



LIST OF BUILDING MATERIALS



MAESTROS CONSTRUCTORES
DESDE 1972

PLANNING PROCESS	3
1. PLANNING	3
2. MANAGEMENT AND SUPERVISION DURING THE CONSTRUCTION PHASE	3
CONSTRUCTION	4
3. FOUNDATIONS	4
4. STRUCTURE AND ROOFS	4
5. WATERPROOFING AND INSULATION	5
6. PLASTERING	6
7. PLASTERWORK	6
8. FIREPLACES	6
9. WIRING AND ELECTRICS	6
10. PLUMBING	7
11. FLOORING, TILING AND SPECIAL PIECES	9
12. KITCHEN CABINETRY	10
13. ELECTRICAL APPLIANCES	12
14. BATHROOM SUITES	12
15. DOORS AND WINDOWS	12
16. GLAZING AND LOCKS	15
17. SECURITY	15
18. PAINTING	15
19. SWIMMING POOLS	16

PLANNING PROCESS

1. PLANNING

1.1 Preliminary planning

Initial plans, based on the type of villa and the wishes of the customer.

1.2 Final planning

Drawing up of all the plans for the project and structural calculations, for presentation to the Professional Associations and the Town Council, so that a building permit can be granted.

1.3 Building project plans

Villas

- f* Location
- f* Foundations and sewerage system
- f* Layout of useable space
- f* Dimensions
- f* Roofs
- f* Elevations
- f* Sections
- f* First slab floor
- f* Second slab floor
- f* Electricity
- pPlumbing
- f* Windows and doors
- f* PVC doors and windows material list
- f* Doors and windows material list
- f* Locks material list
- f* Wardrobe details
- f* Construction details
- f* Construction Section

1.4. Swimming pools

- Initial plans according to the customer's wishes
- Dimensions and structural calculations
- Project execution preparation
- Obtaining the building permit

2. MANAGEMENT AND SUPERVISION DURING THE CONSTRUCTION PHASE

2.1 Selection

Choice of final details and materials such as: tiles, flooring, wall colours, roof tile colours, as per the wishes of the customer

2.2 "In situ" supervision

Supervision of the building work, determined by the project plans. Regular checks on materials used, in line with specifications, current legislation and the wishes of the customer. Reports on the progress of the building work and photographic documentation.

CONSTRUCTION

3. LAYING FOUNDATIONS

3.1 Preparing the site for building

The site is cleared, where necessary. Trees and shrubs are preserved, provided they do not get in the way of the building process. The site is prepared and connections for electricity and water are put in. The boundaries are redrawn, materials and machinery are obtained, and the following tasks are undertaken:

3.2 Excavation

Trenches for the foundations are dug, to the required size specifications.

3.3 Foundations

Generally speaking, 40 cm deep by 80 cm wide continuous footings filled with mass concrete are used. If the results of geotechnical testing shows that a special type of foundations is needed (such as reinforced concrete slabs), the quantities needed will be calculated and agreed upon prior to purchasing. In line with applicable legislation, all of the foundations of the villa will be earthed using bare copper cable.

4. STRUCTURE, ROOFS AND TERRACE ROOFS

4.1 Structure

On top of the foundations, 24 cm thick load-bearing walls are built using TERMOARCILLA blocks. At a height of 40 cm, the support for the first slab floor (at ground floor level) is made. This height is left as an air chamber, ventilated by perforated ceramic pieces around the perimeter. These insulate the house from contact with the ground.

In the case of sloping sites, or if the level requires it, the height of this chamber may be adjusted and the walls will have extra courses, with the corresponding repercussions.

If building regulations allow it, this extra space can be used, for example, as: an extension of the living space, a store for garden tools, etc.

To support the slab floors and joined to the walls, reinforced concrete joists are built. The outer lintels are made of U-shaped ceramic pieces, filled with reinforced concrete.

Floor and ceiling slabs are built using prefabricated prestressed concrete beams, ceramic blocks and a 4 cm thick layer of compressed concrete, reinforced with electrosoldered, steel mesh panels.

These slabs are built horizontally, both inside and outside the houses.

All load-bearing walls are built using TERMOARCILLA 19x24x30 blocks.

The corners are strengthened with

reinforced concrete. Non load-bearing walls which divide the house into rooms are made of 7 cm thick double cavity ceramic bricks.

4.2 Roofs and terrace roofs

On top of the roof slabs, small walls of ceramic brick are built in parallel lines, around 70 cm from each other. These are laid in an open pattern to form the slope of the hips, which are made of a special type of brick called “bardos”, and a 3 cm. thick compression layer of mass concrete.

The roof of the house is finished with “Arabic” style, curved, ceramic roof tiles in red or beige, fixed with cement mortar. The eaves follow the slope of the roof and are built using corbel “bardo” bricks, a 2 cm thick compression layer of cement mortar and finished with Arabic roof tiles.

Perforated ceramic bricks are laid on the exposed areas of the roof. These allow air to circulate through the openwork walls, thus preventing excessive heat build-up in the roof chamber, which would result in movement due to expansion.

5. WATERPROOFING AND INSULATION

5.1 Waterproofing

A sheet of asphalt is laid horizontally below the joist, on top of the last TERMOARCILLA block. This prevents the possibility of rising in the walls. Asphalt sheeting with soldered joints and an overlap where it meets the exposed areas at the top is laid over the compression layer of the sloping eaves of the roof and house, before the roof tiles or floor. Where the slopes meet the edges of the chimney and gas pipes, the asphalt sheeting is overlapped with a lead strip around the flue.

5.2 Heat insulation

All the way around the perimeter of the inside, as shown on the plans, a wall of double-cavity, 7 cm thick, ceramic brick is built, at a distance of 5 cm from the load-bearing walls of the façade. This forms an air chamber. The air chamber is filled with expanded polystyrene panels of a thickness of 3 cm and a density of 10 kg/m³.

3 cm thick, extruded polystyrene insulation is laid over the first slab.

On flat roofed areas, 4 cm thick, extruded polystyrene insulation is laid between the slab and the formation of the slopes.

On the roof, 6 cm thick, rockwool heat insulation is laid directly on top of the slab and between the walls.

5.3 Other means of protection

To protect against splashing, the bottom 70 cm of all our villa models are decorated with natural stone cladding, fixed and pointed with cement mortar.

6. PLASTERING

6.1 Rendering and plastering

All exterior vertical walls and the roofs of the terraces are rendered using machine-sprayed, water-repellent mortar, reinforced with fibreglass and with

a rough finish on vertical areas. All vertical and horizontal interior walls are rendered with sprayed plaster.

7. PLASTERWORK

7.1 Plasterwork

All of the interior ceilings are finished with decorative plaster coving. The ceilings of bathrooms, shower rooms and all other areas where it is necessary are made of smooth plaster slabs with decorative plaster coving.

8. FIREPLACES

8.1 Fireplaces

All villas, except for the CÓRDOBA, SEVILLA, AVILA, LERIDA and CUENCA models are equipped with a fireplace. These have a special cast iron insert with two electrical fans for air circulation, a removable ash pan at the base, a door at the front with fire-resistant vitroc ceramic glass, rockwool insulation between the insert and the wall, a vitreous ceramic connection tube to the flue, and a grate. The outside of the insert is decorated with a black iron surround, with cladding on the sides. The mantelpiece is topped with CREMA-MARFIL natural marble pieces and there is a dummy smoke extractor above. In the house models shown on the plans, benches with a natural marble seat are built at the sides, the underneath of which can be used to store firewood.

Options

Optionally, the villas with a fireplace can be fitted either with the above or with a SPLIT type air conditioning unit with heat pump.

9. WIRING AND ELECTRICS

9.1 Wiring and electrics

A box, certified by the Ministry for Industry and the electricity supply company, is fitted on the boundary of the site. This box contains the electricity meter.

From this box to the fusebox inside the house, the electricity wires run underground. There are 2 10 mm section wires, protected by a reinforced PVC tube and covered with a layer of concrete.

A 220V supply is planned, with the whole network being installed behind walls and ceilings, in curled plastic tubes with the corresponding junction boxes, adapted to suit each villa model in accordance with the Low Voltage Regulations.

The wiring is centralised in a built-in fuse box at the entrance to the house, which holds the various magneto-thermal switches and the general trip switch. Underneath this fuse box, a box is fitted to house the reglementary ICP. It is mandatory for all switches to be connected to an earthed network. They are SIMON brand, series 88, in white.

The sockets are SCHUKO by SIMON, series 88 in white, except those for the hob, oven, washing machine and dishwasher, which are LEGRAND 20 and 25 Amp, and the hot water switch, which is a 16 Amp. fuse/switch set.

9.2 kW of power is planned for all models.

All wiring is carried out by an authorised electrician, in accordance with the

current Electrotechnical Regulations on low voltage, MI BT instructions and regulations set by the electricity supply company, officially approved by the Ministry for Industry, which provides certification via the corresponding Statement on Electrical Wiring Bulletin, which is necessary before the supply can be connected.

9.2 Installation of system elements for TV/ FM radio aerials and/or dish

Network of curled plastic tubes and the necessary wiring and junction boxes, built in behind the walls and ceilings from outside the house to the living/dining area and each of the bedrooms. The mechanisms are from the same series as the rest of the electrical mechanisms throughout the villa.

9.3 Telephone connection

The telephone connection runs underground from the boundary of the site to the house, with sockets in the sitting room and each of the bedrooms. The mechanisms are of the same series as the rest of the electrical mechanisms throughout the villa.

9.4 Installation of the alarm system

The alarm system to be installed in the villas shall consist of a control keypad, a control box, interior and exterior sirens and two radio presence detectors.

It will be installed in a concealed tube and an electricity socket and a phone point will be installed beside the control box.

The wiring must be controlled by a separate trip switch, which will be connected directly to the power supply.

10. PLUMBING

10.1 Water supply

Where the site meets the road, a box will be installed to house the water meter.

The water supply runs underground from this box to the facade of the house in ¾" diameter polyethylene pipes, protected with a layer of concrete. Inside the box, beside the outlet from the meter, a stopcock is fitted.

At the facade of the house, the connection material used is Rehau high density polyethylene and before it enters the house at one of the wet areas, it branches off to an outside tap. This is for garden maintenance and other uses, and the supply is separate from the general stopcocks inside the house. It can only be controlled from the stopcock behind the meter. In this way, gardening staff will not need access to the inside of the house.

At the inlet of the general pipe in the house, a stopcock for the cold water supply is fitted.

The cold water supply is installed using high density reticulated polyethylene piping in 16, 20 and 25 mm diameters, with brass fittings, and is built in behind the walls and ceilings. It is protected by curled plastic tubes and there are individual stopcocks for each individual bathroom or shower room. These can be found by the washbasins.

The cold water supply will have a connection and supply point for the collector of a solar panel system, which is connected to the hot water tank. From here, the hot water is distributed to all hot taps, using the same polyethylene pipes with the same diameters.

The connections from the supply network to the taps use 12 mm, nickel-plated, copper pipes.

All villa models have water connections and drainage for a washing machine and dishwasher, at the points indicated in the plans.

10.2 Sewerage system

The sewerage system uses PVC tubes with diameters of 40, 32 and 110 mm. These are concealed behind walls and run under the first slab floor to a utilities box, which is built outside. From here they lead to a septic tank buried underground, or to the general sewerage network, where available.

All drains have individual siphons and the bathtubs and shower trays have siphon valves.

If there is no general sewerage system in the development, a septic tank will be built, as previously stated, within the boundaries of the site itself.

10.3 Bathroom fittings and taps

- By bathroom, we mean those rooms that are shown on the plans as having a bathtub fitted.

Rectangular bathtubs are made of porcelain-enamelled, cast iron and are white in colour. The brand is ROCA and the model is CONTINENTAL.

In the TOLEDO, MADRID "B" and "C", LAS PALMAS, VALENCIA, BARCELONA, MERIDA, BILBAO "A", "B" and "C", ARANJUEZ "A" and "B", villas, bathtubs in the shapes and sizes specified on the plans will be fitted.

- By shower room, we mean those rooms that are shown on the plans to have a shower tray installed, instead of a bathtub. The shower trays are made of vitreous porcelain in white. They are 80 x 80 cm, ROCA brand, and the model is "MALTA", or else they are made "in situ".
- Other bath and shower-room fittings: basins, bidets and toilets (the latter being back-to-wall models) – are made of white vitreous porcelain and are from the ROCA MERIDIAN wall-mounted range. In the SEVILLA houses, the bathroom fittings are from the VICTORIA range.
- Accessories such as toilet roll holders, soap dishes, towel hangers and rails and over-basin shelves are from the ATOLL range by HANSGROHE, with a chrome and glass finish. There is a mirror over the basin, measuring 1 m wide by 0.9 m high, with 5 mm thick silver *cristañola* glass with polished edges.
- The kitchen sinks are white resin, from the ASTRAL range by "WEDEL" and have one or two bowls and a draining board, as shown in the plans of the various house types.

10.4 Taps

All taps are chrome "METROPOL", single-lever mixers by HANSGROHE, except for the outside tap, which is chrome-coated brass and has a hose connector.

11. FLOORING, TILING AND SPECIAL ELEMENTS

11.1 Flooring

For the floors of the insides and roofed terraces of our villas, you can choose between two options.

- The first option is ceramic tiles with joins of approximately 3 mm. wide, grouted with pearl grey mortar. Around the edges of the rooms, the same tiles are used as a skirting board.
- The second option is 40 x 40 cm medium-grain vibrated terrazzo tiles, fixed with cement mortar and ground and polished after laying. Inside, the tiles are finished with a mirror-type topcoat, and on the terraces, they are finished with a natural polish. Around the perimeters of the rooms, next to the walls, a 7cm high skirting board, made from the same tiles is fitted.

In villa models with different floor levels, or with two storeys, connected via an interior staircase, the treads and skirtings are made from the same material as the floor, provided it is available. If the stairs are outdoors, the treads are made of unpolished, small grain, acid-washed, vibrated terrazzo, which are non-slip. The risers are tiled with a decorative border.

11.2 Tiling

The vertical walls in the kitchens, bathrooms and/or shower rooms of all our villas are tiled from floor to ceiling. Adhesive cement is used to fix the tiles in place and the joins are approximately 3 cm and are grouted using fine mortar.

11.3 Special elements

In all our villa models, the exterior door thresholds are made from CREMA MARFIL micrograin marble. The length and width is cut to suit the space available and the marble is 2 cm thick.

The windowsills are made from 2 cm thick, CREMA MARFIL, micrograin marble and have a run-off in the form of a channelled groove at the bottom.

12. KITCHEN CABINETRY

12.1 Kitchen cabinetry

All kitchens are fitted with a cabinet suitable for housing a built-in refrigerator, “Silent System” drawers in the lower units, and shelves inside the cupboards, except in the sink housing and the space for the washing machine or dishwasher. A rubbish bin will be fitted to the inside of the door of the cupboard under the sink.

There is a space for a built-in oven in the lower units, underneath the hob.

An extractor hood will be fitted above the hob.

The worktops are 2 cm thick natural granite with a 2 cm strip glued to the front. The choices available are ROSA PORRIÑO, BLANCO PERLA, VERDE CASTAÑO, MONDARIZ, BLANCO CRISTAL, GRAN GRIS and ROJO BALMORAL and there is a 7 cm high upstand of the same material fixed to the wall. Gaps will be left in the worktops for the hob and sink, as shown in the plans.

In all villa models (where shown in the plans), a room divider in the form of a breakfast bar is installed between the kitchen and the living/dining area. The worktop of this bar is made from the same natural granite as the kitchen worktop and is formed by two superimposed 2cm thick sections, with a bevel in between them.

We also offer you a wide selection of cabinet doors in several different styles.

Our kitchen shop, “**Of Original Furnitures**” has an interesting selection. Our expert staff will be delighted to assist you with the design and layout of your dream kitchen.

12.2 Kitchen accessories and furniture

Your kitchen need not only be a place to store and cook food: it can fulfil other functions too. For example, it can be a place for the family to get together or for entertaining friends, a place to relax with a cup of coffee, or to watch TV.

As with so many things, the balance between functionality and perfection comes down to small details, and these same details also reflect personal preferences and tastes: a hob that’s fitted at just the right height, ergonomic knobs or a modern storage system, a shelf for a flowerpot, a spacious dining table in the middle of the room, a corner arrangement for the sink – all those extras that give your kitchen that personal touch. The CHG kitchens program gives you the chance to put your ideas into practice.

But that’s just the beginning...

Naturally, your imagination knows no limits – almost anything is possible. In general, CHG offers you its own decoration package as part of the total price.

Our proposal suits the architecture of the villa perfectly and is based on the rational use of the space available, with your comfort always in mind.

12.3 Perfect technology in the kitchen

Increased functionality

This exceptional technology, using hardened steel precision bearings and special runners ensures that there is no wear and tear on drawers throughout the whole of their lifespan, with maximum stability, no matter how often you open and close them. Nothing is too heavy for this system, and its amazing stability enables it to support extreme weights.

Exact aesthetic standards, and technology designed according to ergonomic principles: this is what turns the kitchen into a place where you can let your creativity reign. It's easier to enjoy the real pleasure of cooking, when the work is made easier.

Personal solutions

You'll find a wide range of styles to suit all tastes at **Of Original Furnitures**: from wooden styles to great-looking aluminium designs. All our kitchen ranges are designed to be functional, with huge possibilities for combining elements, from the right kind of lighting to the perfect furniture.

12.4 Attractive exteriors and valuable interiors

Absolutely functional: there's life inside!

How the cupboards are laid out is a fundamental issue when trying to make the most of the space in a kitchen. With the right technology, even the smallest corner can be used to its best advantage. Our innovative design solutions make it possible to organise the space, bearing in mind the needs of each person and of each kitchen. Let our experts at **Of Original Furnitures** advise you!

13. ELECTRICAL APPLIANCES

13.1 Built-in hobs

In all of our villas, a 4-ring ceramic hob is fitted, with the controls on the oven, which is fitted below the hob. The hob is BALAY brand, and is available with a white or black surround.

13.2 Built-in electric oven

In all our villas, the oven fitted is a BALAY electric combination model, which works as both a conventional and a fan oven.

13.3 Extractor hood

A BALAY extractor hood is fitted above the hob, with an outlet to the outside via a chimney in the covered area.

All electrical appliances are covered by the manufacturer's warranty, starting from the date you receive your keys.

14. BATHROOM CABINETS

14.1 Bathroom cabinets and countertops

Cabinets are fitted in all villa models that have a surface for a countertop basin.

These cabinets are made from MDF-style, water-repellent board with arched mouldings on the top. They are lacquered in white on the outside panels, doors and drawers, with melamine board on the inside. The countertop is made of 3 cm thick, "CREMA MARFIL" natural marble with a 13 cm overhang around the edge and a shelf in the same material built into the wall, 20 cm above the countertop. The length of the shelf is the same as the length of the countertop and extends 12 cm from the tiled wall.

At our kitchen shop, **Of Original Furnitures**, our expert staff will be delighted to show you a wide range of bathroom furniture.

15. DOORS AND WINDOWS

15.1 Exterior doors and windows

All villa styles have security entrance doors, with the following characteristics: Aluminium subframe fixed to the blockwork with claw nails. The door and frame have a reinforced PVC structure with steel tubes and 3 mm steel cladding, covered with PVC panels. Security butt hinges. Safety lock with three double anchor points. Handle on the inside and knob on the outside.

In all house styles, the size and number of panes for windows and glazed doors differs according to the plans. The subframes are made of 18 x 36 mm anodised aluminium. Exterior glazed doors and windows are made using white PVC, which ensures maximum levels of watertightness and heat and noise insulation. These sections are reinforced inside with galvanised steel, where necessary.

The two-pane windows use the Winkhaus espagnolette bolt locking system, with three anchor points. One of the panes has a tilt and turn mechanism. The pane fixings are made from dichromate steel with white plastic covers.

The single-pane windows use the Winkhaus espagnolette bolt locking system, with three anchor points and a tilt and turn mechanism. The fixings are of dichromate steel with white plastic covers.

Glazed single doors without a shutter are made with a frame at the bottom and reinforced with an intermediate steel plate on the panel. The doors are fixed to the blockwork using metal screws that go through both the frame and the subframe. They have three "HSV" security hinges. The Winkhaus locking system has five anchor points, four of which are hook-style, and the fifth with a lock. There is a handle on the inside and the outside, and a lock with a key.

Glazed double doors without a shutter are made with a frame at the bottom and reinforced with an intermediate steel plate on the panel. The doors are fixed to the blockwork using metal screws that go through both the frame and the subframe. Each door has three "HSV" security hinges. One door

is passive but can be opened. The passive door is made with four anchor points, two at the top and two at the bottom, and with a handle inside to activate the anchors. The other side of the door is fitted with a Winkhaus lock with 5 anchor points. Four of these are hook-style and the fifth has a lock with a handle on both the inside and the outside, and a key.

Single and double glazed doors that are fitted with a shutter are made without reinforcements to the panel and ironwork with five anchor points. Four of these are hook style points and the fifth has a lock. There are handles on both sides and the active door panel has a lock with a key. If there is a passive door panel, it has a bolt at the top and the bottom.

Glazed doors share a master key with the locking doors in the rest of the house.

White aluminium roller shutters are fitted to all bedroom window cavities. These are encased in a PVC box at the top of the window, with heat and noise insulation provided by 30 kg/m³ expanded polystyrene. The shutters are opened using a push-button motorised system.

15.2 Interior doors

In all our villas, the interior doors are made from water-repellent, solid MDF with arched mouldings at the top on both sides. These are lacquered in white. The latches and fixings are embossed, with handles on both sides. These are URFIC Ibérica, reference 2003 and have a privacy flap on the inside handle for bathrooms and shower rooms. They have white butt hinges.

The door frames are made from subframes which are fitted when the walls are being built and then clad with mouldings and groove formation when the work is at the final stages, after all plastering and tiling has been done. A PVC frame is slotted into the groove formation around the edge. This acts as noise insulation and also softens bangs.

To protect the walls from being damaged by the door handles, rubber door stoppers are fitted, at the desired distance. These are screwed to the walls at the same height as the door handles. In the bathrooms and shower rooms, the door stoppers are self-adhesive.

15.3 Wardrobes

Built-in wardrobes are planned for all bedrooms. The sizes and number of doors differ, as per the plans of our villas.

We offer two alternatives for the wardrobe doors in all our villas. These are:

- Solid MDF doors which are water-repellent and have an arched moulding at the top (on the outside only) and are lacquered in white. The top section is for folded garments and the bottom is for hanging clothes.

The opening and closing ironwork of the lower doors is embossed, with a handle on the outside of one of the two doors. This handle is ref. 2003 by URFIC Ibérica. The other door has two bolts. The top doors are fitted with URFIC Ibérica ref. 2003 handles. The fixings are of the silent-closing clip type. The doors are fitted with white lacquered butt hinges.

- Folding doors with slide rails at the top and bottom, edged and finished with white pore melamine. These doors extend to the full height of the folded garment and hanging garment sections. The different sections are

divided inside the wardrobe, with a white, melamine-coated board.

The insides of the wardrobes are made of imitation beech, melamine board. At the bottom, a nickel chrome bar is fixed for hanging clothes, and to one side, there are three shelves, with the same finish as the inside of the wardrobe.

16. GLAZING AND LOCKS

16.1 Glazing

All of the outside windows are glazed with two panes (one 6mm thick and one 4 mm thick). Between the two panes there is a 12 mm sealed air chamber, with an aluminium separator frame, closed at the corners with brackets and filled with a moisture absorber. This type of glazing has excellent heat and noise insulation properties. Each of the two panes of glass is joined to the separating frame by butyl threads, which form the first hermetic barrier. The second seal is a filling of polysulphur which is pressure-injected between the outside edge of the separator and the edges of the two panes of glass. This guarantees that there is dry air between the panes. In bathrooms and shower rooms, the 4 mm clear pane is replaced with a 4 mm embossed glass pane. Glazed doors have security glass consisting of two 6 + 6 panes, stuck together with a PVB sheet and a 4 mm pane with a 10 mm sealed air chamber.

17. SECURITY

17.1 Security

In those downstairs windows which will not be fitted with shutters, metal grilles will be fitted inside the window frames. These are made of hot galvanised, round bars joined by flanged tiles and decorated with stems. They are fixed to the walls using claw nails.

18. PAINTING

18.1 Exterior walls

All of the outside walls are painted with acrylic paint on top of the rough sprayed water-repellent mortar, in a colour of your choice from the catalogue.

On the arches of covered terraces which are not made using circular pillars, stone ashlar and segments are reproduced, in a colour to be determined.

18.2 Interior walls

All interior vertical walls that are not tiled are painted. Acrylic textured, satin-finish paint in the chosen colour is applied to the plasterwork
All of the interior ceilings are painted in smooth, matt, acrylic paint in white.

18.3 Interior doors

The interior doors are painted white.

18.4 Security

Exterior security elements are given two coats of special two-component paint for galvanised steel, in white or black.

19. SWIMMING POOLS

19.1 Planning

Initial plans according to the customer's wishes
Dimensions and structural

calculations Elaboration of execution
projectAcquisition of building permit

19.2 Construction

- Soft ground excavation
- Permanent wall formwork, built using ceramic brick walls.
- Ground preparation base with a layer of compacted aggregate.
- Steel frame made from electrosoldered mesh panels with corrugated rod reinforcement on the base, walls and perimeter joist for fixing to crowning.
- Concreted base, walls and joist, with compression spraying (Guniting).
- Interior plastering with cement mortar.
- Interior cladding with vitreous mosaic tiles, which are resistant to alkalis and chlorine
- Decorative, tiled border at the top of the walls, making cleaning and maintenance easier
- 60 cm wide, white, artificial stone for the entire perimeter crowning
- Installation of water network for purifying and renewal by means of spray nozzles, skimmers, base inlet and sweeper inlet
- Electricity supply with automatic and manual control panel for the motor-pump and purifier
- Water filtration and purification system
- Covered cabinet for storing purification equipment, situated close to the poolside, semi-sunken for easy handling.
- A cleaning kit with pool bottom sweeper is supplied.
- Stainless steel ladder