

Faedra Park – Lakihegy Technical details

# TECHNICAL DETAILS FAEDRA PARK industrial hall and social/office block

SZIGETSZENTMIKLÓS, LAKIHEGY







# **TECHNICAL DETAILS**

LAKIHEGY Parcel Nr.: 13251/7 industrial hall and social/office block

# LOCATION AND VICINITY

The plots can be accessed from the internal road running parallel with the main road. The fact that motorway M0 is in the vicinity and there is direct access to the main road provide great opportunities for industrial and logistic development. There is a green belt separating the plots from the main road and adjacent buildings.

# ARCHITECTURE

There are two entries for vehicles to drive in and out at the street front of the selected plot, and the buildings can be accessed from the parking lots for passenger and commercial vehicles located along the street front. It is possible to divide the building inside and each block can have a two-storied office block. To manage truck traffic two level docking gates and one plus one optional docking gates are planned for each block.

#### Building floor plan:

Inside the ground level of the building there will be a hall that can be divided into three parts, to which three two-storied office blocks will be connected from the street. The hall will be a high-frame warehouse with interior height of 10.0 m. The standard office block will contain a hall, a waiting room for truck drivers, toilets, an office room, rest areas/rooms, lockers, bathrooms on the ground floor. There will be internal stairs in each block leading to the offices, toilets, kitchenette, and a server room upstairs. Each block will have its own parking lot for passenger cars and trucks.

**Facades:** the building appearance will be modern and with minimalist design, and will look like the new office buildings and halls erected in the vicinity. Facades walls are sandwich structured composites with colours in harmony with the building mass. A footing is made of prefab reinforced concrete sandwich structure.

#### Structure: prefab reinforced concrete

Hall floor: steel fibre industrial floor, load-bearing capacity: 5 t / m2

Floors: Prefab reinforced concrete floor, 5t / m2 load capacity

**External walls:** sandwich structured composite, 10 cm thick

### Partition walls in the hall: plasterboard

Partition walls: plasterboard, 10 cm thick

**Roof:** trapezoid-profile steel sheet, with insulation, with fibres min. 15 cm, waterproofing: PVC

Stairs: concrete stairs, covered with gres tiles

Facade windows: triple-glazed heat insulating dark-grey plastic windows,

Entrance doors: Aluminium structure, with safety lock

**Floor covers:** gres tiles in toilets and kitchen, laminated floor in offices **Wall facings:** plastered wall painted with dispersion paint; wall tiles in in toilets and kitchen.



Railing: powder-coated steel structure Planned number of parking places: 53

#### **BUILDING SANITARY ENGINEERING**

#### Social areas:

Office/kitchenette/resting area/room/reception

**Heating/cooling:** heat-pump multisplit solution, outdoor units are placed on the roof and indoor units are in suspended ceiling blocks. Regulation: wall-mounted thermostat/control panel in each room

**Ventilation:** natural ventilation by opening the windows (forced ventilation in the kitchenette; air resupply through air gaps installed in window frame/ through a grid in the door to the hall

**Domestic hot water:** electric water boiler installed under the sink in the kitchenette.

#### Lockers/bathrooms/toilets/corridors:

Heating: electric radiators, considering the required IP protection class

**Ventilation:** collective exhaust ducts are installed; air resupply through air gaps installed in window frame/ through a grid in the door to the hall

**Domestic hot water:** or by horizontal electric boiler installed in the suspended ceiling in lockers, and electric water boiler installed under the sink in the toilets.

#### Warehousing/industrial areas:

**Heating:** Temperature control in warehouses is done by two-step gas-firing air heating fans or infrared heating panels. Each unit will have its own thermostat installed in the zone of stay for control and regulation.

**Ventilation:** natural via roof skylights/smoke domes and RWA gates with programmed opening.

#### Roof:

**Solar panel:** solar panel with a total power of cc. 50kW will be installed on the roof, which will satisfy the relevant regulations on renewable energetic solutions and ensures lower overhead costs.

#### **ELECTRIC INSTALLATIONS**

#### Lighting and power cables, fittings:

Illumination levels:

-warehouses, corridors, staircases: 100 lux,

-stairs: 150 lux,

-rest areas/rooms: 200 lux,

-offices: 500 lux

Suspended LED lights, ceiling-mounted LED lights and other LED-lights installed inside suspended ceiling, LED panel lights indoor, and a general outdoor lighting system with weatherproof LED lights are planned. LED light colour temperature: warm white (2700-3000 K°).

General indoor lights will be switched by means of local switches in the rooms. Lights in bathrooms/toilets and outdoor areas will be switched on and off by means of presence and motion sensors.



#### **Protection against electric shock:**

Protection against electric shock method: basic protection – protection against direct contact: insulate live parts, protective lids and covers.

Protection against Indirect contact: automatic cut off of power supply.

Network earthing system: TN-S system (protective earthing).

#### Lightning protection:

Lighting protection will be designed on the basis of standard risk assessment to be performed during the definite project planning.

There will be a lighting protection system installed, including lighting rods, wires, and earthing grid to be made of reinforced concrete.

#### SPRINKLER SYSTEM

There will be an ESFR sprinkler system installed in the entire building. Sprinkler head spraying patters will be determined in consideration of the architectural, building engineering, and electric installations. Suspended ceilings with a height of 80 cm will be installed in the offices, and therefore sprinkler system will also be installed above the suspended ceiling. The pumps of the sprinkler system the flow switches (flow sensors) installed in the main pipeline of the internal sprinkler system in the sanitary room give an alarm signal when water begins to flow. Only the sprinkler heads located above or near the fire start to sprinkle. The designed sprinkled area covers the entire building, except for the electric room, boiler room, and rooms with uninterrupted power supply.

Note: The developer reserves the right to make changes to the technical content, which changes can only be of equivalent quality to the technical content described above and must comply with legal requirements.