# TECHNICAL SPECIFICATIONS SALCÂMILOR

The designed buildings fall into Category C of importance in accordance with the regulations on quality in construction H.G. 766/21 / 1997 and Class of importance II in accordance with the regulations of the seismic design code P100 / 1-2013

**Foundations** are of the general eraser type on the entire contour of the building or basement if it exceeds the contour of the building, made of reinforced concrete C 20/25 at a depth below the frost limit.

**The resistance structure** is designed with outer and inner walls made of thick reinforced concrete of 30 cm and 35 cm. The reinforced concrete floors are 20 cm thick. The class of concrete used for the elements the superstructure is C40 / 50 and C30-37. The aim was to eliminate the beams as much as possible in order to obtain flat surfaces inside the rooms but where it was necessary to design beams they were designed from concrete reinforced with sections between 30 x 35 cm and 30 x 65 cm. The reinforcement of all the elements was designed with reinforcement profiled quality S500, ductility class C. The structure is calculated to be earthquake resistant regulations in force P100 / 2013.

The central core of each building comprising the elevator shafts and the staircase will be executed at the same time as the walls structural exteriors and interiors, is made of continuous monolithic reinforced concrete.

**The exterior walls** are cast in a continuous monolithic system of reinforced concrete type diaphragm, and where technological gaps result - parapets, sub-beams, etc., - the filling will be made with 30 cm brick masonry thermal insulation with thermal system package with polystyrene EPS80 10 cm and basalt wool band 10 cm / plaster (European Technical Approval system) on the entire facade.

**Non-structural partition walls** are made of the inner structure with metal profiles with width of 7.5 cm and double plated on both sides with tiles plasterboard with a thickness of each plate of 12.5 cm. Plates of

drywall used in conjunction with the interior wall system compartmentalization is a solid, durable and

soundproofing calculated and designed, approved by manufacturer (Rigips or similar).

Also, in the area of wet rooms - kitchens, bathrooms, toilets, gutters, rainwater installations, sewerage, sides windows, etc. the boards used will be of the waterproofing type again in fire risk areas there will be fire resistant boards with minimum duration of 60 minutes up to the mentioned 180 minutes in the project approved by ISU. Especially where they are provided Rigid partitions will be made of brick walls with

11.5 cm thick Porotherm or Brikston brick, linen depending on the project.

**The partition walls between** the apartments will be made of brick masonry with a minimum thickness of





30 cm of Porotherm or Brikston hollow brick.

In the areas with the terrace the floor above the floor is thermally insulated at the top with the regular layers, barriers vapors, waterproofing, thermal insulation and their protection resistant and guaranteed to weather, slopes provided by screeds and water intakes through special siphons.

**Rainwater leaks** from the terraces are collected and directed to the internal collecting columns, made of PP110 (polypropylene) and which accumulates water in the basement from where they are first retained in water retention basins rainwater placed outside the built premises of the buildings and then discharged by pumping back into the urban network.

**Stair access** to the floors, will be executed monolith simultaneously with the structure, made of reinforced concrete C 40/50 provided with a protective railing on ramps and on intermediate platforms.

Through the structural design, thresholds can also be provided in the residential buildings, but only between the apartment and the balconies with the role of accidental weather protection.

**Access stairs in the building and access ramps** for strollers and people with disabled will be designed from reinforced concrete connected with regular slopes to the entrance floors of the building, there where distances or space does not allow the design of access ramps from the outside people with disabilities in buildings will provided platforms - electrically operated hydraulic lift, with an area of 1-1.2 sqm with a lift of 3-4 steps for to reach the building entrance access quota.

**The balconies** provided for the apartments will be made of reinforced concrete floor board in the console and will be waterproofed under the floor provided to be made of special ceramic tiles for exterior and non-slip, laid with mortar on the plate. The side railings of the balconies can be made of reinforced concrete with a thickness of 15 cm and / or having a pediment balcony parapet made of safety glass made of two laminated sheets glued together, embedded in the side lower and provided with stiffening profile - current mine at the top of recessed stainless steel profile laterally in parapets.

The designed buildings will be shaped so that the apartments are arranged around the vertical core of the building with the elevators and the staircase, this nucleus will ensure access from the ground floor to the last habitable level and further to the level of the technical floor, where the thermal power plant with the installations related to the preparation of domestic hot water will be located and central heating heating agent for the entire building.

The access to the technical floor will be made only on stairs from the last habitable level.

No other spaces, functions or rooms are provided on the level of each floor, apart from the living ones.

The buildings, in their plan, will be dimensioned in such a way that the distances from the apartments to the central access roads - elevators and stairs - vertical to be as short as possible, in a straight line, without obstacles, and the balconies of living rooms to be designed with a depth of at least 1.5 m but not more than 2.0 m for comfort, use of space, enough glazing in the rooms and proper shading.

**Basements** will be provided with rooms calculated structurally so as to meet the requirements of the shelter-ALA, transformation stations if they cannot be located above ground, hydrophores and drinking water pumping stations / housekeeping / rain / fire. These technical rooms in the basements will be provided with floor and / or base siphons accidentally accumulated water collection.

The screeds will be executed in dry regime.





# **Finishes in Standard apartments:**

- Porcelain tile floor glued with adhesive on the screed
- On the contour of the rooms with tiled floor the plinth will be of the same material
- Laminate flooring mounted on soundproofing foil
- The duropolymer baseboard will be mounted on the contour of the rooms in the area with parquet
- The floors are connected to the door sills or in the demarcation area, with passage and masking profiles. Non-slip exterior tile flooring in balconies, contour plinth of the same material
- All rooms are plastered and finished.
- Paintings: white pearl color, with washable interior paints on the walls and ceilings in the living room, bedroom / bedrooms, bathroom, kitchen, vestibule and bathroom where appropriate.
- The access door is secured, with a frame made of solid steel profiles, minimum safety class 2, Pinum type. Sheet of the door is made of steel profile frame with bars and internal stiffeners made of non-deformable steel profiles, multipoint safety and locking systems.
- PVC windows and doors, offering a suitable combination of thermal insulation and verified state-of-the-art technology. In all the exterior carpentry apartments have a generous height and opening, in order to ensure penetration natural light.
- For the same reasons mentioned above, as well as due to the provision of underfloor heating and disposal conventional radiators, the parapet of the exterior carpentry, of the windows could be lowered, but a fixed glass eyes at the bottom of the windows so as to ensure security that is, a parapet of 90 cm consisting of solid masonry and fixed glass window.
- Interior doors are doors on the cellular structure with CPL, ALB foil finish with prefabricated frames and sills made of MDF, the same tone as the door leaf, ultra-resistant material to washing and shocks, accessories and sea closures resistance.

## **Apartment facilities:**

- Wall mounted toilet bowl, suspended and washbasin, white porcelain ceramic material.
- The water tank for the toilet is of the buried type delivered with the complete structure and equipment White acrylic bathtub, shower cabin with 6 mm safety glass and Easy Clean treatment with acrylic bathtub
- All bathrooms are also equipped with a large mirror above the sink
- All bathrooms and toilets are ventilated through vertical drains with absorption channels provided at the top-the upper terraces of buildings with absorption fans calculated at high powers of absorption for the entire column of apartments.
- Faucets for washbasin, bathtub are single lever type, chrome, with low noise level and system low consumption of chrome water supplied for all types of bathrooms and toilets.









# **Interior installations apartments**

## **Electric:**

The electrical installation is provided to be single-phase (220 V), with fuses that allow a calculated consumption and enough for each apartment, with fuse box for each circuit, on living rooms, with fuses ultra-sensitive to short-circuit in bathrooms.

Separate circuits are provided in the safety panel for large consumers - refrigerators, washing machines washing and air conditioning equipment, electric hob. It should be mentioned that in the kitchens only the electric hob and oven are provided, inside the apartments there is none gas pipe.

The electrical circuit of the electric hob is doubled by a circuit provided for the hood, the hotels are provided to be connected for smoke evacuation to a vertical vein with double channels, the vein located in the nearest corner of the to the position of the hood, the coupling will be made through the approved piping and at the upper part of the ventilation - absorption, ie on the terrace of the building a high power absorption fan will be provided.

The wall where the kitchen equipment is designed - refrigerator, sink, cooking machine, is tiled with hard plasterboard on metal frame so that this equipment can be arranged or moved after At the request of the tenant, the builder will provide the necessary connections, water - sewerage, sockets. Where space allowed, kitchen areas were designed open to the living room but with the possibility closing with light walls later and where the closed kitchens were designed the partition wall from the living room can be removed by the tenant if desired.

The electrical installation is made of copper co-conductors in the tube, buried in the plaster. A general earthing installation has been provided. The electrical appliances (sockets, switches) are made of hard white PVC. The sockets in the rooms were provided at the positions considered optimal according to a furniture study made by specialized companies, so there are grouped sockets for the kitchen worktop, for the workplace provided in office rooms or living rooms. Places for central ceiling lamps have been designed in living rooms and circuit living rooms. for wall sconces.

Above the entrance to the apartments is provided the electrical fuse panel and the connection panel separately fiber optic internet, from which branched cables wired through the walls with the data cable in each room at the sockets found and common with the circuits The electricity meter for the apartment is positioned in the FDCP on the ground floor in the technical room special where all the counters of the apartments in the building are grouped.

# Sanitary

Each building is connected to a dedicated hydrophore pumping group to ensure flow and pressure. corresponding in the apartments and passed through a drinking water filtration and treatment station. These rooms with hydrophores are located underground in special soundproofing chambers, electricity generators provided for each phase of the assembly will support the pumping groups in case of failure in the power supply network urban. The hot and cold water pipes coming from the floor distributor in the apartments are mounted buried in dig and go on the contour of the rooms, anyway there will be no holes in the floor. The internal sewer pipes and columns are made of PP with rubber plug and gaskets. The check valves are with the ball. The connection for the washing machine (cold water and drainage) is apparently left near the place provided project through the studied furniture plan, similar connections are also provided for washing machines vessels suggested as location by the architectural plan The pipes of the columns are positioned in the niche of installations made of plasterboard.

## **Ventilation:**

All bathroom and kitchen rooms have ventilation ducts - vitiated air absorption, antennas made of structure of steel profiles and plated with gypsum boards, inner pipes made of sheet metal including the connections between the channels and the ventilation grilles.





## Intercom:

The apartments are equipped with video intercom.

#### **COMMON SPACES**

The floors in the common areas are made of granite. lifts: The building is equipped with Schindler elevator or similar for 8 people. The elevators are of the latest technological generation with Class A consumer economizers, speed management system, SMS alert system at the supplier and the company maintenance, movement control automation correlated with fire or hazard detection control panel, special finishes and digital displays.

**Gardens:** The apartments on the ground floor of the buildings can benefit from a garden owned. The fence is made of a fence with a base / insulated concrete foundations and at the top wood softwoods - decorative profiles that ensure transparency. In the garden there is a layer of vegetal soil of 10 - 40 cm; grass will be planted.

The vegetal layer is continuous in the extension of the vegetal layer green spaces of the ensemble so that the drainage of the rainwater will be done from the facade of the building, in the slight slope of the continuous vegetal layer towards the drain collection points - ditches embedded at the sidewalks and then discharged into the sewerage network of the whole.

## **UTILITIES:**

The utilities will be provided as follows:

- A. Road and mooring in final solution (the portion of the road that ensures the connection with public roads)
- B. 220V power supply with single-phase installed power estimated cover for apartments.
- C. Internal domestic sewerage connected to the sewerage network of the assembly.
- D. Water supply from the assembly network.
- E. Gas supply



