



The First Guimarães

PROJECT

The First

LENGTH

36,75 m

GROSS FLOOR AREA

8.300 m²

LOCATION

Guimarães, Portugal

WIDTH

14,95 m

**SIZE OF CREE SYSTEM
AREA**

4,375 m²

ARCHITECT

Mário Fernandes

HEIGHT

19,50 m

**START OF
CONSTRUCTION**

February 2022

M&E ENGINEER

Hidro & Undel
(Grupo Casais)

**NUMBER OF FLOORS
ABOVE GROUND**

5

COMPLETION

February 2023

**STRUCTURAL
ENGINEERING**

Aspect Engineers

**NUMBER OF FLOORS
BELOW GROUND**

1

The First in Guimarães takes prefabricated construction to the next level.

The CREE complex in Guimarães consists of two 5-story buildings – a new B&B Hotel with 95 rooms, and a students' residence offering 44 rented studio apartments as well as commercial space – both located in the vicinity of the University of Minho, which makes it a perfect residence quarters for the students and university staff.

Fully prefabricated hybrid-slab elements as well as façade panels with attached load-bearing glulam columns made it possible to significantly optimize the building assembly. Furthermore, all bathrooms and the main MEP-distribution have been prefabricated as well. Taking the idea of industrialization of building to the next level.



Facts

TYPE OF USE

Hotel and Student Homes

LOCATION

Located within a one-hour drive north of Porto, the First in Guimarães stands out as the first timber-hybrid building on the Iberian Peninsula.

COST CERTAINTY

BIM "Building Information Modeling" software allowed stakeholders precise simulation and planning of all aspects and follows the building throughout its entire lifecycle as a digital twin.

FIRE SAFETY

Timber-hybrid structure ensures the same fire safety standards as concrete, fire & smoke detection sensors in building voids, no sprinkler system.

SUSTAINABILITY

By using a timber-hybrid structure the project implies only one third of the concrete volume of a traditional concrete structure. Additionally, innovative use of recycled fishing nets in the entrance area.

MODULAR CONSTRUCTION

Use of the bathroom modules from Blufab, consisting of prefabricated 2D elements and the 6 m long prefabricated MEP-racks from Bluemep, which allowed for a quicker installation and finishing of the rooms interior.

TIME SAVINGS

The construction of each of the blocks took only 8 days thanks to the innovative prefabrication process of the CREE System, which allowed a reduction of about 40% of the total construction time.