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PRECEDENT STUDY: HOUSING.

OUTSIDE USA

Vivazz, Mieres Social Housing

Asturias, Spain



Savonnerie Heymans

Brussels, Belgium



IN USA

Broadway Affordable Housing

Santa Monica



VIVAZZ, MIERES

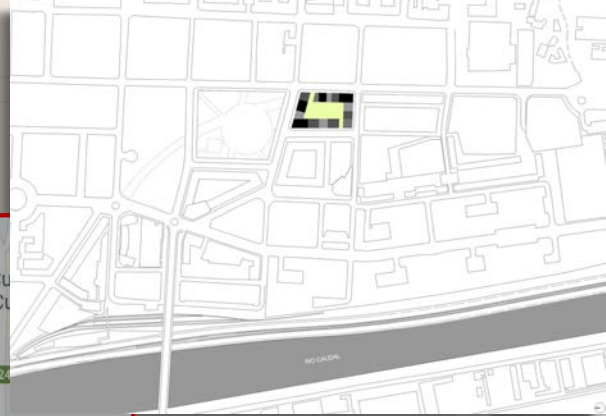
SOCIAL HOUSING

ASTURIAS, SPAIN

OUTSIDE USA



LOCATION



Address

Calle Valeriano
Miranda, 45, 33616
Mieres, Asturias,
Spain

The site lies in the centre of Mieres, a small town in the Asturias region of northern Spain.

Schools & Universities

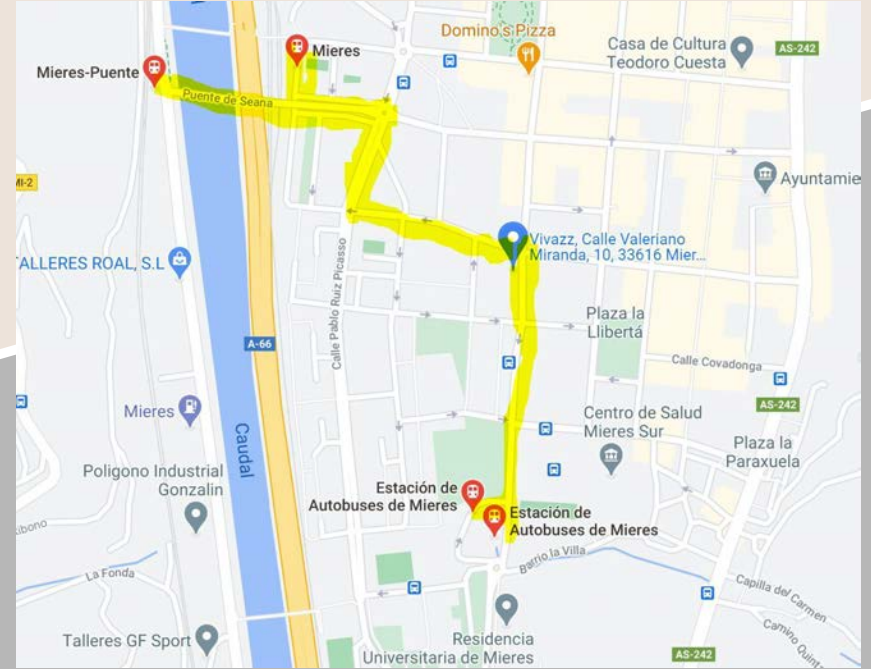
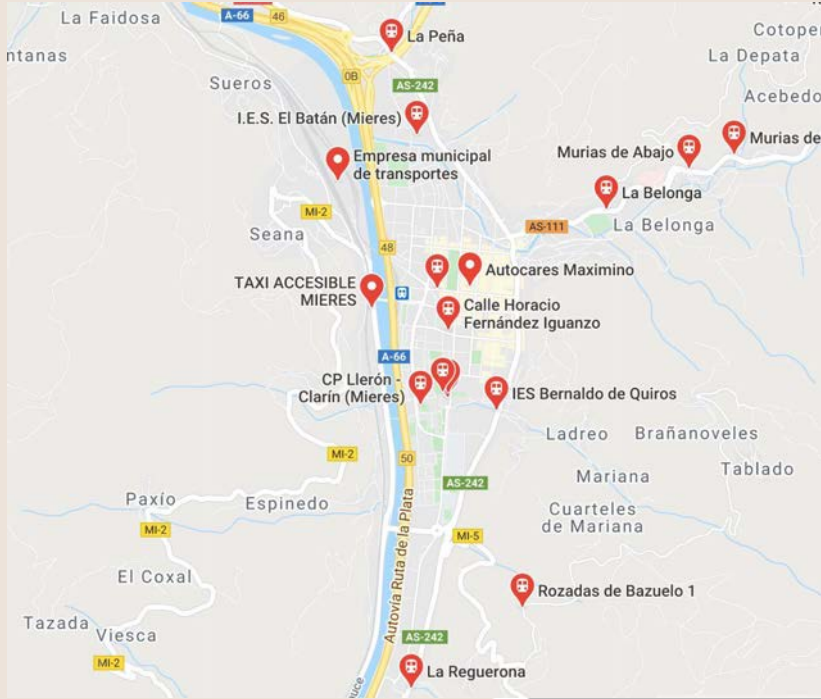
The complex has access to many services, including schools and universities.



Centers for Art & Culture

There are also many different cultural spaces in the proximities.

Access to Public Transportation Services



Bus and train stations
at walkable distances.

- Area - 192,028.16 sf- (17,840 m²)
- 131 apartments
- Volumes of varying heights (three to seven stories)
- Apartments of different sizes (from one to four bedrooms)
- Commercial and retail space at street level.



Size of Project

- 8 one-bedroom units, with an area of 527.432 sf.
- 68 two-bedroom apartments, with an area of 667.362 sf., four of them are reserved for people with reduced mobility.
- 49 three-bedroom apartments, with about 893.405 sf.
- 6 units designed for large families, with an area of 1151.738 sf.

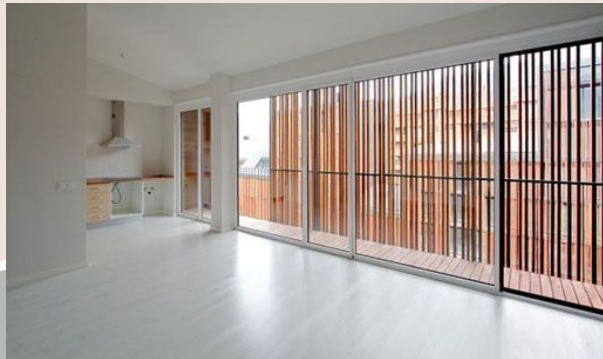


The housing units were produced by adding up consecutive 2.6 meters (8sft) modules .

Size of Project



The rest of the program (storage rooms, garage and facilities) was designed in a common underground basement.



The terrace, one meter deep, is used as a visual and spatial extension of the apartment. However, it lacks certain functionality due to the narrowness.



Project Cost

Cost of project. The project cost €10.5 million (12,435,113.86 USD),

Cost per square ft. This project worked out to be €595 per square metre (65.43 dollars per square ft).

Architect and Development Team

Developer: La Sociedad Estatal de de Promoción de Suelo. (The State Society for Land Promotion)

Architecture Firm: Zigzag Arquitectura

Project architect: Bernardo Angelini and David Casino.



"Zigzag is a way of thinking and working based on the search for alternatives and side paths which promote simple solutions with a rich and a complex content"



The empty spaces amongst the buildings, permit the inhabitants to enjoy the beautiful Asturian landscape and let the sun and the air enter the inner spaces at the same time.

Amenities



Amenities

The housing units have double orientation, allowing cross ventilation and natural lighting.

A plaza with native grass and bamboo plants is located in the middle of the buildings. It is the main social gathering spot for its residents and an attraction for the city's inhabitants.

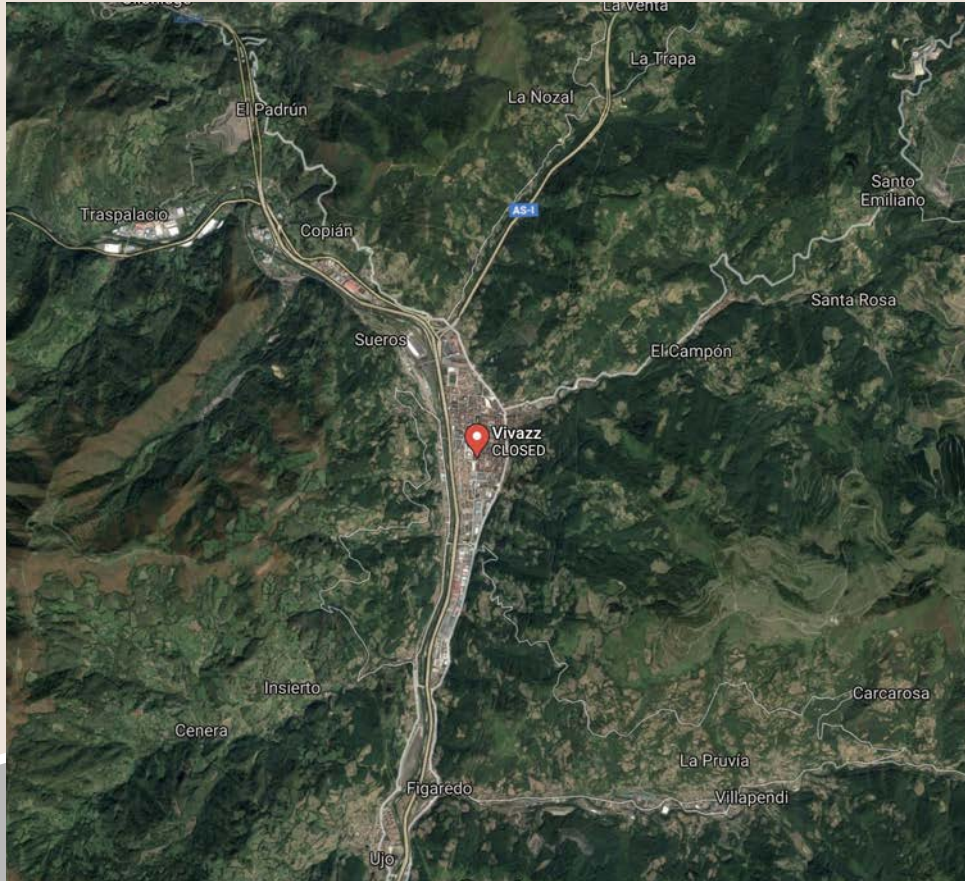




Amenities



The site presented a challenge.



Design Challenges

- It is situated deep inland, not ideal for attracting visitors.
- This town is compacted into a valley landscape in between the sylvan hills.
- It is subjected to flooding by the Caudal River.

There was also constraints of resources and context.



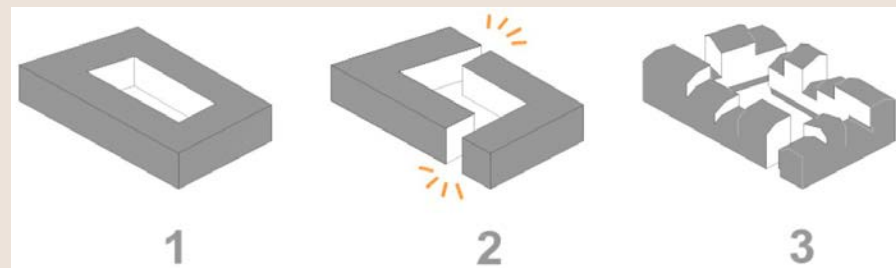
The architects' plans were to create a design that honored and complemented the town's history, mixed urban and rural while connecting with nature and its surroundings mountains.

Design Challenges

Context:

- The town was experiencing a decline in their legacy of mining and heavy industry, they were attempting to redefine their identity for the post-industrial era.
- The neighborhood was considered a wasteland with not alot of activity going on and many empty sites that are awaiting redevelopment.

- The design stages began with a generic courtyard block that was later fractured and reconfigured.
- The fractured structure creates a composition of multi-faceted irregularly stacked forms.
- The shifting and angular roof planes generated an added layer of interest and complexity.



Design Breakdown



Voids and cuttings penetrate the block that frame views of the mountains and Asturian landscapes.



Design Breakdown

The courtyard is one of the major components of the design



- It creates a urban garden at the center of the block, planted with native grasses and bamboo.
- The courtyard is semi-public and is a place of gathering and activities.

Design Breakdown

- The design of the plaza has a slope that follows the natural inclination of the site.
- The ground floor apartments have private outside areas created by the green landscape that are slightly higher.
- The courtyard area is built with low concrete blocks that serves as both plant containers and benches.

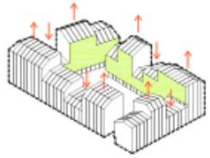


Analysis:

- The courtyard provides multiple benefits for this project. It brings the residents together creating a sense of community. It provides a beautiful landscaped area that people can enjoy as opposed to the unkempt green areas in the adjacent sites. A negative is since outside people do have access to this courtyard in can feel imposing to the residents if there is strangers gathering there.

- 1- Varying Heights of Volumes
- 2- Final Massing
- 3- Noise Directions
- 4- Access Points to Site
- 5- Green Space / Vegetation
- 6- Gathering Space
- 7- Sun Path
- 8- Views

Design Breakdown



1



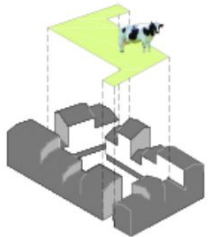
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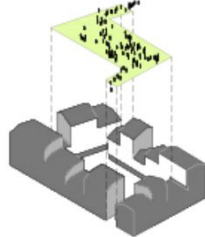
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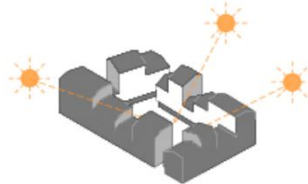
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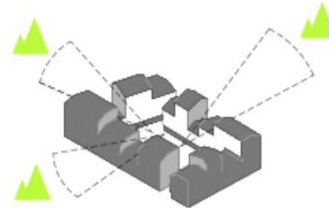
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Program Diagram / Circulation

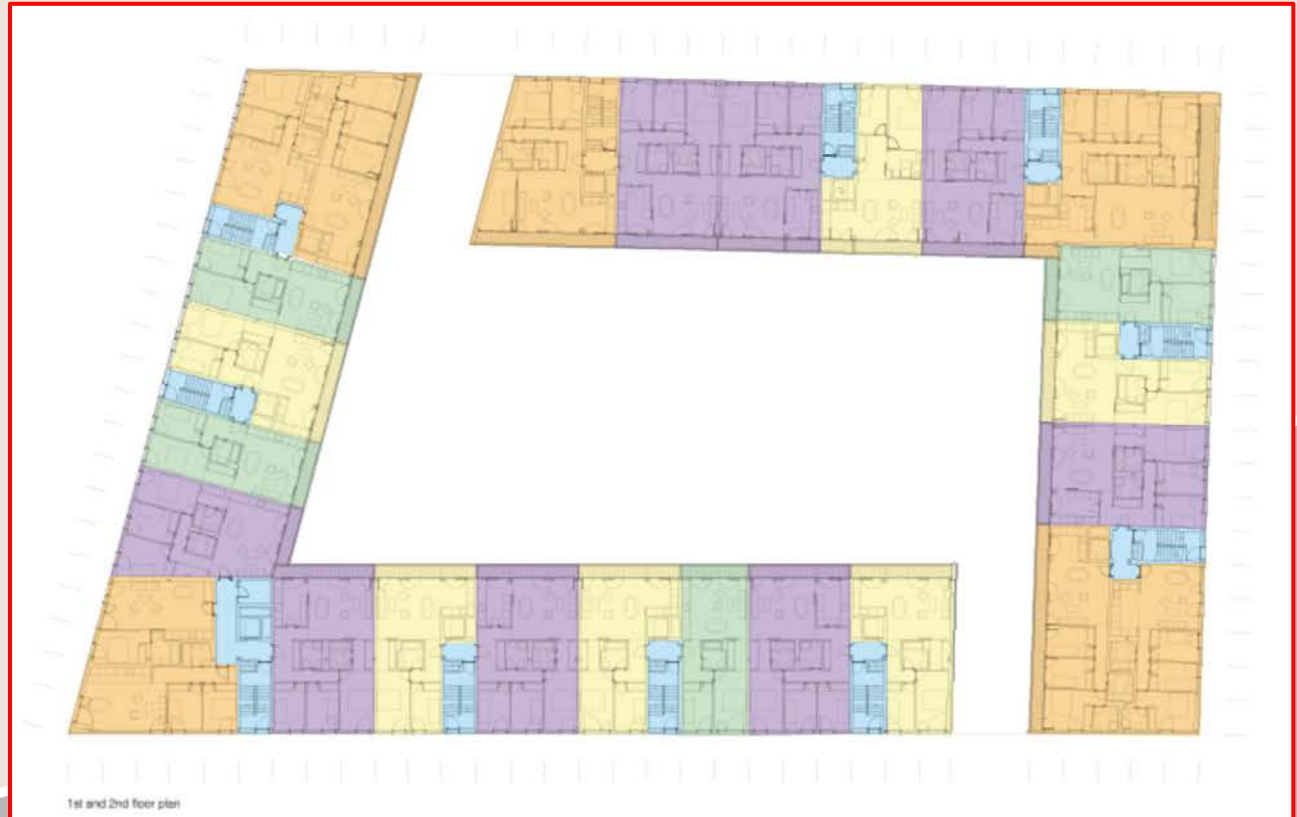
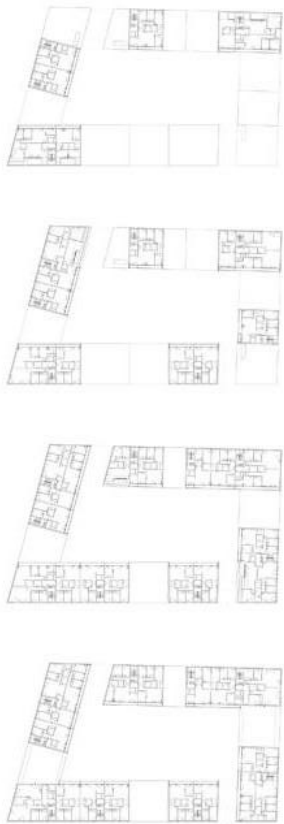
Pink - Retail / Blue - Vertical Circulation / Orange - Residences
1- Entrance to Underground Parking



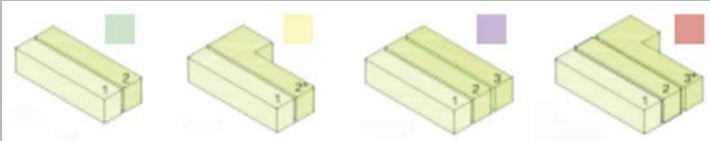
- The site is accessed through two open corners that define a diagonal route from the streets.
- The apartments are accessed through the courtyard with set of stairs that connect from 1 to 3 apartments per floor.

Analysis:

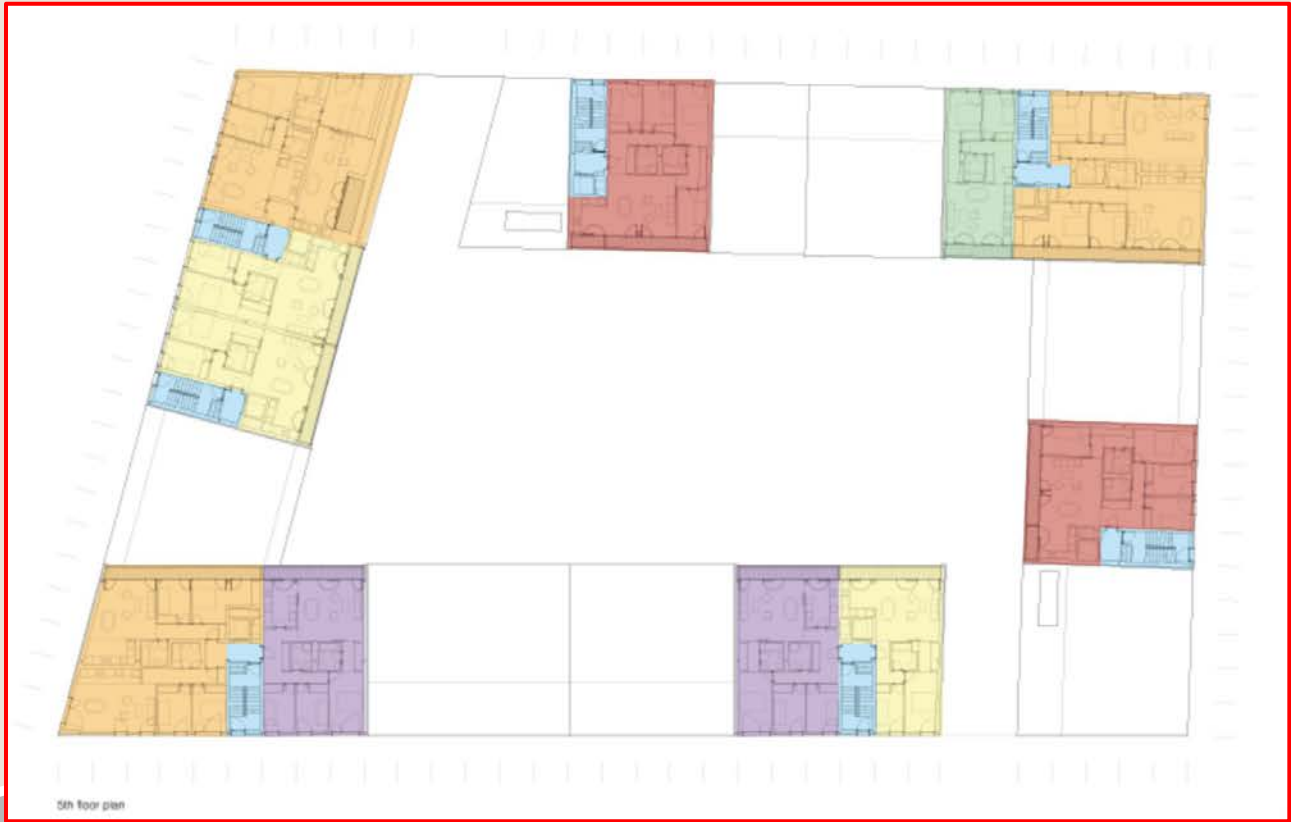
- There's no direct access from the streets to the apartments while that promotes privacy it could also be hazardous and become an inconvenience.
- However having access only from the courtyard promotes daily use and activity of the courtyard so it's not neglected.



1st and 2nd floor plan



These are the typical configurations for apartments. Apartments range from one to four bedrooms.



Analysis:

- With 131 apartments each having a range of bedrooms, this design maximizes the organization and design of the apartments in terms of quantity and efficiency.
- However, the apartments in the corner are at a disadvantage, they don't benefit from cross ventilation. They also don't have access to balconies or views to the courtyard.

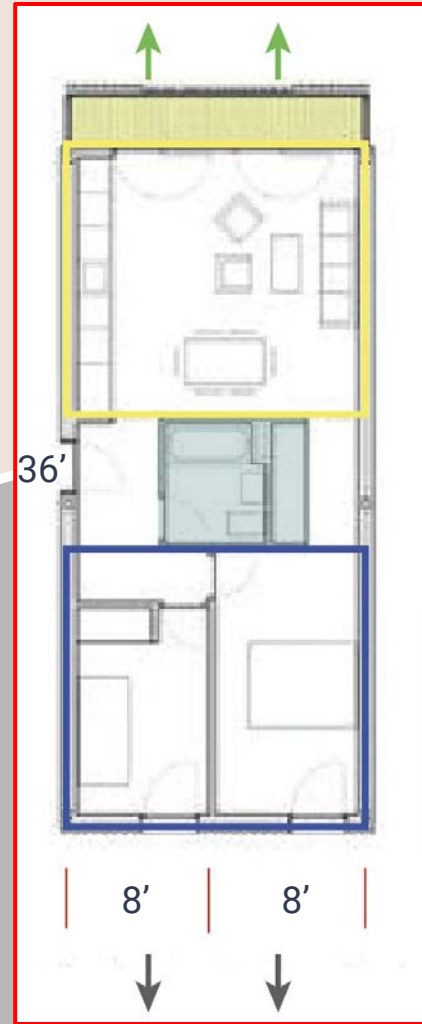
The apartments were designed to be compact and economical. Each apartment has a clear organization with a central core of bathrooms and storage spaces to create separation between day and night. The typical bedroom module is 8 feet wide. The larger units have ensuite bathrooms.



Design Breakdown

Analysis:

- The compact designs of the apartments allows for all the spaces to have a function. The simple organization of the apartments allows for a clear separation of sleeping and living which is a plus. The design also allows for great circulation throughout the whole apartments.



The living spaces face the courtyard for a more tranquil and nature inspired feel. However the bedrooms face the street and urban surrounding.



Design Breakdown

Analysis:

- A con of the design of the apartments is that all the bedrooms face views that are not the most appealing. Although there are great views of the mountains and landscape ahead, the sites adjacent are barely maintained and uninteresting. The adjacent sites features parking lots on two sides of the site, abandoned green spaces, and construction sites.

- The street sides were enveloped by dark, ribbed metal cladding that pays homage to the town's industrial past.
 - The courtyard elevations are glazed and wrapped by a rustic timber lattice composed from thin vertical strips of elondo, a chestnut hued African hardwood.



Design Breakdown

- As opposed to the exterior facade, the courtyard facades signified a symbolic return to nature. The use of wood and its vertical placements forms a resemblance to the forests of the nearby mountains.



Design Breakdown

Analysis:

- While the contrast between the interior and exterior facades is interesting, the dark exterior material may not be suitable for the surroundings. While walking on the sidewalk, all you encounter is this dark building that can feel overwhelming, especially in terms of the context. The exterior design would have benefited from using more materials and palettes that complemented the green mountains and earth tones of the surrounding buildings while still paying homage to the town's industrial past.



Design Breakdown

The timber facades are movable screens that encloses balconies that are connected to the living space in each apartment. These timber veils softens the sun's intensity and casts rippling shades around the interiors. The balconies pay homage to the traditional Asturian porch. The depth of the balconies are 1 meter deep (3ft).

Design Breakdown



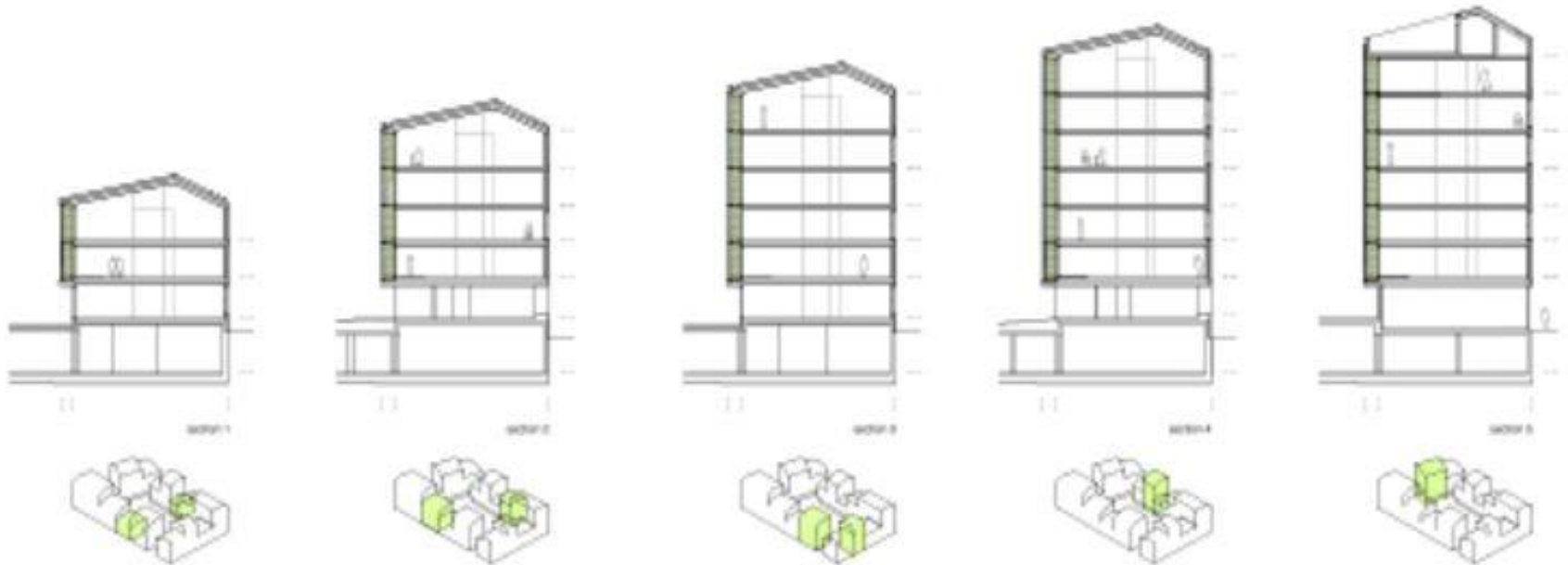
Analysis:

- The balconies are a great addition to the apartments. They provide views of the courtyard while creating a private and tranquil places the residents can enjoy. A con would be that the balconies aren't that deep so placing furnishings such as a table wouldn't be ideal. The timber movable screens are a great idea that allows residents access to more privacy when needed while adding a dynamic and interesting design to the facade.

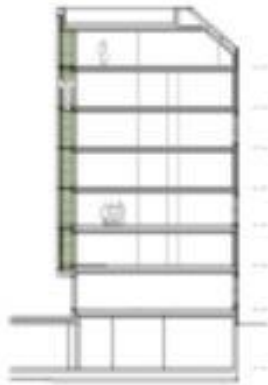
Sections



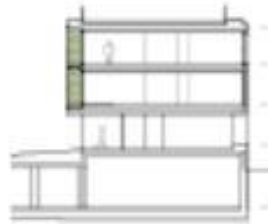
Sections



Sections



SECTION 1



SECTION 2



SECTION 3



SECTION 4



Elevation



- Courtyard provides a garden / green space
- Utilizes passive solar energy through solar panels installed on flat roofs
- Solar - powered heating systems
- Apartments are designed to maximize the entry of natural light and cross ventilation
- Sustainable / local materials

Sustainability



Analysis:

- This project does include great sustainable components but it could always be pushed further by adding other passive houses techniques. Another example would be adding an eco-friendly rainwater harvesting system since this part of Spain receives an abundance of rainfall.

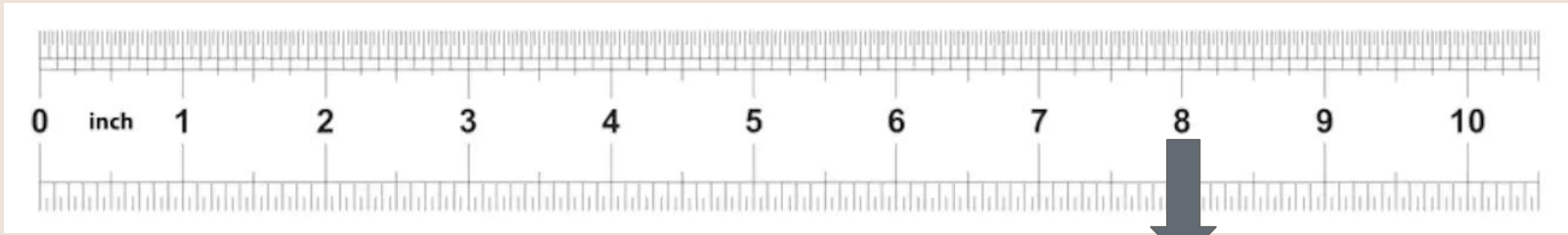
There is retail and commercial spaces located at the ground level.

Retail



Analysis:

- If someone is walking down this street they probably would not notice that there is retail in there. There is no branding or indication that there is commercial space. The only access to these space are from inside the courtyard, there is no access from the street. This is a con because this doesn't attract consumers and if it did, then the shoppers could interrupt the residences in the courtyard.

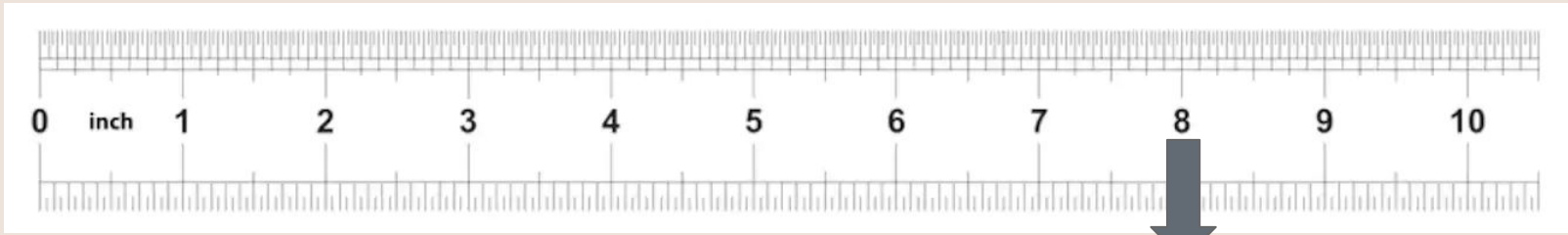


One of the design challenges mentioned was that the site was prone to flooding by a nearby river however there was no design mention on how this building would deal with that challenge.



Grade / Summary

- Corner apartments have no access to balconies.
- Apartments are only accessible from the courtyard.
- All the bedrooms have views to adjacent sites that are not appealing.
- The adjacent site includes parking and badly maintained green areas.
- The exterior facade doesn't fit with its natural surroundings and buildings.
- The retail spaces overall don't work.



- This project was successful in many ways. The courtyard provided a beautiful green landscaped area that the residents can enjoy even from the comfort of their private balconies.

Grade / Summary



- The interior movable timber facade provides a dynamic and practical design.
- This project also included sustainable elements to it's design.
- The apartments were designed to maximize views, natural light, and cross ventilation.

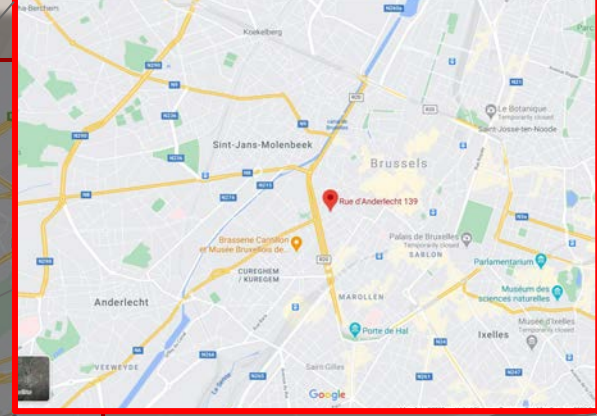
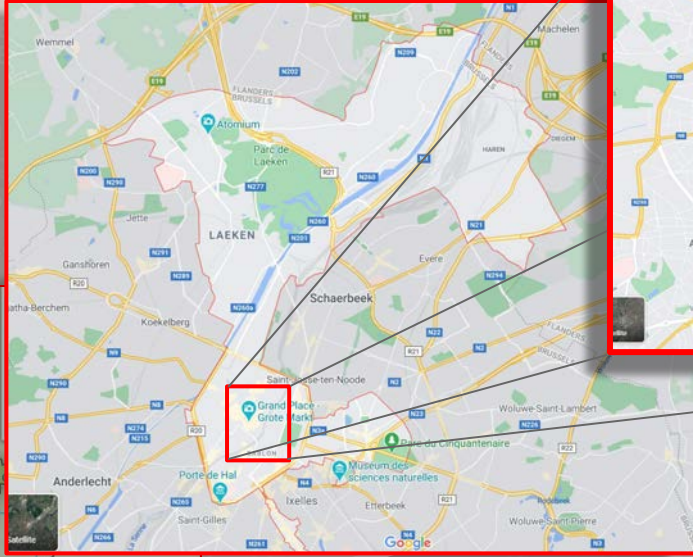
Savonnerie Heymans

Brussels, Belgium (2011)

OUTSIDE USA



Location



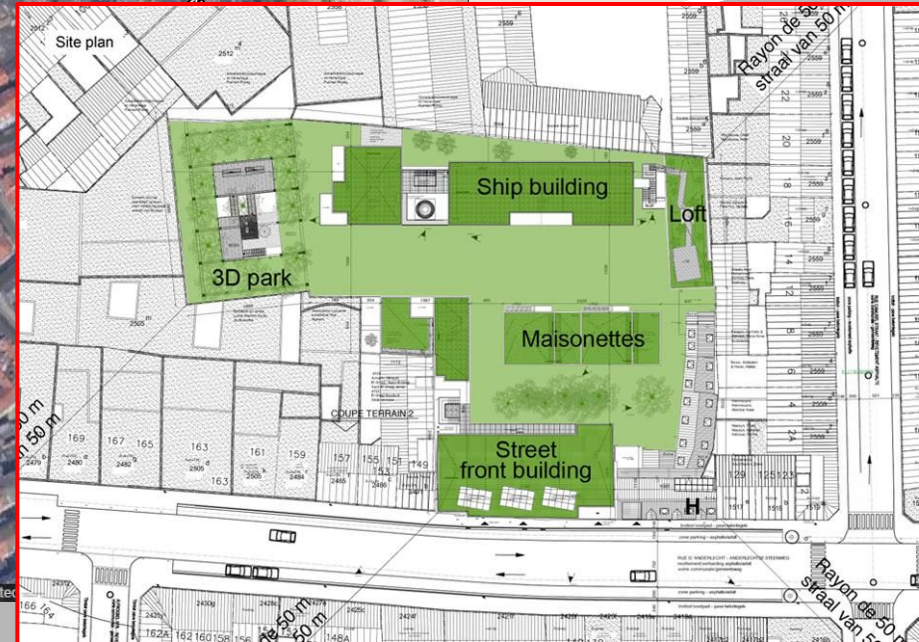
Address
Rue
d'Anderlecht
139-147, 1000

The site is located in the country's capital and is also only 1.5 miles away from Grand Place which is the central square of Brussels.

Brussels, Belgium



Site Plan





Analysis: Located near the tram station (meaning easy and affordable access to transport and sustainable travel)

- Narrow entrance on small street.
- Located near various cultural centers.
- Close proximity to grocery, supermarket, and neighborhood retail (1 block radius).

Housing Conditions in Belgium



Social housing in Belgium is provided for individuals and families on low incomes. Over the last forty years Social housing has been kept to the regions of Brussels, Flemish and Walloon.

Belgium has organized its social housing stock under two categories: “Social” and “intermediate” .

Approximately 6.5% of the Belgian housing market consists of social housing, totaling over 280,000 units.

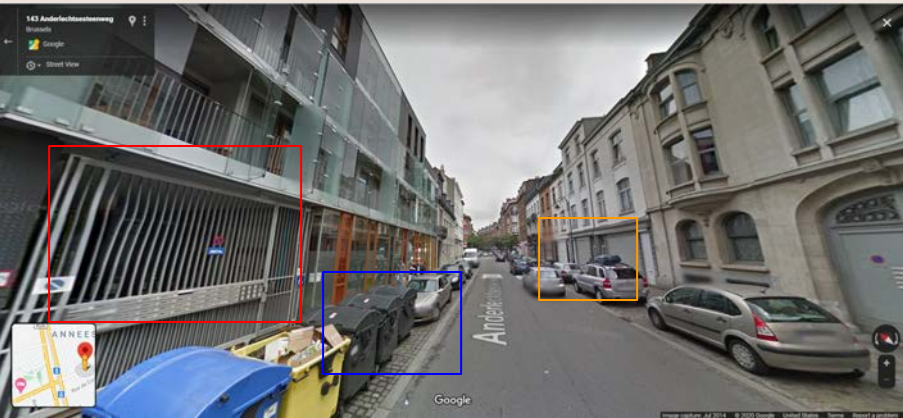
What is Brussels like?

Brussels is a human-sized capital and green-oriented which makes it joyful and pleasant for its inhabitants.



Satellite views of the street showing the context of buildings surrounding the site's entrance. The Facade stands out from the others and materials differ.

Also note the cleanliness of the streets and how parking and garbage is arranged.

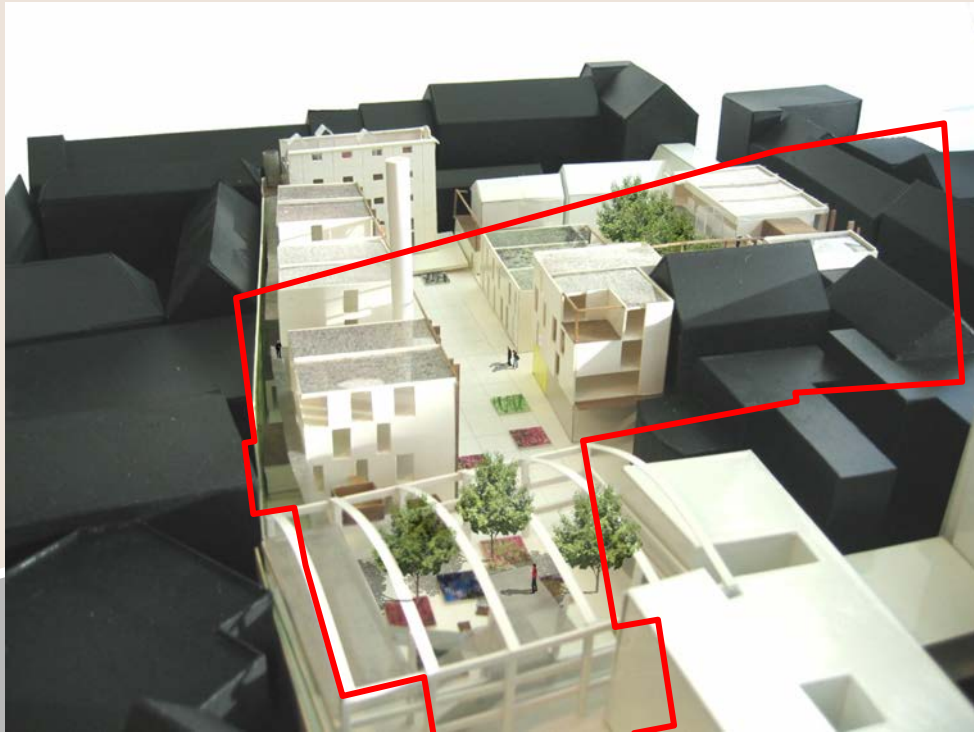


Entrance Gate

Parking

Trash Disposal

Savonnerie Heymans is a social housing project in Brussels, Belgium. Before its use of subsidized housing today, it used to be a Soap factory site. The site keeps most of the industrial feel and elements from its past.



Size of Project

Area - 6,500 m² (Gross 70,000 ft²)
Usable Floor Area: 4,880 m² (52,527.883 ft²)

42 sustainable accommodations (studios, apartments from 1 to 6-bedroom, lofts, duplexes and Maisonettes and a day-care center)

The architects paid special attention to efficient, low-maintenance measures in order to reduce energy costs during and after construction.

- Construction costs excluding VAT, excluding premiums 2.782 € / m²
Exemplary building subsidy 100 € / m²



Project cost

Total construction cost: **€ 10,600,000**
\$ 12,379,740. U.S.

Cost per square meter- **\$1,630 €**, **\$ 1903.17 U.S.**

Cost per square feet- **\$151 €**, **\$ 176.31 U.S.**

Owner: CPAS de Bruxelles

Architect and Development Team

Project architect: **Gilles Debrun**



Architecture Team: **MDW
Architecture**



**Marie
Moignot**
Founder



Xavier De Wil
Founder



Olivia Noël
Manager

Founded in 2001 by Marie Moignot and Xavier De Wil, MDW Architecture. 30 staff members presently.

"Our ethos is to combine the highest standards of creativity and sustainability."

Architect and Development Team



Engineering Team:

Design office (special techniques):
MK Engineering

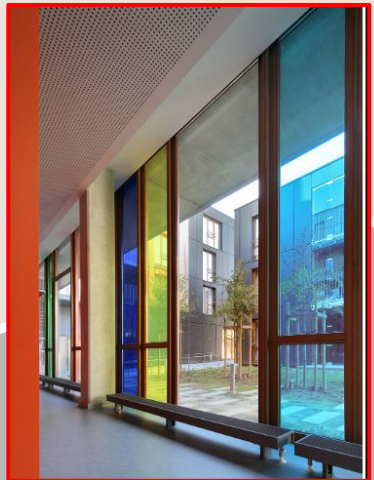


Design office (stabilité):
Waterman TCA
SETESCO

Engineering office (acoustics
consultant):
ATS



General contractor:
CFE Brabant



Amenities include:

- Social Meeting Event Space
- Ludothèque (game library)
- “Mini-forest” garden
- 3D landscaped park and playground
- Main Promenade/walkway.

Amenities

Project architect Gilles Debrun calls the Savonnerie Heymans “a village” that offers protected space for interaction in an otherwise cramped urban setting.

Analysis: The building is successful in providing social spaces and generally seems like a peaceful place to live. A diverse set of amenities are provided on the site itself.

3D Park



Main Entrance



Analysis: The Entrance gate is not the most appealing, as well as the front facade, besides the different colored glass of the daycare, feels lacking in a welcoming design.



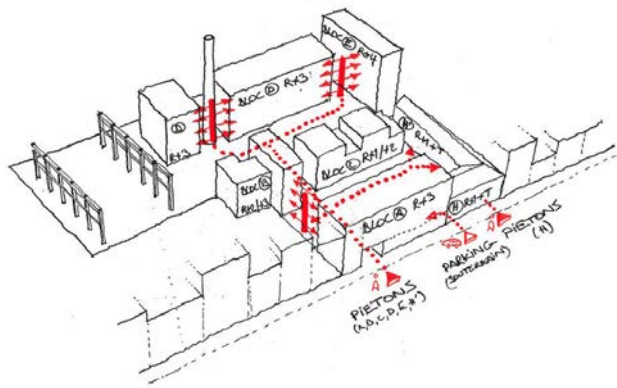
Great Courtyard



Design Breakdown



Started January 2008 and
finished December 2011



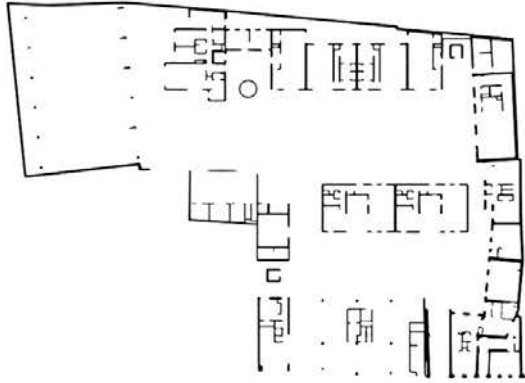
- 1 ENTRANCE
- 2 DAY-CARE CENTER
- 3 GARDEN
- 4 PARKING
- 5 PLAYGROUND
- 6 CHIMNEY
- 7 COURTYARD
- 8 COMMUNAL LOUNGE/
LAUNDRY AREA
- 9 EXISTING STRUCTURE/
HOUSING/LOFTS
- 10 NEW HOUSING



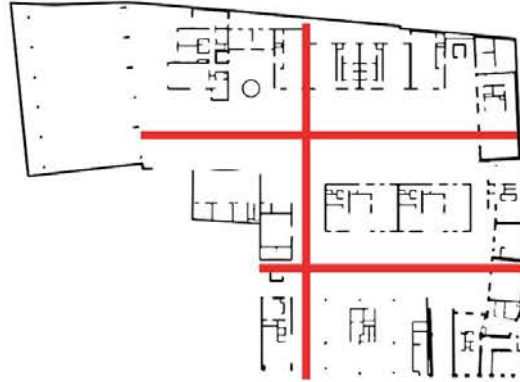
GROUND FLOOR PLAN

Analysis

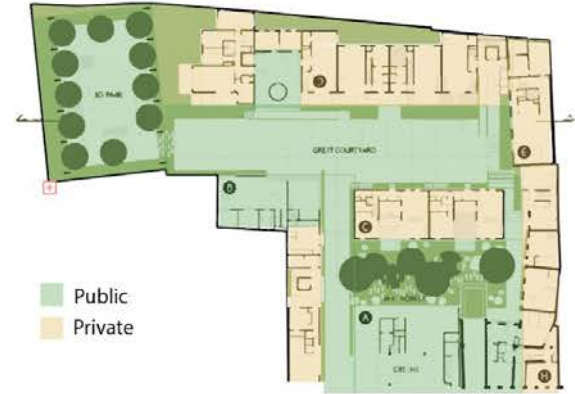
Structure



Symmetry

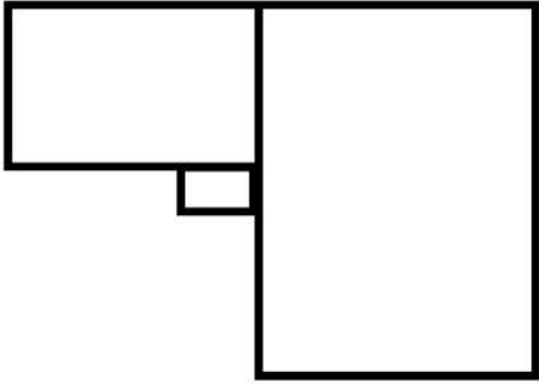


Public vs. Private



Analysis

Parti



Natural Light



Circulation



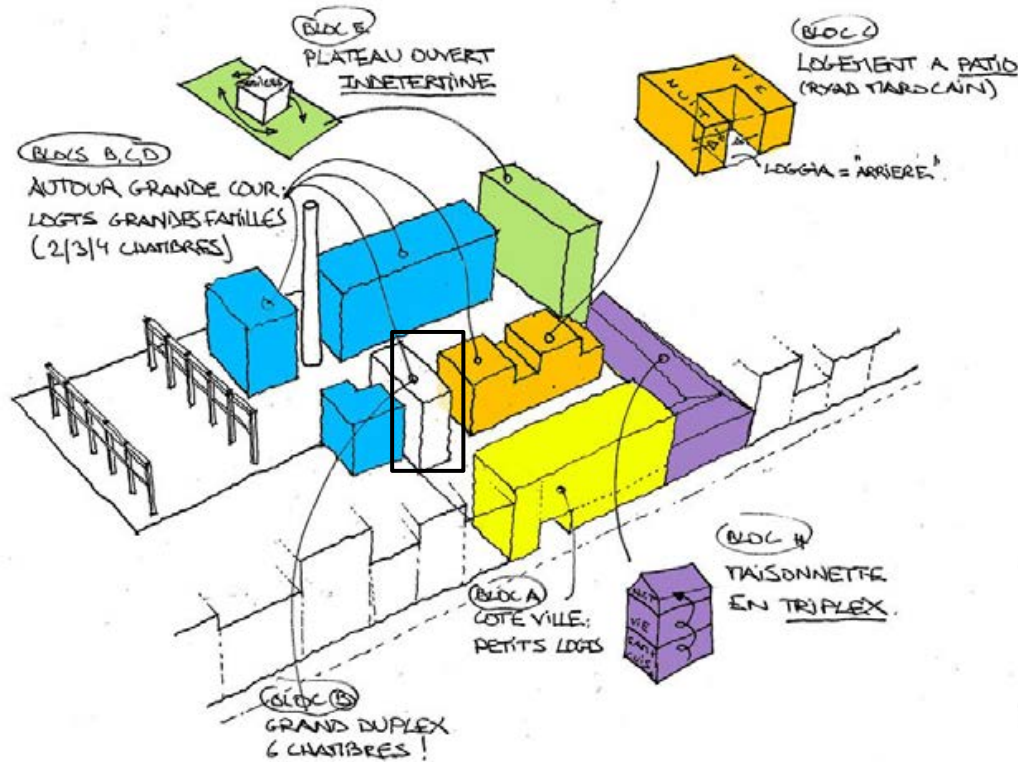
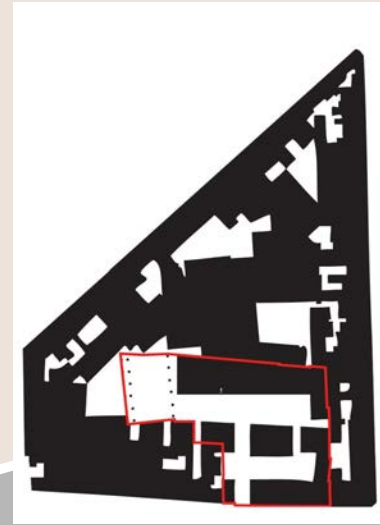
- Simple arrangement of geometry considering surrounding buildings.

- Natural light mainly accessed through courtyard.

- Main paths of public circulation :connected to courtyards.



Housing units



Design Breakdown

Triplex- 3 housing units

Around large courtyard, large family accommodations, 2/3/4 rooms

Lofts

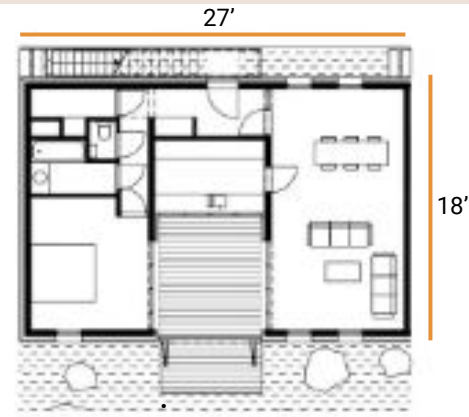
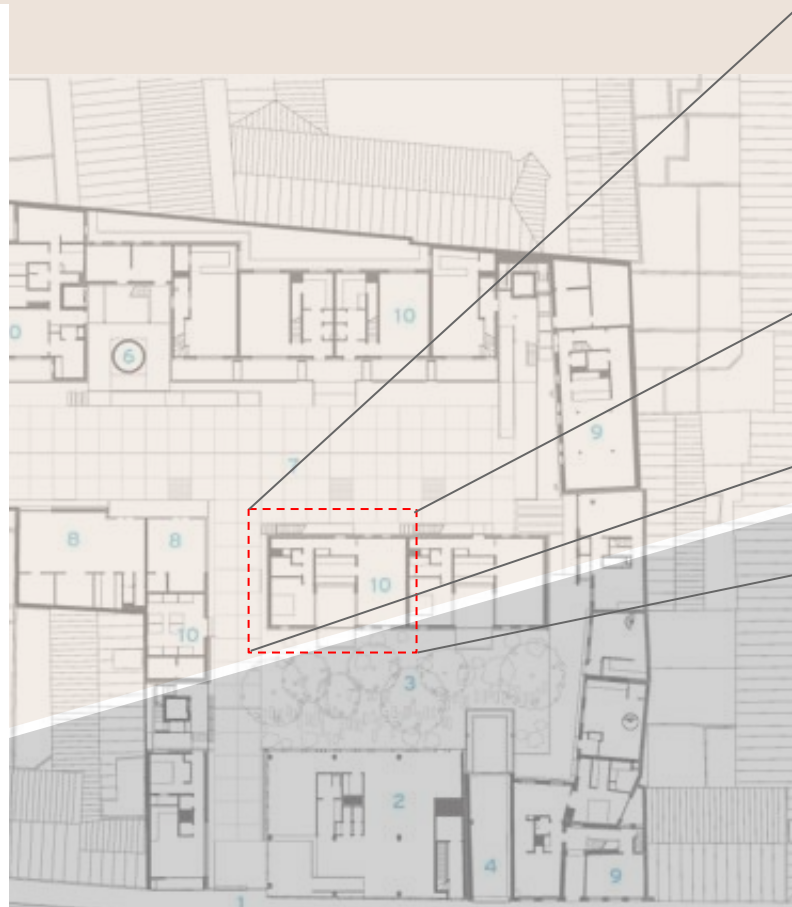
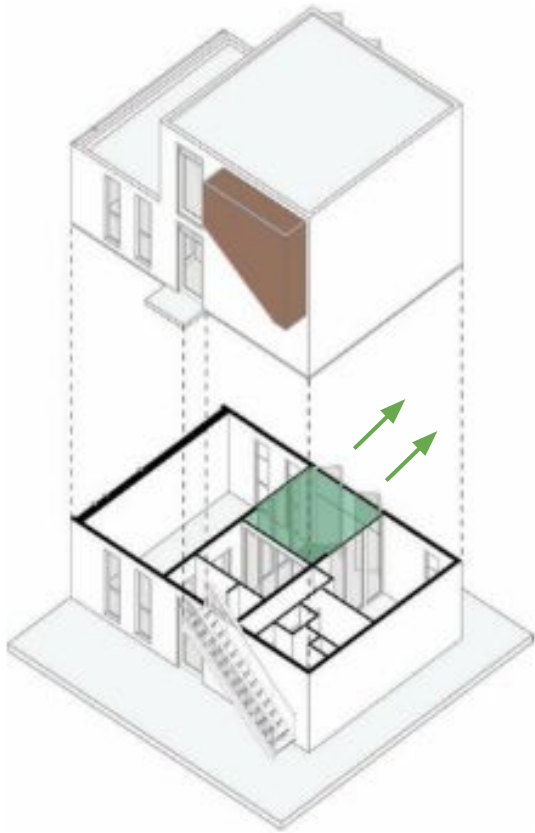
Large Duplex - 6 rooms

Area: 438 ft²
Cost: 66,138 € (77,088 USD)

Area: 323 ft²
Cost: 48,773 € (56,848 USD)

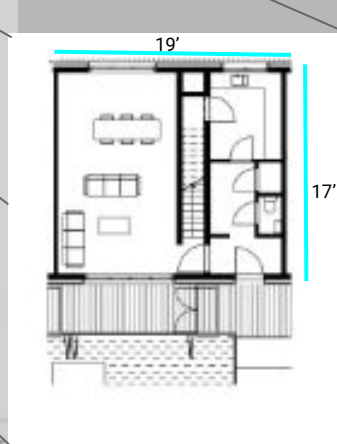
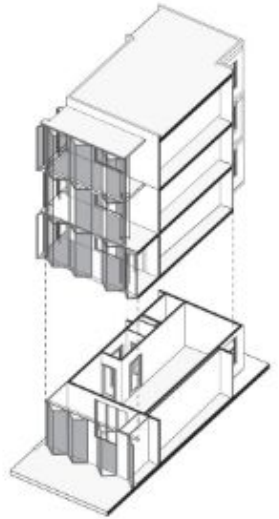
Area: 496 ft²
Cost: 74,896 € (87,296 USD)





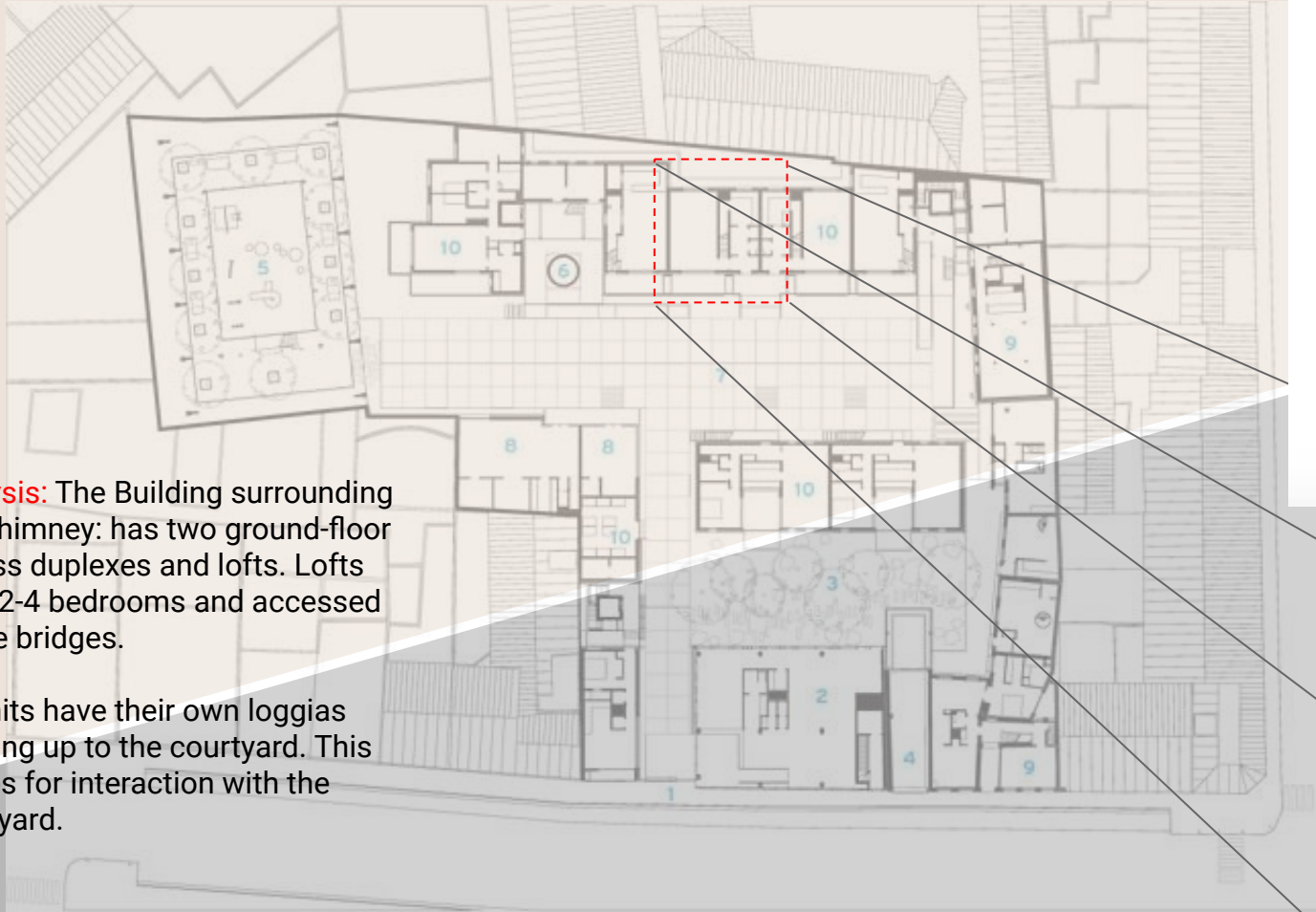
486 sq ft.

Analysis: The middle buildings surrounding by the mini forest have two one-floor apartment and duplexes above. There is a middle patio. Units entrance is from the square.

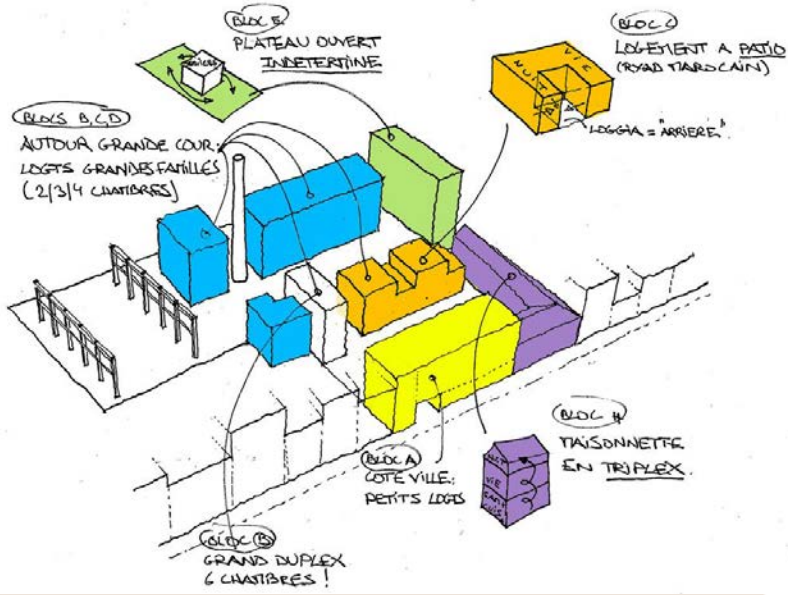


Analysis: The Building surrounding the Chimney: has two ground-floor access duplexes and lofts. Lofts have 2-4 bedrooms and accessed by the bridges.

All units have their own loggias opening up to the courtyard. This makes for interaction with the courtyard.



Facades (Housing units)



Analysis:

- The buildings have different facades and materials to keep in concept of 'diversity' and 'community'. Though different they are complementary to the others, sharing one-or-two of the same materials.
- It is noticed that a lot of MDW's projects like the new buildings contain basically the same materials and color scheme.



Middle units- new buildings with material of industrial steel stairs and black metal panelling, and brown wood gives a warmer feel.



Lofts: Restored buildings Old steel beams are reused, white bricks are added giving a black and white palette to the building. Glass-covered terraces are seen.



New building facing courtyard. Same material as middle units but applied differently.

Materials:



Industrial-style
metal panels



(glued laminated larch
**wood doors & window
frames**);
CRISTAL(glazed
sliding/folding doors)



Load-bearing concrete brick walls
clad with non-bearing façades -
wooden coffers (caissons) stuffed
with cellulose insulation (new
buildings) or hemp fiber.

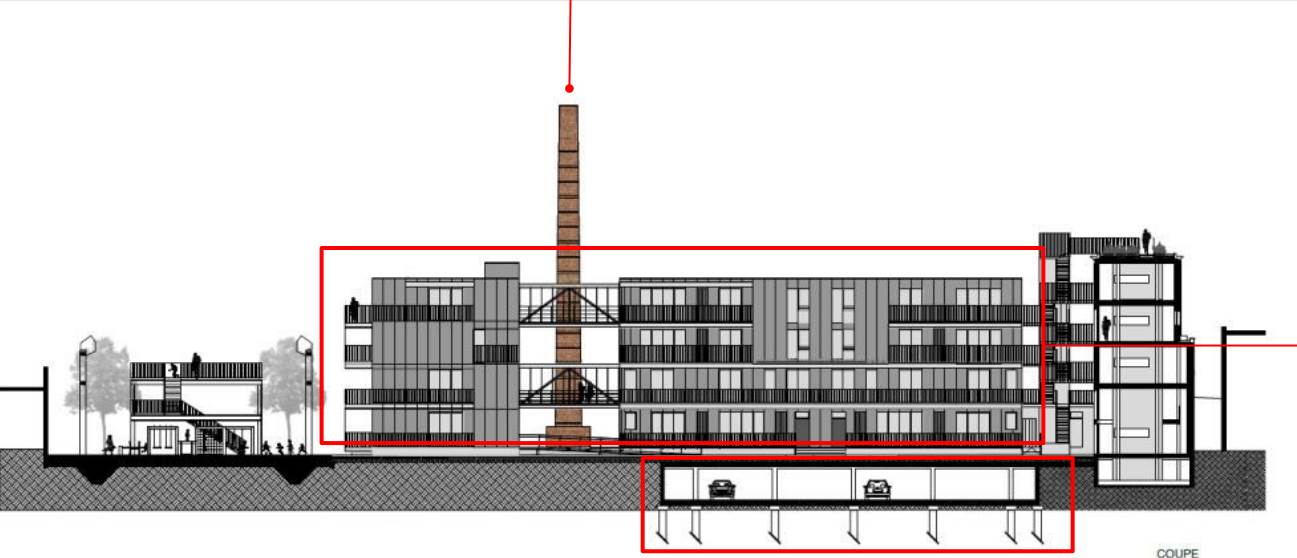
Analysis: Gives a warm homely feel
and adds color to the facade that
blends well with the black metal
panels.



glass-enclosed loggias

Analysis: The Loggias are placed
on the south side to maximize
sunlight gain. Being able to
operate an open/closed glass
gives residents a sense of control
over temperature that is
sustainable.

40m high chimney
used as part of the
underground garage
ventilation system.

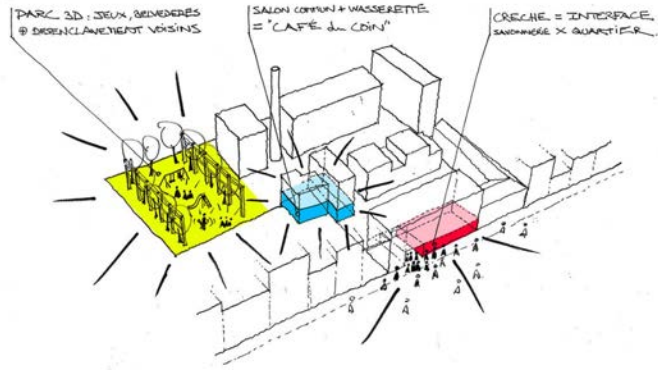


Parking

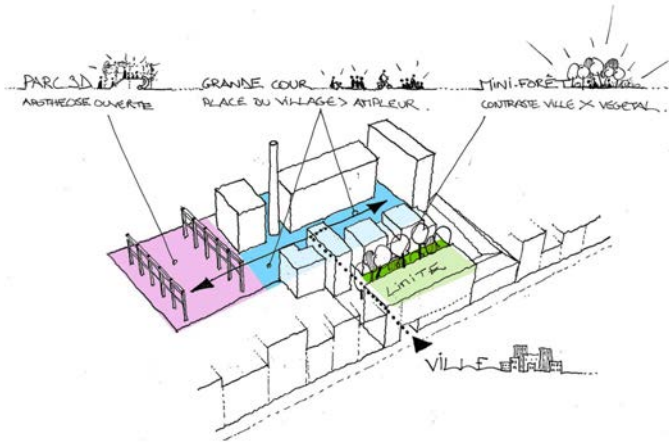
COUPE
1:100



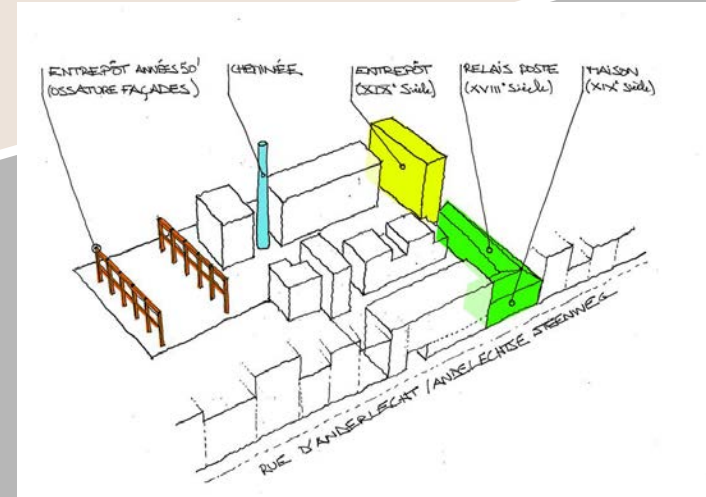
Social



Design Breakdown



Open spaces



Renovated

Manufacturers of new structural components:

- Insulation: **STEICO CANAFLEX** (hemp fiber)
- Roofing: **DERBIGUM** (flat); Kingspan (rigid thermoset modified resin insulation)
- Fenestration: **Riche**
- Glazing: **Saint-Gobain Glass**
- Elevators: **Schindler**
- Photovoltaic system: 36 sq m of photovoltaic solar panels (ECS), collective heating system: cogeneration unit (37 kW heat and 17 kW electricity), Gas condensing boiler (120 kW) with mini heating network, high efficiency heat exchangers (88% recovery)



Existing from factory:

- steel beams from a demolished factory building.



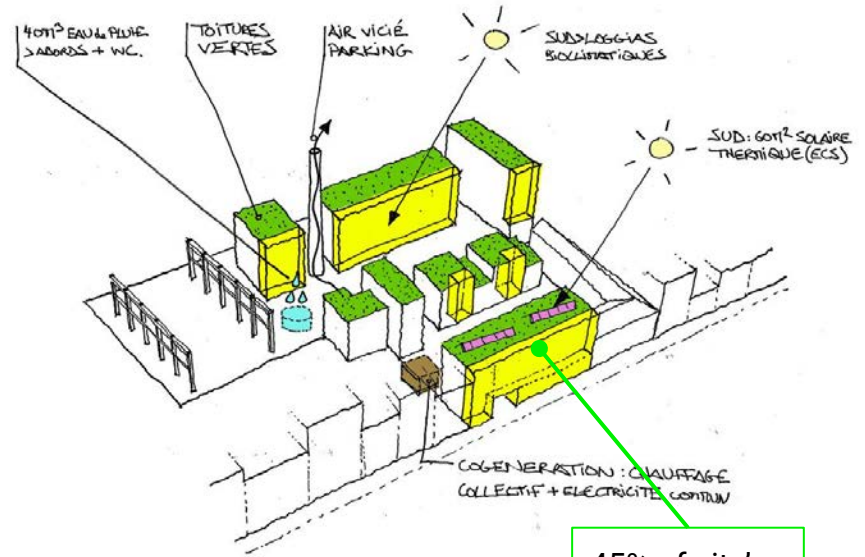
Reminiscent of Le Corbusier's much larger post World War II Unité d'Habitation in Marseilles, France, almost all the units open to integrated porches or loggias.

Sustainability

All of the buildings includes sustainability features such as:

- natural insulation
- 646 ft² solar panels for hot water heating
- rainwater harvesting for toilets.
- New buildings are wrapped with industrial-style metal panels (backed with 5'-inch-thick hemp insulation)

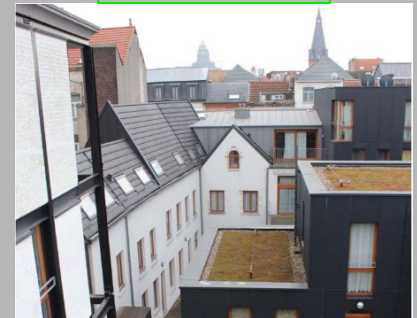
Loggias maximizing sunlight



45% of site's grey-water

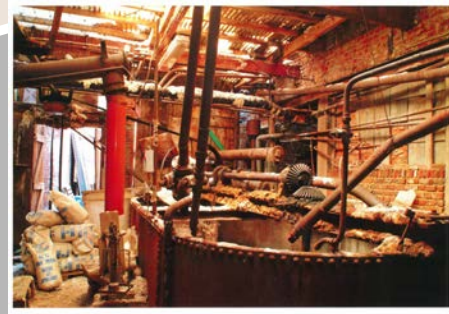
requires less than 15 Kw per square metre (7,300 BTUs psf) per year to heat.

- Insulation was added to the loft building to perform at the passive standards of the Brussels Institute for Management of the Environment (IBGE).



Design Challenges & Solutions

The architect wanted to keep the industrial feel of the site, yet create a sustainable design. As a restoration project it would take a bit of work to improve existing buildings and bring them up to code. Also the site was contaminated being as it was previously used as a factory.



Analysis:

Converting from a factory to a comfortable housing project is a challenge in itself.....



Design Challenges

& Solutions

Very sustainable measures were taken in material use in order to upgrade from past buildings and also benefit the future by energy efficient.

Use of natural insulation to insulate the old buildings.

The courtyard was produced on the site area that was contaminated.

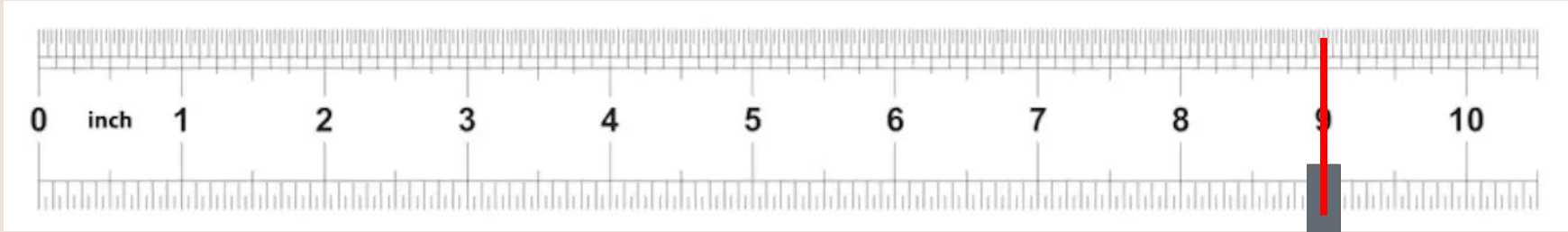


Loggias:



Interior:





Grading the Project

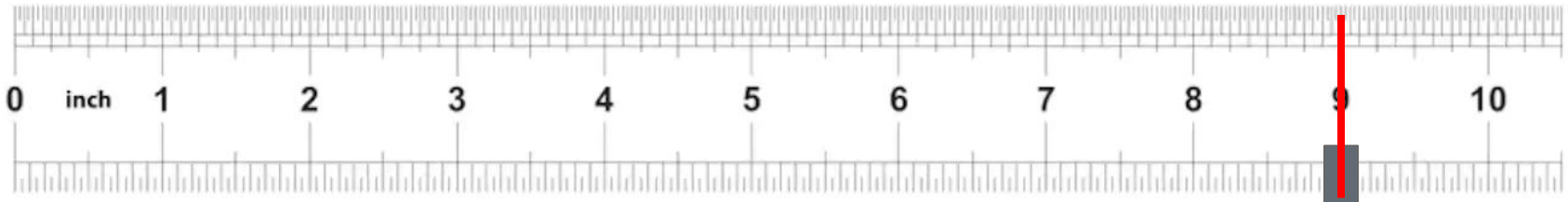
Satisfied:

- Sustainable
- Day-care to benefit neighborhood
- energy efficient
-

AWARDS:

MIPIM 2011 Award in the residential developments and application of sustainable development principles in creative contemporary architecture.

EUMiesAwards (Nominee)



Grading the Project



Did not Satisfy:

- Entrance can be improved
- High Construction cost
- Circulation have small pathways

Summary

Tucked within the core of Brussels, a place where as little as 10-15% of housing is tailored to low and middle income families, the Savonnerie Heymans represents a gratifying, promising, and exemplary future for a mixed diverse population in Belgium.

Overall it is a successful housing project that thinks of its people and the community whilst also providing a good design.



Broadway Affordable Housing

Santa Monica

USA



SITE

2602 Broadway
Santa Monica, California

is 33 units affordable house complex containing four three story building situated around a "Starfish-shape" courtyard with an underground parking complex.

The site is surrounded with a mixed of residential and offices.



Broadway Housing

Area: 33,000 SF

Completion: 2012

Owner: Community Corporation of Santa Monica

Architect: Kevin Daly Architect

Engineer(s):

Structural: John Labib & Associate,
TKSC

Electrical: FBA Engineering

Civil Engineer: Paller-Roberts Engineering

Consultant(s):

Landscape: Dry Design Inc.

Acoustical: Davy + Associates

Owner's Rep: SL Leonard & Associates

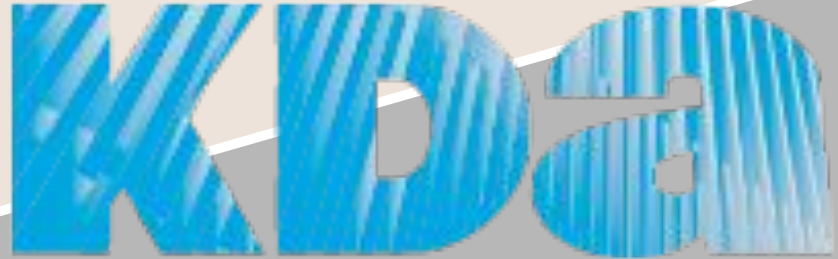
General Contractor: Ruiz Brothers

Photographers(s): Iwan Baan

Total Cost: \$10,900,000

Cost Per SqFt: \$330

Rent Range: \$569 to \$1315



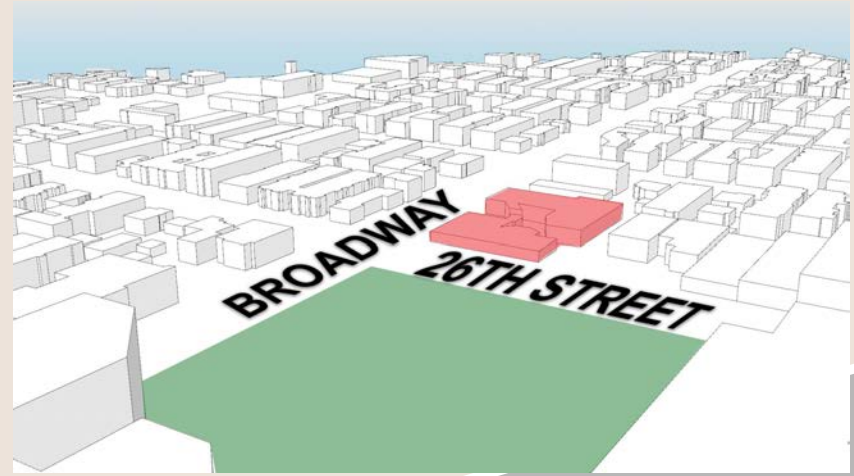
Design Challenges

Community Resistance

- opposed to affordable house despite being a demand within the area (Market study shows demand for 7,921 2 bed room and 6,725 3 bedroom units within this area serving those with income around \$560 to \$1300 (according to AIA description of the project)
- wants the new building to fit within neighborhood in term of scale and size.

Site Challenge

- Keeping and maintaining existing tree on site per community request



Design Intention

Design to be economical and environmentally sustainable

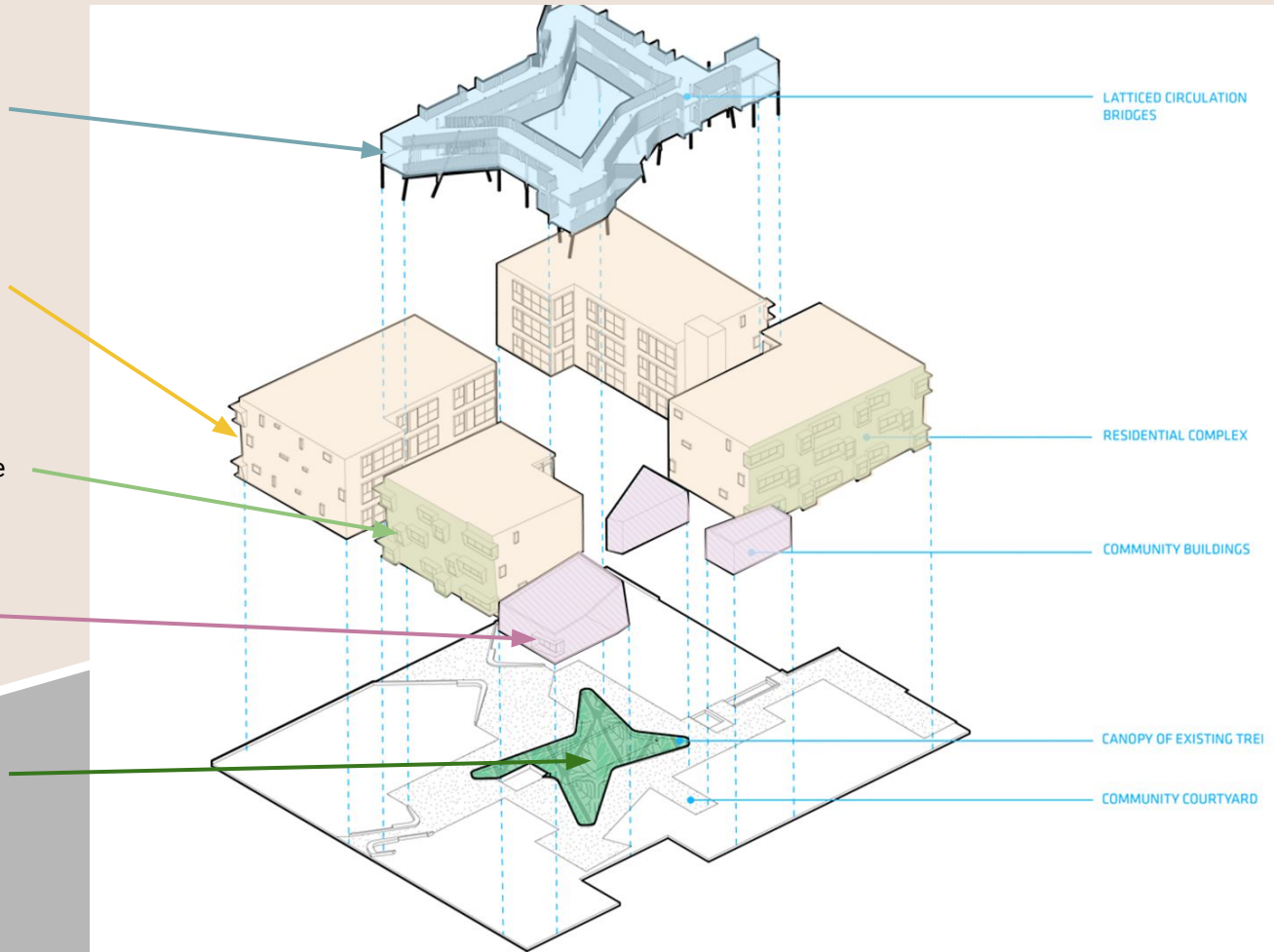
Vertical circulation connecting each smaller building mass

Smaller building mass housing the thirty three living units was design to fit within the urban fabric of the neighborhood with its height and sizes.

Hooded Window design for sustainability and makes the mass of the building feel less rectangular

Community building area design for classes and surrounds around a playground

Building built around existing tree, turn into a focal point courtyard for complex



LATTICED CIRCULATION BRIDGES

RESIDENTIAL COMPLEX

COMMUNITY BUILDINGS

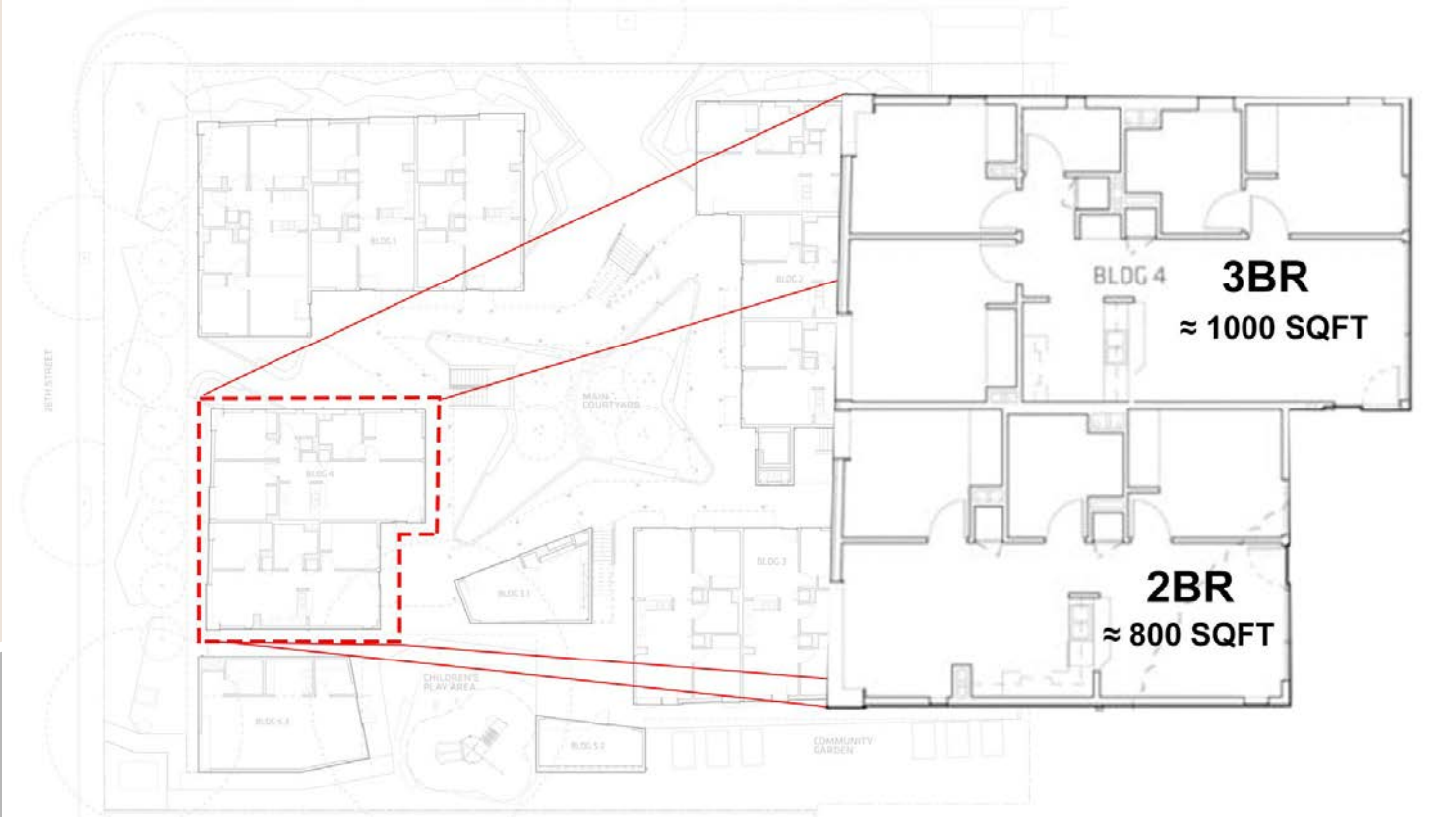
CANOPY OF EXISTING TREE

COMMUNITY COURTYARD

Living Units

Total 33 units. Three bedroom units on lower level and two bedrooms units on upper level

Santa Monica apartments with an average of 775 sq ft



Amenities

Site:

Bike Path in Red

Park in Green

ANALYSIS:

-Site Amenities are limited due to location. Shown here in a blue line there is harsh abruption between the neighborhood side and offices with few retails within that area.

- The area with its many large corporate office shows that this area have heavy vehicular traffic.



Amenities

Complex

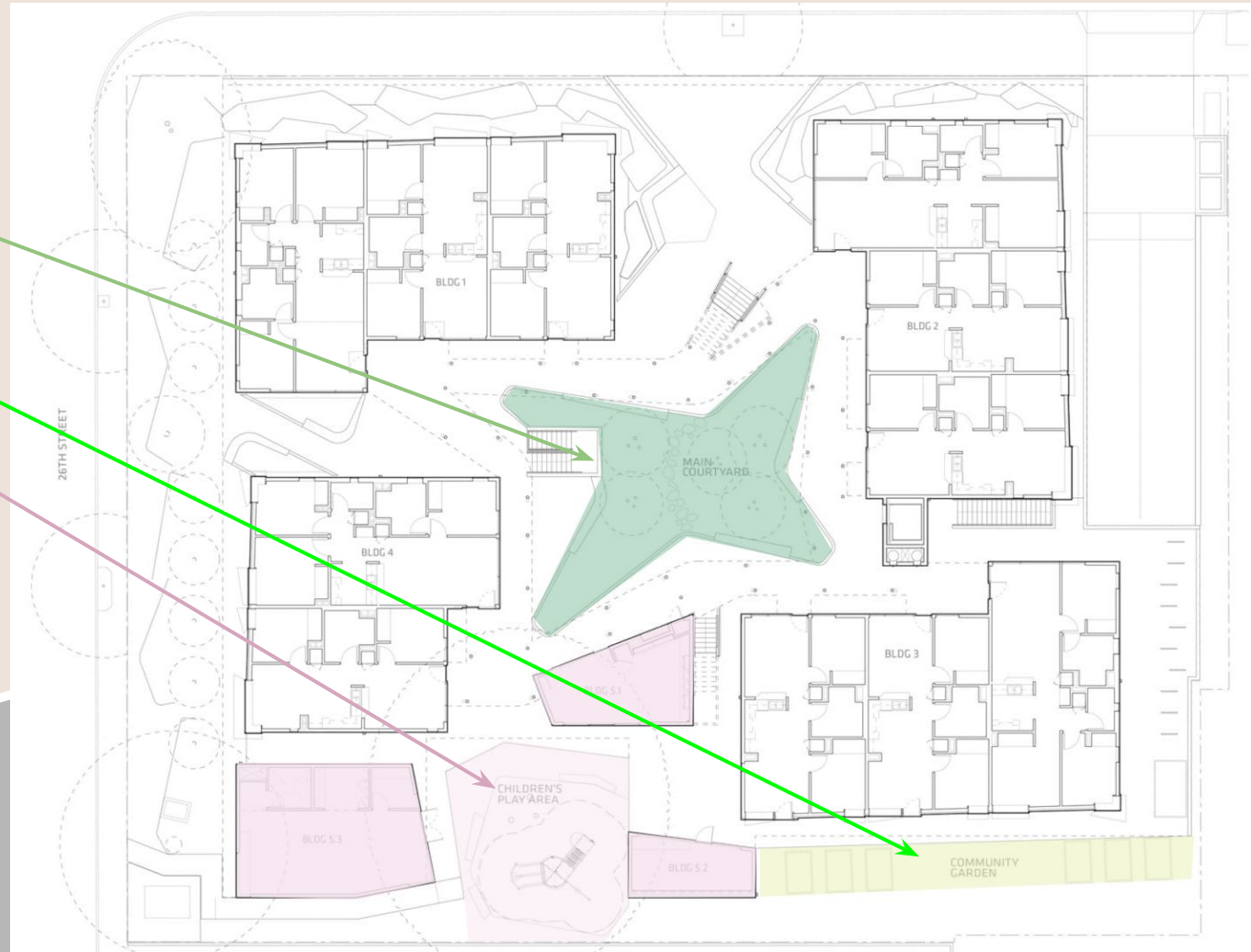
Main Courtyard, Housing, existing tree and other vegetation

Community Garden

Community room include buildings for class room and play area

ANALYSIS:

- Main Courtyard seem to be ineffective use beside for vegetation and only hard seating around it. Potentially moving the community garden to this area will make it more of a focal point and draw thoses in the complex to interact with it more.
- Community building could be utilized for more amenity beside classroom like a fitness centers. In addition a community building could be replace with an outdoor eating area for communal gathering and better use of community garden.



Circulation

ANALYSIS:

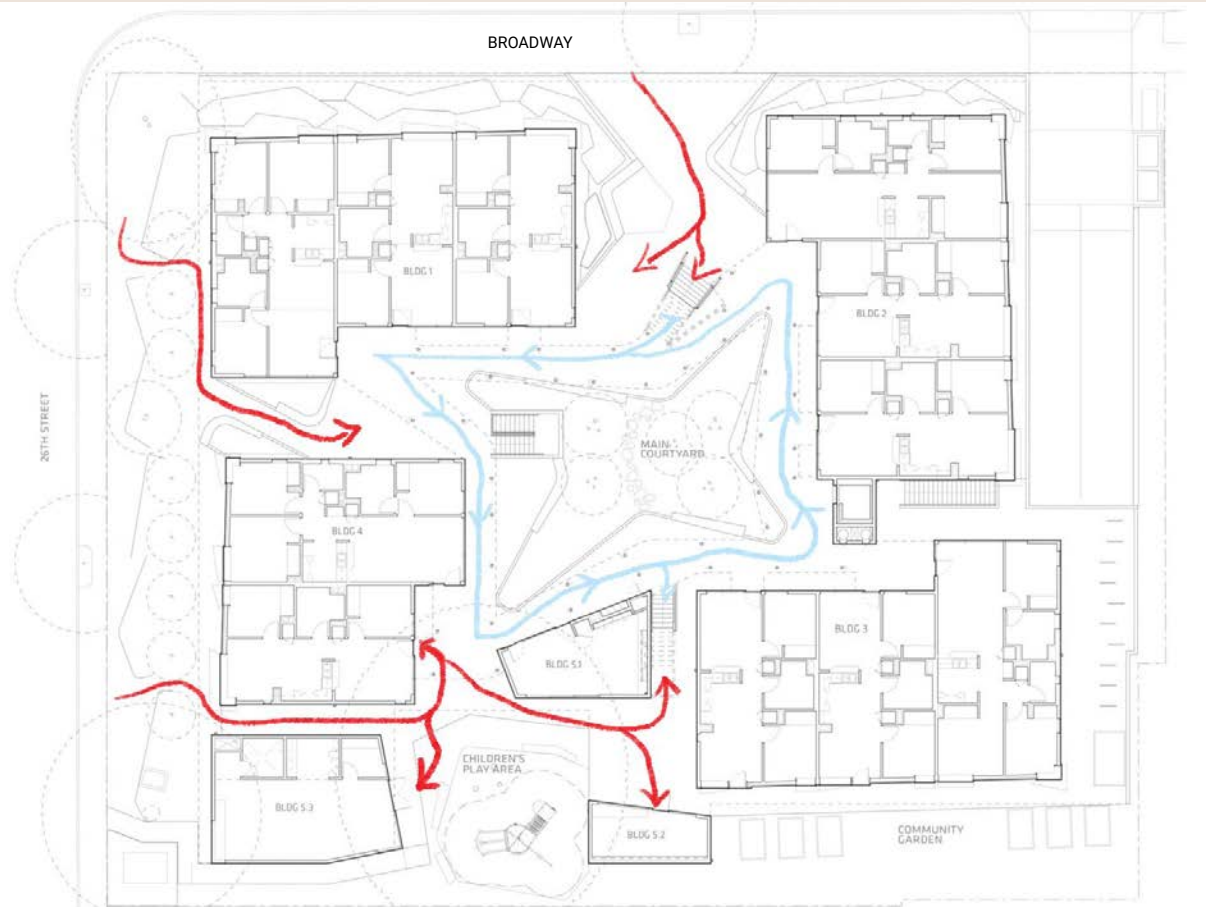
-The vertical circulation looks appealing and is appealing in that it keeps the tree per the community request. However its take up a lot of space that could be allocate to make bigger or even more rooms. The suggestion will be to shrinking square footage of vertical circulation changing the shape of the courtyard.

- The current main entrance is on Broadway. However due to site amenity of a park across 26th Street. The suggestion is to change the entrance and focus of the building more toward 26th street so that it will face the park.



In red It show the two entrance to the complex. One on Broadway and Another On 26th Street.

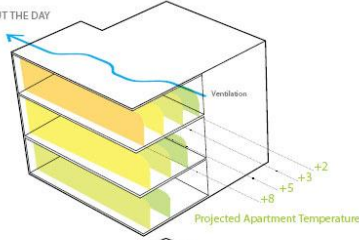
In blue is a bridge walkway area serves as a vertical connection and connects the separate units together.



Sustainability

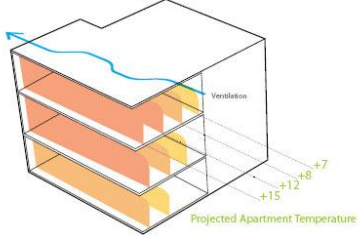
EXTERIOR SHADING SHADE GLAZING TO REDUCE HEAT GAIN THROUGHOUT THE DAY

With Exterior Shading
Southwest Orientation



Projected Apartment Temperature

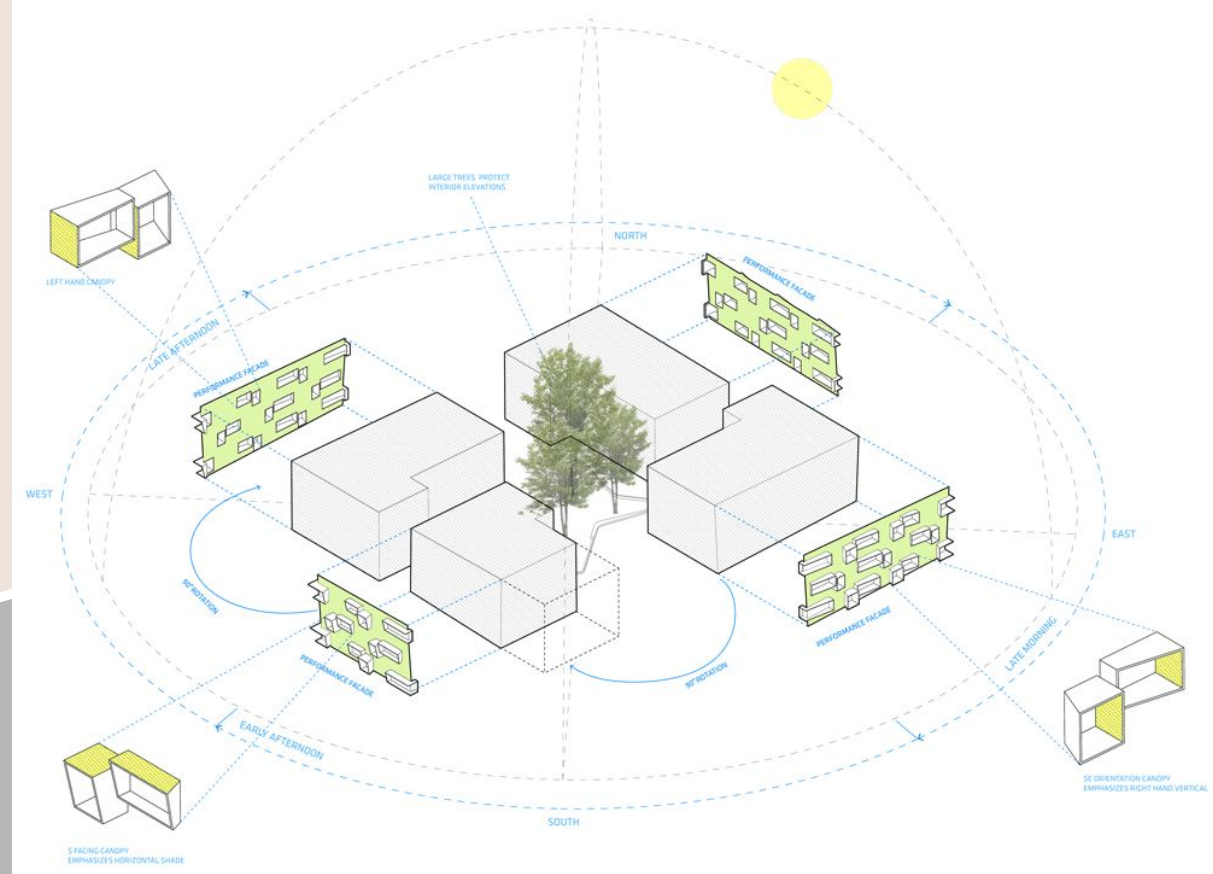
Without Exterior Shading
Southwest Orientation



Projected Apartment Temperature

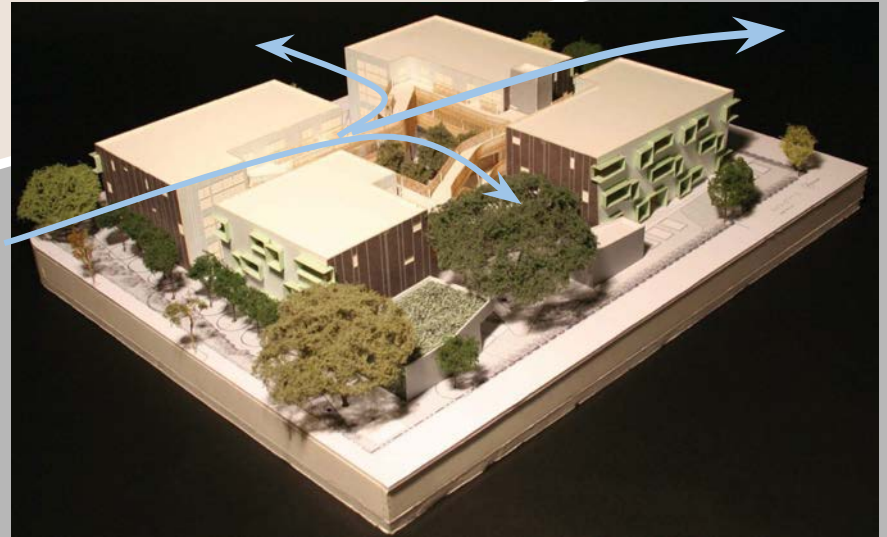
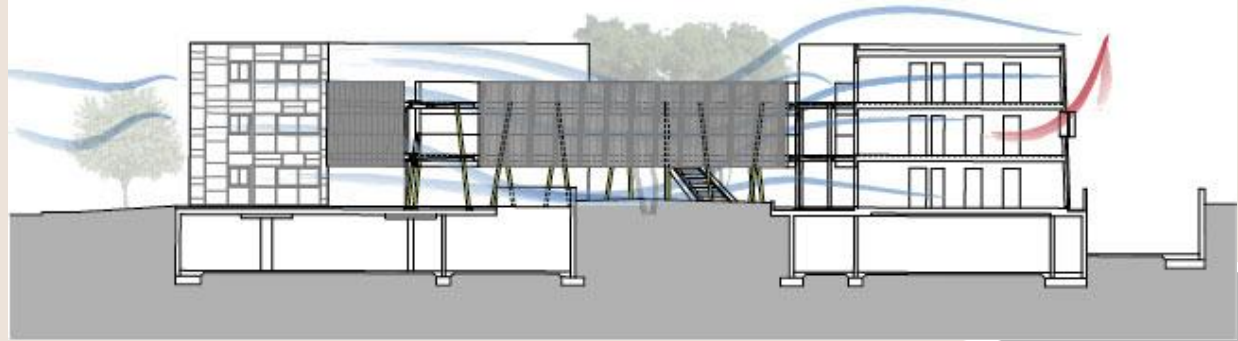


The hooded window protrude out to make the building look less rectangular. The facade is placed on the face of each specific building where sunlight is exposed the most. Its main feature is to provide solar shading to reduce solar rays from heating interior space.



Sustainability

The broken apart living quarter is situated in a way that allows natural ventilation through the complex. To promote this the bamboo slat serving as balustrade for the vertical circulation in the center is design to promote privacy but also to encourage windows that are facing the other build to be open thus increasing the cross ventilation. This design keep the living quarters at a comfortable temperature year round.



Sustainability

With the intention of designing with sustainability in mind the architect included other measure such as

- A green roof to helps insulate and slow runoff water
- A 15,000 gallon underground rainwater for the maintain of the vegetation around the site
- A fiber -cement board facade that is breathable to release heat
- A vegative screen wall on community building facing 26th street that insulate and reflects noise.
- 10 bicycle parking in rear yard

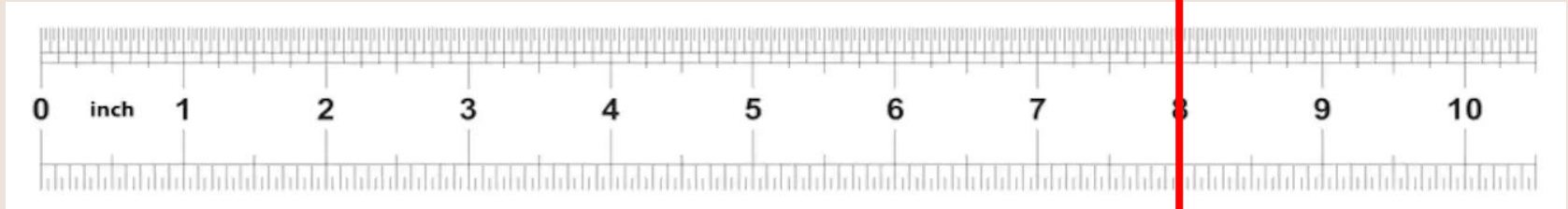
ANALYSIS:

The sustainability feature is sufficient enough to making the building perform well for those who living there and gives off less of a feeling of being "affordable". However, improvements could be made to be expansion of certain feature.

- A vegative screen wall can be expanded along 26th street to make it a prominent feature and reduce more noise along 26th street due to surround area being more offices, vehicular traffic is heavy within the area .
- The green roof from images and the image shown can be expanded to the roof of each complexes and not solely just on one community building.
- Another feature to further the sustainability push is to put solar panel on the roof. From an aerial perspective looking at the map of the location solar can be spot in few building in surrounding area. In addition the location of Santa Monica and its climate allow solar to be a worth investment to benefit those living in the complex.



Summary



Satisfied

- The need of affordable housing within this area.
- The communities needs of keeping the building fit within the context of the neighborhood and keeping main tree on site.
- The sustainable building pushes it further than just a “affordable housing”

What could be improved

- Entrance improvement
- More Sustainably
- Better use of Community Space



OUTSIDE USA

Vivazz, Mieres Social Housing

Asturias, Spain

Cost- \$12,435,113.86 USD (\$65.43 psf) Area- 192,028.16 sf

Typ. 2 Bedroom- 576 sf Typ. 3 Bedroom- 864 sf

Savonnerie Heymans

Brussels, Belgium

Total construction cost: 12,379,740. U.S. (\$176.31 psf)

Area: 70,000 sf

IN USA

Broadway Affordable Housing

Santa Monica

Cost- \$10,900,000 (\$330psf) Area- 33,000 SF

Typ 1 Bedroom ≈ 725 Typ 2 Bedroom ≈ 800 Typ 3 Bedroom ≈ 1000



Vivazz

<http://mdw-architecture.com/#page-about>

<https://www.archdaily.com/220116/savonnerie-heymans-mdw-architecture>

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Savonnerie

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Broadway House

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