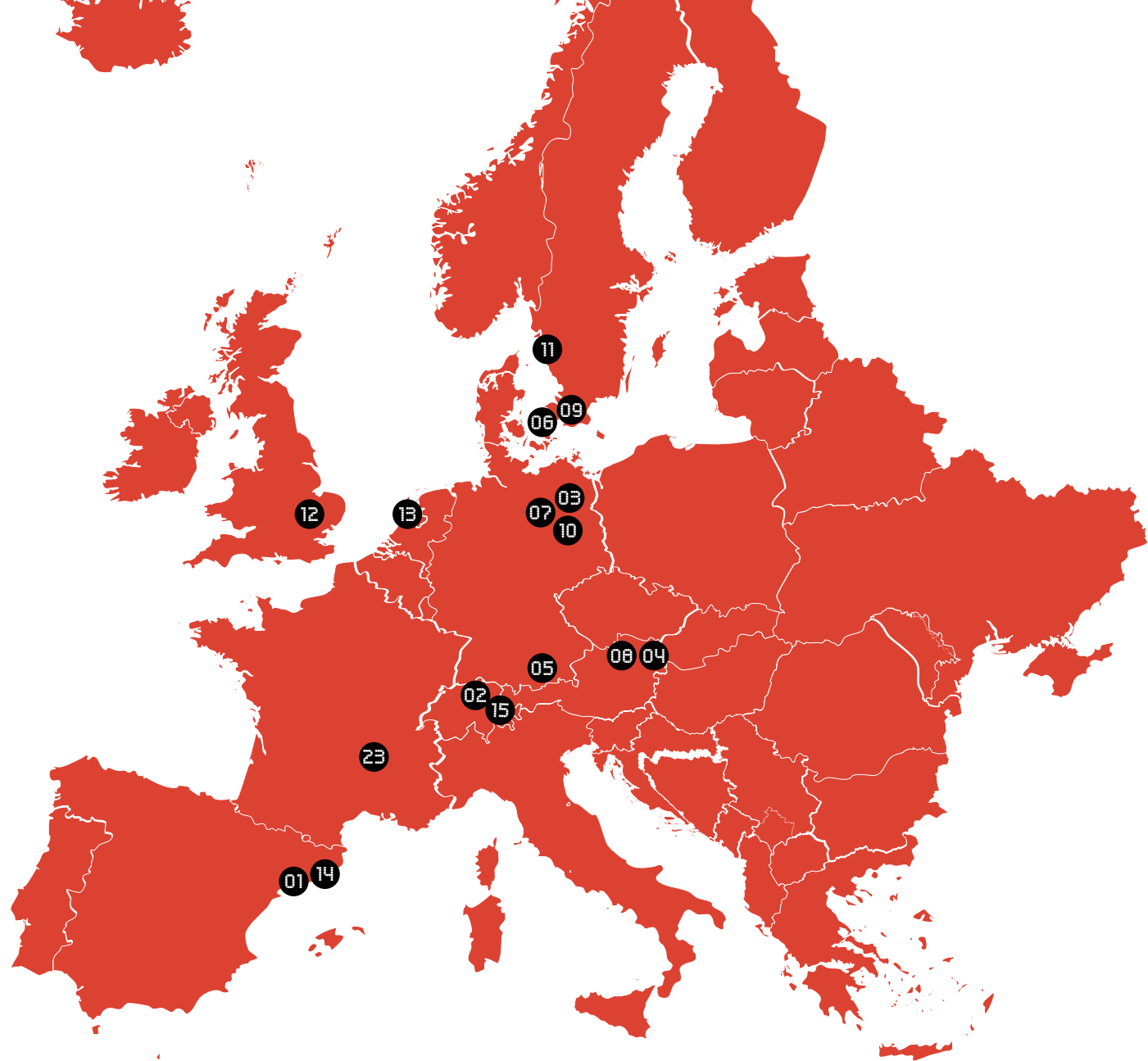




01 Lacol
La Borda, Barcelona (Spain)

02 Müller Sigrist Architekten
Genossenschaft Kalkbreite, Zurich (Switzerland)

03 Zanderroth Architekten
BIGyard, Berlin (Germany)

04 einszueins Architektur
Co-Housing Wohnprojekt, Vienna (Austria)

05 bogevischs buero architekten & stadtplaner GmbH, SHAG Schindler Hable Architekten
WagnisART, Munich (Germany)

06 Vandkunsten Architects
Jystrup Sawmill, Jystrup (Denmark)

07 Carpaneto Architekten, Fatkoehl Architekten, BARarchitekten
Spreefeld, Berlin (Germany)

08 einszueins Architektur
Gleis 21, Vienna (Austria)

09 Siegel Architecture
UrbanorVillor, Malmö (Sweden)

10 ifau und Jesko Fezer, Heide & von Beckerath
R50, Berlin (Germany)

11 Malmström Edström Arkitekter Ingenjörer
Viva Housing Co-Operative, Gothenburg (Sweden)

12 Mole Architects
Marmalade Lane, Cambridge (UK)

13 Space & Matter
Schoonschip, Amsterdam (Netherlands)

14 Lacol
La Balma, Barcelona (Spain)

15 Schneider Studer Primas Architekten
Kraftwerk1 Zwicky Süd, Zürich

Case studies of successful **Housing-Co-ops** throughout Europe

—
2024

LaCol

La Borda, Barcelona (Spain)

Housing Cooperative - realized

01



Architects

LaCol

Construction Duration

February 2017 – October 2018

Developer/Owner

Habitatges La Borda SCCL

Funding Sources

Cooperative member contributions, public land lease (75 years), and various grants

Rental/Ownership Models

Cooperative ownership model where members collectively own and manage the property

Awards and Recognitions

Winner of the 2022 Emerging Architecture Prize by the European Union Prize for Contemporary Architecture - Mies van der Rohe Award, Zumtobel Group Award 2021 Special mention at the 2021 Fassa Bortolo Sustainable Architecture International Award, Special mention at the 2021 Matilde Baffa Ugo Rivolta European Architecture Award, European Housing Award for Best New Work 2024

Types and Number of Communal Areas/Functions

280m², consisting of: kitchen-dining room, laundry, multipurpose space, guest rooms, health space, storage, patio, bike parking, and terraces

Different Apartment Types

Three types: 1-bedroom, 2-bedroom, 3-bedroom, with sizes of 40, 60, and 75 m²

Quality of Outdoor Spaces

Includes a communal patio and rooftop terraces, designed to promote social interaction and community living

Building Typology

Cluster Housing with a central courtyard

Building Materials and Construction Techniques

Timber construction with cross-laminated timber for the upper levels and reinforced concrete for the ground floor. Emphasizes sustainable materials and passive design strategies

Energy Efficiency Standards

Designed to minimize energy consumption, though specific certifications like Passive House, LEED, or BREEAM are not mentioned

Carbon Footprint + Waste Management

Focus on minimal environmental impact during construction and lifecycle. Emphasizes reducing material waste during construction

Green Infrastructure

Includes green roofs and communal green spaces

Public Transport Connectivity

Well-connected to public transport

Parking and Mobility Concepts

Includes bike parking

Project Cost

Approximately €3,275,000
Cost per square meter: €1.067/m²

Gross Floor Area (GFA)

3,000 m²

Net Floor Area (NFA)

Usable floor area: 3,071 m²

Number of Units / Number of Members

28 units

Rent Price vs. Local Rent Price Index

The fee is €8.71 per square meter, compared with around €11 for local private rentals and around €7.85 for public housing. Once the loans have been repaid, the cost of contributions will fall to around €5.86 per square meter

Equity Contribution of Members

Each household had to make a mandatory initial contribution of €18,500 (Urban Agenda Platform).

Long-term Maintenance Costs

Operating costs for the next 10 years are estimated to be around €180,000 to €200,000 per year (Urban Agenda Platform).

Turnover Rate

None of the original residents have left, and there is a waiting list of over 70 people (as of May 6, 2021)



The atrium courtyard of La Borda, inspired by the Familistère's social housing ideals, fosters community through shared, sustainable spaces that echo cooperative living principles.

La Borda in Barcelona represents a revolutionary step in cooperative housing, intertwining architectural innovation, social sustainability, and environmental consciousness. Conceived and realized by the architectural collective Lacol, La Borda emerged as a beacon of modern, community-centered living. Completed in 2018, it is situated in the Sants neighborhood of Barcelona on a site historically connected to the Can Batlló industrial complex. This project exemplifies a significant shift in how urban residential environments can be conceived, focusing on communal living and ecological responsibility.

La Borda's architectural design is characterized by its extensive use of wood, which not only imbues the building with a warm, natural aesthetic but also emphasizes sustainability. The building, one of the largest wooden structures in Spain, features a combination of cross-laminated timber (CLT) for the upper floors and concrete for the ground level. This hybrid approach maximizes both structural stability and environmental performance. The decision to use visible wood throughout the interior spaces, reminiscent of Scandinavian design, contrasts strikingly with traditional Spanish architecture, yet it aligns seamlessly with the project's

ethos of innovation and sustainability. The layout of La Borda is meticulously organized around a central courtyard, a design choice inspired by the "corralas" of central and southern Spain. This courtyard functions as the heart of the community, providing a space for interaction, natural light, and ventilation. The communal areas include a large kitchen-dining room, laundry facilities, guest rooms, and multipurpose spaces, all designed to foster social interaction among residents. Carles Baiges, a member of Lacol and a resident of La Borda, emphasizes the significance of these communal areas, stating, “The courtyard is not just a physical space but a social catalyst, promoting a sense of belonging and community cohesion”¹. La Borda's integration with its surroundings is both sensitive and strategic. Located on a plot leased from the city for 75 years, the building is positioned to connect with the existing urban fabric while revitalizing the industrial legacy of Can Batlló. The south-facing facade opens onto a future community park, enhancing the building's connection to its environment and providing additional green space for residents. This orientation also plays a crucial role in the building's bioclimatic design, ensuring maximum solar gain in winter and effective shading in summer.



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Ground floor



Third Floor



Fifth Floor

The architectural vision behind La Borda is deeply rooted in the principles of sustainability and user participation. Lacol's objective was to create housing that minimizes environmental impact throughout its lifecycle. Passive design strategies, such as the central courtyard acting as a thermal buffer and the extensive use of natural insulation materials, contribute to the building's near-zero energy consumption. The rooftop photovoltaic panels further reduce the building's reliance on external energy sources, underscoring Lacol's commitment to environmental stewardship.

User participation is a cornerstone of La Borda's design philosophy. From the outset, future residents were actively involved in the design process, ensuring that the final outcome met their needs and aspirations. This participatory approach extended beyond design to include construction and ongoing management, fostering a strong sense of ownership and responsibility among residents. Baiges reflects on this process, noting, "Involving residents in every stage of the project ensures that the spaces we create truly reflect their desires and foster a deeper connection to their homes"².

La Borda addresses critical housing needs in Barcelona, offering an alternative to the speculative housing market. The cooperative model ensures that housing remains affordable and prioritizes the collective good over individual profit. This model is particularly significant in a city like Barcelona, where rising property prices have marginalized many residents. By providing flexible living spaces that can be adapted to the changing needs of residents, La Borda demonstrates a forward-thinking approach to urban housing.



Crosssection

The project's innovative features extend beyond architecture into social and governance models. La Borda operates under a cooperative management structure, with decisions made collectively by residents. This model promotes transparency, inclusivity, and democratic governance, aligning with the project's broader social objectives. Additionally, the emphasis on shared spaces and community facilities encourages social interaction and mutual support, enhancing the overall quality of life for residents.

Lessons from La Borda are highly relevant for housing cooperatives in other urban contexts, such as Lisbon. The project's success highlights the importance of community involvement, sustainable building practices, and cooperative management in creating resilient and inclusive urban housing. However, challenges such as securing funding and navigating regulatory frameworks must be carefully considered and addressed. La Borda stands as a testament to the potential of cooperative housing to address urban housing challenges through innovative design, sustainability, and community engagement. As Baiges aptly summarizes, "La Borda is not just a building; it is a living, breathing community that embodies the values of sustainability, solidarity, and social justice"³.

¹ Kaltenbach, Frank. "La Borda: A Case Study in Cooperative Housing." Detail, 3.2022. (08.08.2024).
¹ Ott, Clara. "La Borda: Architectural Innovation and Social Impact." Architectural Journal, 2019. (08.08.2024).
³ "La Borda Housing Cooperative: Community and Sustainability." La Borda Official Website, 2021. (08.08.2024).



Müller Sigrist Architekten

Kalkbreite, Zurich (Switzerland)

Residential/Housing - realized

02



Architects Müller Sigrist Architekten, Zurich
Date of Completion August 2014
Developer/Owner Genossenschaft Kalkbreite
Project Cost CHF 77 million (approx. EUR 64 million)
Funding Sources + Financing Models Member contributions, municipal grants, bank loans
Rental / Ownership Models Cooperative rental model, with moderate rents below market average; subsidized options available
Already Realized or Competition Fully realized project
Awards and Recognitions Minergie-P-Eco certification, recognized for sustainable urban living
Building Typology Perimeter Block Development
Different Apartment Types Cluster apartments, family apartments, senior living spaces, and a large communal household with 20 apartments
Ratio of Private to Communal Areas Approximately 10% communal spaces (600 m² of 6350 m²)

Quality of Outdoor Spaces 2,500 m² public terrace, green roofs, and other communal outdoor spaces
Accessibility Barrier-free access to apartments and communal areas
Building Materials + Construction Techniques Concrete structure with prefabricated wooden façade elements, sustainable materials for interior, Minergie-P-Eco standard
Energy Efficiency Standards Meets the Minergie-P-Eco standard and is certified as a 2000-Watt site
Carbon Footprint Minimized through energy-efficient design, low energy consumption
Demographic Diversity Aims to house a diverse mix of income groups, ages, and nationalities
Resident Satisfaction High involvement and satisfaction, participatory design process
Public Transport Connectivity Highly accessible, located above a tram depot
Social Mixing 11 subsidized apartments for low-income households, mixed-income residents
Neighborhood Integration Strong integration with local businesses, public spaces

Parking and Mobility Concepts Car-free living, extensive bicycle parking, car-sharing services
Supply Infrastructure Proximity to essential services like supermarkets, schools, and hospitals
Plot Size / Gross Area 6,724 m²
Floor Space Index (FSI) High density, total usable floor area of 22,900 m²
Net Floor Area (NFA) Approximately 7,500 m² of residential space
Gross Floor Area (GFA) 22,900 m² including all residential and commercial spaces
Number of Units /Members 88 apartments, approximately 2,395 cooperative members
Average Living Area per Unit Around 32 m² per person, below the Swiss average of 45 m²
Cost per Member One-time share certificate CHF 1,000, administrative fee CHF 200
Equity Contribution of Members Investment depends on apartment size, e.g., CHF 25,000 for a 4-room apartment
Rent Price vs. Local Rent Price Index Moderate, below the Zurich market average; subsidized options available



Courtyard Kalkbreite - Public use of terraces and rooftops
The so-called social control will ensure that people don't just do everything there.

The Kalkbreite project in Zurich is a milestone in contemporary urban development, combining innovative architectural design with a strong social and ecological commitment. Initiated by the Kalkbreite cooperative and realized by Müller Sigrist Architekten, this mixed-use development project was completed in 2014. It represents a new type of urban living by integrating residential, commercial, and cultural spaces above a functioning public tram depot. The design not only addresses the complex urban structure of Zurich but also sets new standards for sustainable and community-oriented architecture¹.

One of the most striking features of Kalkbreite is the architectural response to the unique challenges of the site. The project is situated on a triangular plot bordered by busy roads and a railway line. Müller Sigrist Architekten opted for a polygonal block structure that embraces the irregularity of the site, resulting in a dynamic and visually striking form².

The building's facade is particularly noteworthy, using a shimmering plaster that changes color from orange to turquoise depending on the light, giving the building a lively and constantly changing appearance in the urban landscape³.

The arrangement of the buildings demonstrates the architects' commitment to creating spaces that foster community interaction while respecting individual privacy. The 55 apartments are arranged in clusters, each connected by the "Rue Intérieure," an internal corridor that serves as the building's backbone. This innovative circulation space not only facilitates movement within the building but also promotes a sense of community among the residents. Additionally, the integration of "joker rooms," flexible spaces that can be added to apartments as needed, reflects the project's adaptability to the changing needs of its residents⁴. Social sustainability is at the heart of the Kalkbreite project.

The site is located in the centre of Zurich at a prominent intersection of two districts and is used as a parking facility for the trams of the city's public transport company (VBZ).



The cooperative model played a crucial role in ensuring that the development is accessible to a diverse group of residents, providing affordable housing in one of Zurich's most desirable areas. The participatory planning process was a key element of this approach, with future residents actively involved in the planning and decision-making phases. This not only ensured that the final design met the needs of its users but also strengthened the sense of ownership and community among the residents. As one resident noted, "Being part of the planning process made us feel like this place truly belongs to us. It's more than just a home; it's a community we built together"⁵.

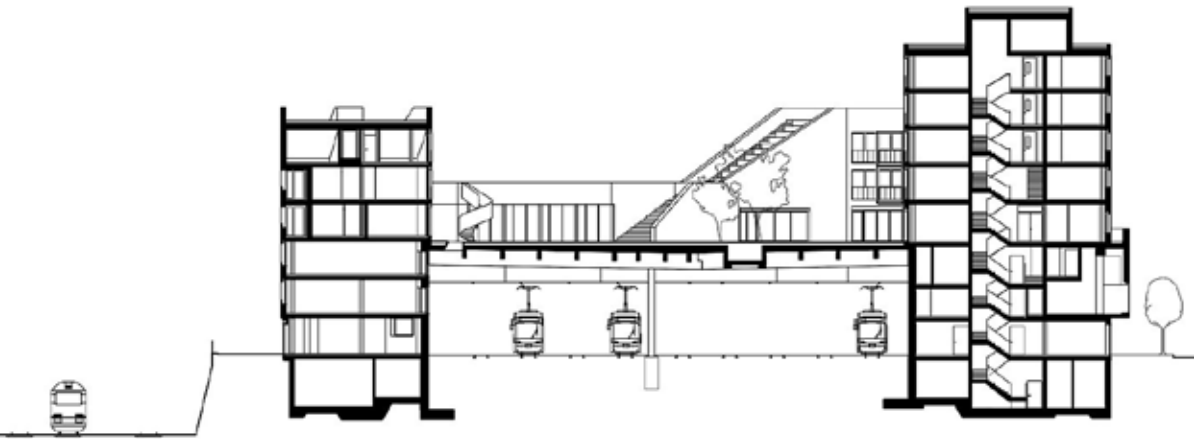
Ecological sustainability was also a guiding principle in the development of Kalkbreite. The project was designed to meet the Minergie-P-Eco standard, a Swiss certification recognizing buildings with exceptional energy efficiency and ecological performance⁶. The compact building form minimizes heat loss, while the use of a groundwater heat pump and other renewable energy sources reduces the development's carbon footprint. Furthermore, the location of Kalkbreite, with its excellent public transportation links, supports the project's car-free concept, promoting sustainable mobility and

reducing the environmental impact of its residents⁷. The success of Kalkbreite lies not only in its architectural innovation but also in its ability to address broader social and ecological challenges.

The project offers a model for cooperative housing that balances affordability, sustainability, and community engagement. It provides valuable lessons for urban development projects worldwide, particularly regarding the integration of sustainable practices into dense housing developments. "Kalkbreite shows that it is possible to create an urban space that is both socially inclusive and ecologically responsible. It is a model that should inspire cities around the world," commented architect Urs Müller of Müller Sigrist Architekten⁸.

- 1 Müller Sigrist Architekten - Wohn- und Gewerbesiedlung Kalkbreite Zürich
- 2 Müller Sigrist Architekten - Wohn- und Gewerbesiedlung Kalkbreite Zürich
- 3 Bauwelt - Kalkbreite
- 4 Kalkbreite Webseite - Wohnen
- 5 Wikipedia - Wohn- und Gewerbebau Kalkbreite
- 6 Müller Sigrist Architekten - Wohn- und Gewerbesiedlung Kalkbreite Zürich
- 7 Kalkbreite Webseite - Über Kalkbreite
- 8 Bauwelt - Kalkbreite

Cross section
Highlighting public transport



Community space perspective
Residents were involved in the design process to ensure their needs were met. Several spaces can be adapted as the needs of the community change over time.



Zanderroth Architekten

BIGyard, Berlin (Germany)

Communal housing - realized

03



The site’s challenging conditions could have been significant obstacles, but instead, they became catalysts for innovative design solutions.

"The BIGyard project in Berlin’s Prenzlauer Berg district stands as a testament to the evolving landscape of urban residential design, where the aspirations of private homeownership converge with the ideals of communal living. Conceived and executed by Zanderroth Architekten between 2009 and 2011, BIGyard comprises 45 diverse housing units, skillfully interwoven into the dense urban fabric of Berlin’s Gründerzeit neighborhood. This project, by its very nature, challenges the conventional paradigms of urban development, offering a fresh perspective on how to create meaningful community spaces within the confines of a modern city¹.

The architectural language of BIGyard is at once both understated and profound, harmonizing with the surrounding built environment while asserting its distinct identity. The development is organized into three typologies: 23 street-facing townhouses, 10 garden houses that open directly onto a communal courtyard, and 12 penthouses that crown the structure with panoramic views of Berlin². These housing types are not merely architectural responses to site constraints; they represent a deliberate effort to foster a vibrant, interwoven

community. The courtyard, a 1,200-square-meter green expanse elevated atop an underground garage, serves as the heart of this community, providing a shared space that encourages interaction and connection among residents³.

At the core of Zanderroth Architekten’s design philosophy for BIGyard is the seamless integration of private and communal spaces. This balance is perhaps most evident in the design of the townhouses, which feature narrow, vertical layouts that emphasize a sense of individual ownership while maintaining a connection to the broader community through shared access points and overlapping pathways⁴. The garden houses, with their expansive, light-filled rooms and direct access to the central courtyard, exemplify the architects’ commitment to creating fluid transitions between interior and exterior spaces⁵. The penthouses, perched above the garden houses, not only offer luxurious living spaces but also reinforce the communal ethos by connecting directly to a shared rooftop terrace⁶.

Architects
Zanderroth Architekten, Berlin

Date of Completion
2010

Developer/Owner
Bauherrengemeinschaft
Zelterstraße 5-11

Funding Sources + Financing Models
Primarily financed by the members of the building cooperative with supplementary bank loans.

Rental / Ownership Models
The project was developed as a co-housing initiative, where the units are individually owned by the members of the cooperative.

Already Realized or Competition
Fully realized project

Awards and Recognitions

Deutscher Bauherrenpreis 2014
Best Architects 2014 Award
Deutscher Landschaftsarchitekturpreis 2013 (Sonderpreis Wohnfreiraum)
Architekturpreis Berlin 2013 (1st Prize)
BDA Preis Berlin 2012
Deutscher Architekturpreis 2011 (Honorable Mention)
Ugo Rivolta European Architectural Award 2011

Building Typology
Row Development, with elements of Cluster Housing and Mixed-Use Development

Different Apartment Types
23 Townhouses
10 Garden Houses
12 Penthouses
Quality of Outdoor Spaces
Includes a 1,300 m² communal garden, 250 m² rooftop terrace with a summer kitchen, and a sauna. The courtyard is raised to the first-floor level and features natural landscaping with paths and a water feature.

Types and Number of Communal Areas/Functions

Communal yard (1,300 m²)
Rooftop terrace (250 m²)
Sauna
Four guest apartments
Accessibility
The development provides multiple access points, including elevators, ensuring accessibility, although the complex layout includes numerous staircases.

Building Materials + Construction Techniques
Concrete structure
Natural stone and wood used in interior finishes
Prefabricated elements for efficiency

Green Infrastructure
The project includes green roofs and a large communal garden, enhancing the green infrastructure.

Demographic Diversity
The project is a co-housing initiative, primarily appealing to a diverse group of professionals and families.

Resident Satisfaction
The project has been well-received, particularly for its combination of privacy and community living.

Public Transport Connectivity
Excellent connectivity with nearby tram and bus lines, located in the Prenzlauer Berg district.

Social Mixing
The project supports a diverse social mix due to its cooperative ownership model.

Neighborhood Integration
Strong integration with the urban fabric of Prenzlauer Berg, enhancing community interaction.

Parking and Mobility Concepts
Includes underground parking, bicycle storage, and car-free garden areas.

Supply Infrastructure
Close proximity to supermarkets, schools, and hospitals, well-integrated into the local urban infrastructure.

Project Cost
EUR 8,970,000 (cost group 300-400, excluding VAT)

Plot Size / Gross Area
Gross area: 9,100 m²
Floor Space Index (FSI)
Plot ratio of 1.00 / 3.00

Net Floor Area (NFA)
6,624 m²

Gross Floor Area (GFA)
3,336 m²

Number of Units /Members
45 residential units

Rent Price vs. Local Rent Price Index
The units were sold at prices below the local market level due to the cooperative model, where no external developers profited from the project, allowing for lower square meter prices.

Equity Contribution of Members
Members of the cooperative financed the project through their investments, proportional to the size of their purchased units.

Ratio of Private to Communal Areas
Significant communal areas, including a large central garden and rooftop terrace, contribute to the community feel of the development.

The site’s challenging conditions—bordered by 22-meter-high firewalls and facing north towards a listed church—could have been significant obstacles, but instead, they became catalysts for innovative design solutions. The street-facing townhouses, limited to four stories, prevent the garden houses from being overshadowed, allowing light to penetrate the courtyard from multiple angles⁷. This strategic manipulation of light and space reflects a deep understanding of urban design principles and the need to create livable, inviting environments in even the most constrained settings⁸.

Sustainability is a cornerstone of the BIGyard project, both in terms of environmental impact and long-term community viability. The central garden, carefully planted with a mix of hardy trees and shrubs, serves as a green lung for the development, enhancing biodiversity and providing a natural buffer against the urban surroundings⁹. The selection of species such as Gleditsia and Sorbus, which are well-suited to the rooftop environment, demonstrates a commitment to sustainability that goes beyond mere aesthetics¹⁰. Moreover, the use of durable, low-maintenance materials throughout the project ensures that it will remain a vibrant, functional space for years to come¹¹.

Beyond its architectural and environmental achievements, BIGyard addresses a pressing social need: the provision of affordable, high-quality housing in a rapidly gentrifying city. By adopting a cooperative housing model, the project allows residents to purchase their homes at prices significantly below market rates, making homeownership accessible to a broader demographic¹². This model also fosters a strong sense of community, as residents are actively involved in the design and management of the development, ensuring that the final product reflects their needs and desires¹³. The balance between private and communal spaces within BIGyard exemplifies a new approach to urban living, one that prioritizes both individual ownership and collective well-being¹⁴.

The central garden is not just a physical space but a dynamic, evolving part of the community’s life. Designed with flexibility in mind, the garden includes play areas for children, seating for adults, and spaces that can be adapted as the community’s needs change over time¹⁵. This adaptability ensures that the garden remains a central hub of activity and interaction, fostering a sense of belonging among residents. The success of this communal space is evident in the variety of activities it hosts, from open-air movie nights to neighborhood festivals, which serve to strengthen the bonds within the community¹⁶. BIGyard’s innovative approach to urban living has set a new standard for cooperative housing developments, not just in Berlin but potentially across other urban centers facing similar challenges. The project’s success underscores the importance of thoughtful design, sustainability, and active community engagement in creating resilient, livable cities. As urban areas continue to grow and evolve, the lessons learned from BIGyard will be invaluable in shaping the future of housing development, offering a blueprint for creating spaces that are both socially and environmentally sustainable¹⁷.

1,3,12,14,16 <https://www.draussen-im-zentrum.de/erweitert/bigyard/>
2,4,11 <https://www.baunetz-architekten.de/zanderroth/3536599/projekt/3536879>
1 <https://www.archdaily.com/793287/bigyard-zanderroth-architekten>
6 <https://www.bauwelt.de/themen/bauten/BIGYard-Baugruppe-Berlin-Prenzlauer-Berg-zanderroth-2159306.html>
7,8 <https://www.miesarch.com/work/1586>
9,10,15 <https://www.magazin-quartier.de/article/gruener-wohnhof-am-prenzlauer-berg-bigyard/>
13,17 <https://www.thisispaper.com/mag/bigyard-zanderroth-architekten>



Variety of floorplans

Members of the cooperative financed the project through their investments, proportional to the size of their purchased units.



All 45 residential units are individualized.



A 1,200-square-meter green expanse elevated atop an underground garage, serves as the heart of this community.

√The central garden is not just a physical space but a dynamic, evolving part of the community's life.



Community spaces
Residents were involved in the design process to ensure their needs were met. Several spaces can be adapted as the needs of the community change over time.



The architectural language of BIGyard is harmonizing with the surrounding built environment while asserting its distinct identity.



Private home ownership and ideals of communal living are coming together.

Einszueins Architektur, Bayer und Zilker GmbH

Co-Housing-Wohnprojekt, Vienna (Austria)

Cooperative housing - realized

04



The Co-Housing Wohnprojekt in Vienna stands as a model for a new way of living in urban environments. Sustainability, community engagement, and architectural innovation are the priorities.

The Co-Housing Wohnprojekt in Vienna represents a significant shift in urban residential design, intertwining architectural innovation, social sustainability, and communal living principles. Completed in December 2013 and designed by Einszueins Architektur, this project is situated in the Nordbahnhof district of Vienna, a newly developed urban area that serves as an incubator for sustainable living.

The project was born from the shared vision of 67 adults and 34 children who sought to redefine urban living through a collaborative approach. The result is a residential complex that integrates 39 apartment units with extensive communal spaces, designed to foster interaction, sustainability, and a sense of community¹. The architectural design of the Co-Housing Wohnprojekt reflects a deep commitment to both individual and collective needs. The 39 apartments, ranging from 36 to 150 square meters, are organized around a central hallway, with air spaces connecting different levels, promoting natural light and ventilation. This layout encourages spontaneous interactions among residents while allowing for personal privacy.

The ground floor is dedicated to community-oriented functions, housing a large communal kitchen, children's play areas, and spaces for trade, which actively engage with the surrounding neighborhood².

A particularly striking feature of the project is the rooftop, which belongs entirely to the community. It includes a sauna, a meditation room, guest apartments, a library, and a roof garden, all designed to serve as tranquil spaces for residents to relax and engage with one another³. The architects' approach to integrating communal spaces with private living areas underscores the project's ethos of balancing individual freedom with collective responsibility.

Architects
Einszueins Architektur, Bayer und Zilker GmbH

Date of Completion
December 2013

Developer/Owner
Verein Wohnprojekt Wien in cooperation with Schwarzzatal Housing Association

Funding Sources + Financing Models
The project was funded through a combination of private funds from members (570 Euros per square meter) and state subsidies for housing projects. It included cooperative financing models and shared ownership.

Rental / Ownership Models
Members of the Wohnprojekt Wien are tenants under a cooperative ownership model. There is no individual ownership; instead, the property is owned by the association. Rent is set below market rates due to state subsidies.

Already Realized or Competition
Fully realized project

Awards and Recognitions
Premio Europeo di Architettura Baffa Rivolta
Shortlisted for the EU Mies Award Building Typology Cluster Housing with elements of Mixed-Use Development

Different Apartment Types
39 apartments ranging from 1-bedroom to 6-bedroom units, with sizes from 36 to 150 m².
Quality of Outdoor Spaces

700 m² of community spaces including a rooftop terrace, garden, and multiple communal areas.
Types and Number of Communal Areas/Functions

Community kitchen, children's playroom, event rooms, library, guest apartments, sauna, and meditation room.
Accessibility
The project includes barrier-free design with accessible communal areas.

Building Materials + Construction Techniques
Low-energy construction with a ventilated larch wood facade, mineral wool insulation, and a photovoltaic system on the roof.
Energy Efficiency Standards

Near Passive House standard, with energy efficiency supported by mechanical ventilation and groundwater temperature control.
Green Infrastructure
The project includes a rooftop garden, a large communal garden, and green facades.

Demographic Diversity
The project brings together various generations, cultures, and professions under one roof.

Resident Satisfaction
High resident satisfaction due to the participatory planning process and strong community engagement.

Public Transport Connectivity
Located in the Nordbahnhof area, it has excellent public transport connectivity.

Social Mixing
Includes two solidarity apartments for people who otherwise could not afford to live in the project, fostering social diversity.

Neighborhood Integration
The project actively engages with the local community through cultural activities and shared spaces accessible to the public.

Parking and Mobility Concepts
Includes vehicle sharing (cars and cargo bikes), promoting sustainable mobility.
Supply Infrastructure
The project is situated in close proximity to essential services like supermarkets, schools, and parks.

Project Cost
EUR 6.5 million, with a cost per square meter of approximately EUR 1041.67.

Plot Size / Gross Area
Gross area: Approximately 6,240 m².

Floor Space Index (FSI)
1.31.

Net Floor Area (NFA)
Approximately 5,300 m².

Gross Floor Area (GFA)
Approximately 6,240 m².

Number of Units /Members
39 residential units; about 67 adults and 25 children.

Average Living Area per Unit
The apartments vary in size from 36 to 150 m², with the average likely falling within this range.

Cost per Member
570 Euros per square meter for initial private funds contributed by each member.

Rent Price vs. Local Rent Price Index
Rent is below market rate, supported by state subsidies.

Equity Contribution of Members
Members contributed 570 Euros per square meter.

Long-term Maintenance Costs
Managed collectively by the Wohnprojekt Wien association, with shared responsibilities among residents.

Ratio of Private to Communal Areas
Communal areas account for about 15% of the total space.

The project also demonstrates a strong commitment to sustainability, both in its environmental design and its social infrastructure. The building meets nearly passive house standards, featuring a massive construction body with a wood facade that enhances energy efficiency. A photovoltaic installation on the rooftop, coupled with a mechanical ventilation system controlled through groundwater, ensures that the building operates with minimal energy consumption⁴. The use of durable, ecological building materials further emphasizes the project's long-term sustainability goals, aligning with the broader movement towards environmentally conscious urban development.

One of the key innovations of the Co-Housing Wohnprojekt is its participatory design process. From the outset, residents were actively involved in every stage of the project's development, from urban planning to the selection of electrical equipment in individual apartments⁵. This high level of participation not only ensured that the final design met the diverse needs of the residents but also fostered a strong sense of ownership and community. Markus Zilker, one of the architects and a resident, highlighted the importance of this process, stating, "Involving residents in the design and construction phases allows for a living environment that truly reflects the collective aspirations of the community"⁶.

Beyond its architectural and environmental achievements, the Co-Housing Wohnprojekt addresses critical social issues, particularly in the realm of housing affordability and community support. The project operates under a shared ownership model, which allows residents to purchase their apartments at prices significantly below market rates. This model not only makes homeownership accessible to a broader demographic but also ensures that the housing remains affordable in the long term⁷. Additionally, the project includes supported apartments for individuals in need, such as refugees and single mothers, reinforcing the community's commitment to social equity and solidarity⁸. The communal aspects of the Co-Housing Wohnprojekt extend beyond shared physical spaces to include a variety of collective activities and services. Residents have access to a vehicle-sharing program that includes cars and cargo bikes, a community-supported agriculture (CSA) membership, and a small shop run by residents that serves as a meeting point for the neighborhood⁹. These initiatives not only enhance the quality of life for residents but also contribute to the sustainability and

resilience of the broader community. As one resident remarked, "The sense of solidarity and mutual support in this community is palpable, whether it's sharing a meal in the communal kitchen or helping a neighbor with childcare"¹⁰. The Co-Housing Wohnprojekt in Vienna stands as a model for a new way of living in urban environments, one that prioritizes sustainability, community engagement, and architectural innovation. By seamlessly integrating individual and collective needs, the project offers valuable insights into the potential for co-housing models to address the complex challenges of urban living in the 21st century. As cities around the world grapple with issues of affordability, sustainability, and social cohesion, the lessons learned from this project will undoubtedly serve as a guide for future developments in cooperative housing¹¹.

¹ Einszueins Architektur. "Wohnprojekt Wien: A Case Study in Collaborative Urban Living." Architectural Journal, 2014.

² Zilker, Markus, and Katharina Bayer. "Co-Housing in Vienna: Balancing Individual and Collective Needs." Detail, 4.2015.

³ Reinberg, Stefanie. "Shared Spaces, Shared Lives: The Co-Housing Wohnprojekt." Quartier, Ausgabe 3, 2016.

⁴ Einszueins Architektur. "Wohnprojekt Wien: A Case Study in Collaborative Urban Living." Architectural Journal, 2014.

⁵ Zilker, Markus, and Katharina Bayer. "Co-Housing in Vienna: Balancing Individual and Collective Needs." Detail, 4.2015.

⁶ Zilker, Markus. Interview by Clara Ott. "The Power of Participatory Design in Co-Housing." Architectural Innovations, 2017.

⁷ Einszueins Architektur. "Wohnprojekt Wien: A Case Study in Collaborative Urban Living." Architectural Journal, 2014.

⁸ Reinberg, Stefanie. "Shared Spaces, Shared Lives: The Co-Housing Wohnprojekt." Quartier, Ausgabe 3, 2016.

⁹ Zilker, Markus, and Katharina Bayer. "Co-Housing in Vienna: Balancing Individual and Collective Needs." Detail, 4.2015.

¹⁰ Reinberg, Stefanie. "Shared Spaces, Shared Lives: The Co-Housing Wohnprojekt." Quartier, Ausgabe 3, 2016.

¹¹ Einszueins Architektur. "Wohnprojekt Wien: A Case Study in Collaborative Urban Living." Architectural Journal, 2014.

Key to the multiple shared spaces is the balance between individual freedom and the collective responsibility.



Ground floor

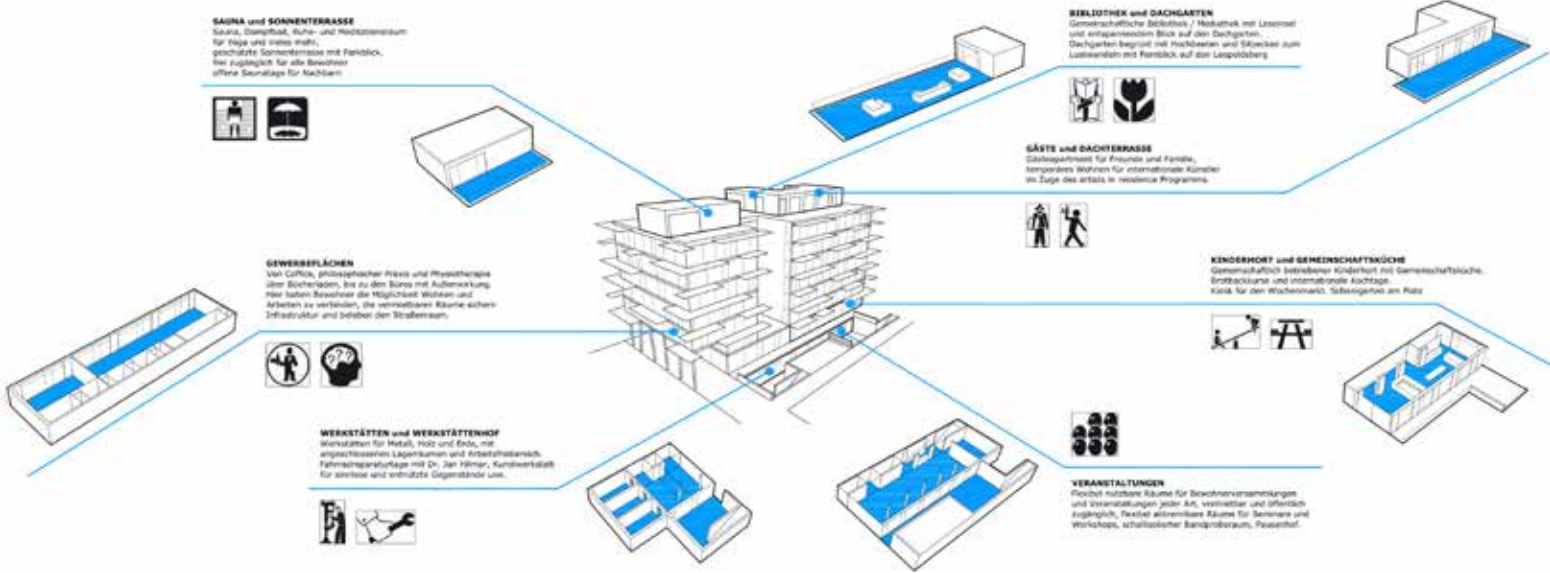


Third floor

Ecological building materials emphasize the project's long-term sustainability goals.



Gemeinschaftsräume Wohnen mit uns!



Isometry
communal areas



Facades facing the public
displaying natural
materials and simplicity

Isometry
building structure

bogevischs buero architekten & stadtplaner GmbH,
SHAG Schindler Hable Architekten
WagnisART, Munich
(Germany)

Cooperative housing - realized



05

Architects
bogevischs buero architekten &
stadtplaner GmbH, SHAG Schindler
Hable Architekten

Date of Completion
2015

Developer/Owner
Wohnbaugenossenschaft wagnis eG

**Funding Sources + Financing
Models**
The project was financed through a
combination of cooperative member
contributions, state subsidies, and
bank loans, enabling affordable
housing through a cooperative
model.
Rental / Ownership Models
WagnisART operates under a
cooperative rental model where
residents are members of the
cooperative. There is no individual
ownership of units, and rent is
scaled according to income.

Already Realized or Competition
Fully realized project

Awards and Recognitions
Deutscher Städtebaupreis 2016
ULI Germany Award for Excellence
2017, DAM Preis für Architektur
2018 Ehrenpreis für guten
Wohnungsbau 2018
Deutscher Landschaftsarchitektur-
Preis 2017 (Participation and
Design)

Building Typology
Cluster Housing, with elements of
Mixed-Use Development and High-
Rise structures

Different Apartment Types
138 residential units, including
conventional apartments and cluster
apartments with shared living
spaces.

Quality of Outdoor Spaces
The project features extensive
outdoor spaces, including roof
gardens, paved plazas, and planted
courtyards totaling over 5,000
m². The roof terraces alone cover
approximately 1,050 m².

**Types and Number of Communal
Areas/Functions**
Ground floor communal spaces
including music rooms, event
spaces, studios, a workshop, a
sauna, a laundry café, and guest
apartments.
Accessibility
All 138 units are barrier-free,
ensuring full accessibility for
residents.

**Building Materials + Construction
Techniques**
The buildings are constructed with
reinforced concrete and feature
drywall finishing. The development
also includes photovoltaic systems
to enhance sustainability.

Energy Efficiency Standards
The buildings are certified Passive
Houses, ensuring high energy
efficiency and reduced carbon
emissions.

Green Infrastructure
The project incorporates intensive
green roofs, large roof terraces, and

substantial planted areas within the
courtyards.

Demographic Diversity
The cooperative housing model
supports a diverse mix of residents
in terms of age, income, and
occupation. The project also
provides subsidized units to ensure
accessibility for lower-income
households.

Public Transport Connectivity
Located in Munich's Domagkpark,
the project benefits from excellent
public transport links, including
nearby tram and bus lines.

Social Mixing
The inclusion of subsidized units
and shared communal spaces
promotes social mixing among
residents.

Parking and Mobility Concepts
The project includes car-sharing
facilities, ample bicycle parking,
and communal mobility options to
reduce reliance on private vehicles.

Supply Infrastructure
Situating in a well-developed
urban area, WagnisART is close
to essential services such as
supermarkets, schools, and medical
facilities.

Project Cost
EUR 25 million

Plot Size / Gross Area
Approximately 9,600 m² for
housing, with additional areas for

commercial and communal use.

Floor Space Index (FSI)
The Floor Space Index (FSI) is 2.11,
reflecting the dense and efficient use
of space within the development.

Net Floor Area (NFA)
Approximately 20,275 m².

Gross Floor Area (GFA)
20,275 m².

Number of Units / Members
138 residential units, with about 320
residents.

Average Living Area per Unit
The average living area per unit is
approximately 147 m², taking into
account the total GFA and number
of units.

**Rent Price vs. Local Rent Price
Index**
Rents are below the local
market average, supported by
the cooperative model and state
subsidies.

Equity Contribution of Members
Members contribute to the
cooperative based on the size of
their unit, ensuring the financial
sustainability of the project.

**Ratio of Private to Communal
Areas**
Significant communal areas, with
a focus on shared spaces that foster
community interaction.



Rooftop gardens and other green spaces underscores the project's commitment to environmental sustainability while simultaneously fostering social cohesion.

The WagnisART project in Munich is a pioneering example of cooperative housing that successfully integrates architectural innovation, social cohesion, and environmental sustainability. Completed in 2016 and located in the new Domagkpark district, WagnisART represents the latest effort by the Wagnis eG cooperative, which has been instrumental in developing progressive housing solutions since its founding in 2000. The project, designed by Bogevischs Buero Architekten & Stadtplaner and SHAG Schindler Hable Architekten, consists of five interconnected buildings that provide 138 cooperative apartments for around 180 residents¹. The architecture of WagnisART is not only visually striking but also purposefully designed to foster a sense of community, embodying the cooperative's ethos of shared living and mutual support.

At the heart of WagnisART's architectural design is the concept of connectivity, both physical and social. The five freestanding passive houses are linked by bridges and elevated walkways, creating a network of semi-public spaces that encourage interaction among residents². This design reflects a departure from traditional urban residential layouts, opting instead for an open, interconnected structure that promotes

both privacy and communal engagement. The use of bridges, which connect the buildings at the third and fourth floors, adds a dynamic element to the project, facilitating spontaneous encounters and fostering a sense of shared ownership among the residents³. The project's spatial organization is also noteworthy for its inclusion of extensive communal areas. These include rooftop gardens, terraces, and various indoor spaces designed for collective activities. The communal spaces are not merely functional; they are central to the project's identity, providing residents with areas to socialize, relax, and collaborate⁴. The rooftop gardens, for example, serve as a key feature, offering not only green spaces for gardening but also opportunities for social interaction, thus enhancing the quality of life within the community. This integration of green spaces into the residential fabric underscores the project's commitment to environmental sustainability while simultaneously fostering social cohesion⁵. WagnisART is deeply embedded in its surrounding urban context, contributing to the broader Domagkpark district, a former military site now transformed into a vibrant residential area. The project's name, WagnisART, reflects its dual heritage: it honors the artistic

history of the Domagkpark, which was once home to one of Europe's largest artist colonies, and it symbolizes a forward-looking approach to urban living⁶. The buildings' layout and design were shaped through a participatory process that involved future residents in the decision-making from the very beginning. This inclusive approach not only ensured that the architectural design met the needs of its users but also fostered a strong sense of community and belonging even before the buildings were completed⁷. The cooperative nature of WagnisART extends beyond its architectural design to its social and economic structures. As members of the Wagnis eG cooperative, residents are both tenants and part-owners of the property, with a lifelong right to their homes at affordable rents⁸. This model protects against market speculation and ensures long-term housing security, a critical factor in Munich's competitive real estate market. The cooperative also places a strong emphasis on sustainability, both in terms of environmental impact and social responsibility. The buildings are certified passive houses, equipped with photovoltaic panels that supply a significant portion of the community's energy needs⁹. Moreover, WagnisART's approach to communal living is innovative in its flexibility and inclusiveness. The project offers a variety of apartment types, including unique cluster apartments where individuals or families have private living quarters while sharing larger communal spaces with their neighbors¹⁰. This arrangement allows for a mix of privacy and social interaction, catering to different lifestyles and needs. The inclusion of shared workshops, studios, and event spaces further enhances the project's communal aspect, making it not just a place to live, but a vibrant community hub¹¹. One of the most significant achievements of WagnisART is its ability to create a self-sustaining community that is resilient, inclusive, and environmentally conscious. The cooperative's governance model ensures that all residents have a voice in the management of the

property, fostering a sense of ownership and collective responsibility¹². This participatory approach extends to all aspects of life within WagnisART, from the maintenance of communal spaces to the organization of social activities. The result is a strong, interconnected community that is capable of adapting to challenges and changes over time. WagnisART has received numerous accolades for its innovative approach to housing, including the prestigious German Urban Development Award (Deutscher Städtebaupreis) in 2016¹³. The project's success highlights the potential of cooperative housing models to address the pressing issues of urbanization, affordability, and social inclusion in today's cities. As urban areas continue to grow and evolve, WagnisART stands as a testament to the power of community-driven development and the importance of integrating social and environmental sustainability into the fabric of our cities.

¹ Bogevischs Buero Architekten & Stadtplaner, "WagnisART: Cooperative Living in Munich," Architectural Review, 2017.

² Geipel, Kaye. "WagnisART: Urban Connectivity and Social Innovation," Stadtbauwelt, 2016.

³ Gollan, Rut-Maria. Interview by Julia Knop, "Creating Spaces for Interaction: The Bridges of WagnisART," Domagkpark Journal, 2018.

⁴ Wagnis eG Cooperative, "The Role of Communal Spaces in WagnisART," WagnisART Official Website, 2020.

⁵ Claudia Neeser, "Green Spaces in Urban Design: The Rooftop Gardens of WagnisART," Landscape Architecture Magazine, 2019.

⁶ Wagnis eG Cooperative, "WagnisART: A Legacy of Art and Innovation," WagnisART Official Website, 2020.

⁷ Bogevischs Buero Architekten & Stadtplaner, "WagnisART: Cooperative Living in Munich," Architectural Review, 2017.

⁸ Claudia Neeser, "Green Spaces in Urban Design: The Rooftop Gardens of WagnisART," Landscape Architecture Magazine, 2019.

⁹ Wagnis eG Cooperative, "The Role of Communal Spaces in WagnisART," WagnisART Official Website, 2020.

¹⁰ Geipel, Kaye. "WagnisART: Urban Connectivity and Social Innovation," Stadtbauwelt, 2016.

¹¹ Gollan, Rut-Maria. Interview by Julia Knop, "Creating Spaces for Interaction: The Bridges of WagnisART," Domagkpark Journal, 2018.

¹² Wagnis eG Cooperative, "The Role of Communal Spaces in WagnisART," WagnisART Official Website, 2020.

¹³ Wagnis eG Cooperative, "WagnisART Wins the German Urban Development Award," WagnisART Official Website, 2017.



The Units are connected on an extra level. Giving residents the chance to have a walk above the ground with their community members.



Community areas are equipped with gardening facilities.



The certified passive houses are equipped with photovoltaic panels.



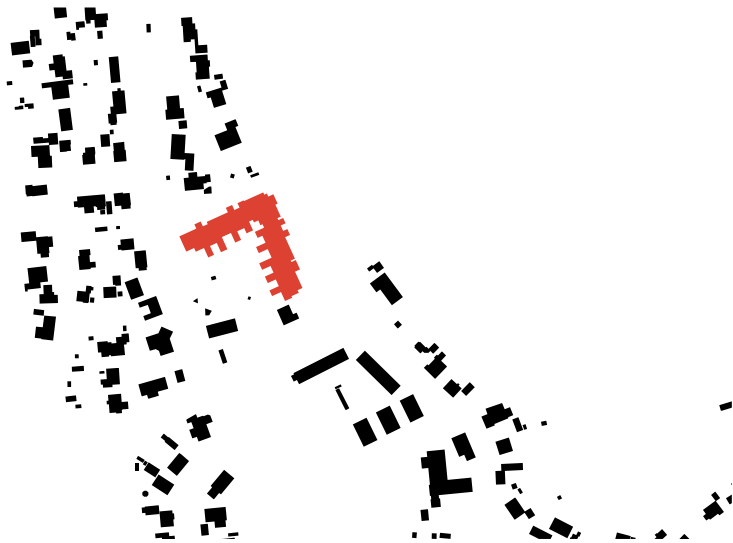
The interconnected of buildings expresses the strong network of the neighborhood

The ground floor is dedicated to community-oriented functions, which actively engage with the surrounding neighborhood.

Vandkunsten Architects
Jystrup Sawmil, Jystrup (Denmark)

Cooperative housing - realized

06



Name of the Architects Vandkunsten Architects
Date of Completion 1984
Developer/Owner The Coop in Jystrup Sawmill (Andelsboligforeningen Jystrup Savværk)
Funding Sources + Financing Models Entirely funded by the residents through cooperative contributions, with costs around £600 per m².
Rental / Ownership models Cooperative ownership model
Already realized or competition Realized project
Awards and Recognitions Finalist in the World Habitat Awards (1995)
Building Typology Cluster Housing
Different Apartment Types 21 units with sizes ranging from 60 to 90 m².
Quality of Outdoor Spaces Includes private outdoor spaces for each unit and communal areas under a glass-covered street.
Types and Number of Communal Areas/Functions 40% of the total space is communal, including a central kitchen, dining area,

living rooms, workshops, and a library. Accessibility The project is designed with various levels and glass-covered streets, ensuring accessible communal spaces year-round.
Building Materials + Construction Techniques Constructed primarily with wood, including facades of black-painted wood and sheet materials. The saw-tooth design and south-facing orientation provide natural heating.
Energy Efficiency Standards The design incorporates energy-saving features like natural heating for the communal streets.
Green Infrastructure The project includes green spaces integrated into the communal living environment.
Number of units /Members 21 residential units
Average Living Area per Unit Approximately 79 m² per unit.
Project Cost Approximately £600 per m². Plot Size / Gross Area 2,915 m²
Gross Floor Area (GFA) 2,915 m²
Ratio of Private to Communal Areas Communal spaces constitute 40% of the total area.



Garden view of intersecting roofs



The project encourages a strong sense of community with 40% of the total area dedicated to shared spaces.

The Jystrup Sawmill (Jystrup Savværk) in Denmark represents a seminal example of cooperative housing that seamlessly integrates architectural innovation with communal living principles. Completed between 1982 and 1984, this project, designed by Vandkunsten, a renowned Danish architectural firm, embodies the aspirations of a group of residents who sought to create a living environment that maximized community interaction while respecting individual privacy. The project consists of 21 private residential units arranged under a single roof, creating what can be described as a "single organism" where communal and private spaces coexist harmoniously. Architecturally, Jystrup Sawmill is notable for its distinctive design, which features a large glass-covered interior street. This communal space, adorned with trees and flower beds, serves as the heart of the community, offering residents a place to gather, dine, and engage in social activities. The glass roof not only provides ample natural light but also creates a warm and inviting atmosphere that contrasts with the often harsh Danish winters.

Vandkunsten's decision to incorporate this indoor street reflects their commitment to fostering a sense of togetherness among the residents, a design philosophy that has been central to their work since the early 1970s. The layout of Jystrup Sawmill is highly flexible, accommodating a variety of living arrangements. The complex includes five different apartment types, ranging from single-story flats to two-story units, all of which are designed to allow generous amounts of daylight to penetrate the living spaces. This variety in housing types ensures that the needs of diverse residents are met, from young families to older individuals seeking a supportive community environment. The adaptability of the living spaces is further enhanced by the project's design, which allows communal areas to expand or contract as needed, thus maintaining a delicate balance between communal interaction and personal privacy. One of the most remarkable aspects of Jystrup Sawmill is its approach to communal living.



Maintaining a balance between communal interaction and personal privacy is one of the fine balances that had to be found.



Arcade connecting the different housing types.



Generous windows improving daily life.

The complex includes five different apartment types, ranging from single-story flats to two-story units, all of which are designed to allow generous amounts of daylight to penetrate the living spaces.

With 40% of the total area dedicated to shared spaces, the project encourages a strong sense of community while ensuring that residents have access to private retreats when needed.

This balance is achieved through thoughtful design elements such as courtyards, roof terraces, and subtle changes in floor levels, which provide residents with opportunities for privacy within the larger communal structure. As one resident remarked, "The care taken to protect your need for privacy struck me the most; in courtyards and roof terraces, the individual can always escape to privileged positions above or beyond the reach of others."

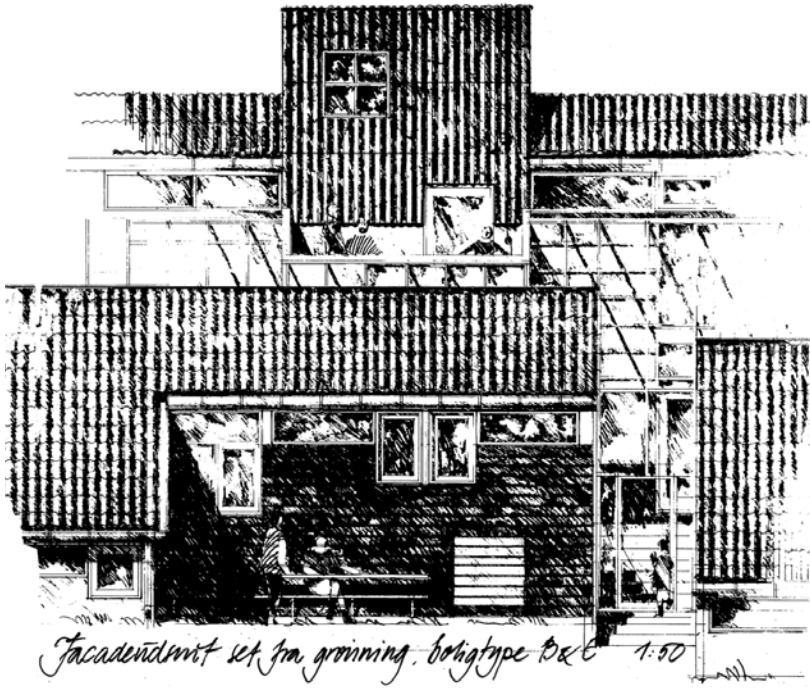
The Jystrup Sawmill project also reflects a broader social and ideological context. Emerging from the post-1960s desire to challenge conventional living arrangements, the project exemplifies a time when architecture was seen as a tool for social change. Vandkunsten's design not only provides a physical space for community but also serves as a vehicle for a more egalitarian and collaborative way of life. This ethos is encapsulated in the project's participatory planning process, which involved close collaboration between the architects and the residents, ensuring that the final design met the collective needs and aspirations of the community.

Today, Jystrup Sawmill remains a viable alternative to traditional housing models, offering insights into how communal living can be successfully integrated into contemporary society.

The project's enduring appeal lies in its ability to balance the need for social interaction with the equally important need for personal privacy. As Vandkunsten continues to explore the possibilities of cooperative housing, Jystrup Sawmill stands as a testament to the potential of architecture to create not just buildings, but vibrant, supportive communities.

Vandkunsten, "Jystrup Sawmill: Communal Living Under One Roof," Vandkunsten Official Website, 12.08.2024.

View Gardenfacade

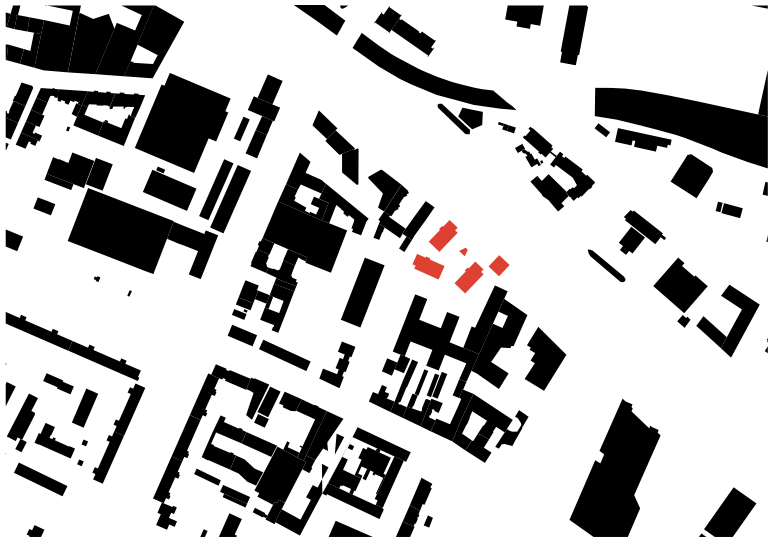


Crosssection



Carpaneto Architekten
FAT Koehl Architekten
BAR Architekten
Spreefeld, Berlin (Germany)

Cooperative housing - realized



07

Architects
Carpaneto Architekten
FAT Koehl Architekten
BAR Architekten

Date of Completion
2014

Developer/Owner
Cooperative Spreefeld Berlin eG

Funding Sources + Financing Models
Member equity contributions
Bank loans
Subsidies from the Berlin Senate
Cooperative financial model

Rental / Ownership Models
Cooperative ownership, with staggered rents starting at levels comparable to government-subsidized housing

Already Realized or Competition
Already realized

Building Typology
Mixed-Use Development

Different Apartment Types
67 residential units in 36 apartments
Cluster apartments accommodating groups of 4 to 21 people
Standard apartments
Maisonette apartments with private gardens

Quality of Outdoor Spaces
Communal terraces
Green spaces within the complex
Publicly accessible waterfront promenade

Types and Number of Communal Areas/Functions
300 m² communal room
200 m² communal terrace
200 m² communal garden
Ground-floor communal spaces, including workshops, co-working spaces, communal kitchens, and more
Fitness rooms, music rooms, and a daycare center

Accessibility
All apartments are barrier-free

Building Materials + Construction Techniques
Extensive use of wood
Passive House standard
Cogeneration unit, geothermal system, and photovoltaics

Energy Efficiency Standards
Passive House standard

Carbon Footprint
Designed to minimize carbon footprint through the use of renewable energy sources

Green Infrastructure
Green roofs
Community gardens

Demographic Diversity
Approximately 83 residents, intentionally diverse community

Public Transport Connectivity
Excellent connectivity to public transportation
Central location in Berlin

Social Mixing
Integration of different income groups through staggered rent models

Neighborhood Integration
Public ground-floor spaces
Active participation in local events

Parking and Mobility Concepts
Car-sharing models
Extensive bicycle parking spaces

Supply Infrastructure
Proximity to essential facilities like supermarkets, schools, and hospitals

Project Cost
Approximately €16 million

Plot Size / Gross Area
6,300 square meters

Gross Floor Area (GFA)
Approx. 9,500 square meters

Net Floor Area (NFA)
8,000 square meters of residential space
1,500 square meters of commercial space

Number of Units /Members
67 residential units in 36 apartments
Approximately 83 residents

Average Living Area per Unit
Approximately 60-80 square meters per unit

Equity Contribution of Members
Members contributed equity capital, with the opportunity to perform self-construction work

Ratio of Private to Communal Areas
Approximately 10% communal spaces (600 m² of 6,350 m²)



The project offers 64 uniquely designed apartments, ranging from compact 25-square-meter units to expansive 600-square-meter communal living spaces.



Spreefeld Berlin, completed in 2014, emerges as a landmark in cooperative housing, demonstrating how architecture can integrate social justice, economic viability, and environmental sustainability. Located along the Spree River, this innovative project was brought to life by a collaboration between Carpaneto Architekten, FAT Koehl Architekten, and BARarchitekten, under the initiative of "Die Zusammenarbeiter," led by Christian Schöningh and several private investors¹.

The design of Spreefeld Berlin is notable for its strategic positioning of three buildings, each maximizing interaction with the urban and natural environments. The structures utilize a hybrid wood-concrete system, adhering to Passive House standards, which not only minimize energy consumption but also significantly reduce the environmental footprint¹. As noted by the architects, "the choice of wood, especially in the form of exterior panels and insulation, was integral to our vision of sustainability and harmony with nature"². Flexibility in living arrangements is a hallmark of Spreefeld.

The project offers 64 uniquely designed apartments, ranging from compact 25-square-meter units to expansive 600-square-meter communal living spaces. This adaptability is achieved through a combination of steel-reinforced concrete frameworks and prefabricated wooden panels, allowing for extensive customization while maintaining structural integrity². The inclusion of cluster apartments, accommodating groups of four to 21 people, underscores the project's commitment to fostering communal living¹. Beyond the residential units, Spreefeld dedicates about 40% of its space to communal amenities, including terraces, a boathouse, a kindergarten, and a woodworking workshop¹. These spaces are designed to encourage social interaction and strengthen community ties. The ground floor is intentionally open to the public, featuring studios, a catering kitchen, and co-working spaces². This integration with the surrounding community is a deliberate design choice, aiming to blur the boundaries between private and public spaces and promote inclusivity³. A significant aspect of Spreefeld's success lies in its cooperative model, which emphasizes resident participation and social equity. From the project's inception,



Members of the community are invited to live a smallscale farmlife in the middle of the city

Almost half of all space si dedicated to communal amenities, including terraces, a boathouse, a kindergarden, and a woodworking workshop.



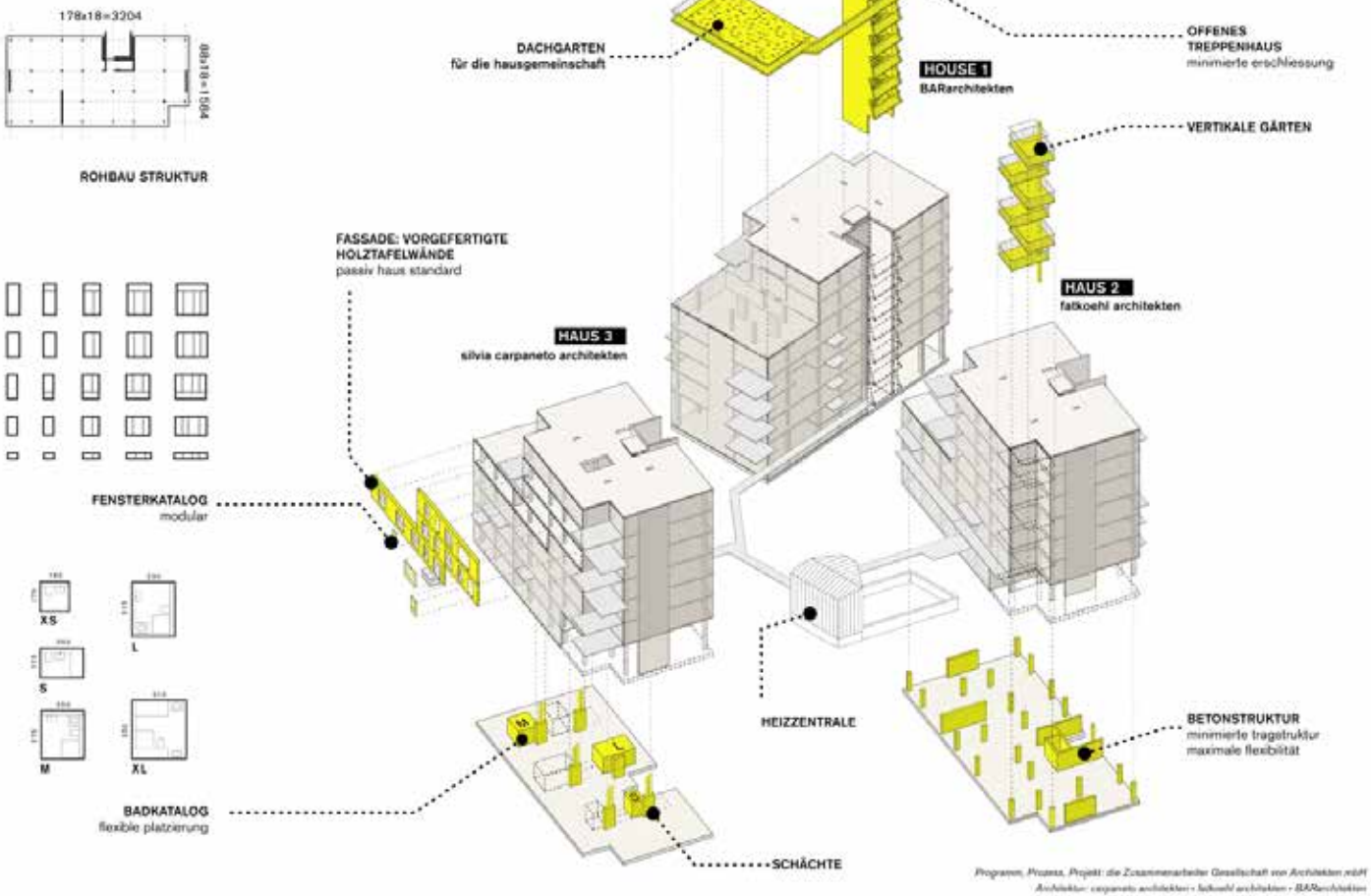
Enlarged balconies are staggered stacked to make space for outdoor quality time.

residents were actively involved in the design and construction processes, ensuring that the final outcome reflected their needs and aspirations¹. This participatory approach also extended to the project's financing, allowing residents to contribute sweat equity, thereby reducing construction costs and enabling the inclusion of individuals with limited financial resources. "This project wouldn't have been possible without the active involvement of the residents at every stage," Schöningh remarked, highlighting the importance of collective effort in the project's success². Spreefeld also excels in its approach to sustainability. The buildings meet stringent Passive House standards, incorporating energy-efficient technologies such as co-generation units, geothermal systems, and photovoltaic panels¹. These features enable the development to generate a significant portion of its energy needs, reducing reliance on external energy sources². The careful selection of environmentally friendly materials, including wood and recycled components, further underscores the project's commitment to minimizing its ecological impact³.

Spreefeld Berlin serves as a model for future urban developments, demonstrating that socially inclusive, environmentally sustainable communities are not only possible but also economically viable. By integrating a diverse mix of residential, commercial, and public spaces within a cohesive architectural framework, Spreefeld challenges traditional notions of urban development and showcases the potential of cooperative housing to create vibrant, resilient urban environments¹.

¹ Bau- und Wohngenossenschaft Spreefeld Berlin eG, "Spreefeld Berlin," Spreefeld Official Website, accessed June 15, 2021.
² Carpaneto, S., "Neubau: Spreefeld Berlin – Wilhelmine-Gemberg-Weg: Berlin Mitte," Carpaneto Architekten Website, accessed June 15, 2021.
³ Ring, K., "Nischen für alternative Lebensformen – Aktueller Wohnungsbau in Berlin," Best of DETAIL: Urbanes Wohnen/Urban Housing, Munich: DETAIL, 2017.

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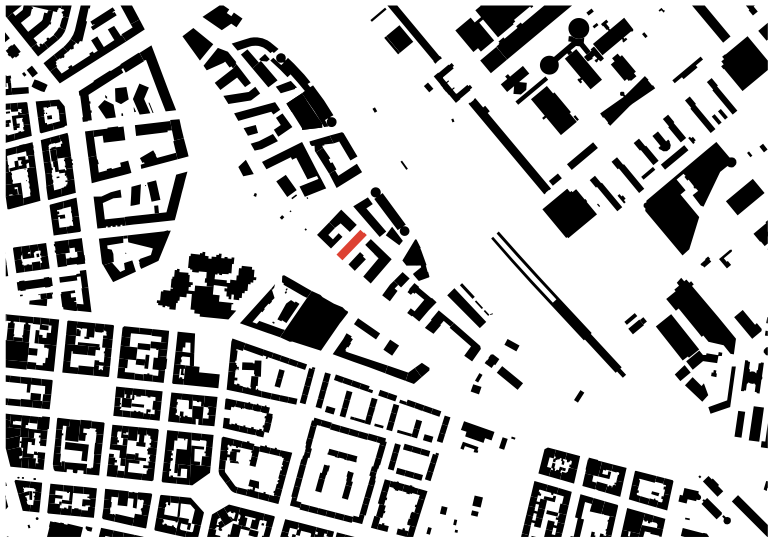
Structural isometry

einszueins architektur

Gleis 21, Vienna (Austria)

Ownership-based housing - realized

08



Name of the Architects
einszueins architektur

Date of Completion (within Construction Duration)
2020

Developer/Owner
Baugruppe Gleis 21

Funding Sources + Financing Models
Bank loans, member equity contributions, and subsidies from the City of Vienna

Rental / Ownership models
Ownership model with cooperative principles; members contribute equity and have ownership rights within the cooperative structure.

Already realized or competition
Already realized

Awards and Recognitions
The New European Bauhaus Prize 2021, Category: Co-design, from heritage to the future.

Building Typology
Standalone Building
Different Apartment Types
Mix of 1-bedroom to 4-bedroom apartments, communal living spaces

Quality of Outdoor Spaces
Communal gardens, green terraces, playgrounds

Types and Number of Communal Areas/Functions
Shared kitchen, event spaces, music rehearsal rooms, coworking spaces, and

guest apartments
Accessibility
Fully accessible with barrier-free apartments and communal areas

Building Materials + Construction Techniques
Timber construction with sustainable materials and energy-efficient technologies

Energy Efficiency Standards
Designed to be a zero-energy building with high energy efficiency standards

Carbon Footprint
Minimized through the use of sustainable construction materials and energy-efficient design

Water Efficiency
Water-saving fixtures and rainwater harvesting systems
Waste Management
On-site recycling and composting facilities

Green Infrastructure
Green roofs, urban gardens, and communal green spaces

Demographic Diversity
Diverse age groups, income levels, and backgrounds, with a focus on inclusivity

Public Transport Connectivity
Located near Vienna Central Station with excellent public transport links

Social Mixing
Apartments allocated to a mix of income levels, with some units

reserved for refugees
Neighborhood Integration
Strong integration with the local community, including collaboration with local schools and cultural institutions

Parking and Mobility Concepts
Limited parking spaces to encourage sustainable mobility; car-sharing models and extensive bicycle parking
Supply Infrastructure
Proximity to supermarkets, schools, hospitals, and other essential services

Project Cost (+Cost per square meter)
Approximately €12 million, with an average cost of €3,500 per square meter

Plot Size / Gross Area
1,470 square meters

Floor Space Index (FSI)
2.8

Gross Floor Area (GFA)
4,140 square meters

Number of units /Members
34 units, around 100 members

Rent price vs. Local Rent Price Index
Below the market rate due to cooperative ownership and city subsidies

Equity Contribution of Members
Equity contributions required, varying by unit sizev



The ground floor of Gleis 21 is designed to be open and accessible to the public, housing a cultural center that includes a music school, a media studio, and an event hall.

Gleis 21 in Vienna represents a landmark in sustainable co-housing, where architecture meets social innovation. Completed in 2019, this project is situated in the newly developed Sonnwendviertel, adjacent to Vienna’s central station. Designed by einszueins architektur, Gleis 21 is the product of a deeply participatory process that involved future residents in every aspect of its creation, from urban planning to the final interior details. This high level of involvement ensured that the project not only met the diverse needs of its inhabitants but also cultivated a robust sense of community from the very beginning¹.

The architectural design of Gleis 21 is defined by its pioneering wood-hybrid construction, a choice that significantly reduces the building’s environmental impact while fostering a healthy and warm living environment. The decision to prioritize wood as the main construction material was driven by its sustainability and its natural aesthetic appeal. The wooden facade, which stands out in the urban landscape, is a visual testament to the building’s commitment to ecological responsibility². Inside, exposed wooden ceilings and expansive windows create a bright, inviting atmosphere that enhances the residents’ quality of life. At its core, Gleis 21 is about flexibility and

personalization. The building comprises 34 residential units, each uniquely designed in collaboration with its future occupants. The building’s neutral and adaptable structure allowed for this customization, ensuring that each apartment could be tailored to meet the specific needs of its residents. The units are accessed via an open arcade on the northwest side, which not only serves as a practical thoroughfare but also as a social space that encourages neighborly interaction. Private balconies on the southeast side offer personal outdoor spaces while maintaining the building’s cohesive aesthetic³.

A hallmark of Gleis 21 is its extensive communal areas, which are central to the project’s design philosophy. These shared spaces include a communal kitchen, a library, a sauna, and a rooftop garden. Designed to foster a strong sense of community, these amenities provide practical benefits while encouraging social interaction. The project also dedicates several “flex units” to refugees, a reflection of its commitment to social solidarity and inclusivity⁴.

The ground floor of Gleis 21 is intentionally designed to be open and accessible to the public, housing a cultural center that includes a music school, a media studio, and an event hall. These facilities, managed by the cultural

association Gleis 21, host a variety of activities—from theater performances to workshops—aimed at enriching the local community. This openness is a deliberate design choice, intended to integrate the building into its urban environment and encourage interaction between residents and the wider community⁵. Sustainability is woven into every aspect of Gleis 21, from its construction to its daily operation. The building meets stringent zero-energy standards, utilizing a combination of solar panels, geothermal energy, and advanced insulation techniques to minimize energy consumption. This approach not only reduces the building's environmental footprint but also ensures long-term affordability for its residents⁶. What sets Gleis 21 apart is its deeply participatory development process. By involving residents from the earliest stages, the project fostered a strong sense of ownership and collective responsibility. This collaborative spirit continues in the building's management, which is collectively owned and operated by its residents, ensuring that it remains both affordable and accessible in the long term⁷. Gleis 21 is more than just a housing project; it is a living example of how architecture can be leveraged to create sustainable, socially inclusive urban communities. Its innovative design, combined with a commitment to environmental and social sustainability, makes it a model for future developments that aim to balance ecological responsibility with human needs.

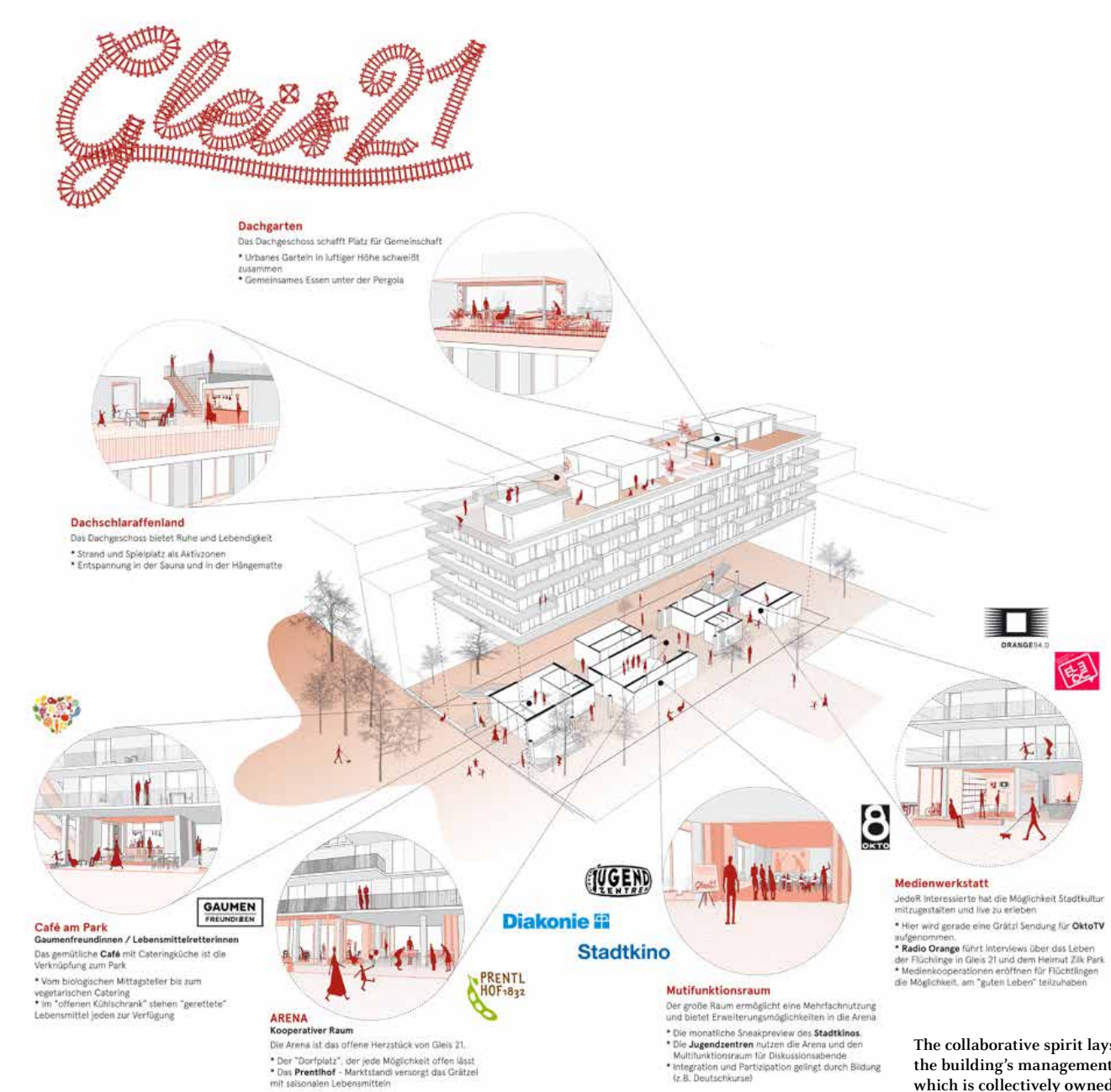
¹ einszueins architektur, "Gleis 21," Gleis 21 Official Website, accessed June 15, 2023.
² Holzbau Austria, "Innovative Wood-Hybrid Construction in Gleis 21," Holzbau Austria, March 2021.
³ Vienna Architecture Guide, "Sustainable Living in Vienna: Gleis 21," Vienna Architecture Guide, accessed June 15, 2023.
⁴ Diakonie Flüchtlingsdienst, "Gleis 21: A Model of Solidarity," Diakonie Austria, accessed June 15, 2023.
⁵ Stadtkino Wien, "Gleis 21 Cultural Spaces," Stadtkino Wien, accessed June 15, 2023.
⁶ Klimaktiv Austria, "Zero-Energy Housing: Gleis 21," Klimaktiv Austria, February 2020.
⁷ New European Bauhaus, "Award-Winning Sustainability: Gleis 21," European Commission, accessed June 15, 2023.



The open ground floor encourages interaction between residents and the wider community.



Floorplan



The collaborative spirit lays in the building's management, which is collectively owned and operated by its residents, ensuring that it remains both affordable and accessible in the long term.

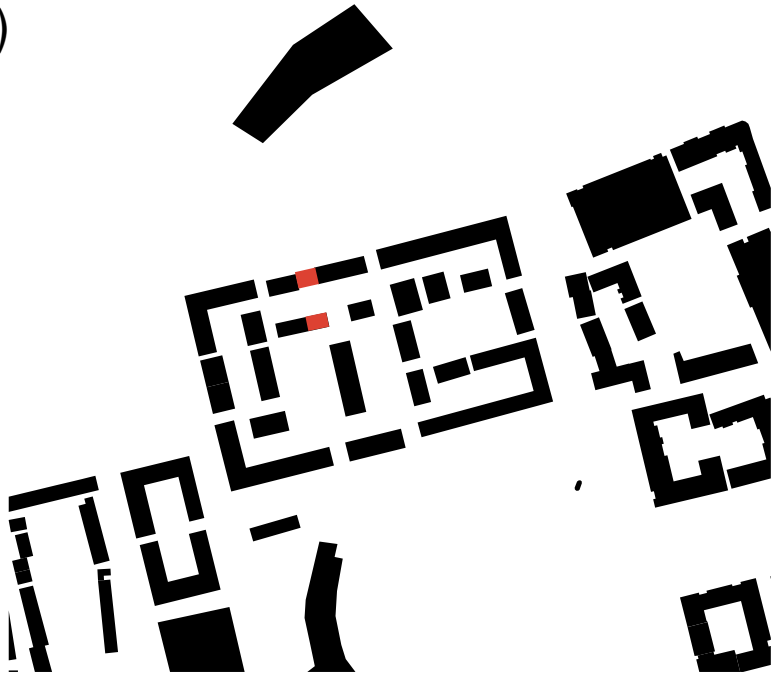


Wood is the main construction material as it is sustainable and gives a natural aesthetic appeal.

Siegel Architecture AB
UrbanaVillor, Malmö (Sweden)

Housing - realized

09



Name of the Architects
Siegel Architecture AB

Date of Completion
2017

Developer/Owner
Developer: Siegel Architects

Already realized or competition
Realized

Building Typology
Cluster Housing

Different Apartment Types
3-bedroom townhouses, 2-bedroom apartments, studios

Quality of Outdoor Spaces
Communal gardens, private terraces, shared outdoor spaces with amenities

Types and Number of Communal Areas/Functions
Shared kitchen, dining area, gardens, workshop, laundry

Building Materials + Construction Techniques
Timber construction with high energy efficiency standards

Energy Efficiency Standards
Designed to meet passive house standards

Green Infrastructure
Communal gardens, green roofs

Demographic Diversity
A mix of families, singles, and older adults

Resident Satisfaction
High levels of satisfaction reported by residents

Public Transport Connectivity
Located within walking distance to public transport options

Social Mixing
Designed to promote social interaction among different age groups and family types

Neighborhood Integration
Well integrated into the local environment with cooperation with local businesses

Parking and Mobility Concepts
Limited parking spaces, emphasis on bicycle parking and public transport

Supply Infrastructure
Close to schools, supermarkets, and healthcare facilities

Number of units /Members
20 units



Community-oriented urban living seen from above



As the community's ideas UrbanaVillor is a vision of how urban living can prioritize community, sustainability, and quality of life.

UrbanaVillor in Malmö exemplifies a novel approach to urban living, reimagining the traditional suburban villa within the dense fabric of a modern city. Completed in 2009 and situated in Västra Hamnen—a revitalized dockyard area—this project transforms conventional housing ideals into a sustainable urban reality. Designed by a collective of architects, including Cord Siegel and Pontus Åqvist, UrbanaVillor integrates the comforts of suburban life with the efficiency and convenience of urban living¹. Architecturally, UrbanaVillor is both innovative and contextually aware, featuring two primary structures: a three-story courtyard building and a six-story street-facing building. These structures house "stacked villas," where each dwelling maintains the privacy and autonomy of a traditional house, including private entrances, gardens, and customizable floor plans. This design preserves the individuality of each residence while fostering a strong sense of community through shared green spaces and interconnected terraces². A standout feature of UrbanaVillor is its integration of greenery into the urban environment. Each unit includes a garden, whether on a balcony or rooftop,

allowing residents to enjoy personal green spaces in the city. The project also includes a communal greenhouse in the courtyard and abundant greenery throughout, contributing to environmental sustainability and enhancing the aesthetic appeal. These green spaces are functional as well as decorative, improving the local microclimate, reducing noise, and enhancing air quality. The architects emphasize that the 30 cm thick soil layers on balconies and roofs play a crucial role in rainwater storage, reinforcing the project's commitment to sustainability³. The building's façade is another key element of its sustainable design. Thick insulation and triple glazing minimize heat loss, ensuring energy efficiency throughout the year. UrbanaVillor is also connected to Malmö's district heating system, which uses waste incineration, highlighting the city's advanced renewable energy infrastructure. Ventilation is managed through a heat exchanger with 80% energy recovery, further reducing the building's environmental impact⁴. Residents actively participate in waste management by separating refuse into eight categories and composting organic waste on-site, practices that support the building's allotments and reinforce the project's sustainable ethos.

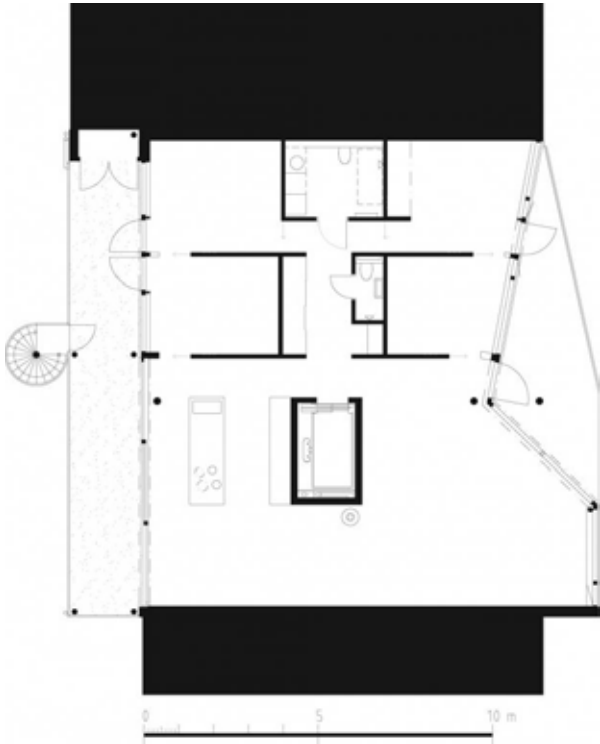
UrbanaVillor is more than just a housing development; it is a vision of how urban living can prioritize community, sustainability, and quality of life. The project began as a communal building enterprise, with residents deeply involved as clients and participants in the design process. This participatory approach allowed the architects to directly translate the community's ideas into a concrete reality, ensuring that the final product met the specific needs and aspirations of its inhabitants⁵. As noted by architectural critics, "The ability to specifically tailor developments to suit the needs of their inhabitants is surely the biggest selling point in the co-op system"⁶. The social dynamics of UrbanaVillor are equally innovative. The design encourages interaction among residents through shared spaces and the unique spatial arrangement of the units. The external spiral staircase, which connects the various levels of the buildings, is not only functional but also serves as a social catalyst, fostering casual encounters and reinforcing the sense of community within the development. This balance of communal living with the privacy and autonomy of individual units reflects a sophisticated approach to urban co-housing⁷.

In summary, UrbanaVillor stands as a model for future urban developments, demonstrating that suburban qualities can be successfully integrated into an urban setting without compromising sustainability or community engagement. The project's success highlights the potential for co-housing models to meet the growing demand for sustainable, community-oriented urban living.

¹ Hauschild + Siegel Architecture, "UrbanaVillor," UrbanaVillor Official Website, accessed August 10, 2023.
² Kristina Sahleström and Daniel Spence, "Co-housing: Learning from Sweden," Hauschild + Siegel Architecture, June 2015.
³ Cord Siegel, "Sustainable Urban Living: The UrbanaVillor Approach," Malmö Architecture Journal, February 2010.
⁴ Niels de Bruin and Magnus Svensson, "Green Architecture in Urban Spaces," Malmö Urban Design Magazine, March 2011.
⁵ Pontus Åqvist, "Participatory Design in Urban Developments," Swedish Architectural Review, May 2010.
⁶ Daniel Spence, "The Future of Co-housing: Insights from UrbanaVillor," Architecture Today, June 2015.
⁷ Karin Larsson, "Community and Architecture: The UrbanaVillor Experiment," Urban Living Quarterly, April 2010.



Longitudinal section



Even though the focus is set on the community, we all need some privacy from time to time, that's why the autonomy of a traditional house, including private entrances, gardens, and customizable floor plans was preserved.



The open cooking area invites the members to enjoy a full on garden view in the urban environment.

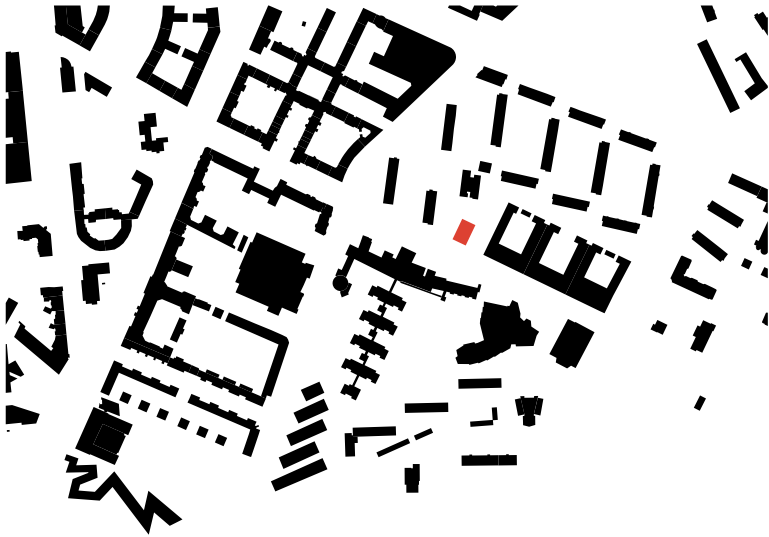


"The ability to specifically tailor developments to suit the needs of their inhabitants is surely the biggest selling point in the co-op system."

ifau und Jesko Fezer, Heide & von Beckerath

R50, Berlin (Germany)

Cooperative housing - realized



The building’s open design, including its ground-floor community spaces accessible to the public, is a dynamic part of the neighborhood.

Name of the Architects ifau und Jesko Fezer, Heide & von Beckerath	Types and Number of Communal Areas/Functions Common room for meetings and events, Shared kitchen and dining area, Guest apartment for visitors, Rooftop terrace, Workshop and laundry facilities	Green Infrastructure Green rooftop terrace, Small communal garden	Plot Size / Gross Area Approx. 2,800 m² Floor Space Index (FSI) Approx. 2.5
Date of Completion 2013	Accessibility The building includes barrier-free apartments and an elevator, making all floors accessible.	Demographic Diversity Residents include a mix of families, singles, and elderly individuals, encouraging intergenerational living.	Net Floor Area (NFA) Approx. 3,750 m² Gross Floor Area (GFA) Approx. 4,500 m²
Developer/Owner R50 Baugruppen GmbH	Building Materials + Construction Techniques Reinforced concrete structure, Use of prefabricated elements, Simple and flexible layout for easy modification by residents	Resident Satisfaction High, based on community feedback and awards received.	Number of Units /Members 19 residential units, housing around 40 members.
Funding Sources + Financing Models Primarily self-financed by the members through a cooperative model, supplemented with bank loans.	Energy Efficiency Standards Built to low-energy building standards, Includes energy-efficient windows and insulation, Minimal energy consumption due to shared resources	Public Transport Connectivity Located near public transport lines, including bus and tram stations.	Average Living Area per Unit Approx. 100 m²
Rental / Ownership Models Ownership through a cooperative model.	Carbon Footprint Efforts to minimize carbon footprint through energy-efficient design and communal living.	Social Mixing The project promotes social mixing by integrating various income groups and age demographics.	Cost per Member Approx. €100,000-€150,000 depending on unit size.
Already Realized or Competition Already realized.	Water Efficiency Water-saving fixtures installed, Shared laundry to reduce individual water consumption	Parking and Mobility Concepts Limited parking spaces to encourage the use of public transport, Bike storage facilities provided	Rent Price vs. Local Rent Price Index Significantly below the local rent price index due to the cooperative ownership model.
Awards and Recognitions BDA Prize Berlin 2014, Deutscher Architekturpreis (German Architecture Prize) 2015, Finalist in the Mies van der Rohe Award 2015	Waste Management Recycling facilities on-site, Encouragement of reduced waste production through community living	Supply Infrastructure Close proximity to essential services like supermarkets, schools, and healthcare facilities.	Equity Contribution of Members Members contributed approximately 30-50% of the total cost, depending on unit size.
Building Typology Standalone Building (Slab)		Project Cost (+Cost per square meter) Estimated total project cost: €4 million Cost per square meter: Approx. €2,500	Ratio of Private to Communal Areas Approx. 70:30
Different Apartment Types Customizable units ranging from 80 to 140 m²; includes 1-bedroom, 2-bedroom, and larger units.			
Quality of Outdoor Spaces Shared rooftop terrace, Semi-private balconies, Garden area			

The R50 project in Berlin exemplifies a groundbreaking approach to urban living, merging affordability with a strong sense of community. Situated in the Kreuzberg neighborhood, R50 is not merely a building; it represents a paradigm shift in cohousing, where architectural innovation meets collective ownership. Completed in 2013, the project was initiated by the architectural firms ifau, Jesko Fezer, and Heide & von Beckerath, who engaged directly with future residents throughout the design and construction process. This collaborative effort is at the heart of R50’s success¹. Architecturally, R50 stands out for its minimalist yet robust design. The six-story building features a reinforced concrete skeleton and a modular timber facade, a combination that emphasizes both durability and flexibility. Within this framework, 19 individual apartments were created, each tailored to the specific needs of its residents. This was made possible through a series of intensive consultations, allowing for a high degree of customization while maintaining a cohesive design language². A key aspect of R50 is its emphasis on shared spaces, which are integral to fostering community among residents. The building’s wraparound balconies serve not

only as extensions of individual apartments but also as informal communal areas, promoting interaction and neighborly engagement. Complementing these are the communal roof terrace, complete with a summer kitchen and winter garden, which provide spaces for social gatherings and shared experiences. As one of the architects observed, “The balconies and terraces are more than just design elements; they are the lifeblood of the community, connecting residents in a way that traditional urban housing often fails to achieve”³. Sustainability is another cornerstone of R50’s design. The building exceeds the stringent standards of Germany’s Energy Saving Regulations (EnEV 2009) by 30%, thanks to advanced thermal insulation and the use of timber—a renewable resource—as a primary building material. Additionally, the green roof and extensive use of natural light contribute to a reduced environmental footprint, enhancing both the ecological and aesthetic qualities of the building⁴. Beyond its physical attributes, R50’s true innovation lies in its social framework. Developed under the Baugruppen model, a cooperative housing initiative, R50 allowed residents to take on the roles of both

developers and end-users. This model not only reduced costs but also empowered residents to directly influence the design and functionality of their homes. “Being part of the decision-making process was not just about saving money; it was about creating a home that truly reflected our needs and values,” said one resident, underscoring the deep sense of ownership and community fostered by this approach⁵.

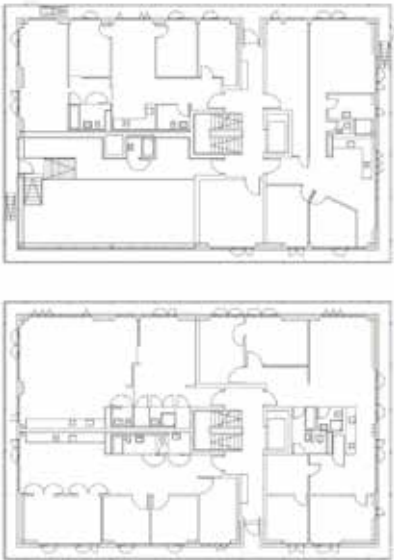
The project’s location in Kreuzberg, a district marked by its post-war social housing, adds a significant layer of context. R50’s design integrates seamlessly with the existing urban fabric, reflecting the architectural vernacular of the area while introducing modern elements that embody the collective vision of its residents. The building’s open design, including its ground-floor community spaces accessible to the public, ensures that R50 is not an isolated enclave but a dynamic part of the neighborhood⁶.

R50’s success extends beyond its architectural and environmental achievements; it represents a viable model for future urban developments. As cities worldwide grapple with issues of housing affordability and social cohesion, the lessons from R50 are increasingly relevant.

The project demonstrates that it is possible to create housing that is not only sustainable and affordable but also deeply rooted in community engagement. As one of the project’s architects aptly put it, “R50 is a living experiment in how architecture can enhance the way we live together”⁷.

¹ ifau und Jesko Fezer, Heide & von Beckerath, "R50 Cohousing," ArchDaily, accessed August 12, 2023.
² Jessica Bridger, "Don't Call It A Commune: Inside Berlin's Radical Cohousing Project," Metropolis Magazine, July 31, 2015.
³ Frances Anderton, "Berlin's R50 Baugruppe is a Model of Living Affordably, Collectively," KCRW, July 2015.
⁴ Jonas Holthaus, Steffen Jagenburg, "Sustainable Urban Cohousing in Berlin," Berlin Architecture Review, May 2014.
⁵ Verena von Beckerath, "Resident Participation in Cohousing: Lessons from R50," Berlin Urban Design Journal, September 2013.
⁶ Andrew Alberts, "Integrating Architecture and Community: The Case of R50," Architecture Today, March 2015.
⁷ Christoph Schmidt, "Living Experiments: R50 and the Future of Cohousing," Urban Living Quarterly, November 2013.

Floorplans
Representing the variety within the 19 individual apartments. Each tailored to the specific needs of its residents.

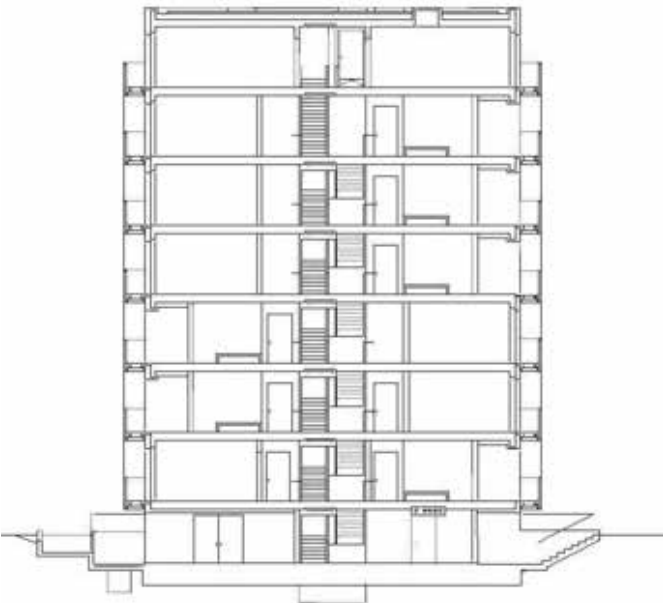


The project’s location in Kreuzberg, a district marked by its post-war social housing, adds a significant layer of context.

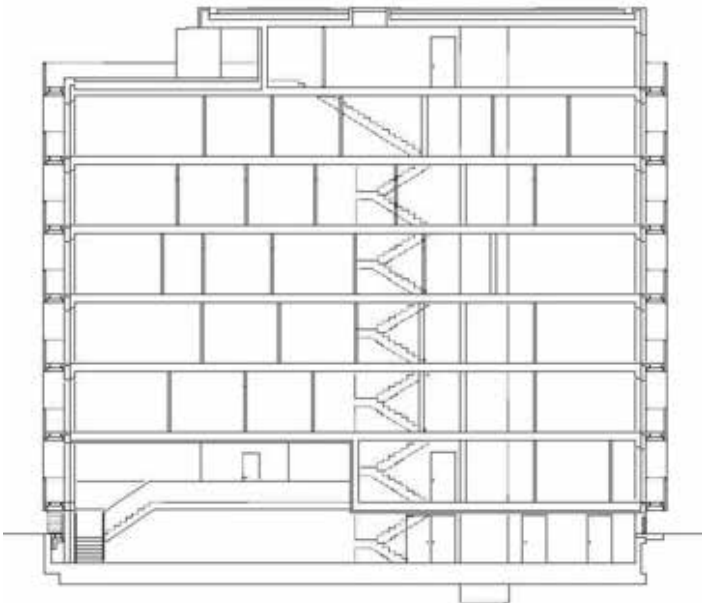


The balconies and terraces are more than just design elements; they are the lifeblood of the community.

Cross-section



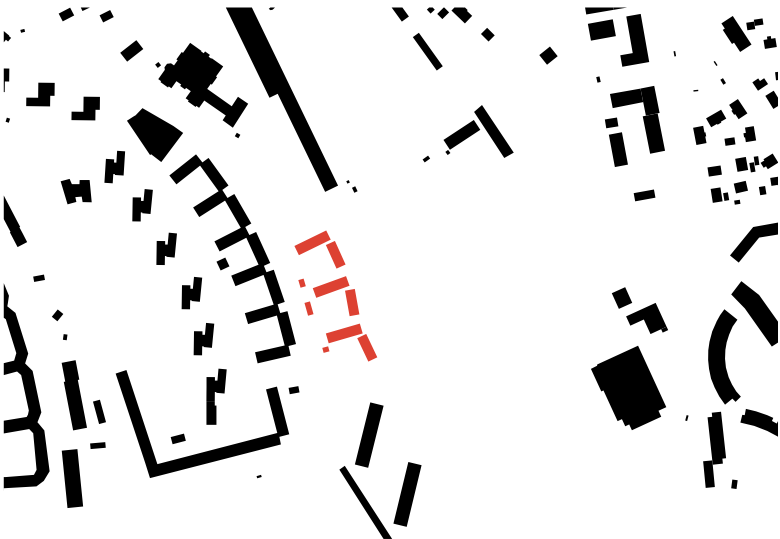
Longitudinal section



Malmström Edström Arkitekter Ingenjörer

Viva Housing Co-Operative, Gothenburg (Sweden)

Cooperative Housing - realized



The steeply sloping site could have been a limitation, yet it's been turned it into an advantage, creating a series of housing volumes that seem to naturally emerge from the landscape.

Name of the Architects Malmström Edström Arkitekter Ingenjörer	Quality of Outdoor Spaces High-quality outdoor spaces with shared green areas, playgrounds, and communal gardens.	Green Infrastructure Green roofs, urban gardens, and a high proportion of green spaces around the building.	Net Floor Area (NFA) Approx. 20,000 m ²
Date of Completion 2019	Types and Number of Communal Areas/Functions Includes a communal laundry room, a shared rooftop terrace, a gym, a sauna, and guest apartments.	Demographic Diversity Designed to accommodate a mix of families, singles, and elderly residents, encouraging intergenerational living.	Gross Floor Area (GFA) Approx. 24,000 m ²
Developer/Owner Riksbyggen	Accessibility All apartments are barrier-free, with elevators providing access to all floors, ensuring full accessibility.	Public Transport Connectivity Well-connected to public transport, including bus and tram lines within walking distance.	Number of Units /Members 133 residential units
Funding Sources + Financing Models Primarily funded through a combination of cooperative housing financing and green bonds, with additional support from municipal grants for sustainable development.	Building Materials + Construction Techniques Primarily constructed using eco-friendly materials, including cross-laminated timber (CLT). The building features triple-glazed windows and high-performance insulation to enhance energy efficiency.	Social Mixing Encourages social mixing through shared communal spaces and activities.	Average Living Area per Unit Approx. 90 m ²
Rental / Ownership models Cooperative ownership model with shared responsibility among members.	Energy Efficiency Standards Swedish Green Building Council (Miljöbyggnad) Gold Certification Designed to meet near-zero energy consumption standards	Parking and Mobility Concepts Limited parking spaces to encourage the use of public transport, with extensive bike storage and a car-sharing program.	Cost per Member Approx. €375,000 per member, depending on the unit size.
Already realized or competition Already realized	Carbon Footprint Low carbon footprint achieved through the use of sustainable building materials and energy-efficient design.	Supply Infrastructure Located close to essential facilities like supermarkets, schools, and healthcare centers.	Rent Price vs. Local Rent Price Index The cooperative model results in rents that are generally below the local rent price index.
Awards and Recognitions Swedish Green Building Council (Miljöbyggnad) Gold Certification Finalist for the European Union Prize for Contemporary Architecture - Mies van der Rohe Award 2022	Water Efficiency Equipped with water-saving fixtures, including low-flow faucets and toilets, and rainwater harvesting systems for garden irrigation.	Project Cost (+Cost per square meter) Estimated total project cost: Approximately €50 million Cost per square meter: Approx. €3,500	Equity Contribution of Members Members contribute approximately 20-30% of the total cost upfront.
Building Typology Cluster Housing		Plot Size / Gross Area Approx. 10,000 m ²	Long-term Maintenance Costs Shared among members; costs are kept low due to the sustainable design and energy efficiency.
Different Apartment Types A mix of 1-bedroom, 2-bedroom, 3-bedroom, and 4-bedroom apartments		Floor Space Index (FSI) Approx. 2.0	Return on Investment (ROI) Not applicable, as it is a cooperative housing model focused on affordability and sustainability rather than profit.
			Ratio of Private to Communal Areas Approx. 70:30

The Viva Housing Co-Operative in Gothenburg, Sweden, is a beacon of sustainable and socially conscious architecture. Completed in 2019 by Malmström Edström Arkitekter Ingenjörer, Viva sits prominently in the Guldheden district, an area celebrated for its historic housing innovations from the mid-20th century. This project, however, pushes the envelope further by not just providing housing but by serving as a cutting-edge demonstration of how architecture can meet the evolving demands of modern urban life¹. The design of Viva is a masterclass in how to build on challenging terrain. The steeply sloping site could have been a limitation, yet the architects turned it into an advantage, creating a series of housing volumes that seem to naturally emerge from the landscape. Elevated on slender pillars, these structures minimize their environmental footprint, preserving the natural terrain and vegetation below. This approach not only enhances the aesthetic integration with the surroundings but also contributes to the project’s sustainability goals². Material choices at Viva are deliberate and innovative,

reflecting both aesthetic and environmental considerations. The use of untreated concrete and cedar wood allows the buildings to evolve with the weather, their facades taking on different hues and textures as light and moisture interact with the materials. This dynamic quality makes the architecture feel alive, while the specially formulated concrete helps reduce the carbon emissions associated with its production by 30%³. Environmental sustainability is deeply embedded in the design of Viva. A significant feature is the expansive photovoltaic array, covering 900 square meters of rooftop space. This system harnesses solar energy, which is stored in recycled batteries from local electric buses—a practical and symbolic gesture towards circular economy principles. Such innovations not only reduce the project’s carbon footprint but also position Viva as a model for future developments that aim to integrate renewable energy at a residential scale⁴. The social dimension of Viva is equally impressive. The cooperative model ensured that the development remained inclusive, offering affordable housing options

Traditional stairwells have been replaced with entrance balconies that face south.



The use of untreated concrete and cedar wood allows the buildings to evolve with the weather.



A specially formulated concrete helps reduce the carbon emissions associated with its production by 30%.



The pursuit of a wholesome sustainability also reflects in the large bike-parking area.



in an area where real estate is typically out of reach for many. The planning process was notably collaborative, with residents having a voice in the design decisions, which fostered a strong sense of community even before construction began. This participatory approach is not just about making decisions—it's about empowering residents to shape the place they will call home, creating a sense of belonging and mutual respect⁵. One of the most innovative aspects of Viva is its rethinking of how residents access their homes. Traditional stairwells have been replaced with entrance balconies that face south and west, designed to maximize exposure to sunlight and encourage spontaneous social interactions. These balconies double as private outdoor spaces, cleverly blurring the line between personal and communal areas. This design strategy exemplifies the broader ethos of Viva, where architecture serves as a catalyst for community building⁶. In conclusion, the Viva Housing Co-Operative stands as a testament to what is possible when architecture, sustainability, and social equity converge. It is more than just a place to live; it is a vibrant community designed to adapt and thrive in the face of future challenges. As cities worldwide continue to seek solutions to the dual crises of urbanization and climate change, Viva offers a blueprint for how we might live better, together.

¹ <https://www.metalocus.es/en/news/materiality-and-contrast-viva-housing-co-operative-malmstrom-edstrom-arkitekter-ingenjorer>
² <https://miesarch.com/work/4863>
³ <https://www.metalocus.es/en/news/materiality-and-contrast-viva-housing-co-operative-malmstrom-edstrom-arkitekter-ingenjorer>
⁴ <https://miesarch.com/work/4863>
⁵ <https://www.metalocus.es/en/news/materiality-and-contrast-viva-housing-co-operative-malmstrom-edstrom-arkitekter-ingenjorer>
⁶ <https://miesarch.com/work/4863>



Longitudinal section



3 types of apartments

The steep landscape didn't have to make space for the buildings but instead got integrated right in the central yard.



Mole Architects

Marmalade Lane, Cambridge (UK)

Cooperative housing - realized

12

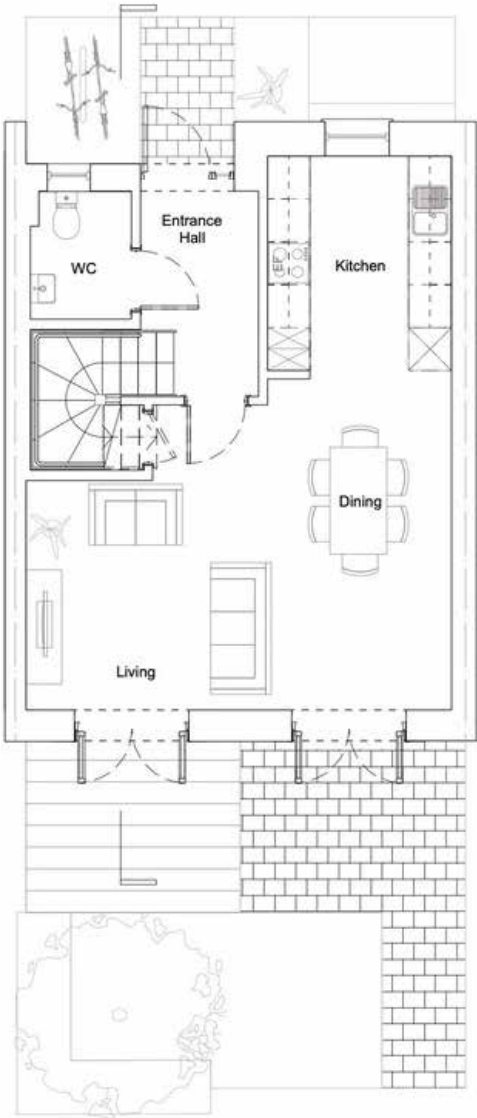


The project consists of 42 homes being the home of vibrant community that redefines urban living by integrating private and shared spaces.

Marmalade Lane, situated in the Orchard Park area of Cambridge, UK, stands as a notable exemplar of contemporary cohousing design, where community engagement and sustainable living converge. Completed in December 2018, this development is the first of its kind in Cambridge, emerging from a unique collaboration between the K1 Cohousing group, Mole Architects, TOWN, and Trivselhus¹. The project, consisting of 42 homes, is not just a residential enclave but a vibrant community that redefines urban living by integrating private and shared spaces in a way that fosters both social interaction and environmental responsibility². The architectural concept behind Marmalade Lane is deeply rooted in the idea of creating a close-knit community. The layout is composed of terraced houses and apartments, all centered around a car-free street—Marmalade Lane itself—that acts as the social heart of the development. This design encourages spontaneous encounters among residents, with one resident describing it as "a place where you don't just live next to your neighbors, but with them, in a real community"³. The careful planning of public and private spaces ensures that while the community thrives on interaction,

individual privacy is also respected. Sustainability is a cornerstone of Marmalade Lane's design. The development utilizes the Trivselhus Climate Shield® system, a high-performance, prefabricated timber frame that is both thermally efficient and airtight. This construction method not only reduces energy consumption but also contributes to the overall environmental sustainability of the project⁴. All homes are equipped with mechanical ventilation and heat recovery (MVHR) systems, ensuring a constant supply of fresh air while minimizing heat loss. Additionally, the project includes sustainable drainage systems and extensive shared gardens, which are integral to the community's commitment to low-impact living⁵. The social infrastructure at Marmalade Lane is exemplified by the Common House, a communal building designed to serve as the hub of community activities. It features a large kitchen, dining area, and flexible spaces for meetings, workshops, and fitness classes. The Common House also includes guest bedrooms, which can be booked by residents, allowing them to host visitors without needing extra space in their own homes⁶. This thoughtful integration of shared facilities

not only enhances the communal living experience but also reflects the project's broader goal of reducing the environmental footprint through shared resources. Marmalade Lane's design also emphasizes customization and adaptability. Future residents were actively involved in the design process, choosing from a variety of layouts, finishes, and materials to create homes that met their specific needs. This approach, known as group custom build, allowed for a high degree of personalization while maintaining architectural coherence across the development⁷. The result is a neighborhood that feels both unified and diverse, with each home reflecting the individuality of its occupants. The location of Marmalade Lane was carefully selected to maximize its connectivity and sustainability. Situated near major cycling routes and public transport links, including the Cambridge Guided Busway, the development encourages residents to reduce car use in favor of more sustainable modes of transport⁸.



Floorplan ground floor

This car-free ethos is further supported by the layout of the development, which relegates car parking to the periphery, freeing up central areas for gardens, play spaces, and social interaction. Marmalade Lane represents a significant departure from traditional housing models. It is a testament to what can be achieved when architects, developers, and residents collaborate closely to create a living environment that prioritizes community and sustainability. As Meredith Bowles, founder of Mole Architects, aptly put it, "Marmalade Lane is not just about building homes; it's about building a way of life that brings people together and nurtures a sense of belonging"⁹.

- ¹ <https://www.marmaladelane.co.uk/>
- ² <https://www.wareatown.co.uk/projects/marmalade-lane/>
- ³ <https://www.theguardian.com/artanddesign/2019/may/08/marmalade-lane-co-housing-cambridge>
- ⁴ <https://www.trivselhus.co.uk/Homes-for-sale/marmalade-lane/index.html>
- ⁵ <https://www.essexdesignguide.co.uk/case-studies/marmalade-lane-co-housing-cambridge/>
- ⁶ <https://www.archdaily.com/918201/marmalade-lane-cohousing-development-mole-architects>
- ⁷ <https://www.architectsjournal.co.uk/buildings/building-study-marmalade-lane-cohousing-by-mole-architects>
- ⁸ <https://www.theguardian.com/artanddesign/2019/may/08/marmalade-lane-co-housing-cambridge>
- ⁹ <https://www.architectsjournal.co.uk/buildings/building-study-marmalade-lane-cohousing-by-mole-architects>



Cross-section



The car-free ethos is freeing up central areas for gardens, play spaces, and social interaction.



Each home reflects the individuality of its occupants.

The result is a neighborhood that feels both unified and diverse.

Space & Matter

Schoonschip, Amsterdam (Netherlands)

Cooperative housing - realized and floating

13



Name of the Architects
Space & Matter

Date of Completion
2021

Developer/Owner
Schoonschip Cooperative

Funding Sources + Financing Models
Private investment by members, bank loans, and government grants for sustainable initiatives.

Rental / Ownership models
Ownership model through cooperative housing.

Already realized or competition
Already realized

Awards and Recognitions
The project has received significant recognition for sustainability, including various European sustainability awards.

Building Typology
Floating community

Different Apartment Types
Custom layouts for each floating home, varying in size.

Quality of Outdoor Spaces
The entire community is centered around water, providing unique outdoor spaces like floating gardens and communal docks.

Types and Number of Communal Areas/Functions
Communal areas include shared green spaces, a floating garden, and communal docks for residents.

Building Materials + Construction Techniques
Homes are constructed using sustainable materials, focusing on reducing the carbon footprint, including prefabrication and modular construction techniques.

Energy Efficiency Standards
Designed to be self-sufficient in energy, incorporating solar panels, heat exchange systems, and battery storage.

Water Efficiency
All homes have water-saving systems and are designed for minimal water usage. Rainwater collection and greywater recycling systems are used.

Waste Management
High recycling rates, with the community employing advanced waste management practices, including composting.

Green Infrastructure
Extensive green roofs, floating gardens, and community-managed green spaces.

Demographic Diversity
Diverse community, with a mix of families, singles, and professionals.

Resident Satisfaction
High satisfaction reported due to the unique living environment and strong community bonds.

Public Transport Connectivity
The community is relatively well-connected to public transport, with nearby bus and tram connections.

Social Mixing
The cooperative model encourages social mixing among different income groups.

Neighborhood Integration
Strong integration with local community activities, including educational tours and workshops on sustainability.

Parking and Mobility Concepts
Limited parking, with a focus on cycling and public transportation.

Plot Size / Gross Area
Approx. 6,000 square meters.

Gross Floor Area (GFA)
Approx. 5,000 square meters.

Number of units /Members
46 floating homes.

Average Living Area per Unit
Approx. 100 square meters.

Equity Contribution of Members
Members contributed between 20-30% of the cost of their home upfront.



The visionary neighborhood is the culmination of over a decade of collaboration among 46 households who shared a common dream of creating a sustainable living environment on water.

Schoonschip, an innovative floating community in Amsterdam, represents a bold redefinition of urban living in the face of climate change. Located in the Johan van Hasseltkanaal in the Buiksloterham area, this visionary neighborhood is the culmination of over a decade of collaboration among 46 households who shared a common dream of creating a sustainable living environment on water¹. Completed in 2020, Schoonschip exemplifies the potential of circular living models and community-driven urban development². At the heart of Schoonschip lies a commitment to environmental sustainability. Each of the 30 floating plots hosts homes meticulously designed to minimize ecological impact. These homes are equipped with solar panels, heat pumps that extract thermal energy from the canal water, and green roofs that not only insulate but also provide space for growing food³. The integration of a smart grid allows residents to trade surplus solar energy using a community-specific cryptocurrency, Jouliette⁴. This energy system not only enhances efficiency but also strengthens the bonds within the community by fostering a culture of shared resources and mutual support. The architectural diversity within Schoonschip is a

reflection of the freedom given to each household in designing their homes, within the constraints of their floating plots. This has resulted in a vibrant array of house designs, where contemporary aesthetics meet environmental functionality⁵. As Marjan de Blok, the project's initiator, emphasizes, "Schoonschip was created and developed by a group of people, not a project developer"⁶. This grassroots approach has not only led to a unique and creative residential area but also instilled a strong sense of ownership and pride among the residents. A key element in Schoonschip's design is its smart jetty system, which serves both functional and social purposes. The jetty physically connects the floating homes to each other and to essential utilities, while also acting as a social hub where neighbors can interact casually⁷. This dual functionality exemplifies Schoonschip's holistic approach to design, where infrastructure and community life are seamlessly integrated. Schoonschip's development is a direct response to the challenges posed by climate change, particularly the rising sea levels threatening coastal cities worldwide. By building on water, the community not only mitigates flood risks but also serves as a model for adaptive

urban living in a changing climate⁸. As Sascha Glasl, co-founder of the architectural firm Space&Matter, notes, "Living on the water offers a great solution for places where climate change and a rise in sea levels are a looming hazard"⁹.

Furthermore, Schoonschip's open-source philosophy underscores its role as a living laboratory for sustainable urban practices. The project actively engages with local, national, and European initiatives, sharing its findings and innovations with other communities seeking to adopt similar models¹⁰. This commitment to knowledge sharing is central to Schoonschip's vision of contributing to global solutions for sustainability. The social structure of Schoonschip further distinguishes it from traditional housing developments. Governed by an owners' association, the community operates on principles of shared responsibility and collective decision-making. Residents participate in workgroups focused on energy management, mobility, and ecology, ensuring that the neighborhood remains at the forefront of sustainable living¹¹. This collaborative approach has not only enabled the successful realization of the project but also fostered a strong sense of community and shared purpose among its residents. Schoonschip's success is not only measured by its environmental and architectural achievements but also by the vibrant and resilient community it has fostered.

As de Blok poignantly observes, "We find it necessary and exciting to share our social and sustainable mindset with others, helping them to advance their knowledge and skills"¹². Schoonschip stands as a powerful testament to what can be achieved when a group of committed individuals come together to create a sustainable, livable future.

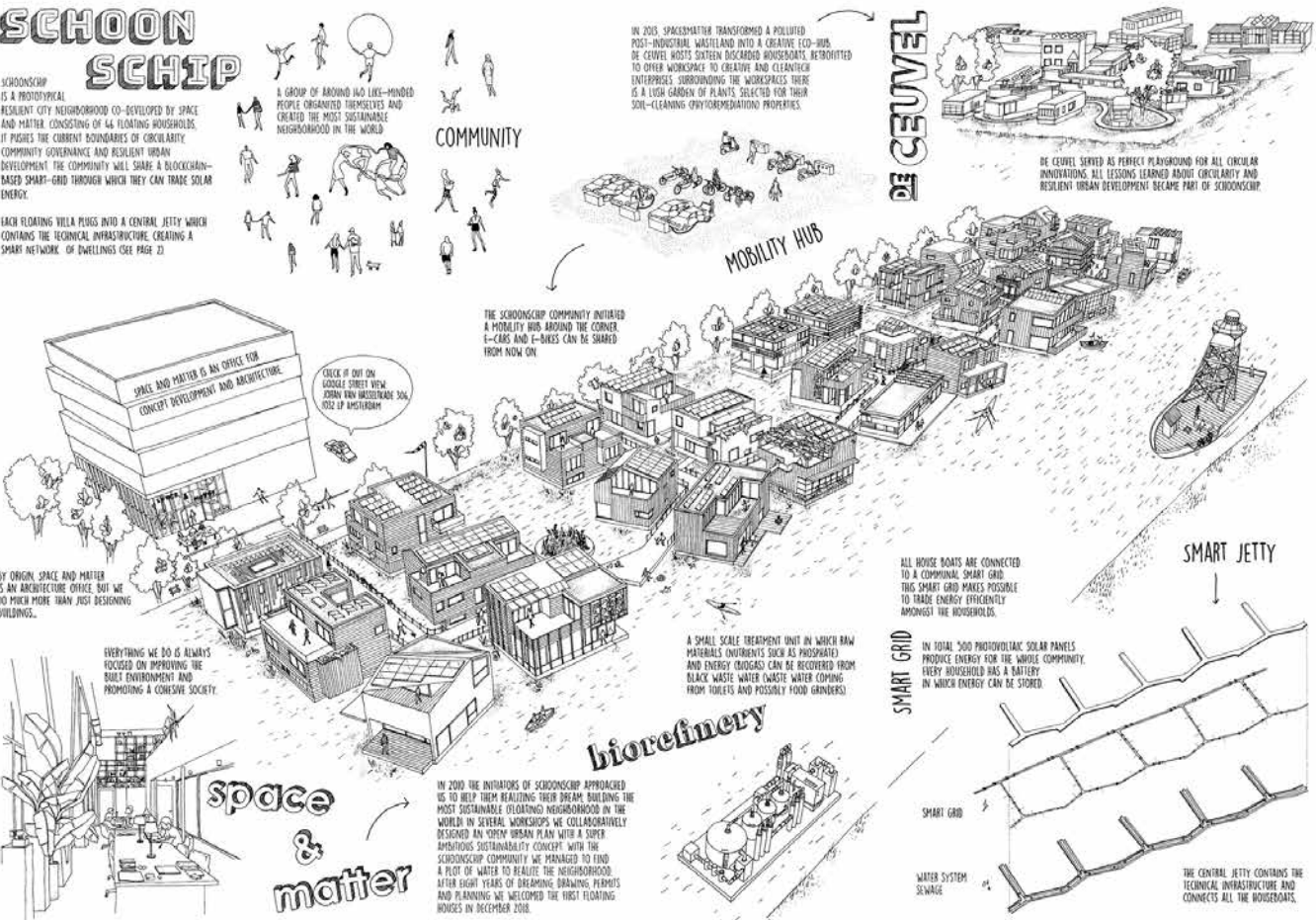
¹ <https://schoonschipamsterdam.org/en/>
² <https://www.spaceandmatter.nl/work/schoonschip>
³ https://www.detail.de/de_de/schwimmende-wohngemeinschaft-schoonschip-in-amsterdam-35000
⁴ <https://www.ubm-development.com/magazin/wg-feeling-auf-dem-wasser/>
⁵ <https://www.spaceandmatter.nl/work/schoonschip>
⁶ <https://schoonschipamsterdam.org/en/>
⁷ <https://www.spaceandmatter.nl/work/schoonschip>
⁸ <https://www.ubm-development.com/magazin/wg-feeling-auf-dem-wasser/>
⁹ <https://www.spaceandmatter.nl/work/schoonschip>
¹⁰ <https://schoonschipamsterdam.org/en/>
¹¹ <https://www.ubm-development.com/magazin/wg-feeling-auf-dem-wasser/>
¹² <https://www.spaceandmatter.nl/work/schoonschip>



All 30 floating plots host homes meticulously designed to minimize ecological impact.

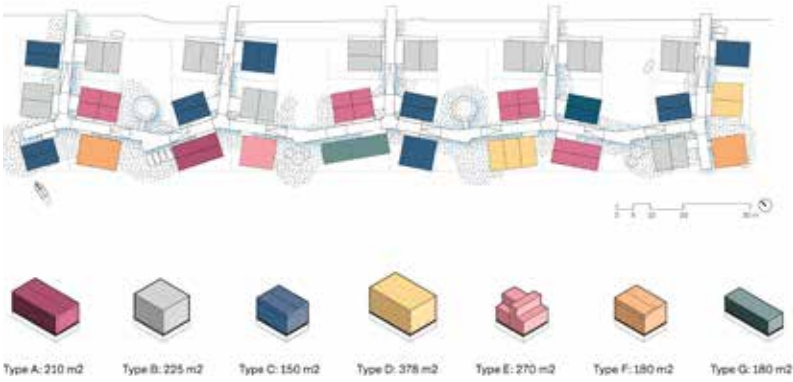


Sharing lessons and knowledge the project has taught is a matter of course for all the members of the floating community.



The jetty physically connects the floating homes to each other and to essential utilities. It is the main meeting point for the neighbourhood.

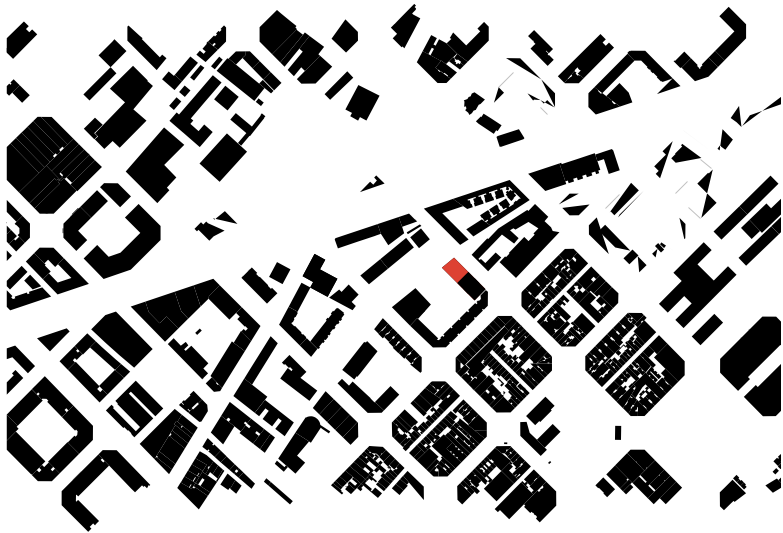
By building on water, the community not only mitigates flood risks but also serves as a model for adaptive urban living in a changing climate.



Lacol
La Balma, Barcelona (Spain)

Collective living - realized

14



Name of the Architects Lacol, Laboqueria
Date of Completion 2021
Developer/Owner La Balma Cooperative
Funding Sources + Financing Models Combination of cooperative member contributions, bank loans, and public funding through government grants and subsidies.
Rental / Ownership Models Cooperative ownership model with long-term lease agreements.
Already Realized or Competition Already realized.
Awards and Recognitions Mies van der Rohe Award 2022 (Nominee), City of Barcelona Architecture Award 2021
Building Typology Perimeter Block Development
Different Apartment Types Units range from 1-bedroom to 4-bedroom apartments, adaptable for various family sizes.
Quality of Outdoor Spaces Includes shared courtyards, roof terraces, and semi-private balconies.
Types and Number of Communal Areas/Functions Communal kitchen, Shared laundry facilities, Multi-purpose room for

events and gatherings, Common outdoor spaces including a garden and playground
Accessibility Building includes barrier-free access with elevators, meeting accessibility standards.
Building Materials + Construction Techniques Use of sustainable and locally-sourced materials such as timber and recycled elements, with an emphasis on reducing the environmental footprint. Prefabricated wooden structures were employed to ensure efficiency and sustainability.
Energy Efficiency Standards Designed to meet high energy efficiency standards, with features like thermal insulation, passive solar heating, and photovoltaic panels.
Water Efficiency Rainwater harvesting systems and water-saving fixtures implemented.
Green Infrastructure Green roofs, community gardens, and the use of native plants to enhance biodiversity and reduce environmental impact.
Demographic Diversity The cooperative promotes a mix of demographics including families, singles, and individuals from various socio-economic backgrounds.
Public Transport Connectivity Located close to public transport, including metro and bus lines.

Social Mixing The cooperative model ensures inclusivity and social diversity, fostering a strong sense of community.
Neighborhood Integration Active engagement with the surrounding neighborhood through community events, shared spaces, and collaboration with local organizations.
Parking and Mobility Concepts Limited parking spaces to encourage sustainable transport options. Bicycle storage is available, and the location is well-served by public transport.
Supply Infrastructure Close proximity to essential services such as supermarkets, schools, and healthcare facilities.
Plot Size / Gross Area Approx. 1,200 square meters
Gross Floor Area (GFA) Approx. 4,000 square meters
Number of Units /Members 20 housing units
Average Living Area per Unit Approx. 75-90 square meters
Equity Contribution of Members Members contribute approximately 20-30% of the housing costs upfront.
Long-term Maintenance Costs Shared among cooperative members; managed collectively through a cooperative fund.



The building comprises 20 residential units, each based on a modular grid system that allows for flexibility and adaptability.

La Balma, situated in the Poblenou neighborhood of Barcelona, stands as a pioneering example of cooperative housing, addressing the city's pressing need for affordable and sustainable living solutions. Completed in 2021, this project emerged from Barcelona's first public tender for cooperative housing on municipal land, marking a significant milestone in the city's approach to housing development. Designed by the architectural cooperatives Lacol and LaBoqueria, La Balma was conceived with a strong emphasis on social sustainability, environmental responsibility, and community engagement¹. The architectural design of La Balma is a reflection of its core principles. The building comprises 20 residential units, each based on a modular grid system that allows for flexibility and adaptability. The standard unit is a 50m² space, which can be expanded by integrating additional 16m² modules managed by the cooperative. This modularity is not merely a spatial arrangement but a manifestation of the project's commitment to fostering a dynamic and intergenerational community. The flexibility of the units ensures that the living spaces can evolve in response to the changing needs of residents, from young families to retirees². As the

architects from Lacol have stated, "La Balma's design is intended to grow and adapt with its inhabitants, supporting a diverse and resilient community"³. Structurally, La Balma utilizes a combination of reinforced concrete and cross-laminated timber (CLT). The concrete forms the base and ground-floor structure, providing stability and minimizing the use of high-impact mineral materials. The upper floors, constructed from CLT, offer a more sustainable and environmentally friendly alternative, contributing to the overall reduction of the building's carbon footprint. This hybrid structure not only enhances the building's sustainability but also provides a comfortable, healthy living environment. The use of wood, with its natural warmth and aesthetic appeal, underscores the project's commitment to creating spaces that are both environmentally and socially sustainable⁴. La Balma's environmental strategy is comprehensive, aiming to minimize energy consumption and reduce the building's ecological footprint. A key feature of this strategy is the integration of passive design elements, such as maximizing solar gain on the lower floors and using shading devices to protect the upper floors from excessive heat. The building also employs a geothermal

system for heating and cooling, which significantly reduces energy costs and environmental impact. This system, combined with radiant clay panels that operate efficiently at low temperatures, ensures that residents can enjoy a high level of comfort with minimal environmental impact. "Our goal was to create a building that not only meets the needs of today but is resilient enough to meet the challenges of tomorrow," noted the architects⁵.

Community spaces are central to La Balma's design, reflecting the project's emphasis on collective living. These spaces are distributed across all floors, encouraging interaction and fostering a sense of community among residents. The ground floor features a communal kitchen-dining area that opens to the neighborhood, acting as a social hub for both residents and the wider community. The rooftop terrace, a vital communal space, doubles as a productive garden where residents can grow their own food, further reducing the environmental impact and strengthening the sense of community⁶. As one resident aptly put it, "La Balma is more than just a place to live; it's a living, breathing community where everyone plays a part in shaping our collective future"⁷.

La Balma's integration into the broader urban fabric of Poblenou is another key aspect of its design. The building's open, inviting design encourages interaction with the surrounding neighborhood, reinforcing its

role as a community asset rather than just a residential building. The project's success is largely attributed to the participatory process that guided its development, ensuring that the final design met the needs and aspirations of its residents while also contributing positively to the neighborhood⁸.

This project is a testament to the potential of cooperative housing to address the challenges of urban living in the 21st century. By combining innovative architectural design with a deep commitment to social and environmental sustainability, La Balma offers valuable insights for other cities facing similar housing crises. The success of La Balma underscores the importance of community-driven development and highlights the critical role that architecture can play in fostering resilient, inclusive communities⁹.

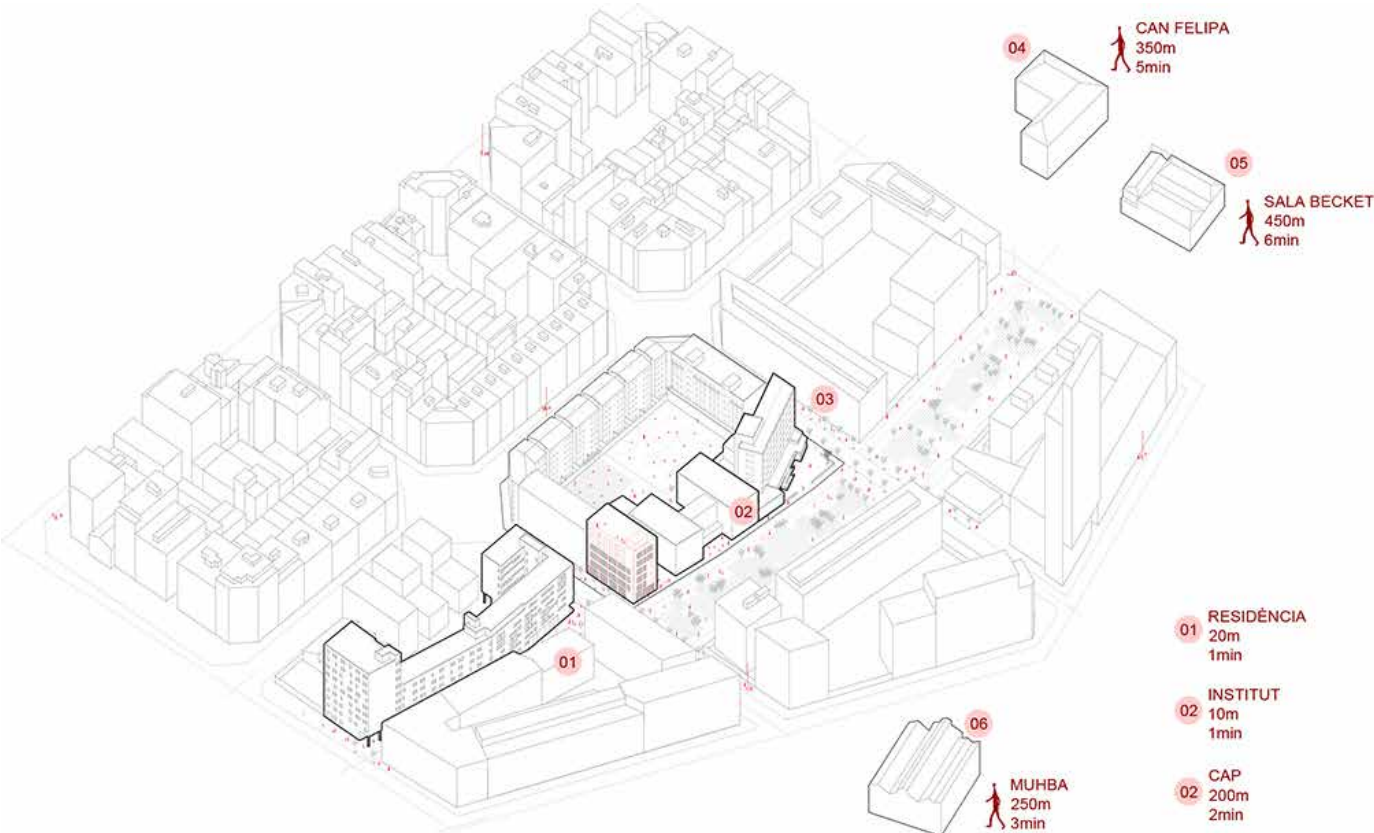
¹ <https://www.lacol.coop/projectes/la-balma/>
² <https://sostrecivic.coop/en/projectes/la-balma/>
³ <https://www.archdaily.com/971631/la-balma-collective-housing-lacol-plus-laboqueria>
⁴ <https://divisare.com/projects/466935-lacol-laboqueria-taller-milena-villalba-la-balma-housing-cooperative>
⁵ <https://www.metalocus.es/en/news/cooperation-community-and-neighborhood-involvement-la-balma-housing-cooperative-laboqueria-and-lacol>
⁶ <https://www.archdaily.com/971631/la-balma-collective-housing-lacol-plus-laboqueria>
⁷ <https://sostrecivic.coop/en/projectes/la-balma/>
⁸ <https://divisare.com/projects/466935-lacol-laboqueria-taller-milena-villalba-la-balma-housing-cooperative>
⁹ <https://www.lacol.coop/projectes/la-balma/>



A key feature of this strategy is the integration of passive design elements, such as using shading devices to protect the upper floors from excessive heat.



The use of wood, with its natural warmth and aesthetic appeal, underscores the project's commitment to creating spaces that are both environmentally and socially sustainable.



Community spaces are distributed across all floors, encouraging interactions.

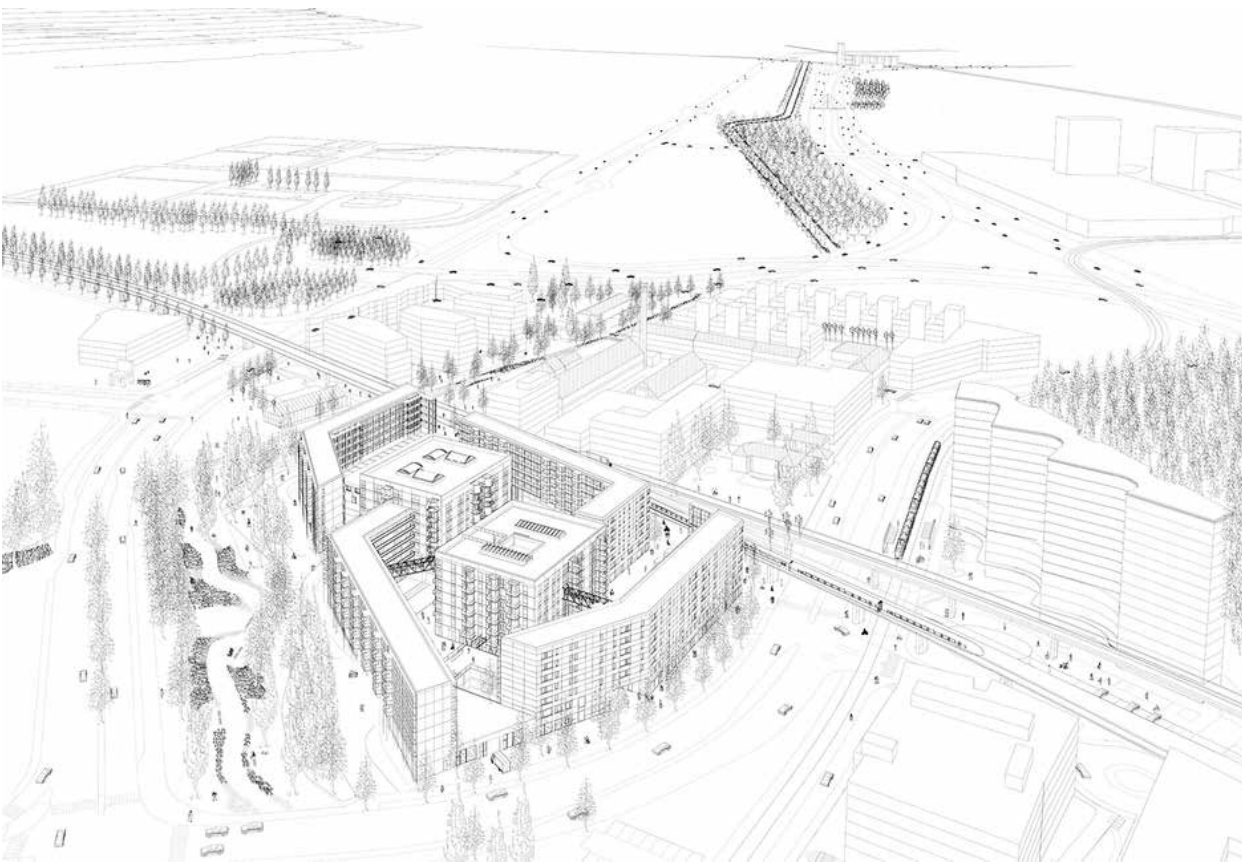


Cross-section

Schneider Studer Primas Architekten

Kraftwerk1 Zwicky Süd, Zurich (Switzerland)

Cooperative housing - realized



The project's emphasis on sustainability, social diversity, innovative living concepts, and the integration of residential and commercial spaces provides a model for creating vibrant, inclusive communities.

Kraftwerk1 Zwicky Süd in Zurich stands out for its bold transformation of a challenging industrial site into a vibrant, inclusive community that seamlessly integrates cooperative housing with commercial, cultural, and social spaces¹. This unique approach to urban development showcases how innovative design and cooperative principles can revitalize underutilized areas, making it a valuable case study for addressing housing and urbanization challenges. Completed in 2016 by the cooperative Kraftwerk1 and designed by Schneider Studer Primas Architekten, the project is situated on the former Zwicky spinning mill site at the intersection of Zurich, Wallisellen, and Dübendorf². Despite its less attractive surroundings—encircled by highways, industrial buildings, and a railway viaduct—the development successfully converts an industrial landscape into a sustainable neighborhood along the Glatt River. Architecturally, the project comprises six buildings with a total gross floor area of 20,900 square meters and a floor space index (FSI) of 1.85³. It offers 150 residential units, achieving a density of 130 units per hectare. The buildings are organized into three typologies: "Scheibe" (slim slabs), "Block" (massive blocks), and "Halle"

(halls)⁴. The "Scheiben" act as noise barriers against surrounding traffic, featuring long terraces and access balconies. The "Blocks" provide compactness and social density, housing both residential units and commercial spaces. The "Halls" offer large, flexible areas for production, storage, exhibitions, and retail, activating the ground floor and contributing to urban diversity. Kraftwerk1 Zwicky Süd offers a diverse range of residential units, from one-room studios to large apartments of up to 14.5 rooms, with an average useful area per unit of 113 square meters³. Innovative living concepts like cluster apartments and large communal living spaces aim to promote social and age diversity among residents⁵. Approximately 30% of the net floor area is dedicated to communal spaces, significantly higher than average, fostering community interaction and shared activities. Economic accessibility is a core aspect of the project. The average monthly rent is €14.66 per square meter, about 40% below the local market rate of €24.50 per square meter³. Affordability is achieved through the cooperative model, where residents contribute equity amounting to 40% of the total project costs. The total project cost was €65 million, resulting in a high cost per

Name of the Architects
Schneider Studer Primas
Architekten GmbH, Zürich

Date of Completion
2015/2016

Developer/Owner
Bau- und Wohngenossenschaft
Kraftwerk1, Zürich

Funding Sources + Financing Models
Mortgages from Zürcher Kantonalbank, contributions from the Pension Fund of the City of Zurich, loans from Fonds de Roulement, member shares (Anteilscheine), and deposit accounts (Depositenkasse)

Awards and Recognitions
Architectural Award of the Canton of Zurich 2016, Distinction Umsicht – Regards – Sguardi 2017 by the Swiss Society of Engineers and Architects (SIA), "Die Besten" Hochparterre 2016, Hase in Gold

Building Typology
Mixed-use development with elements of slab buildings, block buildings, halls, and cluster housing

Different Apartment Types
Studios (29–38 m²), lofts (66 m²), apartments ranging from 2.5-room to 6.5-room (48–160 m²), large shared apartments from 8.5 to 14.5 rooms (230–436 m²), additional rentable rooms (15–20 m²), internal hobby rooms (22–26 m²)

Quality of Outdoor Spaces
Access to communal terraces and green spaces, proximity to the renatured Chriesbach creek for recreation, central generous bicycle platform, outdoor areas intentionally left raw for residents to personalize and green

Types and Number of Communal Areas/Functions
Community kitchen, children's playroom, fitness room, workshop, multipurpose room, guest apartment, home office spaces; total communal area of 285 m²

Accessibility
Includes barrier-free apartments and communal areas, provides housing for people who depend on care in collaboration with Stiftung Altried

Building Materials + Construction Techniques
Built according to Minergie-Eco standard using environmentally friendly and durable materials, low grey energy consumption, intentionally rough and raw finish to encourage resident appropriation

Energy Efficiency Standards
Certified Minergie-Eco, meets Minergie-P standard for energy consumption, compatible with 2000-Watt Society objectives

Green Infrastructure
Climbing plants on facades and structures planned, residents encouraged to green the outdoor

spaces, proximity to natural habitats along the Chriesbach creek

Demographic Diversity
Approximately 300 residents from over 12 countries, inclusive of low-income individuals, refugees, people with disabilities, and those requiring support; a mix of different cultures and age groups

Public Transport Connectivity
Excellent connectivity with Glattalbahnhof line 12 (2 minutes to Glattzentrum shopping center, 4 minutes to Stettbach S-Bahn station, 15 minutes to Zurich city center), direct access to the airport without transfers

Social Mixing
Diverse apartment types promote social and age diversity, partnerships with organizations for supported living, solidarity fund to assist residents who cannot afford full rent

Neighborhood Integration
Mixed-use development with commercial spaces for local businesses, enhances local urban environment by providing lacking amenities, collaboration with neighboring developments for community services

Parking and Mobility Concepts
Car-reduced settlement with limited parking spaces (43 parking spaces), Mobility car-sharing membership provided to residents, generous central bicycle platform with 416 spaces (332 covered)

Supply Infrastructure
On-site businesses including shops, ateliers, cafés, and offices; nearby supermarkets, schools, and other amenities in surrounding developments

Project Cost (+Cost per square meter)
Total project cost approximately 77 million CHF (~65 million EUR), cost per square meter GFA approximately 3,110 EUR/m²

Plot Size / Gross Area
11,500 m²

Floor Space Index (FSI)
1.85

Net Floor Area (NFA)
Total NFA of 16,885 m², including residential area of 12,750 m², commercial area of 3,850 m², communal areas of 285 m²

Gross Floor Area (GFA)
20,900 m²

Number of Units /Members
125 residential units

Average Living Area per Unit
Approximately 102 m²

Rent Price vs. Local Rent Price Index
Average rent price is 14.66 EUR/m², local rent price index is 24.50 EUR/m², representing approximately a 40% discount compared to local market rates



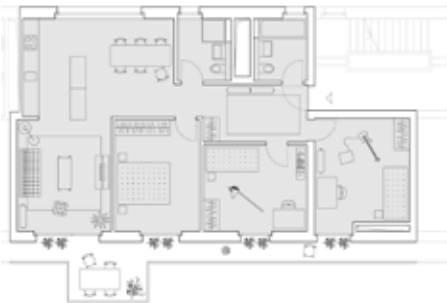
Connectivity through proximity!
Not only the buildings within themselves are connected on different levels, public transport is close by and accessed easily.



Floorplan
Flat A



Floorplan
Flat B



Floorplan
Flat C

Residents were involved in the planning process, contributing ideas on usage, living forms, and development standards. Approximately 30% of the net floor area is dedicated to communal spaces.

The indoor climate is always enjoyable due to passive design strategies and renewable energy sources such as heat pumps.

square meter of €3,110, partly due to the inclusion of extensive communal and commercial spaces³. Sustainability is central to Kraftwerk1 Zwicky Süd. The buildings meet Minergie-Eco standards and align with the 2000-Watt Society's criteria for energy efficiency and ecological building practices². Energy consumption is minimized through passive design strategies and renewable energy sources. A 1,400 square meter photovoltaic system generates approximately 200,000 kWh of electricity annually². Heating and hot water are supplied via a heat pump using purified wastewater, eliminating reliance on fossil fuels. The development promotes sustainable mobility by being car-reduced, offering generous bicycle parking and access to car-sharing services. However, this approach faced resistance in the suburban context where car ownership is common⁵. User participation and self-organization are fundamental principles. Future residents were involved in the planning process through workshops and conferences, contributing ideas on usage, living forms, ecology, and development standards⁴. Claudia Thiesen, project leader at Kraftwerk1, stated, "It's important for us that residents take responsibility and actively shape their living environment"⁵. This participatory approach extends into community management, requiring significant engagement from residents, which may not be feasible for everyone.

The project addresses social inclusion by providing housing for people with disabilities and those requiring assistance, in collaboration with organizations like

Stiftung Altried and Stiftung Domicil¹. Additionally, Kraftwerk1 offers housing to individuals facing difficulties in the regular housing market, promoting social diversity and solidarity within the community. Approximately 13 units are allocated to social housing, and a solidarity fund helps subsidize rents for those in need, though the fund faces limitations due to high demand⁵. Challenges include its industrial location, which initially deterred some potential residents, particularly older individuals and those accustomed to urban settings⁵. The car-reduced concept met resistance, as suburban residents often expect ample parking facilities. Financial barriers also exist; high initial equity contributions—up to CHF 42,500 for a 4.5-room apartment—pose challenges for lower-income individuals, despite efforts to provide affordable rents⁵.

Integration into the urban context is achieved through 5,300 square meters of commercial spaces, hosting businesses that offer local amenities, culture, and public life³. This includes a restaurant and hotel operated by Stiftung Altried, employing people with disabilities, and various shops, ateliers, and offices. The development enhances connectivity through proximity to public transportation, including the Glattalbahn tram line and nearby train stations, although the industrial surroundings still pose challenges to creating a fully integrated urban environment².

Lessons from Kraftwerk1 Zwicky Süd are valuable for cooperative housing initiatives in other urban contexts. The project's emphasis on sustainability, social diversity, innovative living concepts, and the integration of residential and commercial spaces provides a model for creating vibrant, inclusive communities. However, careful consideration of local conditions, including residents' preferences and economic factors, is essential. The project demonstrates that even in less favorable locations, a strong community focus and innovative design can create a high quality of life.

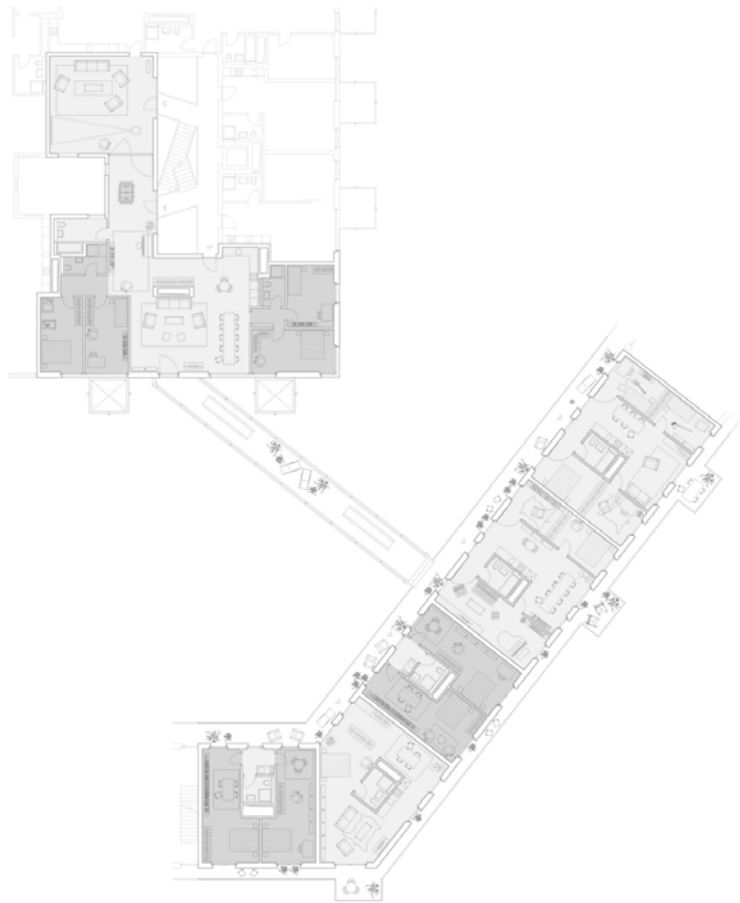
¹ Papazoglou, Liza. "Verzwickte Lage, mutiges Projekt." Hochparterre, May 2016.

² "Auszeichnung Umsicht—Regards—Sguardi 2017." SIA, 2017.

³ "Kraftwerk1 Zwicky Süd." Kraftwerk1 Official Website, 2016.

⁴ Schneider Studer Primas Architekten. Project Description, 2016.

⁵ Thiesen, Claudia. Interview in Hochparterre, May 2016.



Urban and Architectural Design

Bridgeside
Cooperative
Lisbon

—

Urban Design

Floorplans

Isometry & Project Metrics

Facades / Sections

Visualization

Urban and Architectural Design

Bridgeside Cooperative Lisbon

Author: Fabian Milo Teichert

Supervisors: Prof. Johannes Kalvelage,
Prof. Nuno Bernardo Griff



Arial view of the Bridgeside Cooperative

Building Typology

Perimeter Block Development as a slab

Different Apartment Types

Units range from small single 2-bedroom up to 5-bedroom apartments, in different sizes for different incomes, as well as barrier-free apartments for elderly people

Quality of Outdoor Spaces

Includes giant neighborhood park, roof terraces, and semi-private galleries.

Types and Number of Communal Areas/Functions

Giant garden/park, Arcades with quality of stay, 24 Communal kitchens, Shared laundry facilities, Multi-purpose room for events and gatherings, Common outdoor spaces including a garden and playground, large canteen that can be used by both the cooperative and residents of the surrounding area, a Kindergarten for 60 children, Offices to be rented by community members or external parties, small shops like barber shops, mini markets etc.

Accessibility

Building includes barrier-free access with elevators, meeting accessibility standards.

Building Materials + Construction Techniques

The construction of the building consists of a load-bearing reinforced concrete structure. The outer walls are made of masonry, provided with insulation and plastered. Non-load-bearing walls in interior construction are made from sustainable constructions, for example prefabricated timber construction

Green Infrastructure

A huge neighborhood park that offers local recreation, sound insulation, privacy and climatic cooling in summer while contributing to biodiversity

Demographic Diversity

The cooperative promotes a mix of demographics including families, singles, and individuals from various socio-economic backgrounds.

Public Transport Connectivity

Located close to public transport like bus lines.

Social Mixing

The cooperative model ensures inclusivity and social diversity, demographically and economically, fostering a strong sense of community.

Neighborhood Integration

Active engagement with the surrounding neighborhood through community events, like seasonal markets and barbeque sessions in the summer, shared spaces, and collaboration with local organizations.

Parking and Mobility Concepts

Plenty of parking space on the adjacent street (120 parking lots), as well as an underground car park with 160 parking lots, totaling 280 parking lots for the Cooperative as a whole. Some of the parking spaces in the underground car park will be equipped with charging stations for electric cars and parking spaces for car sharing will be offered

Net Floor Area (NFA)

Approx. 20,000 m²

Plot Size / Gross Area

Approx. 20,000 square meters

Gross Floor Area (GFA)

Approx. 28,000 square meters

Floor Space Index (FSI)

Approx. 1

Number of Units /Members

200-220 housing units

Average Living Area per Unit

Approx. 49-72 square meters

Ratio of Private to Communal Areas

5-10% communal and commercial areas

The Bridgeside Cooperative Lisbon features a dynamic five-story residential block that extends nearly 300 meters in length, forming a gracefully stretched parabolic arc along the edge of a 20,000-square-meter site. This architectural gesture not only bridges two heterogeneous settlement components of the surrounding urban fabric, but also urbanistically connects the two Lisbon districts of Marvila and Beato, whose boundary runs directly through the property.

At first glance, the sheer size of the block may seem intimidating. However, its value as both a design statement and an urban solution quickly becomes apparent. The building's form is an evolution rooted in the archetype of the atrium house—a typology that historically provided monks in monasteries and convents with homes centered around a green courtyard. This theme has been favorably adopted by architects in the design of housing cooperatives, as evidenced in case studies like La Borda, which incorporates an atrium within a perimeter block, and WagnisArt, where multiple standalone buildings are connected via rooftop bridges to create a central gathering space. The Bridgeside Cooperative embodies this concept by generating a sense of community through a grand, unifying, and embracing form that encloses a vibrant neighborhood park at its center. This park offers abundant recreational opportunities for all ages and is openly accessible not only to cooperative members but also to the entire neighborhood. The overarching goal is to connect—old

with young, affluent with less privileged, members with guests. This ethos of connection is further reflected in the design of the apartments on the upper floors. All units are accessed via a central, three-meter-wide access gallery that serves not only as a circulation space but also as a high-quality meeting and recreational area. This almost 300-meter-long balcony allows the hundreds of cooperative members to experience a sense of togetherness without sacrificing a healthy level of privacy—a balance maintained by the building's considerable size. Residents are private yet connected, individuals yet part of a collective endeavor. The project's name, Bridgeside Cooperative, also hints at its urban form and intent. In addition to its unifying effect on the urban fabric and the framing of a neighborhood park, the parabolic residential block acts as a protective barrier for the adjacent settlement to the west. Without this new construction, the existing community would be exposed to the noise from the planned new bridge to the east of the property—a project slated to commence within the current decade to establish a third crossing over the River Tagus.

Through its innovative design, the Bridgeside Cooperative Lisbon not only provides high-quality housing but also fosters community interaction, mitigates urban noise pollution, and strengthens the connection between disparate neighborhoods—truly embodying the spirit of bridging communities.



Changing the trajectory of the bridge



Protecting the Surroundings from the noise pollution emitted by the bridge

It makes sense to propose to the municipality of Lisbon a modification of the existing plans for the access routes to the new bridge over the Tagus River. The change would ensure that both the property and the surrounding residential area remain habitable, allowing the urban design gesture to position itself protectively in front of these sites. Simultaneously, a sharper curve in the roadway is suggested, which could serve as a compelling argument for enforcing a speed limit on vehicles crossing the bridge, thereby further reducing the noise pollution it generates.



Redirecting the access to the roundabout from north would also preserve the only historically valuable street in the area. (Map to the left shows the area around the Plot in 1940) Source: Camara Municipal Lisboa

The parabolic gesture of the urban design can be further extended by shifting the bridge access to the east. This would create a larger enclosed neighborhood park to the west of the residential block. The outer edge of the parabola is formed by extending the urban boundaries of the six-story residential buildings at the southern end and the two-story buildings at the northern end of the site.

Excuse

Inspiration for the Urban and Architectural Design

In the beginning there was the atrium house...

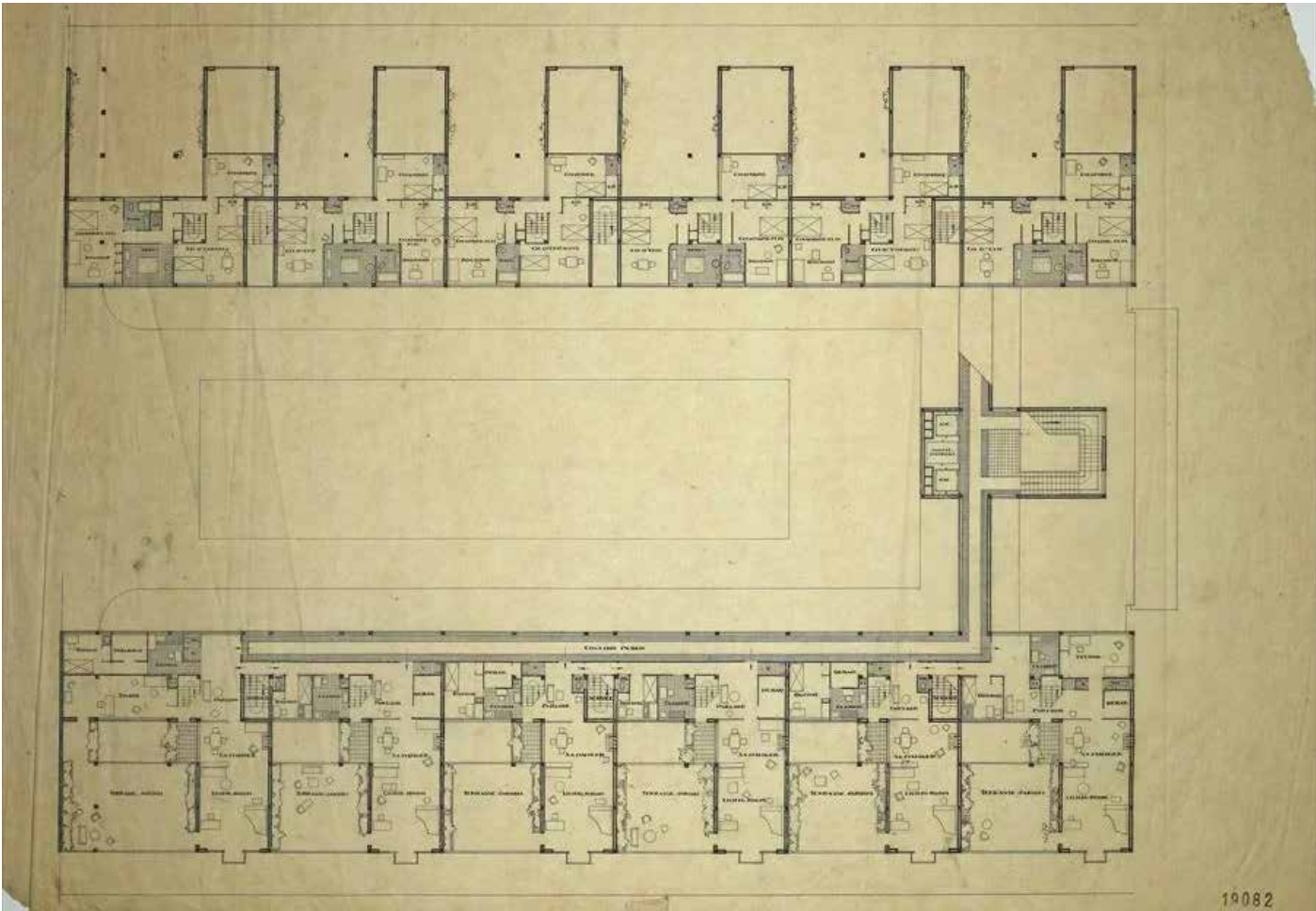
The origin of the architectural and urban design lies in the typology of the atrium house. The research on the topic of cooperative housing in Lisbon revealed a clear overlap in this regard: the typology of the atrium was found again and again within the case studies of successful European projects in the field of cooperative housing. Whether in a very clear form, as in the inner courtyard of the cooperative "La Borda" by the Spanish architectural firm LaCol, which was clearly derived from the Familistère de Guise, or in an abstract form, as in the Munich WagnisArt, a grouping of solitary units that have bridge-like connections on the attic level and at the same time create an inner courtyard. Projects like Kalkbreite in Zurich, like LaBorda, can clearly be assigned to the atrium house type.

As part of the analysis of the area around the property and its history, it turns out that convents have historically played a dominant role in shaping the surrounding development in Marvila and Beato and can still be found today. More than half a dozen convents can still be found in the area. These also do justice to the archetype of the atrium house.

Starting from this archetype at the beginning of urban planning not only becomes relevant through Europe's contemporary projects in the area of housing cooperatives, but a historical revival of this model can also be argued.

The starting point is thereby the original form of the square atrium house and within a long process in which the urban development and functional context is negotiated, the atrium is transformed into a dynamic gesture that creates a protective openness for itself and the surroundings, without losing the connecting and community-generating elements of the atrium house.

Immeubles-Villas from Le Corbusier
(Photo from FLC/ADAGP)



The Familistère de Guise is a very obvious model for LaCol's La Borda and its closed atrium.
(Photo from Collection musée de Guise)

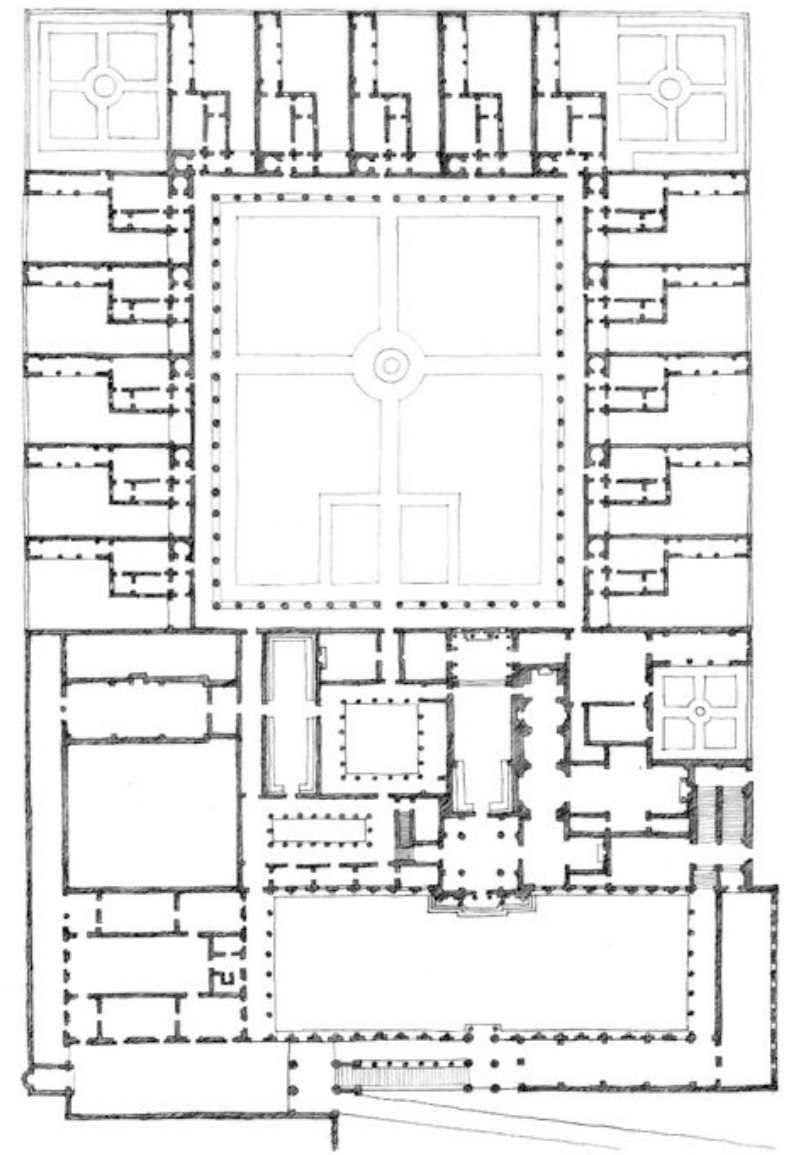


Convento do Beato
(Photo from conventodobeato.com)



Convento de Santos-o-Novo
(Photo from Wikipedia)

Convento de Santos-o-Novo
(Photo from Wikipedia)



Convents like the Certosa di Ema can be seen as the origin of many of today's successful architectural designs of contemporary Cooperative Housing Projects. Houses arranged around a central courtyard with a gallery as a connecting element create the ideal space for a cooperative and communal living. Even Le Corbusier used it as inspiration for his concept "Immeubles Villas" (Picture on page 144).

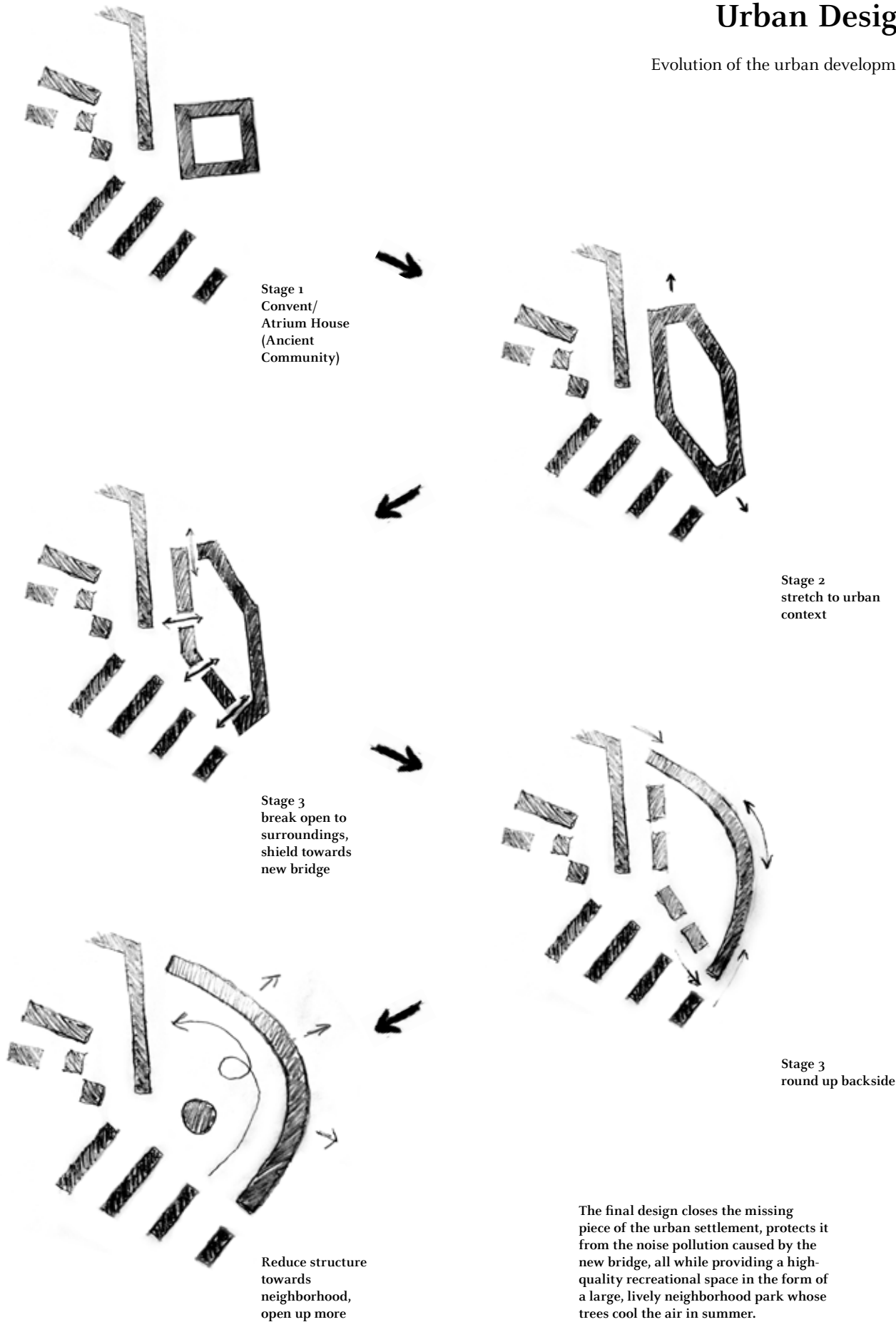




north-facing Siteplan

Urban Design

Evolution of the urban development



Exploded Isometric Drawing

While the upper floors are intended exclusively for living and partly (adapted to demand) for office space, the entire ground floor with closed and open areas benefits the community and the surrounding area. Depending on requirements, those areas are preferably used/rented by members of the cooperative or rented to third parties, in which case the rental income benefits the cooperative. A kindergarten meets the urgent demand in Lisbon for childcare places and at the same time contributes to the demographic diversity of the cooperative. At the same time, barrier-free apartments enable the demographic spectrum to be expanded at the upper end.

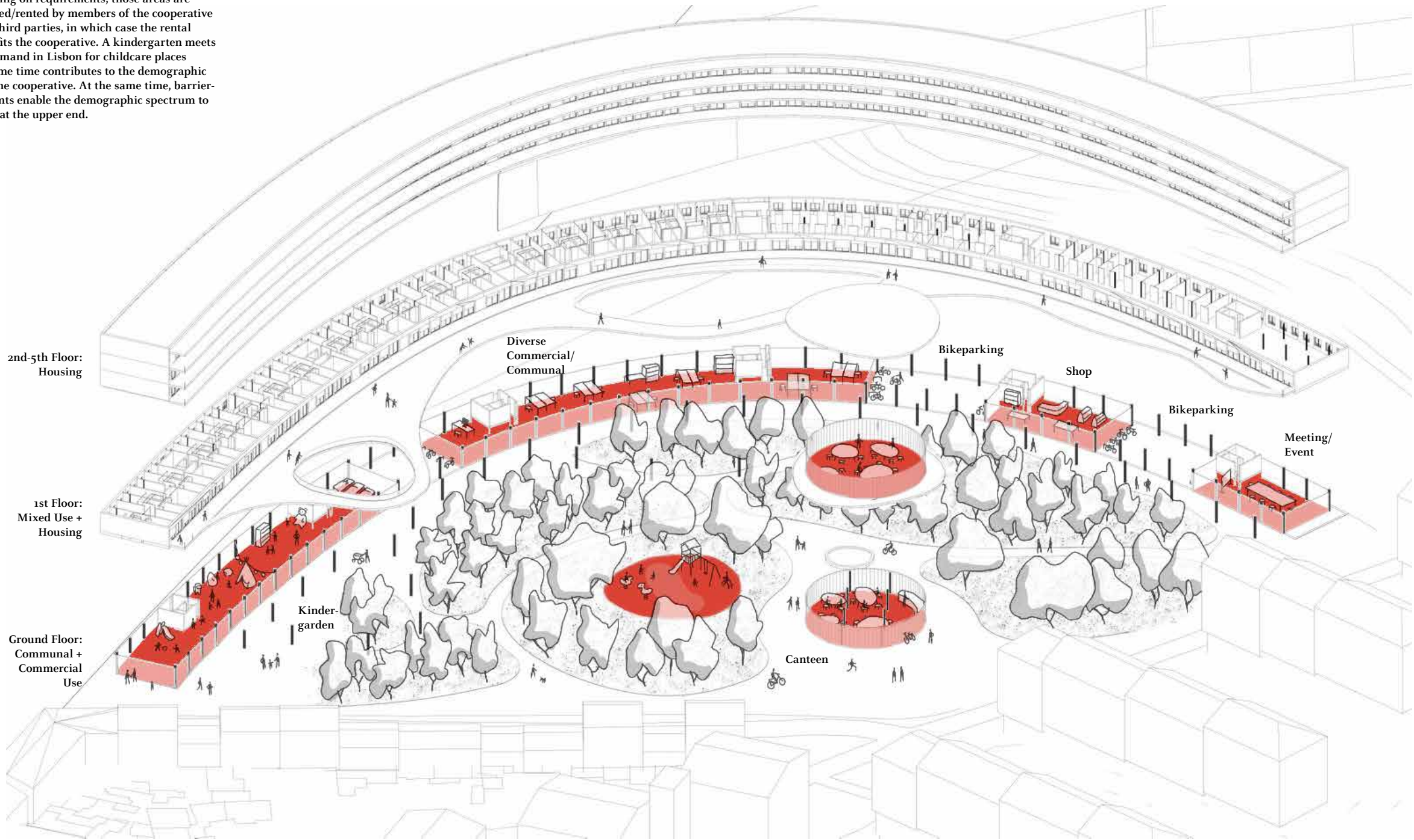
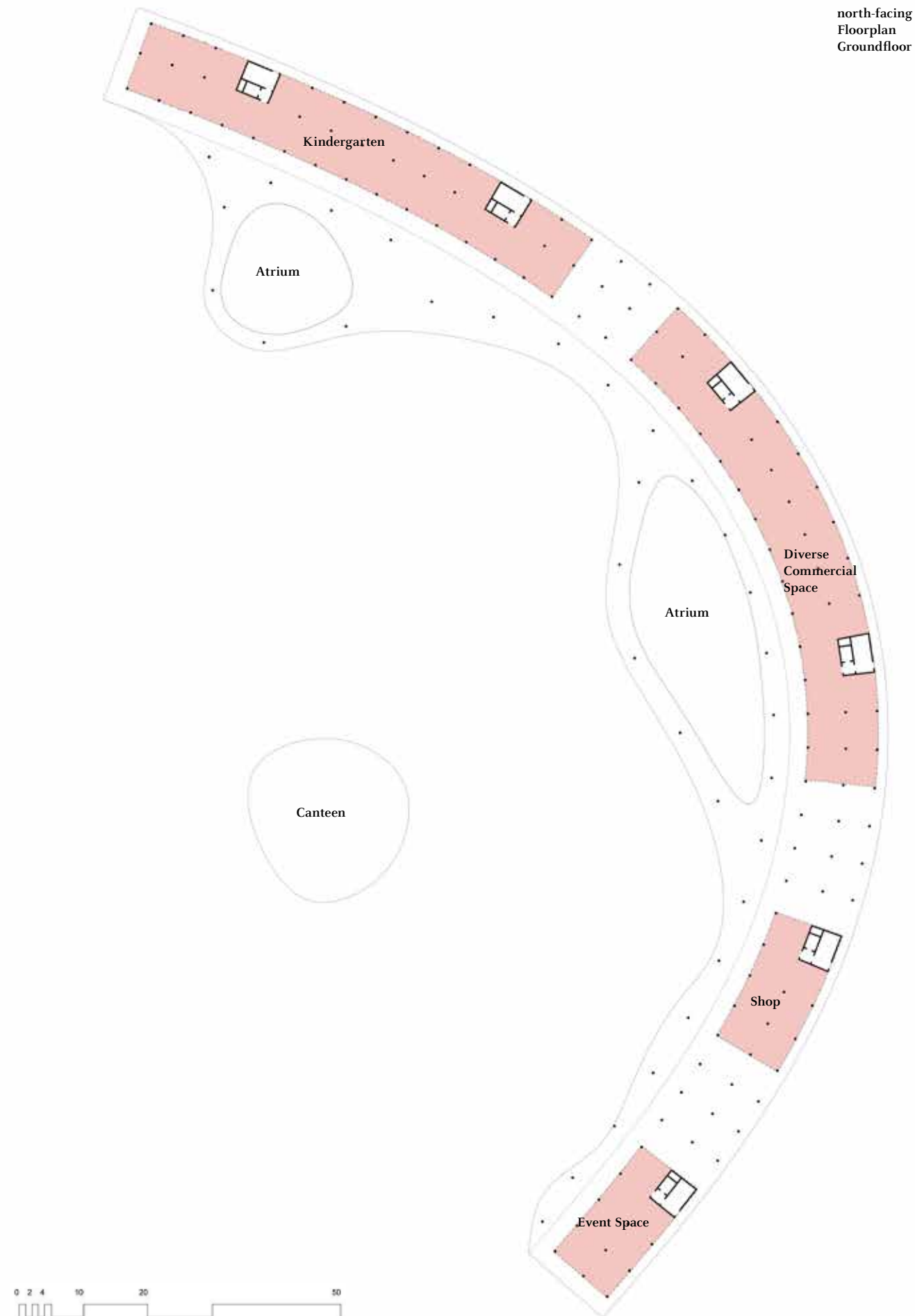


Table of Areas & Project Metrics

Functions of the diverse areas

Plot Size Approx. 28,000 m ²
Net Floor Area Approx. 20,000 m ²
Floor Space Index (FSI) Approx. 1,0
Gross Floor Area Approx. 28,000 m ²
Communal + Commercial Areas (without open spaces) Approx 2660 m ² (10-15% of overall NFA)
Office Area Approx. 1110 m ² (adjustable to demand)
Number of Units 200-220 Housing Units (adjustable to demand)
Kindergarden Approx. 690 m ²
Unit Sizes 23 m ² - 72 m ²
Ratio of Apartment Types Adapted to exact demand as part of a participatory design process. However, the predominance is on smaller apartment types.



Floor Plans

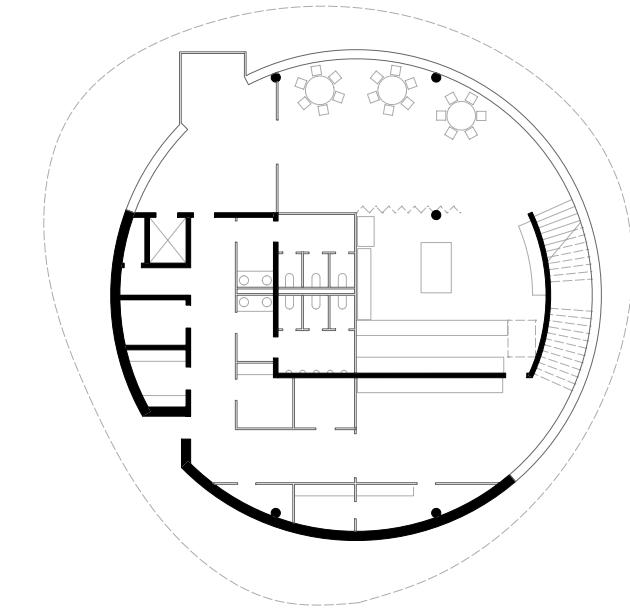
The ground floor plan of the cooperative housing project is meticulously designed to benefit both the residents and the broader community. The column grid is strategically planned to accommodate an underground parking garage, ensuring structural efficiency throughout the building.

At the northern end of the parabolic structure, the large block is dedicated to a kindergarten. This facility not only addresses the significant demand for childcare services in Lisbon but also enhances the demographic diversity of the community by attracting young families. The inclusion of the kindergarten enriches the community fabric and provides essential support for working parents.

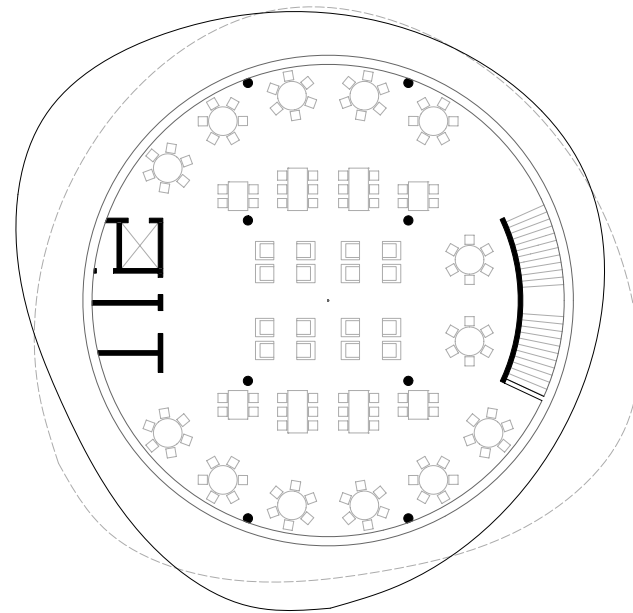
The remaining blocks are allocated for commercial and community-oriented functions such as an event space, hairdresser, shops, and a mini-market. The specific functions of these spaces will be determined through a participatory design process involving the architect, stakeholders, and cooperative residents. This collaborative approach ensures that the facilities align with the actual needs and desires of the community.

At the center of the park stands a distinctive blob-shaped building, serving as an urban landmark and a communal gathering spot for all residents of the surrounding area and the cooperative. With its two floors, it offers ample space to accommodate singles, families, the elderly, working professionals, and other local inhabitants, especially during lunchtime. The building fosters community interaction and contributes to social cohesion.

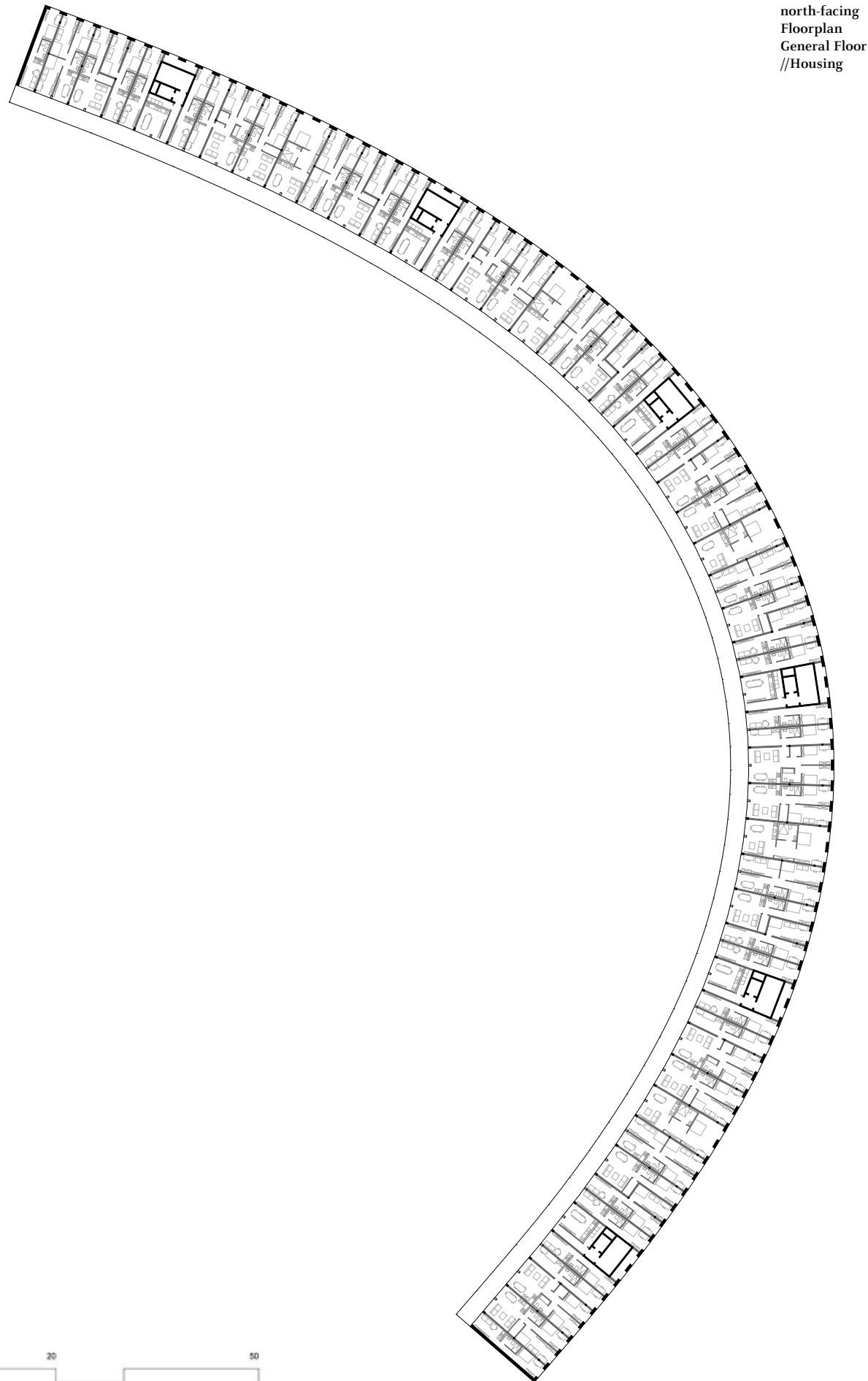
An organically extending canopy from the blob-shaped building reaches into the inner courtyard, creating a variety of inviting outdoor spaces. These differentiated areas enhance the quality of the environment and can be utilized by the kindergarten to the north, offering additional spaces for children's activities and community events.



Floorplan Canteen
Groundfloor

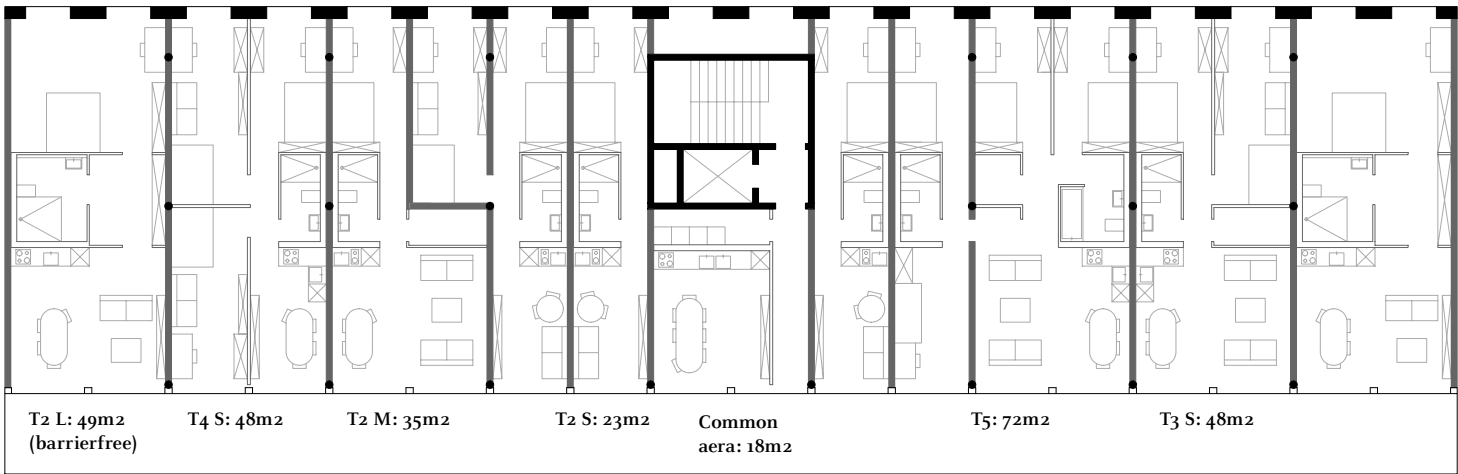


Floorplan Canteen
Upper Floor



north-facing
Floorplan
General Floor
//Housing

Floor Plans



Floor plans of apartment types

Apartment Floor Plans on the Upper Floors

The upper floors of the Bridgeside Cooperative Lisbon are thoughtfully designed to offer a versatile and inclusive living environment that caters to a diverse community. The building's grid system and depth enable not only residential use but also the flexibility to accommodate various office layouts, such as open-plan offices, group offices, and combi-offices. This adaptability ensures that both living and working spaces can be tailored to meet current and future needs.

Flexible and Participatory Design

A key feature of the design is its support for participatory design processes. The flexible grid allows residents to actively engage in shaping their living spaces, ensuring that the apartments meet their specific needs and preferences. This collaborative approach results in a relevant and responsive spatial program, with apartment types that are both generous and highly efficient.

Variety of Apartment Types

The residential units vary in size and layout, ranging from two to five rooms, and are available in different configurations. This variety ensures that individuals and families of all sizes can find a home that suits them, including those with a smaller budget. The apartments are designed with efficiency in mind, particularly in the layout of sanitary areas, maximizing usable space without compromising comfort.

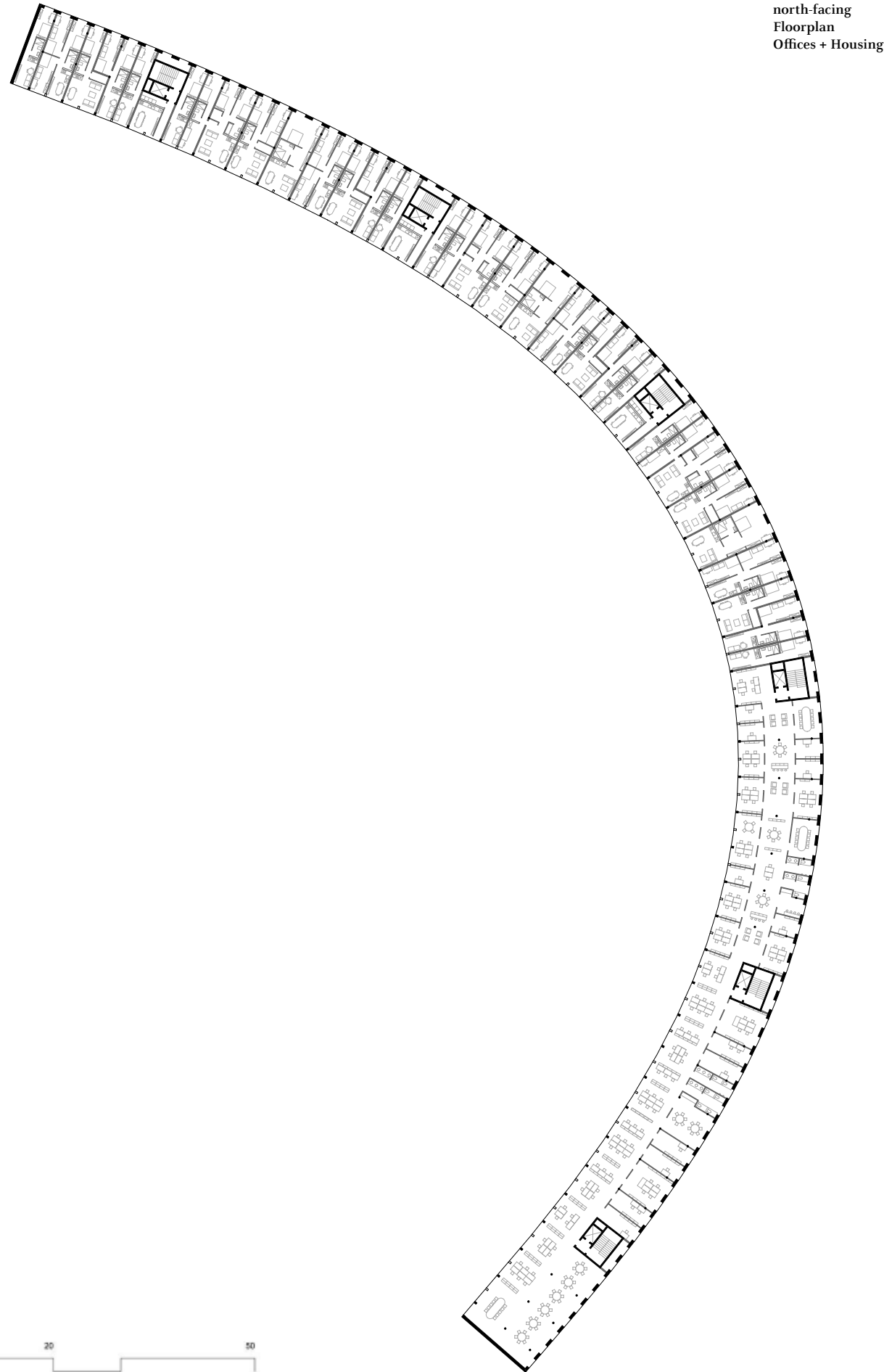
Age-Appropriate and Accessible Living

Inclusivity is a cornerstone of the cooperative's philosophy. The design accommodates age-appropriate living options and includes wheelchair-accessible units, making the building welcoming to residents of all ages and abilities. This ensures that everyone, from young families to elderly individuals, can enjoy a comfortable and supportive living environment.

Community-Oriented Features

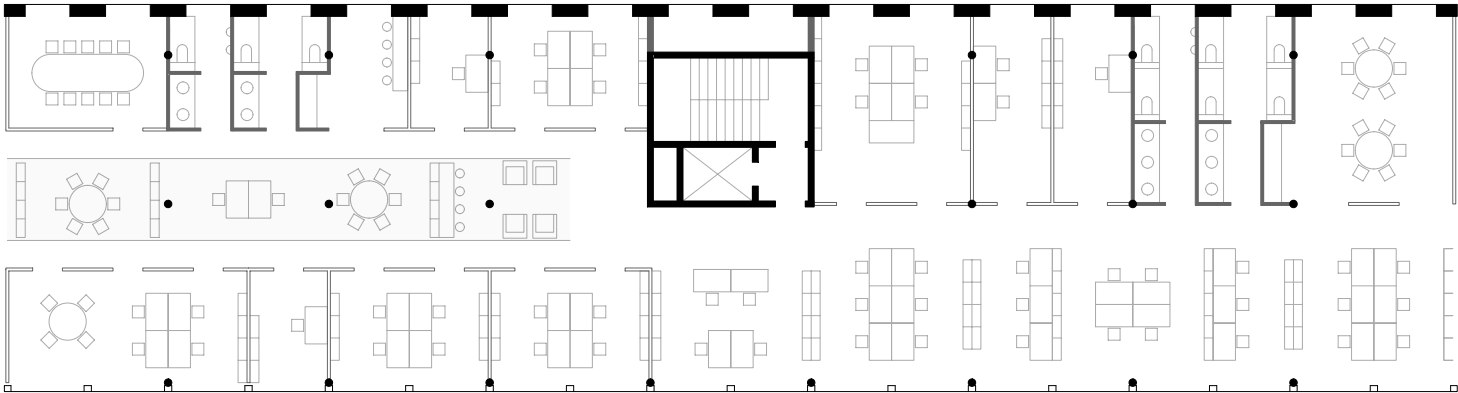
Each apartment has access to a central, three-meter-wide access gallery (Laubengang), which is more than just a corridor—it's a quality space for social interaction and relaxation. This gallery acts as an extension of the residents' own living areas, akin to a 300-meter-long balcony, fostering a strong sense of community while maintaining individual privacy.

The living spaces are oriented towards the inner courtyard, with large glass sliding doors that provide abundant natural light and seamless integration with the outdoors. The courtyard-facing façades are fully glazed, enhancing the connection with the vibrant neighborhood park below. Conversely, the façades facing the future bridge are designed with reduced exposure to mitigate noise pollution, ensuring a tranquil living environment.



north-facing
Floorplan
Offices + Housing

Floor Plans



Floorplan
Office Types

Communal Amenities

At each staircase on every floor, there are communal kitchens that serve as gathering spots for residents, encouraging interaction and fostering a sense of community. Adjacent to these kitchens are laundry rooms equipped with shared washing machines, promoting resource efficiency and collaboration among residents. This arrangement results in a total of 24 small communal areas on the upper floors, supplementing the communal functions on the ground floor.

On the ground floor, where there is a larger outdoor area, the communal spaces at the staircases can be designed more generously. These expanded areas provide opportunities for residents from multiple floors to come together, further enhancing the cooperative spirit.

Efficient and Sustainable Design

The overall concept emphasizes efficient floor planning, with a focus on the rational distribution of sanitary and utility areas. The consistent grid layout across the floors allows for variability in apartment designs and facilitates future adaptability, ensuring long-term sustainability.

Integration with the Neighborhood

The access gallery and the neighborhood park act as extensions of the residents' private living spaces, blurring the lines between individual and community areas. This design encourages residents to engage with their surroundings and contributes to a vibrant neighborhood atmosphere.

Scalability and Demand Accommodation

The floor plans and the number of apartments are adaptable based on participatory processes and demand. The cooperative anticipates accommodating approximately 200 to 220 apartments, with the exact number dependent on the demand for office space within the building.

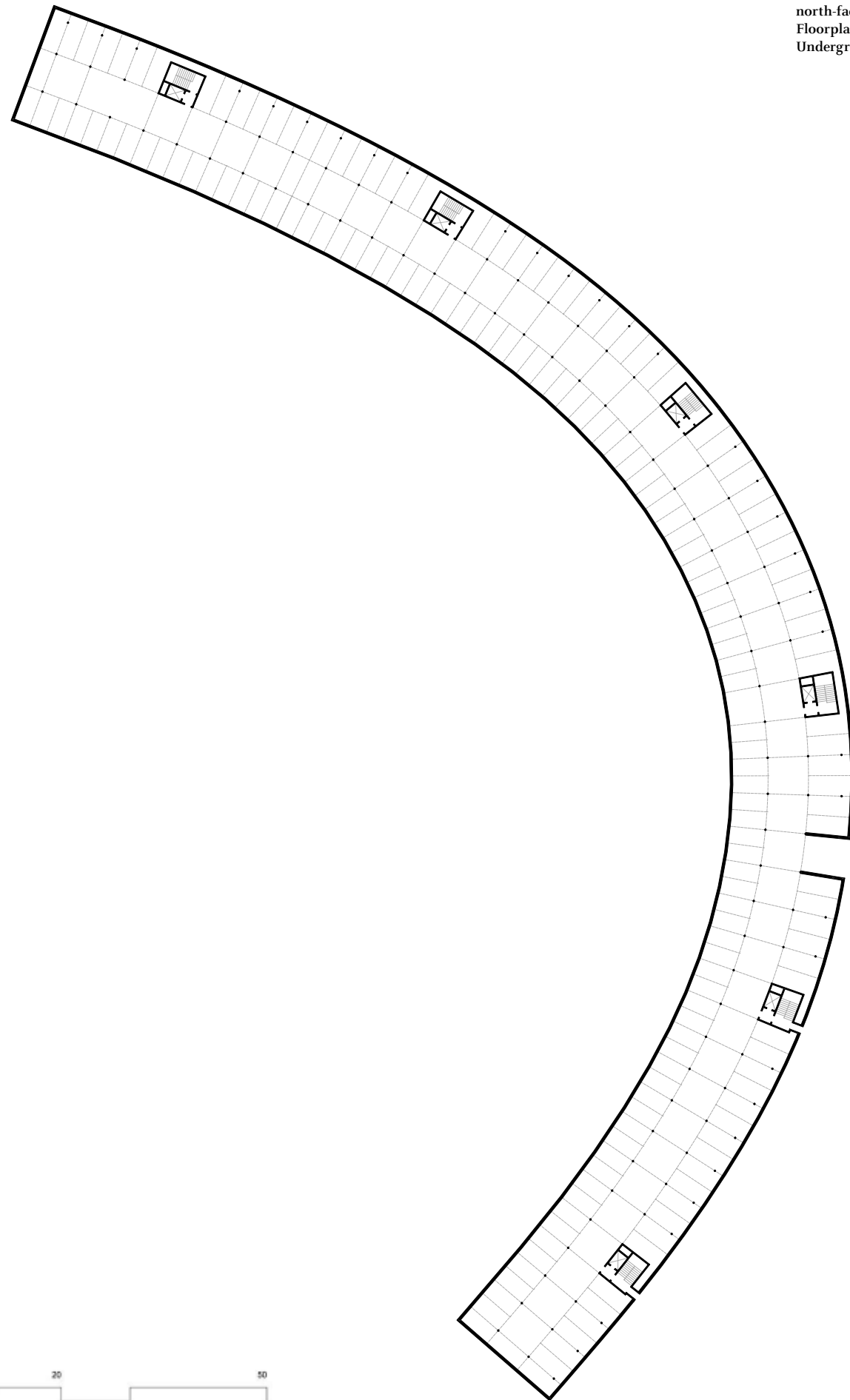
In addition to residential units, the upper floors of the Bridgeside Cooperative Lisbon are designed to accommodate versatile office spaces. The building's comprehensive grid system allows for office areas to be flexibly distributed throughout the entire structure. This flexibility supports various office typologies, including open-plan offices, group offices, and combi-offices, catering to a wide range of professional needs.

Flexible Floor Plan Design

The office spaces benefit from a free floor plan design, enabling tenants to customize layouts that best suit their organizational requirements. This adaptability ensures that businesses can create environments that foster both collaboration and individual focus. The ability to reconfigure spaces easily allows companies to adapt to changing team sizes and work styles over time.



north-facing
Floorplan
Underground Parking



Section



Section A-A
Close up

Promoting Communication and Concentration

The design of the office areas emphasizes the creation of spaces that promote effective communication while also providing quiet zones for concentration. Shared communal areas and meeting rooms are strategically placed to encourage interaction and idea exchange among employees. Simultaneously, private offices and designated quiet areas are incorporated to allow for focused work, ensuring a balanced and productive work environment.

Seamless Integration with Building Amenities

Occupants of the office spaces can take advantage of the building's communal amenities, such as the expansive access galleries and the neighborhood park. These areas serve as additional venues for informal meetings, networking, or relaxation during breaks, enhancing the overall work experience.

Sustainable and Efficient Design

The integration of office spaces within the residential building promotes a mixed-use environment, contributing to the sustainability of the urban area. By utilizing the same efficient grid and structural system, the offices share the building's resource-efficient features, such as optimized natural lighting from the large glazed façades facing the courtyard and sound insulation on the sides facing the bridge.

Conclusion

The inclusion of flexible and adaptable office spaces within the Bridgeside Cooperative Lisbon adds a dynamic layer to the building's function. By offering customizable work environments that promote both collaboration and concentration, the cooperative not only serves as a residential community but also as a vibrant professional hub. This integration of living and working spaces embodies the cooperative's commitment to connectivity and community, enriching the lives of both residents and professionals alike.

Facades / Sections



Photos of the surroundings - Multi-storey apartments, including social housing of the municipality dominate the surrounding development to the west of the property



Facade - Inside the Courtyard

The face of the large parabolic residential block draws aesthetically from the multi-storey apartment buildings in the surrounding area. Both the subtle, calm pastel colors of the facades and the structure of the facades themselves are reinterpreted in a modern way in the design. The playfully rhythmically changing colors that Lisbon is known for and which decorate some of the city's buildings. In addition to this color palette, the residents of the cooperative will breathe life into the facades with their own individuality.

Section A-A



Facades / Sections



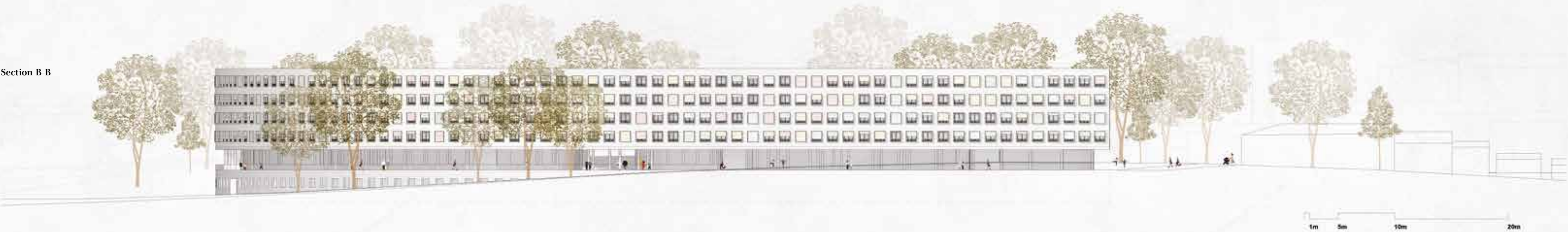
Photos of the surroundings - The 2-story development on the historic street with saddle-roof houses to the west of the property, as well as the characteristic saddle-roof houses of the Madre de Deus settlement, inspire the outside of the parabolic-shaped cooperative.



Facade - View from Outside

While the façade on the inner courtyard side of the residential block is based more on the multi-story apartment buildings in the area, the façade facing the bridge is an interpretation of the façades of the small historic street to the west with 1-2 storey gable roof houses. The often used window jambs are interpreted in a modern way. The result is a very strict and homogeneous image of a perforated facade, which is also broken up here by the rhythm of the colors and also by the dynamic urban form of the building. This makes the very strict urban development gesture dynamic and lively at the same time.

Section B-B



View from the Galleries
Visualization



Appendix

Anhang

Bibliography & Sources

Books and Book Chapters

Agarez, R. (Ed.). (2018). *Habitação: Cem Anos de Políticas Públicas em Portugal 1918–2018*. Lisbon: Instituto da Habitação e da Reabilitação Urbana.

Includes: Pedrosa, P. S. (2018). "As cooperativas de habitação portuguesas: o jogo dos possíveis" (pp. 280–315). URL: http://www.portaldahabitacao.pt/opencms/export/sites/porta1/pt/porta1/100anoshabitacao/af_IHRU_Habitacao_Social.pdf

Akcan, E. (2018). *Open Architecture: Migration, Citizenship and the Urban Renewal of Berlin-Kreuzberg* by IBA 1984/87. Basel: Birkhäuser.

Conference video: <https://www.youtube.com/watch?v=G1Vq-KSAXEo>

Bandeirinha, J. A. (2007). *O Processo SAAL e a Arquitectura no 25 de Abril de 1974*. Coimbra: Imprensa da Universidade de Coimbra.

Kleihues, J., & Klotz, H. (Eds.). (1986). *International Building Exhibition Berlin 1987: Examples of a New Architecture*. New York: Rizzoli.

Sardo, D. (Ed.). (2014). *The SAAL Process: Architecture and Participation 1974–1976*. Porto: Serralves Museum.

URL: <https://search.worldcat.org/title/saal-process-architecture-and-participation-1974-1976/oclc/898471107>
Tostões, A., Wang, W., & Becker, A. (Eds.). (2007). *Portugal: Architektur im 20. Jahrhundert*. Munich: Prestel Verlag.

Turner, J. F. C. (1972). "Housing as a Verb." In Turner, J. F. C., & Fichter, R. (Eds.), *Freedom to Build*. New York: Macmillan.

Choay, F. (1979). *L'urbanisme, utopies et réalités: Une anthologie*. Paris: Éditions du Seuil.

Cole, L. (n.d.). *Under Construction: A History of Co-operative Housing in Canada*.

Kuhnert, J., & Leps, O. (n.d.). *Neue Wohnungsgemeinnützigkeit*. Wiesbaden: Springer Fachmedien.

Journal Articles and Academic Papers

Antunes, G. (2019). Social housing policy in Portugal: from 1974 to the present.

Forum Sociológico, (34), 7–17. URL: https://www.researchgate.net/publication/335426826_Politica_de_habitacao_social_em_Portugal_de_1974_a_atualidade

Farha, L. (2019). Access to justice for the right to housing. UN Human Rights Council.

Hegedüs, J., Horváth, V., & Somogyi, E. (2014). The potential of social rental agencies within social housing provision in post-socialist countries: The case of Hungary. *European Journal of Homelessness*.

Tosics, I. (2019). The housing paradox: what can local municipalities do? *URBACT*. URL: <http://urbact.eu/housing-paradox-what-can-local-municipalities-do>

Cooper, M., & Rodman, M. C. (n.d.). *Accessibility and Quality of Life in Housing Cooperatives*. Environment and Behavior.

Gonzalez, A. (n.d.). *Housing Cooperatives and Environmental Sustainability*.

Kipkures, B. M., & Kibati, P. (n.d.). Influence of Financial Planning on Sustainability of Housing Cooperatives in Nakuru County, Kenya.

Gagyí, A. (n.d.). *Public Finance for the Future We Want*.

David, B. (1976). "Le SAAL ou l'Exception Irrationnelle du Système." Casabella.

Reports and Official Documents

European Union Housing Report. (2024). *Finding Together a Solution to the Growing Housing Crisis*.

Lisbon Social Housing Policy Report. (2023).

OECD. (2023). *Demographic Statistics*.

World Bank. (2023). *Urbanization Report*.

Banco de Portugal. (2023).

Instituto Nacional de Estatística (INE). (2023).

Câmara Municipal de Lisboa. (2023).

Confidencial Imobiliário. (2022). Data on housing availability and social housing stock.

Eurostat. (2022, 2023).

Lisbon Green Spaces Report. (2023).

World Bank GINI Index. (2023).

Magazines and Newspaper Articles

Almeida, H., & Goyeneche, A. (2023). "Portugal's attempts to block wealthy foreign home buyers aren't working as Lisbon house prices keep rising—past Milan, Madrid, and Berlin." *Fortune*. URL: <https://fortune.com/2023/10/02/portugal-wealthy-foreign-home-buyers-lisbon-house-prices-rising/>

Essential Business. (2024). "The four root problems of Portugal's housing crisis."

The Guardian. (2023). "Portugal's bid to attract foreign money backfires as rental market goes 'crazy'." URL: <https://www.theguardian.com/world/2023/mar/01/portugal-bid-attract-foreign-money-backfires-rental-market>

L'Architecture d'Aujourd'hui, No. 185. (1976). "Portugal."

Kaltenbach, F. (2022). "La Borda: A Case Study in Cooperative Housing." *Detail*, (3).

Ott, C. (2019). "La Borda: Architectural

Innovation and Social Impact." *Architectural Journal*.

Geipel, K. (2016). "WagnisART: Urban Connectivity and Social Innovation." *Stadtbauwelt*.

Papazoglou, L. (2016). "Verzwickte Lage, mutiges Projekt." *Hochparterre*, May.

Thiesen, C. (2016). Interview in *Hochparterre*, May.

Websites and Online Resources

Lisboa Occidental SRU. (n.d.). Official Website. URL: <https://www.lisboaocidentalnsru.pt/>

Lisboa Para Pessoas. (2024). "Lisbon City Council advances with a program to build affordable housing through cooperatives." URL: <https://lisboaparapessoas.pt/2024/03/17/lisboa-programa-construcao-habitacao-cooperativas/>

Câmara Municipal de Lisboa. (2023). "Municipal Master Plan – Zoning and Urban Space Qualification Map." URL: https://www.lisboa.pt/fileadmin/porta1/temas/urbanismo/planeamento_urbano/PDM/PDM_planta_ordenamento_qualificacao_espaco_urbano.pdf

World Economic Forum. (2024). Information on government initiatives and market risks. URL: <https://www.weforum.org/>

Coop Housing International. (n.d.). Resources on the legal framework and governance of cooperative housing. URL: <https://www.housinginternational.coop/>

CHF Canada. (n.d.). "History of Co-op Housing." URL: <https://chfcanada.coop/about-co-op-housing/history-of-co-op-housing/>

National Cooperative Law Center. (n.d.). "A History of Housing Cooperatives." URL: [Link not provided]

Housing Co-op Association. (n.d.). "What is a housing cooperative?" URL: <https://learn.robinhood.com/articles/6qTZVdwjSGoowZxZLqAkQi/what-is-a-housing-cooperative/>

Global Communities. (n.d.). "Addressing Housing Challenges through Cooperatives." URL: <https://globalcommunities.org/>

Western Sydney University. (2024). "First national study reveals housing cooperatives could be part of the solution to Australia's rental crisis." URL: https://www.westernsydney.edu.au/newscentre/news_centre/more_news_stories/2024-first-national-study-reveals-housing-cooperatives-could-be-part-of-the-solution-to-australias-rental-crisis

AESOP Planning. (n.d.). "What do we know about Cooperative Housing? Comparative analysis of the legal frameworks in five countries." URL: [Link not provided]

CCH Cooperative Housing. (n.d.). "Good Governance and Principled Leadership for Housing Co-ops." URL: <https://www.cch.coop/>

Wikipedia. (n.d.). "Housing cooperative." URL: https://en.wikipedia.org/wiki/Housing_cooperative

ResearchGate. (n.d.). "Social housing policy in Portugal from 1974 to the present." URL: https://www.researchgate.net/publication/335426826_Politica_de_habitacao_social_em_Portugal_de_1974_a_atualidade

YouTube. (n.d.). "Conference on Open Architecture by Esra Akcan." URL: <https://www.youtube.com/watch?v=G1Vq-KSAXEo>

Projects and Case Studies

La Borda Housing Cooperative (Barcelona, Spain)

Lacol. (n.d.). "Project Description: La

Borda." URL: <https://www.lacol.coop/projectes/la-borda/>
ArchDaily. (2021). "La Borda – Architectural Details." URL: <https://www.archdaily.com/971631/la-borda-collective-housing-lacol-plus-laboqueria>

Kalkbreite Residential and Commercial Complex (Zurich, Switzerland)
Müller Sigrist Architekten. (n.d.). "Project Kalkbreite." URL: <https://www.muellersigrist.ch/projekt/wg-kalkbreite/>
Kalkbreite Cooperative. (n.d.). Official Website. URL: <https://www.kalkbreite.net/>
Wikipedia. (n.d.). "Wohn- und Gewerbebau Kalkbreite." URL: <https://de.wikipedia.org/wiki/Kalkbreite>

BIGyard (Berlin, Germany)
Zanderroth Architekten. (n.d.). "Project BIGyard." URL: <https://www.zanderroth.de/projekt/bigyard/>
ArchDaily. (2016). "BIGyard – Project Information." URL: <https://www.archdaily.com/793287/bigyard-zanderroth-architekten>
Mies van der Rohe Award. (n.d.). "Project Details." URL: <https://www.miesarch.com/work/1586>
Bauwelt. (n.d.). "BIGyard Article." URL: <https://www.bauwelt.de/themen/bauten/bigyard-baugruppe-berlin-prenzlauer-Berg-zanderroth-2159306.html>

Wohnprojekt Wien (Vienna, Austria)
einszueins architektur. (n.d.). "Project Wohnprojekt Wien." URL: <https://www.einszueins.at/projekte/wohnprojekt-wien/>
Wohnprojekt Wien. (n.d.). Official Website. URL: <https://www.wohnprojekt-wien.at/>

WagnisART (Munich, Germany)
Bogevischs Buero Architekten & Stadtplaner. (n.d.). "Project WagnisART." URL: <https://www.bogevisch.de/projekte/wagnisart/>
Wagnis eG Cooperative. (n.d.). Official Website. URL: <https://www.wagnis.org/>

Spreefeld Berlin (Berlin, Germany)
Bau- und Wohngenossenschaft Spreefeld Berlin eG. (n.d.). Official Website. URL: <https://www.spreefeld-berlin.de/>
Carpaneto Architekten. (n.d.). "Project

Spreefeld." URL: <https://www.carpaneto.de/projects/spreefeld-berlin/>

Gleis 21 (Vienna, Austria)
einszueins architektur. (n.d.). "Project Gleis 21." URL: [https://gleis21.wien/Holzbau Austria. \(2021\). "Innovative Wood-Hybrid Construction in Gleis 21." URL: https://www.holzbauaustria.at/aktuelles/gleis21/](https://gleis21.wien/Holzbau Austria. (2021).)
Diakonie Flüchtlingsdienst. (n.d.). "Gleis 21: A Model of Solidarity." URL: <https://www.diakonie.at/fluechtlingsdienst>

R50 – Cohousing (Berlin, Germany)
ifau and Jesko Fezer, Heide & von Beckerath. (n.d.). "Project R50." URL: <https://www.ifau.berlin/projekte/r50/>
ArchDaily. (n.d.). "R50 – Cohousing Project." URL: <https://www.archdaily.com/604923/r50-cohousing-ifau-heide-and-von-beckerath>

Marmalade Lane Cohousing Development (Cambridge, UK)
Mole Architects. (n.d.). "Project Marmalade Lane." URL: <https://molearchitects.co.uk/project/marmalade-lane/>
Marmalade Lane. (n.d.). Official Website. URL: <https://www.marmaladelane.co.uk/>
The Guardian. (2019). "Article on Marmalade Lane." URL: <https://www.theguardian.com/artanddesign/2019/may/08/marmalade-lane-co-housing-cambridge>

Viva Housing Cooperative (Gothenburg, Sweden)
Malmström Edström Arkitekter Ingenjörer. (n.d.). "Project Viva Housing Cooperative." URL: <https://www.metalocus.es/en/news/materiality-and-contrast-viva-housing-co-operative-malmstrom-edstrom-arkitekter-ingenjorer>
Mies van der Rohe Award. (n.d.). "Project Details." URL: <https://miesarch.com/work/4863>

Schoonschip Amsterdam (Amsterdam, Netherlands)
Schoonschip Amsterdam. (n.d.). Official Website. URL: <https://schoonschipamsterdam.org/en/>
Space&Matter. (n.d.). "Project Schoonschip." URL: <https://www.spaceandmatter.nl/work/schoonschip>
Detail Magazine. (n.d.). "Floating

Community Schoonschip." URL: https://www.detail.de/de_de/schwimmende-wohngemeinschaft-schoonschip-in-amsterdam-35000

La Balma Housing Cooperative (Barcelona, Spain)
Lacol. (n.d.). "Project La Balma." URL: <https://www.lacol.coop/projectes/la-balma/>
Sostre Cívic. (n.d.). "Project La Balma." URL: <https://sostrecivic.coop/en/projectes/la-balma/>
ArchDaily. (2021). "La Balma – Collective Housing." URL: <https://www.archdaily.com/971631/la-balma-collective-housing-lacol-plus-laboqueria>

Kraftwerk1 Zwicky Süd (Zurich, Switzerland)
Kraftwerk1 Cooperative. (n.d.). Official Website. URL: <https://www.kraftwerk1.ch/>
Schneider Studer Primas Architekten. (n.d.). "Project Description." URL: <https://www.sspag.ch/projekte/wohnen/zwicky-sued/>
Papazoglou, L. (2016). "Verzwickte Lage, mutiges Projekt." Hochparterre, May.

Statistical Data and Surveys

Instituto Nacional de Estadística (INE). (2023). URL: <https://www.ine.pt/>

Eurostat. (2022, 2023). URL: <https://ec.europa.eu/eurostat>

World Bank. (2023). Urbanization Report, GINI Index. URL: <https://data.worldbank.org/>

OECD. (2023). Demographic Statistics. URL: <https://www.oecd.org/statistics/>

Banco de Portugal. (2023). URL: <https://www.bportugal.pt/>

Turismo de Lisboa. (2023). URL: <https://www.visitlisboa.com/>

Metropolitano de Lisboa. (2023). URL: <https://www.metrolisboa.pt/>

Serviço de Estrangeiros e Fronteiras (SEF). (2023). URL: <https://www.sef.pt/>

University of Lisbon. (2023). URL: <https://www.ulisboa.pt/>

Other Sources

Network for Public Health Law. (n.d.). URL: <https://www.networkforphl.org/>

Hudson Architects. (n.d.). The Housing Crisis Unveiled: Exploring Challenges and Architectural Solutions.

World Economic Forum. (n.d.). Reports on mixed-use developments and modular construction. URL: <https://www.weforum.org/>

Ashworth, J. S. (2024). The Housing Crisis Unveiled: Exploring Challenges and Architectural Solutions.

Saraiva, T. M., Cera, N., & Albani, J. (2020). A Casa: Uma Revolução Assim... [Video Essay].

