

CASE STUDY

Prologis Dutra RJ II Building 200

LEEDv4 BD+C: Core and Shell



OPERATIONAL CARBON
FOOTPRINT REDUCTION:
434,480 kg CO₂e

*energy modeling data as compared to ASHRAE 90.1-2010



GROSS FLOOR AREA:

953,927 SF

Rio de Janeiro, Brazil



Dutra RJ II B200 Exterior View



493,208 Gallons of Total Water Savings

Compared to the LEED baseline using low-flow fixtures, recycled water and a non-irrigated landscape.



938,700 Gallons of Annual Outdoor Water Savings

Compared against LEED baseline standards through native and adaptive landscaping and no irrigation.



5.8% Electric Vehicle Chargers

Site uses smart grid-connected EV chargers for optimized charging times and demand charges.



100% LED Lights

Energy and cost-efficient LED lights used for interior and site lighting, reducing mercury extraction, usage and exposure.



55% Energy Use Reduction

Compared to similar warehouse buildings based on ASHRAE 90.1-2010 energy efficiency standards.



10 Products with EPDs Installed

Specifically selected products with available Environmental Product Declarations (EPDs) for transparent material life cycle impacts.

KEY FEATURES

- Advanced energy meter used for continuous cloud access to the building's energy performance.
- Project prioritizes reducing local impacts through Regional Priority credits for Bicycle Facilities and Outdoor Water Use Reduction.

PROJECT TEAM

Owner/Developer: Prologis
Architect: TM2
Contractor: Ribeiro Caram
Civil: G Infra

Mechanical: Laeromec
Electrical: PQR MA2
Plumbing: HUsina
Landscape: Agrovias

NOTABLE LEED THRESHOLDS

HEADLINE	INTENT	STRATEGY
Location and Transportation: Green Vehicles	By promoting alternatives to conventionally fueled automobiles the project helps reduce pollution and helping reduce pollution and fossil fuel dependence.	5.8% of the total parking capacity is equipped with EV chargers, supporting the transition to cleaner transportation.
Sustainable Sites: Heat Island Reduction	The highly reflective roof reduces solar heat gain on-site, helping maintain cooler temperatures both indoors and in surrounding outdoor areas, while minimizing effects on local microclimates.	A white metal roof and 100% concrete hardscape were implemented to help mitigate the urban heat island effect.
Water Efficiency: Outdoor Water Use Reduction	Thoughtful landscape design using native, adapted, and drought-tolerant plants can dramatically reduce or eliminate the need for irrigation while better integrating the building into its environment.	The project uses native and adaptive plants for landscaping. Due to the site's climate, no permanent irrigation system was needed, achieving 100% water savings compared to LEED baseline.
Energy and Atmosphere: Advanced Energy Metering	By tracking both building-level and system-level energy use, the project supports active energy management and identify opportunities for additional savings.	The building is equipped with advanced energy meters that provide real-time, remote monitoring of energy use. This enables smarter decision-making, improved energy management, and continuous performance optimization.
Materials and Resources: Sourcing of Raw Materials	Selecting products verified to have been extracted or sourced responsibly encourages the use of materials with transparent life cycle information and reduced environmental, economic, and social impacts.	Approximately 37.3% of the total permanently installed materials (by cost) include recycled content. This includes cement mixes, roofing, and structural steel.
Indoor Environmental Quality: Enhanced IAQ	To promote occupants' comfort and well-being by improving indoor air quality. Provide real-time feedback on ventilation performance in areas particularly prone to under-ventilation due to higher occupant concentrations.	CO2 sensors with visual indicator installed in all densely occupied spaces (conference rooms) for continuous monitoring.
Innovation: Low Mercury Lighting	Mercury is a toxic chemical and neurotoxin that breaks down slowly in the environment. In buildings, mercury is commonly released through breakage of lamps containing it.	100% LED lighting was selected for this project, eliminating the risk of mercury contamination from lighting systems.