

## TECHNICAL SPECIFICATION Hall B

Łódź, Zakładowa 96

Certification: ---



Area

<i>Terrein</i>	Entrance, gate / concierge, fence, maneuvering area for trucks, parking for passenger cars - 53 places
<i>Building</i>	A single-storey warehouse with office space. Clear height in the storage area 10 m (to the main beams).
<i>Exterior facade</i>	<ul style="list-style-type: none"><li>• On the side of the docks: Walls of precast concrete elements with a height of:<ul style="list-style-type: none"><li>&gt; from -1.20 to 4.20 m at the docks</li><li>&gt; from 0.00 to 4.20 m at the "entrance" from level 0</li><li>&gt; from 0.00 to 0.30 m in other parts of the building, except for office premises</li></ul></li><li>• Trapezoidal corrugated sheet / 600/1200 cassette</li><li>• From the office side: The facade is made of trapezoidal sheet metal in RAL 9006 and RAL 5003. Aluminum window and door joinery, powder-coated in RAL 5003.</li></ul>



Warehouse part

<i>Fire load</i>	Fire load up to 4000 MJ / m <sup>2</sup>
<i>Column grid</i>	Column grid at a spacing of 22.5 m x 12 m i Stage IIIA - 22.5 x 20 at the unloading docks Stage IIIB - 22.5 x 15 at the unloading docks Stage IIICD - 22.5 x 19.5 at the unloading docks Stage IV - 22.5 x 22 at the unloading docks
<i>The floor plate</i>	<ul style="list-style-type: none"><li>• Uniformly distributed load of 50 kN / m<sup>2</sup>.</li><li>• Floor slab - reinforced concrete, 17 cm thick (reinforcement dispersed with steel fibers DRAMIX RC 80/50 in the amount of 17 kg / m<sup>3</sup>, steel mesh reinforcement made of 8 mm bars and 150 x 150 meshes located within unloading docks)</li><li>• Surface hardening: dry mineral sprinkle, dust-free floor.</li><li>• Surface flatness according to DIN 18202, table 3, line 3</li><li>• Thermal insulation of ground beams, internal circumference.</li><li>• Prefabricated reinforced concrete perimeter beams.</li><li>• 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.</li></ul>

	<ul style="list-style-type: none"> <li>• Prefabricated reinforced concrete dock sockets.</li> </ul>
<i>Supporting structure</i>	<ul style="list-style-type: none"> <li>• Reinforced concrete columns, main reinforced concrete and steel beams. Column grid at a spacing of 22.5 m x 12 m i Stage IIIA - 22.5 x 20 at the unloading docks Stage IIIB - 22.5 x 15 at the unloading docks Stage IIICD - 22.5 x 19.5 at the unloading docks Stage IV - 22.5 x 22 at the unloading docks</li> <li>• Steel structure protected against corrosion.</li> <li>• In the front part of the docks, a reinforced concrete wall as a substructure for sectional doors.</li> </ul>
<i>Sectional doors</i>	<ul style="list-style-type: none"> <li>• Overhead sectional doors with electric drive:</li> <li>• 3 m x 3.2 m sectional dock for docks with glazed section (number: 81 pcs)</li> <li>• 3.5 m x 4.2 m entrance gates from level 0 (number: 7 pcs)</li> </ul>
<i>Transhipment platforms</i>	<ul style="list-style-type: none"> <li>• Electric Hörmann type 22, Crawford 38, Promsthal 21; nominal load capacity 60 kN</li> <li>• Lip length 0.405 m, platform width 2.0 m.</li> <li>• Platform length 2.50 m, height 0.6 m, steel structure.</li> <li>• Dock height: 1.20 m</li> <li>• Dock seal: apron. Two rubber buffers with dimensions of 500x250x100mm at each loading platform. Trailer wheel guides for each loading platform - made of cubes.</li> </ul>
<i>Roof</i>	The warehouse roof is flat, sheathing made of trapezoidal sheet metal, 0.63 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.
<i>Roof drainage</i>	Underpressure roof drainage installation, emergency overflows in the walls of the attic.
<i>Lighting the warehouse area</i>	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.
<i>Door accessories</i>	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

<i>Fire resistance category and class</i>	ZL III
<i>Offices and communication</i>	<ul style="list-style-type: none"> <li>• The height of the offices is 3 m in the light.</li> <li>• GK internal walls and 120 mm thick block on steel system profiles with acoustic insulation made of mineral wool, painted with emulsion paint.</li> <li>• Finishing of floors: carpet in offices, ceramic tiles in social areas</li> <li>• Ceiling finishing: mineral system suspended ceiling on a grid, panels 60 cm x 60 cm in white.</li> <li>• Aluminum window frames, powder coated in RAL 5003.</li> <li>• Internal paneled doors (Porta, DRE or equivalent), adjustable wooden frame</li> </ul>
<i>Technical rooms</i>	<ul style="list-style-type: none"> <li>• Floor finish: faded concrete.</li> <li>• Finishing of walls: double painting with emulsion paint.</li> <li>• Doors: metal technical.</li> </ul>
<i>Sanitary facilities</i>	<ul style="list-style-type: none"> <li>• Internal plasterboard walls, 120 mm thick, are double-paneled (waterproof board) on steel system profiles with acoustic insulation made of mineral wool, painted with emulsion paint.</li> <li>• Floor finishing: ceramic tiles in a standard color.</li> <li>• Wall finishing: tiles.</li> <li>• Ceiling finishing: mineral system ceiling suspended on a grid, panels 60 cm x 60 cm in white, waterproof.</li> <li>• Sanitary equipment: white ceramic sanitary ware</li> <li>• Sanitary equipment: hangers, towel dispensers, soap dispensers</li> </ul>



## Sanitary and mechanical installations

<i>Sanitary installations</i>	<p>Sanitary sewage system: combined</p> <p>Storm sewage system: combined</p> <p>Industrial sewage system: none</p> <p>Water supply system for social and living purposes - power supply from the municipal network</p>
<i>Fire protection</i>	<p>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 / m<sup>2</sup>.</p>
<i>Heating and ventilation</i>	<p>Heating in the storage area - gas heaters. Design internal temperature in the storage area: 15 ° C with an outside temperature of - 20 ° C. In the office part, central heating is supplied from a gas boiler room. Calculated internal temperature in the office part: 20 degrees C, outside temperature - 20 ° C. Heating in sanitary facilities locally - electric heaters.</p> <p>Ventilation in the storage area:</p>

Exhaust: mechanical 0.25 changes / h, roof exhaust fans. Air supply: through entrance gates.

Ventilation system: None

Ventilation in the office and social part:

Extraction and supply: ventilation unit with heat recovery, air volume 30 m<sup>3</sup> / h.

Air conditioning in the office and social part: no info



## Electrical Installations

<i>General</i>	<ul style="list-style-type: none"><li>• power supply about 2 x 630 kVA.</li><li>• Energy distribution: main switchgear, facility and distribution switchgears.</li><li>• Power supply: 230/400 V.</li><li>• Electricity consumption billed by sub-calculator. One meter per module of warehouse space.</li><li>• Power supply for the workplace: two sockets on an 8m<sup>2</sup> purely office space.</li><li>• Cleaning and general purpose sockets: one cleaning socket for every 20 m<sup>2</sup> of room (corridors, sanitary facilities, lockers, cleaning room, technical room).</li><li>• General purpose sockets in kitchenettes: 4 pcs.</li><li>• 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 m<sup>2</sup> of the hall)</li><li>• Lightning protection - horizontal and vertical lightning rods.</li></ul>
<i>Lighting</i>	<ul style="list-style-type: none"><li>• Fluorescent lamp lighting</li><li>• 200 lux in the warehouse (before check-in), in sanitary rooms, corridors and staircases)</li><li>• 150 lux in technical rooms</li><li>• 500 lux in offices</li><li>• Emergency lighting / signage for emergency exits at all LED emergency exits outside the building</li></ul>
<i>Telecommunication</i>	Teletechnical connections: --