit includes a kitchen and bedroom facing north, an interior bathroom, corridor, and storage room, as well as a second bedroom and a living room facing south. A small loggia extends the living area to the outside.

Due to the site's sloping topography rising toward the south, the basement receives natural light from the north, while the ground-floor apartments benefit from direct outdoor access to the south. The buildings underwent partial renovation of the envelope around twenty years ago, including the addition of new cladding and double-glazed windows.



The section reveals the site's topographic rise, allowing the ground-floor apartments to sit above street level on the north side and at ground level on the south side



The building is articulated by four set-backs, each accessed via a north-facing staircase, leading to two three-room apartments per floor

Thyra Jones

PROJECT Gerhart-Hauptmann-Ring 266-272,
Frankfurt- Nordweststadt
CLIENT NHW
YEAR 1964
TYPOLOGY terraced housing
STRATEGY Typological update

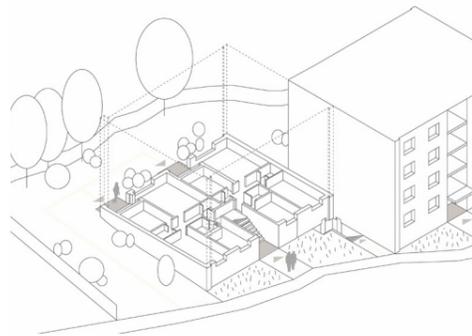
DESCRIPTION

Diversity of residents – a microcosm of society: The neighbourhood around Gerhart-Hauptmann-Ring is characterised by remarkable diversity. People from the most diverse backgrounds live side by side here. Whether from other federal states, from abroad or Frankfurt natives - the residents have different life stories and cultural backgrounds. This diversity is also reflected in the architecture and social structures of the neighbourhood. Housing estates were built here decades ago, originally as social housing, and many of the original tenants still live here today. Gerhart-Hauptmann-Ring is not just a place to live, but a home for many who have developed a strong identity in this neighbourhood. The people who live here are not only culturally and ethnically diverse, but also very different in their stages of life. There are young families who have moved into their first homes, commuters and many older people, some of whom have lived here since the first years after the housing estates were built. The residential area has continued to develop over the years and many residents have moved to the area because they were looking for a place that was not only affordable, but also offered good connections to Frankfurt city centre.

Age demographic trends and their significance: Age demographics in Frankfurt am Main show a clear trend towards an older society. According to the City of Frankfurt's Office for Statistics, the proportion of people over the age of 65 rose to around 20.3% of the total population in 2020. By 2030, this proportion will rise to around 25%. This means that a significant increase in the number of older people living in municipal housing estates is to be expected in the coming years. This development poses major challenges for the city administration, property companies and, above all, social housing companies. Nassauische Heimstätte, as the owner of many social housing units in Gerhart-Hauptmann-Ring, is aware of this demographic development. It has a responsibility not only to maintain the housing, but also to adapt it to the needs of an ageing society. In this context, the renovation and refurbishment of existing flats is essential in order to ensure their attractiveness and quality of life for residents. A modern and barrier-free living environment not only promotes the well-being of older tenants, but also ensures that the generations can continue to live together without excluding younger or older people.



Site plan



Isometry of dual entrances



View towards newly created barrier-free accesses at the rear of the building



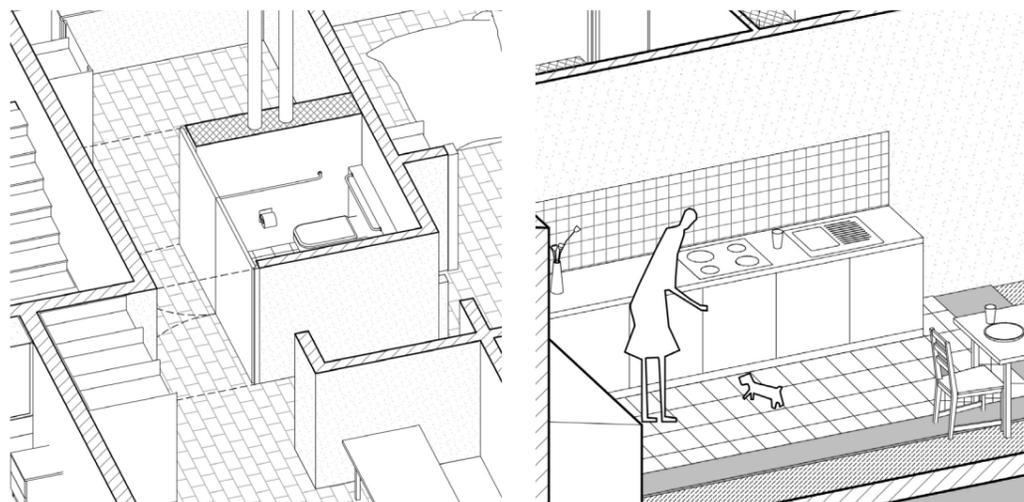
Interior of transformed barrier-free unit



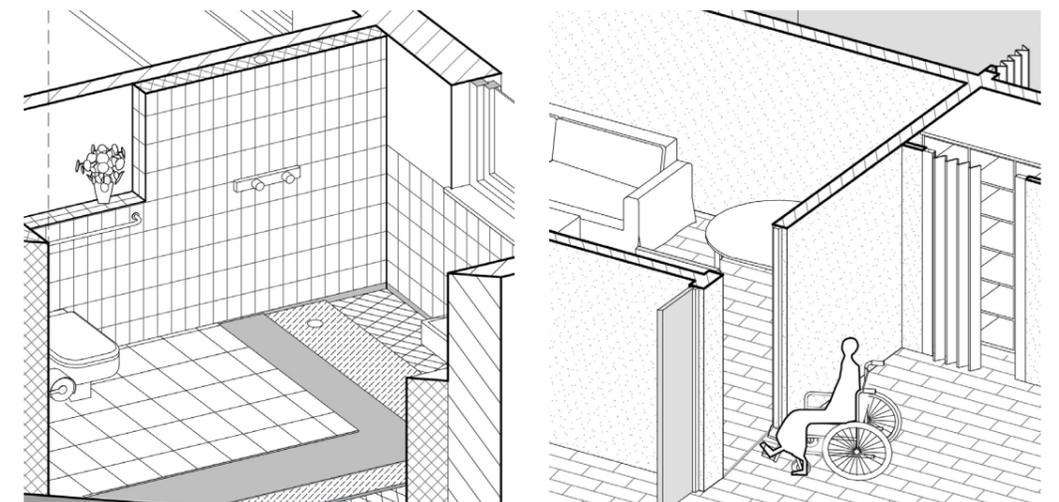
Ground floor type A



Ground floor type B



Bathroom and kitchen details



Bathroom and door details

Tomasz Iwanek

PROJECT Gerhart-Hauptmann-Ring 266-272, Frankfurt-Nordweststadt
CLIENT NHW
YEAR 1964
TYOLOGY terraced houses
STRATEGY Better performance

DESCRIPTION

Gerhart-Hauptmann-Ring 266-272 in Nordweststadt Frankfurt is composed of four cubical segments with flat roofs. Although extra insulation has been added, in some areas it is insufficient, creating thermal bridges and reducing the building's energy performance, especially in loggias and roof elements. From a spatial perspective, the building lacks crucial areas: residents have no place to gather, their flats offer insufficient space for home offices, and the kitchens are too small for multiple people to cook simultaneously.

To address this, I designed a new construction on top of the building, converting the existing flat roof into livable space. The construction begins by breaking the ceiling above the staircases and properly insulating the rest. Each staircase would then be enlarged by one floor using lightweight timber frame construction. Rooftop stairs would be made of steel elements, quickly connected for fast construction. Modular timber frames would be spaced two meters apart and filled with polycarbonate sheets, creating semi-open spaces. Inside these, fully insulated rooms would be built—compact but sufficient for working areas.

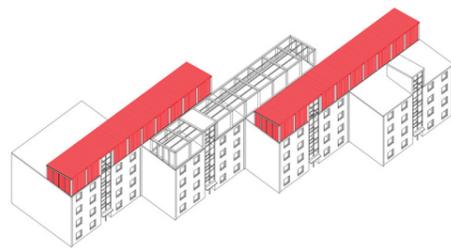
The building's goal is not only to meet spatial requirements but also to improve performance. An energy recovery system would collect heat and humidity from the semi-open spaces, including planted areas, transforming it into renewable energy. These new spaces would act as a thermal buffer: in winter providing extra insulation and in summer allowing ventilation through sliding doors.

Interiors are adjustable to residents' needs. Most furniture would be movable, making kitchens, common areas, and workspaces flexible. Special working rooms, requested by residents, would feature movable walls and furniture, allowing use as home offices or small workshops.

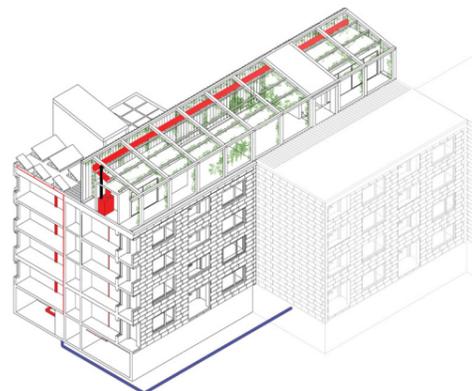
Outer spaces would be partly left low-maintenance, with green roofs mainly covered in grass. They could serve as playgrounds for younger residents, orchards for growing plants, or areas for solar panels, further improving building performance.



Site plan



Retrofit scheme



Construction isometry



Cross section



Attic floor



Interior of communal area on roof

PROJECT	Gerhart-Hauptmann-Ring / PR 3304 91
CLIENT	NHW
LOCATION	Gerhart-Hauptmann-Ring 23-25 Frankfurt-Nordweststadt
YEAR	1965
TYOLOGY	high-rise slab
DWELLINGS	48
SIZE OF UNITS	55/60/73m ²

4

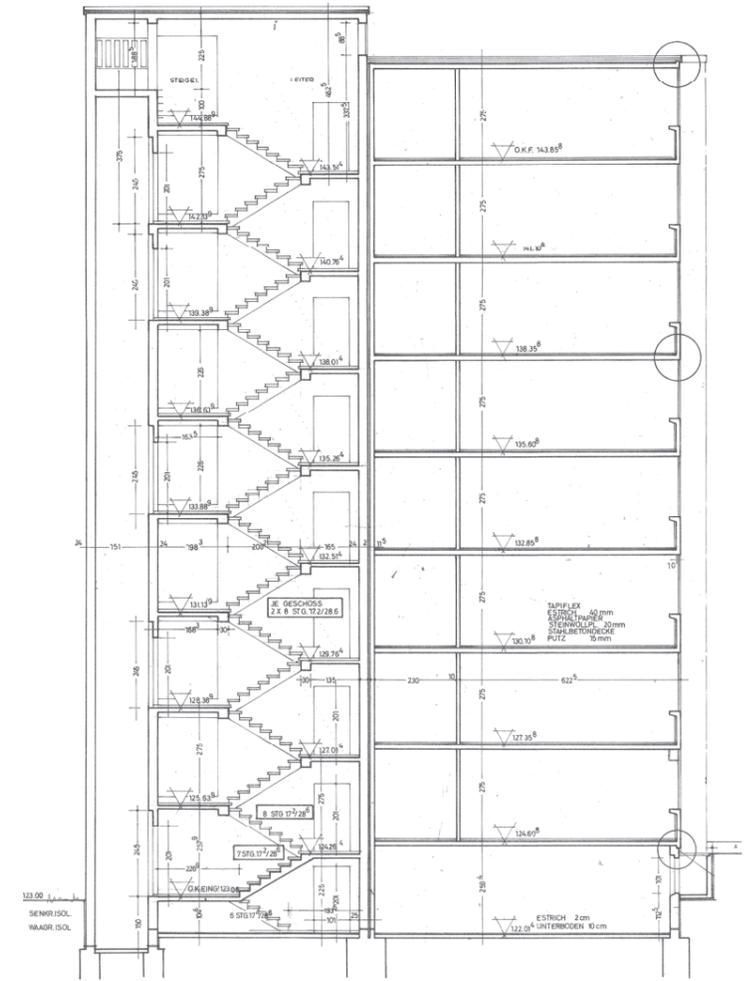
DESCRIPTION

Located in the northern part of Nordweststadt, the eight-story block—designated as “Block 5”—was constructed in 1965. The building is accessed from the north via a protruding volume that houses both the staircase and elevator. From this vertical circulation core, each floor leads to two open corridors or Laubengänge, each connecting to three apartments.

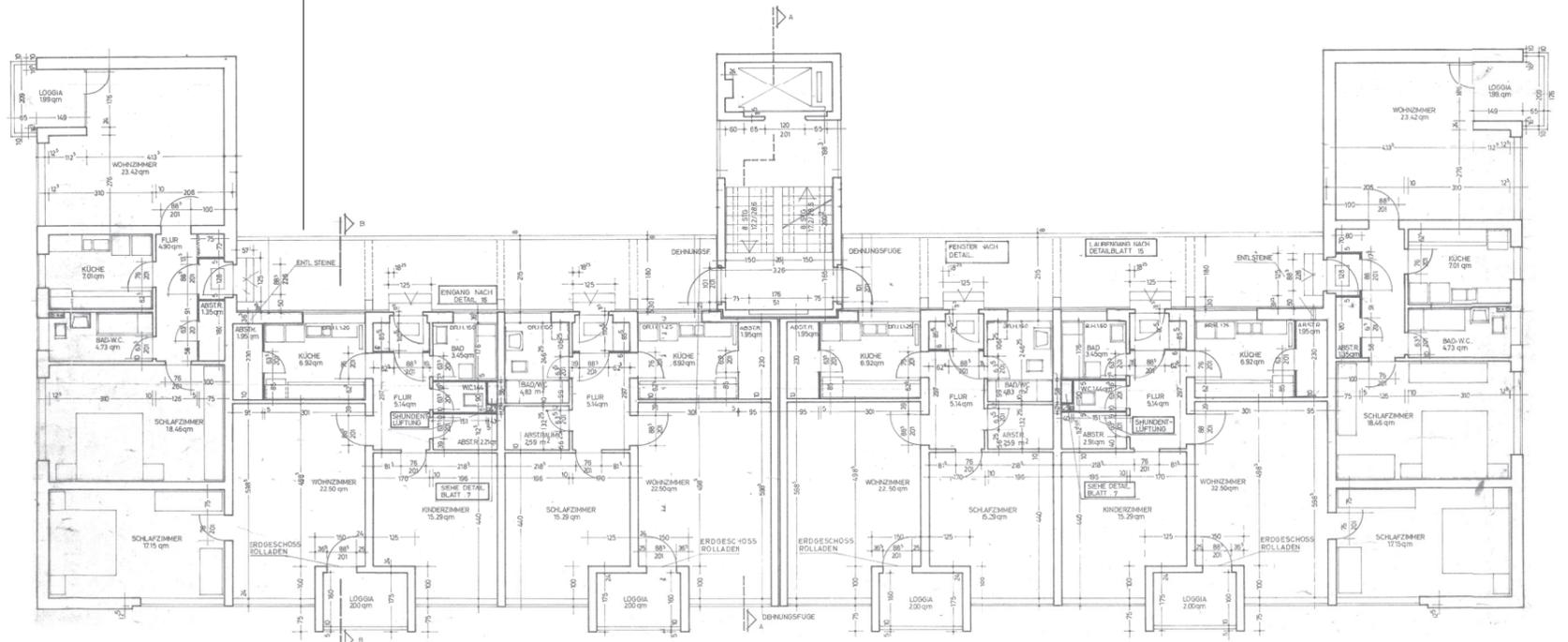
The units positioned at the ends of the corridors are single-oriented, facing either east or west. These apartments feature a living room with a small loggia, and a corridor that passes by the kitchen, bathroom, and storage space before reaching a single bedroom.

The four centrally located units are oriented north-south. Their kitchens and bathrooms face the Laubengang (north), while one or two bedrooms and a living room with a small loggia open to the south.

The façade is characterized by its protruding loggias and the distinct red coloring of the closed corners, giving the building both rhythm and contrast. About twenty years ago, the building underwent partial renovation of the envelope, which included the installation of a six-centimeter-thick insulation layer, new cladding, and double-glazed windows.



The section reveals the site's topographic rise, allowing the ground-floor apartments to sit above street level on the north side and at ground level on the south side



The building is articulated by four set-backs, each accessed via a north-facing staircase, leading to two three-room apartments per floor

Liyue Ouyang

PROJECT Gerhart-Hauptmann-Ring 23-25, Frankfurt-Nordweststadt
CLIENT NHW
YEAR 1965
TYOLOGY high-rise slab
STRATEGY Typological update

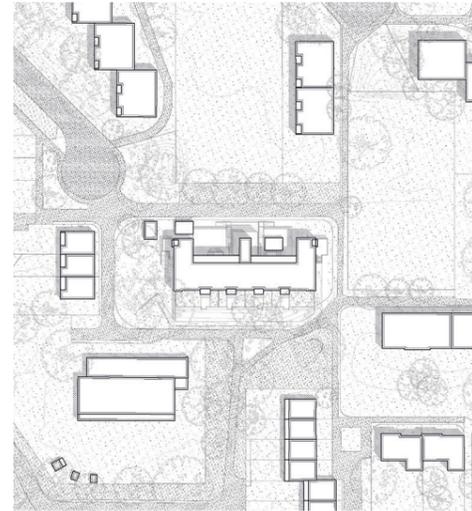
DESCRIPTION

This renovation project is located in northern Frankfurt's Nordweststadt district, with Block 5 being an eight-storey social housing building constructed in 1965. Thanks to 1960s urban planning, the building is well-ventilated and surrounded by greenery. Oriented north-south, it features distinct hot and cold zones: the north facade is shaded, keeping the entrance area cooler, while the south facade receives ample sunlight, offering potential for outdoor activities. The renovation strategy addresses these dual climate conditions, creating complementary public spaces. The north entrance will become a summer plaza with stainless steel installations, a mist cooling system, lighting strips, wooden plank paving, and accessible ramps—a cool retreat for residents to relax and socialize. The south side leverages sunlight, combining the 1.5 m elevation difference and private courtyard to add a 4.5 m-wide public platform connecting east and west slopes and staircases, forming a warm activity space for winter use. The platform includes seating, storage cabinets, and landscape planting, ensuring ground-floor privacy while enhancing living quality.

The building is connected by a vertical circulation core, with east-west corridors leading to three units per floor. While most residents are satisfied with the floor plans, accessibility can be improved. The elevator currently stops between floors; a seat lift will be added in the stairwell for wheelchairs and strollers.

Interior renovations improve spatial transparency and comfort. Single-sided units have partial wall removals between living rooms and kitchens, expanded doorways, and updated accessible bathrooms. Standard floors retain original entrances, with ramps added to eliminate two steps in public corridors. Four north-south facing units near the transportation hub undergo targeted renovations: ground-floor entrances move to the south courtyard, corridors convert into private balconies with partitions, kitchen-living partitions are removed, entrance areas expanded, and bathroom/storage spaces merged and optimised. Master bedrooms gain independent bathrooms, and a rainwater harvesting system irrigates the courtyard. One-bedroom units see significant changes, swapping kitchen and bathroom with living and bedroom spaces to optimise layout. During construction, temporary kitchen facilities are provided; upon completion, original bathrooms become open-plan kitchens.

Overall, 20 of 48 units (41%) will be upgraded to accessible housing. Through systematic ground-floor and interior adjustments, the project enhances accessibility, spatial flexibility, and integration between the building and its urban environment.



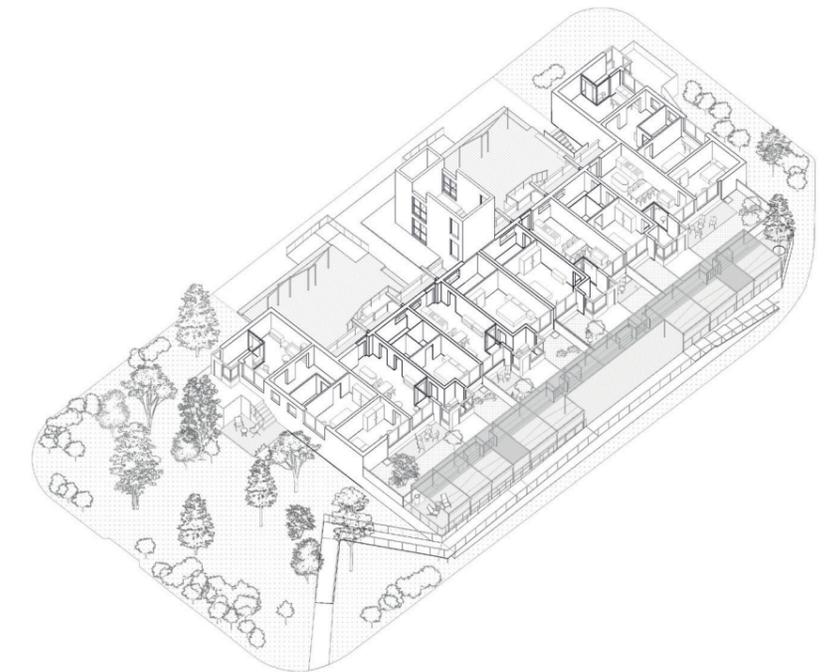
Site plan



Retrofit scheme



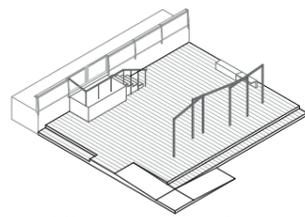
View towards newly created barrier-free entrances from the rear of the building



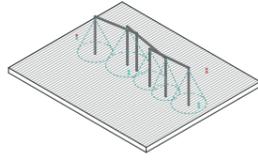
Ground floor isometry



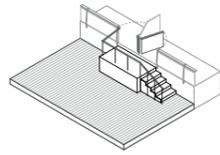
Interior of transformed barrier-free unit



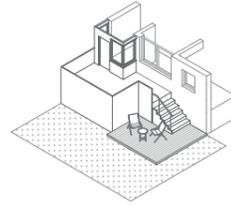
1. North square with new infra-structures



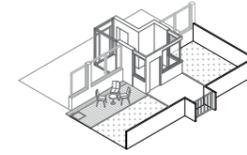
2. Mist cooling system and lighting system



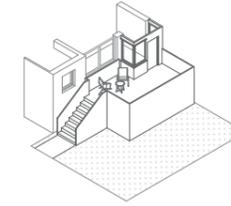
3. Stairs connecting laubengang and north square



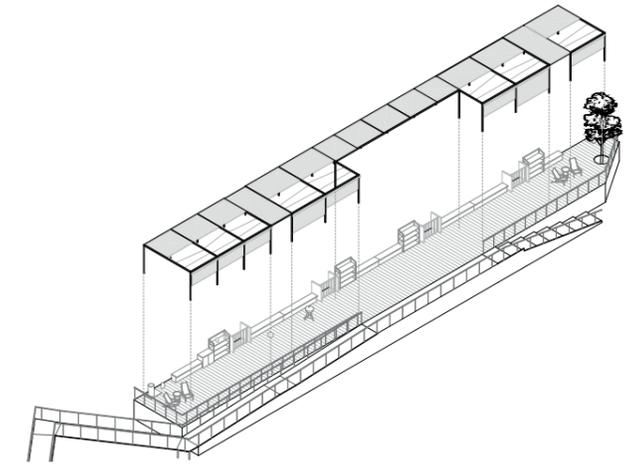
4. Single orientated apartment entrance (West)



5. Entrance connecting the ground floor apartment to the south public platform

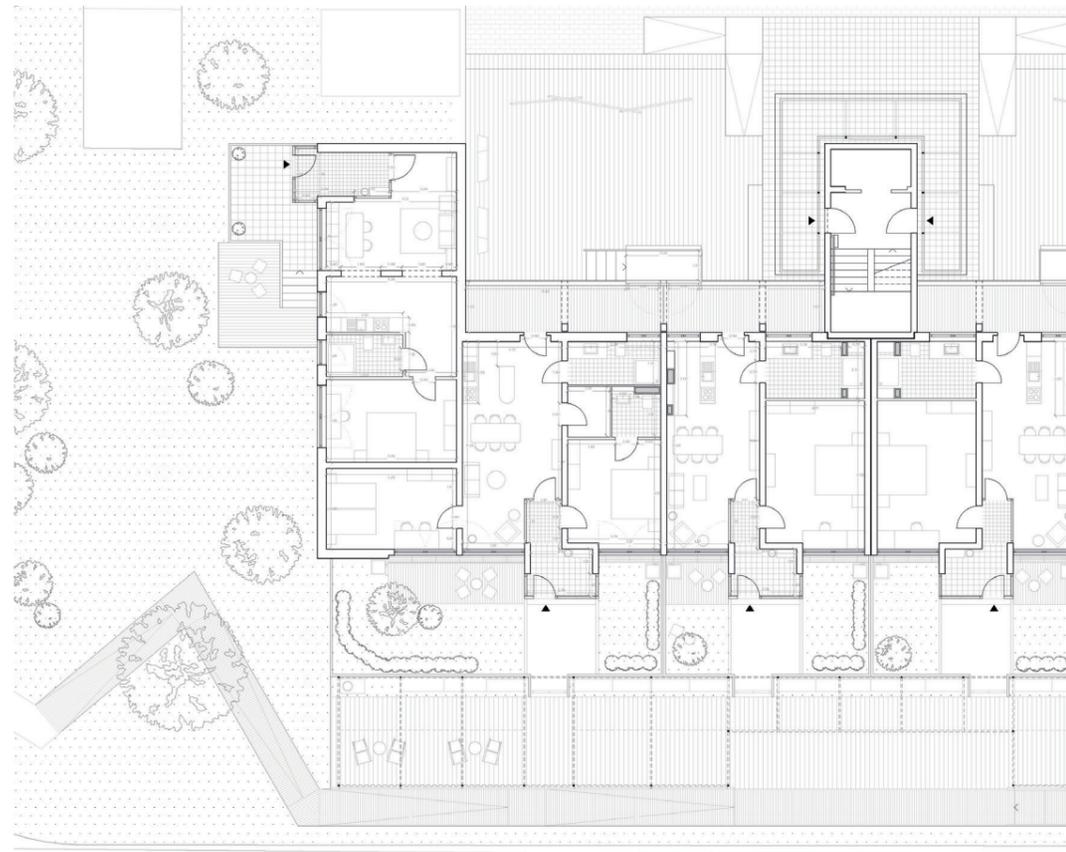


6. Single orientated apartment entrance (East)



7. Shading system and 8. South public platform

Abacus of new facilities in the public space



Ground floor



Section

PROJECT Gerhart-Hauptmann-Ring 23-25, Frankfurt-Nordweststadt
CLIENT NHW
YEAR 1965
TPOLOGY high-rise slab
STRATEGY Typological update

DESCRIPTION

As part of the design to improve the building performance at Gerhart-Hauptmann-Ring 23–25, a solution was developed for the northern access balcony (Laubengang). Over the years, this balcony had suffered significant damage from mold. Although temporary measures, such as chemical treatments and repainting of affected surfaces, had been taken, the issue persisted. In addition, the balcony serves both as an access route and emergency exit. Due to its narrow width, residents are not allowed to place furniture there, which prevents it from being used as a communal living area.

These issues led to the development of the current concept. The access balcony will be completely renewed using a vertical “Pilgerschrittverfahren” (step-by-step construction method). The structure will be made of prefabricated modular elements that are assembled on-site. This ensures a faster construction process, minimizing the time that residents need to vacate each floor. To maximize the functionality of the new structure, the supporting columns will include technical shafts as well as integrated lighting, drainage, and water supply systems.

The balcony will be constructed as a separate structure, detached from the existing façade. This offset creates vertical voids that allow continuous airflow along the original façade, preventing future mold issues caused by water vapor escaping from the building’s wet rooms. Previously, wind from the northwest would press this vapor against the building and the balcony. With the new design, the airflow is redirected upward.

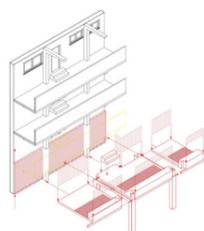
Additional moisture control is provided by a vertical garden along the existing façade. These plants support natural air exchange. Materials such as clay plaster (used indoors) and lime plaster (used outdoors) also contribute to moisture regulation. The new balcony façade will be clad in red-pigmented corrugated concrete, visually tying in with the existing structure and emphasizing its horizontal lines.

The balcony floor will be designed with varied textures to distinguish between the circulation path and the communal seating areas. Additionally, a small elevation—a single step—in the emergency exit zone and its narrow passage discourages the placement of furniture there and reinforces the need to keep this section clear.

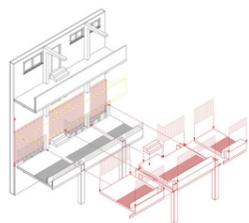
The northern access balcony is conceived as a shared living space for the residential clusters: a protected, multifunctional “joker space” that welcomes residents and safeguards the building structure from further deterioration.



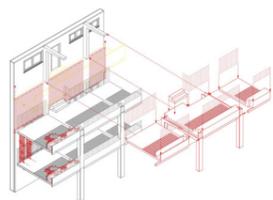
Site plan



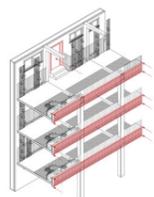
Phase 1



Phase 2



Phase 3



Phase 4



Isometry

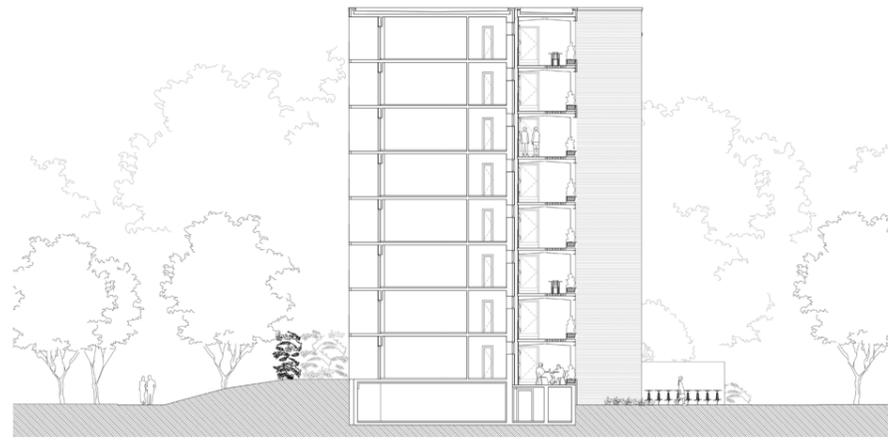


View along transformed open arcade

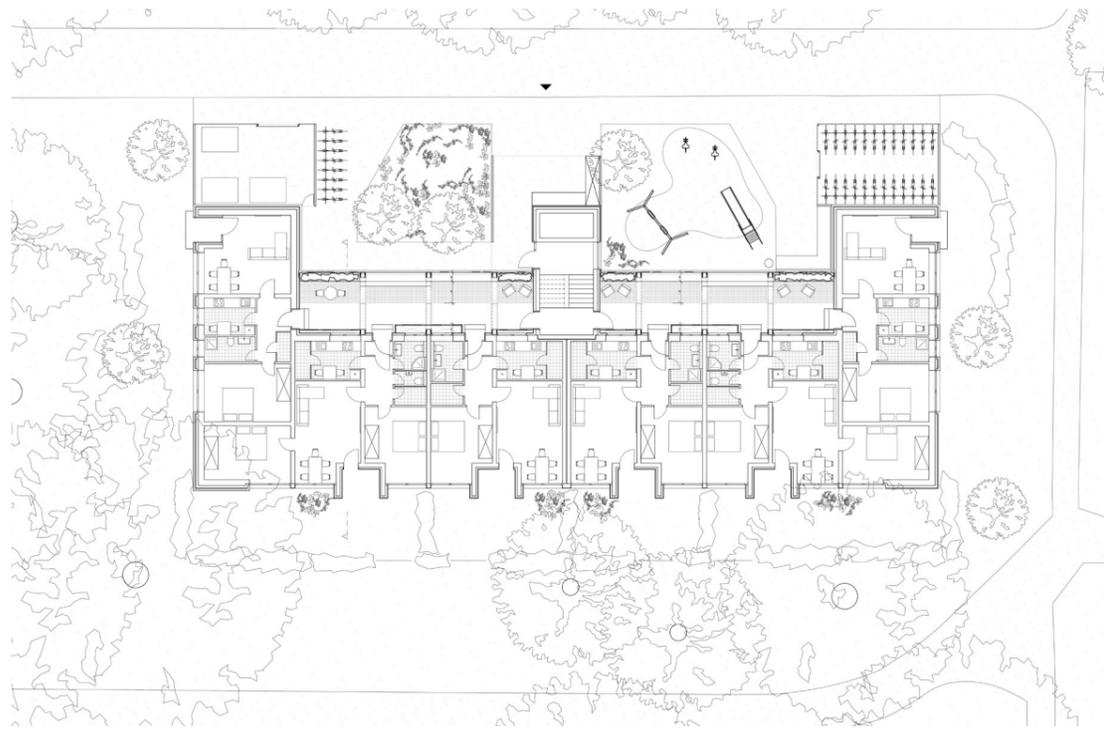


Elevation of transformed open arcade

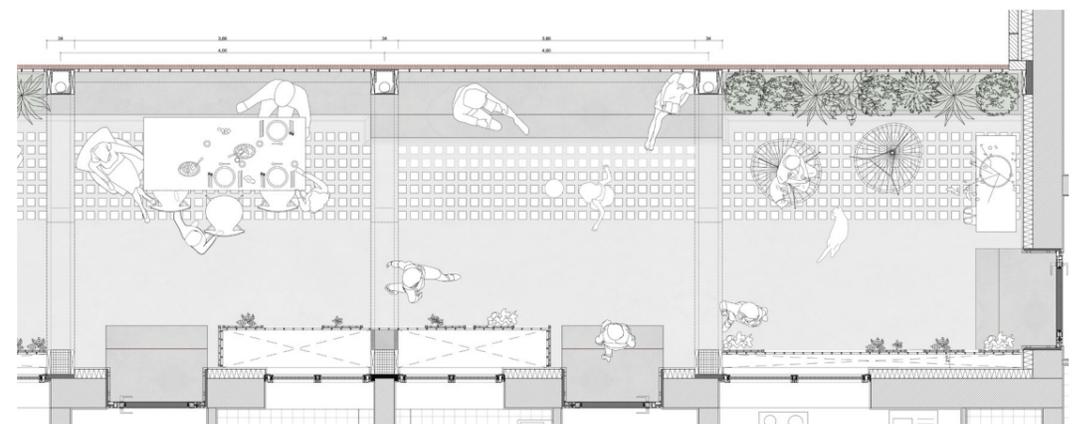
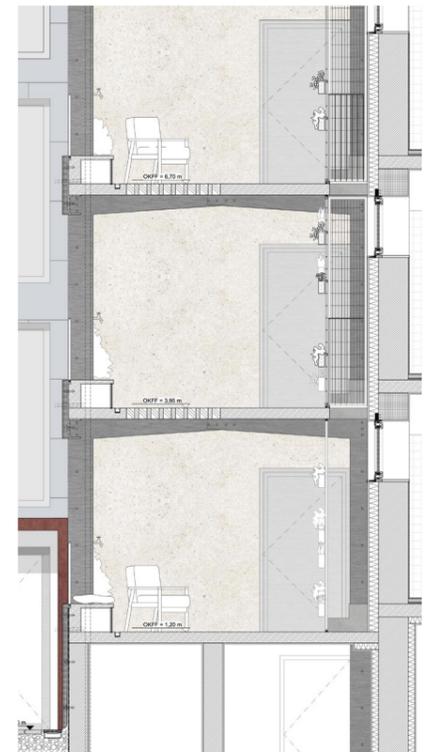
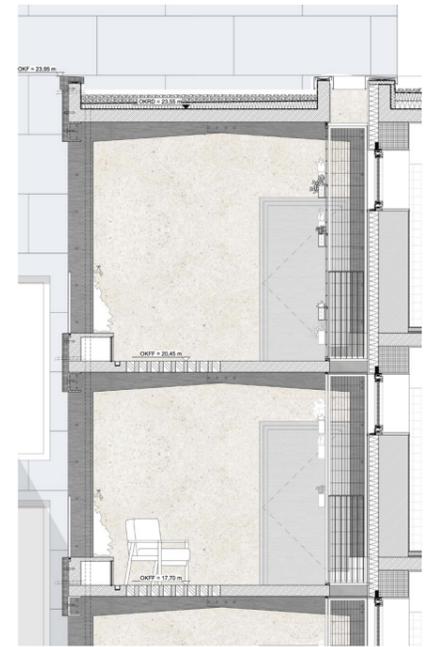
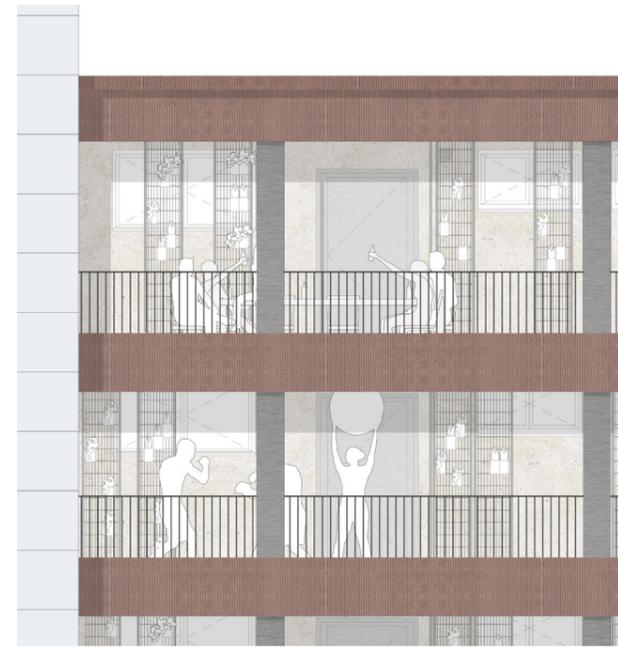
Cross section



Ground floor



Elevation



Detail

PROJECT	Gerhart-Hauptmann-Ring 23-25, Frankfurt-Nordweststadt
CLIENT	NHW
YEAR	1965
TYOLOGY	high-rise slab
STRATEGY	Better performance

DESCRIPTION

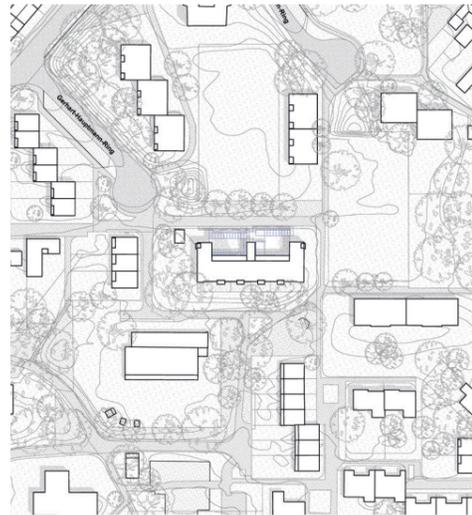
The façade – the face of the building – originally fulfills two essential tasks: it represents the interior to the outside world and protects it from environmental influences. The building at Gerhart-Hauptmann-Ring 23+25 is situated in the heart of Frankfurt's Nordweststadt, a housing estate where architects and urban planners attributed particular significance to the spatial definition of the built environment. Within the concept of the Raumstadt (spatial city), façades not only act as protective envelopes but also play a decisive role in shaping and giving form to the in-between spaces designed for urban life and social interaction.

While the building's interior still displays a high degree of spatial quality and accommodates largely satisfied residents, the façade is no longer capable of fulfilling its original functions. The southern façade, though still contributing to the definition of the public realm, shows severe building-physics deficiencies. The absence of external shading for the large window openings, together with thermal bridges and insufficient insulation, leads to overheating and mold formation. The northern façade, which defines the address of the building, has largely lost its representative and spatial character. It neither conveys the architectural quality of the interior nor generates a welcoming space for residents, guests, or passers-by. Moreover, during the refurbishment in the 1990s, in addition to the still valuable brickwork low-cost materials like asbestos panels were installed

To restore the façade's three fundamental functions – protection, representation, and spatial formation – a comprehensive renewal is required. This new construction aims to minimize disturbance to residents while ensuring durability, material honesty, and reversibility. A modular frame system made of simple prefabricated steel L-profiles with bolted connections has therefore been developed. It enables precise assembly, easy disassembly, repair, and material reuse.

Each module is clad with galvanized steel sheets and single-glazed window elements, forming a second skin on the southern side. Behind this ventilated and insulated layer emerges a thermal buffer zone between the existing façade and the new envelope. Additional exterior curtains provide flexible shading, while the recurring façade module transforms the existing loggias into winter gardens, mitigating pre-existing thermal bridges.

On the northern side, the same modules are reconfigured into spatial structures. They provide integrated storage, define a clear architectural address, and create differentiated courtyards that serve as social buffer zones and informal gathering spaces. Through the use of shimmering metal surfaces in contrast to the existing brick, the building enters into a refined dialogue with its green surroundings, reinforcing the urban fabric and ensuring a lasting contribution to the quality of both the building and its neighborhood.



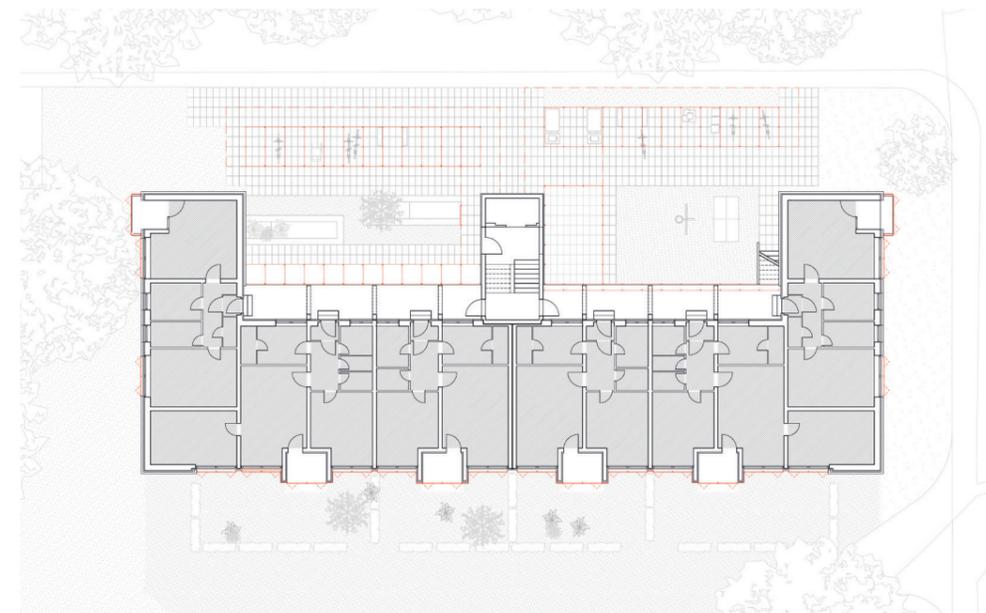
Site plan



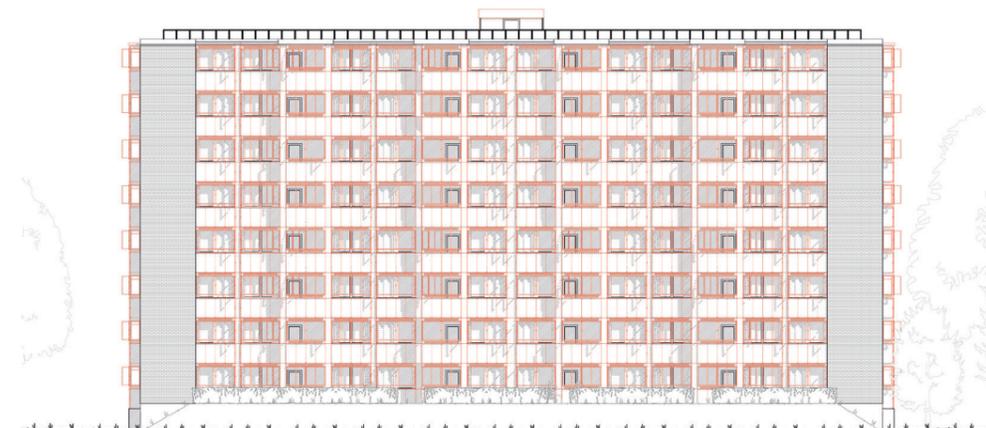
Isometry



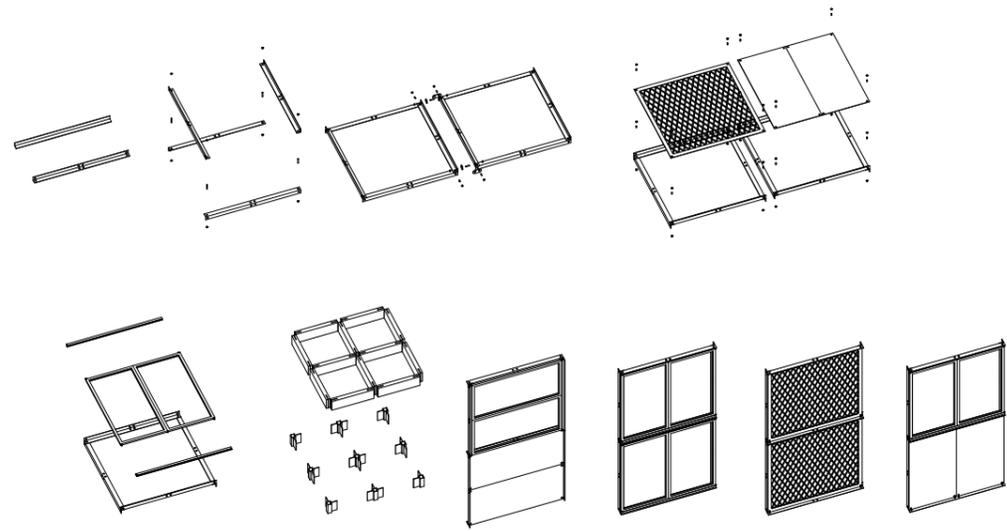
View of transformed North façade with added storage spaces



Ground floor



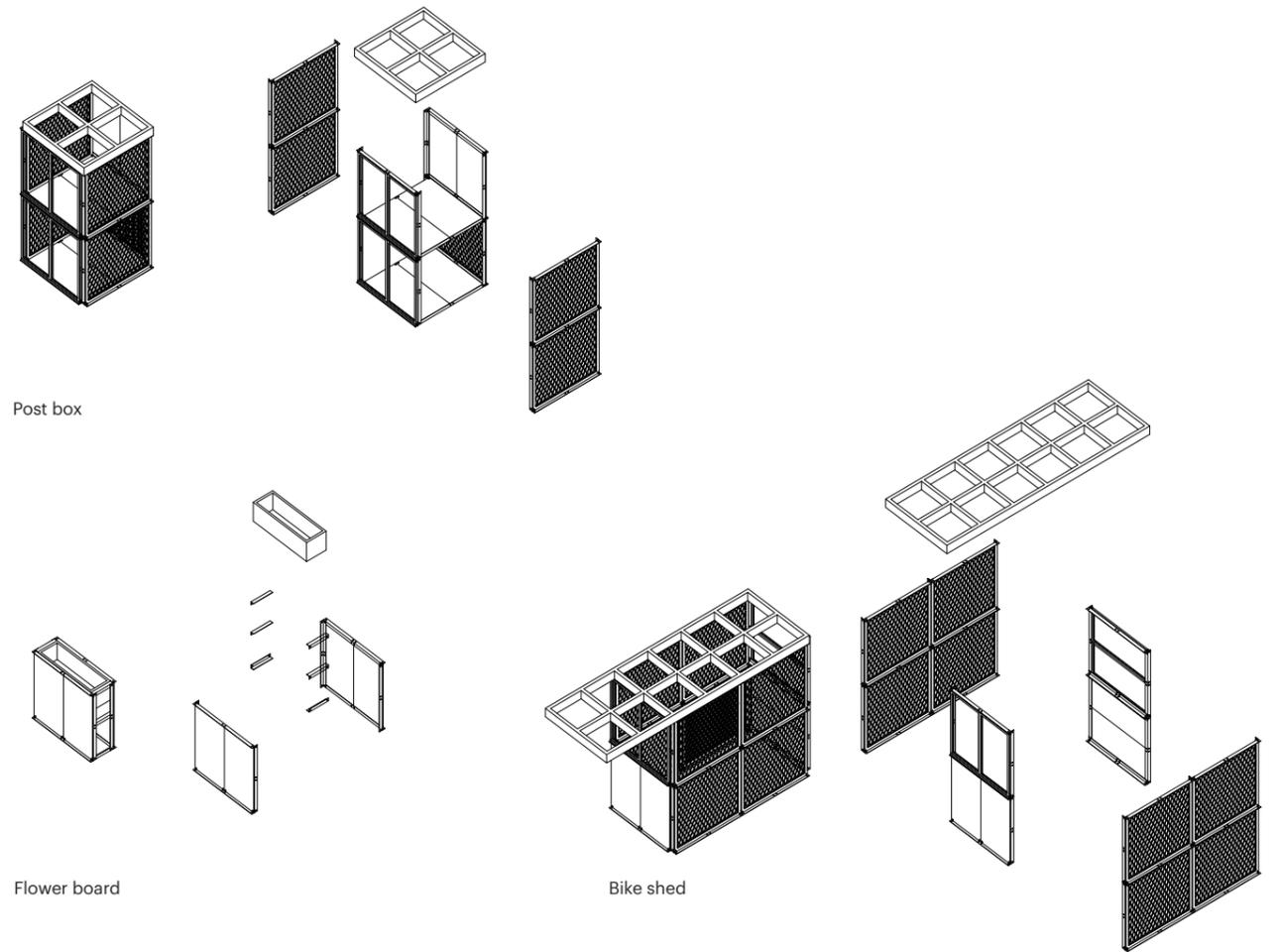
South elevation



Prefabrication process



Section



Post box

Flower board

Bike shed



Detail

PROJECT	Aussiger Straße / PR 3313 65
CLIENT	NHW
LOCATION	Aussiger Straße 10-14 Frankfurt-Sachsenhausen
YEAR	1966
TYOLOGY	high-rise slab
DWELLINGS	96
PER BUILDING	32
SIZE OF UNITS	67-75 m ²

5

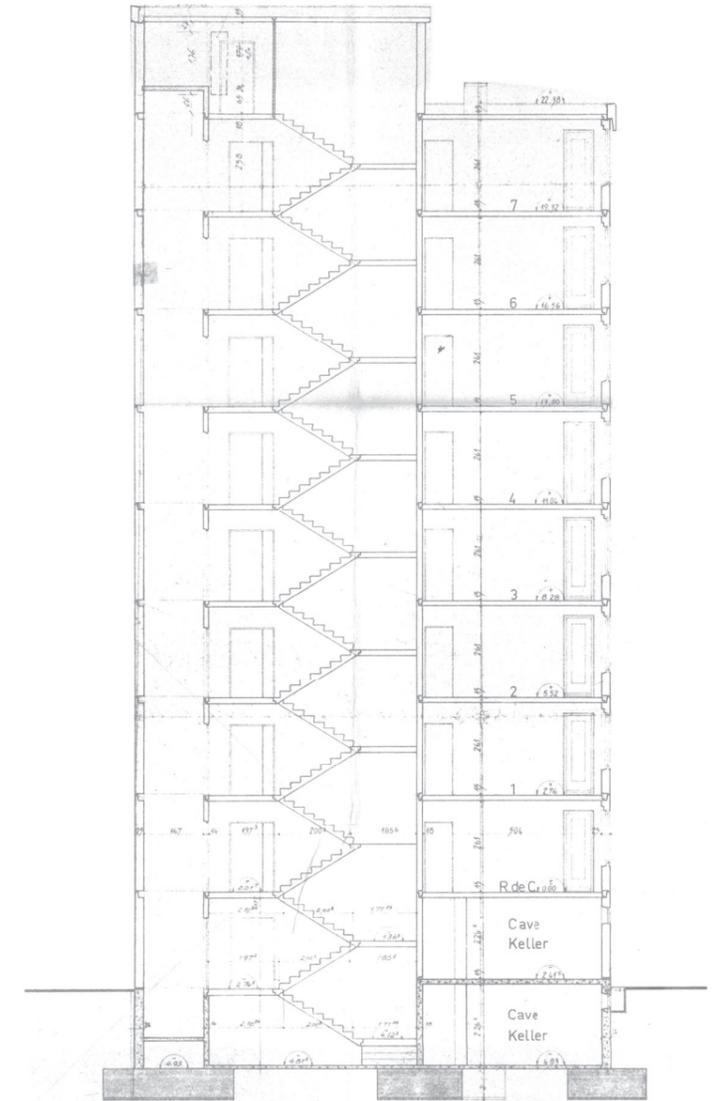
DESCRIPTION

The neighborhood along Aussiger Straße, between Mörfelder Landstraße and the city forest, reflects three distinct phases of urban development in Frankfurt.

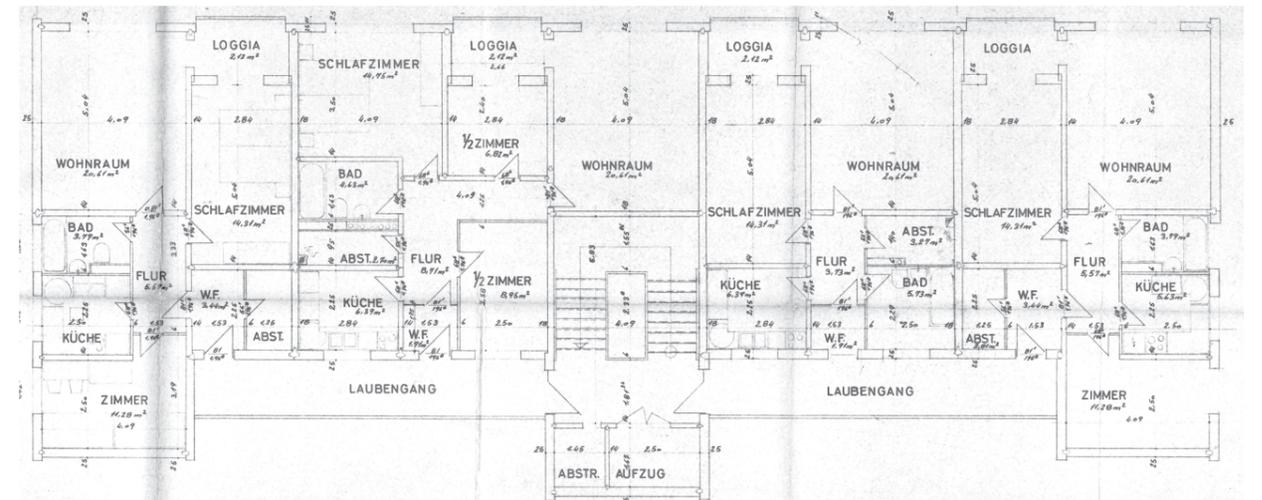
To the north lies the Heimatsiedlung, developed during Ernst May's Neues Frankfurt initiative between 1927 and 1934 and designed by architect Franz Roedcke. To the east is the Fritz-Kissel-Siedlung, a large-scale post-war development constructed by the Nassauische Heimstätte in the 1950s.

The triangular plot enclosed by Heimatsiedlung, Fritz-Kissel-Siedlung, and the railway was the final portion to be developed. In the 1960s, it was built up with three south-facing high-rise slabs. Each building is accessed from the north via an external circulation core containing a staircase and elevator. From here, two open corridors or Laubengänge extend to the left and right, each connecting two apartments per floor.

All units are double-oriented and range in size from 67 to 75 m². The apartments closest to the core have kitchens and bathrooms facing north, while bedrooms, living rooms, and private loggias face south. The larger units are located at the ends of the buildings and do not face the Laubengang. Instead, these feature a second bedroom, as well as kitchen and bathroom windows, oriented respectively east or west. Approximately twenty years ago, the buildings underwent partial envelope renovation, which included the addition of a six-centimeter-thick layer of insulation.



In the nine-story building, the ground floor and basement are used for storage, while an elevator and a single staircase provide access to the upper levels



The load-bearing slab structure, with two alternating axial dimensions, enables flexible spatial configurations

Evisa Ferhati

PROJECT Aussiger Straße 10-14, Frankfurt-Sachsenhausen
CLIENT NHW
YEAR 1966
TYOLOGY high-rise slab
STRATEGY Better performance

DESCRIPTION

This project begins with a critical observation of spatial imbalance within a nine-story social housing building on Aussiger Straße 14 in Frankfurt. The access system is organized around a central circulation core that opens onto a Laubengang, which leads to two apartments on each side. However, this layout results in significant variation in exposure and spatial quality. For instance, the largest apartments have both the kitchen and a bedroom facing the walkway, making them much more visible than the corner apartments, which remain more private.

STEP 1 - Recognizing Inequality: Through site analysis and informal conversations with residents, it became clear that the current layout creates unequal exposure and fragmented living conditions. Some apartments were more open to circulation, while others were shielded. This imbalance informed the first step of the design: acknowledging the lack of spatial equality and beginning to recalibrate it.

STEP 2 - Reorienting the Interior: To ensure equal exposure and encourage a sense of community, the internal layout of the apartments was reconfigured. The kitchen and dining areas of all units are now aligned along the Laubengang axis, becoming the primary entrance zone. In this configuration, the kitchen, often the heart of domestic life, becomes an active, social, and transparent space. Its exposure to the Laubengang enhances both visibility and informal interaction among neighbors.

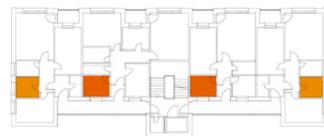
STEP 3 - Extending the Laubengang: The Laubengang is extended by 50 cm to incorporate a built-in bench, creating a transitional zone between public and private. This bench not only offers a place to remove shoes or pause briefly before entering the apartment, but also signals a shift in how the circulation space is used, less as a passage, more as a lived edge.

STEP 4 - Adding a Communal Extension: Finally, a lightweight steel structure is added along the north side of the building, attached to the Laubengang. This new volume responds directly to the residents' own expressed need for communal space, which is currently missing in the existing layout. The extension introduces three key loggia-like zones, at both corners and the center of the façade, which can serve as spaces for drying clothes, social gatherings, children's play, or simply sitting and enjoying the view.

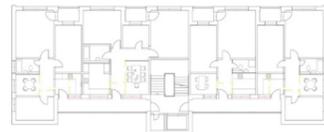
Over time, residents are encouraged to personalize these spaces, shaping their use and meaning according to their daily needs. By doing so, the structure not only adds function but becomes a canvas for appropriation and community identity.



Site plan



Phase 1



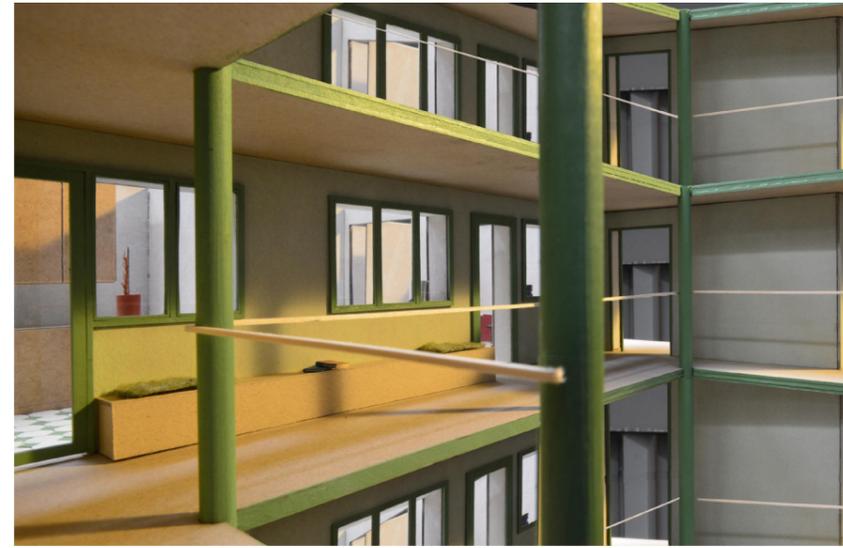
Phase 2



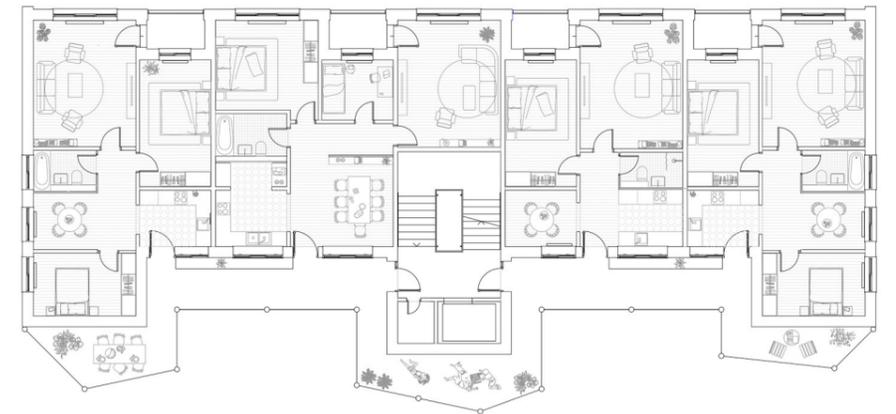
Phase 3



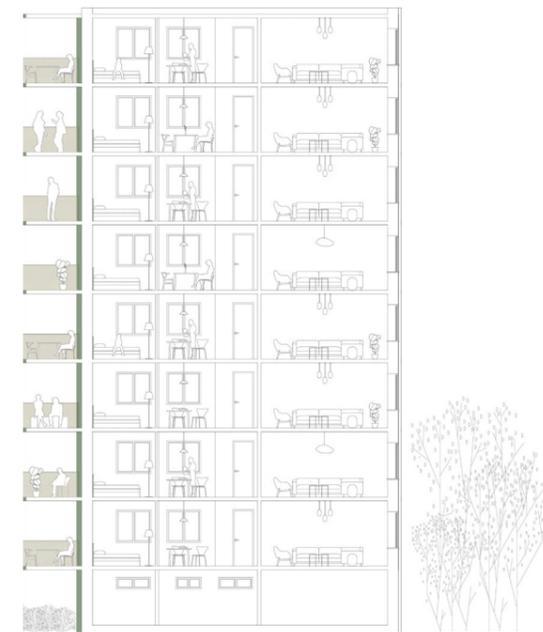
Phase 4



View along extended open arcade towards reorientated kitchens



Regular floor



Cross section

Simon Kallfaß

PROJECT Aussiger Straße 10-14, Frankfurt-Sachsenhausen
CLIENT NHW
YEAR 1966
TYOLOGY high-rise slab
STRATEGY Better performance

DESCRIPTION

Close to Frankfurt city centre, in the immediate vicinity of the city forest, with a view of greenery and access to a large, almost private garden with play facilities, sufficient car parking spaces, renovated with generous 17 cm insulation. This may sound like a desirable property. However, there is a catch, because the building described is located 10 metres from a large and busy railway line. In addition, the south facade of the building is exposed to direct sunlight and has no sun protection elements.

This design aims to preserve the building and its advantages while improving noise protection and temperature regulation.

To this end, a buffer is being created on the façade exposed to sunlight and noise. This buffer serves to provide shade, reflect noise and store solar energy. In addition, the buffer provides tenants with additional living space that can be used outdoors in summer and as a conservatory in winter.

In order not to disturb the residents during the renovation, the intervention is minimally invasive and can be carried out quickly. The largest measure is the balcony structure on the south façade. It can be placed in front of the façade using prefabricated, repetitive modules made of reinforced concrete. The dense mass of the reinforced concrete is designed to reflect the sound waves of the trains. The result is a solid wall that blocks out the noise of the trains.

To access the balcony, only the loggia balustrade needs to be demolished. The concrete slabs are prefabricated in the factory, transported by low-loader and positioned with a tower crane. Once a shell floor has been completed, the railings and conservatory skin can be installed immediately, while the next floor is added above. This speeds up the construction process and reduces disruption to tenants.

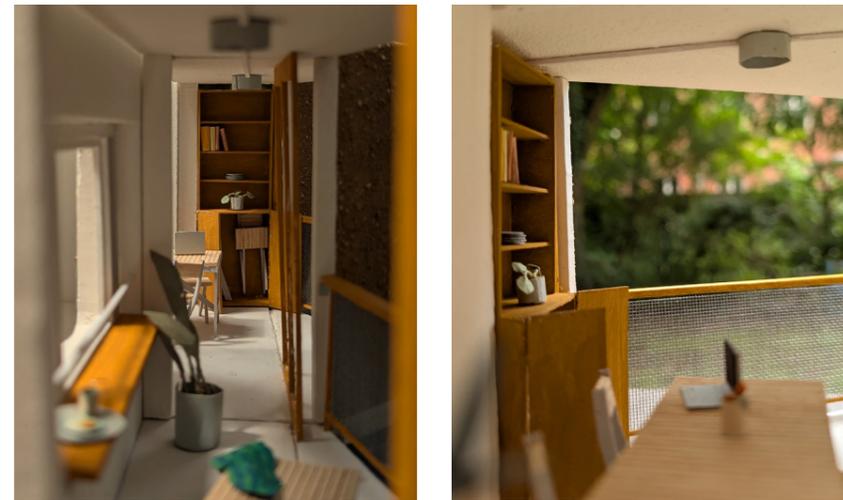
In addition, the theme of the buffer is also implemented in the floor plans and the cross-section of the building. This is because the long-disused technical shafts of the original building are now used as ventilation shafts. To optimise this effect, small openings are created in the floor plan to improve air circulation. In each apartment, it makes sense to swap the kitchen with the bathroom, as this connects the kitchen with the living room to create a larger living space and at the same time creates a ventilation axis from the buffer to the ventilation shaft.

The ventilation shaft, which runs from the basement to the roof, is now reinforced by a solar chimney. The heating of the solar chimney and the resulting temperature difference between the chimney and the apartments creates natural ventilation in the apartments.

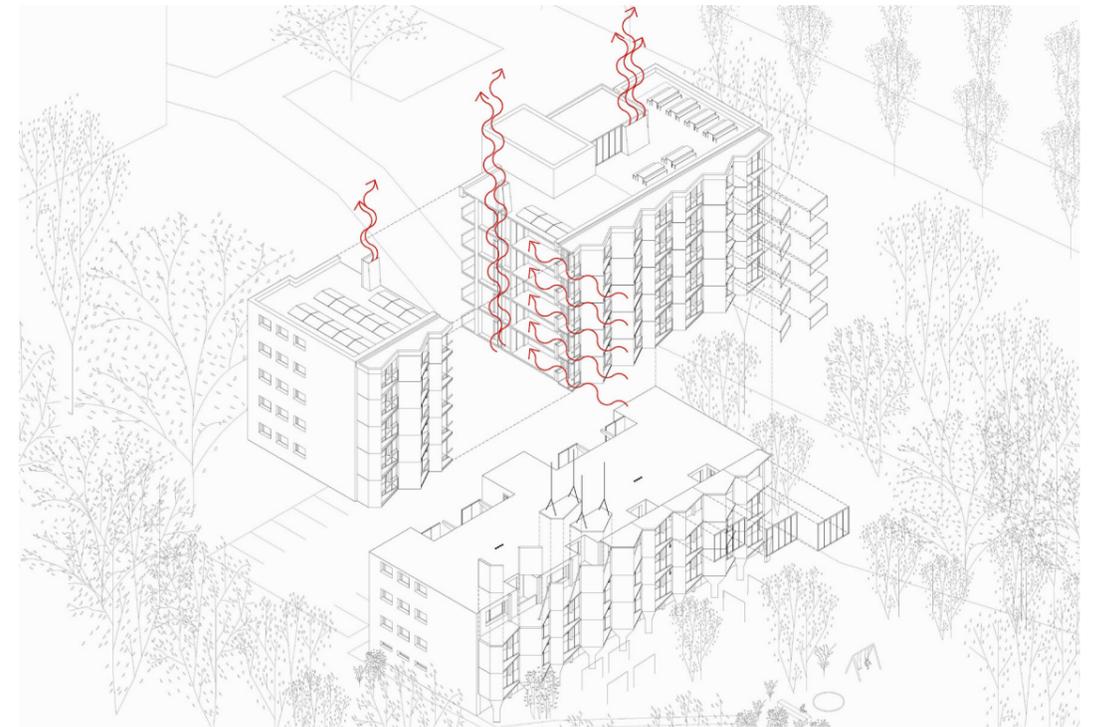
In winter, the conservatories in front of the loggia help to reduce heat loss. This preheated air can also be directed into the interior rooms through optimised air circulation.



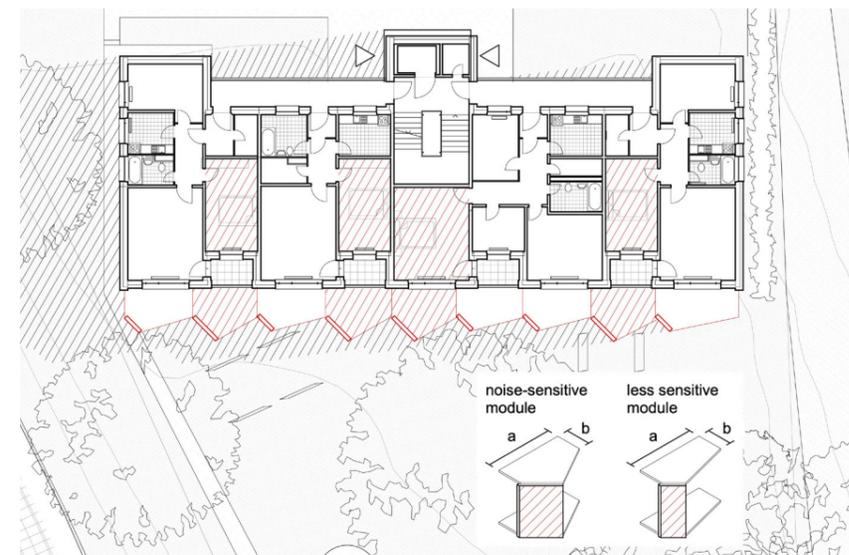
Site plan



Interior of added loggia layer providing noise insulation and extending private exterior space



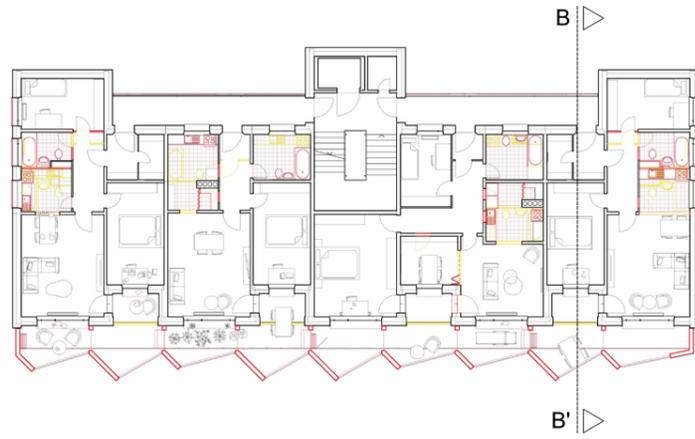
Isometry



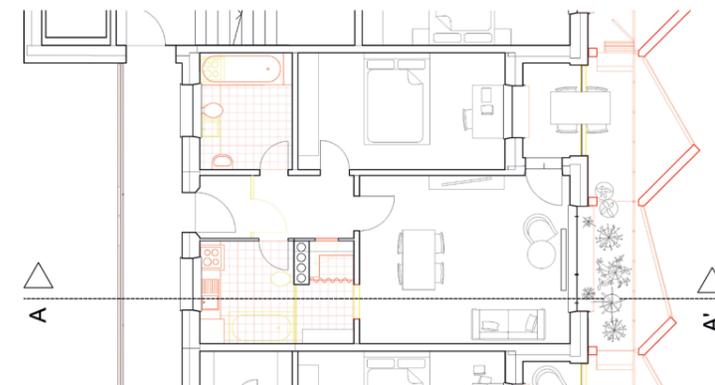
Strategy



Section



Regular floor



Detail



South elevation



North elevation

Adea Nuri

PROJECT Aussiger Straße 10-14, Frankfurt-Sachsenhausen
CLIENT NHW
YEAR 1966
TYOLOGY high-rise slab
STRATEGY Radical retrofit

DESCRIPTION

“Reconnect” is a design proposal for transforming the ground floor at Aussiger Straße 14 in Frankfurt. The project aims to enhance functionality, accessibility, and community among residents. Its title reflects the ambition to reconnect tenants with each other, the building, and the underused green landscape.

The existing situation presents several challenges. The entrance is dominated by surface parking, creating a harsh, unwelcoming first impression. Accessibility is limited: the elevated ground floor is reachable only by steps, posing barriers for people with limited mobility, parents with strollers, and cyclists. Inside, communal spaces are fragmented, dark, and underused. Storage rooms are small and often abandoned. While a generous park lies to the south, it is disconnected from the building by the lack of direct access.

The proposal introduces a plinth that wraps around the building, becoming the key architectural and social element. Beyond functional improvements, the plinth elevates the building’s spatial identity, emphasizes its presence, and transforms its relationship with the ground. It acts as a unifying platform, connecting the building to its surroundings and redefining how people approach, access, and inhabit the ground floor.

The plinth replaces part of the parking area with greenery, generous bike parking, seating areas, and barrier-free circulation. A gently sloped ramp links the sidewalk to the plinth, making the building fully accessible. The plinth functions as a social interface, solving practical issues while enhancing civic quality and architectural clarity.

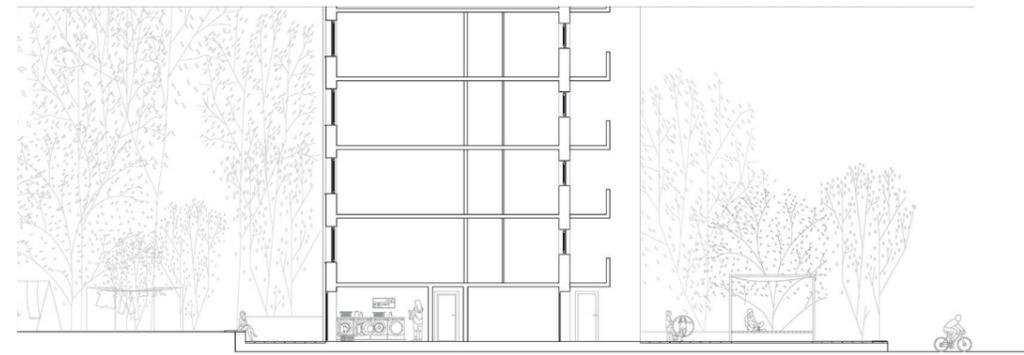
Inside, the ground floor is reorganized into clearly defined communal zones: a shared kitchen and dining area, a playroom for children, and improved laundry and drying spaces. New openings on the southern façade connect these spaces directly to the park, encouraging interaction among neighbors and making social life visible and accessible. Storage rooms are restructured into larger, multi-functional spaces for shared furniture, tools, clothing, and household items, supporting practical needs and circular resource use.

Roofed pergolas along the plinth create shaded spaces for relaxation, meetings, or small activities. On the park-facing side, the pergola forms a soft green threshold with climbing plants, offering a gradual transition from the open park to the more private communal world of the residence.

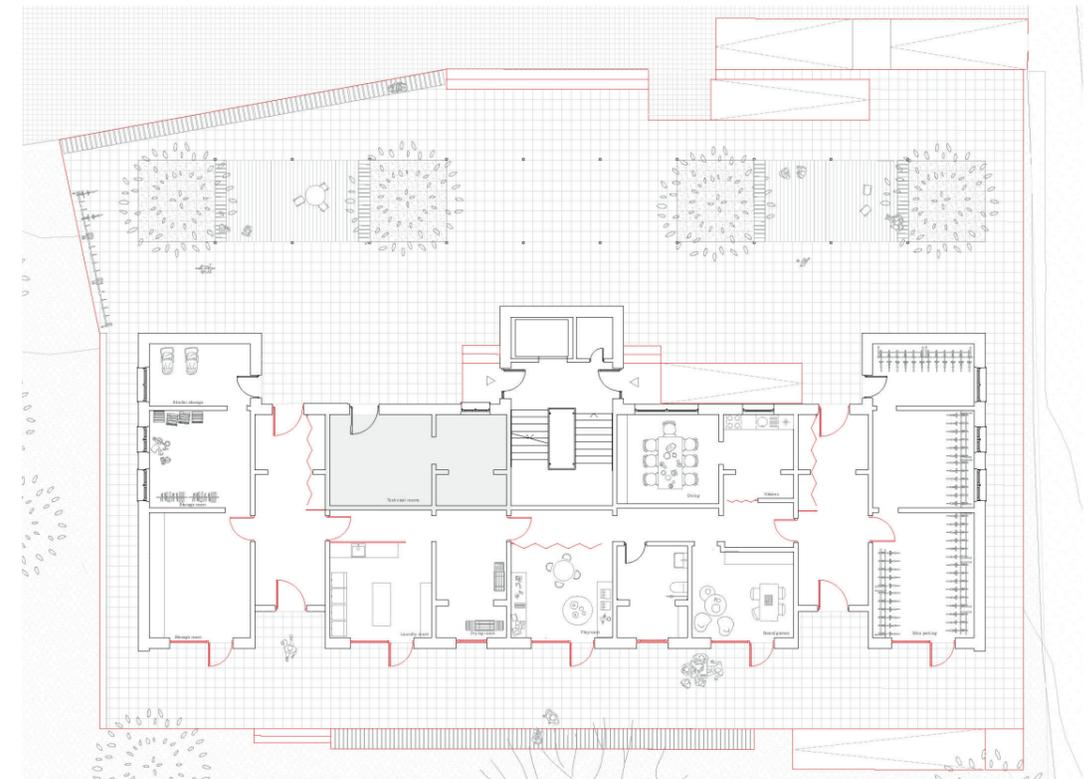
“Reconnect” transforms the neglected, fragmented ground floor into a cohesive, inclusive, and socially vibrant space. Through the plinth—the defining gesture—the intervention restores dignity and clarity to the building base, amplifies its monumentality, and reestablishes meaningful connections between people, architecture, and landscape.



Site plan



Section



Ground floor



View from East towards newly created plinth, reconnecting the building with its surroundings

PROJECT Langweidenstraße
 CLIENT NHW
 LOCATION Langweidenstraße 32, 50
 Frankfurt-Hausen
 YEAR 1972
 TYPOLOGY residential tower
 DWELLINGS 130
 PER BUILDING 75/55
 SIZE OF UNITS 44-93m²

6

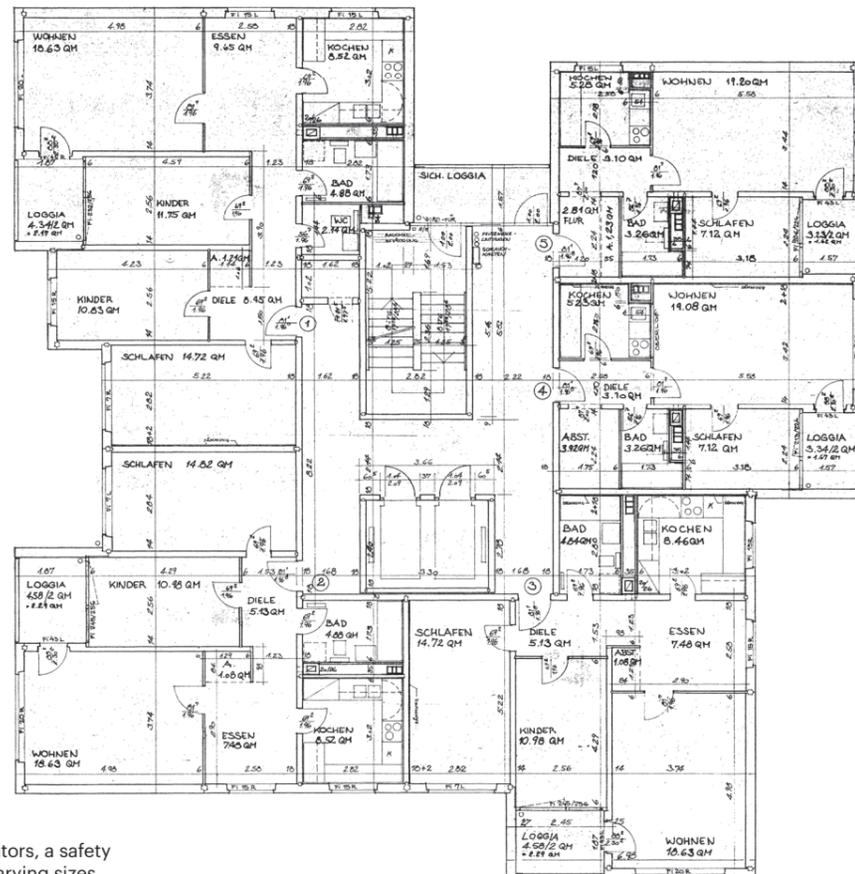
DESCRIPTION

The two high-rise residential towers are part of a group of five towers located on the eastern border of Frankfurt-Hausen, built in the early 1970s. The two towers, comprising 11 and 15 stories respectively, were completed in 1972. Access is provided via staircases and an elevator, leading to a spacious distribution area from which five apartments can be entered.

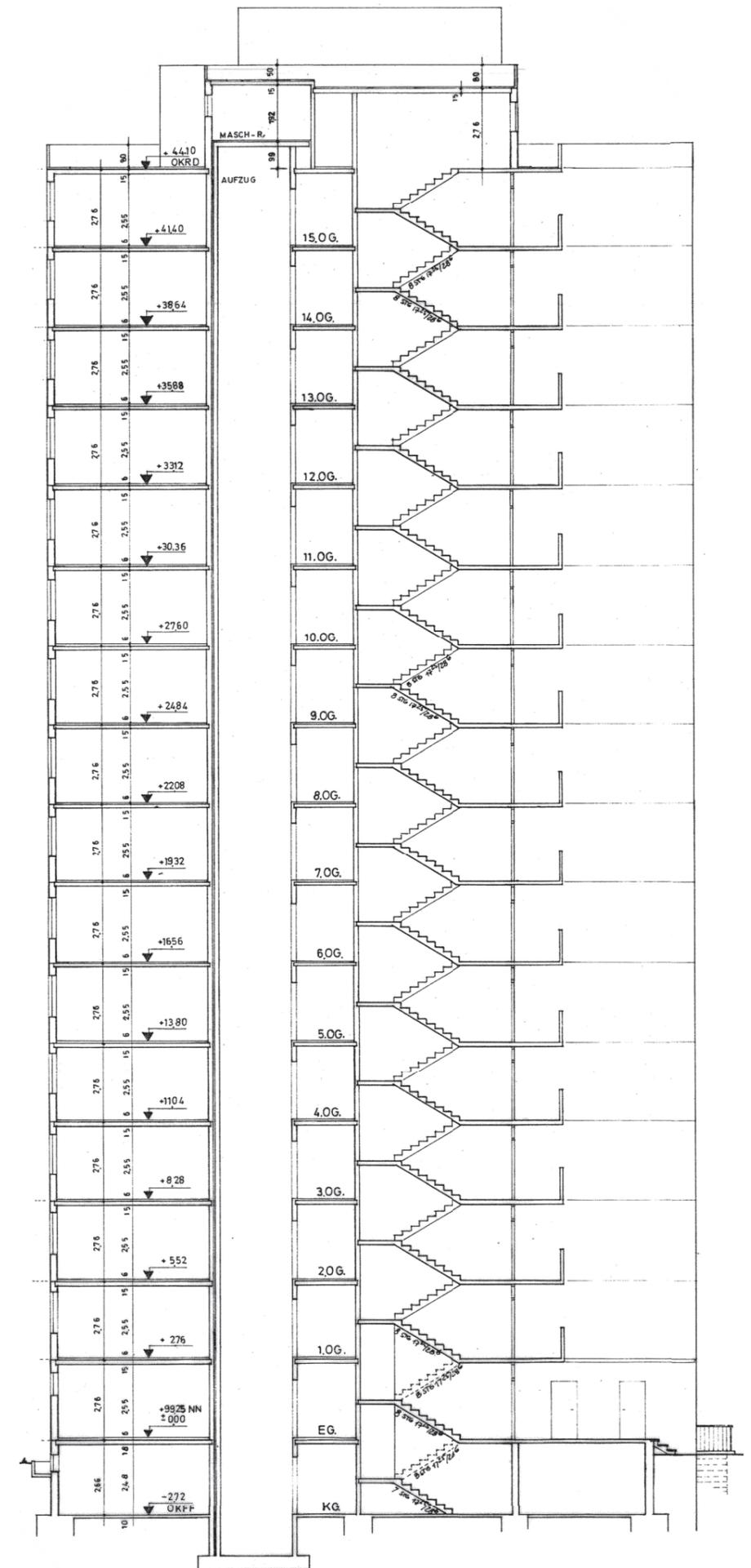
To comply with fire regulations, access to the staircase from the distribution space requires passing through an external loggia.

The apartment sizes vary significantly—from 44 m² single-oriented units with an internal kitchen and bathroom, and a bedroom, living room, and loggia facing east, to large corner apartments with three bedrooms and a living room facing west, and a kitchen and dining room facing north. This creates a wide variety of apartment layouts and sizes.

Approximately twenty years ago, the buildings underwent partial envelope renovation, which included the addition of a six-centimeter-thick layer of insulation.



Around the central core—which contains elevators, a safety staircase, and a corridor—five apartments of varying sizes are arranged. The smallest units face east, while the larger apartments are positioned at the corners



The ground level and basement are used for storage space

PROJECT	<u>Ben-Gurion-Ring</u>
CLIENT	Nassauische Heimstätte
LOCATION	Ben-Gurion-Ring 120-138 Frankfurt-Bonames
YEAR	1976
TYOLOGY	high-rise slab
DWELLINGS	167
PER BUILDING	24
SIZE OF UNITS	43-88m ²

7

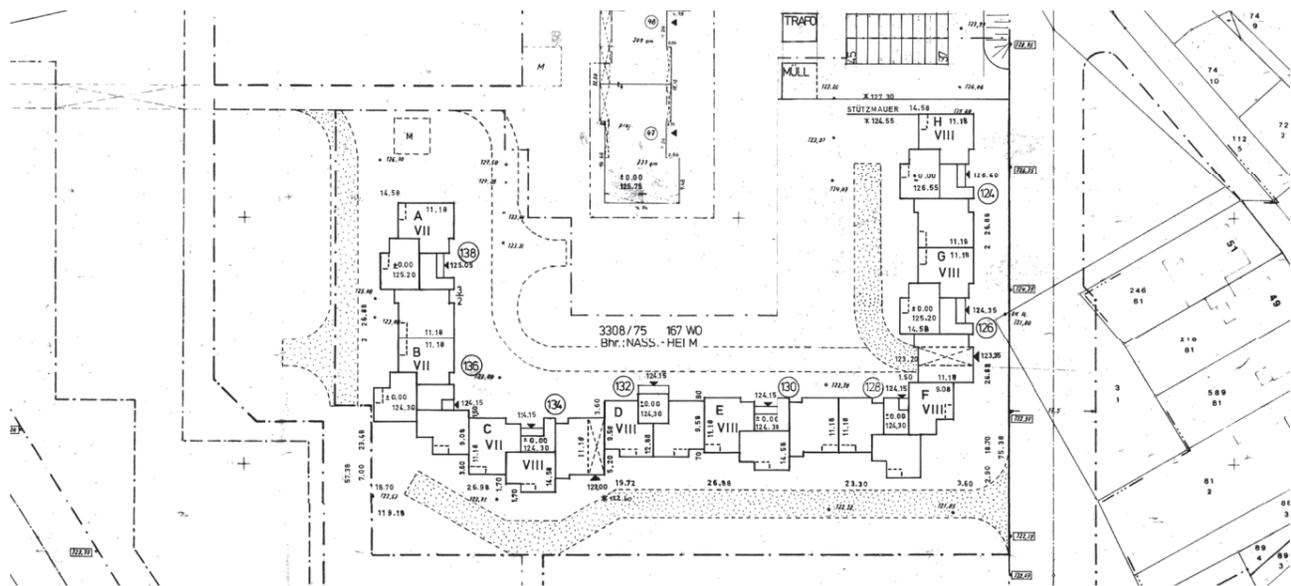
DESCRIPTION

The large settlement project of Ben-Gurion-Ring was developed in the 1970s in Frankfurt-Bonames and Nieder-Eschbach, covering an area of 35 hectares. As early as the 1950s, the first buildings were constructed near the center of Bonames. The area later expanded northward with the addition of 1,350 units of social housing. Today, approximately 4,000 people live in the settlement. Since 2016, the adjacent industrial area to the north has also been undergoing transformation into residential space.

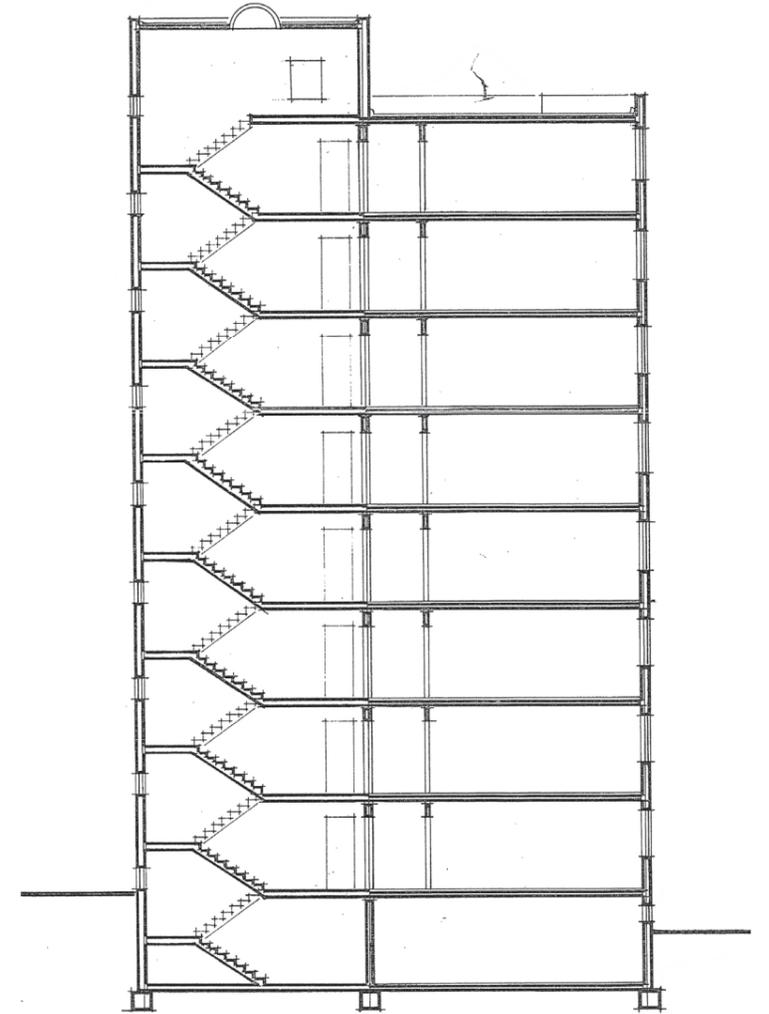
An eight-story slab building defines the southern edge of the settlement. Using a modular system of prefabricated concrete elements, a highly complex structure was realized, featuring a wide variety of axial spans and setbacks. This complexity was made possible through a consistent access strategy: all segments are accessed in the same way. Entry is from the courtyard to the north, with a staircase and elevator leading to three apartments per floor.

The apartments themselves vary significantly in size, based on combinations of different, repeating modules. Kitchens generally face north and are connected to internal bathrooms. Bedrooms are oriented to both the north and south, while living rooms and loggias are typically located on the southern side.

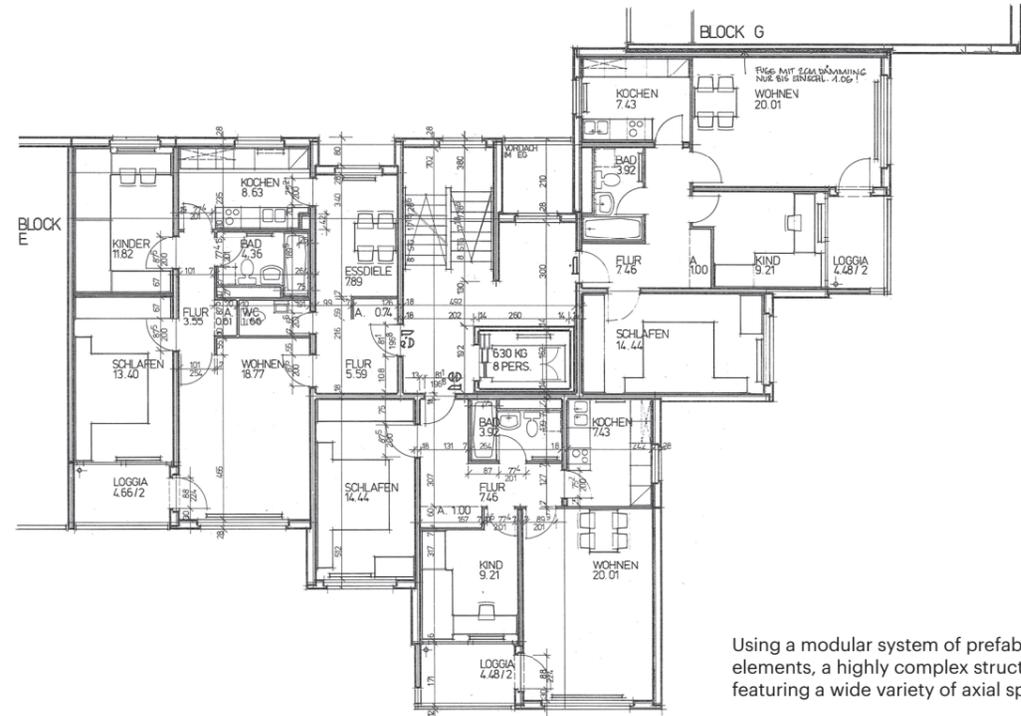
The entire construction was prefabricated using the Holzmann-Coignet building system, with the facade remaining in its' original state of precast concrete element with minimal core insulation.



The site plan highlights the scale of both the building and the overall settlement, illustrating that the 120-meter-long structure represents only a small portion of the larger Ben-Gurion settlement



The eight-story building is accessed by a single staircase and an elevator, which stops only at the stair landing



Using a modular system of prefabricated concrete elements, a highly complex structure was realized, featuring a wide variety of axial spans and setbacks

Luzie Geißler

PROJECT Ben-Gurion-Ring 120-138, Frankfurt-Bonames
CLIENT NHW
YEAR 1976
TYOLOGY high-rise slab
STRATEGY Typological update

DESCRIPTION

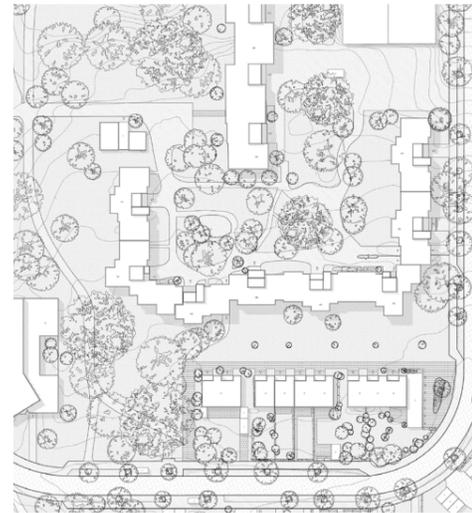
Many long-term residents have lived at Ben-Gurion Ring for over 30 years, experiencing life cycles—from moving in alone, to raising children, and eventually living independently again. This fluidity reflects the dynamic nature of the community and highlights diverse demands on the housing. The units are standardized two- to four-room apartments, approximately 60–95 m², with four distinct floor plan typologies. These functional, repetitive layouts feature central corridors, separate kitchens and bathrooms, bedrooms, and living areas.

Considering modern living needs, especially for young adults and evolving families, the typologies are adapted while respecting the existing structure. Most modifications preserve the framework and main walls, maintaining the general layout. Valuable aspects such as exterior views are strengthened, and characteristic materials, like storage elements, are retained. Kitchens and bathrooms, though rigid elements alongside elevators, staircases, and shafts, are key components of the social structure.

Interior spaces are reorganized to balance personal living areas and shared spaces. Within the framework of fixed walls, kitchens and bathrooms are enlarged and relocated without reducing individual rooms. The open central space invites visual and acoustic contact: kitchens become a central hall connected to living areas, and bathrooms gain natural light and ventilation. Rooms are no longer assigned fixed functions, allowing residents freedom to use spaces for living, eating, sleeping, or studying, and to adapt layouts as family composition changes over time.

Communal ideas replace traditional separation. Existing built-in wardrobes are reinterpreted to meet storage needs: facing storage units act as buffers and separation stages while doors serve both as wardrobe closures and doors for adjacent rooms. This allows residents to connect or divide spaces according to their needs, creating flexible, extendable layouts. Wall-to-ceiling wooden shelves can be altered or interchanged, enabling some dwellings to maintain private rooms while others form large continuous spaces.

These buffer elements and shared spaces enhance the psychological aspects of living and relationships between family members. While Ben-Gurion Ring is a large housing structure where many spaces are anonymous, its core lies in strengthening the inner apartment and living structure through small interventions and reinterpretation of space, views, and daily life.



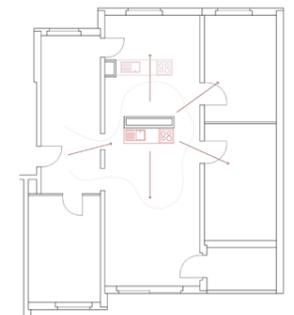
Site plan



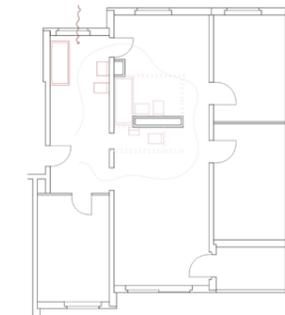
Interior of transformed unit with open kitchen area



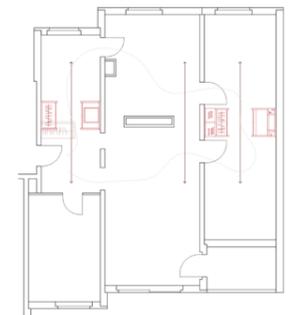
typology IV-a existing floor plan



transformed kitchen as centre

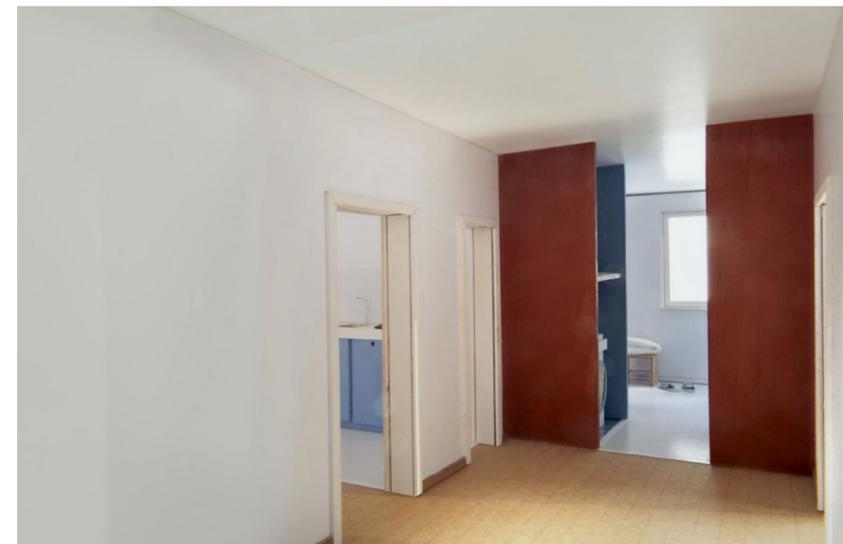


bathroom with natural light and ventilation

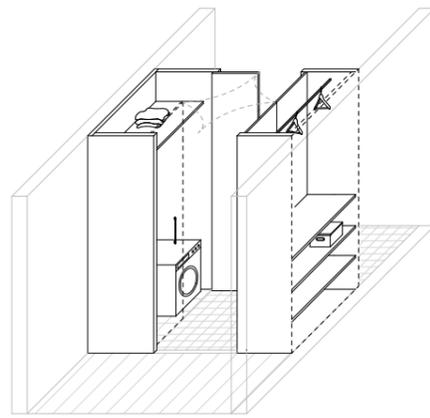


storage element as buffer

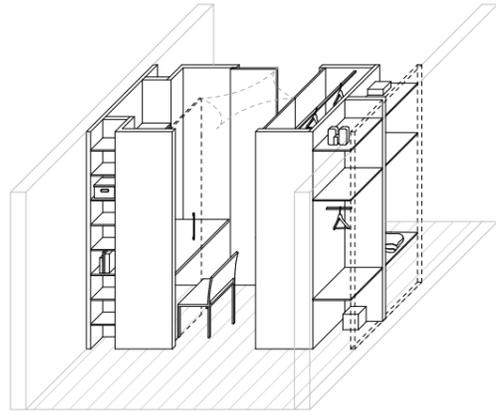
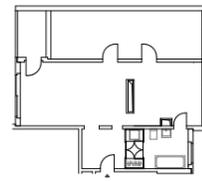
Typologies



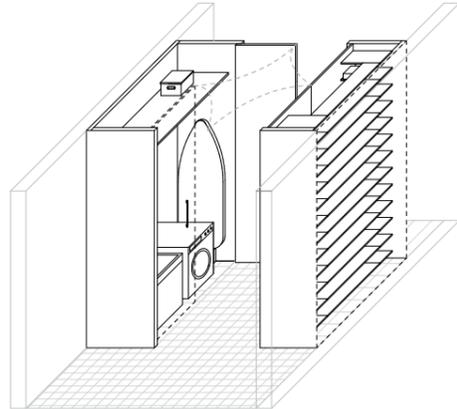
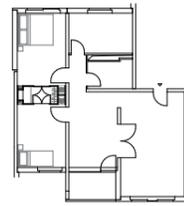
Interior of room with storage element as buffer



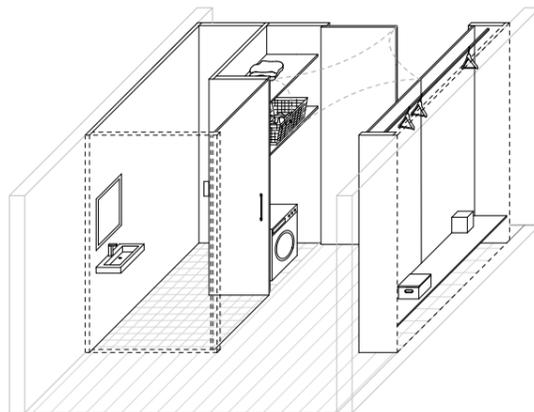
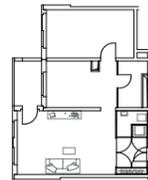
Bathroom



Bedroom



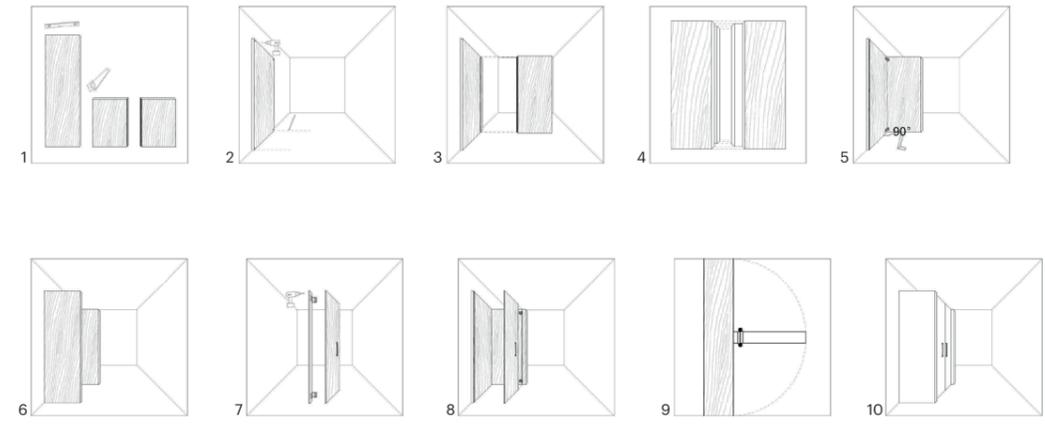
Kitchen



Kitchen



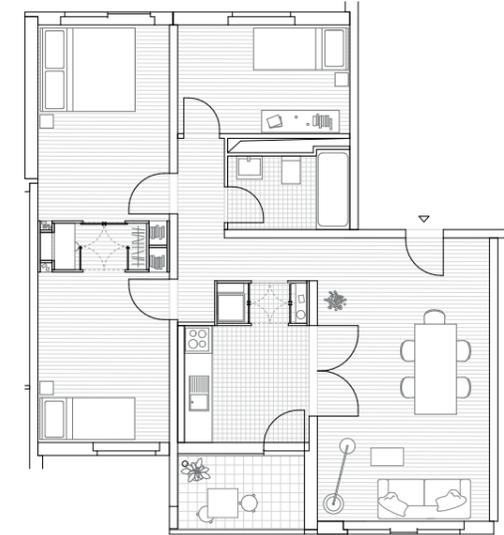
Built-in elements



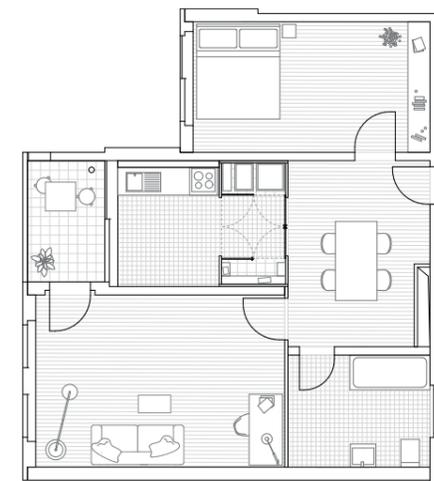
Building phases



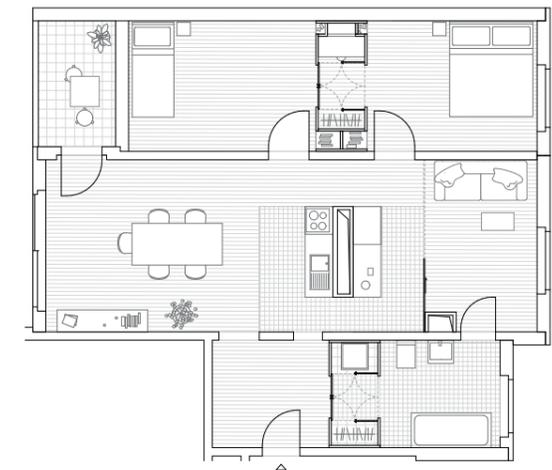
Scenario of usage: elderly couple
Typology II



Scenario of usage: family of four
Typology V



Scenario of usage: student homeoffice
Typology III



Scenario of usage: couple with toddler
Typology IV-b

Retrofit living situations

Klara Georgi

PROJECT Ben-Gurion-Ring 120-138, Frankfurt-Bonames
CLIENT NHW
YEAR 1976
TYOLOGY high-rise slab
STRATEGY Radical retrofit

DESCRIPTION

We find ourselves in one of the most northern districts of Frankfurt - Bonames. In the 1970s the Neue Heimat developed a settlement here that followed the principle urbanity through density. This meant that large quantities of housing needed to go hand in hand with providing for the everyday needs of the residents. Today the settlement is popular for its good housing layouts and connection to recreational area.

Building on this idea this project aims to reimagine one of the residential social housing complexes by activating vacant ground-floor spaces and introducing new housing typologies tailored to the areas diverse households. The intervention begins with the east wing of the building, where street-facing units are transformed into public functions such as a children's learning centre, a senior meet-up space, and a janitor's office. Outdoor terraces, ramps, and benches improve accessibility and create inviting public areas.

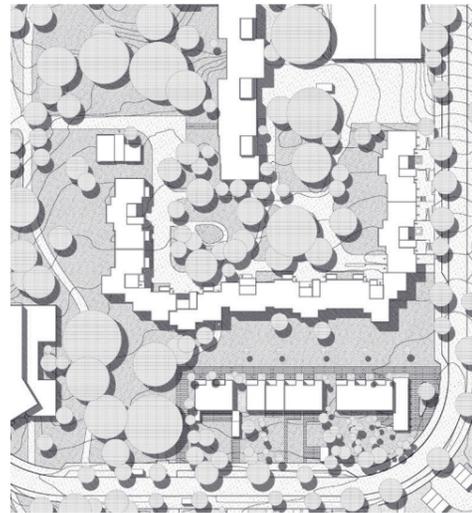
In the quieter west and south wings, communal uses such as laundry rooms and bike storage are introduced near circulation cores, fostering informal neighborly interaction.

New duplex apartments are created by connecting ground and first floors using prefabricated timber extensions. These duplexes accommodate up to eight people and include buffer zones for storage, hobby and work. A studio unit can be added to the duplex, offering flexible living arrangements.

A major design challenge was the lack of daylight in ground-floor units. Because the façade panels are load-bearing, full removal was not a sensible option to do en masse. However, enlarging windows from the top down preserved structural integrity while improving light and allowing new access points.

In the east wing, new wooden panels replace old façade elements to increase transparency, while a slim extension provides vertical circulation. The upper-floor apartment is downsized to suit a single resident or couple.

Architecturally, the additions respect the building's 1970s heritage through form, color, and rhythm. The result is a subtle yet effective transformation—enhancing livability, supporting social interaction, and showing how existing structures can adapt to changing needs.

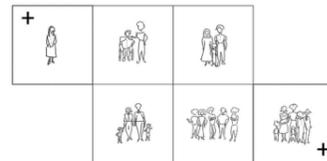


Site plan

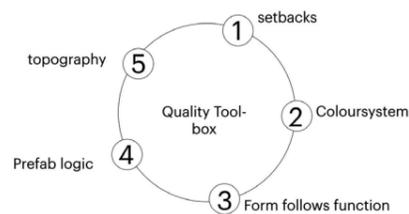
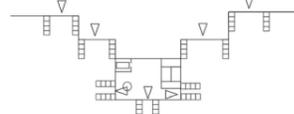
Introduce mixed use



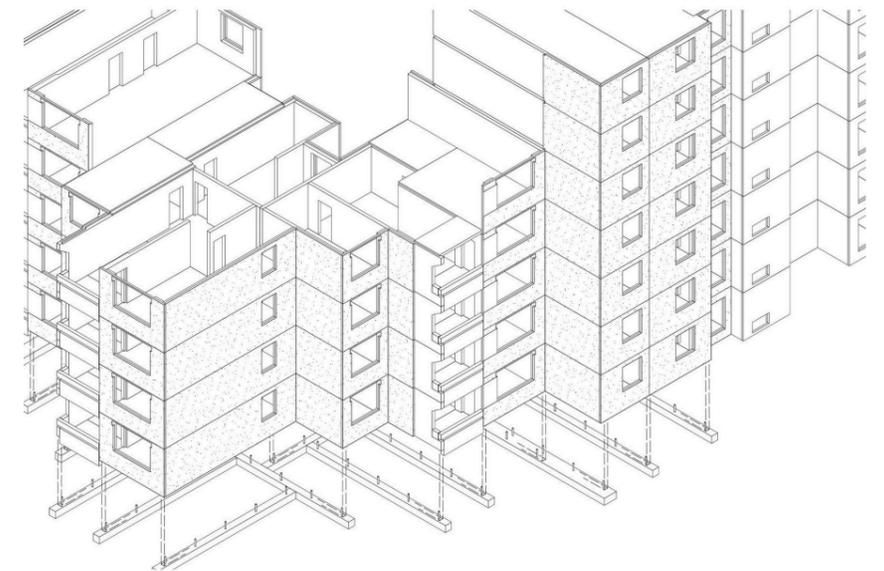
Diversify apartment types



create qualitative circulation and entry spaces/combine with storage space to declutter communal areas



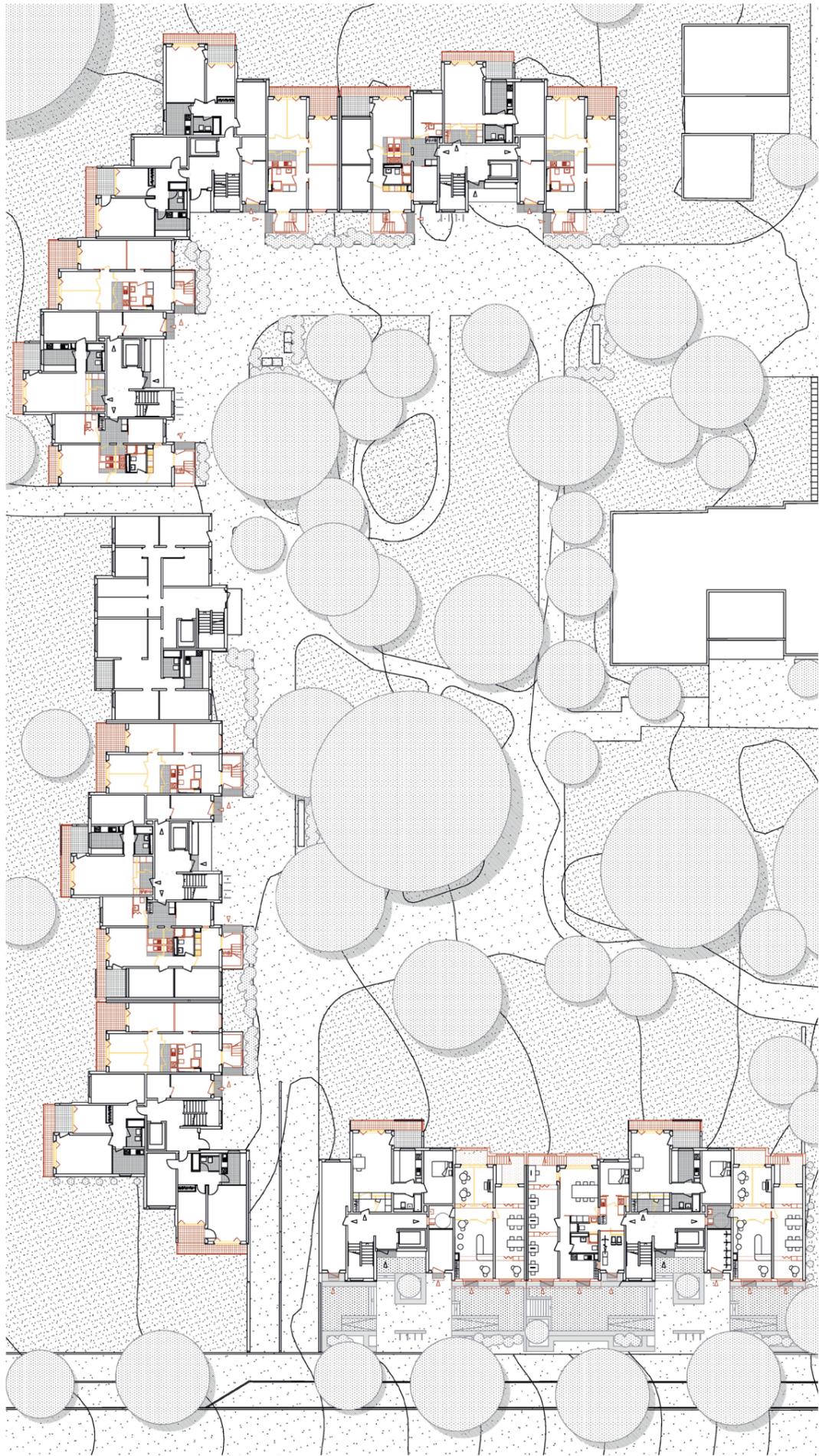
View towards transformed entrance



Isometry prefabricated structure



View towards transformed entrance



Ground floor 



Elevation



First floor public house



First floor private house

Katharina Lore Meyer

PROJECT Ben-Gurion-Ring 120-138, Frankfurt-Bonames
CLIENT NHW
YEAR 1976
TYOLOGY high-rise slab
STRATEGY Better performance

DESCRIPTION

Ben-Gurion-Ring is an exclusively residential complex, part of a larger settlement in Frankfurt-Eschbach. Like surrounding buildings, it has a distinct form and a strong presence in its predominantly residential context. Positioned at the end of the park, it serves as a U-shaped closure to the large-scale projects in the north. The building is seven to eight stories high, constructed in prefabricated concrete panels using the Holzmann-Coignet system. Modules were cast in the Holzmann-Coignet-Werk Neulsenburg. It is one of many early-seventies projects following this construction logic.

All panels are load-bearing. Apartments are separated by 180 mm solid concrete walls, which include pre-cast installations and doorframes for rapid interior construction. Exterior walls have 50 mm insulation and a 50 mm concrete facade layer, finished from painted to washed concrete. These facade panels give the building its characteristic appearance. Prefabrication and the connection of elements limit design possibilities in both space and structural flexibility.

Decades of living have left visible marks on the building—not in damages, as it is robust, but in adaptations. Long-term residents have transformed their spaces: adding gardens, interior cladding, removing doors, closing loggias, and replacing built-ins. These appropriations became central to the design process. Rather than conserving a historical state, the project responds to the life the building holds, reflecting the social nature of housing.

All interventions follow the original logic of a catalogue, creating variability through repetition, but the project is never “finished.” Elements aim to encourage residents’ engagement, enabling them to use and reshape the spaces. This influences decisions on use, placement, and materials. The construction process itself is part of this progression: apartments remain habitable throughout, with living comfort and safety, including fire regulations, as key considerations.

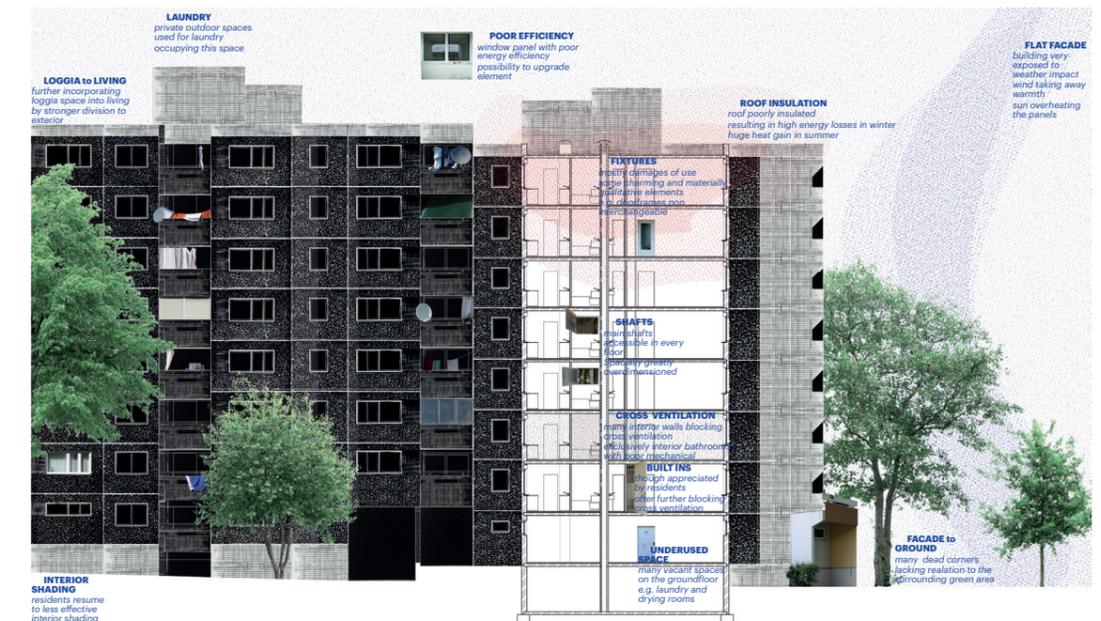
Guided by these principles, additive elements have been designed to improve the building’s performance in every facet. Each intervention promotes energy efficiency, environmentally conscious material choices, architectural quality, and interactive social or daily-life functions. The design seeks to balance technical, ecological, and social aspects while respecting the existing structure and the lives it supports.



Site plan



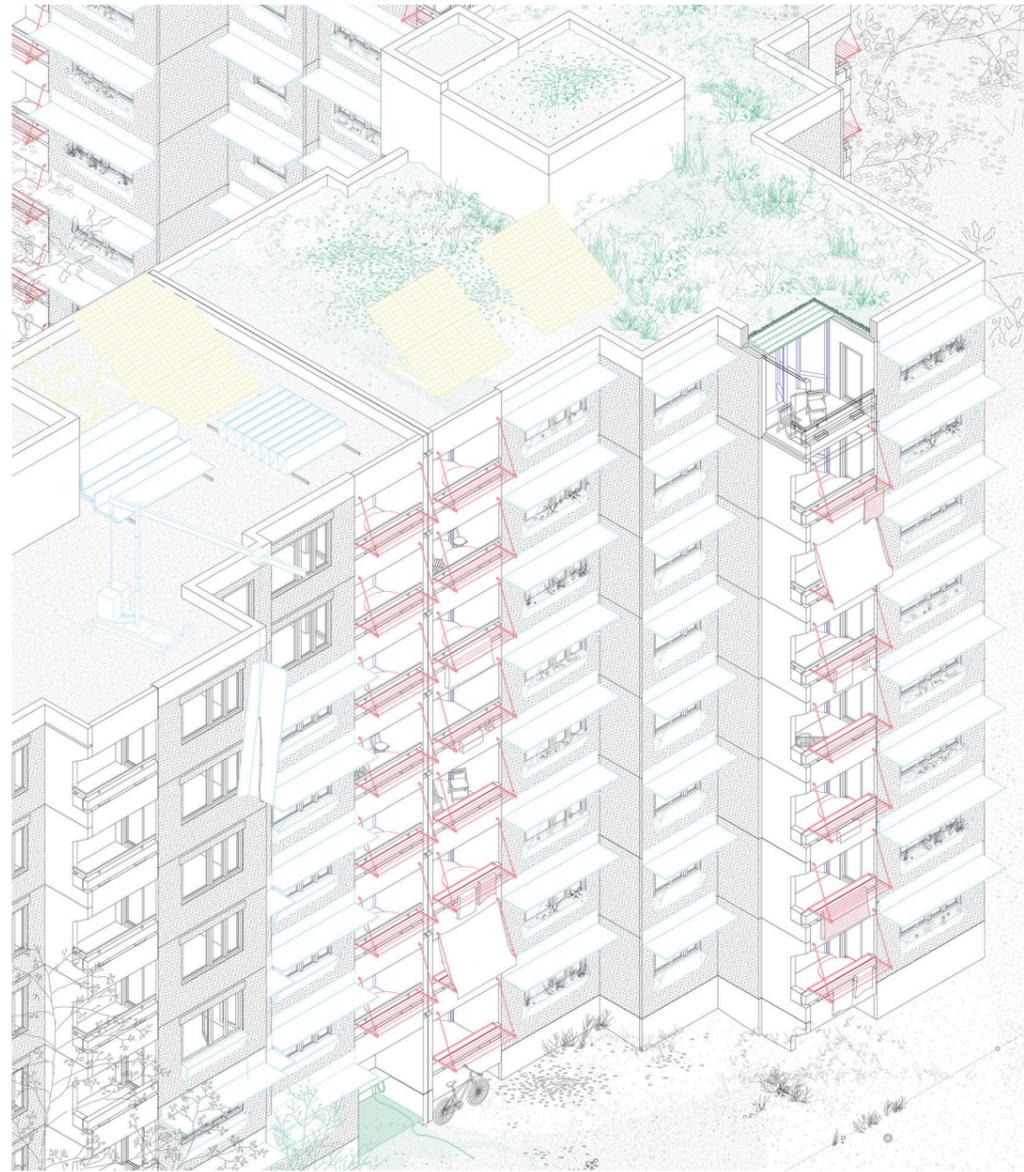
Detail of transformed façade with shading elements and planters



Research



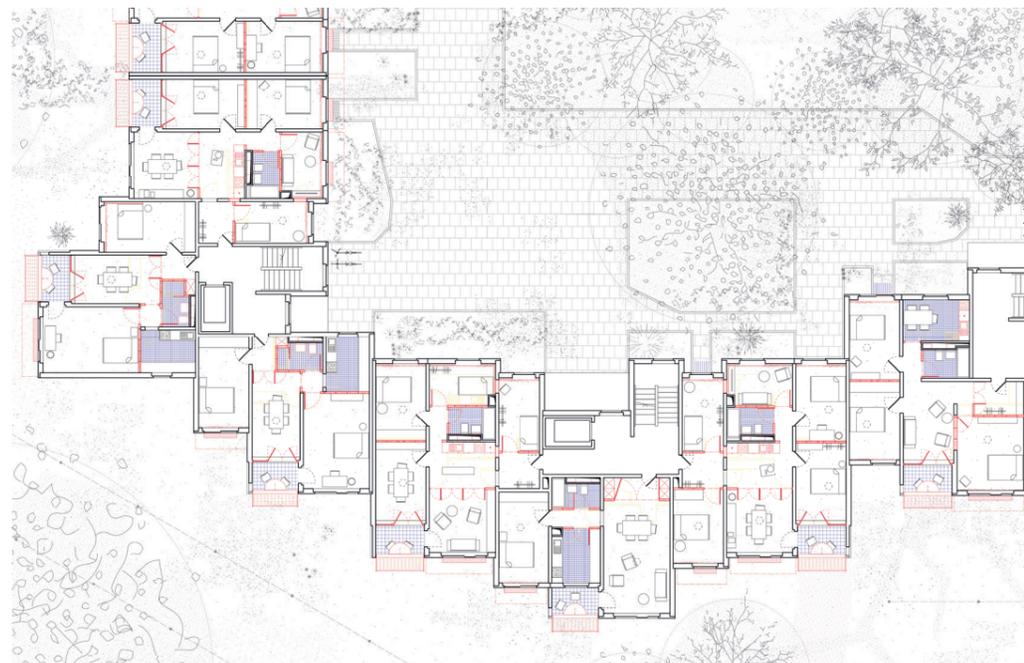
Interior of transformed unit



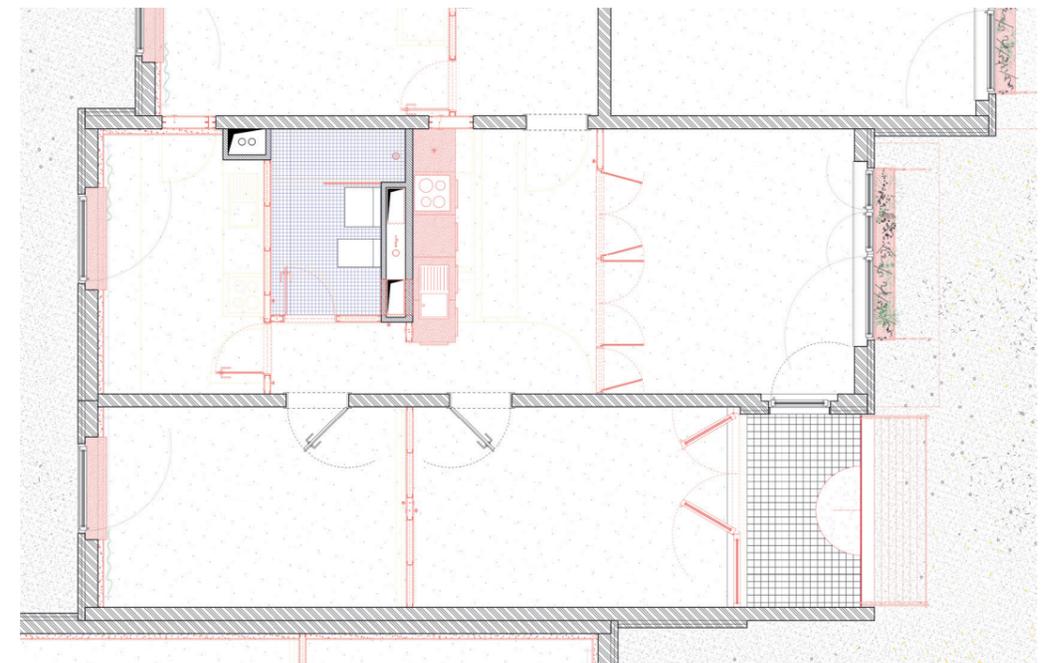
Isometry



Section detail
5 room unit



Regular floor



Floor detail
5 room unit

Colophon

EUW

Institute Entwerfen und Wohnen

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