

BUILDING ESPECIFICATIONS



1. EARTHWORK

1.1. LAND CLEARING AND CLEANING

- Land clearing and cleaning up to a minimum depth of 25 cm, using mechanical methods. This includes all work necessary to remove the following from the areas set aside for building or development: trees, plants, stumps, undergrowth, brush, fallen wood, debris, rubbish or any other material.

1.2. OPEN EXCAVATION

- Excavation of basements over 2m deep in any kind of soil, using mechanical methods, including removal of the excavated materials and lorry loading.

2. FOUNDATIONS

2.1. SURFACE FOUNDATIONS

- All structural and foundation works will be carried out in accordance with the recommendations of the geotechnical study of the terrain. A reinforced slab foundation or isolated reinforced concrete footings braced by reinforced concrete tie beams will be executed, in both cases according to the recommendations of the geotechnical study.

2.2. BASEMENT FOUNDATION SLAB

- Reinforced concrete floor slab, made with HA-25/B/20/IIa concrete manufactured at the plant and poured with a bucket, and B 500 S steel, with smooth surface finish by means of a vibrating screed.

2.3. WATERPROOFING AND DRAINAGE

- A perimeter drainage system will be installed around the perimeter of the sanitary facilities
- Inverted, trafficable and non-trafficable roofs with thermal insulation layer according to project specifications.

3. FRAMEWORK

3.1. UPRIGHTS

- Reinforced concrete columns, made of HA-25/B/20/ concrete manufactured at the plant, with a free height of up to 3 m. and 30x30 cm. of average section.
- Reinforced concrete basement wall, with concrete HA-25/B/20/ manufactured at the plant and poured with a bucket. B 500 S steel.

3.2. FLOOR SLABS AND SLABS

- One-way horizontal slab, 30=25+5 cm edge, on continuous formwork system; 10 cm "in situ" beams, 80 cm spacing; concrete block, 70x70x25 cm, and electro soldered mesh in compression layer.

3.3. STAIRCASES

- Reinforced concrete staircase with inclined slab, with concrete steps covered with porcelain stoneware tiles model DEEP GREY, URBATEK series by "PORCELANOSA Grupo", or similar, received with cement mortar. Pieces of special dimensions.

- Glass railing 100 cm. high made up of: 10+10 laminated glass mounted on a 5 mm. thick stainless steel profile.

4. FACADES

4.1. BRICK EXTERIOR WALLS

- Enclosure consisting of: 11.5 cm. thick outer leaf, made of triple hollow ceramic brick, for cladding, 24x11.5x11.5 cm, received with industrial cement mortar, with cement rendering applied on an interior vertical facing, on the back of the outer leaf of the façade with air chamber. Free-standing self-supporting wall cladding, "KNAUF" or similar, made of laminated plasterboard, anchored to the slabs by means of a structure formed by channels and uprights.

4.2. EXTERIOR CARPENTRY AND BLINDS

Gray anodized aluminum carpentry, for fixed "CORTIZO" or similar, consisting of a leaf with profiles with thermal bridge break, and with pre-frame. Large fixed windows will be installed, and tilt and turn doors for the exit to the outside.

4.3. RESIDENCE ENTRANCE

- Block of 120x210 cm. standardized armored folding entrance door, finished with ALUCOBOND or tropical wood on both sides and high security lock with five frontal locking points, including lateral fixings.

4.4. PLOT ENTRANCE

Sectional garage door, HÖRMANN or similar, consisting of a ribbed aluminum panel filled with polyurethane and automatic opening.

- Sliding metal gate for vehicle access.

- Single or double-leaf metal swing gate with manual opening for pedestrian access.

4.5. SILLS AND RAILINGS

Parapet made of a 11.5 cm. thick brick masonry sheet of triple hollow ceramic brick, to be clad, received with industrial cement mortar, gray color.

- Stadip or similar 10+10 safety glass railings.

4.6. EXTERIOR DETAILS

- The flashings will be made of polymer concrete with a polished, flat surface of 31x2.5 cm.

4.7. GLASS

- Insulating double glazing, 8/12/6, with shims and continuous sealing.
- Shower enclosures: glazing with 8 mm thick satin tempered glass, fixed on carpentry, with perimeter and lateral shims, cold sealed with colorless synthetic silicone (not acrylic). It includes doors of different opening types according to the project.

5. PARTITIONS

5.1. PARTITION WALLS AND LINING

Free-standing self-supporting wall cladding, W628.es "KNAUF" system or similar, made with laminated plasterboard, anchored to the floor slabs by means of a structure formed by channels and studs; 85 mm total thickness; separation between studs 600 mm with thermo-acoustic insulation formed by glass wool panel, P1281 Ursa Terra Mur in roll "URSA IBÉRICA AISLANTES" or similar, non-hydrophilic, coated on one side with printed kraft paper that acts as a vapor barrier.

Single partition wall W111.en "KNAUF" (12,5+48+12,5)/400 (48) LM - (2 Standard (A)) or similar with laminated plasterboards, on "KNAUF" acoustic band or similar, consisting of a simple structure, with normal "N" stud arrangement; acoustic insulation with semi-rigid mineral wool panel, thickness 45 mm, in the web; total thickness 60,5 mm.

5.2. INTERIOR DOOR FRAMES AND WARDROBES

- Single leaf doors, 203x82.5x3.5 cm, made of MDF board, pre-lacquered in white, with horizontal slits every 50 cm. Interior carpentry continues from floor to ceiling. Hinged part with concealed hinge system up to a height of 2.11 m., fixed part up to ceiling.
- Prefabricated built-in closet with sliding panels, made of MDF board, pre-lacquered in white.

6. PLUMBING

6.1. FIXTURES AND FITTINGS

6.1.1. TOILET

- Hung toilet with "NOKEN" URBAN series fixtures, seat with cushioned hinge, light wall installation. Includes fixing kits and connection pipes.

6.1.2. WASHBASIN

- Washbasin of "KRION" by "PORCELANOSA GRUPO", flush series or similar, recessed, equipped with single lever faucet for washing "URBAN" series by "NOKEN" or similar.

6.1.3. SHOWER

- Krion shower tray, from the RAS series by "PORCELANOSA GRUPO" or similar, white color.
- Thermostatic wall-mounted faucet for bath/shower, URBAN series, from PORCELANOSA or similar, chrome finish, possibility of limiting temperature and flow rate.

6.1.4. KITCHEN SINK

- Silacryl sink, model Bermeo "ROCA" or similar, with 1 bowl, Ténéré beige color, 490x500x190 mm, equipped with single lever mixer tap for sink, with high top swivel spout, chrome finish, with ceramic cartridge, model L20 "ROCA" or similar.

6.2. PLUMBING

- The plumbing installation will be carried out in accordance with the plans, the Basic Installation Standards and the Technical Building Code.

- The pipes used in the installations for hot and cold water will be made of cross-linked polyethylene (PE-X), series 5, "UPONOR IBERIA" or similar of guaranteed quality, perfectly smooth and well calibrated.

6.3. SEWER SYSTEM

- It will be made with mineral charged PVC pipe with sufficient sections for its proper functioning in accordance with the CTE.

7. LIGHTING & ELECTRICITY

7.1. LIGHTING

- Optional according to the lighting project.

7.2. ELECTRICITY

- Supply and installation of a complete electrical network for the interior distribution of a single-family house with a high degree of electrification.

8.1. TERESTRIAL TELEVISION

- Pre-installation of individual satellite TV system "TELEVÉS" (number of bases depending

8.2. TELEPHONE

- Individual telephone system. (number of bases depending

8.3. SMART HOME SYSTEM

- Installation of home automation for the control of the house (electricity, lighting, electronics, etc.), through the use of available techniques and technologies. Includes alarm system and pre-installation of video surveillance.

8.4. INTERCOM

- Stadio Plus "GOLMAR" or similar color digital video door entry system for single-family houses, with additional monitors.

9. ROOFS

9.1. TRAFFICABLE ROOFS

- Flat, non-ventilated, trafficable, non-ventilated, flat roof, with fixed floor screed, inverted type, slope from 1% to 5% for private pedestrian traffic, consisting of:

SLOPE FORMATION (2): Expanded clay of 350 kg/m³ density, dry poured and consolidated on its surface with cement slurry, with an average thickness of 10 cm.

ADHERED BILSEALING (3): SBS elastomer modified bitumen sheet, LBM (SBS)-30-FV, placed with anionic asphalt emulsion without fillers, type EA, and SBS elastomer modified bitumen sheet, LBM (SBS)-30-FP adhered to the previous one with a blowtorch, without coinciding their joints.

SEPARATOR LAYER UNDER INSULATION (4): Non-tissue geotextile composed of needle-punched polyester fibers, with a longitudinal tensile strength of 1.2 kN/m, a transverse tensile strength of 1.2 kN/m, CBR punching strength of 0.3 kN and a surface mass of 150 g/m².

THERMAL INSULATION (5): Rigid extruded polystyrene panel Ursa XPS NIII L "URSA IBÉRICA AISLANTES" or similar, 60 mm thick, compressive strength >300 kPa.

UNDER PROTECTION SEPARATOR LAYER (4): Nonwoven geotextile composed of needle-punched polyester fibers, with a transverse tensile strength of 2 kN/m, CBR puncture resistance of 0.4 kN and a surface mass of 200 g/m².

PROTECTION COAT (6): 4 cm thick M-5 cement mortar that will serve as a base for the subsequent fixed flooring.

9.2. NON-TRAFFICABLE ROOFS (GRAVEL)

- Flat, non-trafficable, non-ventilated, graveled, inverted type, slope from 1% to 5% composed of:

SLOPE FORMATION (2): Expanded clay of 350 kg/m³ density, dry poured and consolidated on its surface with cement slurry, with an average thickness of 10 cm.

ADHERED BILSEALING (3): SBS elastomer modified bitumen sheet, LBM (SBS)-30-FV, placed with anionic asphalt emulsion without fillers, type EA, and SBS elastomer modified bitumen sheet, LBM (SBS)-30-FP adhered to the previous one with a blowtorch, without coinciding their joints.

SEPARATOR LAYER UNDER INSULATION (4): Nonwoven geotextile composed of needle-punched polyester fibers, with a longitudinal tensile strength of 1.2 kN/m, a transverse tensile strength of 1.2 kN/m, CBR punching strength of 0.3 kN and a surface mass of 150 g/m².

THERMAL INSULATION (5): Rigid extruded polystyrene panel Ursa XPS NIII L "URSA IBÉRI- CA AISLANTES" or similar, 60 mm thick, compressive strength >300 kPa.

UNDER PROTECTION SEPARATOR LAYER (4): Nonwoven geotextile composed of needle-punched polyester fibers, with a longitudinal tensile strength of 1.2 kN/m, a transverse tensile strength of 1.2 kN/m, CBR punching strength of 0.4 kN and a surface mass of 200 g/m².

. PROTECTION LAYER (7): 10 cm of pebbles from 16 to 32 mm in diameter.

10. WALL COVERINGS

10.1. EXTERIOR COATING

- Coating of exterior walls with single-layer mortar Morcemdur RF "Grupo Puma" or similar, with fine scraped finish, thickness 15 mm and color white 100, mechanically applied, reinforced and reinforced with anti-alkali mesh even when changing material.

10.2. EXTERIOR PAINT

- Decorative coating of facades with silicate paint, VALENTINE or similar, white color, for the realization of the finishing coat in continuous two-coat coatings; cleaning and sanding of the traditional mortar substrate, base coat with a preparation based on potassium silicate and acrylic emulsions and two coats of finish.

10.3. INTERIOR PAINT

- Two coats of white plastic paint with smooth texture, color of choice, matte finish, on interior horizontal and vertical walls of gypsum plasterboard, base coat and two coats of finish.

10.4. TILING AND PLASTERING

- In bathrooms, tiling with "VENIS" porcelain stoneware tiles, from "PORCELANOSA GRUPO", Newport Dark Grey series or similar, 33.3 x 100 cm, placed on a support surface of laminated gypsum boards on the interior wall.

- In kitchens, tiling with "VENIS" porcelain stoneware tiles, from "PORCELANOSA GRUPO", Arizona Caliza series or similar, of 31.6 x 90 cm, placed on a support surface of laminated gypsum boards on the interior wall.

10.5. FALSE CEILINGS

- Continuous false ceiling, located at different heights, smooth D114 "KNAUF" or similar, with metal structure

metal structure

(12,5+47), formed by a laminated gypsum board.

Formation of drawers in false ceilings for curtain rails with prefabricated plasterboard, thickness 15 mm, type "KNAUF" or similar.

Possibility of having a perimeter tray in the false ceiling for the location of LED strips in the same (optional).

11 FLOORS AND PAVING

11.1. INTERIOR AND EXTERIOR FLOORING AND PAVING

- Flooring of porcelain stoneware ceramic tiles, model DEEP GREY of the URBATEK series of "PORCELANOSA GRUPO" or similar, 59,6x59,6 cm.

*Anti-slip treatment in exteriors.

11.2. PAVEMENT OF GARAGE AND UTILITY ROOMS

- - Smooth continuous pavement in interior

11.3. EXTERIOR STAIRS

- Lining of straight stair tread lined with 59.6x59.6 cm DEEP GREY model porcelain stoneware tread and partition from the URBATEK series by PORCELANOSA or similar, using pieces of special dimensions, with stringer of the same material received with M-5 cement mortar.

* Anti-slip treatment.

11.4. VEHICLE ENTRANCE PAVING

- Ramp made of grated or swept concrete, after vibrating and

12. SWIMMINGPOOL

12.1. OVERFLOW SYSTEM

- Perimeter grating formed with the exterior pavement itself, leaving a 2 cm gap in it, where a water collection channel will be located.

12.2. BASIN WATERPROOFING

- Formation of swimming pool basin by spraying a 20 cm thick, quick-setting, gunned concrete layer. With cement and special aggregates, with reinforcement formed by double electrowelded mesh, without expansion joints, for the formation of the floor and walls of the monolithic pool basin in swimming pools. Waterproofing of swimming pool basins, with flexible bi-component mortar (minimum thickness 2 mm).

12.3. BASIN COVERING

- Vitreous coating (gresite) on floors and walls of swimming pool basins, in 2.5x2.5 cm paper tiles, smooth series in white color, received with flexible cementitious adhesive, white color.

12.4. EQUIPMENT

- Complete purification equipment for swimming pool 7x3,5x1,5 m (volume 48 m3)
- Installation of electrical control and protection panel for 10x5x1,5 m swimming pool (volume 42 m3) with watertight box, high sensitivity differential, starter, motor protection thermal relay, selectors, manual-automatic timer, start-stop signal lights and protection fuses, all wired and mounted internally and connected to the motor under steel pipe. Fully installed and in operation.
- Installation of automatic salt water chlorination equipment with electronic dosing pump.
- Installation of complete purification equipment.
- Installation of manual pool cleaner, consisting of suction cart with brush and wheels, telescopic handle in anodized aluminum and self-floating hose.
- Installation of outdoor shower for swimming pool.

13. PLOT PREPARATION

13.1. FILL

- Open-cast backfilling with material from the excavation itself; and compaction to 95% of the Modified Proctor with a self-propelled tandem compactor, in 30 cm thick layers, until reaching a dry density not less than 95% of the maximum density obtained in the Modified Proctor test, to improve the resistant properties of the supporting soil.
- 30 cm thick layer of fertilized topsoil and soil preparation, crumbling, cleaning, leveling and fertilizing for planting, carried out by manual means.

13.2. PERIMETER WALKWAY

A perimeter sidewalk bordering the house will be built, in order to avoid cracking, with a minimum size of 10 to 12 mm boulder stone, with an irregular arrangement, 150 mm thick.

13.3. PLOT ENCLOSURE (RETAINING WALL)

- Earth containment by means of a limestone wall, on one face, received with industrial cement mortar.

14. SYSTEMS (HEATING & COOLING SYSTEM)

14.1. HEATING, COOLING AND ACS

- Air conditioning and ventilation system. Thermos aerothermal system or similar:
 - - Heat pump: Aerothermal for heating, cooling and DHW.
 - - High efficiency Fan Coils (DAITSU) or similar.
 - - DOUBLE FLUID controlled mechanical ventilation.

* The qualities and finishes described above will be considered during the execution of the works, although they may be subject to modifications in order to introduce improvements of a technical, economic and/or aesthetic nature, adjusted to minimum quality standards, always at the discretion of the Architect-Author of the Project.