

Building

Energy Rating

- All units achieve Energy Class A – NZEB (Nearly Zero Energy Building).
- Reduces energy consumption by 47% compared to a reference building.
- 61% more efficient in space heating.
- 31% more efficient in cooling, ensuring year-round comfort.
- 23% more efficient in domestic hot water production.
- 56% of the energy consumed comes from renewable sources.
- CO₂ emissions: only 0.68 tonnes/year, significantly below the national average.

Note: the figures above represent the average across all units and are based on preliminary energy certificates.

This classification is achieved through a high level of insulation in façades, roof and common areas; high-performance window frames and glazing; individualised ventilation systems; and an efficient domestic hot water heating system.

Structure

The structure is earthquake-resistant and includes solid slabs sized in accordance with both Portuguese and European regulations.

The stairwells and elevator shafts are built in reinforced concrete, providing the building with a more rigid central core.

Façade

The building's construction principle is defined by conceptual simplicity and straightforward processes, ensuring not only the structural integrity of all elements, but also reliable performance under normal use conditions, with minimal maintenance costs throughout its lifespan.

The façade is composed of two layers: the exposed concrete structure and a secondary band that incorporates the external openings and masonry panels made of thermal blocks, with internal insulation and plasterboard cladding.

The external openings feature aluminium frames with thermal break, double glazing, and high acoustic performance.

Roof

Flat roof with thermal insulation, waterproofing, and a gravel finish.

Partitioning and Insulation

Separation between apartments is achieved using concrete block walls, finished with plasterboard lining and mineral wool insulation.

Internal walls between different rooms within each apartment are made of plasterboard partitions with mineral wool acoustic insulation.

Floor slabs between levels consist of reinforced concrete with a resilient layer (such as CDM STRAVITEC MAT-W8a or equivalent), topped with an 11 cm screed layer. Suspended plasterboard ceilings will be installed.

This solution enhances acoustic insulation between apartments.

Parking and Storage

Remote-controlled automatic gate, Hörmann type or equivalent.

Concrete floor with hardener, including horizontal markings for parking bays and circulation paths, with designated spaces for users with reduced mobility.

Parking bays will be open and include pre-installation for electric vehicle charging points.

Basement levels will be equipped with a mixed ventilation system, favouring passive smoke extraction whenever possible, in order to optimise operational and maintenance costs.

Common Areas

The ground floor includes a multipurpose room that combines workspace, lounge and dining areas, accessible via the main entrance lobby and served by a supporting toilet facility.

This floor also includes a shared laundry room equipped with washing and drying machines controlled via mobile app, a bicycle storage area, and a designated space for waste collection (RSU - Municipal Waste Collection).

Elevators

The building includes two vertical access cores with two elevators (Orona brand or equivalent), with automatic doors suitable for reduced mobility access. Each elevator has a capacity for 8 people or a maximum load of 630 kg.

Building entrance hall

Spacious entrance hall with non-slip aluminium-profile mat, Matador type or equivalent. Walls and technical cabinets finished in melamine-faced chipboard, with white MDF doors. Suspended ceilings in painted plasterboard.

Mailboxes are integrated into the façade, in aluminium matching the window frames, with access from both inside and outside.

Public access to the entrance lobby is via an external gallery at street level, which connects to the main road, as well as a staircase linking to the public car park located on the lower ground level.

There is also an external gallery on the opposite façade, providing secondary access, including emergency exits and access points for municipal waste collection (RSU - Municipal Waste Collection).

Retail Spaces

The ground floor also includes retail units located on the eastern end of the building, directly connected to the main street.

These commercial spaces will include dedicated rooms for waste storage and collection (RSU), as well as storage areas.

Landscaping

Gardens

The buildings are surrounded by extensive landscaped public areas, incorporating pedestrian and cycling paths that link the urban area with the Ponte de Moreira Park / Leça Green Corridor.

Exterior lighting

The external pedestrian galleries leading to the building will be equipped with ceiling-mounted LED luminaires.

Outdoor pathways

The flooring of the external galleries will be in trowelled screed, with side protection railings in exposed concrete.

Apartments

Front door

RC2 security door, fire-resistant and sound-insulated, with a lacquered finish, Globadis type or equivalent.

Finishes

All interior floors within the units will be finished with FINSA – Finfloor Roble Sonata laminate or equivalent, with skirting boards in moisture-resistant MDF matching the carpentry colour.

Wall finishes in painted plasterboard.

Ceramic wall coverings in sanitary facilities in Roca Thinbig – Koronis White tiles or equivalent.

Ceilings in painted plasterboard.

Blackout roller blinds in bedrooms.

Lighting

Living room lighting will include 4 recessed spotlights in the suspended ceiling and 1 central light point, complemented by integrated LED lighting in the kitchen units.

Bedroom lighting includes 1 central light point and outlets for bedside lamps. The suite additionally includes 1 recessed spotlight in the ceiling of the dressing area (leading to the bathroom).

Bathrooms will have 1 recessed spotlight in the ceiling, complemented by LED lighting integrated into the mirror.

Balconies will be fitted with a surface-mounted technical luminaire, Philips Coreline Waterproof type or equivalent, ceiling-mounted.

Carpintarias

Interior doors in honeycomb-core MDF with a white lacquered finish, or equivalent.

Technical cabinet in melamine-coated chipboard, in the same colour as the kitchen furniture.

Wardrobes in melamine-coated chipboard, white finish – optional extra.

NOTE: Wardrobes are included during the pre-commercialisation phase (prior to the start of construction).

Kitchens

Kitchens fitted with upper and lower units in moisture-resistant chipboard, melamine-coated, with integrated LED lighting under the upper units. Worktop in Silestone-type material or equivalent, stainless steel sink, and mixer tap, Teka type or equivalent.

Basic kitchen appliances are included, from Teka or equivalent:

- Built-in fridge
- Dishwasher
- Induction hob
- Built-in extractor hood
- Built-in oven
- Built-in microwave

Pre-installation for a washing machine is planned.

Bathroom

Wall-mounted washbasin set over a suspended vanity unit with two drawers and a mirror with integrated LED lighting, Roca Linea type or equivalent.

Sanitary ware and accessories by Roca or equivalent, including:

- Wall-hung white sanitary fittings
- Built-in cisterns with chrome flush plates
- White resin shower trays, anti-slip
- Glass shower screens with sliding doors
- Chrome-finish mixer taps
- Single-lever adjustable-height shower column with handheld showerhead, chrome finish

Terraces and Balconies

Floors finished with trowelled screed.

External railings in exposed concrete.

Balconies include ventilated technical cabinets housing the heat pump and a designated area for the future installation of an air conditioning unit, for which pre-installation is already in place.

Instalações especiais

Electrical systems

EFAPEL Apolo 5000 series electrical fittings, or equivalent

Video intercom system.

Access control system at building entrances and in common areas.

Pre-installation for a CCTV system in the basement parking area, as well as in the entrances and common areas on the ground floor.

Pre-installation for electric vehicle chargers (connected to each unit).

Air-conditioning systems

Pre-installation for multi-split air conditioning systems, with designated spaces for future installation of outdoor units within technical cabinets on the balconies, and indoor split units in bedrooms and living rooms.

NOTE: Indoor and outdoor air conditioning units are included during the pre-commercialisation phase (prior to the start of construction).

Ventilation systems

Independent extraction systems in kitchens and bathrooms, ensuring better air quality and preventing the transfer of odours and noise between units.

Kitchen ventilation is provided via a built-in extractor hood.

Sanitary ventilation networks are connected to the roof.

Windows are dimensioned according to international natural ventilation standards, ensuring adequate and efficient air renewal in all areas.

Smoke Extraction and Fire Safety Systems

Fire detection and suppression systems.

The parking facility is equipped with a pollution control ventilation system, maintaining acceptable levels of carbon monoxide concentration and enabling smoke extraction in the event of fire.

Water heating systems

Each unit will be equipped with a high-efficiency monobloc heat pump for domestic hot water production.

Photovoltaic System (UPAC)

All units will be equipped with photovoltaic systems, sized according to available roof area and solar orientation.

Telecommunications and security infrastructure

ITED infrastructure, including copper pair networks, coaxial cable (CATV and S/MATV), and fibre optic networks.

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