

STAGE OF COMPLETION OF GORA DEVELOPMENT

I. Structure

1	Type	Solid beamless structure
2	Horizontal elements	Slabs and beams
3	Vertical elements	Columns and seismic dampers
4	Exterior walls	Wienerberger-Porotherm 25 cm bricks
5	Interior partition walls	The masonry partitioning the separate units of the building and intended for some particular places according to the project design shall be made with 25 cm thick Wienerberger bricks, plus additional cladding made of 2xGKB sound insulating plaster slabs. The walls partitioning the interior of a unit shall be made with 12 cm thick Wienerberger bricks.

II. Façade

1	Type	Breathable façade cladding of natural stone and genuine wood panels with class B fire resistance, 30 mm thick.
2	Insulation material	Faced mineral wool, 14 cm thick, class A2 fire resistance.

III. Roof

1	Type	Flat roof
2	System	Bituminous primer, SBS self-adhesive moisture insulation, 16 cm thick mineral wool, polyethylene foil, reinforced concrete for the incline with 50 mm thickness at minimum, bitumen primer, SBS bitumen waterproof insulation 2 x 4 mm.

IV. Vertical planning

1	Description	Drives, walks, landscape, playgrounds, automatic irrigation systems.
2	Maintenance of the lawn and common building areas	Additional fees will be charged on a monthly basis for the maintenance of courtyard and underground parking lots in accordance with a maintenance and management agreement.
3	Lighting	According to the project design
4	Rainwater tank	<p>A protective HDPE drainage membrane will be installed along the tank walls, including on the surface on ground level. The bottom will not have such insulation.</p> <p>Heat insulation XPS 5 cm will be installed on the tank walls, including on the surface on ground level. The bottom will not have such insulation.</p> <p>The following insulation will be installed inside the tank: a PVC waterproof insulating membrane will be installed on the tank floor and walls; geotextile will be installed on the tank floor and walls.</p> <p>The lid of the rainwater tank will be heat insulated.</p>

V. Stage of completion of the units in the development – basements

1	Floor	The floor of basements and service facilities will be polished concrete. The concrete flooring will be impregnated to prevent oil permeation. The flooring of toilets and bathrooms in basements will be lined with glazed stoneware tiles. Traffic markings will be put in the driving areas and parking spaces.
2	Ceiling	The ceiling in basements will have a visible concrete surface, and the ceilings of rooms on the ground floor will be insulated with 14 cm faced mineral wool and class A2 fire resistance. The design includes the torch applied installation of 2 layers of bituminous waterproof

		insulation under and around all foundations. This waterproof insulation will be protected by 5 cm XPS up to the adjacent ground level.
3	Walls	Visible concrete surface
4	Garage door	Automatic garage door at the driveway entrances. Electric-driven garage doors for individual garage cells.
5	Electric wiring system	All garage cells will have individual distribution panels that will be powered and metered by the electric main panel. The power supply of all consuming devices in the underground garages will be provided by the relevant distribution panel. It will feed the operative and the evacuation route lighting and the plugs in the common areas.
6	Water supply and sewerage system	The drainage of basement areas will be ensured by the installation of manholes equipped with submersible pumps. There will be mud and grease traps for the water coming from the linear drain pipes in the basement area.
7	Heating, Ventilating and Air-conditioning-ventilation system	Each residential building will have its own suction ventilation system ensuring triple air loops. The exhaust gases will be sucked in by centrifugal fans installed in a sound insulated box which will be mounted in the basement. The exhaust gases will be discharged through screens situated above the roof of the buildings.
8	Remarks	<i>LPG or methane fuelled vehicles will not be allowed to enter the underground garages.</i>

VI. Common parts

1	Paving	A combination of natural stone and glazed stoneware tiles in the staircases. The toilets and bathrooms as well as the passageways will be lined with glazed stoneware tiles.
2	Ceilings	Latex coated
3	Walls	A combination of decorative plastering, wooden panelling and latex paint.

4	Railings	Railings will be topped with handrails according to the project design.
5	Elevators	Electric-driven passenger elevators made by Schindler. The elevators will be equipped with automatic devices for arrival to the nearest stop in case of power failure.
6	Electric wiring system	The power supply of all consuming devices in the common building areas in the entrances will be provided by the electric main panel. It will feed the operative and the evacuation route lighting in the staircases, in the passageways of the buildings floors, etc.
7	Low-voltage systems	<p>A building communication cabinet (BDOX.X) will be mounted in the entrance hall on the ground floor in the common facility room that will house the passive and active telecommunication equipment, the video monitoring equipment, the video-intercom system, etc. The chosen model of input low-voltage cabinet for the services provided by external operators is CD06.1 – it will be situated in the security building and will feed the low-voltage cabinets in the entrance halls of the G, O, R, A buildings in the development by means of optical fibre cables SMFO using the required number of fibres. There will be a permanent alternative way to ensure the operation of the video monitoring system. The cabinets will have sufficient room to house the equipment of any other systems if such will be needed in the future or any additional communication equipment. The buildings will have an IP camera-based real time video monitoring and recording system and recording device (NVR) with installed special purpose recording and record review software. Passive and active video monitoring equipment will be mounted in the security guard booth in building B06.</p> <p>The development will have an anti-burglary system. The anti-burglary system for the security building and the development perimeter will be installed ready-to-function, including central sensors and perimeter intrusion sensors connected to the required cabling.</p>

8	Water supply and sewerage system	<p>The supply of household water to the development will be provided through the existing street water supply piping Ø175 CT. The water supply piping in the building will be made using high density polyethylene piping.</p> <p>The discharge of household wastewater and rainwater will be ensured by two branch sewers in the building, one for the household wastewater and the other for the rainwater.</p>
9	Gas supply installation	<p>The gas supply installations will include 1 gas supply control and metering device (Gas Regulation Panel – GRP) GRP G, GRP O, GRP R and GRP A and a gas meter panel for individual consumers, including the connecting piping. The recesses will be detached from the floor landings by partition walls made of fireproof building materials with a 90-minute fire-resistance limit. Every recess will have one or more openings appropriately sized to ensure the service maintenance and repair of all GRPs inside it. The openings will have a lock and tightly closing doors made of fireproof material.</p>
10	Fire alarming	<p>The development will have 2 fire alarm stations installed, C2.1 and C3.1, with the required number of fire alarm loops. They will be mounted in the common facility room of the building. The stations will have a panel board distance mounted in the server room of the security building for remote monitoring and management.</p> <p>All rooms and areas will have smoke-optical detectors installed responding to early fire phase fumes which do not contain any source of radioactivity.</p> <p>A sound and light signalling installation (sirens) will be mounted inside the building and outside on the building façade to ensure reliable fire-alarming in case of fire.</p>
11	Lightning protection system	<p>A lightning protection system will be installed to avoid any direct or indirect lightning strikes of the buildings.</p> <p>The following elements in the development will be grounded – the bus bar PE of all main panels, communication cabinets and equipment, the cable trays,</p>

		the metal guiding rails of elevators, the current discharge lines of the lightning protection system and all other current conducting incoming and outgoing parts of the building (water and gas piping, etc.).
12	Supply to the buildings from external sources	Electric power, water, sewerage and gas.

VII. Apartment units

1	Joinery	The doors and windows will have aluminium joinery with a thermal break and profile colour RAL 7016.
2	Flooring	Smooth cement plaster finish.
3	Ceiling	Gypsum plastering and putty polishing. The bathrooms and toilets will be finished with moisture-resistant gypsum plaster boards.
4	Walls	Gypsum plastering and putty polishing with aluminium angle bars on all external corners. Bathrooms and toilets will have a whitewash-cement plaster finish.
5	Loggia, balconies, individual courtyards	The paving will be made of frost-resistant glazed stoneware tiles and the railing will be made of tempered glass. In the top floor apartments, the adjacent flat roof will be delivered with decking and railing mounted along the exterior line of the roof terrace. The individual courtyards adjacent to the ground floor apartments and two-level apartments will be delivered with partly laid decking and mounted pergola.
6	Entrance door	An armoured MDF door with a wood-imitation finish and mechanical and electronic control; 3D adjustable concealed hinges; an automatic threshold; an electromechanical handle with 7 locking points; a video surveillance system with an integrated touch display; mobile phone control; contactless card control.
7	Electric wiring system	The consuming devices in the apartments will be fed by the apartment distribution panel. These panels will be equipped with an input overload circuit breaker and output automatic circuit breakers. There will also be

		<p>safety switches (protection against residual currents) for the current loops of the plugs.</p> <p>The electric wiring in the apartments will be made according to a TN-S scheme. It will be made using CBT type cables laid in cable trays and above the suspended ceiling, and in the places where there are none – vertically via an open installation stapled in rigid fire-retardant pipes or via a hidden installation in fire-retardant corrugated pipes.</p>
8	Light current systems	<p>Each apartment will have a light current distribution box. This box will be included in the shared housing with the electric power distribution panel for better room optimization and a nicer appearance.</p> <p>The video-intercom system is designed with an IP-based system compatible with the access control system designed for the elevators. The system can also be controlled by smartphone or tablet through an Internet connection. The apartments will be delivered with cabling for alarm systems – sensors, keyboards and a station for each apartment.</p>
9	Water supply and sewerage system	<p>The water supply installation will be made of PN16 polyethylene pipes for cold water and PN20 for hot water. The floor-mounted pipework will be made of polyethylene pipes in insulating sleeves. Hot water in the residential buildings will be supplied by the gas-fired boilers.</p>
10	Heat Ventilation and Air-conditioning installation	<p>There will be an autonomous gas-fired boiler for each apartment designed with single-pipe gas condensing boilers (including an inbuilt expansion tank and circulation pump). The heaters will be vertical radiators for the bathrooms and underfloor heating in the rooms.</p> <p>The pipework connecting the control panels and the gas-fired boiler will be made of copper pipes. The pipes connecting the vertical radiators and the underfloor heating to the control panels will be made of polyethylene with aluminium padding inserted in the floor covering. Each distribution control panel for</p>

		<p>underfloor heating of apartments will be completed with a box, a distribution control collector with flow adjusting valves and a control collector with electric thermostatic valves, spherical valves with a pipe connector, pipe joining adaptors, automatic deaerators, drainage and support bars.</p> <p>The vertical radiators will be completed with a thermostatic radiator valve, a radiator lock-shield valve and a manual deaerator.</p>
10.1	Gas supply installation	<p>Gas-fired boilers are type C gas appliances – they have a burning chamber that is isolated from the room. The air for burning will be fed through an Ø80 mm fresh air delivery pipe and the exhaust gases will be discharged through the Ø80 mm flue that will be joined to common chimneys type Schiedel. Schiedel chimneys are designed with two separate chambers – one for the discharge of exhaust gases and the other for the delivery of fresh air. The gas ductwork for the indoor gas installations (after GRP) will be made of copper pipes, Ø22×1 mm и Ø18×1 mm according to BDS 1773-84 and suitable fittings – elbow joints, T joints, sockets, adaptors and nipples. The accidental leakage of natural gas in the room where the gas-fuelled boiler is mounted will be controlled in each apartment by means of gas detectors for household use. When the gas concentration rises, the gas detectors will disconnect the gas flow into the gas appliances through the otherwise normally open electromagnetic valve.</p>
10.2	Air-conditioning system	<p>An autonomous mini VRF system will be installed in each apartment unit. The outdoor units of these systems will be mounted on the northern façade of the buildings. The indoor units will be mounted inside the ductwork. The refrigerating agent will be distributed by means of copper pipework and distribution boxes.</p> <p>The transporting system between the indoor and outdoor units will be ensured through the copper pipework and pipe branching of appropriate dimensions insulated with 13 mm synthetic rubber. The pipes</p>

		running from the indoor hydromodule to the convectors will be made of stabilized polypropylene insulated with 13 mm synthetic rubber. The condensation produced by the indoor units will be let out according to the designed water supply and sewerage system. The connection of all condense ducts to the sewer network will be achieved by means of a water seal.
10.3	Ventilation system	The toilets and bathrooms will be equipped with forced suction ventilation. It will be achieved by means of vertical air ductwork. The air suction capacity will be 90m ³ /h per toilet or bathroom unit. Exhaust air will be discharged above the roof of the building.
10.4	Chimneys	An entire system of chimneys will be constructed in the living rooms providing the opportunity to install a burning chamber (fireplace). The mineral wool insulated ceramic pipes will be installed in the outdoor unit made of light but strong concrete.