

# 6x6 BLOCK

Girona  
2016-2020

Located in an urban environment of transition between the compact city and the open block *ensanche* characterized by an important presence of public facilities, the project proposes the design of 35 apartments based on criteria of program flexibility and reduction of the carbon footprint throughout the life cycle of the building.

The use of cross-laminated timber panels (CLT) for the construction of the volume above ground brings back the traditional structural wall typology and defines living spaces of similar dimensions between load-bearing elements.

## TYPOLOGY

Residential

## AREA

4.375,50 m<sup>2</sup>

## PROMOTER

Private

## BUILDER

Estructuras Ultra, Egoín, Alumilux, Jaume Fusters, Placoguix, Elèctrica Riam, EIS Girona, Telecta

## COLLABORATORS

Raül Elias, project leader  
Arnau Arboix, architect  
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L3J arquitectura i enginyeria, facilities consultants  
Societat Orgànica + 10 s.c.c.l., sustainability consultants  
Blázquez Guanter s.l.p., structural consultants  
SiS consultoria acústica s.l., acoustic consultants  
Incafust, Institut Català de la Fusta, quality control and counselling  
Egoín technical services

## PHOTOGRAPHER

José Hevia

XV Spanish Biennial of Architecture and Urbanism  
Award 2021.

Finalist in the FAD Award of Architecture 2021.





*The project  
draws on the  
local tradition  
of cantilevered  
galleries built on  
the ancient wall  
that separated  
the city from the  
Onyar River.*

**F1**  
Interior of the gallery of Casa Masó, Girona.  
Photograph by Jordi Puig, Fundació Rafael Masó, 2017.

**F2**  
Façades of the buildings above the Onyar River. Unitat  
Municipal d'Anàlisi Territorial - Ajuntament de Girona.

**F3**  
Ortophotomap of the 6x6 Block site.  
Institut Cartogràfic i Geològic de Catalunya (ICGC), 2019.





The apartments are composed of six rooms of 12 m<sup>2</sup> each capable of containing a multiplicity of uses and designed to be connected at will, suggesting a free appropriation of each space and incorporating any possible changes in the program over time according to the wishes or needs of their inhabitant, as well as allowing for the possibility of housing community spaces (nursery, gym, workplaces, collective kitchen-dining room ...).

The chaining of pieces allows, in both bays of each apartment, a complete perception of the total depth of the building and the simultaneous incidence of light from the south and from the north, even in the spaces furthest from the façade planes.

In addition to reducing the energy embedded in the construction, the project makes a significant effort to reduce the energy demand necessary to guarantee the comfort of the living spaces, combining good insulation and cross ventilation with the maximum use of solar radiation.

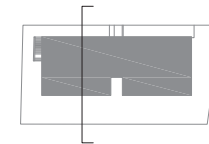
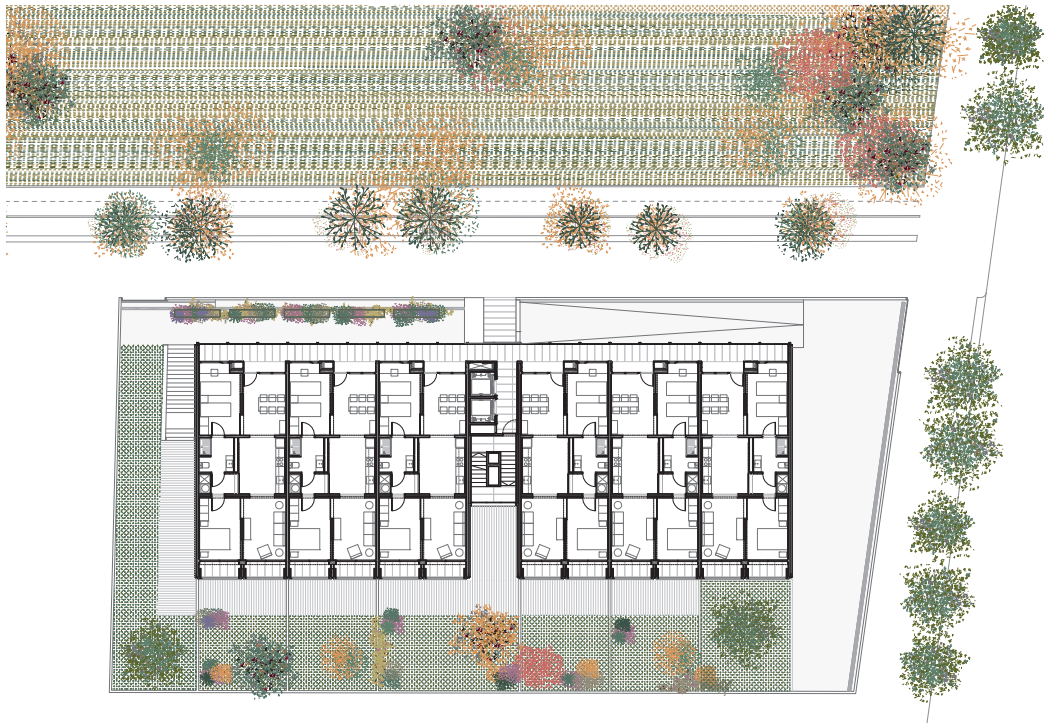
The location of a gallery as a habitable greenhouse on the south façade allows the passive preheating of the air intake of the ventilation system in winter, while in summer the direction of the circuit is reversed and the gallery is reconfigured as a shadehouse in contact with the environment.

**F1**  
South façade during winter. The gallery as a greenhouse.

**F2**  
South façade during summer. The gallery as shadehouse.

**F3**  
Galleries above the Onyar River painted by Vicente Huedo.





#### F1

Southern elevation. The systematization of the prefabricated construction serves as a regular compositional basis on which the double position of the gallery enclosures operates: as a greenhouse in winter and as a shadehouse in summer. This radical differentiation brings dynamism and vibration to the façade of the building, which expresses its will and ability to adapt to the climate.

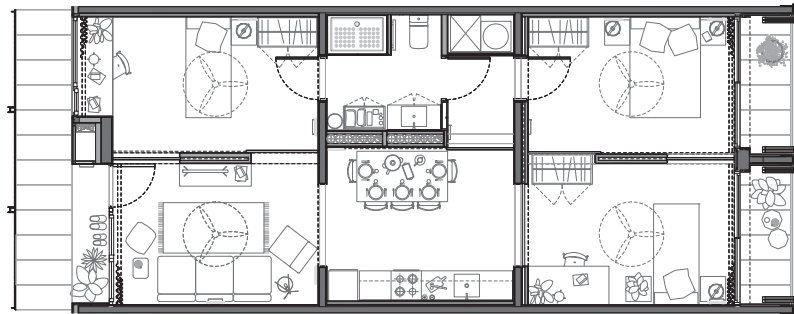
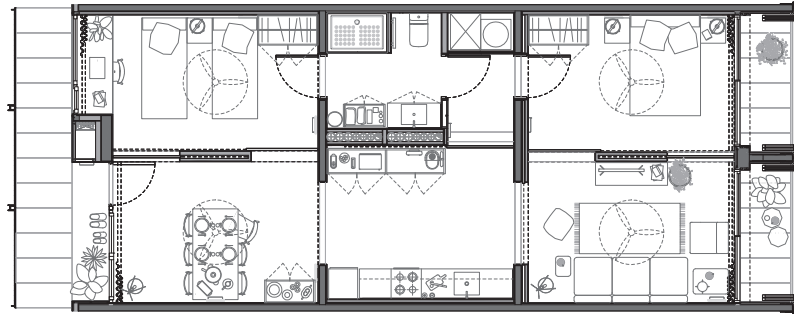
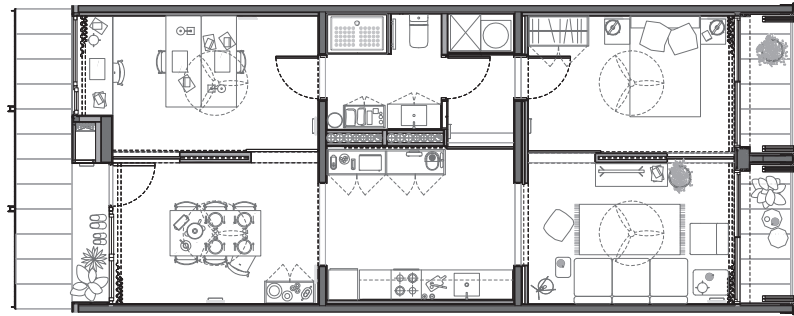
#### F2

Type plan.

#### F3

Cross section. Solar radiation absorption on the southern façade, the transformation of the gallery into a shadehouse and cross-ventilation complement each other as the main bioclimatic strategies of the building.





**F1**  
Sheltering the domestic. Single bedroom layout.

**F2**  
Sheltering the domestic. Two bedroom layout.

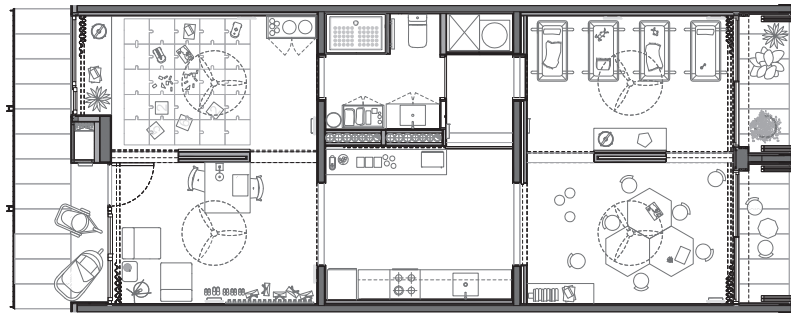
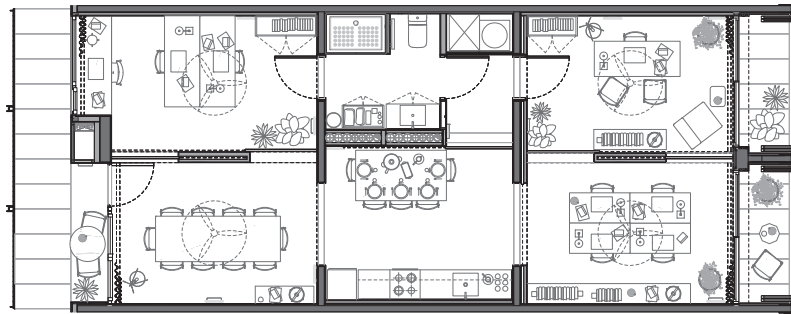
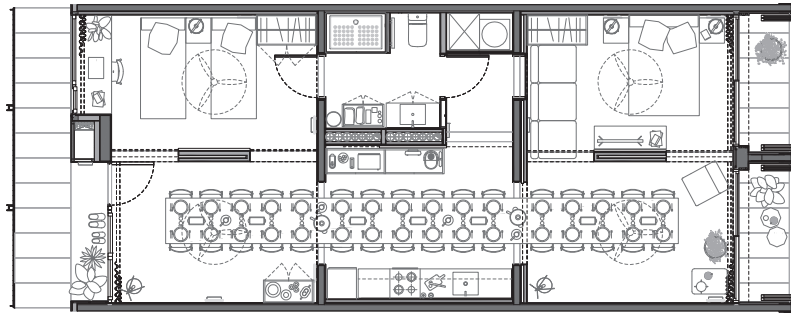
**F3**  
Sheltering the domestic. Three bedroom layout.



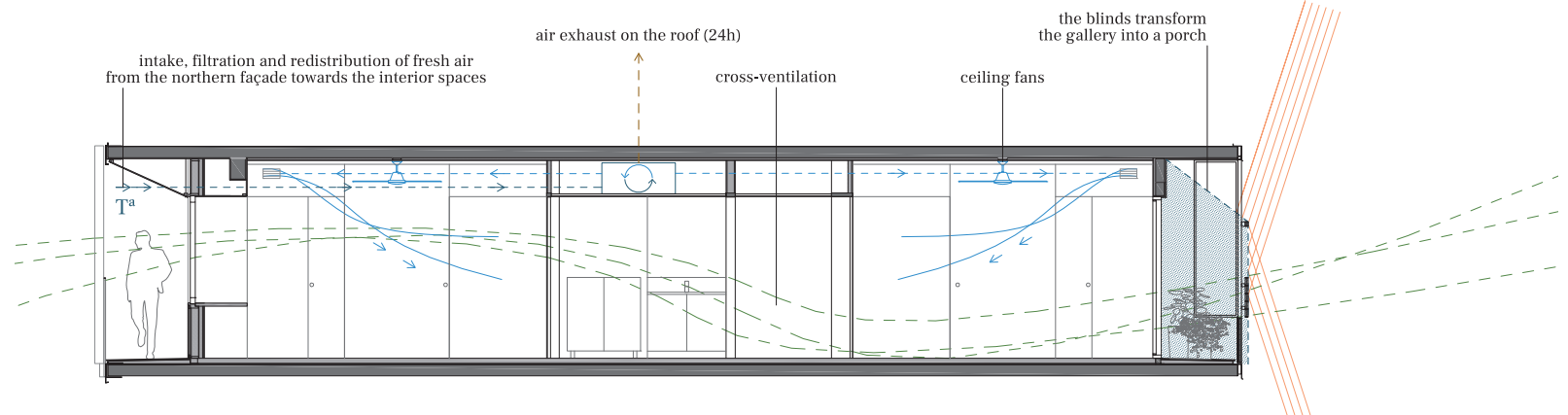
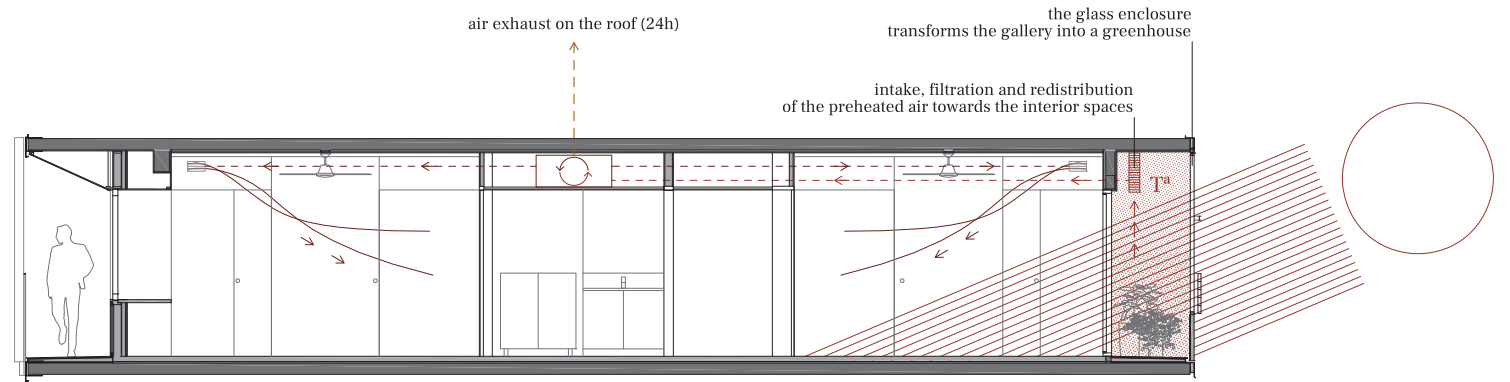
**F4**  
Sheltering the extraordinary, celebration.

**F5**  
Sheltering the collectiveness, coworking.

**F6**  
Sheltering the collectiveness, nursery.







**F1**  
Winter climatic function. The gallery acts as a greenhouse passively preheating the supply air of the double flow ventilation system.

**F2**  
Summer climatic function. The gallery acts as a shadehouse and the air intake necessary for the ventilation of interior spaces comes from the northern façade.

0 1 2m



- F1**  
The north-facing rooms are connected to the access walkway and the exterior green area through a generous work table and a large window.
- F2**  
Public access to the apartments from the north walkway open to the green area. Wood gives warmth to this shared space.

*The variable width of the northern walkway creates small areas of domesticity in front of each apartment's entrance.*







**F1**

The strategic location of the sliding doors provides cross-sectional views and diagonal connections between the six rooms that compose each home.

**F2**

The central core of the apartment houses the kitchen, bathroom and space for everyday domestic tasks.

**F3**

All rooms have wide openings for natural light throughout the day. The wood characterizes the interior divisions between them.

**F4**

The gallery as a shadehouse. Intermediate space capable of generating an atmosphere of intense retreat and contact with the environment.







#### F1, F2, F3, F4, F5

The proposal suggests a free appropriation of each space and incorporates any possible changes in the program over time according to the wishes and needs of its inhabitants. The homogeneity of the rooms pursues the maximum flexibility and adaptability of each unit.