# TECHNICAL SPECIFICATION Hall A

Łódź, ul. Dostawcza 17

Certification: ---

## Area

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| *Terrein* | Entrance, gate / concierge, fence, maneuvering area for trucks,<br>parking for passenger cars - 12 places<br>parking for vans - 10 places<br>parking for trucks 42 t - 3 places |
| *Building* | A single-storey warehouse with office space. Clear height in the storage area 10 m (to the main beams). |
| *Exterior facade* | • On the side of the docks: Walls of precast concrete elements with a height of:<br>> from -1.20 to 4.20 m at the docks<br>> from 0.00 to 4.20 m at the "entrance" from level 0<br>> from 0.00 to 0.30 m in other parts of the building, except for office premises<br>• Sandwich panels in horizontal orientation with PIR filling, 10 cm thick<br>• From the office side: Glass facade made of translucent and non-transparent colored glass. Aluminum window and door joinery, powder coated in RAL 5006 color. |

## Warehouse part

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| *Fire load* | Fire load up to 4000 MJ / m2 |
| *Column grid* | Column grid with a spacing of 22.5 m x 12 m |
| *The floor plate* | • Uniformly distributed load of 50 kN / m2.<br>• Floor slab - reinforced concrete, 17 cm thick (reinforcement dispersed with steel fibers DRAMIX RC 80/50 in the amount of 17 kg / m3, steel mesh reinforcement made of 8 mm bars and 150 x 150 meshes located within unloading docks)<br>• Surface hardening: dry mineral sprinkle, dust-free floor.<br>• Surface flatness according to DIN 18202, table 3, line 3<br>• Thermal insulation of ground beams, internal circumference.<br>• Prefabricated reinforced concrete perimeter beams.<br>• The floor with dilatation every 30 x 40m, edged with a steel flat bar and dowelled - protected against vertical movements by the Diamond Dowel system.<br>• Prefabricated reinforced concrete dock sockets. |

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| *Supporting structure* | • Reinforced concrete columns, main steel beams.<br>• Column grid 22.5 m x 12 m. Steel structure protected against corrosion.<br>• In the front part of the docks, a reinforced concrete wall as a substructure for sectional gates. |
| *Sectional doors* | • Overhead sectional doors with electric drive:<br>• 3 m x 3.2 m sectional docks with glazed section (number: 14 pcs)<br>• 3.5 m x 4.2 m entrance gates from level 0 (number: 2pcs)<br>• 3 m x 3.2 m entrance gates from level 0 (number: 3 pcs) |
| *Transhipment platforms* | • Electric types Hörmann, Crawford; nominal load capacity 60 kN<br>• Lip length 0.405 m, platform width 2.0 m.<br>• Platform length 2.50 m, height 0.6 m, steel structure.<br>• Dock height: 1.10 m<br>• Dock seal: apron. Two rubber buffers with dimensions of 500x250x100mm at each loading platform. Trailer wheel guides at each loading platform - made of steel tubes. |
| *Roof* | The warehouse roof is flat, sheathing made of trapezoidal sheet metal, 0.88 mm thick, powder coated in a standard color. Roof insulation - hard mineral wool (when using a roof sheet with RE15 parameters) covered with a PVC membrane with a thickness of 1.2 mm. Design internal temperature in the storage area +15 ° C, at an outside temperature of -20 ° C. |
| *Roof drainage* | Underpressure roof drainage installation, emergency overflows in the walls of the attic. |
| *Lighting the warehouse area* | Access to daylight in the storage area - through smoke vents and skylights (lighting area in total 3% of the floor plan). NRO transparent polycarbonate filling. Starting the smoke exhaust from the sprinkler pump station. |
| *Door accessories* | Anti-panic mechanisms in all emergency exits. Door closers in fire-resistant doors and in the entrance door of the main office area. |

## Office part

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| *Fire resistance category and class* | ZL III |
| *Offices and communication* | • The height of the offices is 3 m in the light.<br>• GK internal walls and 120 mm thick block on steel system profiles with acoustic insulation made of mineral wool, painted with emulsion paint.<br>• Finishing of floors: carpet in offices, ceramic tiles in social areas<br>• Ceiling finishing: mineral system suspended ceiling on a grid, panels 60 cm x 60 cm in white.<br>• Aluminum window frames, powder coated in RAL 5006.<br>• Internal paneled doors (Porta, DRE or equivalent), adjustable wooden frame |

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| *Technical rooms* | • Floor finish: faded concrete.<br>• Finishing of walls: double painting with emulsion paint.<br>• Doors: metal technical. |
| *Sanitary facilities* | • Internal plasterboard walls, 120 mm thick, laminated (waterproof board) on steel system profiles with acoustic insulation made of mineral wool, painted with emulsion paint.<br>• Floor finishing: ceramic tiles in a standard color.<br>• Wall finishing: tiles up to a height of 2m, showers (Delfarma tenant).<br>• Ceiling finishing: mineral system ceiling suspended on a grid, panels 60 cm x 60 cm in white, waterproof.<br>• Sanitary equipment: white ceramic sanitary ware (Koło, Cersanit).<br>• Sanitary equipment: hangers, towel dispensers, soap dispensers (Kludi, Oras, Merida). |

## Sanitary and mechanical installations

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| *Sanitary installations* | Sanitary sewage system: combined<br>Storm sewage system: combined<br>Industrial sewage system: none<br>Water supply system for social and living purposes - power supply from the municipal network |
| *Fire protection* | ESFR sprinkler system (K240 heads) in the storage part, water supply for fire purposes from the fire tank. Internal hydrants and handheld firefighting equipment on the storage area in accordance with local regulations and requirements. External hydrants located on the premises of the facility. Permissible fire load on the warehouse: up to 4,000 MJ / m2. |
| *Heating and ventilation* | Heating in the warehouse part - Design internal temperature in the warehouse part: the assumed temperature for two parts of the hall (in axes 1-9 / AM and in axes 9-15 / AM) +15 degrees C with an outside temperature of - 20 degrees C. parts of the hall in axes 15-23 / AM 25 degrees C in summer and 18 degrees C in winter in the medicine packaging room (Delfarma production), controlled temperature in the range of 20 - 25 degrees C is assumed<br>To cover the required heat demand of the hall in the 1-9 / A-M axes, three INFRA infrared heaters with a nominal power of 45 kW and one infrared heater INFRA with a nominal power of 28 kW were used. In part of the hall<br>in axes 9-15 / A-M, the heat load will be covered by two INFRA gas heaters with a nominal power of 45 kW each.<br>The hall in the axes 15-23 / A-M<br>In the part of the hall where the tenant is Delfarma, the required heat parameters in the warehouse and in the medicine packaging and release / reception chambers will be provided by two gas-powered devices from TRANE, rooftop type YKD 600, 170 kW each and one YSD 102 device, 56 kW. |

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| | . The warehouse part of the hall will be served by two YKD 600 units. One of these units will also provide the required parameters in the release chambers<br>and parties. Rooftop YSD 102 is designed to operate rooms. packaging of medicines.<br>Ventilation in the storage area:<br>Exhaust: mechanical 0.25 changes / h, roof exhaust fans. Air supply: through the entrance and dock gates.<br>Ventilation system: based on smoke vents<br>Ventilation in the office and social part:<br>Extraction and supply: ventilation unit with heat recovery, air volume 30 m3 / h.<br>Air conditioning in the office and social area: split 100W / m2 |

## Electrical Installations

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| *General* | • 400 kVA power supply for a hall with a storage area of 9511 m2.<br>• Energy distribution: main switchgear, facility switchgears.<br>• Power supply: 230/400 V.<br>• Electricity consumption billed by sub-calculator. One meter per module of warehouse space.<br>• Power supply for the workplace: two sockets on an 8m2 purely office space.<br>• Cleaning and general purpose sockets: one cleaning socket for every 20 m2 of room (corridors, sanitary facilities, lockers, cleaning room, technical room).<br>• General purpose sockets in kitchenettes: 4 pcs.<br>• In the warehouse part - a set of single-phase general-purpose sockets located at the loading platform, 2 pcs +1 force socket (1 set per 3000 m2 of the hall)<br>• Lightning protection - horizontal and vertical lightning rods. |
| *Lighting* | • Fluorescent lamp lighting<br>• 200 lux in the warehouse (before check-in), in sanitary rooms, corridors and staircases)<br>• 150 lux in technical rooms<br>• 500 lux in offices<br>• Emergency lighting / signage for emergency exits at all LED emergency exits outside the building |

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| *Telecommunication* | Teletechnical connections:  Netia |