Council on Tall Buildings and Urban Habitat Kingdom Tower 1,000+ m / 3,280+ ft Tallest 20 in 2020 Buri Khalifa 828 m / 2,717 ft Projected World's Tallest 20 Buildings in the Year 2020 "Future Tallest" Criteria: Buildings included in this study are either built, under construction or considered real proposals. A real proposal can be considered Ping An Finance Center such if it has: a specific site with ownership interests within the building development team; a full professional design team progressing the design beyond the 660 m / 2,165 ft conceptual stage; formal planning consent/legal permission for construction (or is in the process of obtaining such permission); and a full intention to progress the building to construction and completion. Furthermore this research only considers projects that are within the public domain and have the consent for Signature Tower Jakarta Wuhan Greenland Center inclusion from the respective client-consultant teams. Because of this multi-faceted inclusion criterion, a number of projects were not included. 638 m / 2,093 ft 606 m / 1,988 ft Wuhan Projection as of August 2012 Makkah Royal Clock Tower Hotel Shanghai Tower Triple One 632 m / 2,073 ft 601 m / 1,972 ft Rose Rock International Finance Center 620 m / 2,034 ft Shanghai 588 m / 1,929 ft Goldin Finance 117 Lotte World Tower 597 m / 1,957 ft 555 m / 1,819 ft Tianjin Chow Tai Fook Binhai Center One World Trade Center 530 m / 1,739 ft 541 m / 1,776 ft New York City Dalian Greenland Center Busan Lotte Town Tower Kaisa Feng Long Centre 510 m / 1,674 ft 500 m / 1,640 ft 518 m / 1,699 ft The CTF Guangzhou Shanghai World Financial Center Taipei 101 530 m / 1,739 ft 508 m / 1,667 ft 492 m / 1,614 ft Shanghai Guangzhou International Commerce Centre 484 m / 1,588 ft Hong Kong 5 Above: Diagram of the World's Tallest 20 Buildings as projected by 2020, according to the CTBUH Height Criteria "Height to Architectural Top." For more on CTBUH height criteria, see http://criteria.ctbuh.org/. 4 Signature Tower Jakarta 2 Burj Khalifa Dubai, UAE 5 Shanghai Tower Shanghai, China 6 Triple One Seoul, South Korea Building Status Complete Ping An Finance Center > Wuhan Greenland Center Makkah Royal Clock Tower Hotel Under Construction Shenzhen, China Jakarta, Indonesia Wuhan, China

Kingdom Tower
Jeddah, Saudi Arabia Height: 1,000 + m/3,280 + ft Current Status: Proposed Completion Date: 2018 Building Use: Hotel/Residential/Office

Total Floors: 156 Owner/Developer: Jeddah Economic Company Architect: Adrian Smith + Gordon Gill Architecture Associate Architect: Dar Al-Handasah Shair & Partners Structural Engineers: Thornton Tomasetti MEP Engineer: Environmental Systems Design, Inc. Main Contractor: Saudi Bin Ladin Group

Structural Material: Concrete

9 Goldin Finance 117
Tianjin, China

Height: 597 m/1,957 ft Current Status: Under Construction Completion Date: 2015 Building Use: Hotel/Office Structural Material: Composite Total Floors: 128

Owner/Developer: Goldin Properties Holdings Ltd. Architect: P & T Group Associate Architect: ECADI Structural Engineers: Arup MEP Engineer: Parsons Brinckerhoff Consultants Pte Ltd Project Manager: Goldin Properties Holdings Limited

Main Contractor: Third Bureau of CSCEC

The CTBUH is the world's leading body in the field of tall buildings and the recognized source of information on tall buildings internationally. It is the arbiter of the criteria upon which tall building height is measured, and thus the title of "The World's Tallest

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Building Use: Office Structural Material: Composite Total Floors: 101

Owner/Developer: Taipei Financial Center Corporation Architect: C.Y. Lee & Partners Architects/Partners Structural Engineers: Thornton Tomasetti; Evergreen Engineering **MEP Engineer:** Continental Engineering Consultants, Inc. Project Manager: Turner Construction Main Contractors: Kumagai Gumi; Taiwan Kumagai; RSEA

Engineering; Ta-You-Wei Construction; Samsung E & C

Height: 508m/1,667ft

Current Status: Completed

Completion Date: 2004

17 Taipei 101
Taipei, Taiwan, PRC

Height: 660 m/2,165 ft Current Status: Under Construction Completion Date: 2015 Building Use: Office Structural Material: Composite Total Floors: 115

Owner/Developer: Ping An Life Insurance Company of China Architect: Kohn Pedersen Fox Associates Associate Architect: China Construction Design International Structural Engineers: Thornton Tomasetti MEP Engineer: J. Roger Preston Group

1 1 Lotte World Tower
Seoul, South Korea

Height: 555 m/1,819 ft Current Status: Under Construction Completion Date: 2015 Building Use: Hotel/Office Structural Material: Composite Total Floors: 123

Owner/Developer: The Lotte Group Architect: Kohn Pedersen Fox Associates Associate Architect: Baum Architects, Engineers & Consultants Structural Engineers: Leslie E. Robertson Associates MEP Engineer: SYSKA Hennessy Group

> 18 Kaisa Feng Long Centre Shenzhen, China Height: 500m/1,640ft

Owner: 1 World Trade Center LLC

MEP Engineer: Jaros Baum & Bolles

Owner/Developer: PT Grahamas Adisentosa

Project Manager: PT Grahamas Adisentosa

Associate Architect: PDW Architects

Architect: Smallwood, Reynolds, Stewart, Stewart

MEP Engineer: Beca Group; PT Hantaran Prima Mandiri

One World Trade Center

Height: 541 m/1,776 ft

Completion Date: 2013

Building Use: Office

Total Floors: 104

Developer: Port Authority of New York & New Jersey

Architect: Skidmore, Owings & Merrill LLP

Main Contractor: Tishman Construction

Current Status: Under Construction

Structural Material: Composite

New York City, USA

Owner/Developer: Kaisa Group Holdings Architect: RTKL Structural Engineers: RTKL MEP Engineer: RTKL

Height: 632 m/2,073 ft Height: 638 m/2,093 ft Current Status: Proposed Current Status: Under Construction Completion Date: 2014 Completion Date: 2016 Building Use: Hotel/Office Building Use: Hotel/Office Structural Material: Composite Structural Material: Composite Total Floors: 121 Total Floors: 111

Owner/Developer: Shanghai Tower Construction & Development Architect: Gensler Associate Architect: Architectural Desian & Research Institute of

Structural Engineers: Thornton Tomasetti; PT Gistama Intisemesta Tonaji University Structural Engineers: Thornton Tomasetti MEP Engineer: Cosentini

Main Contractor: Shanghai Construction

13 The CTF Guangzhou Guangzhou, China

Height: 530 m/1.739 ft Current Status: Under Construction Completion Date: 2017 Building Use: Hotel/Residential/Office Structural Material: Composite Total Floors: 111

Owner: Chow Tai Fook Enterprises Developer: New World Project Management Architect: Kohn Pedersen Fox Associates Structural Engineers: WSP Cantor Seinuk; Schlaich Bergermann Associate Architect: Dennis Lau & Ng Chun Man Architects & Eng. Structural Engineers: Arup

MEP Engineer: Parsons Brinckerhoff Consultants Pte Ltd Project Manager: New World Project Management Ltd

19 Shanghai World Financial Center Height: 492m/1,614ft

Current Status: Completed Completion Date: 2008 Building Use: Hotel/Office Structural Material: Composite Total Floors: 101

Developer: Mori Building Architect: Kohn Pedersen Fox Associates; Irie Miyake Architects & Engineers Associate Architect: Shanghai Modern Architectural Design; ECADI Structural Engineer: Leslie E. Robertson Associates MEP Engineer: Kenchiku Setubi Sekkei Kenkyusho Project Manager: Mori Building

Main Contractors: China State Construction; Shanghai Construction

Completion Date: 2016 Building Use: Office

Building Use: Hotel/Residential/Office Structural Material: Unknown Structural Material: Composite Total Floors: 118 Total Floors: 111 Owner/Developer: Wuhan Greenland Bin Jiang Property Co. Ltd. Owner: Dreamhub - Yongsan Development Developer: Dreamhub - Yongsan Development Architect: Adrian Smith + Gordon Gill Architecture Architect: Renzo Piano Building Workshop

Associate Architect: ECADI Structural Engineers: Thornton Tomasetti MEP Engineer: PositivEnergy Practice

Height: 606 m/1,988 ft

Current Status: Proposed

Completion Date: 2015

14 Tianjin Chow Tai Fook Binhai Center Tianjin, China Height: 530 m/1,739 ft

Height: 518 m/1,699 ft Current Status: Under Construction Completion Date: 2016 Building Use: Hotel/Residential/Office Structural Material: Composite Total Floors: 88

15 Dalian Greenland Center

Dalian, China

Owner/Developer: Greenland Group Architect: HOK Associate Architect: ECADI

Structural Engineers: ECADI MEP Engineer: ECADI Project Manager: Greenland Group Main Contractor: Shanghai Construction

Mecca, Saudi Arabia Height: 601 m/1,972 ft

Current Status: Topped Out Completion Date: 2012 Building Use: Hotel Structural Material: Steel/Concrete

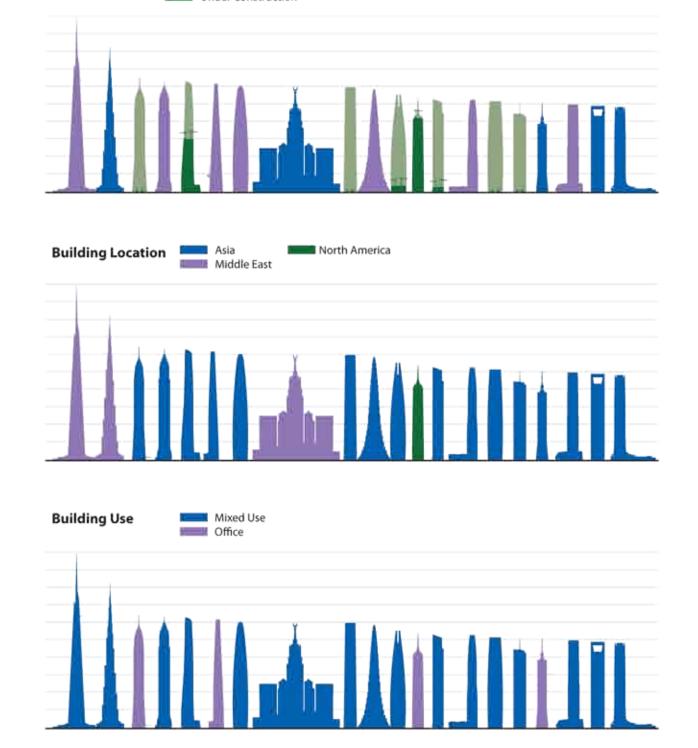
Total Floors: 120 Owner/Developer: Saudi Bin Ladin Group Architect: Dar Al-Handasah Shair & Partners Structural Engineers: Dar Al-Handasah Shair & Partners MEP Engineer: Dar Al-Handasah Shair & Partners Project Manager: Dar Al-Handasah Shair & Partners

Main Contractor: Saudi Bin Ladin Group

16 Busan Lotte Town Tower Busan, South Korea Height: 510 m/1,674 ft Current Status: Under Construction Completion Date: 2016 Building Use: Residential/Hotel/Office

Structural Material: Composite Total Floors: 107 Owner/Developer: The Lotte Group Architect: Skidmore, Owings & Merrill LLP Associate Architect: Heerim Architects & Planners Structural Engineers: Skidmore, Owings & Merrill LLP MEP Engineer: Syska Hennessy Group

Main Contractor: Lotte Construction Management



The Council on Tall Buildings and Urban Habitat, based at the Illinois Institute of Technology in Chicago, is an international not-for-profit organization supported by architecture, engineering, planning, development and construction professionals, designed to facilitate exchanges among those involved in all aspects of the planning, design, construction and operation of tall buildings.

Building determined.

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Height: 828 m/2,717 ft

Total Floors: 163

Structural Engineer: Skidmore, Owings & Merrill LLP

Main Contractors: Samsung E & C; Arabtec; Besix Group

10 Rose Rock Intl Finance Center Tianjin, China

Height: 588m/1929 ft

Current Status: Proposed

Building Use: Multiple

Total Floors: Unknown

Completion Date: Unknown

Structural Material: Unknown

MEP Engineer: Skidmore, Owings & Merrill LLP

Owner/Developer: Emagr Properties PJSC

Architect: Skidmore, Owings & Merrill LLP

Associate Architect: Hyder Consulting

Project Manager: Turner Construction

Owner/Developer: Rose Rock Group

Structural Engineers: Arup

Architect: Bjarke Ingels Group; HKS Architects

Current Status: Completed

Building Use: Office/Residential/Hotel

Structural Material: Steel/Concrete

Completion Date: 2010

Current Status: Proposed Completion Date: Unknown Building Use: Hotel/Office Structural Material: Composite Total Floors: 92

20 International Commerce Centre

Owner: Shanghai World Financial Center Co. Ltd.

Total Floors: 108 Owner: Sun Hung Kai Properties Developer: Sun Hung Kai Properties Architect: Kohn Pedersen Fox Associates Associate Architect: Wong & Ouyang

Height: 620.0 m/2034 ft

Current Status: Proposed

Main Contractor: Samsung Engineering and Construction

Current Status: Proposed

Completion Date: 2015

Total Floors: 97

Structural Engineers: Skidmore, Owings & Merrill LLP

MEP Engineer: Parson Brinckerhoff Consultants Pte Ltd

Height: 484m/1,588ft

Current Status: Completed

Completion Date: 2010

Building Use: Hotel/Office

Structural Material: Composite

Owner/Developer: New World China Land

Architect: Skidmore, Owings & Merrill LLP

Associate Architect: ECADI

Building Use: Residential/Hotel/Office

Structural Material: Composite

Structural Engineer: Arup MEP Engineer: J. Roger Preston Group Project Manager: Harbour Vantage Main Contractors: Sanfield Building Contractors Limited