

TECHNICAL SPECIFICATIONS

BOREAL PLUS APARTMENTS

STRUCTURE

- The structure of the buildings is designed and made at the maximum level of safety and durability in relation to the seismic area, the nature of the land and the stability over time of the buildings.
- The vertical structure is designed to meet the modern need for living in open, clear interior spaces, without exposed beams or pillars, without cracks or niches, while ensuring increased stability of the structure during the sixties.
- The structure with diaphragm walls with a thickness of at least 30 cm, executed in a continuous system - monolith, ensures together with the outer package of the thermal system and the inner cladding the level of thermal and acoustic insulation of the classic walls, with thicknesses of over 60 cm.
- The underground structure - screed made of monolithic reinforced concrete - is waterproofed in bulk and doubled on the outside with bituminous membrane and geotextile and on the inside with plaster and added screeds, ensuring maximum waterproofing and stability over time.
- The structure of the terraces, taking into account the arrangements and technical equipment located, permanently exposed to temperature and weather variations is designed and sealed hydro, thermo and soundproofed with materials of the latest technology.
- The structure of the balconies, sealed hydro, thermo and sound insulated, is made as an extension of the monolithic structure, with the floor and side parapets of reinforced concrete.
- The materials used to make the structural elements are in accordance with the latest European provisions, steel class 500C, concrete class 30/37 and 40/50 added with bulk waterproofing and BCA masonry.
- Slab floors have a thickness and structural composition designed so that together with the 10 cm package - screed, polystyrene and floor laid at the top - and dry plastering at the bottom to absorb and annihilate any vibration or noise.
- All rainwater abstractions are made outside the interior plan of the building, on the facades, collecting at the same time the siphons of the balconies and the condensation of the air conditioning equipment in the apartments.

Compliance with all these requirements in execution and operation is ensured by teams of monitoring, coordination and execution, with experience in the most prestigious residential projects carried out, appreciated and certified at national and European level.

ARCHITECTURE

- The exterior walls are made of BCA, with exterior cladding with polystyrene for the facade and basalt mineral wool and a decorative silicone plaster, waterproofing, as a tire protection.
- The partition walls between the apartments are made of effective ceramic blocks of 25 or 30 cm cm doubled with mineral wool and tiled to obtain the best sound insulation.
- The interior partition walls in the apartments are designed for maximum flexibility, made of sealed metal structure and double plating on each side with plasterboard and sealed interior with mineral wool, so that it can ensure the best sound insulation between rooms and at the same time flexibility in the compartmentalization of the apartment.

- The floors are made of monolith with the rest of the structure, including balconies and stairs, covered with waterproofing screeds, polystyrene and floor and at the bottom with extruded polystyrene and drywall for the best thermal and acoustic insulation. Waterproofing of floors and walls in damp spaces is ensured by a watertight bituminous membrane tank and plywood with special boards reinforced with fiberglass, resistant to moisture behind the ceramic finishes.
- The wall plasters in the apartments are secured in a dry system, with plasterboard plywood on metal profiles so as to allow flexible installation of the installations in the back.
- The plinths made of duopolymer have channels for installations adding an extra flexibility in the extension or relocation of the installations, especially the electric ones and low currents.
- The exterior carpentry provides the most generous glazing with access to natural light throughout

depth of living rooms twice the standard. The windows and doors are

made of durable PVC profiles with anti-scratch protective film, reinforced inside, multicamera type, with a maximum coefficient of thermal and sound insulation. Doors and windows are equipped with a permanent ventilation slot, through the intelligent locking system and hardware.

- The metal access door to the apartment, the frame and the linings have a special custom size, with superior performance in anti-burglary, anti-noise and anti-smoke, passive type with energy conservation, laminated faces in the frame and side linings in the same material.
- Interior doors ordered in special sizes, including the frame and linings, have a special design and features of durability, reliability and maintenance and are protected with anti-scratch laminate and equipped with hardware and accessories with dimensions and finishes above standard.
- The architectural part of the apartments, clearly designed, open, fluent, required the elimination of the thresholds between the rooms and the masking of all installations behind the dry finishes, the lowering of the interior railings to the windows and their replacement. to the apparatus executed with aesthetic grids.

- The interior finishes are made with super-washable and ecological paints, with high vapor diffusion power which allows, along with the dry plastered plasters, a natural breath of the walls.

The floor of the living rooms is provided with traffic-resistant laminate flooring, laid floating. In bathrooms, kitchens and balconies the floor is made of porcelain tiles, cut with maximum precision, with the texture and hardness of natural stone.

The endowments in the bathrooms and the bathrooms are chosen to satisfy the highest aesthetic and functional demands. Sanitary ware, furniture and accessories have an ergonomic design, durability and reliability, made of materials resistant to chemical and physical wear.

Faucets and accessories for sanitary ware are chosen with an innovative design and technology that ensures easy, quiet functionality and economy of consumption.

All the finishing and furnishing elements in the bathrooms and kitchen - appliances, sanitary ware, bathtub, shower, washbasin, furniture are designed and executed to withstand moisture and steam.

- Whether or not windows or natural ventilation have been provided in the bathrooms, the designers have provided forced ventilation by force fans, automated at extraction, smart, mounted in the vertical ventilation duct and adjustable absorption grilles with adjustment for the evacuation of stale air and moisture with anti-odor systems.

- The installation or ventilation windows in the apartments are made of ceramic blocks, covered with mineral wool, covered with dry plaster and sealed with screeds on the horizontal side to block the transmission of annoying noises between the apartments.
 - The front parapet of the balconies is transparent, made of double sheet of glass, laminated, secured and embedded in the frame of robust metal profiles, with a height of 1 meter.
- The designed architectural partitions reflect the harmony of living in safety and comfort, in a space with a personalized ambience, carefully designed and built with dedication.

EQUIPMENT INSTALLATIONS

- The designed installations have the metering provided outside the apartment, placed in the upstairs windows of the installations. The routes of the installations are hidden in plasters, walls and ceilings both in the apartments and in the common parts, including the central distributor of underfloor heating.
- The underfloor heating system with thermal agent is controllable by the thermostat sensors in the central apartment distributor and the wireless apartment thermostat. The bathrooms also have an electric towel radiator with thermostat, to ensure full heating, and permanent air drying.
- A kit for mounting the air conditioner is provided and pre-installed in each room - a power cable, socket, condensate ducts and freon - so that the purchase and quick installation of the desired type of air conditioner is not a difficulty.
- Each room has multiple sockets, integrated solutions for electricity and low currents, laid at an easy step and height, with copper wiring and equipment with special and ergonomic design.
- The water supply and sewerage installations are equipped with access and intervention valves, posed behind the plasters, in easily accessible boxes, masked with finished grilles, which offer a great flexibility of laying - relocation of the equipment, depending on the furniture plan wanted.
- Low current installations include fiber optics installed for the internet, video intercom and access control from the outside, both pedestrians in the building and nearby vehicles.
- Electrical circuits for high-consumption appliances - electric hobs, washing machine, etc. have ultra-sensitive cables and fuses on dedicated electrical circuits and fire protection.

All installations are prepared for the optional installation of smart meters and configured for integration in remote control systems, SmartHome type, especially heating and air conditioning thermostats, electrical equipment.

COMMON SPACES

- Designed for maximum fluency and comfort, the common spaces are treated with noble materials - granite, stainless steel, mirrors, ecological electrical and lighting equipment, fast, smart elevators, naturally ventilated stairwells, welcoming access halls with ergonomic ramps.
- The basements are designed, depending on the category of the building, according to the technical need for the maintenance of the installations, with technical spaces.
- In the case of buildings where only a technical basement has been provided, it cumulates all the vertical installations and allows their maintenance.

GENERAL EQUIPMENT

- The latest generation block heating plants, in condensation, are designed to operate in cascade, respectively to enter the load one after the other only when consumption increases.
- Placed on the upper level of the buildings, for maximum efficiency, and chimney to prevent the return of flue gases, condensing boilers are sealed perimeter and with oversized floor insulation to prevent the transmission of vibrations and noise.
- Hot water storage boilers, booster pumps and power plants are controlled by intelligent automation and integrated into the BMS type management system coupled with the general damage and fire detection system of the building and housing complex.
- In the entirety of the building are updated the latest requirements and measures for fire risk prevention, the surveillance-detection system being integrated in the BMS.
- Each building is connected to a power supply system provided by a generator, designed to operate in case of emergency, covering the necessary equipment and vital consumers.

PARKING

The compound is provided with car parks arranged at ground level, in open space near the blocks of flats, but it also has an above-ground car park built in conditions of maximum safety and comfort.

The advantage of above-ground parking is the possibility to keep the car in a protected and controlled environment. The car park is equipped with 2 large elevators to streamline traffic.

Inside the above-ground car park, there are also parking spaces with sockets for charging electric cars and speakers.

Access to the car park is controlled by smart barriers.

