

The Flex House: Habitat in its Essence

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The project is generated from Corbusier's Dom-ino system developed in 1914. With the clear notion that social housing finds in simplicity its biggest asset, Corbusier's system offers not only this attribute, as it is an open system, where the flexibility of plan distribution and envelope act as main points. The design's idea is to explore the possibilities of this scheme beyond the established visual of the slab on pilotis, to include in this architectural scenery the continuation of the beam system that extends itself beyond the original structure, forming a grid that predicts not only the restraint – where the structure extends, but also the expansion – how far the resident can go from his initial housing module. A global issue such as social housing does not benefit from a single architectural and urban planning approach since the numerical deficit appears only as a condensed and plausible statistics inside a complex sociological equation. In this sense, the open system appears as a pragmatic answer, but not completely programmed to this question. It is our belief that the popular construction knowledge occupies a significant space in the intricate spectrum of predicates, which compose a "housing proposal" that aims for success in its establishment. Conversely, the concept offers the residents possibilities of customization and future extensions of their units according to their interests, recognizing the future resident as the client that he always was, and in a certain way redefining the architect's surpassed role as a dictator of the habitat. Thus, housing is no longer seen only as a unit or a set of blocks, but instead, is appreciated as a part of the city, as a form of occupation and contribution to the urban fabric. The house and its surroundings are investments that the residents will appropriate and develop according to their own language, however, respecting the structural grammar provided by the grid. As Rolnik (2016) notes, "our deficit is not only of houses, but also of city", and inside this motto, the proposal is treated as such; an intervention that is inserted in the urban fabric in order to be incorporated to its reality, and to establish not just houses, but a community.

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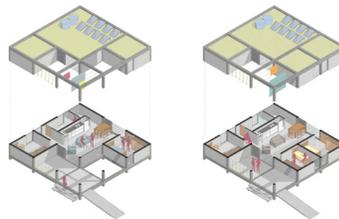


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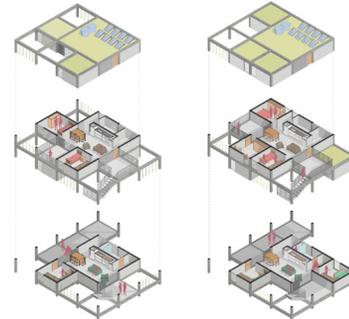
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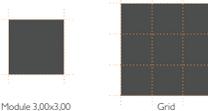
Single Family House Variations



Row House Variations



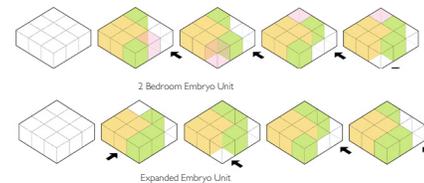
Dom-ino



Module 3.00x3.00

Grid

Module Flexibility



2 Bedroom Embryo Unit

Expanded Embryo Unit

Living | Kitchen | Bathroom Bedroom Expansion Access



| A | Grid Occupation

An Urban occupation where nature and community unite. Through green corridors, streets, and buildings as the main elements of the proposal, a new block configuration emerges. The buildings are inserted in groups surrounding a one-way street, two lines of housing units rotated in the plan to generate in-between spaces compose each group.

| B | Shared In-Between Spaces

The concept of shared spaces drives the block urban occupation, where the paved surface expands the function of street evolving to an environment that encompasses other activities. Semi-private squares are created through the movement of housing positioning, prioritizing residents and pedestrians and cherishing people integration.

| C | Urban Sustainability

Embracing the sustainability idea, the rainwater is directed to the back part of the buildings and then used to reinvent a series of natural areas. Adapting to different climates, during the rain season recreation lakes will emerge from the streams, and in drought periods the same stream will help to cool the air through evaporation.

| D | Green Corridor

The green corridors are located parallel to the houses and to the city grid, expanding and connecting to the neighborhood, generating new paths and recreation areas.

| E | Parking Options

Parking appears in a few spots that will be included through the streets with the aim to concentrate life around them. When they are not in use, these spaces can be appropriated as a square.

