

BELGIUM

# Prologis Park Boom DC2





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This Project Plan Boom DC2 outlines our ambition to further expand our logistics platform in Belgium, with the development of a state-of-the-art logistics center with a total area of 50,000 sqm.

access

to Antwerp

building site

A12 motorway

new access to

to Brussels & Villebroek barge terminal

> Benefitting from excellent transport links and surrounding infrastructure, Boom is located in the middle of the Belgium logistics corridor, between Antwerp and Brussels. Within close proximity to the main ports of Antwerp and Rotterdam and the major European consumer markets in France and Germany, this region is recognised as one of Europe's most strategic hubs for supply chain and distribution activities.

## 1. Introduction

Recognised as one of Europe's most strategic hubs for supply chain and distribution activities.



Prologis Boom DC1

Given its excellent location, logistics activity in Boom is already well established and concentrated at the industrial parks of Krekelenberg I and II. National and international organisations already operating here include: C&A, Staci, Arcese, TNT Express, Ethnicraft, Peri, Atlas Copco and Essers.

Located at Krekelenberg I, Prologis Park Boom already provides of a modern logistics facility totalling approximately 40,000 sqm. At the adjacent industrial park Krekelenberg II, Prologis owns a large scale land position of 10.8 ha, primed for additional logistics and distribution activity, and is now ready to be developed. With the completion of the new expressway N171 and existing transport network, this prime site has a superb direct connection to both the A12 and E19 motorwavs.

This project plan for Prologis Boom DC2 outlines our ambitions to extend Prologis Park Boom and further expand our already-impressive logistics platform in Belgium, with the development of a 50,000 sqm state-of-the-art logistics centre.

Given its excellent location, logistics activity in Boom is already well established and concentrated at the industrial parks of Krekelenberg I and II.



Prologis Park Boom already consists of a modern logistics facility of approximately 40,000 sqm in Krekelenberg I.

## 2. Location

Prominent location with direct access to some of Europe's most important consumer markets via road, rail, sea and air.

Occupying a prime location within the Flanders region of Belgium, Boom is situated between the cities of Ghent, Antwerp and Brussels. This prominent location means the region is widely recognised as one of Europe's most strategic hubs for supply chain and distribution activities owing to:

- Its prominent, central location;
- Existing network of transport infrastructure;
- Availability and access to multimodal transport road, rail, sea, and air;
- Knowledge and experience of logistics service providers and shippers;
- Availability of well-trained, multilingual supply chain and logistics workforce.

Some of Europe's most important consumer markets are directly accessible, including the Randstad in The Netherlands, the Ruhrgebiet in Germany, the Vlaamse Ruit in Belgium and Ile de France in France. Such accessibility makes Boom a great location for e-commerce, trading and European-wide supply chain and distribution activities.

The surrounding catchment areas also provide a ready supply of professionally trained talent well suited to the exacting demands of the logistics and supply

chain sector. Boom benefits significantly from the existing road network and associated infrastructure. Krekelenberg II has its own access road with a direct connection (N171) to the A12 motorway, connecting Antwerp to Brussels. A connection between the A12 and the E19 is also in the pipeline. In addition, Boom boasts significant multimodal options within easy reach with the port of Antwerp approximately 15 km away and Brussels International Airport just 35 km away. The port of Antwerp is also connected via the canal linking Antwerp, Brussels and Charleroi.

Further shipping options are provided by the Trimodal Container Terminal Belgium (TCT Belgium) which is just 5 km away. This inland terminal on the Scheldt-Brussels Canal in Willebroek is strategically located between Antwerp and Brussels. It is a central hub for shipping containers to and from the seaport and provides an on-demand pick-up and collection point for its customer's containers.

This inland terminal is also connected on a daily basis by barge with the deep-sea terminals in Rotterdam, which is the first European port of call for many major liner services arriving from Asia. Barges also connect TCT Belgium with Antwerp twice a day and there are

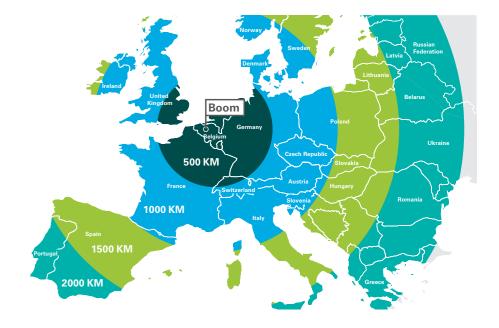
regular barge connections with Zeebrugge as well. Its close proximity to the major motorways makes TCT Belgium an important hub for onward distribution further into mainland Europe.











### Logistic Information

Barge Terminal 5 km

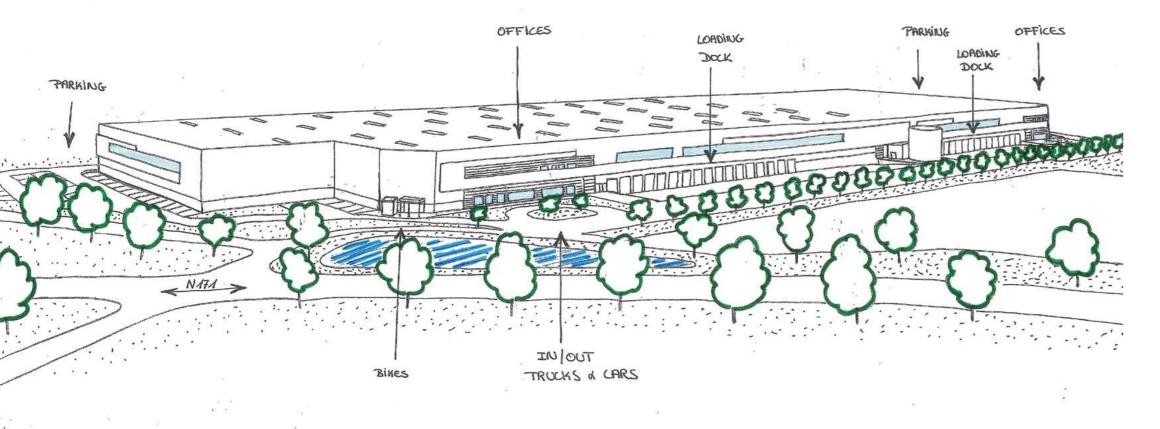
Port of Antwerp 15 km Port of Brussels 30 km

Airport Brussels 35 km



Rail Terminal 1 km

The size of the offices is flexible and can be tailored to meet the bespoke needs of any customer.



Further in-built flexibility for customers means the project can be realized in phases to suit current and projected future business performance. This allows customers to easily flex their space requirements, both now and in the future. The complete flexibility of Prologis Boom DC2 is further expressed by a wide range of customized solutions that we call the 'buildto-suit' concept. This allows individual customers to incorporate their specific bespoke requirements to their building design and layout at the outset.

# 3. Design

The efficient use of space, complete in-built flexibility and a thoughtful layout are key elements of the project design.

Sustainability, efficiency and, perhaps above all, flexibility are at the heart of the architectural design of Prologis Boom DC2. Created by Studiebureau Talboom, the warehouse space totals 49,445 sqm and consists of flexible, rectangular units to maximise the efficiency of the available space. The building benefits from a clear height of 12.2m, along with a mezzanine above the loading area. Attractive office blocks complete the specification. The size of the offices is completely flexible and can be tailored to meet the bespoke needs of any customer.

The use of a dedicated site and its spacious layout, covering 108,539 sqm, allows for intensive logistics use without causing any inconvenience to the immediate surroundings. The site layout affords the possibility for user-dedicated combined entrance/exits with waiting areas for trucks, sliding gates, optional barriers and intercom systems, if required. The efficient use of space and a thoughtful layout of the external area are also key elements of the project design, while safety has been assured with the separation of freight and passenger traffic.



# 4. Architecture

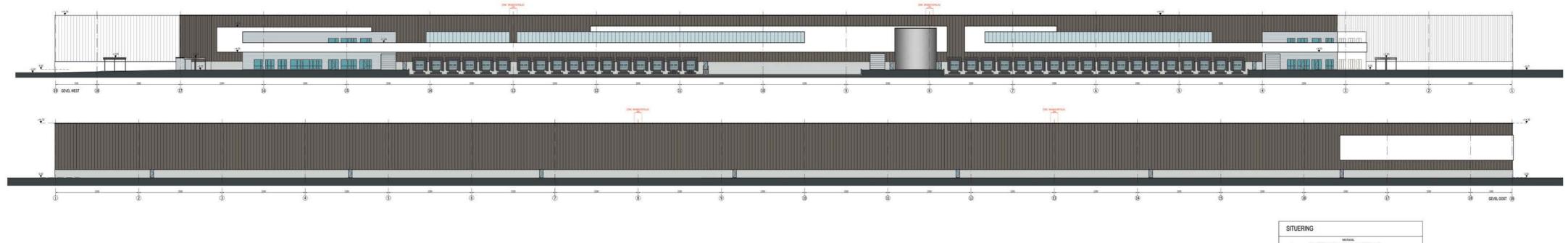
Expressive lines combined with a solid design characterize the facility's strong visual appearance.

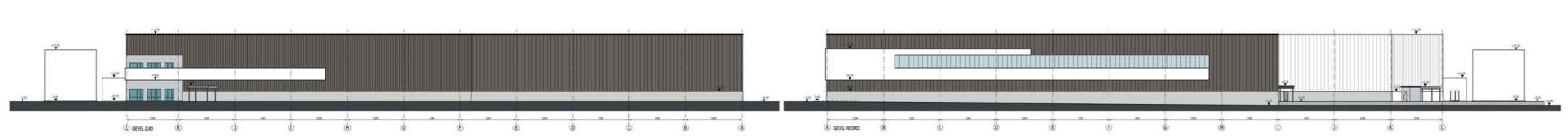
Building on the strong design features of the facility, the main volume of the building will be finished by an architectural wall panel in anthracite to express the simplistic yet solid design. The warehouse will have a 2.5m insulated concrete plinth on all sides which will provide increased security, while underlining the solid appearance of the building.

White stripes will provide a strong contrast to the anthracite wall panels, typifying the design style. The white stripes will lineate the stretched horizontal band of translucent polycarbonate fitted above the dock positions, allowing natural daylight to enter the units to create a welcoming working environment. These horizontal lines are carried through the windows of the offices where the large glass panels provide a clear orientation of the offices while creating a dynamic interaction between the inside and outside. The intention being to create a lively atmosphere around the building that is conducive to a highly productive environment.

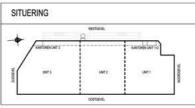
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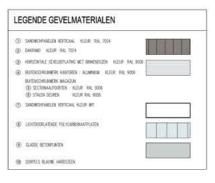














## Legend

- 1. Operational office.
- Open office area with Variable Refrigerant Flow-cooling system.
- 3. Energy efficient LED strip lights with motion control.
- Interior coating in color "bright white" on the visible side of the roof and façade cladding to improve light reflection and with an easily cleaned surface
- Natural daylight via insulating skylights for energy saving and well fare.
- Well-engineered and precisely constructed advanced details for air tight building envelope, ensured by blower door test and thermographic survey.
- Front facade of warehouse: Outdoor LED light fixtures.
- Floor slab of reinforced concrete, capability area loads of 50 kN/sqm. and point loads of 70 KN per shelf post, flatness according to DIN 15185 (super flat according to ABT measurement method), marshalling/order-picking area according to DIN 18202.
- 9. Reinforced concrete truckcourt with oil-water separator.

- 10. Robust prefabricated concrete plinth with high grade insulation.
- Side-wall sprinklers above dock positions and trailer parking.
- Architectural wall panels with secret-fix system and high grade thermal Rc-value 4.5 m 2 K/W insulation with FM approval.
- Sustainable produced vertical steel bar fencing and electrical operated sliding gates in compliance with TAPA.
- 14. Optional intercom systems and automatic barriers.
- Pipe sleeves (spare cable protection pipes) to entrance for tenant specific CCTV, security and access control system.
- Dock- and overhead doors reliably break-in resistant equipped with mechanical anti-lift kit.
- Site lay-out with a safe separation of freight and passenger traffic, -turn possibility and on-site waiting areas for trucks.
- 18. ESFR sprinkler system type K25 according to NFPA/FM-

Global equipped with additional cut-off valves for water saving during test runs.

- 19. Energy saving high performance gas-fired infra-red heaters.
- 20. Daylight intrusion via translucent panels at the mezzanine level.
- 21. Building roof structure prepared for the installation of solar panels to the entire roof surface.
- 22. High grade insulated dock doors, equipped with thermoframe for a thermal break between frame and façade. Lip seals on both sides of the door and a double seal in the lintel area prevent from heat or cold loss.
- 23. Landscaping with native vegetation (no irrigation), birdhouses and selected planting to enhance site ecology and biodiversity.
- 24. Roof system with vapor barrier, FM-approved high grade insulation and PVC roof membrane with internal polyester scrim reinforcement (light grey).

The green surroundings and deliberated infrastructure lead to modern, high quality workplaces combined with outstanding accessibility.

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A high level of Energy Efficiency and Sustainability have been integrated into our standard specifications.

The design of the building is not limited to the façade but considers natural integration of the building in the green surrounding.

# 5. Sustainability & Security

Sustainability has been integrated into the building design, realization and operational functionality. As the global market leader in developing industrial and logistical property, Prologis bears an unique social and economic responsibility. Prologis is in the Top 100 of 'the world's most sustainable companies'.

The green surroundings and deliberated infrastructure lead to modern, high quality workplaces combined with outstanding accessibility.

Based on years of experience with smart and innovative engineering, a sophisticated design was created in which raw materials are used economically and the future operating costs are taken into account. A number of different measures have been integrated into the technical design that combine a reduced CO<sub>2</sub> footprint with energy savings and low maintenance costs.

To measure and certify the sustainability performance of the building, Prologis will apply the BREEAM-INT (Building Research Establishment's Environmental Assessment Method) assessment method. The building will be certified with at least the breeam rating 'VERY GOOD'. As a first step towards breeam certification the project Boom DC2 has been registered with breeam international.

According to Prologis' green-vision, sustainability is more than a label. The development of a Build-to-Suit project is a complex process. Location and the client specific operation play a dominant role in the design process. Prologis intends to design a tailor made building that fully incorporates the client's requirements and wishes. In addition, as long term owner Prologis holds itself to a very high quality standard. A high level of Energy Efficiency and Sustainability have been integrated into our standard specifications.

#### Quality control

The project will also be certified according to the international ISO 14001 environmental management standard.

The standard Prologis specifications will result into a solid and secure building. For customers that operate in the supply chain of the high tech industry Prologis offers an optional package to meet the TAPA-FRS (Transported Asset Protection Association Europe -Freight Security Requirements) standard.

## Sustainability aspects

- High grade insulated wall panels
- High grade insulated roof system of warehouse
- Interior coating in color 'bright white' on the visible side of the roof and façade cladding to improve light reflection and with an easily cleaned surface
- Building structure prepared for the installation of solar panels to the entire roof surface
- Dock levelers with gap sealing to prevent drafts as well as the escape of warm air
- High grade insulated dock doors with a thickness of 67mm, equipped with thermoframe for a thermal break between frame and façade
- Innovative control of LED strip lights in warehouse with lifetime lumen management
- Energy efficient LED lights in offices with dynamic DIM function via daylight reflection control

- Daylight intrusion in warehouse via skylights for energy saving and well fare
- Insulating glass in offices
- Interior coating in color 'bright white' on the visible side of
  Energy saving high performance gas-fired infra-red heaters
  - Heat pump VRF-cooling system and ventilation system with efficient energy recovery in the offices
  - Building Management System for office installations
  - Smart energy meters for monitoring and managing energy consumption
  - Oil-water separator for rain water of truck court
  - Charging stations at site for electric cars and bicycles
  - CO<sub>2</sub>, particulate, humidity and temperature sensors in warehouse and office area for monitoring indoor climate connected to touchscreen dashboard





## Sustainability aspects

- Robust prefabricated reinforced concrete plinth with a height of 2.5 meter / 3.0 meter (at docks)
- Solid vertical steel bar fencing including electrical operated sliding gates at site perimeter, height 2.5 meter in compliance with TAPA
- Optional automatic barriers and intercom system at site main entrance
- The site lay-out with a safe separation of freight and passenger traffic
- Dock- and overheaddoors reliably break-in resistant equipped with mechanical anti-lift kit
- Emergency exit doors in warehouse with a burglary resistance according to the classification 'weerstandsklasse' 2 (verzamelattest SKG 2\* conform NEN5096)

# 6. Specifications

## **Characteristics**

#### Supporting Structure and Floor Slab

- Supporting structure warehouse: steel or reinforced concrete (reference period 50 years), reinforced concrete foundation, steel binders
- Pile foundation of concrete piles under main structure
- Optimized building grid due to integrated structural design & engineering of steel structure, mezzanine, racking lay out and floor slab
- Roof structure prepared for solar panels
- Floor Slab: Capability area loads of 50 KN/sgm and point loads of 70 KN per shelf post with a base

plate of 150x150 mm, flatness according to DIN 15185, order-picking area capability area loads of 50 KN/ sqm flatness according to DIN 18202, Table 3 line 4

• Building design prepared for future growth: side facade prepared for fire wall for future extension including foundation

#### Wall elements, facade and roof

- Heat-insulated prefabricated reinforced concrete plinth appr. 2.4 m
- Roof system with vapour barrier, inflammable thermal insulation Rc-value  $\geq 6 \text{ m } 2\text{K/W}$ and PVC roof membrane with internal polyester scrim reinforcement t=1.5mm (light grey)

- Roof skylights: translucent panels in smoke hatches and/or transparent skylights above expedition area
- Roof dewatering system with emergency overflow system

#### Outdoor Facilities

- Fencing: vertical steel bar fencing at street side and mesh wire fence with barbwire topping total h=2.50 m, coated in RAL-colour
- 2 flagpoles in front of the office
- Entrance gates: 1 pcs. width = 15m and 1 pcs 6m electrical operated, and staff entrance door
- Loading area: -1.20 m FFL warehouse, in front of docks with 18m1 concrete area, truck court with a concrete, asphalt or cobblestones pavement suitable for heavy loads SLW 60, max, slope of 6 %
- Access roads: asphalt or cobblestones suitable for heavy loads SLW 60. Car moving space: cobblestones
- Lawn: according to the requirements of the zoning plan
- Bicvcle shed
- Pipe sleeves (spare cable protection pipes) to entrance for tenant specific CCTV, security and access control system

## Description of the building

approx. 47,167 sqm gross floor area

- Clear height warehouse 12.20 m (=max. storage height)
- Office / Social rooms
- 1,164 sqm
- Mezzanine (5KN/sgm)
- 2,772 sqm
- Loading docks
- 33 to 43 pcs. Ground-floor gates
- 3 pcs.
- Fire compartments
- 3 pcs.
- Car parking space
- 211 pcs
- Trailer parking space
- 10 pcs

### Docks and Gates

- Dock levelers: 30 pcs w/h = 2.5/2.0 m 60 KN dynamic, hinged lip with under-passages, equipped with anti-draft strips for energy efficiency • Jumbo dock levelers: 3 pcs – w/h = 4.5/2.0 m – 60 KN dynamic, hinged lip with under-passages,

- Control panel: each Unit 1 pcs. for light and heat control



- equipped with anti-draft strips for energy efficiencv
- Steel sectional gate 33 electrical operated: -w/h = 3.0/3.0 m, insulated with sight window • Buffer: each dock leveler 2 pcs. rubber buffers
- 25 x 50 x 14 cm
- Gate Sealing: each dock leveler one sealing head- and side flaps of PVC, steel wheel guides
- Ground level access door:
- 3 pcs w/h = 4.0/4.2 m
- Fire wall prepared for future
- gates: 2 pcs (phased development possible)

### Building Service

- Smart metering for real time energy data connected to 55" monitoring screen
- Meters: each unit for power, gas, water, humidity,
- CO<sub>2</sub>, particulate and temperature

#### Risk and quality management

- Single point of contact: Construction management and quality control via bi-weekly site visits of Prologis Project Manager
- Quality control of design and construction of floor slab by specialized slab consultant
- Plan review and construction management of roofing system by Roof Management and the
- Roof Manager web based tool
- Environmental management system according to ISO14001
- Environmental site assessment survey 'zero
- base line soil and groundwater investigation' at
- commencement of lease

#### Liahtina

- Warehouse: energy efficient LED strip lights average light intensity 200 lux warehouse (based on normal aisle 3 m wide racking plan), 300 lux picking area (+1.0m FFL)
- Outside facilities: loading area 20 lux, truck parking space 15 lux, car parking space 10 lux and 10m distance warehouse 2 lux (+1.0m FFL)

#### Interior Work Office & Sanitary

- Reception area and sanitary rooms equipped with ceramic floor tiles 45x45 cm
- Sanitary facilities with toilets, showers and locker room at mezzanine level
- Canteen area (part of mezzanine office/social area) equipped with pvc floor covering (equipment for food preparation is excluded) at mezzanine level
- Main staircase: representative stainless steel handrail and balustrade with natural stone steps
- Office space equipped with anti-static, with standing chair rolls carpet tiles
- Sanitary facility with toilets for office employees.
- Inside walls: office- double planked gypsum board, white painted wallpaper, - sanitary facilities tiles up to edge ceiling
- Ceiling: office, sanitary and social rooms with suspended mineral-fiber plate ceiling 60x60 cm or 120x60 cm
- Clean-off zone: 1.50 x 2.50 m at the main entrance
- Kitchenette: connections provided
- Windows: coated aluminum windows with insulating glazing Uw≤1.1W/m²K
- Outside doors: made of aluminum with glass-insert and representative main entrance
- Inside doors: tubular chipboard door leaves, steel frame, door stops
- Mail box and bell system: representative stainless steel, 1 pcs. per floor with intercom system

#### Power

- Socket outlets warehouse: 1 pcs. 230V/16A each second dock leveller, 1 pcs. socket outlet combination 1 x 400 V/16 A and 2 x 230 V/16 A each 1,000 m<sup>2</sup>.
- 1 pcs. on the roof for each unit
- Office: double power outlet each 1,800 mm in cable ducts above ceiling
- Kitchenette: 2 pcs double power outlets
- Corridors: 1 pcs. power outlet each 20 m<sup>2</sup>
- Transformer: 1 x 1,600 kva, transformer prepared with spare fields for over capacity

#### Heating/Cooling

- Directly gas-fired energy efficient modulating infra-red heaters beneath the warehouse ceiling with modular thermostatic control and manual on/off switch
- Low flow ventilation system in warehouse
- Office: Energy efficient HR boiler with profiled flat-/valve radiators, step less thermostat valves
- VRF cooling in the office areas



- Automatic smoke detection at mezzanine area in
- Fire hose reels: in compliance with fire protection requirements
- Evacuation Alarm System: in compliance

- High grade insulation of roofing, walls and plinth

- Daylight sensors for office lighting

### **Fire Protection**

- Sprinkler system: K25-ceiling-sprinkler according to NFPA/FM-Global, ANPI-certified.
- Fire alarm system: in compliance with fire
- protection requirements
- compliance with fire protection requirements
- with fire protection requirements
- Separation wall elements RF120 according to fire regulations

#### Sustainability (included)

- Heat-insulated prefabricated reinforced
- concrete plinth of 2,5 m
- Dock levelers equipped with anti-draft strips
- for energy efficiency
- Energy efficient LED strip lights
- Motion sensors with dynamic DIM
- for warehouse strip lighting
- Smart metering for energy monitoring and management
- High efficiency heaters in warehouse
- High efficiency installations in office
- Building certificate according to BREEAM,
- minimum classification 'Very Good'
- Minimum requirement for air-tightness
- 3.0 m<sup>3</sup>/( m<sup>2</sup>h)
- Grey (rain) water system to flush toilets

#### Tenant works/options (excluded)

- Automatic barriers and intercom at site entrance
- Burglar alarm and CCTV Video system
- Access control system
- Racking and in-rack sprinkler
- ICT incl. data cabling
- Hand fire extinguishers
- Server room
- Security guard house
- Utilities (future) availability for information only
- Glass fibre net of BELGACOM is available at
- adjacent public road.

## 7. Property Management

Unlike many other industrial real estate companies, Prologis does not outsource property management.



Unlike many other industrial real estate companies, Prologis does not outsource property management. The company's distribution centers are managed by in-house professionals who maintain their facilities in accordance with the industry's highest standards.

Prologis is your long-term partner. The Property Management Team is your first point of contact for all your technical questions, the lease contract, the issues related to your building. Our team has a great deal of expertise, thanks to our many years of experience and the growing number of logistic sites we manage. During the lease period, a dedicated person from the Property Management Team will be assigned to you. This person is our first point of contact for all your questions. This way you always benefit from quick and direct communication. If you wish, we can take care of the total maintenance package for you: setting up the contract, maintenance planning and execution. We will ensure that everything is in compliance with the applicable legislation. This way you can focus on your core business.

Our goal is to optimize your building. In the event that unexpected technical problems arise, we guarantee a quick a high-quality response to your requests. We offer you national coverage with regional points of contact to make sure there is always a maintenance team close to your building.

Would you like to renovate or expand? For that you can also rely on your Prologis contact person, who will review your request for approval.

In short, also after signing your lease contract, you can count on our long-term partnership.



Prologis focusses on the development and management of their distribution centers and subsequently provides its customers and partners with in-house property management services.



# 8. About Prologis

Prologis is the leading owner, operator and developer of industrial logistics real estate across the Americas, Europe and Asia with approximately 72 million square meters (768 million square feet) of modern facilities and nearly 3,762 hectares (9,295 acres) of land in strategic global and regional markets. We create value by developing and managing a world-class portfolio of high-quality logistics and distribution facilities, serving customers and investors as an integral part of the global supply chain. Unlike many developers, Prologis maintains a long-term interest in each of its developments. This means that the in-house property management team is always available to advise the customer on the most efficient way to operate its facility.

We own and control prime development sites, some with building permits, so that we can minimize development time. Therefore, tailor made facilities can be realized within 6 to 8 months at various locations to meet individual customer requirements.

www.prologis.nl

# Benefits of working with Prologis

- Strategic land positions owned and controlled
- In-house property management results in full service to customers
- Minimizing operating costs via global purchasing and using Prologis' experience in property management
- Dedicated BTS team of local and international specialists who are able to deliver specific customer requirements of the highest quality
- Efficiency and flexibility a single point of contact for customer relationships throughout the process
- Sustainability proven track record in sustainability enhancing energy efficiency and reducing carbon footprint
- Market leading position across the globe ensuring stable level of available space within portfolio to accommodate your direct space requirements
- Long term ownership of the property equals long term quality
- Financial strength a solid balance sheet and greater access to capital, enabling us to deliver on promises and continue to serve you well into the future
- Extensive experience of working with a global customer base (more than 4,500 customers)

Striving to develop a bespoke solution that is tailor made to the exacting requirements of every customer.

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# 9. Final note

Recognised as one of Europe's most strategic hubs for supply chain and distribution activities.



This Project Plan for Prologis Boom DC2 outlines our ambitions to extend Prologis Park Boom and further expand our already-impressive logistics platform in Belgium, with the development of a 50,000 sqm state-of-the-art logistics centre.

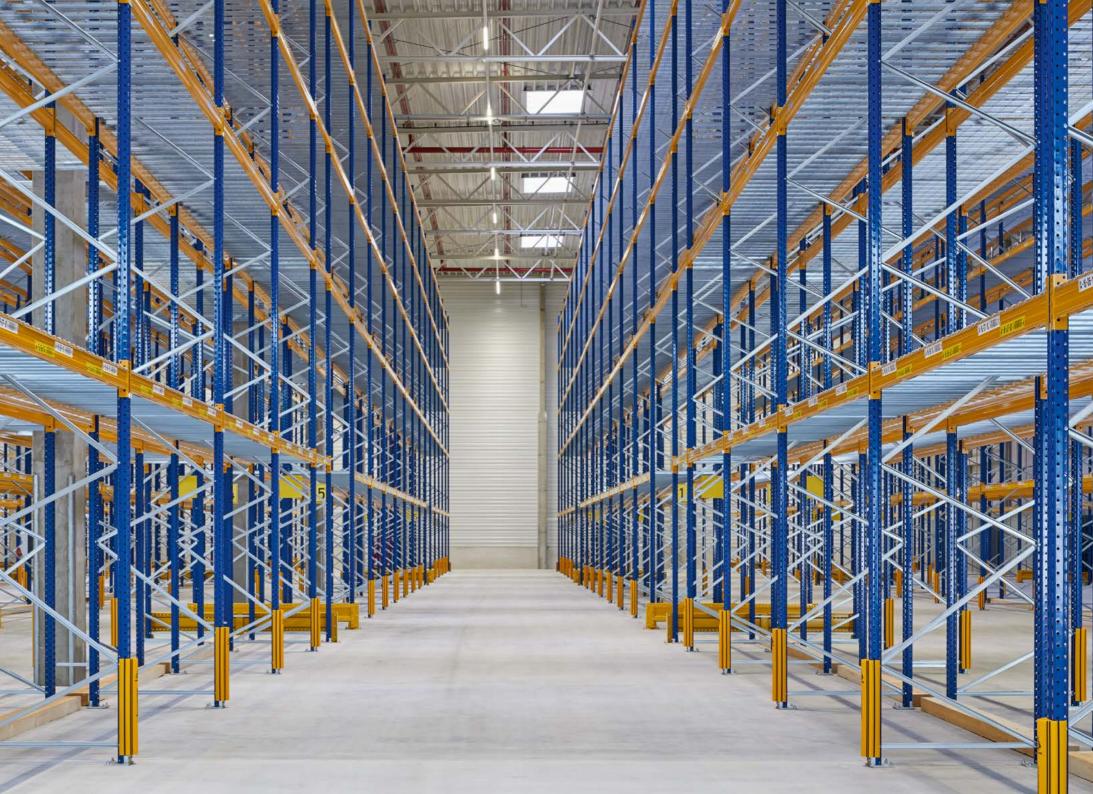
The layouts, images and subdivisions used in this project plan are purely indicative. In order to ensure that we meet the specific requirements of each individual project, the final design will be based on the specific needs and requirements of the customer. This is our key priority.

We recognise that every customer is unique, and Prologis strives to develop a bespoke solution that is tailor made to these exacting requirements. To achieve this, we work collaboratively with each individual customer to ensure that the final design is completely aligned with the goals and objectives that they set out at the beginning of any project.

Please contact us today for your tailor made solution.

## www.prologisbelgium.be

**PRO**LOGIS<sup>®</sup>





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