

Avenida | **Europa** | **20A**
La Moraleja

Tech Specs

A headquarters with much to showcase.

Foundation and structure

The load-bearing structure directly responds to the orderly geometry of the building and consists of ribbed slabs and concrete pillars. On the third floor, the facade pillars are converted into metal pillars.

The structure adequately withstands all permanent, variable, or accidental actions that could influence it. These elements will be defined in the corresponding Execution Project.

The renovation of the building does not involve an increase in loads on the existing slabs or foundation, and therefore, it is not considered necessary to reinforce either the structure or the foundation.



Façade

The new exterior facade is resolved with a curtain wall consisting of glass panels and triangular elements made of composite panels with a honeycomb core. Additionally, the entire façade is well-insulated in order to reduce the building's energy consumption.

The evacuation stairs are enclosed with composite panels with open joints, thus considered open stairs. The interior enclosure separating the stairs from the offices consists of a 100cm thermal insulation SATE façade.

Roofs

The existing layers of the building's roofs are removed down to the clean slab, and a new inverted roof is installed. Roof waterproofing is carried out using polyurea, over which XPS insulation is applied. The finish of the roofs consists of gravel, in the case of the building's roofs, with floating granite pavement on the walkable and landscaped roofs.

Glazing

The glazing will consist of double glass with argon gas filling, complying with CTE regulations.

Partitioning and insulation

The majority of the interior partitioning within the office floors, including the communication cores, has not been modified.

The new interior partitioning for the core and lobby of the new wet rooms will be constructed using laminated plasterboard with a single or double 48 mm structure, including thermal and acoustic insulation, in compliance with current regulations.

The partitioning delineating the cores and lobby is proposed to be constructed using on-site ceramic brick partitioning, with a single layer of Spanish brick, half a foot in size.

Vertical surface cladding

The lobby of the entrance floor will be finished with Falkit panel pieces and lacquered steel paneling. The reception area will be clad in noble natural stone.

The cores of the office floors will be clad in lacquered steel paneling, while the interior of the offices will be finished with plastic paint.

The toilet corridor will be clad in wood paneling, while each toilet cubicle will be tiled with large-format pieces from the DEKTON brand.

The waste disposal room will be tiled with white ceramic pieces measuring 20x20cm, with a bullnose finish at the point where the tiles meet with the floor.



Flooring

The lobby floor will be made of continuous in-situ micro-terrazzo, while terrazzo steps and tiles will be installed in the cores and staircase.

Terraces on the ground floor, third floor, and the entrance to the semi-basement floor and courtyard will feature 60x30cm granite tiles, 3m thick, with SRI>33% and an anti-slip finish suitable for outdoor use.

Exterior entrances will have a grid doormat to ensure cleanliness indoors. The waste disposal room will have a 60x60cm ceramic floor with a bullnose finish at the junction with the vertical surface.

Existing flooring in the offices will be reinstalled using pedestals. The roof will have a finish of round white gravel with an SRI>82%.

Interior carpentry

Doors in the lobby and cores that do not need to compartmentalize space will be panelled metal doors. In fire sectors, doors with a fire resistance rating of EI2C5 will be installed.

Wooden doors with stainless steel hardware will be installed in the reception area and bathroom cubicles.

The changing rooms will have panelling with Formica doors up to the suspended ceiling, along with stainless steel hardware.

Waste disposal room

The following containers are provided:

- 3 bins of 660 L for paper-cardboard
- 2 bins of 660 L for plastics and metal packaging
- 1 bin of 240 L for glass
- 1 bin of 240 L for organic waste
- 1 bin of 240 L for general waste
- 1 bin for batteries
- 1 bin for lamps

These containers will be properly labelled for each type of waste fraction.

Plumbing and sanitation

The building has a supply line that feeds into the water meter room located in the basement.

Each wet room has a shut-off valve for both cold and hot water. All flushing devices, including tanks, faucets, and other sanitary appliances, will have individual shut-off valves.

Toilets and faucets

The bathroom cubicles will feature wall-mounted porcelain vitreous china sinks and toilets in white, along with wall-mounted electronic faucets.

Additionally, each cubicle will be equipped with a soap dispenser, toilet paper dispenser, towel dispenser, and wastebasket.

The accessible bathrooms will also feature wall-mounted accessible toilets for people with disabilities, mixer faucets with ergonomic handles, and stainless steel foldable support bars.

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The changing rooms will have white resin shower trays and wall-mounted anti-vandal faucets. A drinking water fountain will be available in each of the bathroom corridors.

Electricity

The offices and spaces will have sufficient mechanisms to comply with the Low Voltage Directive (LVD), ensuring the proper use of the installed systems. The terraces and access spaces will have power outlets and lighting points.

Communications

Each workstation will have a dual voice/data outlet as a standard feature, except for those installed to serve WiFi access points and CCTV cameras, which will have dual power supplies from both a dedicated electrical installation and a circuit from the general electrical installation.

Additionally, locations for WiFi access points will be determined, and connectivity services will be provided for CCTV systems.

HVAC (Heating, Ventilation, and Air Conditioning) and DHW (Domestic Hot Water) System

The HVAC and DHW system, located on the building's roof, consists of two new chillers, one of which is reversible and the other versatile. In the accumulator room, there are accumulators and a boiler, from which pipes of the secondary circuit run through the shafts to the individual branches of each floor and area. Heat distribution will be carried out using a four-pipe system. New terminal units will be installed in the false ceilings of the spaces and offices, using new four-pipe fan coil units.

Ventilation

There are no modifications to the existing ventilation system in the garage. The above-ground staircases are external, hence naturally ventilated.

Ventilation for the office areas is achieved through 3 Air Handling Units (UTAs) located on the roof. The system involves primary air renewal using a series

of air handling units that supply fresh air at the set temperature in the space, without generating any thermal load during operation.

The air handling units are equipped with heat recovery units and hot and cold water coils to counteract the thermal loads of the outdoor air and bring the outdoor air to the set temperature.

Air distribution is carried out using insulated metal ducts on the exterior of the building and within the shafts, as well as fiberglass ducts within the offices. The fresh air is directed to the intake of the ducted fan coils of the cooling system to mix with the return air from the rooms and be led back to the room to be conditioned through the ducts of the fan coil itself. If the fan coil is not in operation, the fresh air will reach the room through the air return grille of the air conditioning system.

Renewable energy

Photovoltaic panels will be installed on the roof to generate electricity for self-consumption, reducing the building's energy consumption and improving its performance. The aim is to achieve a more efficient A energy label. This system will be designed in accordance with the conditions of the Building Technical Code.

Installation of fire protection

The building is equipped with the following fire protection installations:

- Fire Hose Reel System (BIE's)
- Manual Fire Extinguishers
- Exterior Fire Hydrant
- Automatic Detection and Alarm System
- Emergency Lighting
- Evacuation Signage and Firefighting Equipment Signage
- Sealing of Shafts



Security and CCTV

The building is equipped with security systems (Access Control, Intrusion Detection, and Closed-Circuit Television) and an intrusion alarm system.

Facilities control

The installation of a Building Management System (BMS) has been planned to control the building's facilities.

Lifts

The building has two electric elevators with automatic doors and motors on the roof level. The finishes of the existing elevators will be replaced.

Electric vehicle charging

7 electric vehicle charging points are installed to adapt 7 parking spaces for electric cars in basement level -1.

Equipment

In the outdoor areas of the terrace, benches, waste disposal bins and landscaped areas are installed. Additionally, there is a pergola with speakers to create shaded spaces.

Urbanization of Exterior Spaces Attached to the Building

In the landscaped areas, benches, waste disposal bins, trees, shrubs, and a water feature are installed for the use and enjoyment of office users.



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