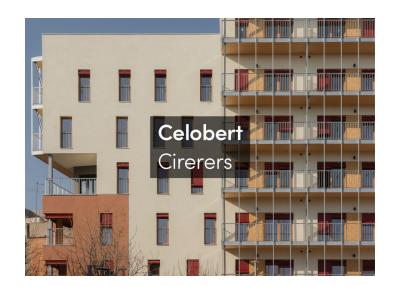
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CIRERERS: THE CITY, THE COMMUNITY, AND THE ENVIRONMENT

Posted on August 7, 2023 by martabuges

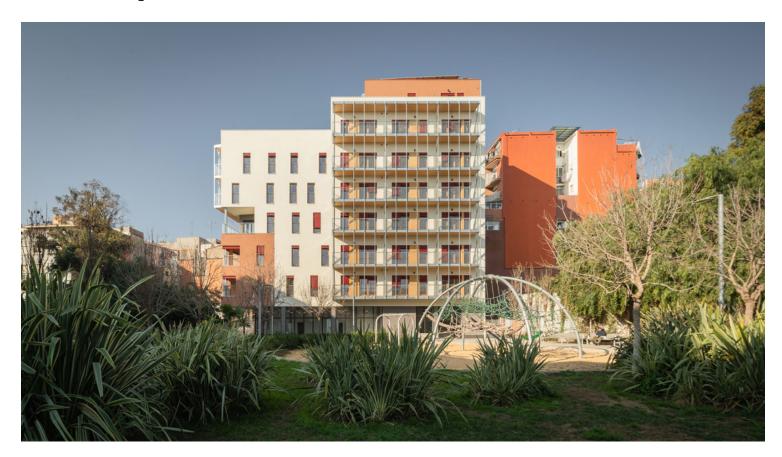


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The project has three major commitments: to the city, the community, and the environment. In the urban context, the building preserves the line of the cityscape through two decisions that shape the project. On the one hand, the layout for the façade on the third floor is set back to enhance a shadow line and recognise the neighbouring volumes. And, on the other hand, from the third floor, instead of continuing to use the party wall, what we do is step back and create a façade with a lot of life, with a central staircase where there is a lot of activity. And to the other side, the building has much more weight.



Location

The plot is in a very particular location. First, we have the urban fabric of Roquetes, which is based on the self-construction of the 1950s and 1960s, with plots of approximately five meters between

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party walls; a new axis that connects to via Júlia; and the new market which is under construction. On the other hand, we have plaça de les Dones de Roquetes, with buildings of a different, more urban and metropolitan scale, with a ground floor plus five to seven floors. So, the building is positioned like a hinge between two completely different fabrics and acts as a backdrop for the opening of a new axis. Urbanistically speaking, the project puts a lot of emphasis on how to resolve the integration of the building into this context. The second fundamental aspect is how this building can be a community building, and how the building as a whole can be housing rather than exclusively the flats. The street pavement, made of cement tiles, seeps into the building and climbs up floor by floor, mimicking to some extent the logic of the Mediterranean street, where semi-domestic and semi-public life intersect. The aim was to establish a relationship between the community spaces and the square. We planned for a restaurant space open to the neighbourhood on the ground floor, with a training programme for women in restaurant business matters, as well. But these uses didn't materialize, and it is currently a commissary run by an agri-food product cooperative.

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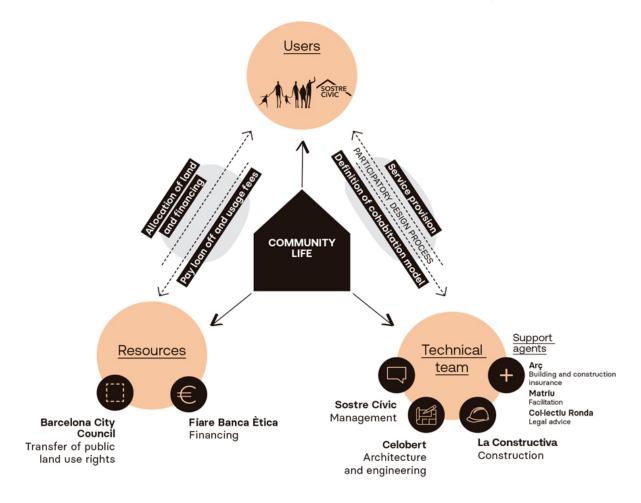
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Participation in the process

Roquetes is an area with a very dynamic social fabric, but the cooperative cohousing movement had not yet arrived. This is because cooperative housing, as of now, is still not affordable for everyone. The situation, however, is changing for the better. The initial capital contributions in the case of Circrers were between €25,000 and €35,000. So for many residents of Roquetes—a neighbourhood

with low per capita income and low-cost rents—this project was not an easy fit.



In the beginning, a seed group was formed with three cohabitation units, who participated in the tender phase. They were the ones to describe the project's mission, vision and values, and provided the foundation for developing the functional programme that we drafted. Therefore, these initial decisions were not derived from an already complete and formed group, which in this case would have been with 32 cohabitation units.

Then we won the competition and the project started picking up speed. When construction began, between 2017 and 2020, more people gradually joined until the group was finalised. They participated in the architectural design process throughout the various phases, from the basic project to execution. Approximately 15% of the neighbours are from Roquetes, while the rest are

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from other neighbourhoods in the city.

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House typology

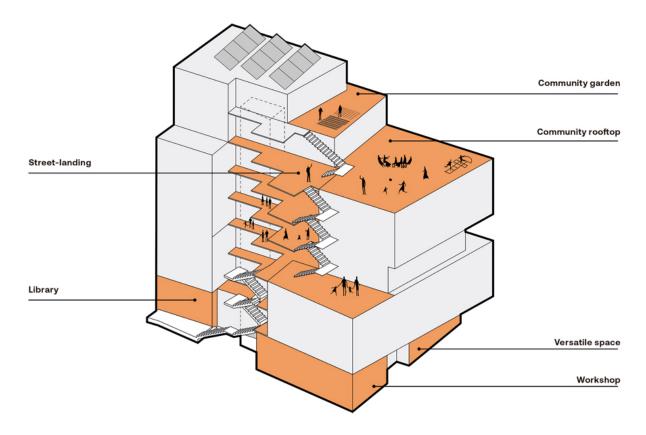
At a typological level, we went for maximum housing density. At first, in the competition project, we proposed 26 units, with a larger surface area, more common spaces and a larger ground floor for retail space. At some point during the project, due to reasons of financial viability, the number of homes was increased to 32, the maximum allowed. Consequently, the houses had to be smaller. About 20 of them are 40-45m2, and those on the tester and in the corners are 60-65m2 and have more rooms. This greatly determines the type of people that will live there. There are many single-person families and couples. It is multi-generational, but due to the small size of most of the homes, there are few families with children. As people moved in, they adapted to the housing that was

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available at the time.

Floors

On the ground floor, we have several spaces: a multi-purpose room with a kitchen, a shared workspace, a workshop area, a warehouse with a bathroom and the commissary. All the floors have a common space that we refer to as the 'streetlanding', which is about 40m2 —around the size of the smaller houses—, and which functions as an extension of the flats. It is a space for chatting, where people gather, children play, grandmothers bring out a table, and residents do laundry and hang clothes out to dry. It is a space without a specific function but that welcomes many activities. This was one idea of the project: we did not want the community space to be concentrated only on the ground floor—where you might gather more sporadically—but on each floor and throughout the building, with indoor and outdoor, covered and uncovered spaces. This encourages encounters and interactions in everyday life. In the end, these spaces give meaning to the project.



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You enter the building on the ground floor through the courtyard. Your first contact is with the centre of the block and from there you go up a flight of stairs, which has a logic more like a service staircase. But when you get to the third-floor rooftop, the staircase moves back and becomes a façade, serving as a viewpoint as you go up. It also allows the community to contemplate itself; it's a place where all kinds of things happen and you see them in a single plane.

Upstairs there's a terrace / lookout with views of the entire city. It has become the main space in the building for gatherings, celebrations and parties. The community uses this space for very dynamic activities and a lot of interaction: there's something going on every weekend, from barbecues to yoga, and outdoor cinema to sewing workshops.

I think the major lesson is that common spaces should be as flexible as possible. During the design process, people do not know how they will live in community and use these spaces because they have never experienced it. Sure, you can do preliminary surveys, participatory processes, etc., but the architecture must not condition the uses in excess.

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Wood structure

The use of wood is the third pillar of the project and, from the start, it was a firm environmental commitment. We made a clear promise in this regard, and the group and Sostre Cívic supported it. We have had to give up certain things. One was an underground parking garage; when we started specifying construction prices we saw that it was out of the price range. The group— not us—decided to give up the parking garage in favour of building with wood.

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The project approaches the issue of the environment from an analytical view of the life cycle of the building as a whole and with a strong commitment to the use of organic materials, such as wood. There are 730 m3 of wood that works like a big storehouse for 730 tons of CO2; that's the ratio. Moreover, we went for dry construction methods: from the ceiling of the ground floor up, there is no concrete. I think it is still the tallest timber building in Spain built with dry construction. Apart from the fact that this whole process is more expensive, there is a significant acoustic issue: meeting the acoustic requirements is complex due to the material composition of the CLT panels—accompanied by gravel, mineral wool and fibre. We had been implementing these materials in single-family homes for some time, at least since 2015. This was the first time we used it in collective housing, and

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it is working very well.

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Climate issues

For all these reasons, the building has very little associated grey energy, which is practically compensated for by the wood itself. In addition, wood fibre and mineral wool are used for thermal insulation; the façade cladding is made of lime mortar; the carpentry is made of wood; and the interior distribution elements are made of gypsum fibre, which also has a low environmental impact.

As for the use of the housing, the building was designed in compliance with 'passivhaus' standards, although it is not certified as such since there is one parameter that it doesn't meet: air tightness, which must be below 0.6.

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Despite there being a fair deal of building envelope, there is a clear commitment to promoting the compactness of the building. Work has been done on the following aspects: high thermal insulation of 12cm on average throughout the entire envelope; a laminate floor-to-floor air tightness barrier; natural cross ventilation through the floors and landings; mechanical ventilation system with heat recovery without thermal loss; solar control based on apertures designed to allow the sun to enter when appropriate based on the time of year, etc. With all these measures and the dual flow ventilation and heat recovery, a standard air conditioning system was not needed.

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Aerothermics

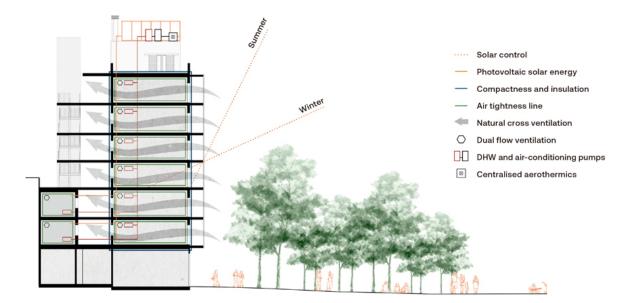
The centralised hot water generation system uses aerothermics. It is also used to complement the ventilation system with heat recovery. The hot water that is stored is used to preheat a little on days that are two or three degrees colder.

Users must learn about these climate issues to ensure comfort levels in their homes and the building. We had to explain these systems in detail to everyone once they moved in.

In these flats, you don't open the windows when you're hot, you have to close them sooner, let

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down and raise the blinds when it's time. You can easily be at 25°C inside when it's 40°C outside.



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