

AMERICA HOUSE - TECHNICAL SPECIFICATIONS

This Technical Specification includes the current information on the building's design, structure and features.

Please note that present specification may change during the realization of the project in order to accommodate the intended layout / use. The Landlord therefore reserves the right to amend accordingly the information contained herein.

BUILDING INFORMATION

Address:	Nicolae Titulescu, nr. 4-8, America House, first floor, District 1; Bucharest.					
Owner:	Complexul Multifunctional Victoria SRL.					
PHYSICAL PROPERTIES						
Date Built:	2005					
Full Asset Area (GBA)	44,195 sqm					
Land Plot (sqm)	6,422 sqm					
Total GLA:	28,534sqm					
Storeys:	9 aboveground (GF + 8F) plus a technical floor					
	3 underground					
Building Height:	33.60 m					
Load bearing structure:	Structural module of 7.80 X 7.80, with reinforced concrete walls and pillars of 70 X 70 cm. The supra-structural system consists of two sections, namely:					
	• West wing, having the dimensions on horizontal plan longitudinally 83.775m, between the axes (2) \div (12) and 27.65 m in cross direction, between the rows (A) \div (D) on the ground floor and floors 1 and 2, while for the other levels the longitudinal directions are 79.30 m, between the axes (2) \div (12) and 25.90 m in cross direction, between the rows (A) \div (D).					
	• East wing, having the dimensions on horizontal plan longitudinally 83.775m, between the axes (13) ÷ (23) and 27.65 m in cross direction, between the rows (A) ÷ (D) on the ground floor and floors 1 and 2, while for the other levels the longitudinal directions are 56.90 m, between the axes (13) ÷ (20) and 25.90 m in cross direction, between the rows (A) ÷ (D).					
	Between the two sections of the super-structural system, from the level ± 0.00 m there is a seismic joint.					
	In vertical plan, the super-structural system contains 9 levels, a ground floor of 4.60 m, first floor 4.00 m high, while the other 7 floors have the following height: 3.60 m. From the level ± 0.00 m, the superstructure of the building will go as high as 33,60 m.					
	The infra-structural system consists of two sections, namely:					
	• West wing, having the dimensions on horizontal plan longitudinally 78.00 m, between the axes (1) \div (12) and 4.00 m from the left side of Axis (1), resulting in a total level of 82.00 m, and 27.15 m in cross direction, between the rows (A) \div (D).					
	• East wing, having the dimensions on horizontal plan longitudinally 78.00 m , between the axes (13) ÷ (23) and 8.65 m from the right side of Axis (23),					

	resulting in a total level of 86.65 m, and 27.15 m in cross direction, between the rows (A) \div (D). In vertical plan, the infra-structural system contains 3 underground levels. Underground level 1 between the levels - 0.20 m and - 3,15 m, underground level 2 between the levels - 3,15 m and - 6,10 m and underground level 3 between the levels - 6,10 m and - 9,05 m.
Earthquake protection:	The design form seismic point of view is based on four reinforced concrete cores, being calculated in order to resist the design seismic action and having a lateral displacement not exceeding 1 cm per floor. Seismic zone C according to the applicable seismic code (P.100-92).
	The Building is supported by a raft foundation plate surrounded by slurry walls.
	The building has sensors mounted for the time-tracking of the construction's behavior at compacting and verticality modifications.
Façade:	The Southern façade is a curtain wall of enameled aluminum, equipped with horizontal blinds against excessive sun and longitudinal windows of 170/60 cm. The Northern façade includes metallic panels and large windows. The glassware is performed with low radiation level, neutral color, insulation elements.
Building Wings:	The building is comprised of two wings: the East wing and the West wing, each one of the wings has its own central service core which is accessible through a main lobby on the ground floor and through a back service loading deck. Goods must be delivered through the backside of the building on the designated loading deck, corridor and the freight elevator for each wing.
Central Service Core East Wing:	2 x staircases shafts (A and B) in central core structure can accommodate interconnected floor areas. 3 x 1,000 kg Passenger high speed elevators (1,6 m/s) with destination control system, the control panel is outside the cabins. One elevator (A) connects the basement parking to the ground floor and with the upper ones. 1 x 1,600 kg Freight/passenger elevator (cabin clear dimensions 140 x 240 x 210 cm) is located in the vecinity of the B evacuation stair case, accessible for any tenant on the wing floor.
Central Service Core West Wing:	2 x staircases shafts (C and D) in central core structure can accommodate interconnected floor areas. 6 x 1,000 kg Passenger high speed elevator (1,6 m/s) with destination control system, the control panel is outside the cabins. 3 elevators connect the basement parking to the ground floor and to the upper ones. 1 x 1,600 kg Freight/passenger elevator (cabin clear dimensions 140 x 240 x 210 cm) is located in the vecinity of the D evacuation stair case, accessible for any tenant on the wing floor
Parking facilities:	365 spaces in total 337 spaces in the basements 28 spaces above ground
Green Building:	BREEAM Outstanding in Use - obtained in 2022
Electrical Cars:	The building has 18 electrical cars charging stations (6 on each level of the underground parking) which can facilitate higher power charging (up to 22kW);
	The charging stations can be unlocked for use with RFID cards. Each charging station is equipped with IEC62196 Type 2 charger socket.

Entrance Hall:	Single-storey Entrance Hall with 4.2 m floor to ceiling height.					
Walls:	Ceramic, Gypsum and panels veneered with veneer foil like wood.					
Floors:	Ceramic tiles.					
Ceiling:	Open ceiling painted in the same color with the HVAC ducts and electrical cables.					
Doors:	Clear glass cladding and one revolving glass door (automated - motion sensor).					
Glazing:	Clear and full height.					
ENERGY EFFICIENCY	 The systems are designed to achieve energy reduction of approx. 20% compared with Ashrae 90.1-2010 reference building. This is achieved by key measures including: Program management system integrated within the BMS. High efficiency lighting arrangement. Sustainable features implemented: The building is supplied by 100% of green energy. All 9 passenger elevators and 2 freight elevators were replaced during 2022 with new Schindler smart destination-controlled, touch free and energy saving elevators system. New Building Management system (BMS) was installed during 2023, controlling and monitoring the environmental, fire and safety and access control services and the backup systems. Two new Air Handling Units installed in 2023, including high efficiency heat recovery system and programming to ensure optimal cooling capacity depending on exterior temperature during summer time Motion sensors activated LED lights in all 3 underground parking levels, lift lobbies and toilets. All water pumps and fresh air fans are equipped with frequency converters. BREEAM very good energy compliance standards. 					
ARCHITECTURAL PLANNING	G INFORMATION					

Lift lobby/Corridor:	4,3 m wide and 8,4 m length elevator lobby on tenants' levels. Except for the multi-tenant floors, where there is also a small corridor,						
Column Spacing:	7 / 7 m.						
Maximum Occupancy:	The East & West wings are configurated for up to a maximum of 350 persons per floor considering available evacuation routes and factoring 100% occupancy diversity (exception: 400 persons/ 1st floor).						
Severability:	Floor plates are divisible to accommodate multiple tenancies. Up to 6 tenants per floor.						
Design Load:	Office Areas: Live Load 400kg/m ²						
Window Dimensions:	2.34 m wide x 1.2 m high (partly openable) and also 2,6 m wide x 2,4 m high (partly openable 0.6 x 1.7m window) on the North facade						
M2 . 1	1.90 m wide x 0.55 m high partly openable windows on the South facade.						
windows:	Inermally insulated Glass Units (IGUS) with the following properties:						
	 U value midpane 1.1 W/m2.K , average 1.4 W/m2.K, Light transmission. Provide glazed areas with maximum U-value of 1.5 W/m2K Break proof glassed 						
Window Shades	internal shading to be installed by the tenant (recommended producer: Lutron Serena, Somfy or Appeal Ultra Smart Blinds).						

Tenant´s Entrance doors: Base fit out (inside tenant's area):	Glassed entrance door with a metal frame equipped with self closing mechanism open space office (w/o dividing walls).					
Walls	Prime pointed dravall					
Columns:	Exposed concrete with a sealant / cladded with drywall boards					
Ceiling Standard:	Noise absorption suspended ceiling to be fitted by the tenants. HVAC components, lighting fixtures, and cables to be fitted within suspended ceiling.					
Floor:	Raised floor without floor boxes.					
Floor coverings:	Tenant fit out (designed for fire resistant carpet tiles 600x600mm).					
RESTROOMS						
All genders	The building provides the same standard toilets for men and women. Each of these has separate compartments that ensure privacy and are equipped with all necessary supplies. For a multi-toilet restroom, more than one hand washing station are available to the occupants. Soap dispensers are checked sporadically throughout the day and refilled if necessary. All dispencers and fixtures are of premium quality, respecting all hygiene standards.					
Disabled persons ´	provided on each floor.					
Lavatories:						
Devices:	No-touch, water faucets and soap dispencers (In case of single tenant floor, changes may occour following tenant design).					
Ventilation:	Extract ventilation providing 500 m3/h per toilet with natural compensation.					
Drawings	Fresh supply air is cooled in summer and heated in winter. Mechanical and electrical drawings in CAD or PDF formats available					

TECHNICAL INFORMATION

VENTILATION SYSTEM

Air Distribution: West wing

Fresh air is provided from air handling units (1x30.550m3/h + 1x31.355m3/h). Air enters the space through ceiling mounted air outlets and leaves the space via the ceiling return air grilles. A separate extract duct is provided for kitchenettes (300m3/h/floor available for tenant fit out). The air distribution system has been designed to achieve optimal performance with respect to noise and efficiency.

East wing

Fresh air is provided from introduction units (1x19.270m3/h + 1x19.295m3/h). Air enters the space through ceiling mounted air outlets and leaves the space via the ceiling return air grilles. A separate extract duct is provided for kitchenettes (230m3/h/floor available for tenant fit out). The air distribution system has been designed to achieve optimal performance with respect to noise and efficiency.

Air Changes:	approx. 2 fresh air exchanges per hour or $25m3/h/person$ for the considered density			
Fresh Air:	Fresh Air rates meets IDA Category 2 indoor air quality (EN 13799) The air volumes allow for on aggregate 10 % of the area is meeting room.			
Humidity:	Air is not conditioned in terms of humidity, but we have humidity			
Air Quality Standards:	The primary air is conditioned (MERV 9-10 filtered and cooled/heated), and periodically independently tested to ensure industry standards are met or exceeded.			
Zones/Floor:				
	There is 1 control zone per $4,2 \text{ m} \times 4,5 \text{ m}$ office segment at the perimeter, and 1 control zone per $8,4 \text{ m}$ segment in the interior areas. Each control zone consists of temperature sensor linked to the ceiling fan coil units. These thermostats can be relocated, or additional ones added, to accommodate any office layout.			
Kitchenettes:	Subject to tenant fit-out.			
COOLING AND HEATING SERVICES				
Cooling Tenant Areas:	Cooling by 4-pipe concealed Fan Coil Units is located in ceiling void. Fan Coil Units (FCUs) are low noise high efficiency (EC) type arranged in modular format - Fan coil units are arranged on a 2,7 m grid at the outer areas and internally on an 8.1 m grid. The fan coil units feed conditioned air to the space through ceiling grilles which are arranged on a 1,35 m grid. FCUs are sized for 1 person per 8 m2 lettable area, and 25 W/m2 equipment heat gains in addition to climate and lighting loads. Cooled air is supplied by slot or swirl diffusors for draught free environment.			
Mechanical Zones:	Each tenancy has stand-alone provision of air, chilled water, heating water, potable water and sprinkler connection, and electrical interface. For tenant fit-out provisions during winter time there is a one chiller with glycol for each wing to ensure chilled water, potable water from the kitchen, waste connection for tea kitchen, condensate drain connection, and the kitchen extract hood duct connection available at the core.			
Temperature Control Zones/Floor:	The room temperatures are zoned and meet the requirements set out in BREEAM Health and Welfare HEA 11. User control of temperature is by means of column or wall mounted air temperature sensors.			
Cooling potential server rooms: Hours of Operations:	At the cores of building (both wings) there is a shaft that connects every floor with the terrace of the building for the possibility of installations of dedicated and professional cooling systems based on ECO refrigerants. To be installed by the tenant Service 24/7			
Heating:	Heat is provided by the ceiling mounted fan coil units. These are temperature controlled by the local wall mounted room sensors.(There is the possibility of integrating the FCUs into the BMS on tenant cost).			

System Design Criteria	HVAC is designed for peak climate conditions. Design Criteria: Summer 33 °C, Winter -15 °C Internal design conditions: Summer 23 +/- 1 °C, Winter 22+/-1°C.
Metering	Each Tenant zone has provisions to allow tenants power and water consumption to be metered individually. The water is in any case metered on a floor- by- floor basis.
Water Services	Capped connections are provided at tenant interface for cold domestic water, one sanitary waste connection for tea kitchen and one connection for condensate drainage.
BMS	The Building Management System (BMS) performs environmental, energy management, lighting control, and fault detection functions. It also monitors the overall facility to provide the building occupants with an energy efficient and comfortable environment.
Plumbing Capacity:	Additional capacity exists for additional tenant/private restrooms.

ELECTRICAL	SYSTEM
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Design Capacities (office areas):	 10 W/m2 for normal and safety lighting 70 W/m2 lettable area for general power 50 W/m2 back-up for IT equipment Boards with 20 % equipped spare capacity a 25 % unequipped. Additional power available through supplemental transformers. 						
Voltage:	230 Volt power for lighting,400 volt three-phase four wire for power at panels located in each electrical distribution boards.						
Floor boxes:	To be installed during tenant fit-out, as per tenant approved electrical project						
Overhead Distribution:	A 2,4 - 2,6 m uncluttered ceiling void allows for flexibility for tenant fit-out services.						
Emergency Power	Supplied by 2 sets of diesel engine generators for fire and life safety systems. These generators will maintain power for saved circuits, Lifts and water supply when not in Fire mode.						
Life Safety Generators:	2 generators located on the west wing ground floor:						
	 CAT® 3412C DIESEL ENGINE : 800 kVA, 50 Hz, 1800 rpm, 380 to 415 Volts Reliable, rugged, durable design Field-proven in thousands of applications worldwide Four-stroke-cycle diesel engine combines consistent performance and excellent fuel economy with minimum weight 						
	2 generators located on the east wing ground floor:						
	CAT® 18C DIESEL ENGINE : 650 kVA, 50 Hz, 1500 rpm, 380 to 415 Volts						

Cat generator set packages have been fully prototype tested

•	Accepts	100%	block	load	in	one	step	and	meets	NFPA	110
	loading I	requir	ement	S							

Conform to ISO 8528-5 steady state and transient response requirements

In the case of fire the following is energized by the life safety generator:

- Sprinkler and hydrant pumps
- Firefighting lifts
- The elevator for the disabled
- Smoke extraction fans
- Stair and lobby pressurization fans
- Emergency Lighting
- Lifting pumps
- CCTV surveillance
- Access control system
- CO alarm in basement
- building control system BMS

In case of Power outage and no fire the following consumers are energized by the life safety generator:

- Fire extinguishing plant 110kW
- Drinking water and exhaust pumps 12kW
- Thermal power plant 36kW Safety lighting 109kW
- Smoke-de-smoking plant 46kW
- Normal and intervention lifts 154 kW
- Ventilation for transformer station and electrogen group 12kW
- Building security and surveillance systems 84 kW
- Computing equipment 780 kW

Additional capacity from the generators can be allocated to tenants at their request, the tenant being the one who will bear the costs.

- **EMI:** Electro Magnetic Interference residuals from outdoors, not affecting internal electrical systems.
- Maintenance:Established maintenance plan with no shut downs except for
extenious and pre -arranged circumstances.

LIGHTING SYSTEM

Daylight:

High Daylight penetration. All workplaces with Daylight zones in accordance with BREEAM.

Lighting of the working area: Since 2003 EU member countries have had a common standard (EN 12464-1) for light planning in workplaces:

- The standard requires an illuminance of 500 lx.
 - ✓ For indirect light in the ceiling (ambient light), the standard states a minimum illuminance of 30 lx as the requirement and recommends a minimum of 50 lx. To achieve the positive effects reported in Fagerhult's study, we recommend an illuminance of 300 lx.
 - ✓ For vertical light on walls (ambient light), the standard states a minimum illuminance of 50 lx as the requirement

	and recommends a minimum of 75 lx. Based on the findings of our research, we recommend an illuminance of 300 lx.
Fixture Layout:	The fixtures can be located in any position, the electrical wiring system allows easy office layout reconfiguration.
Switches:	Manually switched from visible positions at entrance.
Energy saving option:	The lighting could be managed by a digital control system to provide localised zoning, switching and presence detection. (tenant fit-out option).
COMMUNICATION	
FACILITIES	
Telephone:	Analogue and ISDN services are available in the building, but it is also in place a way for a new IP Telephony, such as VoIP (Voice Over Internet). These new systems offer many more opportunities to improve communications.
Cable Television:	arrangement with the cable supplier.
Fibre Optics:	Provision is made to bring fibre optic cable to the tenant's floor. All netcity-approved providers are accepted.
Satellite Services:	Can be individually assessed when requested. Space exists to provide necessary routing of signal cable
ELEVATORS	
Control System:	Integrated Schindler technologies on our elevators: Ahead Connectivity, Ahead RemoteMonitorig, Ahead ActionBoard, Ready for future. The Elevators Control System: Schindler's PORT technology No matter the application, Schindler's PORT terminal effortlessly combines inspired design with state-of-the-art technology. Available in wall mounted versions, the PORT terminal features a 7.4", 400 x 800 pixel touch screen mounted above a versatile RFID card reader that comes with every PORT. It also incorporates a speaker, brightness adjustment and motion sensor. There are also MiniPORT terminals mounted on turnstiles bariers for smart features.
PASSENGER ELEVATORS	
Finishes:	
	Floors: Ceramic tiles Ceiling: Full dimmable lighting Doors: Black finishing - RAL 9004 Walls: Wood finishing and clear mirror
Number of Cars:	On the East wing 3 Schindler elevators are installed with a capacity for 21 persons (1600kg) and travel at 1.6 metres/second.
	On the West wing 6 Schindler elevators are installed with a capacity for 13 persons (1000kg) and travel at 1.6 metres/second Pag. $9/11$

FREIGHT/ PASSENGER	
ELEVATOR	
Number of Cars:	2 (one on each wing)
Speed:	1 m/s (+5%; -10%)
Capacity:	1600 kg / 21 persons
Average wait:	26 seconds
Floors Serviced:	All underground and above ground floors
Dimension	Car dimnesion (width x depth) - 1400mm x 2400mm Car height - 2100mm Door dimension (width x depth) - 1200mm x 2100mm
LIFE SAFETY	
Type of Systems:	Emergency lighting
	Fire Alarm system
	Sprinklers in building and basements Drenchers in basements Fire hose reels
	Fire extinguishers location refer to drawings Panic buttons in the underground and in the toilets of the persons with reduced Mobility
Monitoring:	24/7 Proprietary Monitoring Station
Sprinklers:	Building fully sprinkler protected.
Fire Detection:	Heat and smoke detection devices are provided to meet code requirements.
Smoke Evacuation:	Stair and escape lobby pressurisation. Smoke control system in accordance with EN 12101-6. Car park CO alarm and smoke extract to National Fire Code P 118 and NP 127.
Fire Hose Cabinets:	Located in core areas.
Emergency Exits:	Clearly marked by emergency exits lighted signs.
Voice Notification:	Automatic Voice Evacuation.
Firefighters' Elevator:	Two freight / passenger elevators are designated as the Fire fighters' elevator and are equipped for this purpose. All other passenger elevators are equipped with automatic Phase I emergency recall and Phase II (in car) controls.
Life Safety Personnel:	The core expertise of the Emergency Response Team involves handling emergency evacuation drills, emergency preparedness, responding to all medical calls and conducting tenant evacuation sessions. The Emergency Response Team members are certified WHMIS, First Aid and CPR Instructors with background in fire prevention, medical and Automatic External Defibrillator (AED) training.

BUILDING SECURITY

Personnel:	The building has a full complement of in-house security supervisors and security officers on patrol duty.
CCTV Cameras:	IP Cameras throughout the complex monitor exit, entry points and all public areas.
Hours per Day:	Full security service on a 24-hour-per-day basis.
After-Hours Access	Elevator access points are card controlled to designated floors areas only.
Turnstiles	All turnstiles are linked to the Schindler elevators. To pass by the turnstiles, each person must use its own access card, which is programmed.
Tenant Security	The base building security system can incorporate fully integrated access control and alarm monitoring software packages for the tenant. The general access to the building is secured by turnstiles and personal access card system. The entrance from the general tenants emergency staircase to the lift lobbies is equipped with access system.
Personal Safety	All parking areas have fire alarm pull station (call point), and Digital CCTV system with 24-hour security officer coverage, all lift cars are equipped with Intercom call point.
Monitoring	A centralized Security Operations Centre (SOC) provides 24/7 monitoring for common areas: CCTV, pass card, fire alarm, elevator, and control systems.

FACILITY INFORMATION

FREIGHT HANDLING

Shipping/Receiving	The standard loading of tenant's goods will be organized by the designated loading docks at the backside of the building.
Hours of Operation	7 am to 7 pm Monday to Friday for standard goods.
After-Hours Access	Available upon request.
BUILDING SERVICES	
Recycling	Recycling program in place for recovery of fibre, bottles, cans, wooden pallets, batteries and organic food waste.
Storage	Storage units located in the underground are available for tenant needs.
Shredding	Shredding services available in compliance with Privacy laws at Tenant cost