



MARINA DORČOL

Catalogue of  
technical standards









**Marina Dorćol combines state-of-the-art technical advancements in housing, globally awarded architecture with exceptional comfort in living.**

This document outlines a preliminary catalogue of technical standards for apartments and communal areas. We have used our know-how and experience from our previous projects, especially the DRN office building and the Komunardu residential building in Prague. While developing Marina Dorćol, we opted for technical details that not only have unique aesthetic value, but also allow for ultimate functionality and offer uncompromising living comfort.

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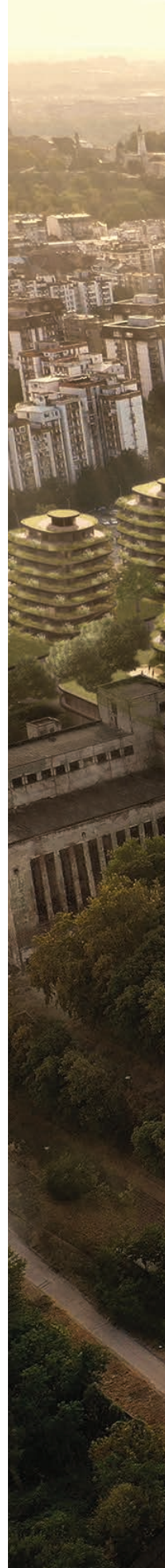
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01.

## The exterior

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The structure  
The roof  
Watering  
Gardens  
The facade  
Exterior joinery





## The structure

The structure of all towers will consist of a combination of pillars and concrete cores, made according to all calculations and the latest Eurocodes. The input used included in-depth, extensive fieldwork studies, with more than forty exploration wells, and over 20 CPT experiments.





# The roof

All roofs have green surfaces as the final layer, under which are all the required state-of-the-art waterproofing systems.





## Watering

Planters up to 60 cm wide will be placed along the terrace edges with a drip irrigation system. The system will ensure uninterrupted watering of green areas, without any additional involvement of the tenants. The system will be operated by the housekeeping department. Dedicated wells will be used for watering, which will also significantly reduce the costs for the tenants.





# Gardens

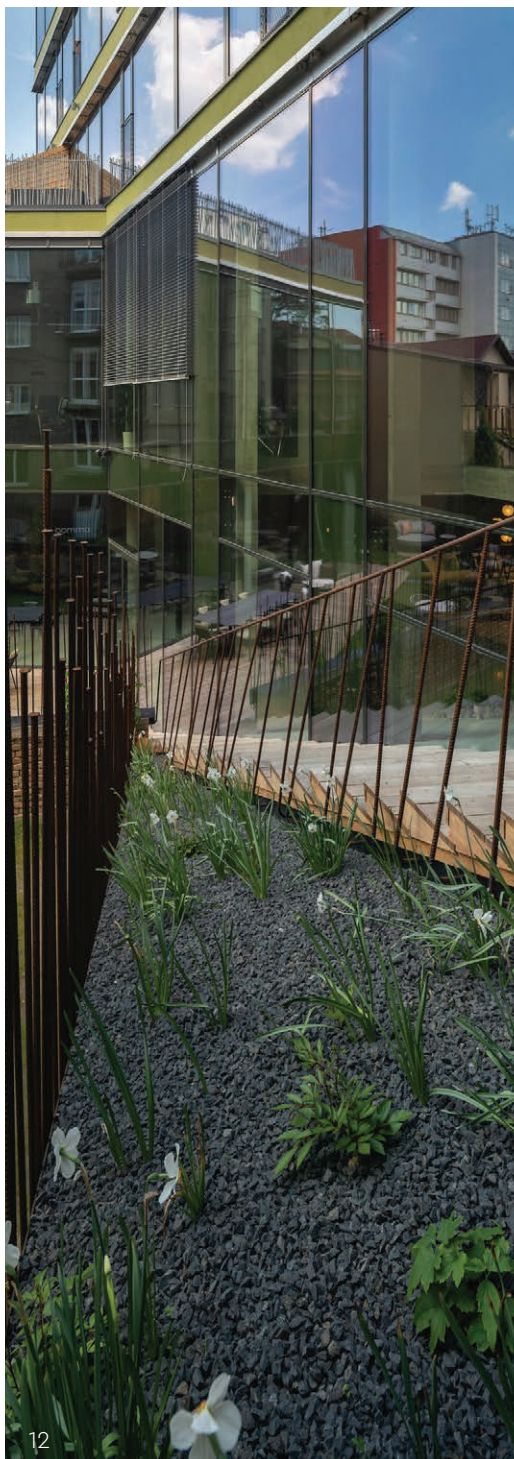
More than one hundred apartments at Marina Dorćol will have green gardens. The housekeeping will include a drip irrigation system.





## The facade

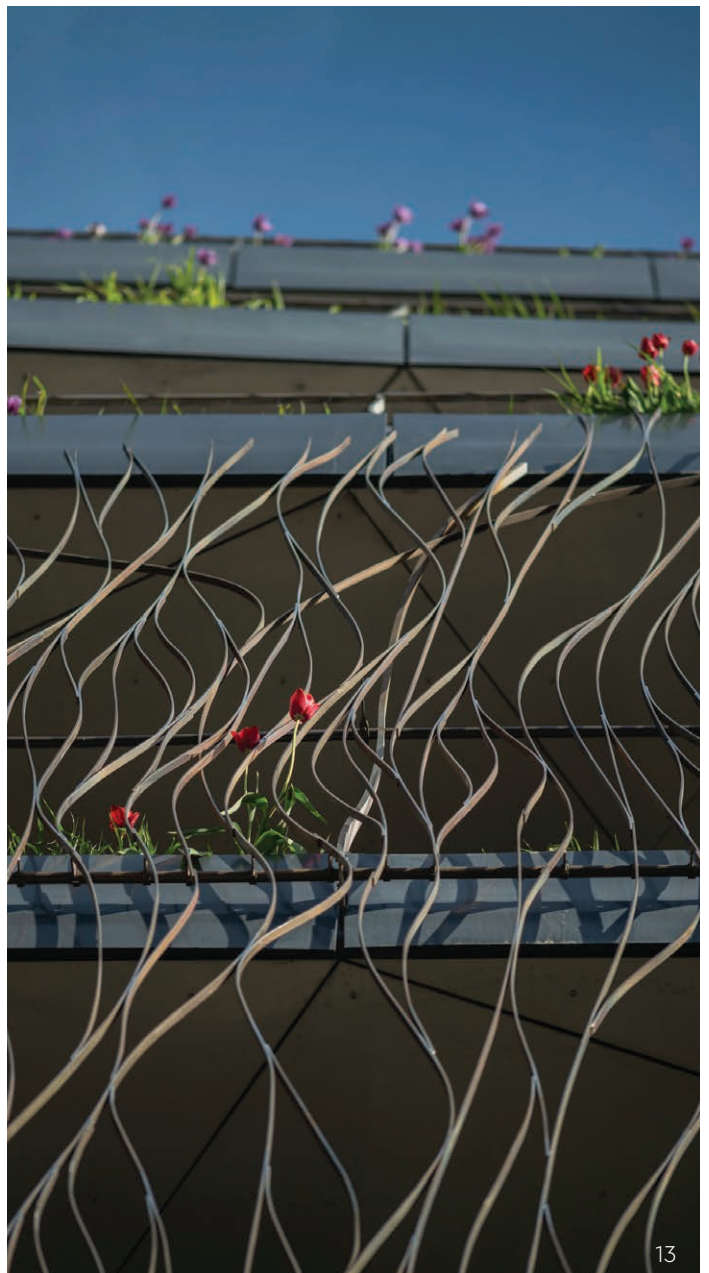
The entire Marina Dorćol complex will use glass facades, extending from the floor to the ceiling and featuring terraces 0.5–3 meters wide along the entire perimeter.





## Exterior joinery

All facade glass, windows, and doors on terraces will be made in partnership with the world's leading facade manufacturers such as Schuco and Reynaers. Mosquito nets will be installed on the windows as part of facade elements. All windows will have external blinds that will be controlled via switches in the living rooms and bedrooms.











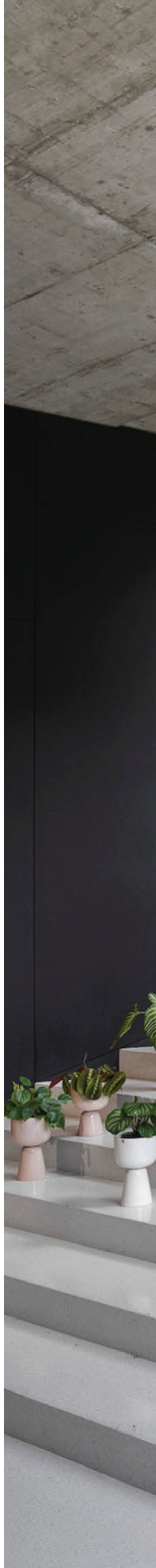


# 02.

## The interior

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- Entrance hall and staircase
- Elevators
- Apartment front doors
- Interior joinery
- The walls
- The floors
- The ceiling
- Finishes in bathrooms and toilets
- Sanitary facilities
- Storage for appliances









## Entrance hall and staircase

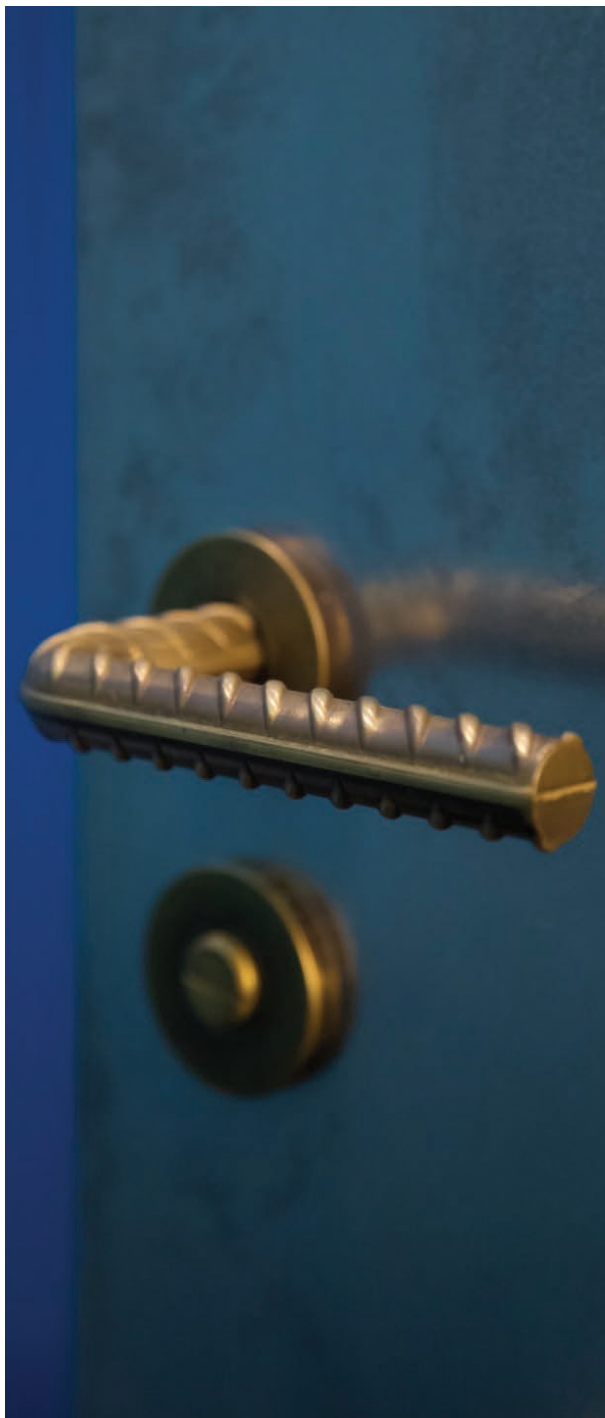
The entrance hall will be finished in a combination of natural concrete and stone, as per the design of the project creator Stanislav Fiala.





# Elevators

All elevators will be fast, with a load capacity of up to 1000 kg, made by the world's leading manufacturers, such as Schindler, Kona, or Otis. The door frames will be galvanized, without additional treatment.



## Apartment front doors

All front doors in the apartments will meet the 30-minute fire resistance requirement. The doors will be classified as security Class 3 and will exceed standard height. All door handles are Rocksor, made by M&T and designed by Stanislav Fiala.

## Interior joinery

All doors in the rooms and bathrooms are made of MDF. The doors are white, lacquered and have hidden hinges. All door handles are Rocksor, made by M&T and designed by Stanislav Fiala.



## The walls

The walls between the apartments and the hallway will be completely made of concrete, with the addition of materials that allow for adequate acoustics. The walls between apartments will be made of concrete or special blocks that meet the leading standards on the global sound barriers market. The installation of all necessary elements will be conducted on the concrete surface in special materials so as not to jeopardize the acoustics towards the neighboring rooms. In addition, no installations will be stretching from one residential unit to another. This will further prevent the passage of sound. Use of underfloor heating systems will provide further reduction of sound transmission.







## The floors

All floors in the apartments — in all rooms except the bathroom and toilet — will be made of rustic brushed oak, oiled with eco-friendly oils. Tenants will have a choice of several colors of flooring of the same quality.



## The ceiling

The ceiling height at Marina Dorćol will be above-standard, without suspended plaster ceilings in living room and bedrooms. There will be only suspended ceilings in hallways, bathrooms, and toilets, for the purpose of mechanical installations of cooling and heat recovery ventilation.



## Finishes in bathrooms and toilets

The bathroom finish is Italian gray marble in a design that echoes stability and firmness through its accentuated gray veins. The variations of fossil details and stone shades lend great depth and character.



## Sanitary facilities

The bathrooms and toilets will be finished and fully furnished, as designed by the architects from Fiala + Nemeč and Kuzmanović + Fiala. The installed toilets will include an assortment from renowned manufacturers. In addition to standard sanitary facilities, all larger bathrooms will have bidets, while smaller bathrooms will have showers next to the toilets. Special attention was paid to towel dryers, specially designed by Stanislav Fiala.







## Storage for appliances

In order not to disturb the interior of bathrooms and toilets, all residential units will feature separate pantries or niches for washing machines and tumble dryers, each having its own drain. These rooms will also have separate fans, which will be switched on as needed to reduce the moisture levels.











# 03.

## Installations

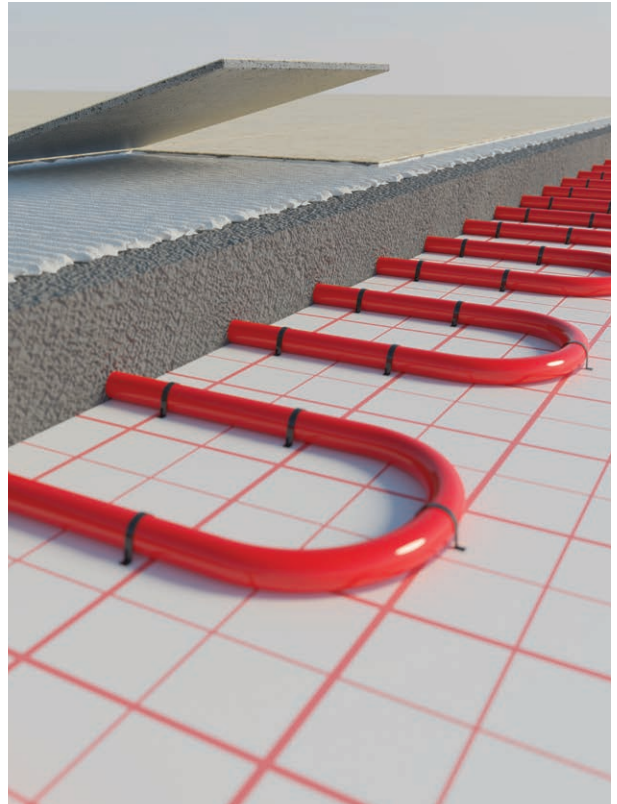
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- Heating system
- Cooling system
- Heat recovery ventilation (HRV) system
- Ventilation
- Kitchen ventilation
- Power installations
- Internet and TV
- Intercom and access control
- Cameras
- Fire alarm system
- Water supply and sewerage



## Heating systems

All apartments will feature underfloor heating systems utilizing geothermal energy sources. High-efficiency heat pumps will be used as the system's main driving mechanism. All of the above will ensure significantly lower heating bills for the tenants. Heating will be controlled via a system that will allow separate control in all rooms. This type of renewable energy supply is one of the most environmentally sustainable heating methods currently available on the market. All the energy consumed will be monitored.



## Cooling system

The cooling system will use locally centralized fan coil units hidden in suspended ceilings in the hallways. They will feed cool air into the apartments towards the living rooms and bedrooms through the grating built into the walls. As with heating, the system will be powered by geothermal energy sources. It will be operated through a separate system, allowing separate temperature control in all rooms. The energy consumption of each residential unit will also be monitored.



# Heat recovery ventilation (HRV) system

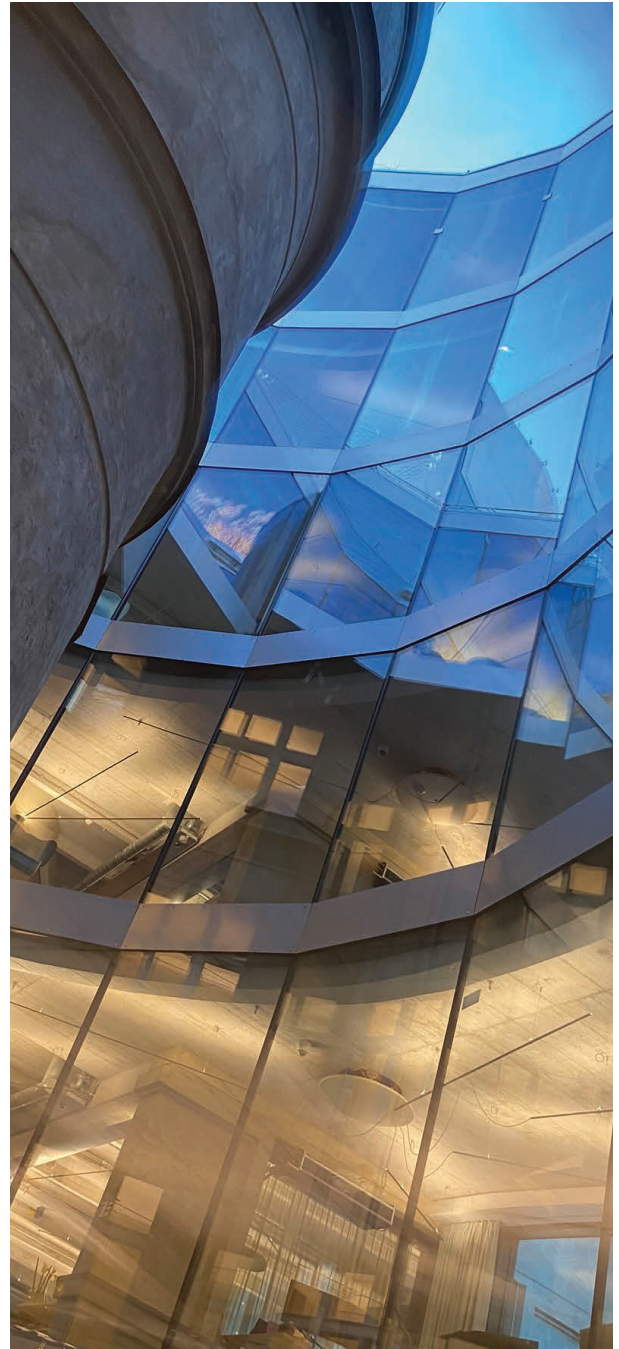
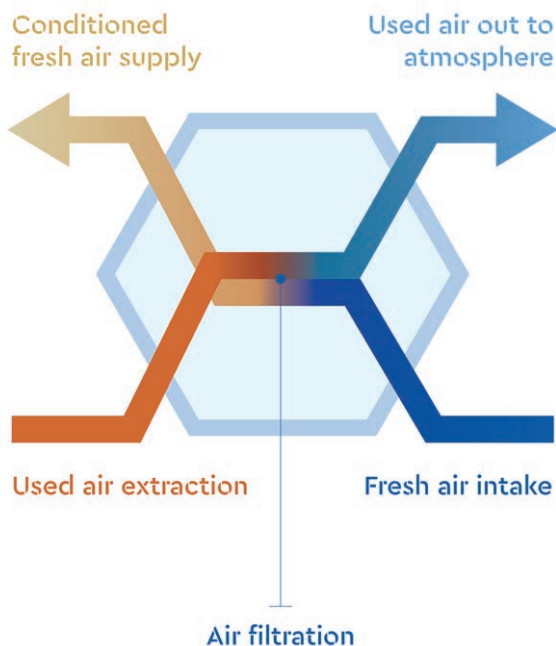
An apartment recuperation unit, often referred to as a "heat recovery ventilation (HRV)" system, is designed to improve indoor air quality while conserving energy.

Here's a brief explanation of its key principles:

- "Heat Recovery": The unit transfers heat from outgoing stale air to incoming fresh air, minimizing heat loss in the winter and cooling loss in the summer. This reduces the energy needed for heating or cooling.
- "Air Exchange": It ensures a constant flow of fresh air into the apartment while expelling old, polluted air.
- "Filtration": The incoming air is typically filtered to remove pollutants, improving indoor air quality.

Overall, it balances air exchange, energy efficiency, and comfort in an apartment.

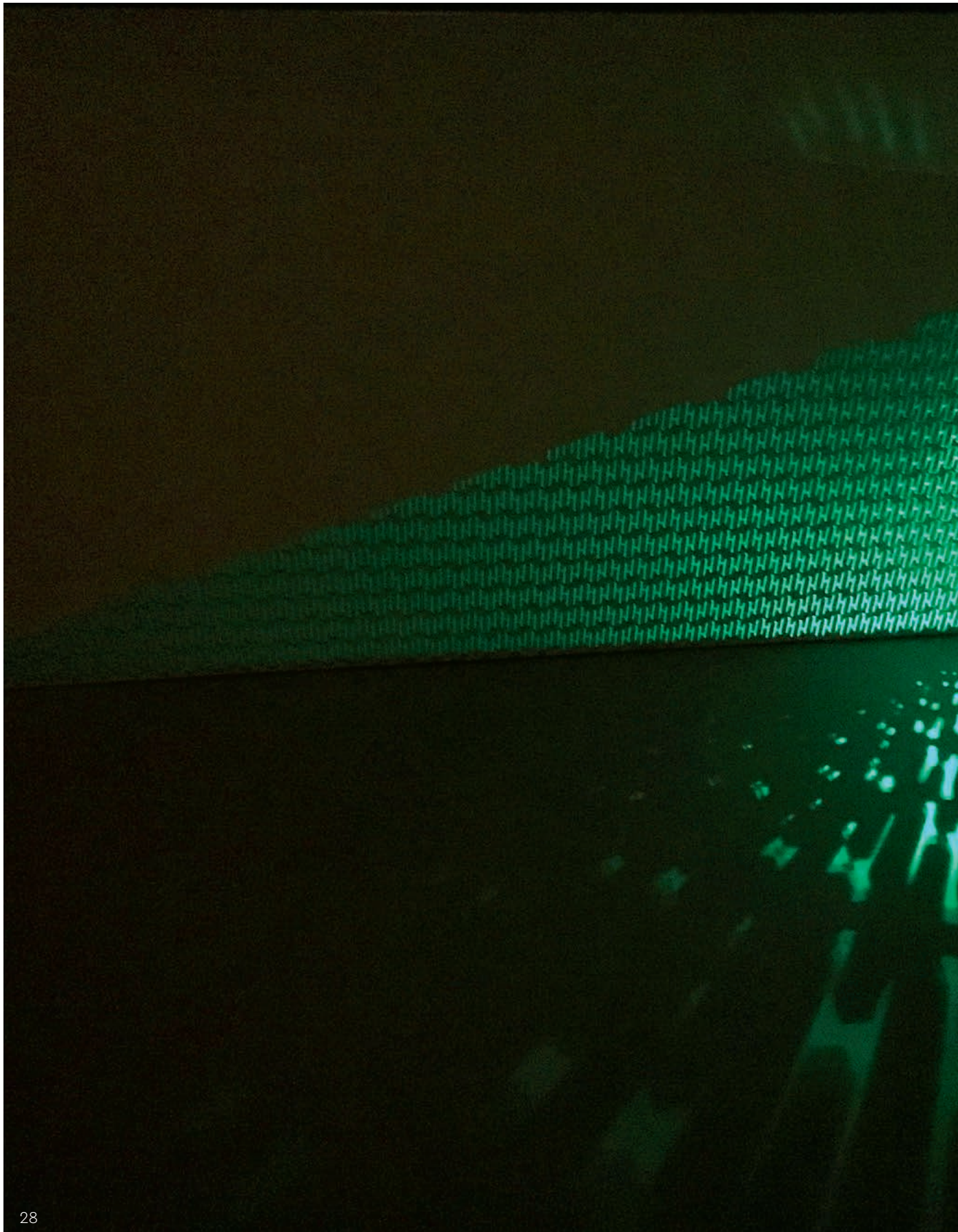
## HEAT RECOVERY CELL



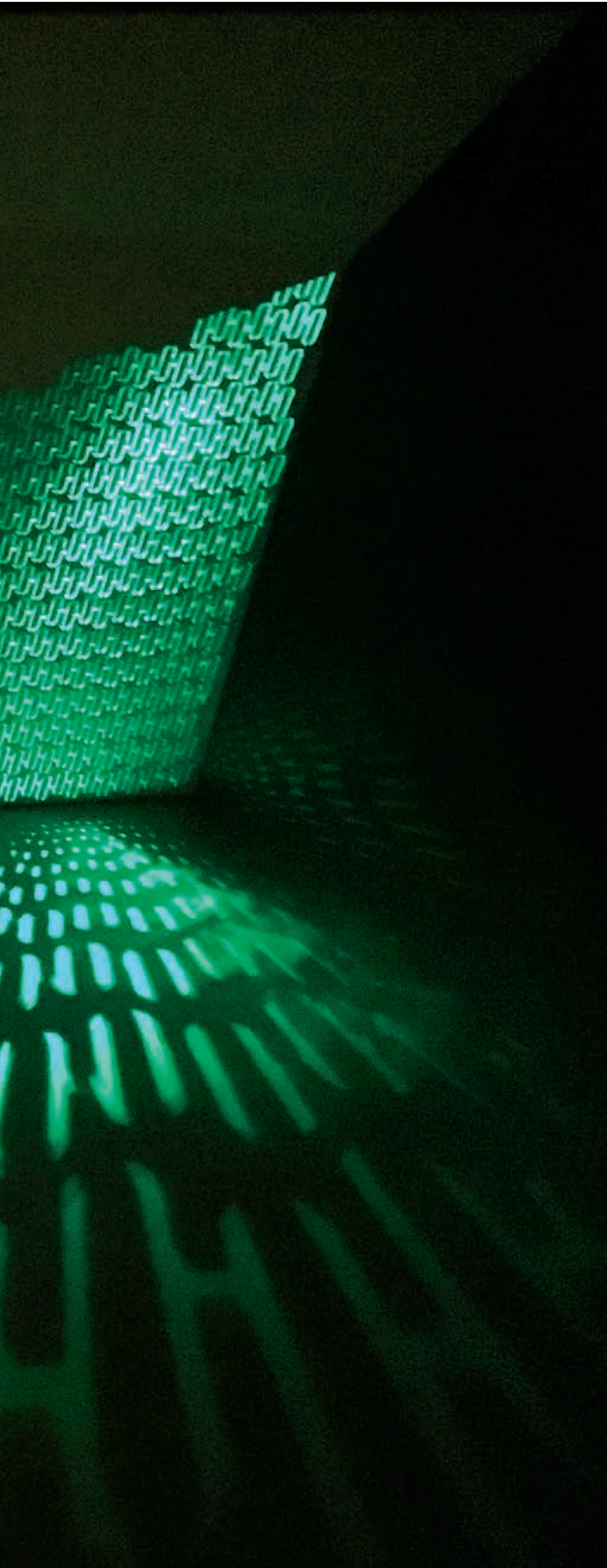
## Ventilation

The apartment ventilation will be mostly natural. Furthermore, the ventilation will be additionally improved through non-stop air circulation using fans that will operate in a slow, silent mode. The tenants will be able to adjust the speed of the ventilation fans.









## Kitchen ventilation

Kitchen ventilation will feature dedicated ducts with mounted extractor hoods. As with other installations, special attention will be paid to maximum noise reduction. The installation of several vertical ducts additionally prevents the passage of sound and odors from neighboring apartments. In addition, non-return valves will be installed to additionally prevent the return of unpleasant smells.



## Power installations

In addition to the standard electrical installations, the kitchens will offer an ample number of sockets. Also, USB or USB C type sockets will be possible to install based on clients change in all living rooms and bedrooms. The electrical accessories installed in the apartments will be made by one of the world's leading manufacturers, such as Jung.

## Internet and TV

The living rooms and bedrooms will offer the option to connect several television and Internet providers by using RJ45 and TV sockets.



## Intercom and access control

An intercom system from a renowned intercom manufacturer will be installed in every apartment. The apartment owners will receive a system chip key that will allow easy access at the entrance ramps, garages, and entrances to the building.



## Cameras

Building security will include an optimal number of CCTV cameras, which will ensure increased safety for the tenants.







## Fire alarm system

Fire alarm systems and warning systems for dangerous concentrations of carbon monoxide will be installed in the garages and above-ground premises.



## Water supply and sewerage

Each apartment will have its own water meter. Water consumption will be measured and billed accordingly. The central water supply system will additionally have a water softening system, which will supply the tenants with sanitary water free of limescale and additionally protect household appliances from failure. Instead of using conventional boilers, sanitary hot water will be prepared through a dedicated central system, which will also use geothermal energy sources to significantly reduce the costs for the tenants. The tenants will have remote access to information about their consumption and bills through a modern BMS system.











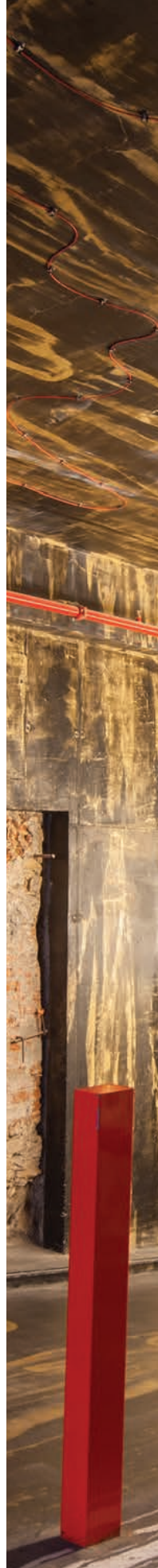


# 04.

## Other areas

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- Garages
- Storage rooms
- Front desk
- Communal areas
- Outdoor areas
- Property management









## Garages

Garages will also feature parking spaces of above-standard dimensions. The car ramp system will allow only the tenants to enter the garages. The tenants will also have the option to install chargers for electric cars. The tenants' guests will be offered a number of hourly and daily rented parking spaces, including those with fast electric chargers. Signal amplifiers for mobile phones will be installed in the garages.





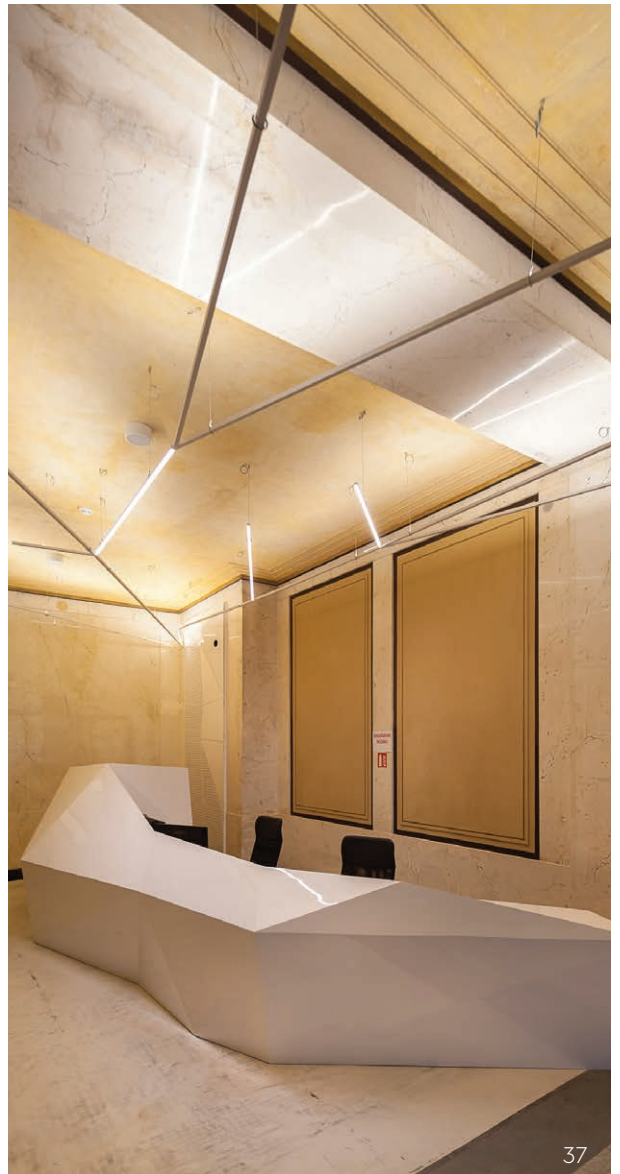


## Storage rooms

Every apartment owner will have a storage-room of 2-6 m<sup>2</sup>.

## Front desk

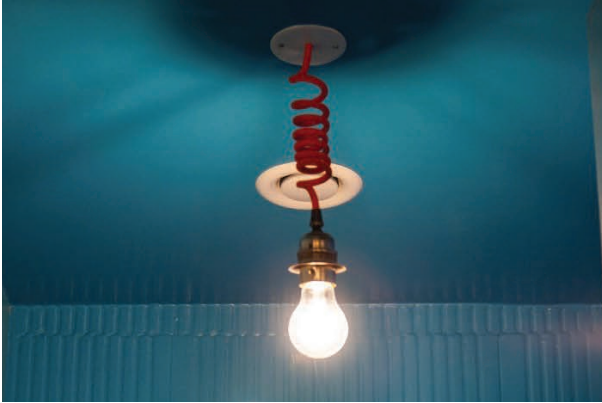
Every apartment block will have their own reception, staffed with security personnel according to the requirements of the housing community and the housekeeping team.





## Communal areas

The front desks will have separate communal areas that will be used to accommodate baby strollers and bicycles. The rooms will be close to the entrances and elevators.



## Outdoor areas

Marina Dorćol will feature over 33.000 m<sup>2</sup> of greenery. The tenants will have access to parks, a promenade by the Marina pool, as well as a range of possibilities for bicycle parking.



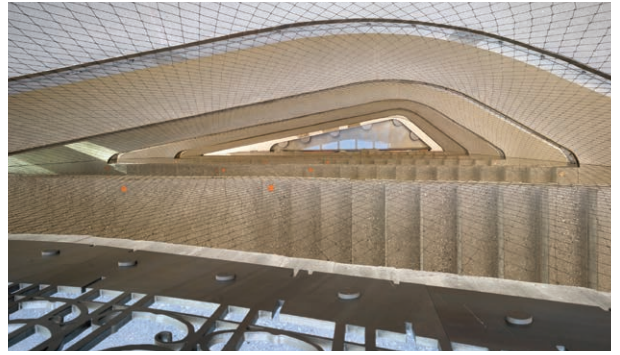






## Property management

After the project is complete, SEBRE will remain present at Marina Dorćol as its property management. The company will manage external security services, technical maintenance, cleaning, and landscaping, while its property manager will have a 24/7 office at the complex.











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