

STRUCTURAL SYSTEM

FOUNDATIONS

Shallow foundation by reinforced concrete slab, subject to the final results of the Geotechnical Survey.

LOAD-BEARING STRUCTURE

Load-bearing structure of reinforced concrete column-and-beam frames, suitably braced, and reinforced concrete walls in the basement areas in contact with the ground, waterproofed with bituminous membranes and fitted with an external drainage system.

FLOOR STRUCTURE

One-way floor slabs with reinforced joists and concrete infill blocks, with edge beams and ribs at openings and supports for enclosures. Staircase flights made of reinforced concrete slabs.

The main criteria taken into account when choosing the structural system were mechanical strength and stability, safety, durability, cost-effectiveness, ease of construction, modular design and market options.

BUILDING ENVELOPE

The building envelope is designed to meet the requirements for safety, habitability, energy saving and noise protection set out in the Spanish Building Technical Code and all other applicable regulations.

ROOFS

The flat roofs will be inverted roofs with a ceramic tile finish, and the falls will be formed with lightweight concrete. This system is used for its good thermal performance, while also protecting the integrity of the asphalt membrane. Waterproofing will consist of a 4 kg elastic bituminous membrane, fully insulated with 60 mm extruded polystyrene boards.

The structural calculations will allow for the possible installation of a hot tub on the roof terrace.

The technical factors determining the choice of roofing system were compliance with damp-proofing requirements, acoustic regulations and limits on energy demand, as well as providing a system that ensures rainwater collection.

FAÇADES

Outer leaf of half-brick perforated brickwork, mortar levelling coat, mesh reinforcement at joints and single-layer render in a colour to be chosen, combined with ceramic tile cladding in a size and format to be decided on site. Internal parging and vapour barrier, 5 cm mineral wool thermal insulation, 3 cm air cavity and inner leaf of double hollow brick, finished with plaster skim and white plastic paint.

The technical factors determining the choice of façade system were compliance with acoustic regulations, limits on energy demand and damp-proofing requirements.

PARTY WALLS

The homes are separated by a perforated brick partition with 15 mm plasterboard linings and 60 mm rock wool insulation,

finished with white plastic paint.

The technical factor determining the choice of party wall system was compliance with acoustic regulations.

PARTITIONING SYSTEM

PARTITIONS

10 cm prefabricated plasterboard partitions with double 15 mm plasterboard sheets, galvanised steel studs and a 50 mm rock wool core, finished with white plastic paint.

The technical factor determining the choice of interior partition system was compliance with acoustic regulations.

FINISHES

Chosen with comfort and durability in mind.

WALL FINISHES

EXTERIOR

- Mortar levelling coat, mesh reinforcement at joints and white single-layer render on façades.
- Two-coat exterior render with cladding on the plinth and ground floor. Colour chosen by the project management.
- Ceramic tile cladding fixed with tile adhesive and mechanical anchors.

INTERIOR

- Screeded plaster skim, finished with white plastic paint, throughout the interior of the home.
- Living-room wall continuing into the patio with stone-effect cladding, colour chosen by the project management.
- Ceramic wall tiles in bathrooms, colour chosen by the project management.
- Exposed concrete walls in the basement.

FLOORING

- Grey compact stoneware tiles inside the home, laid on cement and sand mortar over impact-sound insulation. Colour chosen by the project management.
- Non-slip grooved porcelain tiles on terraces and roofs, laid on mortar over impact-sound insulation. Colour chosen by the project management.
- Stoneware tiles in the basement.
- Concrete slab and stamped concrete on the garage access ramp.

CEILINGS

- Suspended ceiling of smooth plasterboard on a galvanised frame, with perimeter recesses for indirect lighting throughout the home.
- Basement with exposed plaster skim, finished with white plastic paint.

EXTERIOR JOINERY AND METALWORK

- Aluminium windows with thermal break, lacquered grey outside and white inside, with thermal and acoustic double glazing (4+6+4).
- Aluminium shutters throughout, lacquered to match the window frames.
- Metal gate to the plot.
- 1.5 m high perimeter fence in vertical slats, as per the project design.

The technical factors determining the choice of these elements, in addition to appearance and functionality, are compliance with limits on energy demand and achieving the required acoustic insulation. Guarding and opening sizes will meet the requirements of the Spanish Building Code (CTE DB-SUA).

INTERIOR JOINERY

- Armoured front door with steel subframe and security anchors, in lacquered wood in a colour to be decided by the project management. Master-keyed locks.
- Interior doors and wardrobes with smooth sliding doors featuring horizontal grooves every 30 cm, lacquered white.

These elements will be chosen to comply with fire safety, ventilation and other aesthetic and functional requirements of the building.

INSTALLATIONS

PLUMBING AND HOT WATER

- Drinking water supply from the mains network. Cross-linked polyethylene pipework for hot and cold water.
- Domestic hot water by aerothermal heat pump.
- Soundproofed PVC downpipes and drains.
- Roof terrace water point and drain.

ELECTRICS AND TELECOMMUNICATIONS

- Low-voltage electrical installation in accordance with current regulations, supplied by the distribution company.
- High-quality switches and sockets.
- RJ45 data points throughout the home.
- Socket on the roof terrace.

AIR CONDITIONING

- Pre-installation for split air conditioning in the living room and bedrooms.

FIXTURES AND FITTINGS

BATHROOMS

- Roca sanitaryware, The Gap Rimless model, in white.
- Roca taps, Targa single-lever model.
- Resin shower trays with stainless steel fittings.

PARKING

- Parking space in each home, with electric vehicle charging point.

*These specifications are for information purposes and may be modified by the project management during construction for technical, legal, commercial or supply reasons, in which case materials will be replaced by others of equal or higher quality. The brands and models indicated may be replaced by others of equivalent characteristics. Images and renderings are for guidance only and not contractual; furniture, decoration and plants shown in them are not included.