

TECHNICAL SPECIFICATIONS

NN Building - REINA AMÀLIA I

(C/. Reina Amàlia no. 16-16 bis)

GENERAL CHARACTERISTICS

This project involves the construction of a residential building, commercial premises and a car park located at Carrer **Reina Amalia 16-16 bis** in Barcelona.

As it is a building located in the "Casc Antic"(Old Town), special interest has been taken in the design of the façades, in an attempt to match the compositional criteria of the area.

In the interior Ground floor area, a garden and a children's play area for the Community of Owners have been planned. Stairs will lead out of the garage and there will be a COMMUNAL SWIMMING POOL of approximately 1 metre deep.

There are two offices on the Ground floor, which have an open kitchen, combined shower and toilet room and private garden.

The Upper floors have four flats per landing and a functional programme of two and three bedrooms, a dining-living room, kitchen and bathroom (**the 2nd and 3rd doors have an open bar kitchen**).

SPECIFICATIONS

STRUCTURE

The vertical structure of the building will be made of reinforced concrete pillars.

The horizontal structure will be made of lightened waffle slabs using hollow concrete blocks. The structure will be self-supporting on each floor and the enclosures will be carried out at a later date.

The pillars and slabs of the structure will be made of concrete (**H-25**) with a minimum dosage of 250 Kg/m³ of Portland cement.

The entire structure will be built in accordance with the "**Instrucción de Hormigón Estructural EHE**" (**Instruction on Structural Concrete EHE**). Similarly, the commissioning, control and tests will be carried out by specialised and approved laboratories.

FAÇADES

The opaque parts of the building's façades will be made of brickwork, an air chamber, thermal insulation and internal partitioning.

The main and rear façade will be finished with SINGLE-LAYER STUCKS.

The transparent parts of the building will have sliding aluminium frames with louvred shutters on the main façade and sliding aluminium frames with aluminium shutters and winch on the rear façade and interior courtyards.

Glazing will be CLIMALIT or similar.

FLOORING

Floating OAK parquet flooring will be laid over the entire surface of the dwelling, with the exception of the wet areas, kitchen, laundry room and terraces **(the open bar kitchens will also be fitted with floating parquet)**.

In the kitchens and bathrooms, ceramic floor tiles will be laid which will form a joint with the vertical walls.

Ceramic paving will be laid on the terraces.

CLADDING AND TILING

In the main bathroom, the countertop and front of the bathtub will be in CREMA MARFIL marble or similar, with a built-in washbasin. The vertical cladding will be in ceramic tiles. **(The dwellings with a secondary bathroom will have the same characteristics as the first)**.

The kitchens will have granite worktops which will form a joint with the flooring and vertical wall cladding. **(In dwellings with an open bar kitchen, the worktop will be made of postformed wood)**.

The laundry rooms will be tiled in the same way as the kitchen. **(The characteristics of the laundry rooms will depend on each dwelling)**.

SANITARY WARE

The sanitary fittings will be white and consist of a rectangular bathtub, bidet, low-tank toilet and embedded washbasin in the marble countertop.

TAPS

Mixer taps will be fitted in the kitchen sink, washbasin, bidet and a bath-shower mixer with handheld shower will be fitted in the bathtub.

KITCHEN CABINETS

The doors are coated with melamine on both sides with XEY model, TIBER-ARCE MULTIXEY series.

The frames are made of chipboard and coated with melamine on all sides and edges.

The shelves are made of the same material and may also be adjusted.

The kitchens are equipped with:

- Built-in electric oven with glass front and electric programmer.
- Extractor hood integrated into the unit.
- Four-burner gas hob.
- Built-in microwave with glass front.
- Provision for water and electricity supply and plumbing for dishwasher and washing machine.
- Provision for an electrical socket for a tumble dryer.

Note: Kitchens with an open bar will have a special design.

INTERIOR CARPENTRY

All the interior woodwork of the house is veneered and varnished in HAYA.

Entrance door with lock and security hinges.

Wardrobe doors are veneered in HAYA or similar wood and the inside is lined in MELAMINE or LACQUERED wood.

All door frames are clad with the same type of wood as the doors.

Matt chrome locks and handles.

The interior skirting boards of the dwellings are made of veneered wood.

PARTITIONS / INTERIOR CLADDING

The dividing walls between the dwellings will be 167 mm thick and will be made using a double structure of galvanised steel profiles between which a laminated plasterboard and a galvanised steel safety sheet will be placed. They will be covered on the outside with double laminated plasterboard on each side and filled with sound-absorbing fibreglass to achieve a high acoustic insulation of 60 dBA.

The interior partitions will be made of laminated plasterboard partitions, which will then be painted in plastic paint.

The vertical and horizontal walls of the dwellings will be lined with laminated plasterboard which will then be painted in plastic paint.

The false ceilings in the corridors will be made of laminated plaster and painted in plastic paint.

The horizontal walls of the kitchens will be fitted with white aluminium slats.

The horizontal walls of the bathrooms will be made of laminated plaster or Staff type plasterboard (**The bathrooms with air-conditioning units will have removable metal slats**).

ELECTRICAL INSTALLATION

The electrical installation will comply with the "**Reglamento de Baja Tensión y a las Normas Complementarias**" (**Low Voltage Regulations and Complementary Standards**).

The dwellings will have a control and protection panel, with the corresponding I.C.P., differentials and P.I.A.S. from where the different circuits will start.

Each dwelling will contain the following independent circuits:

1. Lighting circuit.
2. Socket circuit.
3. Dishwasher circuit.
4. Washing machine circuit.
5. Tumble dryer circuit.
6. Air-conditioning circuit.
7. Oven and microwave circuit.

PLUMBING INSTALLATION

The plumbing installation shall comply with the "**Basic standards for indoor water supply installations**".

All interior installations will use copper, polypropylene or polyethylene plastic pipes, in accordance with Project Management.

The cold-water installation shall start from an individual stanchion and will supply the sinks, boiler, washbasins, bathtubs, toilets and bidets.

The boiler will supply the hot water system for the sinks, washbasins, bathtubs, and bidets.

In all of the wet rooms, there will be a shut-off valve that separates them from the rest of the rooms.

Piping will be embedded in the false ceiling.

AIR CONDITIONING INSTALLATION

Each dwelling will have a hot-cold heat pump.

The condensing unit will be located on the roof. The evaporator unit will be fitted in the false ceiling of the bathroom for easy maintenance as this is where the fibre ducts will start.

Each unit will be powered independently from the electrical panel of the dwelling.

The pipes will run through the false ceilings.

Air returns are planned for each room and will be placed in the skirting boards to avoid air stratification and to achieve greater comfort.

GAS INSTALLATION

The gas installation shall comply with the "**Basic rules for indoor gas installations**".

The entire installation will be carried out using copper pipes with capillary soldering, which will run from the meters and individual stanchions to each dwelling to supply the boiler and kitchen hob.

LIGHTING

Interior installation of recessed spotlights in the kitchens and the bathrooms.

PAINT

The vertical and horizontal walls of the dwellings will be painted in plastic paint.

The locks and bolts will be painted with electrolytic lead plating for protection and finished with a coat of enamel or similar.

AUDIOVISUAL INSTALLATION

The audiovisual installations shall be installed in compliance with current "I.C.T." regulations.

The dwellings are equipped with TV, FM and satellite dish sockets, located in the living-dining room, kitchen and bedrooms. The installation of wiring for the reception of digital TV channels is also planned.

Telephone: Telephone points will be fitted in the living-dining room, kitchen and bedrooms.

Video intercom: Installation of video intercom by means of a call plate and camera located at the entrance to the main hall of the property and the monitor will be fitted in the kitchen.

ALARM AND HOME AUTOMATION INSTALLATION

The property will be equipped with a home automation and security system. This will achieve a secure domestic environment due to the central anti-intrusion system and comfort through the automatisms of daily tasks.

The system consists of a micro processed alarm centre with radio keypad and integral security volumetric detectors as well as a radio-controlled home automation system to switch the boiler on and off.

The pre-installation of domotics to control any water and gas leaks in the bathrooms and kitchen will be carried out. A socket base will be left so that

the client can later incorporate the elements for the definitive connections and manoeuvres.

The system includes a free maintenance service from the alarm centre for the first nine months, after which the customer may choose to prolong the service or operate it without connecting to the alarm centre.

QUALITY CONTROL

In order to guarantee the quality of the building during the construction process, **specialised companies** and **engineering firms** are contracted to control and manage the installations.

This control shall be carried out in the following stages:

- Structural management (walls, pillars and slabs).
- Management of water, electricity, gas and air conditioning installations.
- Management of façade sealing, aluminium and glass profiles.
- Management of lift construction and installation.

DELIVERY OF THE PROPERTIES

The property will be delivered in a clean condition in all of its components so that it can be occupied immediately.

Barcelona, September 2005

Note: The brands, qualities and design indicated in this report may be substituted by the Architect Director for others of the same or similar characteristics. (The distribution of sanitary ware in the bathroom and kitchen cupboards may also be substituted by the Architect Director).