STRUCTURE & BUILDING ENVELOPE

Foundations

Foundations will be built with reinforced concrete slab embedded in the most suitable geotechnical site. All this depending on the data shown in the geotechnical report and the foundation recommendations established therein.

Load-bearing & horizontal framework

The structural frame will consist of rectangular reinforced concrete columns supporting concrete waffle or solid slabs. Hanging beams might be used too given the spans to keep.

Retaining walls will be of reinforced concrete.

Facade

In general, they will be made, on the external face, of ½"-thick hollow bricks with an inner and outer rendering (e=2 & 1.5 cm respectively), including air chamber and insulation with projected polyutherane foam of 5cm and 35kg/m^3 thickness Double hollow brick partition wall coated with plaster and tempera paint on the inside.

Some (special) external walls will be tiled with ceramic tiles STONETALK SAND MATELLATA 120X60 cm & STONETALK SAND RULLATA 120X30 cm.



ROOFING, PARTITIONS & COATINGS

Roofing

Trafficable roofs over living space will have a slope of 1% to 5% and will include: slopes made of screeded mortar rendering, waterproofing with an elastomer or PVC modified bitumen membrane, a 200g geotextile membrane, thermal insulation, geotextile on top of insulation and a protection layer of cement mortar M-5/ Latermix porous concrete ready for non-slip tile flooring, depending on use.

For terraces and porches located over non-living space, we will use: waterproofing made with waterproof sheeting adhered with a pre-primed prime layer to the cement mortar support forming the slopes (from 1% to 5%), trowelled finish, and protected with a separating geotextile membrane and a cement-mortar protection layer/Latermix porous concrete ready for flooring.

Regarding non-trafficable covered terraces over living spaces, they will have a slope of 1% to 5% and will be made of: cement-mortar slopes with a wire mesh for tensile resistance, waterproofing with an elastomer modified bitumen membrane, geotextile and thermal insulation, a geotextile and protection layer of cement mortar, with gravel finish.

Pitched tile roofs shall be supported on slab or long thin bricks on brick openwork supports. In both cases, a waterproof sheet is placed over the slope formation board or slab, geotextile, thermal insulation, geotextile and reinforced cement mortar protection layer, with a finish of old roof tiles laid with the concave surface facing downwards and new roof tiles laid with the concave surface facing upwards, with bedding mortar.

Partition Walls

The interior partitions of the house have been designed with double hollow brick partition walls, laid with cement mortar and finished with plaster screed and painted.

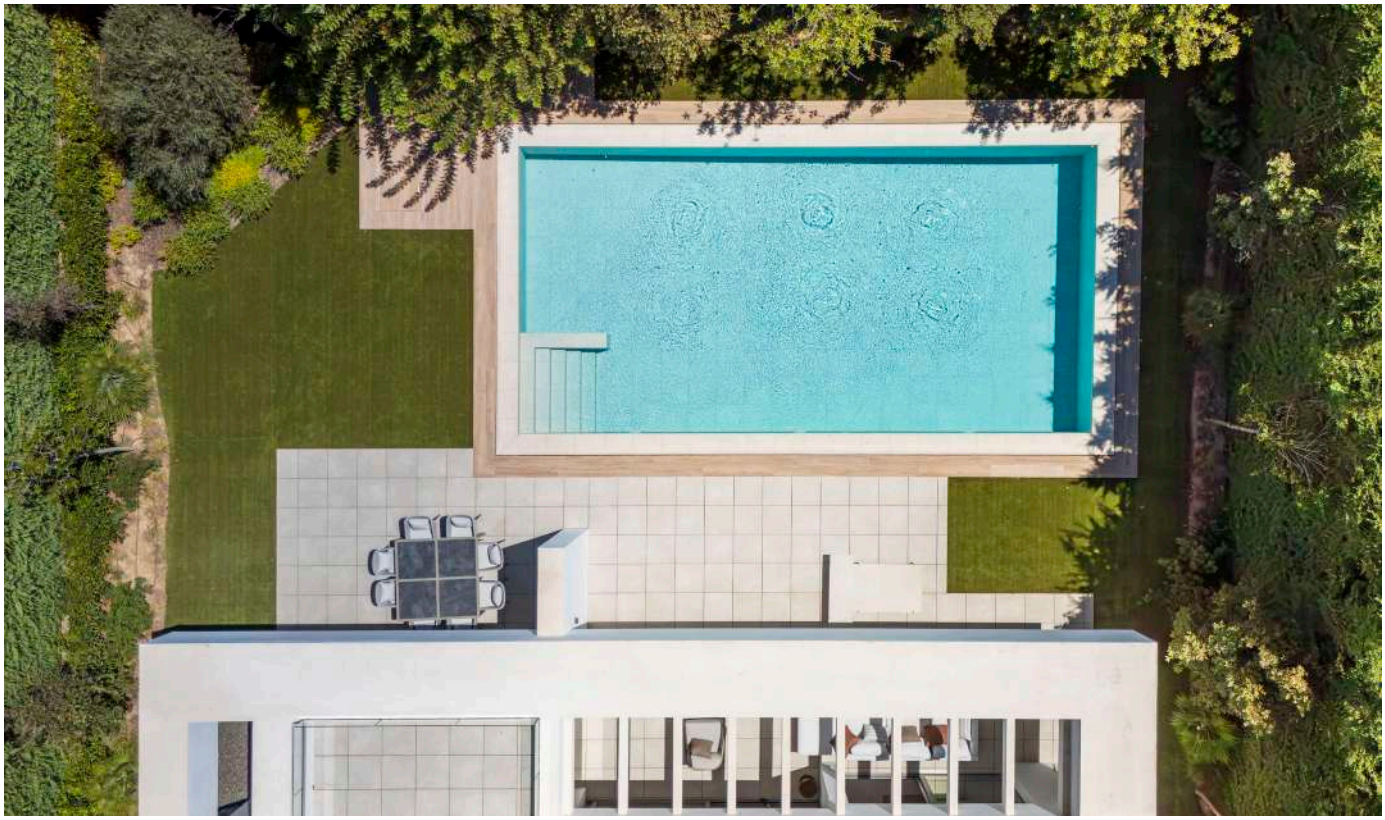
Party Walls

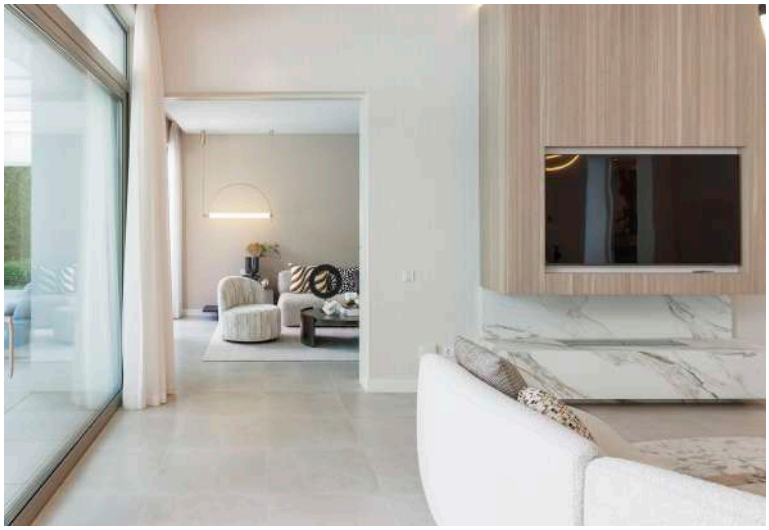
Divisions between plots have been designed with electrowelded wire mesh, soil retaining walls and plant enclosure fence with various species to ensure maximum security between plots.

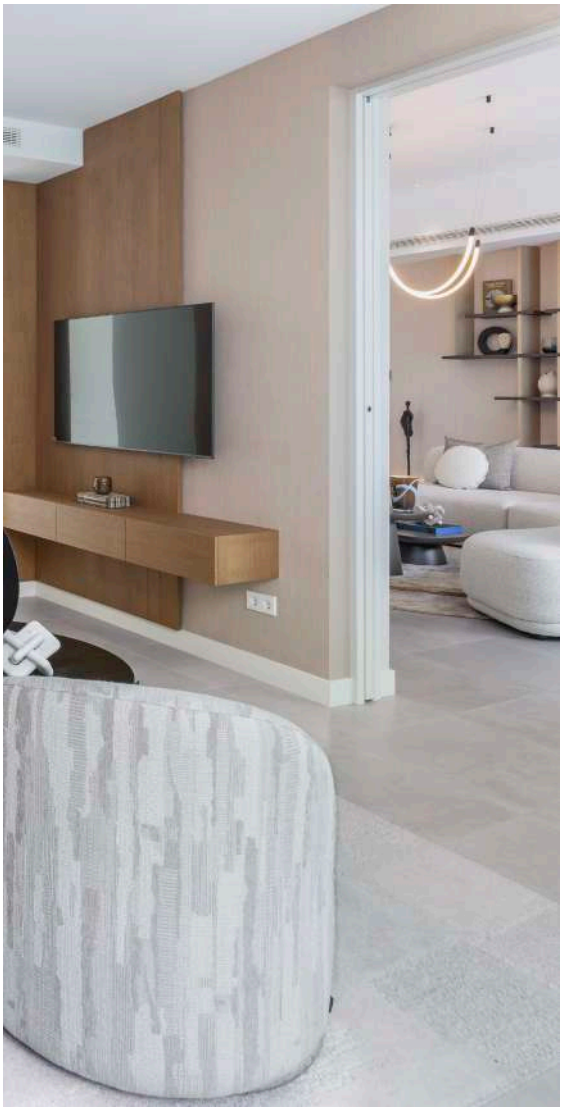
Coating

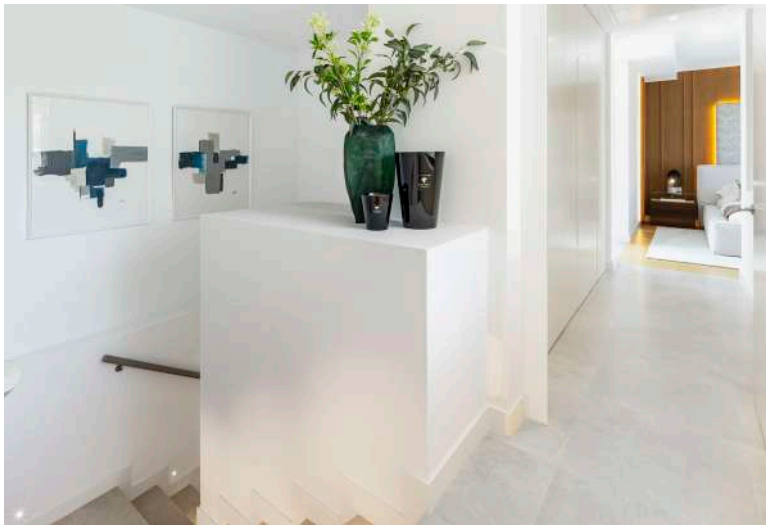
Exterior coating will be continuous and rendered with conventional waterproof cement mortar strengthened and reinforced with wire mesh in the areas with change of material (e= 2 cm both in vertical and horizontal structures).

False plasterboard ceilings in the entire house. In the event of roofed porch, it is planned a suspended false ceiling with metal structure made of a cement sheet finished with finish paste.









FLOORING, TILING & EXTERIOR SURFACES

House Flooring & Tiling

There will be stoneware flooring in each house of the brand NEXUS WHITE 60x60x1 cm C1 FOR COMMON AREAS, STAIRS, BASEMENT BEDROOMS AND BATHROOMS.

This kind of flooring will be also used in their non-slip model for roofed terraces and porches (60x60x2 cm, C3).

In ground floor and first floor bedrooms, there will be ASTORGA OAK WOOD FLOORBOARDS combined with the ceramic floor for the rest of the house.

Skirting board in the interior of the house with waterproof MDF /lacquered PVC and ceramic skirting in basements.

The deck pool will be made of ceramic wood decking boards of the brand NON-SLIP BAVARO MIEL MATE CIFRE C-3

Flooring in the engine room will be changed to NON-SLIP STONEWARE

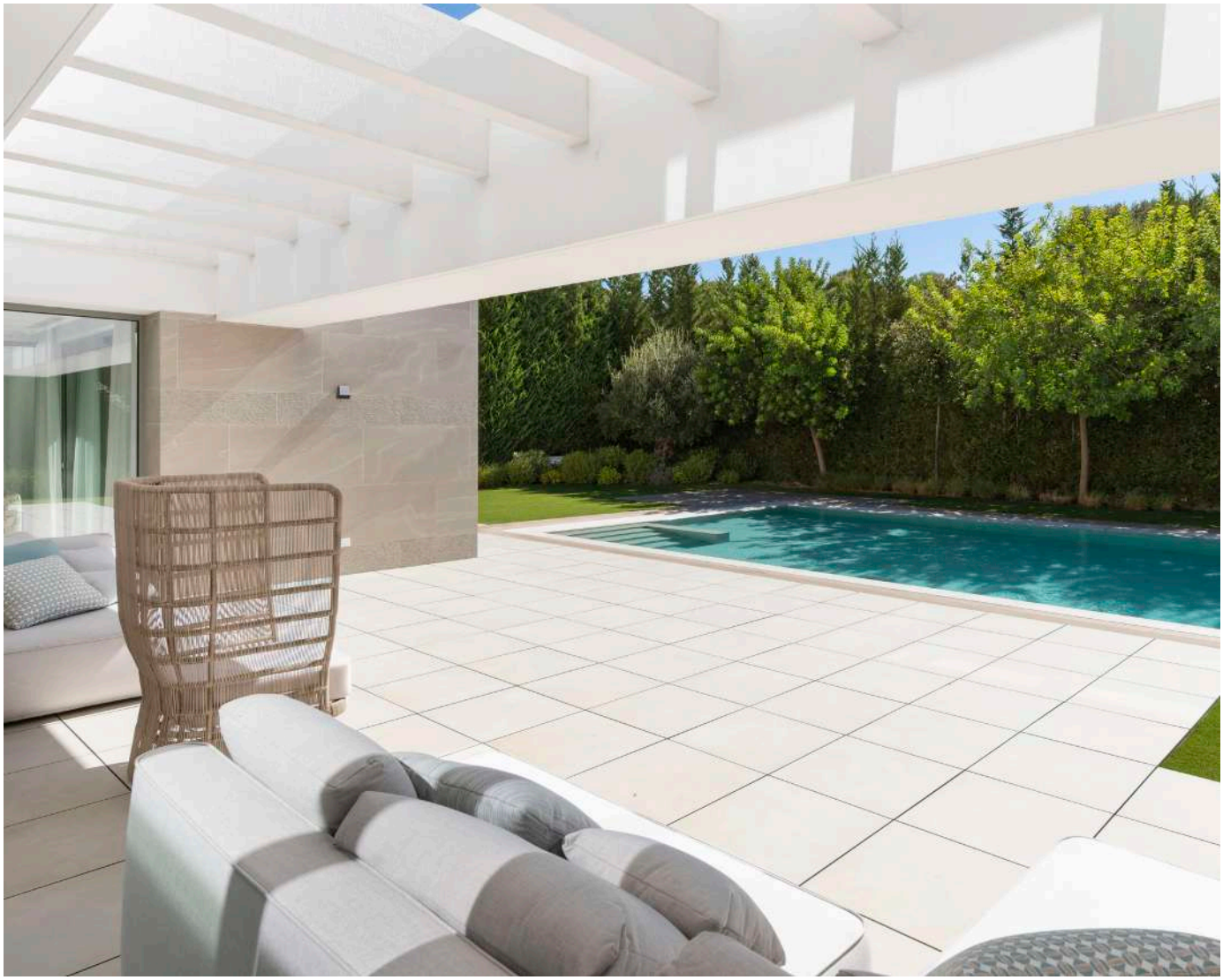
Parking areas will be floored with DEACTIVATED CONCRETE.

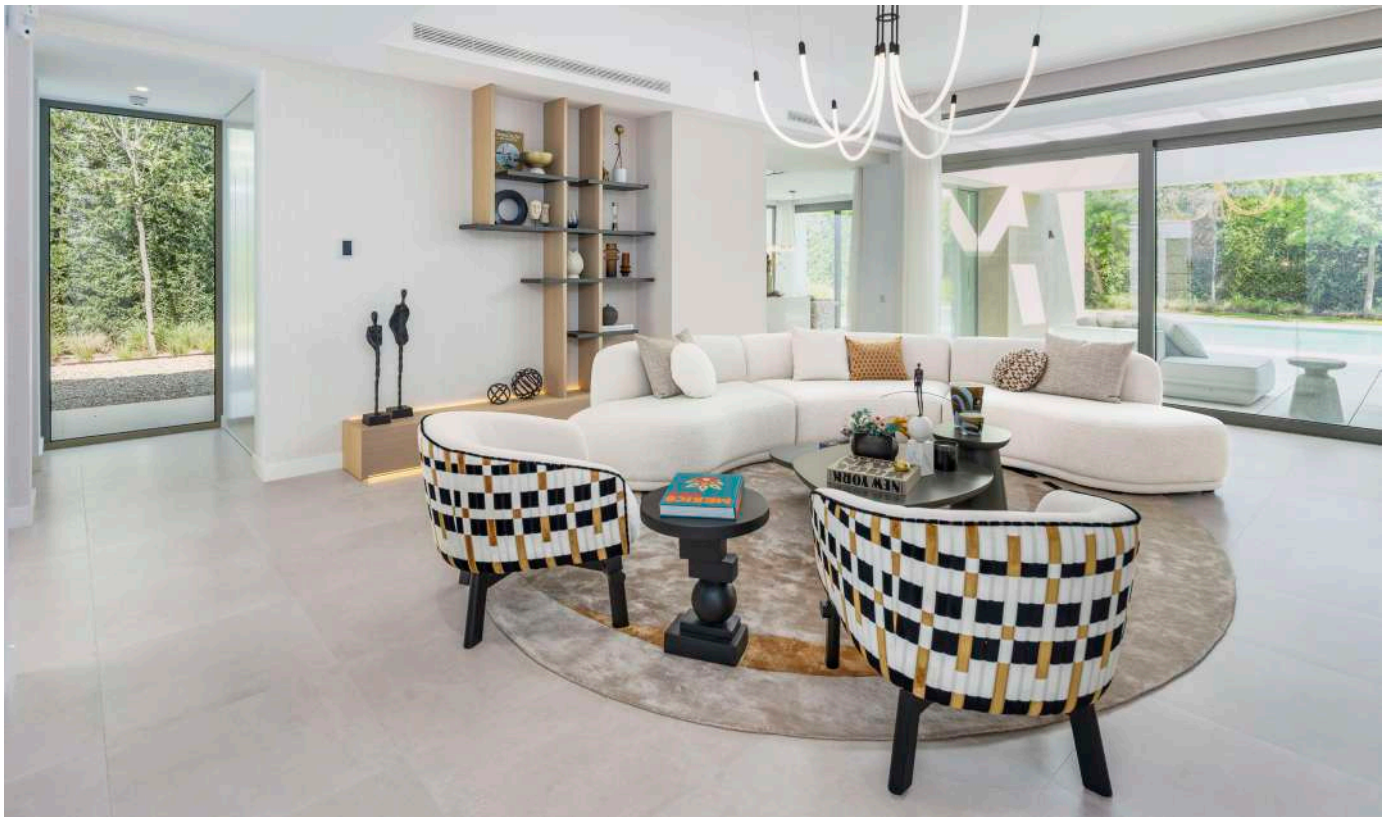
The walkways have been designed with PRECAST CONCRETE PIECES AND RIVER ROCKS.

MASTER BATHROOM: The paint finish is combined with wall porcelain tiling NEXUS WHITE MATE 60x60 cm (CIFRE) and BRUNO PULIDO 240x120 cm (GRESPANIA).

TOILET: The paint finish is combined with wall porcelain tiling MEDUSA PULIDO 260x120 cm (GRESPANIA).

SECONDARY BATHS: The finish paint is combined with wall porcelain tiling NEXUS WHITE MATE 60x60 cm (CIFRE) and NEXUS GLACIAR MATE 60x120 cm (CIFRE).




NEW YORK

KITCHEN & PLUMBING

Kitchen

Brand DANESPAN GR120 Versatis.

Kitchen countertop made of SILESTONE CALACATTA ETERNAL GOLD.

Household appliances of the German brand NEFF.

Plumbing

Cross-linked polyethylene (PEX) pipes inside the house, high-density polyethylene (PE100) for outdoor piping network.

All pipes will be covered with an Armaflex pipe insulation sheet – hot & cold-water pipes.

Return circulation pipes to the inlet of each room, with programming unit and timer.

Shut-off valves per unit.

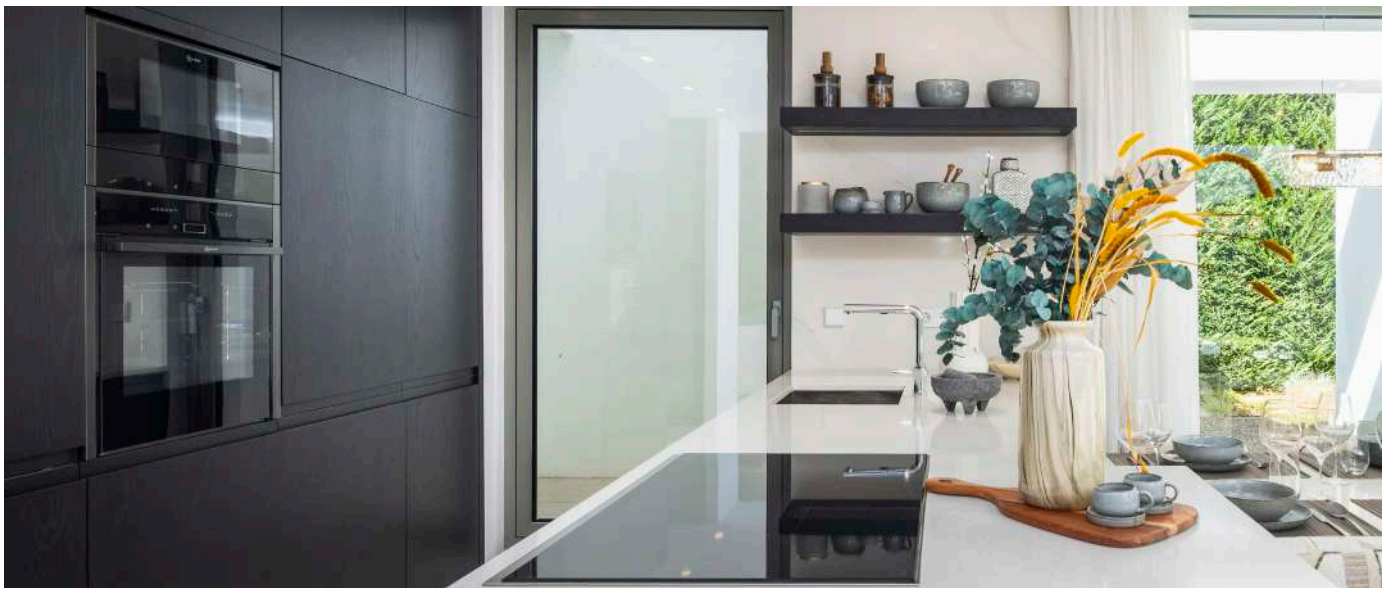
Water supply outlets in terrace.

Drinking-water cistern and irrigation cistern.

Hidrokit for domestic hot water (DHW) supply, integrated in a single unit for HVAC system and DHW (Aerothermal heat pump, brand DAIKIN Altherma System).

Completely finished garden irrigation network, consisting of pipe network and chambers designed for irrigation connected to sprinklers, diffusers and drippers. Irrigation programmers and pressure unit for the entire garden area.

Pool purification with sand filter, with salt chlorinator. Pool lighting with 24W/12V LED spotlights.



BATHROOMS & SEWERAGE

Sanitary ware & Faucets

All sanitary ware will be wall-hung. The toilets are DURAVIT DURASTYLE 540 DRV with ARCHITECT DRV SOFT CLOSE seat and TECE push button. TECE concealed cistern.

In the master bathroom, wall-hung bidet DURAVIT DURASTYLE 540 DRV DURAFIX.

The bathtub in the master bathroom is of the brand and model SANYC TORINO 170 / TRENTO 150.

Basin mixer faucets with clic-clac valve of the brand ASM LAVABO CR

Bidet mixer faucets with clic-clac valve of the brand ASM BIDÉ CR

Freestanding bathtub faucets ASM BAÑERA SUELO CR CIL155

Faucet fittings in the master bathroom shower:-COMPLETE BUILT-IN SHOWER KIT WITH 2 OUTLETS KC080200 –including wall-hung shower mixer with 200MM SHOWER HEAD, shower arm: shower handle, water intake, support and hose.

Complete shower faucet fittings in secondary bathrooms, with single-lever mixer and telescopic shower column CR 140AECO

Floor-standing washbasin column made of POLISHED GRESPANIA MEDUSA PORCELAIN 60X42X90H.

Master bathroom countertops with POLISHED GRESPANIA BRUNO porcelain, with lower wallhung drawer unit.

SOLID SURFACE countertops with bottom shelf for secondary bathrooms.

The mirrors will be wall-mounted and separated from the wall by means of an aluminum angle with a strip of LEDs for backlighting.

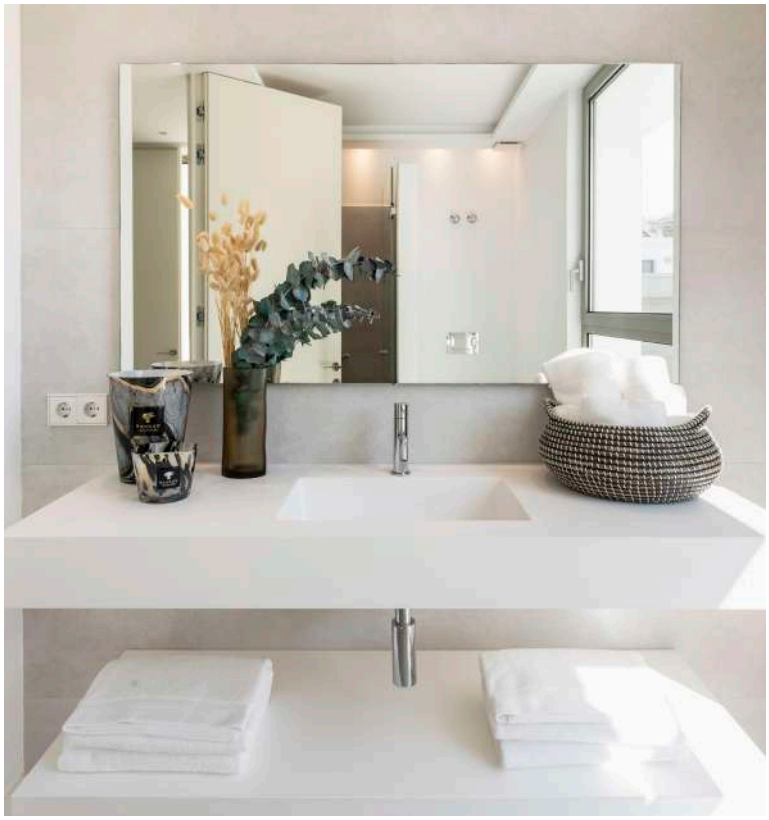
Sewerage

Sewer piping will consist of PVC soundproof pipes of the brand Terrain.

Rainwater network independent of the wastewater network. Brick-red PVC pipe collectors.

Check valve at the outlet to the mains. Siphon traps in bathrooms and toilets.

Safety drains and gargoyles in terraces.







ELECTRICAL & HVAC SYSTEMS

Electrical System

The electrical fittings will be of the brand JUNG F-40 LS white and will be installed in recessed boxes.

The electric switchboard will be fitted in the home-monitoring utilities cabinet inside the house with some free space reserved for the home automation system.

There is a small electrical switchboard next to the main entrance for the general electricity cutoff of the house, according to current regulations.

The maximum permissible power supply for the dwelling will be 14.490 W.

LED spotlights distributed throughout the house, recessed in false ceilings and with movement sensors in transit areas.

Installation of LED strips in false ceiling cavities in different areas, at the discretion of the decorators.

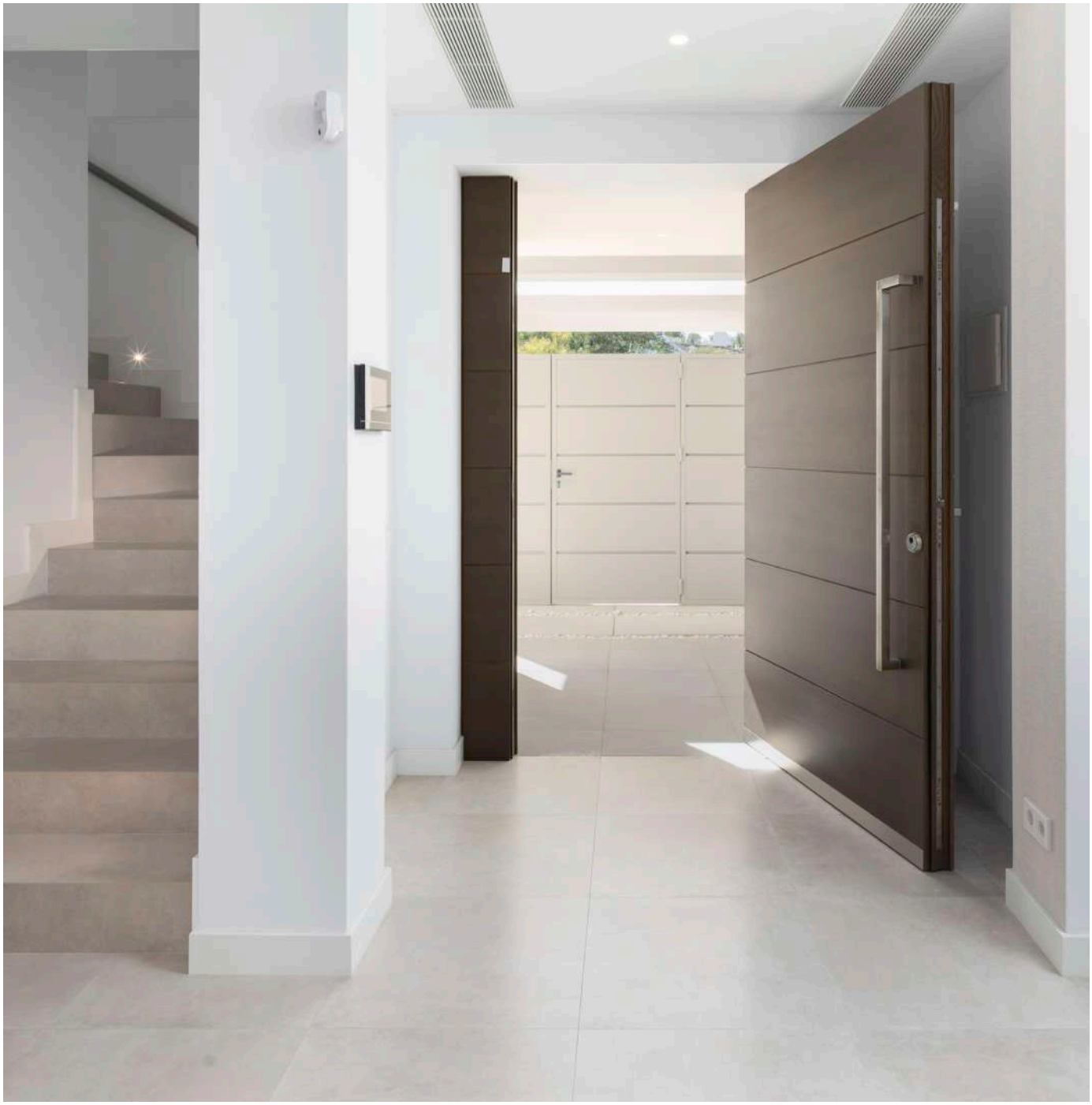
Outdoor lighting with energy-saving LED technology and waterproof luminaires.

Pre-installation of electricity point for stores or curtains and blinds in living room and bedrooms.

On-roof generator set to power the pumping units located in the basement and on the plot.

HVAC System

Air Conditioning	DAIKIN heat pump system, which provides heating, cooling and hot water. On-roof outdoor unit. Indoor ducted inverter units, installed in false ceilings in bathrooms or dressing rooms. Rectangular fibreglass ducts coated with aluminum sheet. Linear slot diffusers for both air supply and return
Heating	Water underfloor heating throughout the house and part of the basement. Aerothermal production equipment shared with the DHW system. Collectors in cabinets.
Ventilation	Installation of forced ventilation system to guarantee the renewal of the air inside the house, in accordance with the Technical Building Code.







TELECOMMUNICATIONS & ALARM

Telecommunications

Telecom cabinet.

Telecom box in cabinet on the ground floor or basement, as appropriate.

Wi-Fi throughout the house

Telephone and data points with RJ-45 sockets located in living-dining room, kitchen, bedrooms of the same brand as the mechanisms in the house, JUNG F-40 LS white.

Satellite antenna.

Terrestrial antenna for TV and FM channels.

TV sockets. RF.+RI., TBA coaxial in living-dining room, kitchen, bedrooms, of the same brand as the mechanisms of the house, JUNG F-40 LS white.

Video Intercom

FERMAX SMILE video intercom system.

Home Automation System

Installation with CONTROL4 Smart Home System and 10” built-in touch screen.

Alarm System

Pre-installation of wire alarm system.

CARPENTRY

Indoor Carpentry

Wood veneered pivot main entrance door with concealed hinges and top and bottom guillotine brush. Stainless steel handle and multi-point lock.

The interior doors are made of white lacquered MDF with concealed fittings and magnetic locking, with lock in bathrooms. The handles are stainless steel. They are complete from floor to ceiling, with no upper lintel cover, according to the project design.

The wardrobe doors are made of white lacquered MDF with cup hinges and handles made with a machined finger slot on the edge of the door.

The wardrobes are lined inside with linen-coloured melamine-finish chipboard and are fully fitted with luggage shelf, hanging rail, drawer units, shelves and shoe racks.

Exterior Carpentry

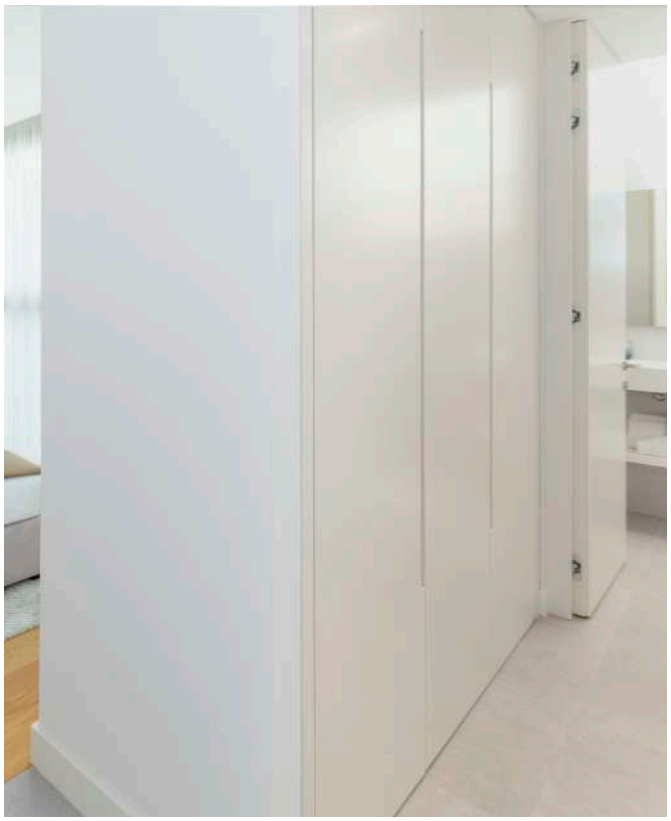
Exterior aluminium carpentry made with CORTIZO brand COR 60 series, and COR 4500 elevating for the larger windows, with thermal bridge break, lacquered in grey colour. At the discretion of the architect who drafted the project, the windows can be sliding, folding, tilt-and-turn, swing or fixed, in each case.

Glazing

PLANITHERM glass with internal air chamber for greater thermal and acoustic insulation, in different thicknesses depending on the size of the window.

8+8 or 10+10 safety glass railings (depending on the size) anchored to the masonry work by means of an aluminum profile of the brand CORTIZO.







PAINTING & POOL

Painting

In interiors, acrylic paint on vertical and horizontal surfaces.

Enamel paint on locks, after minium primer. Plastic paint on ceilings in damp rooms.

Exterior painting of facades with `REVETÓN´ silicone resin paint, smooth texture, with previous

base coat of breathable and water-repellent paint, based on acrylic resins in aqueous emulsion and siloxanes, and finish coating with the same product.

Swimming Pools

Finished with the same material as the floor of the terraces, they have an imitation wood/synthetic wood porcelain decking and a linear channel for water overflow around the perimeter.

Salt chlorination purification system, with the pool machinery located in hidden rooms under the deck flooring, accessible by lifting a metal cover placed on the floor.

The pool compensation vessels are located next to the machine rooms and are also accessible for cleaning and maintenance.

