# Zuellig Building



he Zuellig Building is the first project in the Philippines that has achieved LEED Platinum certification under the Leadership for Energy and Environmental Design Core and Shell (LEED-CS) program of the U.S. Green Building Council. It was also the first building in the Philippines to be pre-certified LEED Gold before it was constructed. The 33-story high-rise, completed in 2011, bills itself as the first "green" office building in Makati City, the country's premier business district and financial center.

The building provides  $62,800 \text{ m}^2$  of Grade A office space, five levels of basement parking, a retail annex with a food court, a rooftop garden, and extensively landscaped outdoor areas.

Tenants benefit from energy savings of at least 16% compared with conventional Grade A buildings. In light of scarce resources and high power costs in the Philippines, these savings contribute significantly to corporate objectives of sustainability and cost efficiency.

### GREEN FEATURES AND SUSTAINABLE TECHNOLOGIES

## DOUBLE-GLAZED CERAMIC FRIT FAÇADE

Simplicity of expression is achieved with the all-glass façade and the use of large floor-to-ceiling glazing panels. The tower gains its identity from the ceramic frit pattern of the glass curtain wall. Inspired by bamboo and flowing water, this distinctive texture refers to local organic motifs and serves to supplement the shading capabilities of the building envelope. The doublepaned, low-emissivity (low-E) glass system ensures that heat gain and energy loss are minimized, while penetration of natural light is maximized. The freestanding plan allows offices to be fitted out so that over 90% of all work stations will benefit from daylight and outdoor views.

#### **ENERGY-EFFICIENT SYSTEMS**

Variable-speed drives for chilled water pumps reduce energy consumption during off-peak hours.

#### WATER EFFICIENCY

Water conservation efforts include the efficient management of potable water, selection of efficient fittings and fixtures, the capture of rain and condensate water, use of water-saving surface materials, and the installation of proper drainage and irrigation systems.

#### POWER-SAVING LIGHTING

A daylight dimming system relying on photocells maintains the necessary lighting levels in common spaces by reducing electric lighting, based on the intensity of daylight in the space. All office areas can be equipped with occupancy sensors to adjust lighting use to occupancy levels.

#### **INDOOR AIR QUALITY**

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m CO}_2$  sensors are placed in densely occupied areas and return-air ducts to indicate the number of occupants and the quality of fresh air in the space. The outside airflow is modulated according to the estimated number of occupants in the space.

#### **PROJECT DETAILS**

#### LOCATION

Makati City, Metro Manila, Philippines

#### NAME

Zuellig Building

#### TVDF

Commercial, single-owner multitenanted office building

#### **DEVELOPER**

Bridgebury Realty Corporation, an affiliate of the Zuellig Group

#### **ARCHITECTURAL DESIGN**

Skidmore, Owings & Merrill, New York

#### **ARCHITECT**

W. V. Coscolluela & Associates, Manila

#### **GENERAL CONTRACTOR**

Leighton

#### SIZE

8,285 m² total site area 1,700 m² total vegetated area 66,000 m² total GFA

#### **BUILDING SPACE**

33-story office tower3-story retail annex5-story basement parking

#### RATING

Platinum level certification under the Leadership for Energy and Environmental Design Core and Shell (LEED-CS) program of the U.S. Green Building Council in July 2013. Also Platinum level certified under the LEED-CI (Commercial Interiors) certification for offices on the 32<sup>nd</sup> floor. Pre-Certified at the Gold level before construction began in 2009.

#### COMPLETION

Q4 2011

#### **AWARDS**

Winner of the "Global Best Projects, Green" category of *Engineering News-Record* magazine's Global Best Projects Awards.

## MEASURABLE RESULTS

#### **ENERGY SAVINGS**

15% or approximately 4.3 million kWh/year\*

#### WATER SAVINGS

Approximately 47% or 60,000 m<sup>3</sup>/year

ENVELOPE THERMAL TRANSFER VALUE

45.45 W/m<sup>2</sup>

#### PAPER RECYCLING

A centralized paper recycling facility encourages the recycling of paper waste generated by office users.

#### **GREEN AREAS**

Located at the intersection of Makati Avenue and Paseo de Roxas, the building is adjacent to the green expanses of the Ayala Triangle Gardens and Urdaneta Village. The entrance area is flanked by an extensive landscaped area. Special care has been taken to transplant, conserve, and replace pre-existing trees. Open areas in the retail annex and the roof garden on the 32<sup>nd</sup> story are being planted with local tropical shrubs and ground cover.

\* This value is derived by comparing the building's proposed design to an ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) compliant building.