

Guangzhou International Finance Center



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Height: To Tip

438.6 m / 1,439 ft

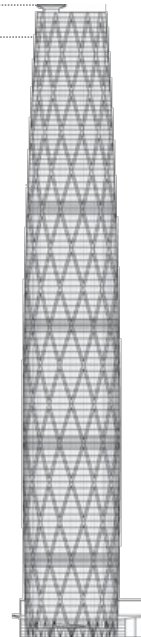
Height:

Architectural

438.6 m / 1,439 ft

Height: Occupied

415.1 m / 1,362 ft



Height: Observatory

415.1 m / 1,362 ft

Height: Helipad

437.5 m / 1,435 ft

Floors Above Ground

103

Floors Below Ground

4

of Elevators

71

Top Elevator Speed

8 m/s

Tower GFA

250,095 m² / 2,692,000 ft²

of Hotel Rooms

374

of Parking Spaces

1,740

Facts

Official Name	Guangzhou International Finance Center
Other Names	Guangzhou IFC, West Tower
Structure Type	Building
Status	COM
Country	China
City	Guangzhou
Street Address & Map	5 Zhujiang Avenue West
Postal Code	510623
Building Function	hotel / office
Structural Material	composite <ul style="list-style-type: none"> Core: Reinforced Concrete Columns: Concrete Filled Steel Floor Spanning: Steel

Proposed	2004
Construction Start	2006
Completion	2010
Official Website	Guangzhou International Finance Center

Rankings

Click arrows to view the next taller/shorter buildings

Global Ranking	#23 Tallest in the World	▲ ▼
Regional Ranking	#18 Tallest in Asia	▲ ▼
National Ranking	#13 Tallest in China	▲ ▼
City Ranking	#2 Tallest in Guangzhou	▲ ▼

Companies Involved

Owner/Developer	Yuexiu Real Estate Investment Trust
Architect	<ul style="list-style-type: none"> Design WilkinsonEyre Architect of Record Architectural Design and Research Institute of South China University of Technology
Structural Engineer	<ul style="list-style-type: none"> Design Architectural Design and Research Institute of South China University of Technology; Arup
MEP Engineer	<ul style="list-style-type: none"> Design Arup
Main Contractor	China State Construction Engineering Corporation ; Guangzhou Municipal Construction Group JV
Other Consultant	<ul style="list-style-type: none"> Acoustics Campbell Shillinglaw Lau Ltd Façade Arup Fire Arup Interiors CityGroup (CTG) Design Landscape Architectural Design and Research Institute of South China University of Technology; Aspect Studios Lighting Lichtvision; Hirsch Bedner Associates Property Management Guangzhou Yuexiu City Construction Jones Lang LaSalle Property Management Co., Ltd. Quantity Surveyor WT Partnership Sustainability J. Roger Preston Limited Traffic Arup Vertical Transportation Arup Wind Cermak Peterka Petersen (CPP), Inc.
Material Supplier	<ul style="list-style-type: none"> Elevator Otis Elevator Company Façade Maintenance Equipment CoxGomyl Paint/Coating Jotun

- Sealants
- Steel

Guangzhou Baiyun Chemical Industry Co. Ltd.
[China Construction Steel Structure Corporation](#)

About Guangzhou International Finance Center

Guangzhou International Finance Center is a landmark tower which defines the emerging international strength of China's third largest city and serves as a landmark for Guangzhou Zhujiang New Town's main axis, which links the commercial district in the north with the Pearl River to the south. At the time of its completion it was the fourth tallest building in China and the ninth tallest building in the world. Its elegant simplicity belies the complex geometry of form and structure which makes it possible. Each of the three façades of the curved triangular plan are also curved in section with a radius of 5.1km set out asymmetrically with the widest point at a third of the height, tapering to its narrowest point at the top. There is no spire, and the three curved façades continue up beyond the highest floor and, in some views, seems to disappear to infinity. The highest point is a helicopter landing pad which hovers over the central atrium just overhanging the perimeter cladding. The inside of this atrium, with its crystalline geometry, sparkles with abundant daylight and is taller than the height of London's [St. Paul's Cathedral](#), including its dome.

Its rounded triangular plan responds to the need for efficient internal space layouts and excellent environmental performance. The tower has a mixture of uses including office space, a luxury hotel and a top floor observation area. Office floors occupy levels 2 through 67 and a Four Seasons hotel is on levels 67 through 103. The tower has a triple height 12 m (39 ft) high entrance lobby which rings the base of the tower and allows secure access to the building's double decker shuttles and standard lift groupings. The main lobby also connects via escalators to a secondary office lobby located at the lower basement level, which in turn allows access to below ground retail and the MTR station. A further dedicated lobby and set down has been formed at ground level for the hotel. At ground level, the tower connects with a substantial podium complex containing a retail mall, conference center and serviced apartments. The tower and podium connect to a large retail mall and transport hub below ground, with a retail loop encouraging connections underneath a landscaped central axis.

The building utilizes the world's tallest constructed diagrid structure which is clearly expressed through the building's façade and gives the building considerable character. The diagrid members are formed from concrete filled steel tubes which provide both good stiffness and fire protection to the structure. However, two hour fire protection was still required in order to meet codes and this was trowel applied directly to the building's primary structure. The tubular diagrid structure "nodes-out" every 12 stories to form 54 m (177 ft) high giant steel diamonds. At the base of the tower the structural members are 1800 mm (70 in) in diameter and reduce in size up the building to 900 mm (35 in) at the top of the building.

The structural core takes much of the gravity load of the building's floors and is linked back to the diagrid perimeter structure via floor beams to create a stiff "tube-within-a-tube" structural system. The inherent stiffness in the structure minimizes steel tonnage while providing inherent stiffness and resistance to acceleration and sway, thereby maintaining high comfort levels for the building's occupants. This stiffness and resistance to acceleration means that no damping of the structure is required.

The building has been designed to be a low carbon and sustainable building. The shape of the building has been designed to reduce the effects of wind, thereby reducing the necessary size and weight of the structure. In addition to fundamental passive measures such as orientation, sustainable building systems have been incorporated into the design which address issues such as comfort, maintenance and cost while paying due regard to environmental sustainability and energy conservation. These include: solar thermal hot water; air-side energy recovery; heat recovery chiller; ice storage system; desiccant dehumidification; high-rise air discharge pressure CFD analysis; free cooling system; and variable air volume.

Guangzhou International Finance Center

CTBUH Initiatives

[CTBUH Guangzhou Symposium : Spatial Design](#)

25 Jan 2019 – Event Report

[Top Company Rankings: The World's 100 Tallest Buildings](#)

13 Oct 2016 – CTBUH Research

[Guangzhou IFC Chosen as Featured Building](#)

Aug 2012 – Featured Tall Building

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Videos

[Exploring Geometry and Form in Tall Buildings](#)

19 Oct 2016 – Chris Wilkinson, Wilkinson Eyre

[Session 10: Developing High-Rise Living in the European Context](#)

11 Jun 2013 – Angela Brady, Harry Handelsman, John Mizon & Paul Monaghan

[Guangzhou Finance Centre: an Elegant Simplicity of Form](#)

20 Sep 2012 – Chris Wilkinson, Wilkinson Eyre Architects

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Research Papers

[Significant Progress in Construction Equipment of Super High-Rise Building](#)

1 Sep 2018 – International Journal of High-rise Buildings Volume 7 Number 3

[Engineering of Guangzhou International Finance Centre](#)

Mar 2017 – International Journal of High-Rise Buildings Volume 6 Number 1

[An Overview of Structural & Aesthetic Developments in Tall Buildings Using Exterior Bracing & Diagrid Systems](#)

1 Dec 2016 – International Journal of High-Rise Buildings Volume 5 Number 4

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