

# Building Information

## **ENERGY EFFICIENCY AND INTERIOR CLIMATE OF BUILDINGS**

Cost of electricity is an everyday fixed cost which unfortunately follows us everywhere. In the light of continuously increasing cost of electricity and network fees, the energy efficiency of buildings is crucial, as it is directly related to the family budget and has an impact on it. Regarding energy efficiency of buildings, the legislator has issued a regulation establishing minimum requirements for buildings to which modern buildings must comply with. This includes requirements for low energy buildings as well as for nearly zero-energy buildings. In the case of an energy efficient building low heating costs have been achieved thanks to insulated external shell (walls, windows, roof, etc. of the building) and good internal climate thanks to mechanical ventilation with heat recovery.

Natura Park apartment houses belong to the energy class B, thus falling in the category of low energy buildings.

### **Shell of the building**

- The load-bearing frame of the apartment building is made of pre-fabricated reinforced concrete load-bearing external walls 440 mm (insulation 200 mm).
- Floors are made of pre-fabricated hollow panels (hollow panel, film, sound insulation from 50 mm mineral wool, 7 cm levelling concrete, underlay, parquet).
- Walls between the apartments are predominantly from reinforced concrete panels (200 mm).
- Partition walls within the apartment are metal frame partition walls (plasterboard 12.5 mm, wool 66 mm and plasterboard 12.5.)

### **Roof**

The roof of the apartment building is a flat roof (hollow panel, SBS vapour barrier, expanded polystyrol min 400 mm, 30 mm wool sheet, 2xSBS covering).

### **Stairs**

Landings and flights are made of pre-fabricated reinforced concrete elements. The flights are finished with a concrete layer and landings with clinker tiles.

### **Openings**

- Windows of the apartments are plastic triple-glazed units.
- The external doors of the apartments are fire-resistant wooden doors with oak veneer.

# Utility Systems

## **Heating**

- Heat supply is based on gas heating. The apartments are provided with water underfloor heating, in bathrooms and toilets there is electric underfloor heating.
- There are no heat meters in the apartments.

## **Ventilation**

- For ventilation each apartment is provided with an individual intake and extraction system with heat recovery. Ventilation equipment is located in the hall or above the washing machine in the wash room.
- There is an extraction pipe in the kitchen for installing a cooker hood.

There is no air conditioning in the apartments.

## **Water, sewerage system**

- Hot water is supplied from the central boiler house of the building.
- Each apartment is provided with remote cold and hot water meters.
- Connections for the wash machine are executed according to the sanitary room plan.

## **Electrical installation**

- Sanitary rooms have suspended ceilings fitted with lighting fixtures.
- Rooms and the hall are provided with cabling for lighting fixtures. Lighting fixtures will be installed by the owner of the apartment.
- Switches, sockets, junction boxes and installation materials according to the design.
- Electricity meters are installed in every staircase either in the electrical boards or electrical board room.
- Every room is provided with TV and Internet sockets.
- Apartments are provided with doorphones for external doors and cabling for a security alarm.