





**CONSTRUCTION SPECIFICATIONS** 

## VILLARROELJORRICO

= ARCHITECTURE · PLANNING · LANDSCAPE DESIGN =

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PROJECT HIGHLIGHTS

- Highest quality insulation on exterior and interior walls.
- Design windows with high energy efficiency, with double glazing and UV protection.
- Kitchens equipped with top brand appliances.
- Installation of dimmable LED strips in coves in the living room and bedrooms.
- Automation.
- Pre-installation of perimeter security for video surveillance cameras.
- Automatic control of the lighting of the interior common areas, based on presence detection for security reasons.
- Low-consumption and high-efficiency lighting in all common areas and inside the homes.
- Underfloor heating by water throughout.
- Zone climate control.
- USB charging points in bedrooms and kitchen.
- WIFI access point per home.
- Safe.
- Pre-installation for motorized curtain rods in the living room.
- Pre-installation of gas fireplace in living room.
- Mirrors with electric anti-fog system.
- Gray water reuse system.
- Pipes lined with Armaflex type shell (cold and hot water pipes).
- Sanitation pipes and gray water soundproofed.
- Swimming pool with saline treatment.
- Private swimming pools in the solariums of the apartments type Superático A and Superático B.





#### BREEAM CERTIFICATION

BREEAM<sup>®</sup> (Building Research Establishment Environmental Assessment Methodology) is the most technically advanced method for assessing and certifying sustainability in buildings and is the world leader with +20 years on the market and +541,000 certified buildings in 77 countries since its creation in 1990.

BREEAM<sup>®</sup> promotes a more sustainable construction that has repercussions on economic, environmental and social benefits for all the people linked to the life of a building (promoters, owners, tenants and/or users) while transferring the Corporate Social Responsibility of the company to the community, society and the market in an unequivocal and easily perceptible way.



#### The information provided in this quality report is indicative, being subject to possible changes.

### SUSTAINABLE DESIGN - MAXIMUM COMFORT - ENERGY

#### ADDITIONAL TECHNICAL INFORMATION

#### **TEN-YEAR INSURANCE**

Contracting with a certified solvency insurance company, ten year insurance, which guarantees coverage for ten years of compensation for material damage caused to the building by errors or defects that originate in or affect the foundation, supports, beams, floors, load-bearing walls or other structural elements, and that directly compromise the mechanical strength and stability of the building.

The construction process will be supervised at all times by the Technical Control Body (OCT) in order to guarantee that the work is carried out with the maximum quality and safety controls in the building.

#### STRUCTURE ACCORDING TO CTE REGULATIONS

The structure and foundation will be undertaken with reinforced concrete according to the requirements of the regulations of the Technical Building Code regarding Structural Safety.

#### **QUALITY CONTROL OF MATERIALS**

Quality control of construction processes and materials by an approved and accredited Laboratory.

Concretes: Controls and tests of finished work according to UNE 83302:84, 83303:84 and 83304:84.

As a complement to the previous UNE 83307:86 and UNE 83308:87

Steel: Filler material according to UNE EN ISO 14555:1999.





#### PHILOSOPHY AND PROJECT CONCEPT.

#### **ARCHITECTURE OF EMPTY SPACE**

For all architectural projects, the work and design of VILLARROELTORRICO structures the free space simultaneously with that of the solid built volumes, allowing the natural environments to take the initiative, acting and qualifying the private spaces of the homes.

In VILLARROELTORRICO's work philosophy, attention to natural spaces and the integration of nature in architecture are the productive engines of the work, to achieve a result of maximum environmental quality and comfort.

In order to achieve a solid, sustainable and quality building, VILLARROELTORRICO pays the utmost attention to the exhaustive quality control of the project, its materials and its execution, having made a careful selection of materials, both for the exterior and for the interior of the houses, which, together with the exquisite care in the architectural details, will allow offering the best constructive result that guarantees the well-being of its future users.

SABINAS also has a highly qualified technical department to advise you on the possibility of personalizing and improving your home, by implementing a series of extras that will allow you to adapt it to your needs.



Melvin Villarroel - Founding Architect



#### **OUR DESIGNERS**



When visiting the land of the SABINAS project, one quickly has a double visual perception of great impact. To the South are the impressive panoramic views of the Mediterranean Sea, its light and the serenity of the coastal landscape; and to the North we are surrounded by the rocky mass of the mountains, which with their robustness and presence generate that extraordinary climate that we enjoy in this area, and among them, La Concha stands out in the background, whose presence makes us part of the spirit of the city of Marbella, printing a seal of identity at our location.

This natural criterion and the opportunity to participate in it results in the idea of working with organic lines, with curves that aim to integrate the linearity of the volumes built on the meandering paths of the topography of this place. But at the same time this is a response to the distant horizon of the south, which although it is marked very linearly by fragmenting the blue of the sky and the sea, in its contact with the earth it is undulating and sinuous.

That is why this gesture of reflection and interpretation of the surrounding nature makes a reading of these two juxtaposed landscapes that, as if they were Yin and Yang, merge through the architectural design in perfect harmony and total union.

The fundamental design criterion and the main idea of the project arises from the very name of the promotion.

Sabinas is a plant species from the upper area of the Mediterranean, with a woody shrubby nature and a solid character that stands out for the peculiarity of growing wider than higher, so that it protects itself from the winds and heat, since it thus adapts to the mountains and the steep slopes of the contours of this site.

That is why the buildings that are designed for the project start from the same idea and with the same philosophy they are built on our plot. The building is in all cases wider than it is tall, reaching up to 50m in length to give the client the maximum visual surface open to the landscape through large terraced areas that also generate shadow spaces and energy self-protection of the building.

The project therefore tries to combine in the same exercise the optimization of the distributions and organization of the interior spaces, the maximum opening of lighting and views towards the sea and finally the design of the building envelope, which through contemporary interpretation issues of energy efficiency and solar control prevail.

All of this at the same time is intertwined with the traditional and most elemental approach of Melvin Villarroel's architecture in which the empty and interstitial spaces that surround the building become equal participants in the importance of the project and are connected with the built areas, whether communal or private.





#### STRUCTURE

- Executed structure, both for vertical and horizontal elements, in reinforced concrete.

- The structural system will be made up of reinforced concrete pillars with a rectangular section on which solid slabs will rest. The possibility of having the presence of hanging beams due to the lighting bridges is foreseen.

- The foundation will be designed based on the data provided by the geotechnical study.

#### ROOFS

- Passable and non-passable roofs over habitable spaces will have a slope of 1% to 5% and will be composed of a vapor barrier (if necessary), formation of slopes of cement mortar, geotextile as a separating element of different materials, insulation, waterproofing with a modified bitumen sheet, a protective layer of M-5 cement mortar, floated, prepared for flooring with non-slip tile according to use.

- In the case of terraces and porches arranged on noninhabitable spaces, waterproofing will be used made with waterproof sheet adhered with primer prior to the support of slope-forming cement mortar (from 1% to 5%), trowelled finish, and protected with a layer geotextile separator and cement mortar protection layer, smoothed, prepared for flooring.

- In the case of walkable covered terraces over non-inhabitable spaces (as per the roofs without insulation).

#### FAÇADES

- In general lines formed, on its exterior face, by 15cm thick perforated brick masonry (commonly called solid), plastered inside and outside (e=2 and 1.5 cm, respectively), with a chamber and polyurethane foam insulation projected with 6cm and 35 kg/m3 density and on its inner side lined with double plasterboard partition walls, screwed to a galvanized sheet metal structure, anchored to the floor and ceiling by waterproof joints in the lower and upper areas of felt. The outer plates will be of high hardness.

- The exterior paint will be high quality elastic in soft tones.

#### CLADDINGS

- The exterior cladding will be continuous and constituted of plastering with traditional water-repellent mortars reinforced and reinforced in the changes of material with anti-retraction mesh (e = 2 cm both vertically and horizontally).

- Flashing plastered and waterproofed with technical mortar. On these waterproofed special pieces of polymeric concrete will be placed.



This type of enclosure ensures the interior comfort of the home, isolating it from the outside and guaranteeing energy savings.

#### PARTITIONING

- The divisions between apartments and the interior partitions between bedrooms and living areas will be executed with half a foot of solid phonic brick and clad on both sides with double plasterboard partitions.

- The interior partitions will be made with double plasterboard partition walls.

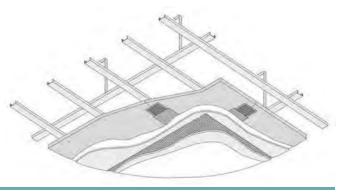
- The exterior plates in plasterboard cladding will be high hardness.

Thermal insulation based on bare rock wool panel, for acoustic and thermal insulation placed in the profile area.

- The interior painting of all the walls will be done in three layers of top quality washable paint in broken white.

- Suspended continuous false ceiling, smooth in laminated plasterboard.

- Exterior false ceiling, smooth with a metal structure, formed by an AQUAPANEL Knauf system plate or similar with a tapered edge, finished with high-quality plastic paint in soft tones.



#### **COMMON AREAS**

#### FLOORING AND PAVEMENTS

- In outdoor areas, pool area, sun loungers, etc. Non-slip stonelike porcelain materials will be placed.

- Outside common areas, rectified non-slip porcelain tile NEXUS WHITE by CIFRE will be installed in 60x60 format or similar equivalent.

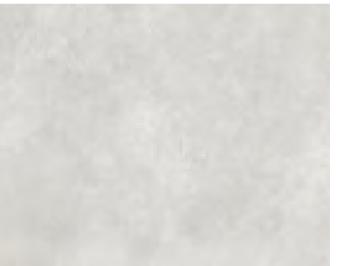
- Skirting board superimposed on a companion wall of the same material.



- The staircase and halls of the buildings will be executed in NATURE BEIGE porcelain tile by PERONDA in 60x60 format. Skirting board superimposed on a companion wall of the same material.

- The access path to the basements will be made of cement pavers in shades of gray and stone or prefabricated pieces of concrete or printed concrete.

- Interior parking floor executed with concrete and floated quartz aggregate, polished finish with protection by application of two-component paint, based on aliphatic polyurethane and solvent with a satin finish after application of epoxy resin.







#### **EXTERIOR CARPENTRY**

1. Exit door from the living room to the garden and sliding windows

- Systems of windows and sliding doors in lacquered aluminum, anthracite color of the brand Schuco, Technal or Cortizo with double glass 4+4 mm or 6+6 mm laminated glazing with polyvinyl butyral PVB and transparent air chamber. The sliding doors in the living rooms are Galandage type (embedded in the wall) while in the rest of the rooms they are simple sliding doors.

-Monoblock-type motorized blind with 45mm slats in bedrooms in the same color as the carpentry.

- Profile embedded in the floor.

- All the windows will have a safety lock and a handle on each leaf.

Accessories, approved anti-lever hanging hardware, highquality EPDM glazing joints, stainless steel screws, sealing elements, accessories and approved machining tools. The criteria for the selection of exterior carpentry have taken into account aesthetic, functional and energy efficiency aspects.



2. Casement windows.

- Tilt-and-turn and casement windows and doors in lacquered aluminium, anthracite gray from the brand Schuco, Technal or similar, OCULTA RPT, with double glazing. Glazing in window enclosures in façade openings composed of 4mm+4mm laminated exterior glass with COOL LITE XTREME 61-29 layer, 18mm 90% Argon chamber, 3mm+3mm interior laminated glass. All glasses will be planiClear base with black Warmedge type interlayer.





#### 3. Glass railings on terraces

- System of laminated safety glass railings embedded in a parapet on habitable terraces on the first floor and a Cortizo View Crystal type solarium or similar top quality.



4. Pergolas

- Outdoor pergolas with natural wood beams.



Thanks to the selection of windows and glass, an excellent acoustic and thermal insulation of the houses is achieved, which gives them greater comfort.

The inclusion of large windows also allows maximum use of natural light with the consequent energy savings.

The railings of the terraces will be made of safety glass made with laminated tempered glass, for greater strength and resistance to impacts.

They become a decorative and aesthetic exterior element.

The use of glass provides visual lightness, luminosity and a feeling of spaciousness, allowing, at the same time, to enjoy the surroundings and its magnificent views.

SGGPLANITHERM 4S known as "four seasons glass". Providing security and light, the glass railings comply with the Technical Building Code (CTE)

#### PAINT

1. Inside

- Smooth plastic paint, matt finish, with a water-based primer undercoat of the Revetón brand or similar as a surface fixative and two finishing coats with Nóvex Eco-1000 plastic paint of the Revetón brand or similar.

- Broken white colour.

2. Outside

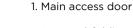
- Exterior paint on silicone resin facades, Reventón Silicone brand or similar, smooth texture, with a previous base coat of breathable and water-repellent paint, based on acrylic resins in aqueous emulsion and siloxanes, and a finishing coat with the same product (in If necessary, bridge by Sika® Top 50 Brand adhesion primer or similar, based on acrylic resin).

- Colors in soft tones.



- High impermeability to rainwater: prevents water seepage inside the support.
- High breathability to water vapour: facilitates the evacuation of moisture, helping to keep the wall dry.
- High resistance to UV rays and the use of stable pigments: contributes to a greater durability of the color outdoors.
- High covering power: allows to gain opacity in fewer hands.
- "Self-cleaning" capacity: its water-repellent pearl effect allows it to repel dirt to a greater extent and remove it with rainwater.
- Excellent adherence on usual construction surfaces due to its composition and ability to penetrate the support.
- Low surface tension: guarantees good adherence when repainting facades with old chalky paint.
- Resistant to microorganisms: contains anti-mold preservative that prevents the formation of mold, algae and verdigris.
- Unaffected by cement alkalis (unsaponifiable).
- Water-based product: solvent-free, convenient and safe to apply, and more respectful of the environment.

#### INTERIOR CARPENTRY



- Armored folding entrance door with a leaf height of 226cm and 230cm in total, with a security lock, made of natural wood on the outside and lacquered on the inside, matching the interior doors of the house.



2. Passage doors

- Interior doors, veneered in water-repellent MDF with a height of 2400 mm. Free passage width of 725 mm in bathrooms and 825 mm in bedrooms and living rooms. Designer handles, hidden hinges and anti-noise perimeter rubber. Flashing of the same material and finish as the door.

Optional with natural oak wood finish or white lacquered.





#### 3. Wardrobes

- Wardrobes made of MDF, veneered wood finish with alveolar or solid interior, brand hidden hinge system, with hour-edge handles from the middle of the door to the floor, fittings and handles. Interior in melamine board with a textile model design.

- The wardrobes will have a laminated interior and be fitted with a trunk shelf, hanging rail and drawers. Hinged system (4 units) with matte steel fittings and handles placed at a height of 100 cm.
- In each room one of the closet doors will have a mirror inside.
- A safe will be installed.

Optional with natural oak wood finish or white lacquered.







Option A Natural Wood

#### FLOORS AND PAVEMENTS

- General interior, rectified porcelain in 90x90 format.

Option A \_ NEXUS WHITE by CIFRE Option B \_ NEXUS GLACIER by CIFRE (or similar equivalents)

- Embedded skirting board on 150x15mm off-white lacquered water-repellent wood plasterboard.

- Pavement on terraces executed with non-slip rectified porcelain in 90x90 format.

Option A \_ NEXUS WHITE by CIFRE Option B \_ NEXUS GLACIER by CIFRE (or similar equivalents)

- 150x15mm off-white lacquered aluminum superimposed skirting board.

- The pavement of the terrace will be a companion to the interior of the house.



Comfort: pleasant, elegant and warm material. Its high resistance to abrasion makes it a very durable material. resistant to bumps and scratches.

- It is very compact and resistant to sudden changes in temperature and humidity.
- High resistance to chemicals.

Attractive design

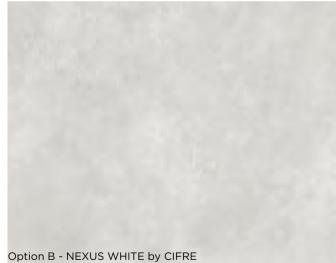
- Minimum maintenance and easy cleaning.
- Hygienic, as it has the ability to retain bacteria that cause allergies.
- It is anti-stain so it is a great substitute for some natural materials such as marble that stain easily.
- Its colors remain unchanged despite being subjected to sudden changes in temperature or exposed to the sun.



cifre

cerámica

Option A - NEXUS GLACIER by CIFRE





#### 1. Mirrors

- Hanging mirror with hidden mechanical fixing, frameless, backlit and anti-fog.

#### 2. Taps

- DONRBRACHT LISSE model single-lever basin faucet or similar equivalent.

- Exempt bathtub faucet model LISSE by DONRBRACHT or similar equivalent.

- Single-lever shower faucet model LISSE by DONRBRACHT or similar equivalent.

- 2-way shower thermostat with hand shower set and matt platinum outlet.

- TECHO shower head 300x 300mm model LISSE by DONRBRACHT or similar equivalent.









3. Sanitary appliances

- GEBERIT SIGMA button

- VILLEROY & BOCH SUBWAY 3.0 toilet with Soft Close lid.

- Washbasin integrated in Solid Surface countertop with drawer unit with visible structure.

- DICA wooden bathroom cabinet or similar equivalent.

- The bathtub in the main bathroom that has this option will be MODEL D-NEO by DURAVIT or similar equivalent.

4. Accessories

- DONRBRACHT SPECIFIC model shower towel rail or similar equivalent.

- DONRBRACHT model SPECIFIC hand towel rail or similar equivalent.

- DONRBRACHT SPECIFIC model wall hangers or similar equivalent (3 units).

#### 5. Claddings

- Washbasin wall cladding (according to detailed plans) with large-format porcelain tile type MARVEL BLACK ATLANTIS from the ATLAS CONCORDE brand.

- Companion bathroom floors to those of the rest of the house.

-The showers will be covered on the walls and floor with the same porcelain tile as the flooring of the bathroom floor. The shower will be non-slip type C3.

- The remaining non-paneled walls in the bathrooms will be made with double plasterboard partitions painted with special anti-humidity paint in the same color as the rest of the house.













1. Mirrors

- Hanging mirror with hidden mechanical fixing, frameless, backlit and anti-fog.

2. Taps

- DONRBRACHT LISSE model single-lever basin faucet or similar equivalent.

- Single-lever shower faucet model LISSE by DONRBRACHT or similar equivalent.

- 2-way shower thermostat with hand shower set and matt platinum outlet.

- DONRBRACHT LISSE model wall-mounted shower head or similar equivalent.



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3. Sanitary appliances

- GEBERIT SIGMA button

- VILLEROY & BOCH SUBWAY 3.0 toilet with Soft Close lid.

- Washbasin integrated in Solid Surface countertop with drawer unit with visible structure.

- DICA wooden bathroom cabinet or similar equivalent.

4. Accessories

- DONRBRACHT SPECIFIC model shower towel rail or similar equivalent.

- DONRBRACHT model SPECIFIC hand towel rail or similar equivalent.

- DONRBRACHT SPECIFIC model wall hangers or similar equivalent (3 units).







#### 5. Claddings

- Washbasin wall cladding (according to detailed plans) with large-format porcelain.

Option A \_ Model JEWELS RAYMI by DOLCERAMIC Option B \_ Model GRAY STONE of ATLAS CONCORDE

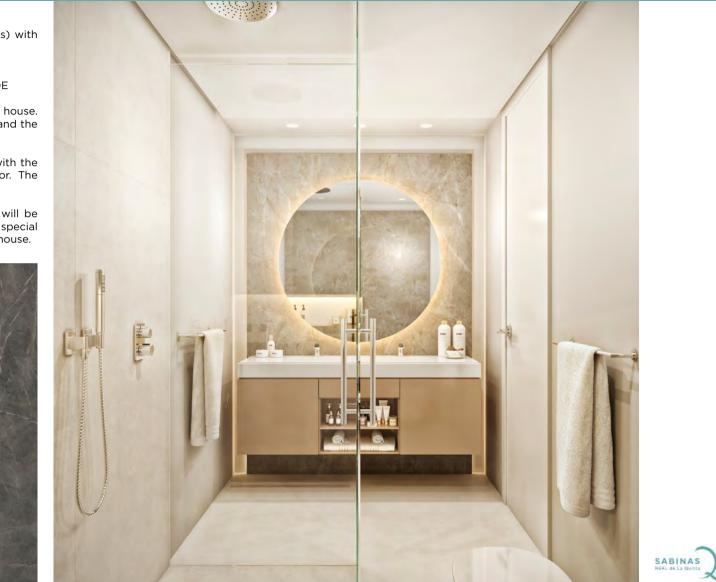
- Companion bathroom floors to those of the rest of the house. The flooring option A will carry the cladding option A and the flooring option B will carry the cladding option B.

- The showers will be covered on the walls and floor with the same porcelain as the flooring of the bathroom floor. The shower will be non-slip type C3.

- The remaining non-paneled walls in the bathrooms will be made with double plasterboard partitions painted with special anti-humidity paint in the same color as the rest of the house.

Option B

Model GRE STONE by ATLASCONCORDE





#### 1. Mirrors

- Hanging mirror with hidden mechanical fixing, frameless, backlit and anti-fog.

2. Taps

- DORNBRACHT LISSE model single-lever basin faucet or similar equivalent.

3. Sanitary appliances

- GEBERIT SIGMA button

- VILLEROY & BOCH SUBWAY 3.0 toilet with Soft Close lid.

- Washbasin integrated in Solid Surface countertop with drawer unit with visible structure.

- DICA wooden bathroom cabinet or similar equivalent.











## 4. Accessories DORNBRACHT SPECIFIC model shower towel rail or similar equivalent. DORNBRACHT model SPECIFIC hand towel rail or similar equivalent. DORNBRACHT model SPECIFIC wall hangers or similar equivalent (3 units).



#### **KITCHENS**

#### FRAME

In a 1.9 cm veneered melamine panel. Thick class E1 (ecological panel or low formaldehyde content). The surface is antistatic, resistant to heat and liquids that are commonly used in the kitchen. All the fronts of the frame are edged in 1 mm ABS. and the rest of the edges in 0.4 mm ABS.

#### REAR

0.6 cm veneered melamine MDF panel. Class E1, with both sides coated in the same color as the frame. To allow the passage of tubes and cables, the rear has a setback of 1.7 cm at the top and 4.7 cm at the bottom.

#### SHELVES

In the same panel and color as the frame, with the front edge in 1 mm ABS. and the rest of the edges in 0.4 mm ABS, always in the color of the frame. All the shelves are height adjustable and have an anti-leakage and anti-tilt safety device. The shelf supports are resistant to high loads. When the piece of furniture is L.80 cm. or higher, change the thickness of shelves or bottoms to 2.5 cm. depending on the type of furniture. In high furniture change shelves and bottom; in the base and wall units, only the shelves change.

#### WORKTOP

In porcelain material and a thickness of 12mm. The main characteristics of this material are: hygienic, nonporous, resistant to high temperatures, stains, detergents, and also resistant to thermal shock, as well as scratching.

#### DRAWERS

With sides and rear in aluminum colored steel and with a 1.6 cm base in gray laminate. Guide with integrated driving and ultralight sliding with total extraction and automatic closing system as standard. Resistance to 40 Kg dynamic load. Furniture with drawers with a front of 90 cm. or higher, have guides with a resistance to a 70 Kg dynamic load as standard.

#### HINGES

With CLIP system and three adjustment pins, which contribute to an exact anchorage and firm retention. The hinges have a built-in brake, except for the 180° hinges that will be sent with shock absorbers for their placement. They have three regulations:

- Vertical: +2 -2 mm. by screw
- Depth: +3 -1 mm. through eccentrics
- Lateral: +4 -0.5 mm. through eccentrics

The hinge is guaranteed for more than 100,000 closing/ opening cycles.



#### HANGER

Zinc-plated steel and hidden in the back of the furniture. Assembly conditions: through three semicircular bolts to fit into the side of the cabinet, with a screw attached to the ceiling and in the furthest hole on the side. Weight resistance 170 kg.

#### DOORS

Wood: Smooth door 2 cm thick. with one of its edges at 45°. Two-sided veneered, 4 wooden edges with anti-humidity seal. Lacquer: 2 cm thick smooth door. with one of its edges at 45°. Matt lacquered.

#### HOME APPLIANCES

Appliances (Siemens brand or equivalent) with induction hob, integrated fridge, freezer and dishwasher, extractor hood, oven, microwave, washer and dryer.





#### INSTALLATIONS

#### **ELECTRICITY AND LIGHTING**

1. Mechanisms

- Mechanisms of the SCHNEIDER brand, model D-LIFE, matte white.



# Schneider

#### 2. Lighting points

- Interior lighting system made up of light points embedded in the false ceiling, Sylvania brand downlight or similar, dimmable in the entrance hall, kitchen, living room, LED in the living room and bedrooms. ON/OFF in corridors or interior distributors.

- Indoor LED lighting with warm white lamp.

3. Outdoor luminaires

- For lighting of pedestrian accesses on paths and stairs, the exterior lighting system will be installed consisting of embedded light points of the LEDS C4 brand, Tiny model or similar, same RAL as the aluminum carpentry.

- In the general lighting of outdoor spaces, wall sconces of the LEDS C4 brand, Afrodita model or similar, same RAL as the aluminum carpentry, will be installed.

- In the lighting of the garden, surface lamps of the Leds C4 mara, Tiny model or similar, will be used.

#### LOW VOLTAGE

- Homes with single-phase installation with power of 9.2 Kw (40 A) in homes without a solarium and 14.49 Kw (63A) in homes with a solarium

- Electric vehicle recharging forecast.
- In common areas activation by presence detectors.
- Controlled plug in living room.
- USB chargers

#### TELECOMMUNICATIONS

- Block catchment system with a single enclosure located on the ground floor or basement.
- Dimensioning of interior boxes sufficient to house a router.
- Fiber optic installation.
- Pre-installation of WiFi access point per home
- Energy eco-efficiency, immediate ignition.
- High light efficiency.
- Durable green technology (between 30,000 and 50,000 hours of life or more).
- Made with recyclable materials. They do not contain polluting elements (eg mercury).
- Color rendering index greater than 80 out of 100.
- Ecological LED lighting is quieter.
- Avoid light pollution.
- Led bulbs are safe, stable and resistant to vibration and shock.
- Free of polluting gases.

#### HOME AUTOMATION

- Main touch screen.

- Home automation control of all the lighting in the home, both on/off and dimmed, technical alarms, blinds, curtains, air conditioning and consumption control.

- Water shut-off valves.

- Smoke Detector.
- Flood detector.



#### SECURITY

- Digital video intercom.
- Pre-installation of exterior security perimeter network.



#### **AIR CONDITIONING**

#### DAIKIN

- Aerothermal production system for cold / heat using a Daikin brand air-water heat pump.

- Outdoor unit on deck and indoor unit in laundry room.

- There will be a DHW storage with a minimum of 180 liters and the additional demand will be met (if the machine is operating in cold mode) by using the wall-mounted support boiler.

- All equipment will have a minimum energy efficiency of A++.

- Support for the production of DHW and underfloor heating by water through a sealed wall-mounted natural gas condensing boiler.

- Indoor Fan Coil units with independent available pressure per room with supply and return distribution network from the machine to the rooms, in order to reduce acoustic communications between rooms.

- The location of each of the units will be made in the toilet and laundry room, with its corresponding maintenance record.

- Condensate connection from the indoor units to the gray water network with a siphon installation equipped with a buoy to prevent odors in the event of water evaporation. All indoor units equipped with condensate pumps.

- Network of Climaver Neto acoustic absorbent ducts. Internal return of each room through a plenum box from the grid located in the false ceiling to the return outlet.

- Linear discharge grilles. Madel brand model LMT-MISSD-DD, Alrzone or similar.

- Underfloor heating by water using the Uponor Klett system throughout with zonal controls.

- Taps with flow rates adapted to Breeam compliance

#### HOME VENTILATION

- Controlled mechanical ventilation system with air intake through aerators or microventilation and exit to the roof.

- Siber brand rectangular air distribution ducts or similar.

- Additional ventilation system in bathrooms with access to the facade using S&P TD Silent 160 timed helical fans activated by presence detection.

#### PLUMBING

- Pressure group made up of two/three alternative operation pumps with speed variator for a set of blocks that share the same basement.

- Prefabricated pump feed regulation tank with a capacity of 1 m3 per dwelling.

- Aquapurif brand softener for each pumping equipment or similar.

- Feeding to the pumping system and from this to the battery of meters through high-density PE pipe.

- Studs up to houses with multilayer Pex-Al-Pex pipe.

- General cut-off valve and solenoid valve activated by home automation and manually.

- Indoor installation using Uponor Pex pipe insulated with elastomeric shell for hot and cold water.

- Ring installation inside wet rooms.

- Return network with pump activation control by push button and/or home automation.

- Production of DHW by means of aerothermal energy with a minimum accumulation of 180 liters and support by means of a wall-mounted natural gas condensing boiler.

#### SANITATION

- Separative system with reuse of gray water for irrigation of the urbanization.
- Recovery of clean rainwater and gray water for urban irrigation.

- Discharge of surplus gray water to the point indicated in the urbanization.

- Discharge of sewage at the indicated point in the urbanization.

- Discharge of excess clean rainwater to the point of discharge from the urbanization.

- Discharge of dirty rainwater to a point to be defined or channel.

- Independent water treatment and reuse by phase.

- Sanitation network inside the houses through the use of soundproofed three-layer polypropylene pipes or soundproofed PVC in collectors and downspouts.

- Collectors hung in the basement in PVC.

- Siphonic boat in bathrooms.

#### LIFT

- Thyssen VF Synergy elevator or a similar premium brand for 6 people weighing 650 kg.





#### URBANIZATION AND GARDENING

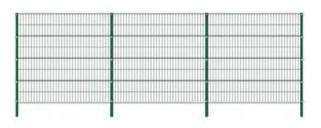
- Ecological-green walls for urbanization and outdoor containment.



- Stone masonry walls in interior urbanization, common areas.

- Urbanization totally fenced in its perimeter, with preinstallation of perimeter security system. (Piping only within the ICT facility)

- Exterior fencing of the Bekaert-type plot or similar.



- Pavements in asphalted main road.

- Pavements of road area in the accesses to the buildings made with cement cobblestone.

- The exterior paths of the garden will be made of continuous mass concrete paving with a floated or brushed finish.

- Pavement on the ground floor terraces of the apartments and around the swimming pool executed with 90x90 non-slip rectified porcelain (companion to the dwellings).

- Garden irrigation with automatic system and drip application.

- Timed garden lighting with wall lights and LED projectors.



#### **OPTIONAL EXTRAS**

#### **OPTIONAL (no extra cost)**

- Finishing of interior doors and cabinet doors (2 options to choose from)
- Color finish in kitchen furniture (2 options to choose from)
- Interior flooring finish (2 options)
- Wall cladding in sinks and showers (2 options)

#### **EXTRAS (additional cost)**

- Charger for recharging electric vehicles in the parking space.
- Gas fireplace.
- Heated towel rails.
- Villeroy & Boch ViClean type smart toilet or similar.
- Cellar cabinet for wines in the kitchen.
- Appliance upgrade package.
- Interior cabinet lighting.
- Private pool in the solarium of apartments type Penthouse 3D or Penthouse 3D+.
- Toilet in the solarium of apartments type Penthouse 3D or Penthouse 3D+.
- Solarium shower.
- Sauna in the solarium of the apartments type Superático A or Superático B.
- Turkish bath in the solarium of the apartments type Superático A or Superático B.
- Barbecue in solarium.
- Motorized bioclimatic pergola in solarium (where the design allows it)

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TIPO ÁTICO 3D+ 3 dorm	TIPO 2D 2 dorm	TIPO 2D + 2 dorm	TIPO ÁTICO 3D 3 dorm	NIVEL P10
TIPO 3D + 3 dorm	TIPO 2D 2 dorm	TIPO 2D + 2 dorm	TIPO 3D 3 dorm	NIVEL PB

ESQUEMA BLOQUE TIPO A

	Solarium	Colanum		
Solarum	TIPO SUPERÁTICO B 3 doim	TIPO SUPERÁTICO B + 3 dorm.	Selarum	NIVEL P20
TIPO ATICO 3D+ 3 dorm	TIPO 2D 2 dorm	TIPO 2D + 2 dorm	TIPO ÁTICO 3D 3 dorm	NIVEL P10
TIPO 3D + 3 dorm	TIPO 2D 2 dorm	TIPO 2D + 2 dorm	TIPO 3D 3 dorm	NIVEL PB

#### ESQUEMA BLOQUE TIPO B

Extras - Private pool and/or toilet in the solarium of apartments type Penthouse 3D or Penthouse 3D+.

Extras - Sauna and Turkish bath in the solarium of apartments type Superático A or Superático B.

In the solarium these apartments have a pool, shower and toilet as standard.

