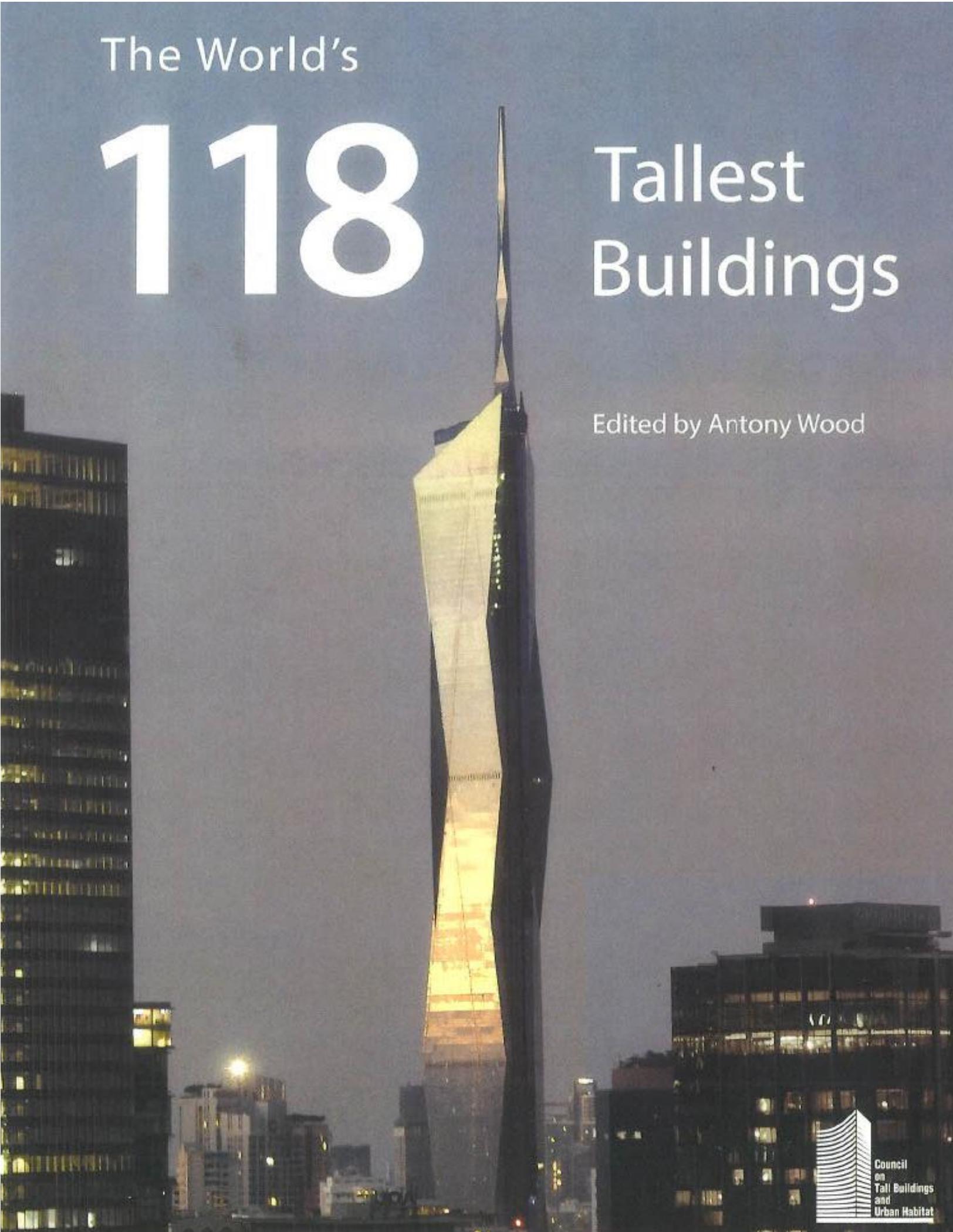


The World's

118

Tallest
Buildings

Edited by Antony Wood



Introduction

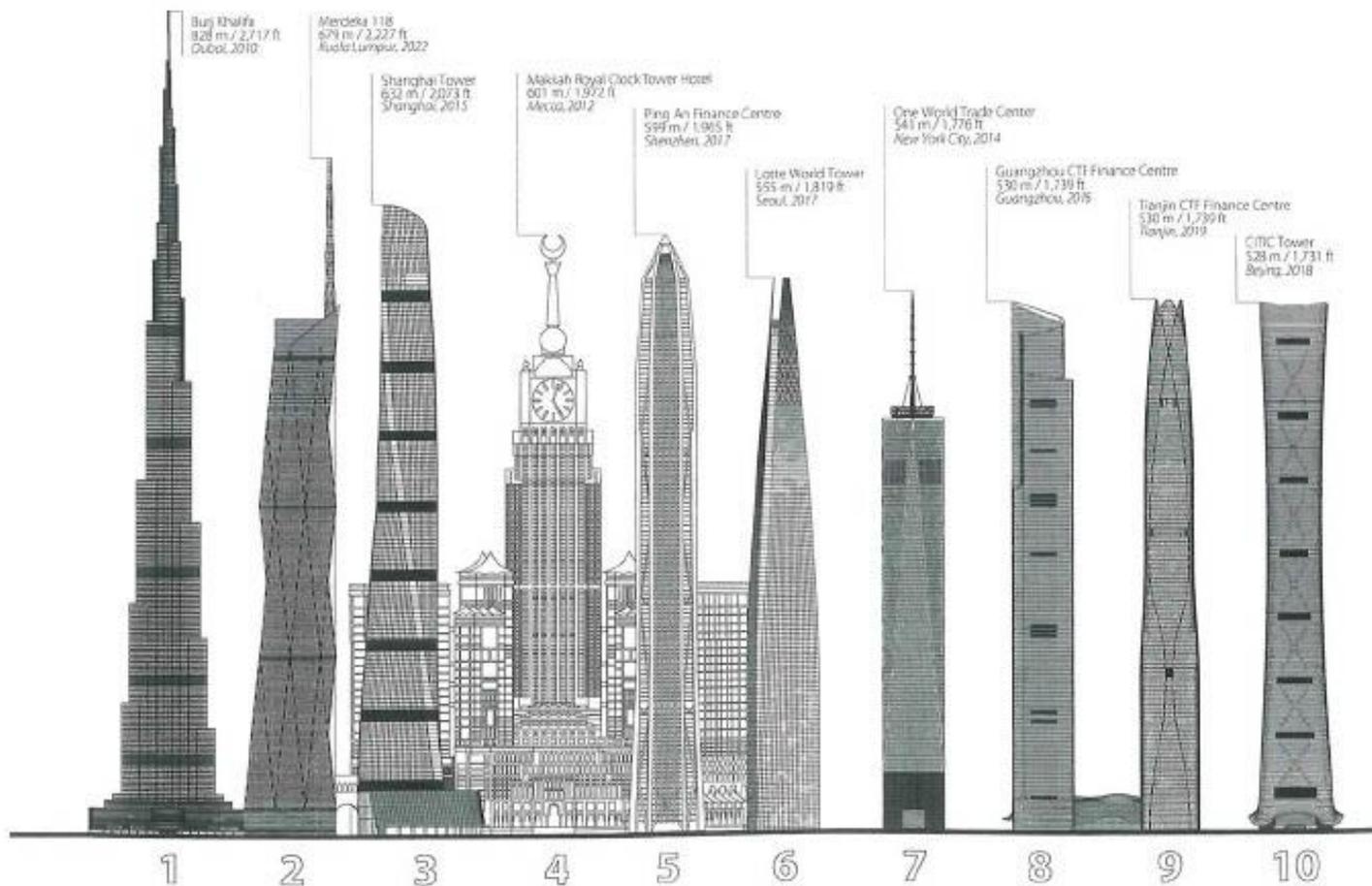
This is the fourth edition of a publication series which began in 1998, when the twin Petronas Towers of Kuala Lumpur, Malaysia, became the world's tallest buildings at 452 meters, surpassing Sears Tower in Chicago. That event turned the world's attention to Malaysia, whose revving economic engine manifested in a landmark designed to commemorate a rise in world stature.

It is fitting, then, that this book arrives when the world once again looks to Malaysia, this time for the arrival of the world's second-tallest building, the Merdeka 118 (see Figure 1), also in Kuala Lumpur. This faceted, crystalline building, tapering asymmetrically into a soaring spire at 679 meters above the ground, is now more than 50 percent taller than the Petronas Towers across town, which indicates how quickly the global skyline has accelerated in just a few decades (see Figure 2). Not only is Merdeka 118 the second-tallest structure

mankind has ever built—and the tallest building to be completed in twelve years, since the Burj Khalifa in 2010—it also becomes only the fourth megatall building (600 meters or higher) ever built. So, whichever data you look at, it's a very big deal for the global building industry.

To commemorate this achievement, and the significance of Merdeka 118 on the world stage, this edition has been duly named "The World's 118 Tallest Buildings," and expanded beyond the traditional 100 tallest buildings, to 118.

Like its predecessor, Merdeka 118 is a national symbol of Malaysia. The word "merdeka" means "independence" in Malaysian, the title is a reference to the country's independence from Britain in 1957. Developed by Permodalan Nasional Berhad (PNB), a government-owned investment fund, it is located in a National Heritage Site—



including Stadium Merdeka, which was purpose-built for the commemoration of independence. Its realization also commemorates a new era of economic development for the country, as it advances from core industries such as natural resources and manufacturing to finance, high technology and knowledge-based services. See more about Merdeka 118 on page 32.

The 118 Tallest in a Global Data Context

This book contains a collection of detailed profiles for the 118 tallest buildings in the world that are either complete, or on track to complete, by the end of 2023 (for more on inclusion and exclusion criteria, see page 20). Such is the pace of global tall building construction that 57 of the world's most iconic 100 skyscrapers that were included in the last version of the book in 2015 have been pushed out by this next generation of memorable towers. Seventy-seven of the 118 buildings in the current list (or a staggering 65 percent) have been completed since the last edition of the book was published, just eight short years before.

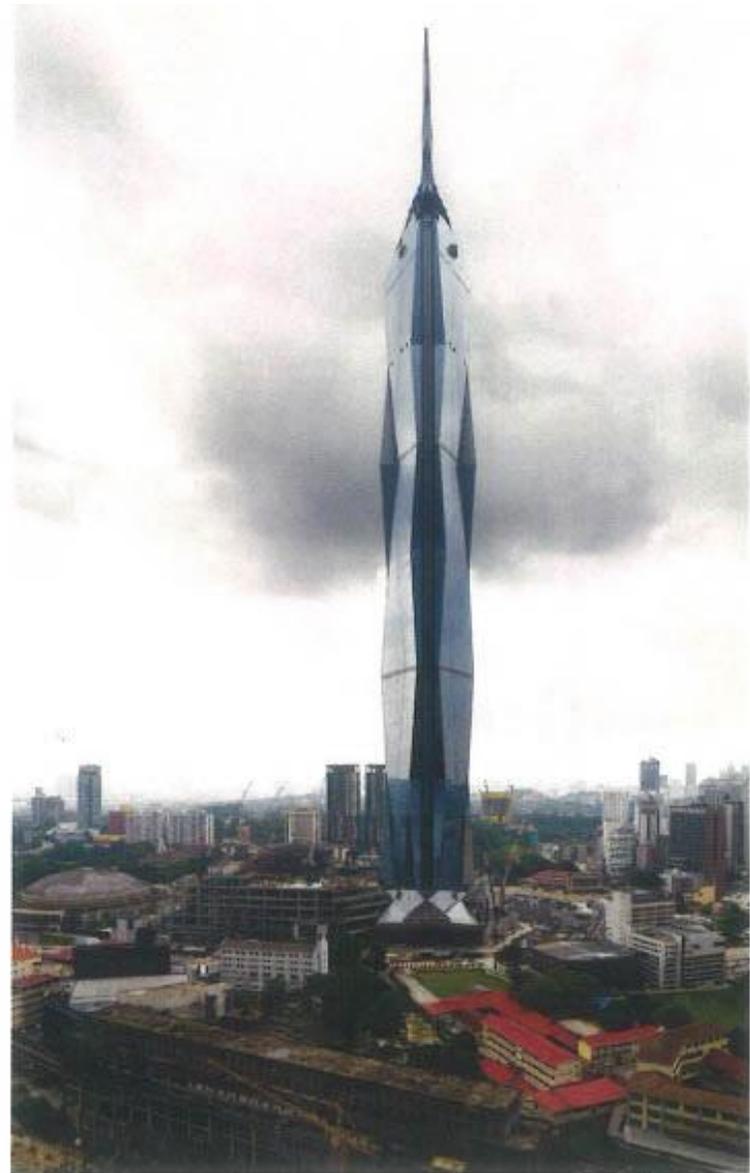


Figure 1: At 679 meters, Merdeka 118 now towers over Kuala Lumpur as the second tallest building in the world.

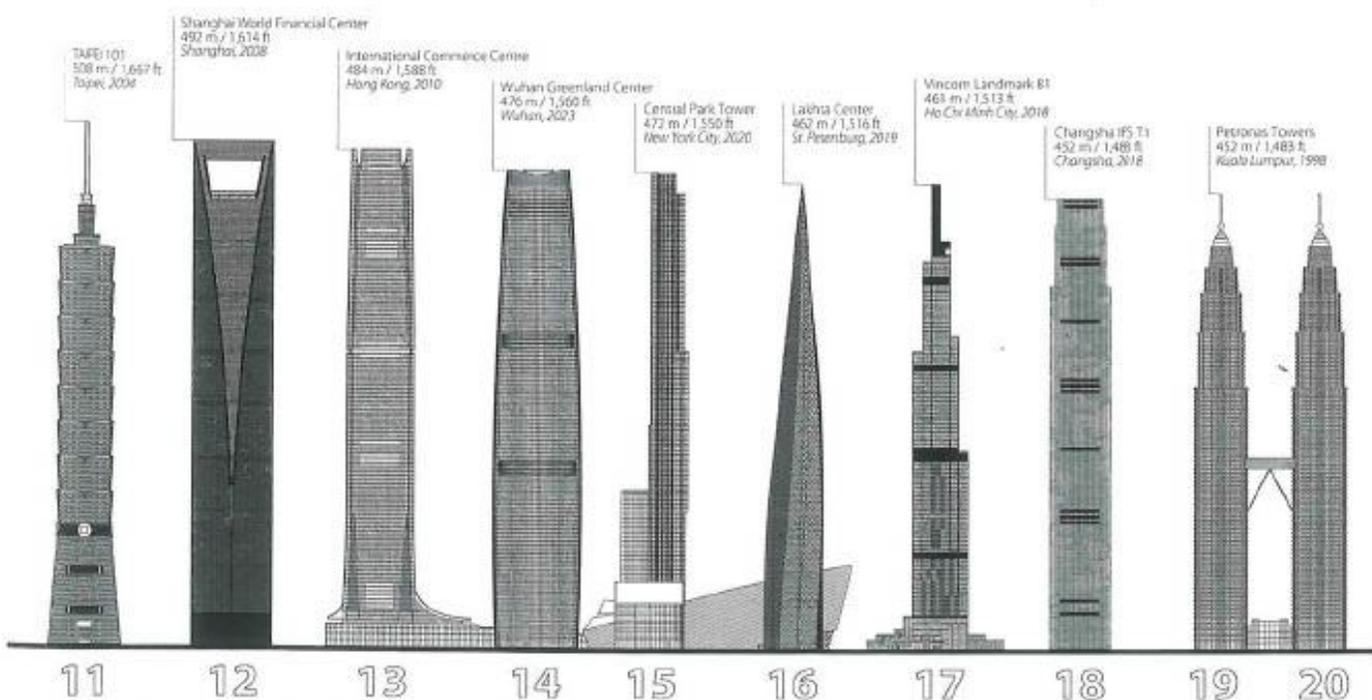


Figure 2: Diagram of the projected tallest 20 completed buildings in the world by the end of 2023, according to CTBUH criteria "Height to Architectural Top" (data as of mid-2022).

02

Merdeka 118

679 meters

Kuala Lumpur, Malaysia

Completion Date: 2022

World Ranking at Completion: 2

Architectural Height: 679 m / 2,227 ft

Height to Tip: 681 m / 2,233 ft

Highest Occupied Floor: 503 m / 1,650 ft

Floors Above Ground: 118

Floors Below Ground: 5

Structural Material: Composite

Primary Function: Hotel / Serviced
Apartments / Office



For more information
and data, visit:
CTBUH.org/Merdeka118

Owner/Developer: PNB Merdeka Ventures SDN
Berhad

Architects: Fender Karsalidis Architects (design);
BSP Architects Planners & Engineers (arch. of
record)

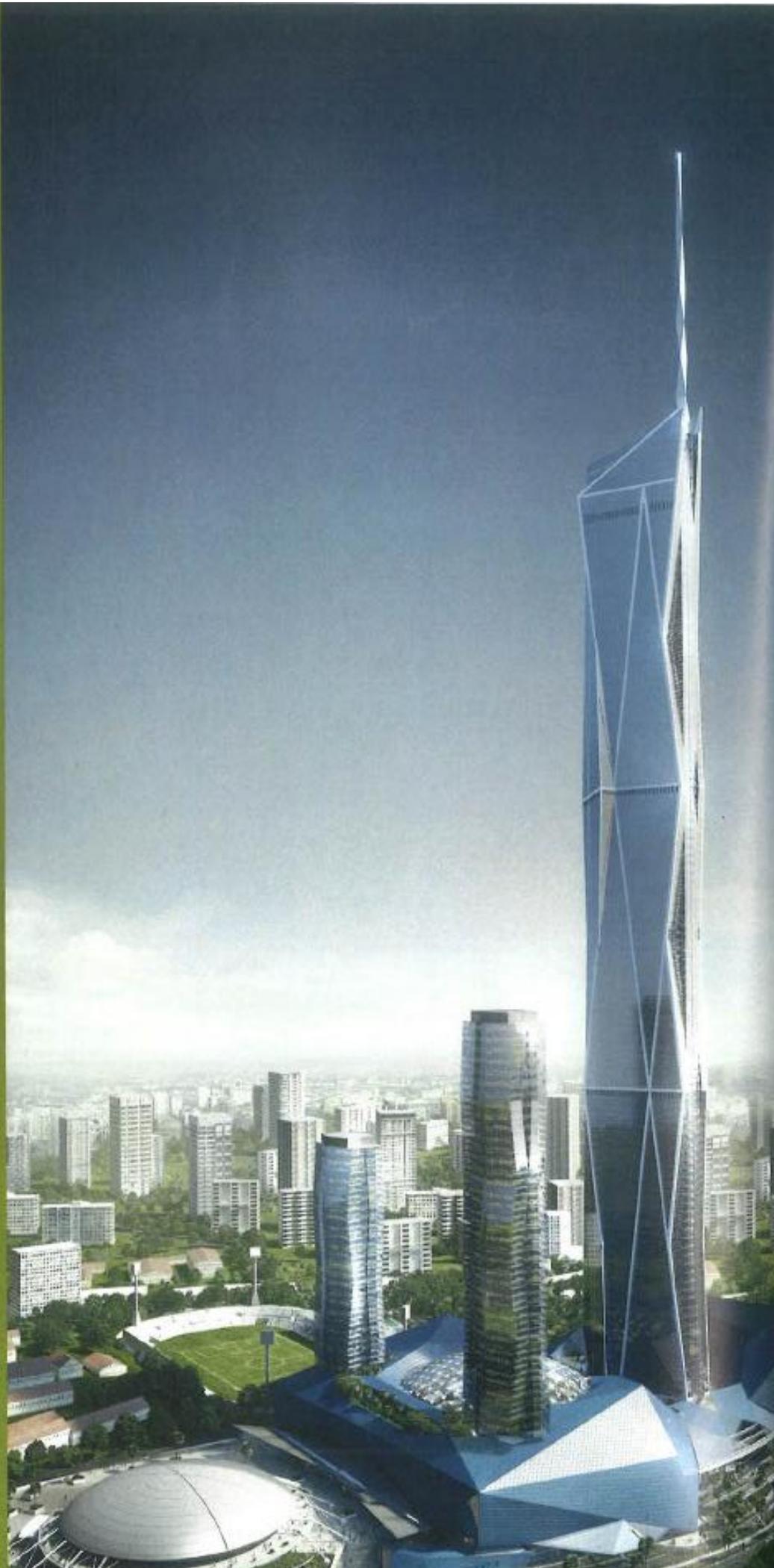
Structural Engineers: LERA Consulting Structural
Engineers (design); Robert Bird Group (design);
Arup (eng. of record)

MEP Engineers: Lehr Consultants International
(design); KTA Tenaga Sdn Bhd (eng. of record)

Project Manager: Turner International LLC

Contractors: UEM Builders Berhad; Samsung C&T
Corporation

Other CTBUH Member Consultants: Arup (civil);



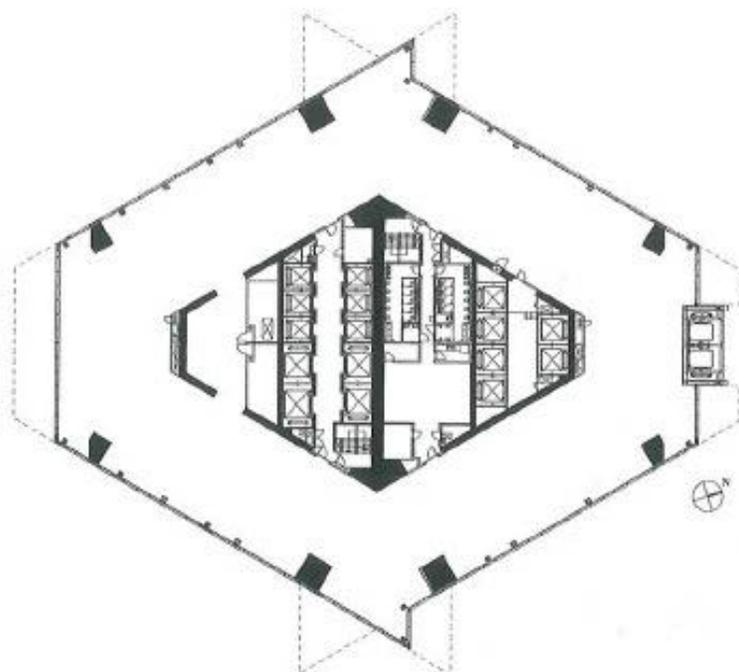


679
meters

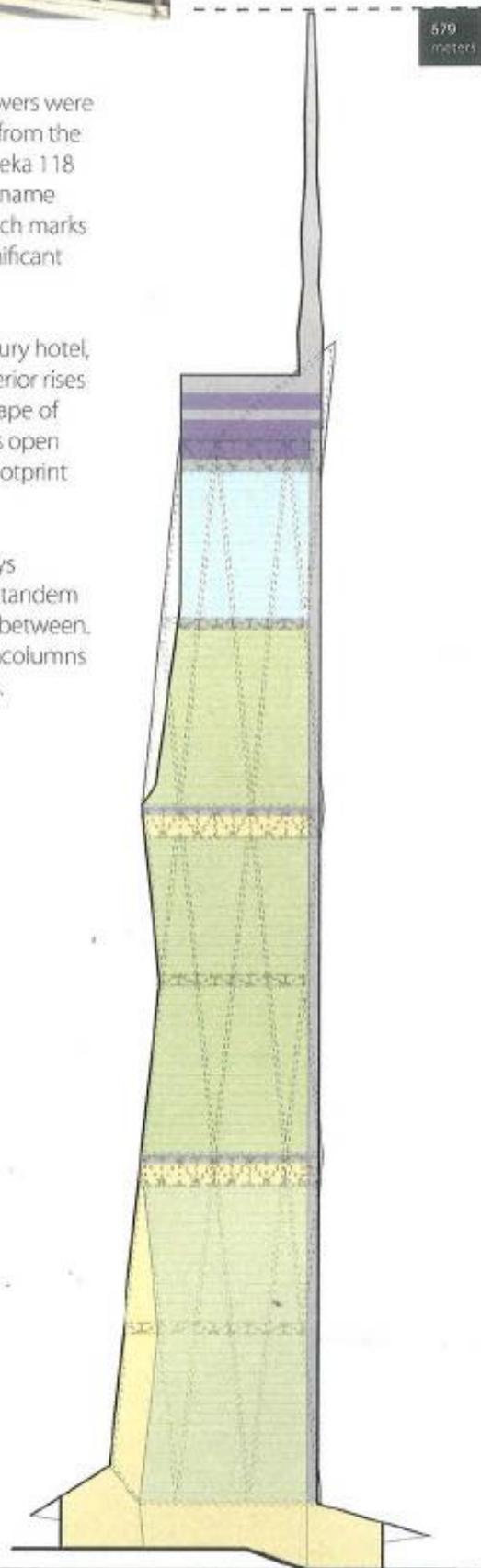
Kuala Lumpur's skyline has long hosted some of the world's tallest buildings; its Petronas Towers were among the world's three tallest buildings from 1998 to 2010. Merdeka 118 rises 679 meters from the city's center, once again galvanizing the Malaysian capital's reputation. At completion, Merdeka 118 eclipsed the 632-meter Shanghai Tower and claimed the title of "world's second tallest." The name Merdeka, or "independence" in Malay, is shared with the neighboring Stadium Merdeka, which marks the site where Malaysian independence was declared in 1957. As such, this tower holds significant cultural meaning and affirms Malaysia's place in modern development.

Its namesake 118 floors are primarily occupied by office space, and topped by a 17-floor luxury hotel, a restaurant, a VIP space, and "The View at 118," a public observation deck. The mirrorlike exterior rises from a ground-level retail center and proceeds skyward, its faceted façade recalling the shape of a gemstone. The podium conjoins with the "Merdeka Boulevard at 118" park, which contains open green space and connections to nearby public transit options. Surrounding the building's footprint are three high-end residential towers.

The tower's structure is constructed primarily of concrete with steel members. It also employs concrete shear walls, megacolumns, and steel outriggers. These structural elements work in tandem allowing the tower to transition from core to façade, with steel members bridging the gaps between. Due to the high import cost of steel, construction focused on using majority concrete megacolumns and walls. A significant cost reduction was realized by eliminating steel from these elements.



Typical Office Plan



- Observatory
- Hotel
- Office
- Support Facilities (Atrium & Sky Lobbies)

Above: Merdeka 118's bright, 15-meter canopy gives way to the tower's main entrance (left); A cascading waterfall anchors the 30-meter-high atrium lobby (right).

Next Page: Merdeka 118 site plan (left); view overlooking skyline (right).

Merdeka 118 Site Plan

