

90 Adoma social housing

3 Pl. des Papyrus, 31200
FRANCE **Toulouse**

2015
 Finished

About

The construction of these social housing units is based on prefabrication. Each house is a prefabricated box built with CLT panels. This system optimises the space taken up by the slabs and walls and the construction time, reducing the time spent on site to the absolute minimum. The boxes are already assembled in the workshop. At the same time, it guarantees the optimum insulation of all the dwellings, achieving thermal comfort. The placement of the modules responds to orientation issues, avoiding orienting the dwellings to the north. In addition, compactness is pursued in order to accommodate the maximum number of social housing units.



Aerial view.



Façade towards the cytises road.



Agents involved

Architect	ppa architectures		
Developer	Adoma		
Construction company	Unknown		
Structural engineer	Pyrénées Charpente		
Timber installer	Pyrénées Charpente	Timber manufacturer	Stora Enso



Main entrance and front public space.



General

14*	Height (m)	4	Floors above ground
1.600	Built-up area (m ²)		Ground floor area (m ²)
2.400.000	Budget (€)	1.500	€/m ²

Building use **Residential**



Main entrance and side façade of Papyrus Pl.



Technical data

Mass Timber Structural system Bracing system **Concrete walls**

Timber products used

- Prefabricated CLT boxes

0 Concrete floors

4 CLT floors

0 Concrete-timber floors



Construction process of the concrete cores. Stora Enso <https://n9.cl/z4k1e>



Construction timing

9 Months to complete the building

13 Weeks to build the structure



Wind actions

Terrain category IV

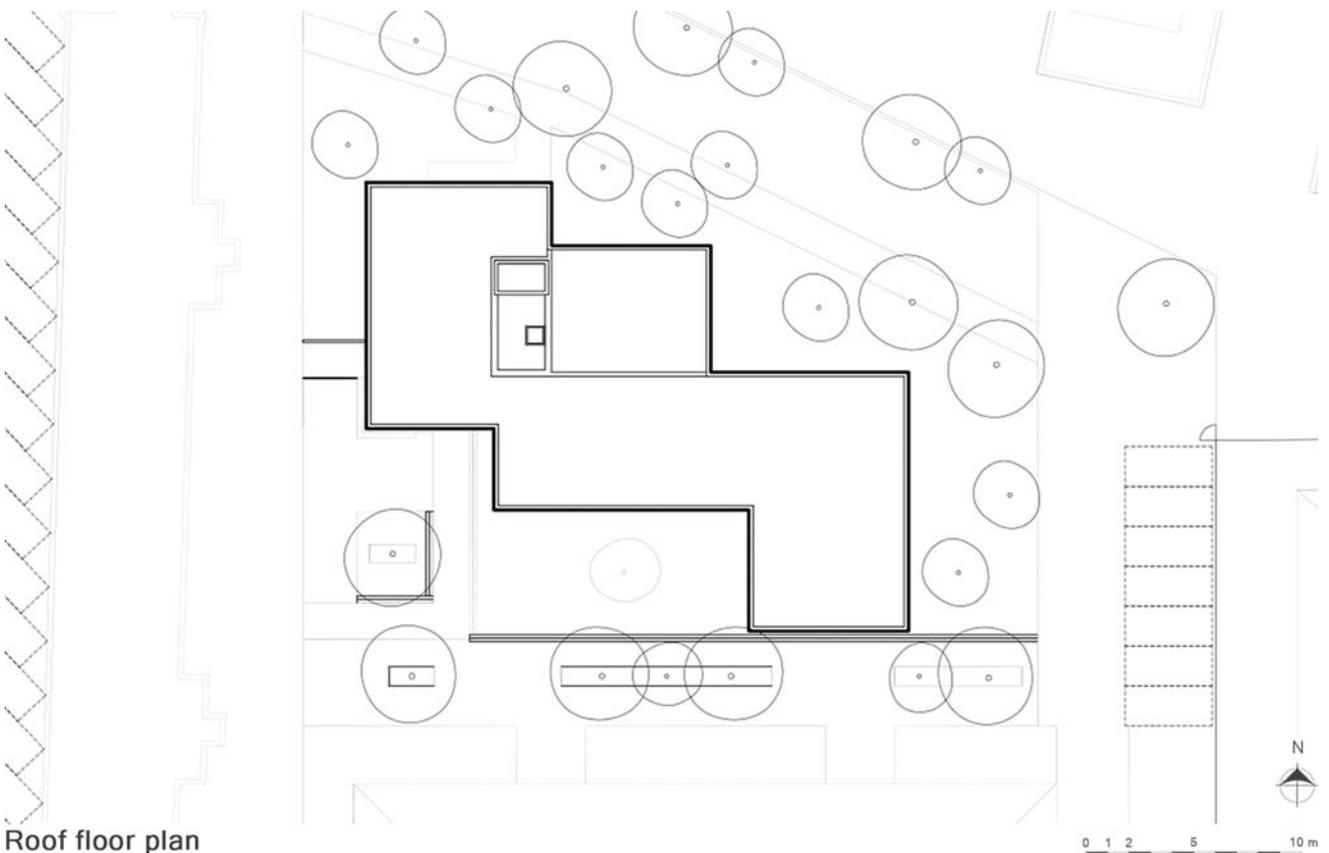
Area in which at least 15% of the surface is covered with buildings and their average height exceeds 15 m.

Slenderness

1,0



Workshop assembly of the prefabricated timber modules. Plataforma Arquitectura <https://n9.cl/56zq0>



Roof floor plan

 Sustainability

Picea abies Wooden specie

470 Wood volume (m3)

190 Distance of transportation (km)

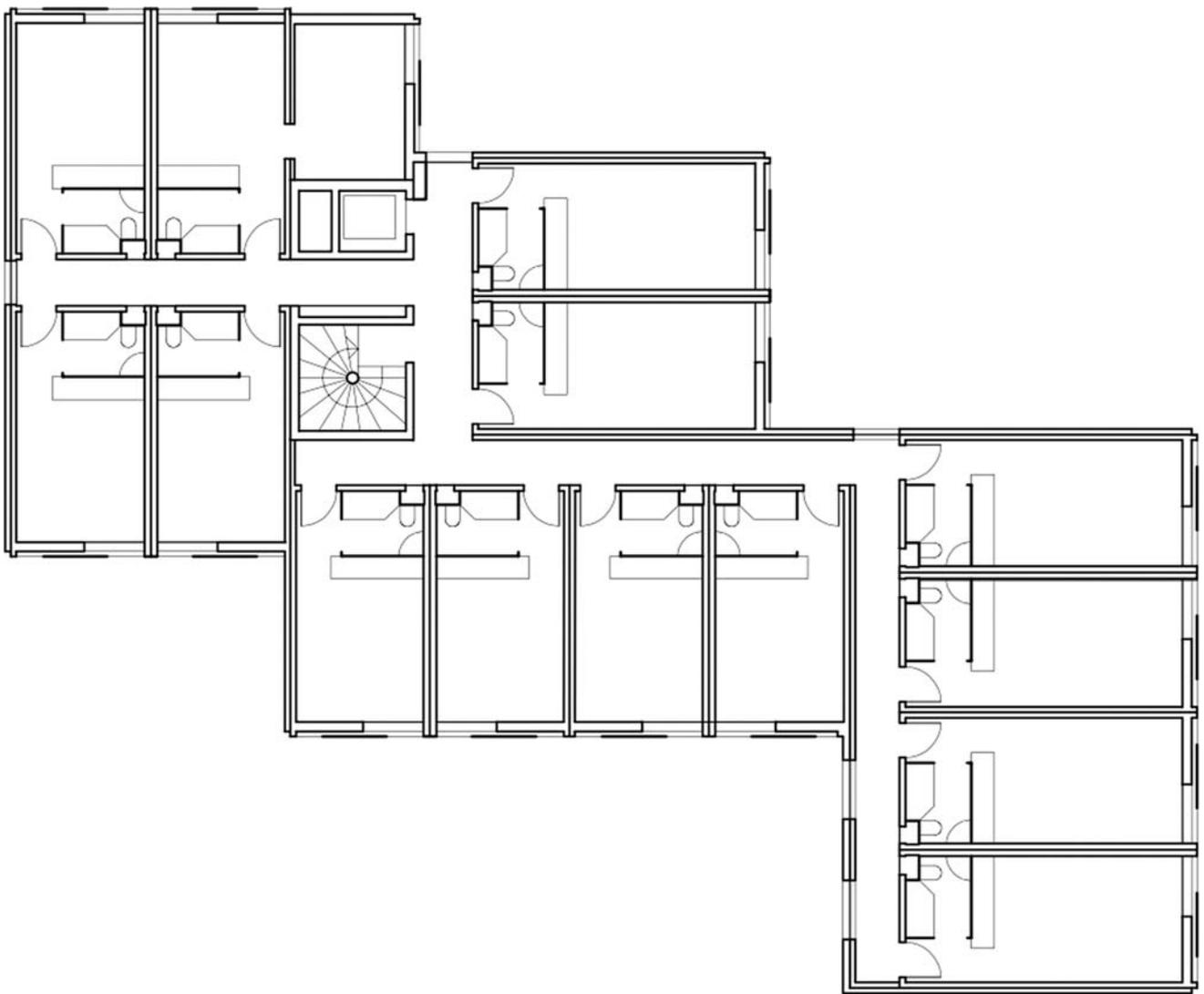
75% Percentage of structure made of wood

165 Potential CO2 benefit (t)

Special transportation needed

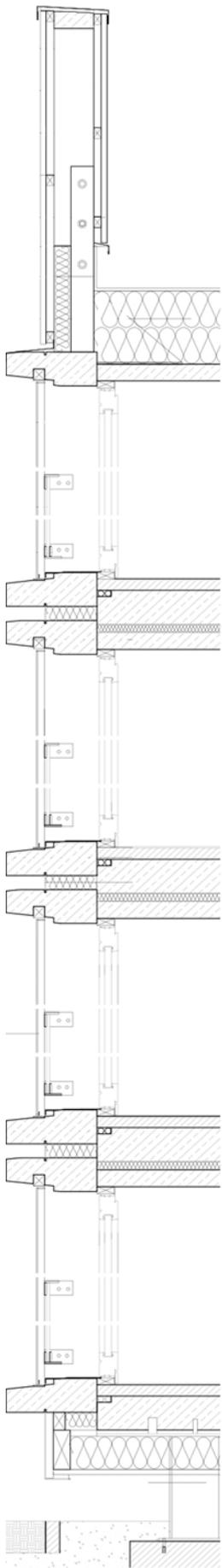


Prefabricated housing module made of CLT panels.
 Plataforma Arquitectura <https://n9.cl/56zq0>

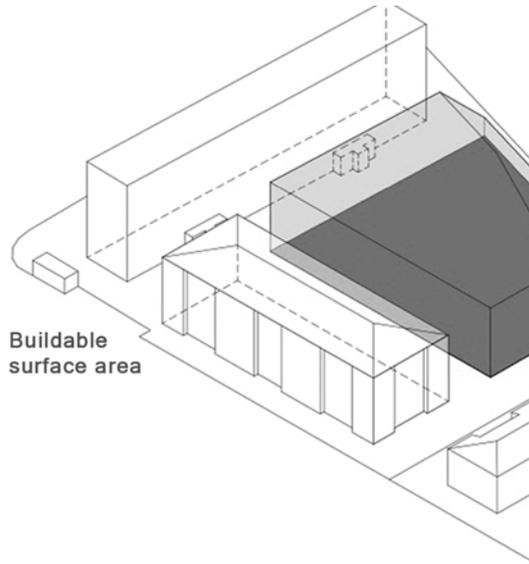


General floor plan

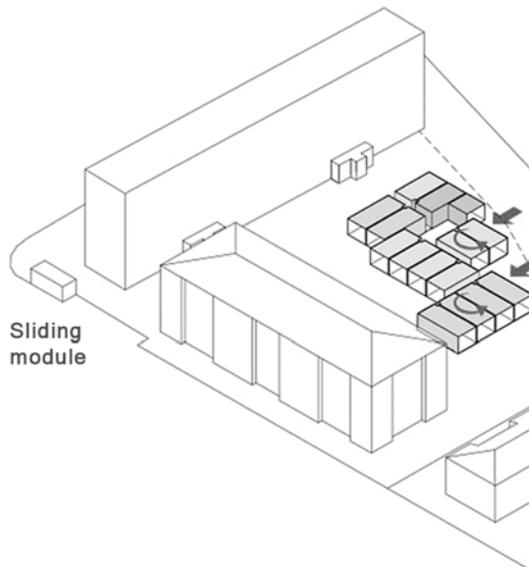




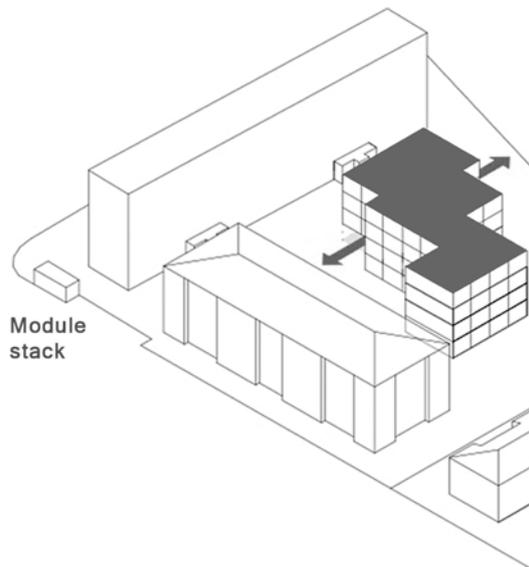
Constructive detail



Buildable surface area



Sliding module



Module stack



Front façade of the prefabricated modules. Aerial view of the building.



Detail image of a housing module.



References:

- Visit to the building on 21.09.21.

PÁGINA INTENCIONADAMENTE EN BLANCO