45 EXAMPLES of Socially Relevant [Urban] Housing Typologies

FIVE Variations Of NINE [Urban] Housing Typologies
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La Playa
Ana Elvira Velez
Medellín, Colombia
2004
Density: 256 units at 338 units/hectare
Site area: 0.75 hectares

Located in the center of Medellín, Colombia, La Playa is built on a site of a demolished textile factory. The project’s location is in marked contrast to previous public housing projects that were relegated to the outskirts of the city. The project features three rectangular bars, five stories high, and shifted toward the south edge of the site in order to create a public space to the north. Two smaller open areas, framed by the zig-zagging shapes of the housing bars, are intended for residents instead of the general public. Each apartment begins as a basic 5 x 10.5 meter unit, with services along one shared wall. The remainder of the unit can be subdivided in multiple ways to allow for different configurations and number of bedrooms, depending on the needs and economic means of the resident. Each unit features a balcony, and the irregular placement of these balconies in relation to interior spaces help break down monotony on the façades. Oblong stairwells serve as vertical circulation to the units and provide a transition from public to private. These stairwells are often the site of impromptu social gatherings and other alternative uses.
Studio
One Bedroom
Two Bedroom
Three Bedroom
Four Bedroom

Group Public
Group Private
Family Public
Family Private

Site circulation
Site territory

Unit Types
- Studio
- One Bedroom
- Two Bedroom
- Three Bedroom
- Four Bedroom
Exterior view from green space

View between housing blocks

Interior circulation
Located on the edge of one of the piers along the IJ River in Amsterdam, Silodam makes reference both to the historic grain silos of this section of the city and to the modern stacked shipping containers so numerous along the Docklands. A central objective of the project is to mix together different users by dispersing a wide range of unit types throughout the project, rather than keeping the types separate. The housing units are organized into “neighborhoods” of 4-8 units of the same housing type and correspond to their exterior treatment on the façades. Housing units are varied, with different options for dimensions, construction type, outer spaces, floor heights, number of floors, type of access, number of rooms, and relationships between floors and views. In addition to the housing units, Silodam includes commercial spaces, offices, public spaces, two automated parking garages, and a space for mooring boats underneath a portion of the building.
Pedregulho Housing
Affonso Reidy
Rio de Janeiro, Brazil
1946-1952
Density: 570 units at 150 units/hectare
Site area: 3.8 hectares

The 260-meter long sinuous seven-story building of the Pedregulho Complex follows the natural contours of the site. Amenities of the project include recreation spaces for adults and children, primary school and kindergarten, market, laundry, health center, pool, gymnasium, and church. The project features two types of units: two-bedroom duplexes on the upper four stories and one-bedroom apartments on the lower two levels. On the third level, between these two types, is the main access to the site from the hill above, as well as vast open space for residents to use flexibly, as well as a nursery school, administration spaces and sheltered play areas. This level is articulated with pilotis showing a clear reference to Le Corbusier, a major influence for Reidy. Because of its siting on a hill, the project offers stunning views of the city. It also takes advantage of opportunities for natural ventilation through the use of porous clay tile along the façades where circulation occurs. The project separates the car completely from the complex. The overall complex includes smaller apartment buildings lower on the hill that feature three-bedroom units which can be adapted to have two or four bedrooms.

View from main access level
Plan Legend
1. City Reservoir
2. Apartments, Type I
3. Apartments, Type II
4. Apartments, Type III
5. Apartments, Type IV
6. Primary School
7. Gymnasium
8. Lockers
9. Pool
10. Basketball
11. Children’s Pool
12. Playground
13. Health Center
14. Laundry
15. Market
16. Nursery
17. Nursery School
18. Kindergarten
19. Underground Walk
20. Workshop
Original exterior views

Exterior views: current condition
The Macallen Building is one of the pioneering structures in the revitalization of the South Boston neighborhood of Boston. The long and narrow site is squeezed by highway ramps to the west, an industrial zone to the south, and the aging residential neighborhood of South Boston to the east. The façades respond to these conditions in their material treatment—a curtain wall towards the highway and views of downtown Boston beyond, and a brick façade towards the more historic buildings of the neighborhood. Bronzed aluminum panels on the north and south refer to the industrial zones surrounding the building and express not only the structural system of the project but also the organization of unit types contained within the project. The form of the building also responds to the transitional nature of the site; the 14-story west end that faces the office towers of the financial district slopes down to the 6-story brick façade that faces the smaller residential scale buildings. Duplexes along the slope feature roof terraces that take advantage of the unusual formal feature. The project is Boston’s first Gold LEED multi-family housing building.
Expression of structural system and unit module in the façade articulation

Roofscape

Façade detail

Private terrace
Located in the middle of one of the blocks in the South of Market neighborhood of San Francisco, the Yerba Buena Lofts feature 200 loft-style residences, parking, and ground-floor work spaces. According to the architect’s website, “The project is modeled on the city: a vertical grid is extruded, establishing a series of ‘lots’ for lofts.” The façades are articulated with alternating translucent glass “bay windows” and recessed balconies. Four floors of parking are concealed by two-story loft units on both sides of the project; six floors of two-story lofts sit above this parking, hiding it from view entirely. All lofts have double-height interior and exterior spaces. All service spaces, such as kitchen, bathroom, storage and stairs are pushed along one wall, optimizing free open space in the remaining portion of each loft. Inhabitants have greater freedom to personalize and customize their homes. All units offer direct connection between indoor and outdoor spaces and take advantage of California’s climate and culture in this way.
Low Rise/High Density Mat Housing

- Siedlung Halen
- Atelier 5
- Quinta da Malagueira
- Alvar Siza
- Hauser & Hilselway Streets
- COAL: Central Office of Architecture
- 60 Units, Chalutier le Forban Ave
- CIT Architecture
- Pines of Perinton
- Gwathmey Siegel Architects

Catherine Mote
Siedlung Halen
Atelier 5
Switzerland
1955-1961
Density: 79 units at 46 units/hectare
Site area: 1.69 hectares

Siedlung Halen is a housing community which was built as an experimental solution for the post-war housing problem in Switzerland. Halen’s site is a sloping field in a wooded area just 5km Northwest of Bern overlooking the Aare River below and a large municipal park to the South. The site connects residents to light and nature as well as offers the permanent absence of nearby buildings. The housing development is comprised of 79 units, each having access to private outdoor space. There is a small partially covered garden at the entrance that is seen from the kitchen and a longer partially covered garden at the bottom level. There are also shared community amenities such as a pool and a retail town square. Halen removes the car from the housing equation. Parking is located at the extremities of the site and in a large underground parking hall, allowing for free pedestrian movement along the site’s several walkways. The two types of housing units in this project are 4 and 5m wide, both three stories high, and were constructed as simply and as economically as possible. There are living spaces on the entry level, bedrooms and baths above and the bottom floor is a flex space that can be used as extra bedrooms or as a family room, studio, or workspace. Halen is the ultimate combination of safe private space and a communal lifestyle.
Site circulation

Group Public
Group Private
Family Public
Family Private

Unit types

Four Bedroom
Five Bedroom

Site territory

Group Public
Group Private
Family Public
Family Private

House Type A
House Type B
Quinta da Malagueira is a residential district just outside of Évora, Portugal. Realized in phases beginning in 1977, the district consists of 1,200 houses, infrastructures, and public facilities. There are two perpendicular vehicular axes of east-west and north-south which structure the gridded distribution of the single frontage lots. Two main house types were developed for the project, both are L-shaped back to back patio houses with the patio either in the front or back of the lot. Each two story dwelling can evolve from one to five bedrooms, fostering variety in the grid. The supply of water, energy, telephones, and television is carried by a system of elevated concrete block ducts providing covered protection over the primary pedestrian walkways. Public buildings and facilities, gardens, shops, a covered market square, church, school, restaurant, and a motel are currently in various stages of design and construction. Malagueira has aged well over the 30 years of its occupation. It was financed and maintained by the city of Évora, and because the residents were living under a combination of ownerships with 60% cooperatives, 35% rental and 5% privately owned as well as the existence of other rules limiting modifications to the original buildings, there is a strong sense of well-being and a high level of maintenance.
This housing densification project designed by the Central Office of Architecture for downtown Los Angeles in 1989 was unfortunately never realized. The design would have allowed for 40 units between Hauser and Ridgeley streets, occupying an entire block. There would have been a different type of house according to each privacy level of the site. Hauser Avenue is a heavily trafficked street so the units along Hauser would have been narrow at twenty-two feet, the minimum which will allow for two side by side parking spaces. These units are taller as well to deal with the street's scale. Being a much quieter street, Ridgeley units would have been thirty-three feet wide, two-story units with driveway access right off of the street. The most private of the unit types would have been the alley units, which are the tallest such that they would have access to light and air. Hauser and the alley unit parking are both along the alley. Each of the three housing types has access to private exterior courtyards. The living spaces for would have all been on the ground floor entry level. There are shared community facilities planned for the north end of the site. A retail office building and a storage area was proposed for the south end, creating a buffer between the houses and the busy commercial zone at the southern end of the project.
Courtyards: opportunity for personalization (top right)

Model views

Bird's eye view of intervention

Ridgeley façade

Hauser façade
This development consists of 40 rented social dwellings, a mixture of houses and apartments, forming a tight composition on a site that combines a panoramic view with close proximity to the center of the city. From first conception to final delivery, the housing on Avenue du Chalutier le Forban took ten years to complete. In order to tie the urban project into its context, the architects took cues from the vernacular. There are pedestrian alleyways, stone walls, and enclosed gardens familiar to the fabric of Plerin. The pedestrian paths cut completely through the project creating porous connections. When the site was evaluated, it was determined that it could not support dense collective buildings, so the architects proposed a mat housing design with a low scale and lines of permeable density. The 40 dwellings create a complex web of high and low streets, houses with patios, split-level apartments with roof terraces, and intermediate dwellings above car parks. Although the project itself is rather small, it creates an effective model for larger repetition. The car free pedestrian walkways create a tangible sense of community, while the private gardens and terraces create the much needed element of exterior privacy. The architect’s desire to create an urban, living social fabric in the heart of the city was a successful experiment in social housing.
Two Bedroom
Three Bedroom
Four Bedroom
Unit types

Group Public
Group Private
Family Public
Family Private
Unit territory
Night view from garden
Pedestrian alleyway
Pedestrian alleyway
Exterior views
Perinton residential community near Rochester, New York, is a classic, almost a diagrammatically pure, manifestation of the planning principle of separating vehicular and pedestrian traffic as well as separating habitable and service areas. The project is composed of 560 units, both garden apartments and townhouses, arranged along four parallel vehicular culs-de-sac. The units’ major rooms always face away from the traffic and instead open onto green courtyards and private terraces. There is a pedestrian path leading to a 6,000 square foot community center at the corner of the site. When the grade of the site changes, there are occasional modifications to the housing pattern where instead the units are stepped back, creating visual variety. There is parking available right off of the vehicular ways. The entire project is kept at a low scale of two stories, with some one story and some two story connector units. The second story, single level units are accessed through point loaded stairs. There are seven different unit types in the project ranging from studio to four bedroom units, allowing for residential diversity. Units are often clustered to create more private entrance mews away from the rest of the public pedestrian circulation. When the units are arranged in lines, the unit is separated from the parking by a line of pedestrian walkways.
Located in the mid-sized German city of Münster, the apartment building on Bernhardstrasse designed by architects Bolles + Wilson addresses both the street front and the interior of the block. The building acts as a gateway to the interior of the block, providing housing both along the main street and the narrow access road. The massing of the project adjusts to both the busier street condition and quieter access road environment. While the façade of the building along the city street maintains a consistent massing with its neighbors, the dentil-like massing of the building along the access road provides for balconies which soften up the building’s presence as it moves away from the city street. A series of point loaded entries lining the access road further breaks down the modest scale of the 26 unit building. The architects accommodate for both elderly living on the lower level along the access road and family housing above. Units range from one to two bedroom. While the lower units are comprised of a single story, the top floor units are made up of two stories. This variety of urban conditions and housing units produce a broad range of living experiences within the small infill project.
Massing diagrams

Fourth floor

Third floor

Second floor

Main floor
In the late 1980s, the city of Paris hired Renzo Piano to design a low cost housing. Located in Paris’ 19th district, a dense area of the city which continues to grow in population, Renzo Piano Building Workshop created a 220 unit project which allowed for plenty of natural light while still maintaining a sense of privacy. This infill housing project manages to formally integrate seamlessly within the chaotic city fabric. The units encircle a large courtyard space filled with a dense planting of birch trees, providing both dappled natural light and privacy. While the general public can access the courtyard through two narrow passages leading from the main street, the courtyard mainly acts as entry point for the Rue de Meaux residents. A series of access points ring the courtyard, leading the residents up into their apartments. Many of the units span the depth of the building, thereby allowing for cross ventilation and ample lighting conditions. The project provides a variety of housing unit types ranging from three bedroom units to studio units. Renzo Piano Building Workshop also developed a variety of room layouts, establishing a large variety of living experiences around the verdant courtyard.
View into southeast corner of the garden

South end of central garden screened by birch trees

Facade detail

Street view
Lorcan O’Herlihy Architects had one concept in mind when designing Formosa 1140: providing public space on a private site. This unique housing prototype provides both a public pocket park, as well as, eleven housing units. Residents of both the neighborhood and the building can enjoy the new outdoor amenity. The architects kept a relatively straightforward design for the housing units on the site. The building consists of two levels of apartments lined up parallel to each other. The apartments are accessed by an exterior hallway which opens out to the park. Each unit is divided into two floors, a main living area and bedrooms upstairs. The lower units have balconies which face out to the park and street and the upstairs units have roof top access. All the units in the project have two bedrooms, limiting the types of inhabitants on the project. While the housing prototype is highly rational, the project is enlivened by the decision to dedicate one third of the site to a public park. The apartments are slightly elevated from the park and separated by a gated, therefore, residents benefit from the proximity of the amenity while also retaining a clear sense of territorial distinction.
Limited to a long narrow site spanning the width of a city block, Stanley Saitowitz | Natoma Architects designed a housing prototype which consists of two thin bars of apartment units lining a central circulation court. Located on the edge of downtown San Francisco, the project provides an alternative to the traditional loft experience with ample natural light and generous social interactions. While the main floor of the building consists of parking, storage, and pedestrian street access, the upper four floors are very open. Residents may enter the building from either Howard or Natoma Street. Circulation up into the building occurs in the center of the building, which pushes the living spaces out toward the streets. While the building utilizes traditional closed off fire stairs and elevator cores, each floor has a dynamic circulation court which provides plenty of opportunity for interaction amongst the residents. The circulation court consists of a hallway which feeds two units. The remaining two to four units are accessed through communal outdoor patio spaces. 1234 Howard Street contains a variety of housing units from studios up to two bedroom units. The ample glazing facing into the circulation court provides both day lighting and social interaction.
While limited by a small Vancouver city lot on a busy commercial street, Lang Wilson Practice in Architecture Culture [LWPAC] managed to create a rich housing environment. The project consists of two bars of housing oriented parallel to the streets. A circulation court separates the housing units and allows for natural light to enter deep into the building. The main floor of the building consists of commercial real estate on the street side, as well as one bedroom residences at the rear of the site. A gentle slope across the site allows for parking to be slipped underneath the main floor. The two bars of housing are made up of either two or three housing units. Each unit in the project is divided into two levels: a main living area and a bedroom. Light cores and balconies allow for natural light to enter deep into the apartment units and provide the residents with exterior living space. The circulation court acts as a semi private meeting area, as well as, a light well. In total LWPAC designed ten units ranging from one to two bedrooms. The dynamic sectional manipulations of their design provides a variety of living experiences in the tight site.
Located on the Hudson riverfront, the Charles Street tower is just one in a complex of three buildings designed by renowned architect Richard Meier. The latest of the three, the Charles River apartment continues with the architectural language set out by Meier on its two previous Buildings. In the Charles St. Apartments, Meier continues with the steel and glass curtain wall approach to create lofty and open views to the river and the street below. The tower rises 16 stories high with the two first levels dedicated to small studio apartments and single room apartments. On the levels above, the ample floors are divided by a central spine wall into two apartments facing north and south. The top level houses a large duplex penthouse. The airy appearance of the apartments and their transparency creates a visual connection with the public environment. Meier recessed the apartments to create perimeter terraces that reinforce the connection between the inside and the outside. Circulation in the building is straightforward. At ground level, a small plaza mediates the interaction between the tower and the street. Created to cater a specific resident type, the Charles St. Tower is a good example of a high-end residential tower.
Kanchanjunga
Charles Correa Associates
Mumbai, India
1970-1983
Density: 32 units at 10.2 units/acre

Project area: 130,680 sq. ft.

Designed by Charles Correa on the late 1970s, the Kanchanjunga apartment tower is an exceptional example of architectural geniality. Located in Mumbai, the tower houses 32 apartments divided in 4 different types. Following Corbusian models, Correa devised a modular system which allows the different unit types to interlock and interact, creating interesting territorial relationships. The different terraces created on each unit take advantage of Mumbai’s agreeable climate. Moreover, these terraces provide important social spaces. These social spaces are very in Indian culture. Most of the spaces in the apartment are shareable spaces within the unit, while they provide a certain level of privacy to the outside. The Kanchanjunga tower has the largest unit size in this study. The variation of 3, 4, 5 and 6 bedroom units is a reflection of the family structure in India. Large families are typical in this area of the world. The building has a central circulation core. Since most of the units are duplexes, vertical mobility is a feature element inside the apartments. Usually the living room and the terrace are left open to the top level to create a visual connection between the levels. The Kanchanjunga residential tower is a good example of sensible architecture and urbanism.
Site territory

Structural plan

Territory
- Group Public
- Group Private
- Family Public
- Family Private

Circulation
- Group Public
- Group Private
- Family Public
- Family Private

Detail of interlocking units (type B and C)

Units A and C

Floor unit plan

Unit B
The Jujuy tower, designed by architect Marcelo Spina, is located on a low-rise neighborhood of the city of Rosario, Argentina. The project intends to balance issues of housing for the medium class, a revenue-driven housing market, urban densification and a “problem of vertical repetition” as denounced by Spina. The apartments are intended for middle class families at an average density of four residents per unit. The Jujuy tower holds 18 apartments; each floor contains two apartments up to the eighth floor, the ninth floor houses a full floor unit and at the top a duplex penthouse crowns the tower. Entrance to the unit occurs at the midpoint of the apartment from a small lobby created by the vertical circulation core. The building is located on a long and narrow site facing the Jujuy Street. Spina organized the spaces to provide a more public interaction between the units and the street below. The balconies are halfway between interior and exterior providing a sort of transitional space between the public and the private realms. The balconies are also a source of variation from unit to unit. Shutters allow each unit to change the characteristic of its balcony creating individuality from the collectiveness of the tower.
Unit Types:
- Two Bedroom
- Three Bedroom

Territory:
- Group Public
- Group Private
- Family Public
- Family Private

Two Bedroom
Three Bedroom
Penthouse (duplex)
Full-floor uni
Typical apartments 2 per floor
The housing complex at 700 west Eighth Avenue is a typical example of the "Vancouver Model" which has revolutionized development in inner-city housing. Consistently with this development model, the building includes free-market units, public housing and rental units. The complex houses ten townhouses, six non-market senior's apartments, and 106 market residential units. The project is formed by two towers set atop a plinth containing the town houses, rental units and communal areas. Circulation in the project is as varied as its program. Town houses are directly connected to the street while tower apartments are reached through two separate circulation cores arriving at a corridor connecting all the units at each floor. The project contains a central "courtyard" with a pool as its main feature. Furthermore, a series of landscaped terraces and roofs gardens provide a connection between the units and the public realm. The terraces to the perimeter of the complex offer a more public character because of their connection to the public environment. On the other hand, the courtyard pool and inner balconies make part of a group private environment. This complex is a good example of the "Vancouver model", offering a viable alternative to the issues of affordable housing and free-market development.
Unit Types
- Two Bedroom
- Three Bedroom

Apartments

Townhouse type
Vertical circulation core

Circulation
- Group Public
- Group Private
- Family Public
- Family Private

Connecting corridor

Territory
- Group Public
- Group Private
- Family Public
- Family Private
Montevideo
Mecanoo Architecten
Rotterdam, The Netherlands
1999-2005
Density: 129 units
Project area: 57,530m²

Mecanoo’s Montevideo is one of several tall buildings planned for the Wilhelmina Pier area, part of Rotterdam’s old city harbor now free for development after port activities moved west, closer to the coast. As predominantly residential, Montevideo sits at the southern side of the pier adjacent to Hotel New York. Mecanoo developed a catalog of apartment formats, with different sizes marketed to accommodate a multitude of lifestyles and family types. The firm has developed 54 different types across 129 units. Programmatically organized in section, the architects piled large flats with varying floor heights into the main tower: five levels of “Loft,” 20 levels of “City,” and 14 levels of “Sky” apartments, as well as a penthouse. Ten levels of “Water” apartments create a manor-house mix in the shorter tower that cantilevers out toward the water. The two towers connect through a five-story horizontal bar containing offices and public facilities, such as a swimming pool and fitness center. The resulting plan sought to avoid a sharp contrast with the nearby office buildings – to not create housing blocks with a rigid repetition of balconies and monotonous fenestration, but instead to provide generous, neutral floor plates flexible enough for living and working, and further, to create an open and inviting base at street level.
The project occupies a site at the edge of Charles River as a boundary between the city of Boston and the Harvard University campus in Cambridge. The married student housing fosters community integration by way of its hybridized housing typology and spatial organization within the site. The traditional mid-height Georgian style typology of adjacent Harvard University dormitories combined with a tower typology achieves a high density on the site. Three, 22-story towers and housing blocks with varying heights of 3, 5, and 7 stories are organized around a series of courtyards: two that are internalized within the complex, and two that open up to the river. The courtyards are connected by a main spine of a public pedestrian walkway through the project, linking the neighborhood east of the project to the Charles River. The main entrances to the buildings are organized off of this spine. The towers are linked to the top level of each of the lower blocks by corridors every third floor in a “skip stop” organization which connect modules of six apartments and also serve as social spaces. This module, utilized in both the towers and the blocks, allowed for the mass production of building components and was modified in order to create differentiation of spatial qualities, fenestrations, and access ways.
Unit Types

- Hybrid: Towers + Linear Blocks/
  - Skip-stop sections

Unit Circulation

- Skip-stop axonometric: circulation
- Skip-stop axonometric: territory

Unit Territory

- Group Public
- Group Private
- Family Public
- Family Private

Circulation

- Group Public
- Group Private
- Family Public
- Family Private

Unit Types

- Studio
- One Bedroom
- Two Bedroom
Rather than various architects designing individualized housing projects within the block, the office of Vera Yanovshtchinsky Architecten hybridized housing typologies and conceptualized a series of “implants” or clusters of unit types that were inserted and interconnected within the entire block. This mixing of differing market rates of the housing with the incorporation of an outdoor terrace into the scheme satisfies Vinex but achieves a high degree of variation in roof height and housing density. The street facade is fairly urban and consistent to the lot line while the rear terraces of the housing that face the water are highly articulated and differentiated, resulting in a layering of private territory overlooking the more public ecological watercourse of what is referred to as the “green tunnel”. Three portals break the urban facade and allow access for residents to the units as well as the public to access a terrace which connects to a communal greenspace along the water. Each unit has access to a private outdoor terrace and each ground level unit has access to the communal greenspace. In mixing the various unit types, special attention was paid in maintaining privacy from within each unit as well as within each terrace while taking into account each unit’s exposure to the sun.
The Beijing Image housing project by Steidle Architekten is rooted in a critique of the complex coexistence of the many images of Chinese architecture in Beijing. This hybridized housing project seeks to embed itself into the many images of the surrounding city by referencing the colors of ancient imperial palaces, the austere building forms of Soviet influenced housing projects, as well as the recent architecture in the city which conveys the condition of economic prosperity, of social structure and of the Chinese longing for beauty. It attempts to integrate different aspects of tradition, space, and the typical orientation of buildings towards the south and towards the inner courtyard into a form with a certain strength and symbolism. Originally conceived of as the “Beijing Dragon,” the buildings linear forms zigzags across the site forming a series of courtyards of varying degrees of openness. The complex is skewered by a pedestrian arcade of public space connecting the north end courtyard to the more public courtyard to the south of the site. Higher tower pieces punctuate the block and provide for increased density on the site. The red band of color not only is a cultural reference but gives an identity to the larger “houses” within the complex.
A hybrid of terrace housing and tower blocks, Schots 1 + 2 define exterior courtyard spaces of varying degrees of public and private territory. The terrace housing units open directly onto the more private, internalized courtyard for residents. In between 1 + 2 is a public, pedestrian only zone that is activated by the retail program at the base of the buildings. All of the units are rentals and provide housing for students, the elderly, empty nesters and includes a thirty percent social housing component. The terrace housing and the tower blocks are differentiated by their building form and material details. Most of the terrace housing units are narrow with a core of kitchen and bathroom at the middle of the plan to maximize the size of living spaces at the front and the back of the plan. A similar strategy is employed in the apartment units where the bathrooms, and kitchens are situated in the central, darkest part of the plan so as to maximize living space closest to the glazed facades. Bedrooms are located on both sides of a central hallway which leads to a full width living space.
Unit Types

- Two Bedroom
- Three Bedroom
- Four Bedroom

Building Section A-A
La Grande Cour is one of three blocks that make up Westerdoksseiland, the spatial master plan which was designed by Peter Defesche of OD205. Meyer en Van Schooten Architecten [MVSA] designed the master plan of the block known as La Grande Cour. Along with MVSA, Heren 5 Architecten and de Architekten Cie each designed a component of the block which consists of three parcels. The work of each architect is differentiated by the building material details, fenestration, and in the landscape of each courtyard.

La Grande Cour is a hybrid of a perimeter block and towers which frame views to the river Ij. The complex of housing units which vary from subsidized rental units to upmarket owner-occupied dwellings is organized around three courtyards, or cours. Large openings in the perimeter of the block ensure that units interior to the block have access through the courtyards to views and light, making the compact design with a density of 300 units per hectare more amenable to all of housing types. The tower buildings, or “periscopes”, of upmarket housing cantilever above the perimeter block to capture more exclusive and panoramic prospect of the city.
Monica Sanga

6  PERIMETER BLOCK

University Students’ Housing
C+S Associates

Sierra Bonita Apartments
Tighe Architects

Stadstuinen
KCAP

Armstrong Place +
Senior Housing
David Baker and Partners

VOC Cour
JSA
The student housing was designed to adapt to the constraints of the brief - the perimeter of the lot, the fixed alignment, the building height - and use them as a springboard for original compositional and typological solutions that produced a light-filled interior landscape inside severe walls. The building is far from inward-looking and imposes order on the wider context: the passageway that cuts crosswise through it is seen as a “city gate,” a way through the block and a focus for communal activities, as well as access to the students’ lodgings. The continuous reinforced concrete base, greywood shingles and glass-brick fascia are evenly-colored, unbroken surfaces but they are also loaded with positive vibes. It is here that the building reveals the extent to which the elementary mass visible from the street is in fact a complex structure whose layout, planimetric variations and deviations of section generate a lean-looking though atmospheric interior of raw concrete streaked by form work and in some places deeply gouged. Understanding the building’s functional layout - shops, entrance and refectory on the ground floor; study rooms and services on the upper levels facing the principal street and lodgings (for 250 students) in the other three blocks - explains the layout of the external facades, and indicates how the kinds of materials used are related to the amount of light that reaches the interior.
The building, reserved for low-income, physically disabled residents, somehow manages to be beautiful. Most low-income housing maintains an institutional look, but these units don’t feel low-income at all. They are comfortable and modern with concrete floors. Those along the courtyard have their own porches with built-in benches for enjoying the courtyard. The building gets its edgy design motif from its chevron-like brace frames that echo throughout the building. The front facade, for instance, is clad with aluminum panels with the same pattern. The courtyard is the jewel of the project. Unlike some affordable housing developments, whose courtyards feel too exposed, this one feels like a sheltered escape. Tighe describes it as a “bamboo forest,” largely a function of the protective bamboo trees that will grow up to 60 feet tall. The eccentric brace pattern is in the courtyard’s shard-like pathways, which help break up the space and make it feel even more intimate. The area has an edge thanks to tall, polycarbonate-covered light tubes and Cor-ten steel planters. Atop the building, two roof terraces provide residents with great views of the neighborhood and beyond. Photovoltaics provide a shady canopy. These solar panels are part of a system of green elements that also includes low-impact building materials, natural air/ventilation, passive solar design, native landscaping, and a solar water heater.

Sierra Bonita Apartments
Tighe Architecture, 2008
Hollywood, California
42 units
Gross Floor area: 50,000 sf

Street view

PERIMETER BLOCK
Situation

Building sections

Courtyard views
1. BEDROOM  2. PORCH  3. KITCHEN  4. DINING ROOM  5. LIVING ROOM  6. STORAGE  7. BENCH  8. BATHROOM

**Territory**
- Group Public
- Group Private
- Family Public
- Family Private

**Circulation**
- Group Public
- Group Private
- Family Public
- Family Private

**Unit Types**
- One Bedroom - type 1: with balcony
- One Bedroom - type 2: without balcony
- One Bedroom - type 3: without exterior storage
- One Bedroom - type 4: courtyard exposure

**Group Public**
- Circulation
- Territory

**Group Private**
- Circulation
- Territory

**Family Public**
- Circulation
- Territory

**Family Private**
- Circulation
- Territory
The ‘Stadstuinen’ [City Gardens] area of Rotterdam’s Kop van Zuid (a massive redevelopment of the former Docklands on the southern banks of the River Maas) is a residential enclave that combines the advantages of suburban and urban lifestyles. The project comprises a total of approximately 570 residential units in 10 urban blocks set around an elongated square. The outer edge is determined by apartment buildings of 7-9 storeys with urban functions in the plinth. The inner area is a garden district with mainly ground-accessed dwellings. The corners of the square are marked by urban villas, one of which is occupied by primary school De Pijler. The blocks have been designed by four different architects who produced their schemes in consultation with each other. The predominant material is brick, applied in various mixtures and in four different color tones. The consistent use of materials gives the neighborhood a sense of architectural unity. The positioning of the blocks and the introduction of different kinds of outdoor space, such as winter gardens and galleries, serve to optimize the sense of spaciousness. KCAP designed the four corner blocks. These blocks are characterized by a variety of housing types and different access principles which accompany the transition from the dwelling to the collective area. All the exterior spaces have been executed as cantilevered, projecting glazed-in balconies.
Group Public
Group Private
Family Public
Family Private

Circulation

Site section

Site

Ground Level

Second Level

Unit types
- Single Level Apartment
- Two Level Apartment
- Multi-Level Town home
This complex development fills a formerly industrial city block with an innovative housing mix: Affordable urban town homes to keep growing families in the city and family housing adjacent to senior apartments to prevent seniors from living in isolation. The development lies just a block from a stop of a new light-rail line, a park, and a health center. The senior building, with 116 affordable rental units, serves as the anchor for the development, housing retail space and services. To reflect the historically African-American population of the neighborhood, design details were drawn from traditional African textiles and symbols. The courtyard is ringed by a wall inset with Ashanti tribal symbols representing security, wisdom, power, love, unity, and hope. The senior apartments overlook the park, the courtyard, or a landscaped mews that runs between the building and the family townhouse development. In the family development, two mirrored sections of stacked townhouses flank a large open public courtyard above one level of parking, lobby, and community spaces. While staying connected to the city streets through private stoops and balconies, the townhouses surround the central courtyard, which features vegetable gardens, outdoor seating, and a picnic and play structure. Each side also features a smaller private courtyard with planters and picnic tables.
Huldy building volumes by MVRDV, Art Zaaijer, Bosch Architecten and JSA stand side by side around the courtyard, the VOC Cour, of the newly developed Westerdoks Island on the southern bank of the IJ waterway in Amsterdam. With cantilevered brick balconies and panorama views of the city and the IJ, Jeroen Schipper gives living a double face. After two earlier urban plans for the central block, both of which were ditched, the urban contours of the final plan – a series of higher and lower volumes grouped around a central court – were determined by the client. In a joint process involving the client and participating architects, this cake was then sliced into 14 architectural pieces. The pieces correspond logically with the chosen structure of the perimeter block. The programme assigned to JSA consists of a tower-shaped building overlooking Westerdok, the adjoining entrance building, a section with rental dwellings for de Alliantie housing association on the street between the north and central blocks, and the corner block along the curved side to the IJ waterway.
Group Public
Group Private
Family Public
Family Private

Territory
Circulation

Sixth floor plan
Balcony detail
Courtyard view
TERRACE HOUSING

Bubeshko Terrace
Rudolph Schindler

Renca Housing
Elemental

Sound Barrier Housing
Maurice Nio

Loloma 5
Will Bruder + Partners

Aluminum City Terrace
Walter Gropius & Marcel Breuer
The Bubeshko Terrace Apartments has 6 apartment units on three levels above ground-floor garages. Two sets of stairs line both sides of the apartment blocks with a central corridor for service access connecting to back doors of each apartment. The top floor units have backyards while the front apartments have balconies and terraces. The horizontal planes project in contrast to the sloping site. Each of the apartments is different, but all of the units have a garage on the first level along with other similar characteristics. There are two studios, a one bedroom, and a two bedroom in the left complex. In the right complex there is a three bedroom duplex and a two bedroom unit. Entrances open in corners directly onto the living room of each unit giving a long view to the exterior. The duplex has balconies on both levels and a patio with a covered porch to the rear of the unit. The apartments are not concrete, but are constructed of timber framing and stucco.
Renca Housing consists of 170 units in the north-east section of Santiago. The site was purchased by residents of various informal settlements located nearby. Elemental proposed a vertical housing system greatly minimizing the footprint of the project. The house is designed to be built into a basic three-bedroom unit. Before the residents move in the house is a three-storey empty volume with a kitchen on the ground level and a bathroom directly above the kitchen. The three story void can gradually be built by the residents and can have a total of 3 bedrooms filling 53.4 square meters. The first two levels are constructed of concrete frame with brick infill, while the top level is a simple wooden structure sitting on top of the walls that supports the roof. The wooden structure allows for flexible growth and there is ample space for an attic on the third floor. Residents add partition walls and floor slabs of simple, inexpensive materials allowing for further alterations in the future if need be.
Sound Barrier Terrace Housing
Maurice Nio
Hilversum, The Netherlands
2001
Density: 1.2 units at 20 units/ hectare
Site area: 0.6 hectares

Sound Barrier Housing in Hilversum is made up of twelve terrace houses integrated into a sound barrier wall running parallel to a major roadway. The units are low and long keeping noise down and creating ample space for natural light. The homes nestle into the concrete sound barrier and are barely visible from the road. The complex is known as the “Cyclopes” because their front sections look as if they are observing the onlooker. The parking and entrance area are on the bottom floor which is quite a bit smaller than the upper level due to the issue of daylighting. On the upper level, the living room cantilevers over the entrance vestibule and additional lighting comes from skylights in the ceiling. A double-flight stair connects to the garage space to the upper floor. The load-bearing construction is made from prefabricated concrete. The lower level is clad in clinker brickwork while the second floor is made with silver-colored composite resin panels.
The complex is located between the sprawl of suburbia and a growing urbanism in Scottsdale. Loloma 5 is a small residential project consisting of 5 two-bedroom units, encouraging the development of the Urban site. The site is long and thin forcing the units upward. The units angle to capture views of Camelback Mountain to the northwest and the street-side of the units are clad in zinc. Cars pull into a wide driveway and park just under the living room of each unit. A narrow walkway on the south allows for an intimate space where neighbors can meet. The townhouses are all identical in size, 1540 square feet, on three floors creating views of the mountains on one side and the city on the other. The buildings combine concrete block on the first floor with wood framing above. The building is clad in materials such as naturally rusting corrugated steel on the north and perforated metal protecting the west facing balconies. The building envelope blocks the intense Arizona sun from entering the living room and kitchen. Stucco walls and translucent plastic partitions on the deck help shade the outdoor space while directing views to the sky.
Aluminum City Terrace Housing was built near the Alcoa plant just outside of Pittsburgh. The plant supplied war materials and so the project was sponsored by the federal government as defense housing. The buildings were sited facing south-east and south-west to take advantage of views and to allow for maximum sunlight. The complex includes a community center and each unit has an attached tool shed. The low one and two-level terrace houses have quite wide open ground floor plans with living room, dining space and kitchen separated by a low partition. All houses have ventilation directly through the units. The project is constructed from wood frame with lateral ribbon windows with heavy lintels. Regularly spaced wood posts are located at the ends of partitions and between rooms to support all of the vertical loads. Brick veneer is used on the walls on the access side and treated cedar on the southern walls with broad windows and slatted sunshades. The units are separated on the exterior from one another by the tool shed and fence partitions providing a small degree of privacy. There are two detached two-story row-houses with living room, dining room and kitchen are completely open with only one wall separating the bedroom from the public space.
Group Public
Group Private
Family Public
Family Private

Circulation

Site circulation

Three Bedroom Floor Plan
(second level)

One Bedroom Floor Plan
(detached Unit)

Three Bedroom Floor Plan
(entry level)

Site circulation

Three Bedroom Floor Plan
(second level)

One Bedroom Floor Plan
(entry level)

Three Bedroom Floor Plan
(second level)

One Bedroom Floor Plan
(detached Unit)
Elevation

Exterior details

Exterior view

Interior views
Piraeus has a variety of apartments, enclosed recreational areas, commercial space and even underground parking within its unique design. The ground floor serves mostly as retail space while the remainder of the building is 95% social housing. Unit types are mostly lofts, studios, 1 and 2 bedroom flats and a few 4 bedroom apartments. Piraeus’ unique design arose from the necessity to have plenty of units while leaving a neighboring building undisturbed. When designed it began as a perimeter block then was kinked inwards at the south façade. This allowed for the neighboring building to remain undisturbed while creating an opportunity for more sunlight to filter into the now southwest facing wing. The transparency is noted on the west façade as there are pillars leading from the courtyard into the dock. Large retail windows also allow for transparency and sunlight. The enclosed courtyard was created through this alteration of the south façade. It is accessible through a passageway between retail entrances. This enclosure functions well for residents who wish to have a more private outdoor experience. The transparent courtyard is beneficial to those who wish to have an alternate access route to the docks as well as more seaside ventilation coming in through the large windows.
Dock view from courtyard

View of courtyards inside the block

Transparent gate façade

View from inside courtyard
Saint Fargeau Firemen’s Housing
Vincent Brossy
Place Saint-Fargeau, Paris, France
1997-2000
Density: 65 units at 60 units/ hectare
Site area: 0.7462 hectares

The Saint Fargeau Firemen’s building in Paris, France is a marriage between old concrete barracks and a new fire department center joined by a steel and glass façade. This fire station defines the street corner. The new center was placed between the barracks and a 1970s apartment building, creating a paved courtyard behind the steel and glass façade above and parking garage below. Having the garage entrance off the street allows for convenient access for emergency vehicles to operate through. The paved courtyard is large enough to drive training equipment for routine fire exercises. The courtyard isn’t completely paved, however. There is a garden on the west end for residents to enjoy. The old barracks building has living units on the upper floors while public spaces like a gym, food services, an infirmary and public offices are on the lower levels. The upstairs unit layout contains single rooms, and some family apartment units arranged about three point-access stairs and elevators. The upper floor of the new glass and steel frame building contain single rooms along a hallway with two and three bedroom family apartments on the south end. The older building was remodeled from barracks to a variety of floors containing a few family apartment units, rooms for firemen to live, public restrooms, and common rooms for firemen on call.
Ground floor unit type
- Studio
- One Bedroom
- Two Bedroom
- Three Bedroom

Second floor unit type

Bird's eye perspective

Building section A-A
The Carré building is located on a former military site across from a former military base in Breda, Netherlands. It was designed as a place for retiring baby boomers to move to after their children have grown and moved from home. There are 140 apartments and 140 parking spaces available along with shops downstairs. About 40 of the apartment units were sold in the open market while the remaining units are rent controlled.

The building is a combination of compact blocks ranging from 4 to 10 stories sitting above an underground parking garage. There is a space between two of these blocks for access into the courtyard from the outside as well as access through the front of the buildings which has the transparent façade created by removing the bottom two floors. This transparency allows for a view to the old military base for residents to enjoy, as the majority are ex-military. The courtyard is paved and contains a seating area for some socializing. The ground floors are reserved for retail while the remainder of the floors contain one and two bedroom units with a few larger family apartments. These units are accessed through three staircases and elevators and glass covered galleries.
View from courtyard looking north

Façade detail

East facade

View from courtyard
This student dormitory at Tulane University creates a frame for a courtyard shared by neighboring dormitories. The street façade is primarily brick in order to blend in with other dormitories. This project contains two L-shaped buildings joined together by a three-level gallery. This gallery along with the floor to ceiling windows in the student lobby area creates the transparency. The inside façade is less traditional and adds more transparency with large windows and slatted balconies. The ground units have transform windows while the second through fourth floors have semi-shared balconies. Katherine & William Mayer Residences helps create two courtyards: a smaller more private courtyard sits behind the gallery while the larger courtyard is shared between Mayer Hall resident and other students living in neighboring dormitories located within Warren Quad. There are 9 doors for entrance on the ground level and dorm rooms can be accessed through 5 point access stairs and 1 elevator. Student suites share a bathroom while each dorm wing shares a full kitchen and additional restrooms near study areas and lounges. Suites are either two bedrooms with one student in each or two bedrooms with two students in each room.
St. Francis Square Apartments
Robert Marquis & Claude Stoller
San Francisco, California
1963-1964
Density: 299 units at 90 units/hectare
Site area: 3.3 hectares

The transparency in these buildings occurs from the spaces between buildings in each block as well as the use of glass panel doors along with fi led sheet glass as the walls of both front and back entrances to each unit’s stair well. Circulation is carried through point-access stairs, each shared by 6 apartments. Each of these blocks contains a landscaped courtyard visible from the balcony of each unit. These three blocks along with their corresponding parking lots became a super block after two adjacent streets were closed off. This project began as cooperative housing. In order to keep costs down shared common areas such as laundry rooms and garbage sheds were implemented. There was also a compromise to keep the inside of apartments simple to reduce cost for individual apartments while giving more thought to the landscaping for shared value. The balconies also contribute to the transparency theme. They are covered on the sides with horizontal slatted wood pieces and vertical pieces on the front and facing the courtyards. This allows for a sense of privacy along with convenient visibility of the courtyard. This is convenient for residents with children, since the courtyards are primarily occupied by children, there is an improved opportunity for safety surveillance.
Cluster

GWLA Terrain
KCAP & West 8

Linked Hybrid
Steven Holl Architects

Master Plan Gestra
Bolles+Wilson

Nuovo Portello
Gino Valle & Cino Zucchi

Urban Water Lilies
OODA+OOIIO
An environmentally friendly and car-free residential area has been realized on the former site of the municipal drinking-water company (GWL) in Amsterdam. Owing to its strong cohesion and high density, the GWL site presents itself as a single, large-scale urban element in its surroundings. At the same time it is an open zone with residential blocks in the midst of greenery, an oasis of calm in the metropolitan chaos. The GWL site marks the boundary between the traditional housing blocks of the Staatslieden neighborhood and the businesses and industry to the west. A few historic buildings and a water tower were retained, and these now form the eye-catching heart of the neighborhood. The site includes communal housing, live/work dwellings, a community centre and other amenities. On its western and northern sides the site is enclosed by a meandering residential block that climbs from four storeys in the South to nine in the North-East. The design protects the site from the westerly wind and from the noise of the Haarlemmerweg trunk road. Together, the 14 blocks of four to five storeys form a park-like setting. They stand on green islands with private gardens surrounded by hedges.
The 220,000 square meter pedestrian-oriented Linked Hybrid complex, sited adjacent to the site of old city wall of Beijing, aims to counter the current privatized urban developments in China by creating a new twenty-first century porous urban space, inviting and open to the public from every side. Filmic urban public space; around, over and through multifaceted spatial layers, as well as the many passages through the project, make the Linked Hybrid an “open city within a city”. The project promotes interactive relations and encourages encounters in the public spaces that vary from commercial, residential, and educational to recreational. The entire complex is a three-dimensional urban space in which buildings on the ground, under the ground and over the ground are fused together. Geothermal wells (655 at 100 meters deep) provide Linked Hybrid with cooling in summer and heating in winter, and make it one of the largest green residential projects in the world.
Aerial view

Top right and above: porous urban space accessible from all sides of the site

View to the sky of pedestrian linkages
The Bolles + Wilson Master plan to re-urbanise the GESTRA industrial site won the 2010 competition. Now updated it outlines the legal limits for a mix of row houses, a home for the elderly, existing rolls converted to maisonettes, a transversal street and a central piazza. A reintegration of this island precinct back into the surrounding and densely woven residential neighborhoods. Located on the GESTRA Findorff road, the project is a new, attractive neighborhood with a nice, central placed remaining Milller Hall which is the former emigrants and is retained for historic preservation. New paths will be created, linking the districts of Regensburg road and Findorff citizens to be a better pasture. This is the result of an urban design competition, won by the renowned architectural firm of Bolles + Wilson, Münster. The architecturally sophisticated “winning design” of Bolles + Wilson creates a modern small town that offers strong compression and new freedom. It provides a central place as the “shared space”. There will be no large discount stores. Overall, a wide range of apartment types are offered to make the area more attractive for different population groups.
The once industrial area immediately surrounding Milan is undergoing a transformation. A sizable development at Nuovo Portello currently being undertaken by the Milanese architect Cino Zucchi, on a site close to the old trade fair, Zucchi is, in this particularly fragmented urban context, seeking a solution that is ‘do-it-yourself city planning on a miniature scale’, while also drawing on his considerable practical and academic knowledge of Milanese housing design. The proposal for a private and subsidized residential complex by Cino Zucchi Architetti (CZA) at Nuovo Portello, close to the former trade fair site to the northwest of the Milan, is part of a series of projects for the abandoned industrial areas on the outskirts of the city. Its comprehensive plan, like that for the residential development of the former trade fair area, is a response to the increasing demand for service-sector and residential spaces, and the integrated development of public- (for example, green spaces, a new transportation system, and new administrative buildings) and private-sector services.
Clockwise from above: View from the main public space, Elevation detail, View of towers

View of housing blocks from the south
The design of the proposal was instinctively developed under basic and determinative assumptions reflected from the local. Water, rurality, urbanity and cultural habits and traditions. The architects have tried to form an interactive balance among all the premises and found in nature a conceptual framework that served as a starting point for the formalization of our urban housing plan. The floating water lilies. This living in water organisms are in their essence specimens that naturally make a "bridge" between water and land world, developing a particular and sustainable ecosystem. Simultaneously the floating water lilies are also a recognizable icon of the Friesland province identity. All the urban plan was created in a cellular matrix brought by the water lilies abstraction where all the ground floor access housing units, together with all the sports, agricultural and public spaces set in water, like floating water lily pad. In this sense all the apartment housing blocks are the exceptional forms with a more vertical assumption, and that are also related with the concept representing the abstraction of the Water lily flower.
Landscape types

Housing Typologies

Typologies
- Apartment Tower
- Marina Apartments
- Typology A
- Typology B
- Typology C
- Typology D
- Typology E
- Typology F
- Typology G
- Typology H

Site plan: housing typologies
Linear Block
Low Rise/High Density
Mat Housing
Infil
Point Tower
Hybrid
Perimeter Block
Terrace Housing
Transparent Block
Cluster
LOW RISE/ HIGH DENSITY MAT HOUSING

Siedlung Halen
Atelier 5

Quinta da Malagueira
Alvaro Siza
http://portfolios.uniandes.edu.co/gallery/220512101/CF_Proyecto-Lugar_Mat-Building_201410
https://www.vitruvius.com.br/revistas/read/arquitextos/01.008/936
https://www.slideshare.net/josephstevevalladolidanton/quinta-da-malagueira-alvaro-siza

Hausser & Ridgeley Streets
COA: Central Office of Architecture
Re: American Dream_ Six Urban Housing Prototypes for Los Angeles [40-45]

40 Units, Chalutier le Forban Ave
CIT Architecture
https://www.europanfrance.org/europan/content/site/E05_FR_BRE/E05_FR_BRE_SC.pdf

Pines of Perinton
Shepley, Bulfinch, Richardson & Abbot Architects
http://www.saitowitz.com/work/855-folsom-street/
http://doesarchitecture.com/yerba-buena-lofts.html
https://architizer.com/projects/yerba-buena-lofts/

LINEAR BLOCK

La Playa
Ana Elvira Velez
https://www.anaelviravelez.co/la-playa
http://portfolios.uniandes.edu.co/gallery/32542345/ANALISIS-UNIDAD-SOSTENIBLE-2014_01_La-playa
https://www.arquitectura.info/expoe Lamar/den/las/la-playa.html

Silodam
MVRDV
https://www.mvrdv.nl/projects/763/silodam
https://www.arquitectura.info/expoe llas/silodam

Pedi2Qtique Housing
ANA Studio
http://www.silodam.blogspot.com/ped2qtiquehousing-development/
http://www.anaelviravelez.co/la-playa
http://www.silodam.blogspot.com/ped2qtiquehousing-complex.html

Macalien Building
OHH + ooa
https://www.archdaily.com/47703/macalien-building-condominiums-offf-x-da
https://www.anaelviravelez.co/la-playa
http://www.bep-monegraph.com/ Projects/0-serpentine-science
http://www.silodam.blogspot.com/ped2qtiquehousing-complex.html

Yerba Buena Lofts
Stanley Saitowitz | Natoma Architects
http://www.saitowitz.com/work/855-folsom-street/
http://www.anaelviravelez.co/la-playa
http://architizer.com/projects/yerba-buena-lofts/

2 1
**INFILL**

Apartments on Bernhardstrasse
Bolles+Wilson

https://bolles-wilson.com/projects/
https://cartografi o.tumblr.com/post/138163965781/bolles-wilson-apartamentos-bernhardstrasse
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005104
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005107
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005108
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005109
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005110

Rue de Meaux
Renzo Piano Building Workshop

https://www.research.seikenrokou.org/201211071100/489438
http://portfolios.unandes.edu.co/gallery/92562632/ARQU-3934-Apodeis-Diagrama-Rue-de-Meaux

Formosa 1140
Lorcan O’Herlihy Architects

http://loharchitects.com/work/formosa1140
http://patterns.work/Jujuy-2056
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005107
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005108
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005109
http://www.desinia.tw/design/pdetail.php?c=3005&id=d005110

1234 Howard Street
Stanley Saitowitz | Natoma Architects

https://www.archdaily.com/34504/1234-howard-street-stanley-saitowitz-natoma-architects
http://www.saitowitz.com/work/1234-howard-street/
http://www.buzzbuzzhome.com/ca/700-west-8th

RIDAR_One
LWPAC

https://lwpac.net/portfolio/roar_one/
https://www.desinia.tw/design/pdetail.php?c=3005&id=d005104

**POINT TOWER**

Charles Street Apartments
Richard Meier & Partners

https://www.richardmeier.com/?projects=145-charles-street

Kanchanjunga
Charles Correa Associates

https://collectievehuisvastgoed.net/2011/12/06/kanchanjunga-apartments-by-charles-correa-associates/
https://www.architecturaldigest.it/topics[charles-correa/

Jujuy 2016
Marcelo Spina

https://patterns.work/Jujuy-2056
https://www.archdaily.com/82976/in-progress-jujuy-redux-p-a-t-i-e-n-s-maxo-spina

700 West 8th Avenue
Heneghan Partners Architects

https://heneghanpartners.com/projects/700-w-8th/
http://www.buzzbuzzhome.com/ca/700-west-8th

Montevideo
Mecanoo Architects

https://www.mecanoo.nl/Projects/project/33/Montevideo-Residential-Tower?
https://www.bluffton.edu/homepages/facstaff/sullivanm/netherlands/rotterdam/montevideo/montevideo.html
https://constructalia.arcelormittal.com/en/case_study_gallery/netherlands/montevideo_rotterdam_a_residential_high_rise_with_hybrid_structure
7 TERRACE HOUSING

Bubeshko Terrace
Rudolph Schindler
https://www.dwell.com/article/the-restored-rudolph-schindler-project-that-was-inspired-by-a-greek-village-6b25c59a

Renca Housing
Elemental
https://www.elementalargentina.com/2014/10/08/renca/
https://latinamericanarchitecture.unm.edu/portfolio/renca/
https://www.elemental-architects.com/mexico/renca-social-housing

Loloma 5
Will Bruder + Partners
https://www.archdaily.com/138295/loloma-5-will-bruderpartners
https://azarchitecture.com/listing/loloma-5-livework-leased/print/

Sound Barrier Housing
Maurice Nio
https://homesthetics.net/modern-collective-housing-cyclops-netherlands-nio-architecten/
https://www.archdaily.com/61429/ad-interviews-maurice-nio

Aluminum City Terrace
Walter Gropius & Marcel Breuer
http://architurist.blogspot.com/2013/05/aluminum-city-terrace-new-kensington-pa.html

8 TRANSPARENT BLOCK

Pireaus
Hans Koelhof & Christian Rapp
https://www.aedes澄清.server/work/7501

Renca Housing
Elemental
https://www.elementalargentina.com/2014/10/08/renca/
https://latinamericanarchitecture.unm.edu/portfolio/renca/
https://www.elemental-architects.com/mexico/renca-social-housing

Sound Barrier Housing
Maurice Nio
https://homesthetics.net/modern-collective-housing-cyclops-netherlands-nio-architecten/
https://www.archdaily.com/61429/ad-interviews-maurice-nio

Loloma 5
Will Bruder + Partners
https://www.archdaily.com/138295/loloma-5-will-bruderpartners
https://azarchitecture.com/listing/loloma-5-livework-leased/print/

Aluminum City Terrace
Walter Gropius & Marcel Breuer
http://architurist.blogspot.com/2013/05/aluminum-city-terrace-new-kensington-pa.html

Katherine & William Mayer Residences
Perkins + Will
http://www.blackmountaincollegeproject.org/Biographies/STOLLERclaude/STOLLERstfrancis.htm
http://housing.totalarch.com/node/214

St. Francis Square Apartments
Margulis & Stoller
https://www.blackmountaincollegeproject.org/Biographies/STOLLERclaude/STOLLERstfrancis.htm
http://housing.totalarch.com/node/214
This book is a compilation of case studies on Urban Housing developed for use in the undergraduate housing studies at the School of Architecture at the University of Texas at Austin.

5X9

FIVE Variations Of NINE [Urban] Housing Typologies

45 EXAMPLES of Socially Relevant [Urban] Housing Typologies