BADÁVILA BLDG

Innovation and Sustainability through Industry 4.0

With a specifically designed structural system and nearly zero carbon emissions, BADAVILA bldg becomes an outstanding paradigm on how to blend construction innovation and sustainability with the memory of the place through the materiality of the facades and the industrial-look interior spaces.

ENERGY **EFFICIENCY** CLASS

A

RENEWABLE ENERGY SELF-GENERATED

30%

MANAGED POLLUTED LAND

4000T

REDUCTION ON EMBODIED WATER CONSUMPTION

18%

EMBODIED GHG EMISSIONS REDUCTION

24%

PROJECT DETAILS

Location: Barcelona
Use: Commercial building
Year: 2023
Surface: 11.550sqm
PV energy production: 111MWh/year

CERTIFICATIONS

LEED
GOLD

INTEGRATION WITH URBAN ENVIRONMENT

The project seeks for a **positive impact on its urban environment** by strategically shaping a higher volume at the entrance, and liberating a vegetalised public path very permeable, connected and inviting that leads to the entrance plaza of the building.

SUSTAINABLE DESIGN

The strategy of design was focused on optimizing the sustainable parameters by means of **preindustrialized systems** as well as high quality local proximity materials to reduce maintenance and trasportation impact.

ENERGY EFFICIENCY

The envelope develops a technological double-layered skin that, protects from solar irradiation the more exposed facades and it gets open to the more favorable orientations, whereas it has an outstanding thermal performance.

- 30% self-generated Photovoltaic energy
- Thermoactive foundations
- Districlima

DECARBONISATION

Reduced embodied emissions and,
Nearly Zero operational Carbon emissions
Promote bicycle and electric mobility

- 10 EV chargers
- 165 bike racks
- 432 daily public transportation services

WATER

- +40% reduction of operational water consumption
- 18% reduction of embodied water consumption during construction

CIRCULARITY

- 30% recycled content in new materials
- 70% regional materials
- 100% of FSC certified wood
- BCASA centralized waste management

‘REGREEN’

Green public spaces are placed on the rooftop and the ground floor plaza, seeking to reduce the ‘island of heat effect’, as well as generating benefits on landscape, biodiversity, wellness and health to the users of the building.

- 2300sqm of openair public spaces
- 460sqm of landscaping