

High-quality building standards

Upon request, all rental spaces can be adapted according to the future tenant's requirements. To a certain extent, adjustments may be made even if a building is already under construction in order to accommodate the tenant's special technical requirements. An experienced VGP team of experts will assess all the needs of the tenant and ensure a successful implementation. We are continuously working to optimise our buildings, and at all times with a view to the needs of the market and technical developments. Of course, energy efficiency and sustainability are always a priority.

SUSTAINABILITY

As a minimum, all our new buildings will be certified by the assessment methods of DGNB, BREEAM with the aim of a classification of Gold (DGNB) or Excellent (BREEAM). Upon request and if desired, we can work together with the tenant towards a higher certification ranking. In addition, the roof will be equipped with a solar panel installation, in principle offering on-site green energy production for our tenant.

ELECTRICAL VEHICLES CHARGING POINTS*

Upon request, Electrical Vehicle charging stations can be considered. EV charging equipment can be adapted to the tenant's requirements and is provided with required infrastructure hanging from the main building transformer/s.

GREEN WALL*

Upon request, a green façade wall concept can be offered in the project early stages including all building adaptations required. Modular flexible systems that can provide different configurations can be considered. The green façade systems provide several benefits such as: building energy consumption demand reduction and façade elements protection against severe temperature changes and ultraviolet radiation.

PHOTOVOLTAIC INSTALLATION*

Upon request, a photovoltaic panels installation is provided dimensioned as per tenant's energy consumption needs. Necessary roof load bearing capacity reserve is standardly observed in the buildings to allow its implementation any time needed. The installation is designed and executed fully complying with applicable standards and its elements: inverters, PV modules, etc. are CE certified. The panels are placed on coplanar aluminium structures with ballasted fixing systems to the roof properly calculated for applicable loads.

GREEN ROOF*

Upon request, an extensive green roof concept can be offered during the project early stages (either hydroseeding or grown green stripes system) including all building adaptations required for this purpose: structural, roof dewatering systems, etc. The green roof systems are placed on a waterproofing membrane and provide several benefits such as: building energy consumption demand reduction, contribution to the roof water dewatering collection and roof elements protection against severe temperature changes and ultraviolet radiation.

OFFICE SPACE

Office spaces are air-conditioned and feature dropped ceilings with inlaid mineral fibre panels. According to customer requirements, floor coverings are high-quality and durable carpets, tile or linoleum. Interior doors and wall colours are executed according to the customer's wishes.

PRODUCTION AND WAREHOUSE AREAS

Every tenant has its own specific requirements. Our approach is to tailor each respective production or warehouse space precisely according to the wishes and needs of our customer.

WINDOWS

All window units in administrative areas are made of thermally separated 3-chamber aluminium sections with a powdercoated and coloured surface (RAL). Insulated glazing meets a heat conductivity level of $U = 1.1 \text{ W/m}^2\text{K}$.

FACADE

The façade on warehouse buildings consists of prefabricated sandwich panels (e.g. Kingspan, Brucha) with thermal PIR insulation of ca 100 mm or equivalent. Heat transfer coefficient: $U = 0.222 \text{ W/m}^2\text{K}$. The façade's supporting structure is anchored to the load-bearing reinforced concrete columns.

SKYLIGHTS

At least 2% of the roof area will be made of transparent materials. These roof windows, skylights, glass panes or similar elements are designed in accordance with fire and hygienic requirements. Automatic systems for smoke removal are installed if required by law.

ROOF

The roof structure consists of load-bearing steel-reinforced concrete beams, trapezoidal steel sheeting, a vapour insulation layer, and thermal insulation of PIR segments with interlocking joints or, alternatively, mineral insulation and a top layer of waterproofing foil. Roof insulation with PIR is $U = 0.24 \text{ W/m}^2\text{K}$.

LIGHTS

Warehouse areas are equipped with energy efficient lights with a light intensity of 200 lux in the space between shelf units and 300 lux in the picking area. Anti-glare criteria are considered in the lighting design. The lights are divided into independent control sections.

SUPPORT STRUCTURE

The load-bearing system of the buildings is made of prefabricated reinforced concrete. The columns are standardly placed on a grid of $12 \times 24 \text{ m}$ ($16 \times 24 \text{ m}$). The standard clear height between the floor and the lowest part of the load-bearing structure in the warehouse is min. 10 m.

CONCRETE PLINTH

A concrete plinth with a height of 500 mm above the concrete floor is constructed around the whole perimeter of the warehouse to protect the façade against damage.

GATES

Sufficient loading ramps and gates are provided for truck loading and unloading. Standard sectional doors have dimensions $3.0 \times 3.25 \text{ m}$ and are equipped with a viewing window to the outside. Rubber dock shelters outside and fully automatic hydraulic levelling bridges with a loading capacity of 60 kN are also standard.

FLOOR

Warehouse floors are constructed of a monolithic concrete slab, reinforced with steel fibres. Floors are laid on a compacted subgrade (maximum load at least 80 MPa) covered with a PE separation foil. The maximum load-bearing capacity of floor slabs is 70 kN/m^2 . Floor surfaces are hardened and power trowelled. (Surface flatness is in accordance with DIN 18202, Table 3, line 4.)

PAVED SURFACES

All access ways for trucks, including parking and manipulation spaces, are adequately dimensioned to provide fully loaded 18 m vehicles sufficient space to manoeuvre. All access ways and parking places for trucks are made of interlocking concrete tiles. The area of the loading yard (up to 18 m before the loading gates) is executed as a concrete surface.

*Provided upon tenant's request. Not included in VGP standards.