88 Le plateau des Possibles residence

Allée Antoine de Saint Exupéry 33130
FRANCE **Bègles**

2022
Under construction

About

It is a residential block conceived as a small village in which each dwelling forms a house in the shape of a duplex or triplex. With this configuration, the building reaches up to five storeys in some places. The construction of the building's structure is made entirely of wood, using a post and beam system and light framework on the façades. The enclosure is insulated by using straw boxes which, due to their stiffness, also serve as bracing in one of the directions. The floor slabs are made of concrete on lost timber formwork.


Aerial view.


Infographics of the building in its surroundings
Dauphins Architecture

Agents involved

Architect	Dauphins Architecture		
Developer	Domofrance		
Construction company	Unknown		
Structural engineer	Bureau d'études IBC and LAMECOL		
Timber installer	LAMECOL	Timber manufacturer	LAMECOL


Infographic of the front façade
Dauphins Architecture

General

15	Height (m)	5	Floors above ground
1.550	Built-up area (m2)	671	Ground floor area (m2)
2.750.000	Budget (€)	1.774	€/m2
Building use	Residential		


Main façade under construction.

Technical data

Post and Beam — Structural system

Timber cross — Bracing system

Timber products used

- GLT posts and beams
- Light-framed roof
- Light-framed with straw insulation on the façade

0 Concrete floors

0 CLT floors

4 Concrete-timber floors

Basement floor construction process. Timber posts, beams and bracings.

Construction timing

14 Months to complete the building

16 Weeks to build the structure

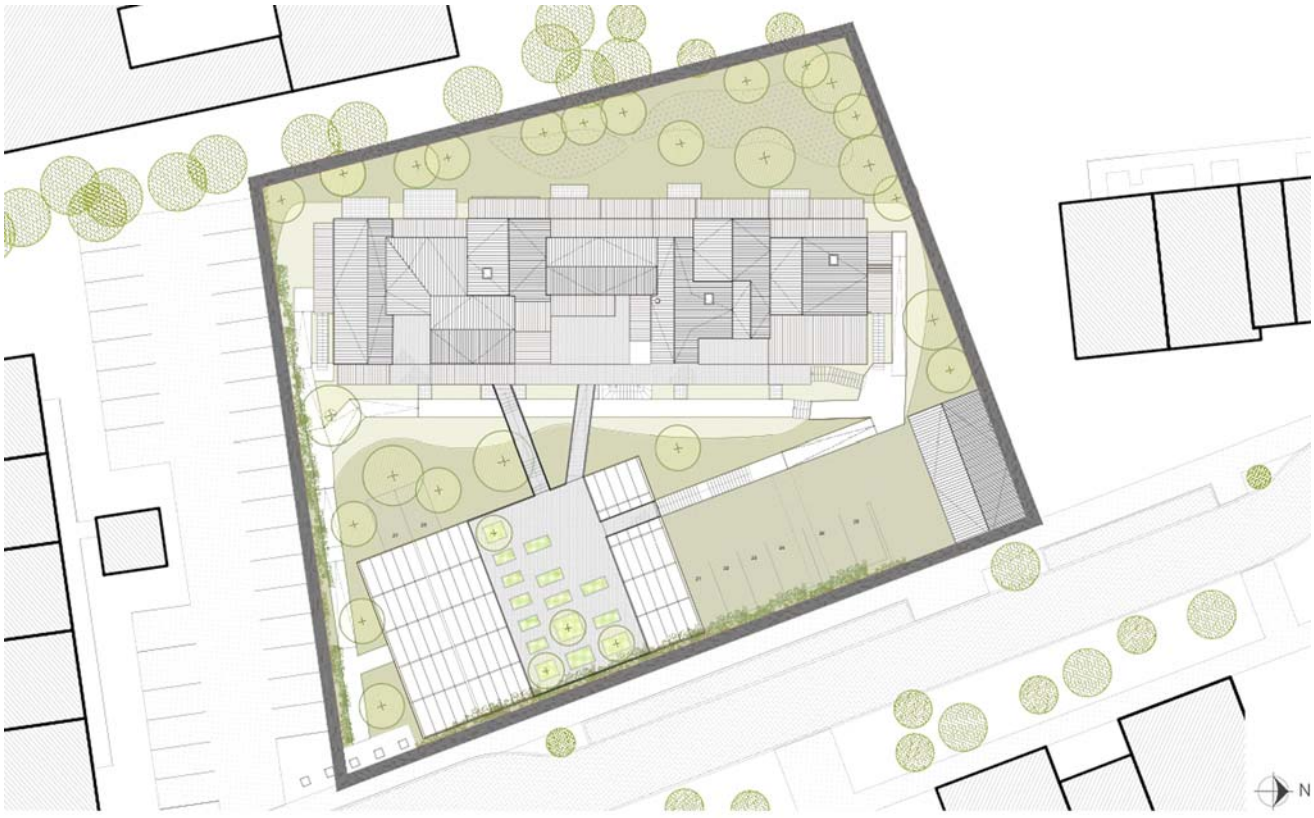
First floor structure phase. Timber posts and beams.

Wind actions

Terrain category III

Area with regular cover of vegetation or buildings or with isolated obstacles with separations of maximum 20 obstacles heights (such as villages, suburban terrain, permanent forest)

Slenderness 1,3



Roof floor plan

Sustainability

Picea abies — Wooden specie

280 — Wood volume (m3)

100 — Potential CO2 benefit (t)

30 — Distance of transportation (km)

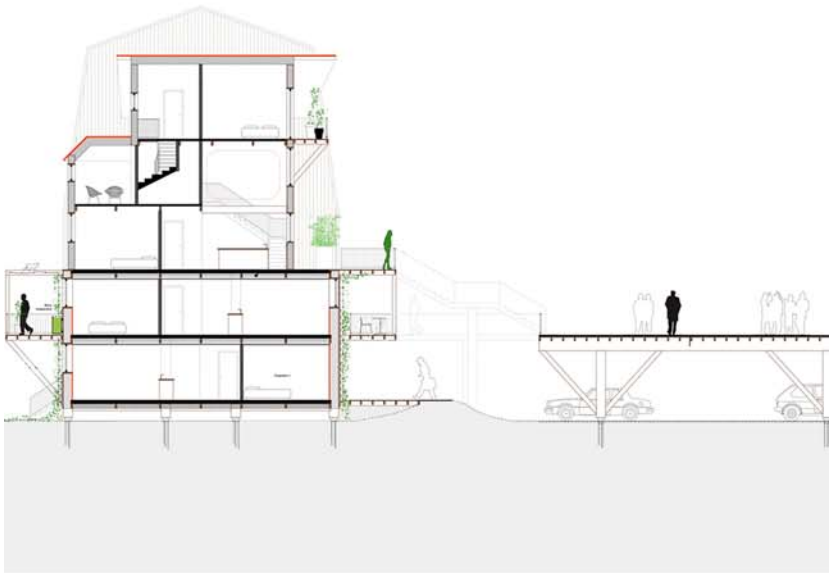
☐ — Special transportation needed

57% — Percentage of structure made of wood

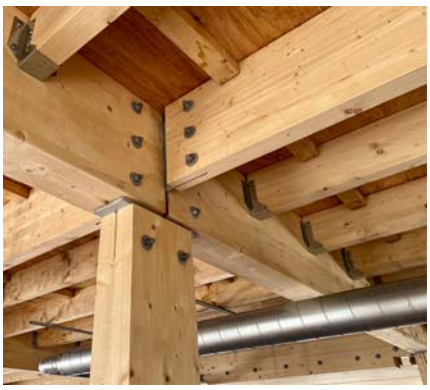
Construction process. Aerial view.

General floor plan

Aerial view of the building



Cross section 0 1 2 5m



One-way slab with timber beams and joists.

Post and beam joint.

References:

- Dauphins architecture. Https://n9.cl/6q2xl [15.09.21]. Alizée Cugney. Interview on 20.09.21. Online survey on 23.09.21.

- Visit to the building on 20.09.21.

- Interview to Lamecol on 20.09.21.