TAIPEI 101

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Facts

Official Name: TAIPEI 101
Structure Type: Building
Status: Completed
Country: Taiwan
City: Taipei
Street Address & Map: No. 7 Xin Yi Road, District Xin Yi
Postal Code: 110
Building Function: Office
Structural Material: Composite
Energy Label: LEED Platinum O+M: Existing Buildings
Proposed: 1997
Construction Start: 1999
Completion: 2004
Retrofit Start: 2009
Retrofit End: 2011

Rankings

Global Ranking: #9 Tallest in the World
Regional Ranking: #6 Tallest in Asia
National Ranking: #1 Tallest in Taiwan
City Ranking: #1 Tallest in Taipei

Companies Involved

Owner/Developer: Taipei Financial Center Corporation
Architect: C.Y. Lee & Partners Architects/Planners
Structural Engineer: Evergreen Consulting Engineering; Thornton Tomasetti
MEP Engineer: Continental Engineering Consultants, Inc.; Lehr Engineering
Project Manager: Turner International LLC
Main Contractor: Kumagai Gumi; RSEA Engineering; Samsung C&T Corporation; Ta-You-Wei Construction; Taiwan Kumagai

Other Consultant

Acoustics: Shen Milsom Wilke, Inc.
Building Monitoring: Kinematics Inc.
Damping: RWDI; ITT Endine
Façade: ALT Limited
Landscape: Genius Loci
LEED: EcoTech International; Siemens Building Technology; SL+A International Asia
Lighting: Theo Kondos
Marketing: Wordsearch
Sustainability: EcoTech International; Siemens Building Technology; SL+A International Asia
Vertical Transportation: Lerch Bates
Wind: RWDI

Height: To Tip
508 m / 1,667 ft
Height: Architectural
508 m / 1,667 ft
Height: Occupied
438 m / 1,437 ft
Height: Observatory
391.8 m / 1,285 ft
Floors Above Ground
101
Floors Below Ground
5
# of Elevators
61
Top Elevator Speed
16.83 m/s
Tower GFA
198,347 m² / 2,134,989 ft²
Development GFA
357,719 m² / 3,850,455 ft²
# of Parking Spaces
1,839
About TAIPEI 101

Standing in the Xinyi District of Taipei, an area known for its financial services and vibrant shopping malls, TAIPEI 101 represents a worldwide precedent for sustainable skyscraper development. It achieved a LEED Platinum certification for Operations and Maintenance in 2011, an impressive feat for a tower of its size and complexity.

The tower rises from its base in a series of eight-story modules that flare outward, evoking the form of a Chinese pagoda. The top of each module houses mechanical floors that accommodate garbage systems, ventilation equipment, water storage, and MEP services. Near the top, a smaller tower caps the structure, forming a pinnacle that has become a familiar sight for the city. The façade of the tower features double-paned green glass curtain walls that are highly reflective and block solar heat gain by 50 percent. Other sustainable features include energy efficient luminaries, custom lighting controls, low-flow water fixtures, and a smart Energy Management and Control System.

TAIPEI 101 contains a 728-ton tuned mass damper (TMD), a large spherical steel pendulum that offsets lateral movements caused by strong winds. The TMD is located in a large multi-story cavity near the top of the tower. This location is ideal for countering overturning forces, a necessary precaution in a typhoon-prone part of the world.

Nearly every aspect of the building’s design is steeped in symbolism. The number 101 represents January 1, the first day of the year. As such, the building has become a central component of New Year’s celebrations in Taiwan. Every year, all of the tower’s lights are turned off and each of the stacked modules light up in sequential order, counting down the last eight seconds before the New Year, which is followed by a dazzling fireworks display.

CTBUH Initiatives

CTBUH Study Examines Tallest Buildings with Dampers
22 Aug 2018 – CTBUH Research

TAIPEI 101 Hosts “Global Tall: Trends, Drivers and Challenges”
28 Jun 2018 – Event Report

Vertical Transportation: Ascent & Acceleration
12 Sep 2017 – CTBUH Research

CTBUH Awards

Performance Award 2016 Winner
CTBUH Awards 2016

Other Building Facts

Tallest building in the world 2004 - 2010. Preceded by Petronas Tower 1 and surpassed by the Burj Khalifa.