

## Wuhan Center Tower



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Height: To Tip  
438 m / 1,437 ft  
Height:  
Architectural  
438 m / 1,437 ft



Floors Above Ground  
88  
Tower GFA  
343,900 m<sup>2</sup> / 3,701,709 ft<sup>2</sup>  
# of Parking Spaces  
1,200

### Facts

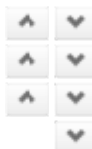
Official Name	Wuhan Center Tower
Name of Complex	Wuhan Center
Structure Type	Building
Status	COM
Country	China
City	Wuhan
Street Address & Map	Hanxi Road
Building Function	hotel / residential / office
Structural Material	composite <ul style="list-style-type: none"> <li>Core: Reinforced Concrete</li> <li>Columns: Concrete Filled Steel</li> <li>Floor Spanning: Steel</li> </ul>

Proposed	2008
Construction Start	2011
Completion	2019

### Rankings

Global Ranking	#24 Tallest in the World
Regional Ranking	#19 Tallest in Asia
National Ranking	#14 Tallest in China
City Ranking	#1 Tallest in Wuhan

Click arrows to view the next taller/shorter buildings



### Companies Involved

Owner	China Oceanwide Holdings Group
Developer	Wuhan CBD Investment Development Company
Architect	<ul style="list-style-type: none"> <li>Design: East China Architectural Design &amp; Research Institute</li> </ul>
Structural Engineer	<ul style="list-style-type: none"> <li>Design: East China Architectural Design &amp; Research Institute</li> <li>Peer Review: Thornton Tomasetti</li> </ul>
MEP Engineer	<ul style="list-style-type: none"> <li>Design: East China Architectural Design &amp; Research Institute</li> </ul>
Main Contractor	China State Construction Engineering Corporation
Other Consultant	<ul style="list-style-type: none"> <li>Cost: Sweett Group</li> <li>Façade: ALT Limited; East China Architectural Design &amp; Research Institute</li> <li>Landscape: SWA Group</li> <li>Lighting: Grand Sight Design International</li> <li>Wind: RWDI</li> </ul>
Material Supplier	<ul style="list-style-type: none"> <li>Cladding: Jangho Group Co., Ltd.</li> <li>Paint/Coating: Jotun</li> <li>Steel: China Construction Steel Structure Corporation</li> </ul>

### About Wuhan Center Tower

Inspired by a sailing vessel, Wuhan Center Tower is appropriately situated beside the Mengze Lake in Hubei province, along the Yangzhi River. The tower is divided into five vertical sections, seamlessly integrating retail, office, and residential spaces, as well as a hotel. It is easily accessible from public transportation, designed to serve the needs of residents and guests, as well as the city's burgeoning business community.

The primary design features that enhance the structure's sustainability are the façade and an integrated energy core. A folding glass curtain façade enwraps the Wuhan Center, with two bevels running along its height. The slotted sides help reduce wind pressure on the building. The tower's façade materials were carefully considered with respect to appearance and function. Fully glazed and sealed curtain wall systems allow more light into the space, but also increase solar heat gain. To address this issue, folding curtain wall units optimize shading performance,

reducing solar radiation and indoor heat gain by 50% compared to a smooth curtain wall. Comfortable indoor temperatures are also maintained through a sophisticated air flow system, employing techniques such as using stratified air at the top of the tower in cooling systems.

The main focus of the tower's core design is space efficiency. The core area reduces gradually as the building's height increases, leaving more free space in the core tube to arrange mechanical, electrical, and auxiliary systems in an "integrated energy core."

The tower's design typifies the sustainable building concept, utilizing both architectural modeling and façade technology to create a high-performance structure, recognizing that as urban population density increases, and buildings grow taller by necessity, the environmental imperative is that much more powerful.

## **CTBUH Initiatives**

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### **Top Company Rankings: The World's 100 Tallest Buildings**

13 Oct 2016 – CTBUH Research

### **CTBUH Releases Year in Review: Tall Trends of 2019**

12 Dec 2019 – CTBUH Journal Paper Report

## **Research Papers**

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### **Year in Review: Tall Trends of 2019**

12 Dec 2019 – CTBUH Journal 2019 Issue IV

### **Significant Progress in Construction Equipment of Super High-Rise Building**

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

### **Wuhan Center – A Sustainable Design Exploration for Skyscrapers**

Sep 2012 – CTBUH 2012 9th World Congress, Shanghai

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