**Burj Khalifa**

Burj Khalifa (“Khalifa Tower”), known during [construction](https://www.britannica.com/technology/construction) as Burj Dubai, was officially named to honour the leader of the neighbouring emirate of [Abu Dhabi](https://www.britannica.com/place/Abu-Dhabi-emirate), Sheikh [Khalifa ibn Zayed Al Nahyan](https://www.britannica.com/biography/Sheikh-Khalifa-ibn-Zayid-Al-Nahyan). Although the tower was formally opened on January 4, 2010, the entirety of the interior was not complete at that time. Built to house a variety of commercial, residential, and hospitality ventures, the tower—whose intended height remained a closely guarded secret throughout its construction—reached completion at 162 floors and a height of 2,717 feet (828 metres). It was designed by the Chicago-based architectural firm of Skidmore, Owings & Merrill. Adrian Smith served as architect, and William F. Baker served as structural engineer.

The building, [modular](https://www.britannica.com/dictionary/modular) in plan, is laid out on a three-lobed footprint that is an abstract rendering of the local *Hymenocallis* flower. The Y-shaped plan plays a central role in the reduction of wind forces on the tower. A hexagonal central core is buttressed by a series of wings, each with its own concrete core and perimeter columns. As the tower increases in height, the wings step back in a spiral configuration, changing the building’s shape at each tier and so reducing the effect of the wind on the building. The central core emerges at the tower’s top and is finished with a [spire](https://www.britannica.com/technology/spire), which reaches more than 700 feet (200 metres). The spire was constructed inside the tower and hoisted to its final position using a hydraulic pump. At the foundational level, the tower is supported by a [reinforced concrete](https://www.britannica.com/technology/reinforced-concrete) mat nearly 13 feet (4 metres) thick, itself supported by concrete piles 5 feet (1.5 metres) in [diameter](https://www.britannica.com/dictionary/diameter). A three-story [podium](https://www.britannica.com/technology/podium) anchors the tower in place; the podium and two-story basement alone measure some 2,000,000 square feet (186,000 square metres) in their own right. The tower’s exterior cladding is made up of aluminum and stainless-steel panels, vertical stainless-steel tubular fins, and more than 28,000 hand-cut glass panels. A public observation deck, called “At the Top,” is located on the 124th floor.

**skyscraper**, a very tall multistoried building. The name first came into use during the 1880s, shortly after the first skyscrapers were built, in the [United States](https://www.britannica.com/place/United-States). The development of skyscrapers came as a result of the coincidence of several technological and social developments. The [term](https://www.britannica.com/technology/term-architecture-and-sculpture) skyscraper originally applied to buildings of 10 to 20 stories, but by the late 20th century the term was used to describe high-rise buildings of unusual height, generally greater than 40 or 50 stories

The increase in urban [commerce](https://www.britannica.com/dictionary/commerce) in the United States in the second half of the 19th century augmented the need for city business space, and the installation of the first safe passenger [elevator](https://www.britannica.com/technology/elevator-vertical-transport) (in the Haughwout Department Store, New York City) in 1857 made practical the erection of buildings more than four or five stories tall. Although the earliest skyscrapers rested on extremely thick [masonry](https://www.britannica.com/technology/masonry) walls at the ground level, architects soon turned to the use of a cast-[iron](https://www.britannica.com/science/iron-chemical-element) and wrought-iron framework to support the weight of the upper floors, allowing for more [floor](https://www.britannica.com/technology/floor) space on the lower stories. [James Bogardus](https://www.britannica.com/biography/James-Bogardus) built the Cast Iron Building (1848, New York City) with a rigid frame of iron providing the main support for upper-floor and [roof](https://www.britannica.com/technology/roof) loads.

The design and decoration of skyscrapers have passed through several stages. Jenney and his protégé [Louis Sullivan](https://www.britannica.com/biography/Louis-Sullivan) styled their buildings to accentuate verticality, with [delineated](https://www.merriam-webster.com/dictionary/delineated) columns rising from base to cornice. There was, however, some retention of, and regression to, earlier styles as well. As part of the [Neoclassical](https://www.britannica.com/art/Neoclassical-architecture) revival, for instance, skyscrapers such as those designed by the firm of [McKim, Mead, and White](https://www.britannica.com/topic/McKim-Mead-and-White) were modeled after Classical Greek columns. The Metropolitan Life Insurance Building in [New York City](https://www.britannica.com/place/New-York-City) (1909) was modeled by Napoleon Le Brun after the Campanile of St. Mark’s in Venice, and the [Woolworth Building](https://www.britannica.com/place/Woolworth-Building) (1913), by [Cass Gilbert](https://www.britannica.com/biography/Cass-Gilbert), is a prime example of neo-Gothic decoration. Even the [Art Deco](https://www.britannica.com/art/Art-Deco) carvings on such towers as the [Chrysler Building](https://www.britannica.com/topic/Chrysler-Building) (1930), the [Empire State Building](https://www.britannica.com/topic/Empire-State-Building) (1931), and the RCA Building (1931) in New York City, which were then considered as modern as the new [technology](https://www.britannica.com/technology/technology), are now viewed as more related to the old ornate decorations than to truly modern lines.

# Facts about the Burj Khalifa

The Burj Khalifa height is a staggering 828 meters (2716.5 feet) tall, soaring over Dubai. It’s three times as tall as the Eiffel Tower and nearly twice as tall as the Empire State Building. Laid end to end, its pieces stretch over a quarter of the way around the world. It’s cloud-piercing height is certainly one of the most impressive facts about Bruj Khalifa.

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 One of the most mind blowing Burj Khalifa facts is how much the materials weigh. To put things in to perspective, the weight of the concrete is equivalent to 100,000 elephants. The total weight of aluminum used on the Burj Khalifa is equivalent to that of five A380 aircraft.

Burj Khalifa fun facts that you can truly applaud are its sustainability and reuse of resources. Every year 15 million gallons of water are collected sustainably. The water is used for irrigation to water the landscaping and plants, for the cooling system and to supply the Dubai Fountain.

 Some Burj Khalifa trivia about the elevators: the building has the longest single running elevator, which is 140 floors. The Burj Khalifa elevator speed is 10 meters per second, making the elevators among the fastest in the world. The Burj Khalifa elevator time to reach the observation deck on the 124th floor is only one minute.

Of course, you can’t leave out how the materials and man hours measure up when talking about interesting facts about the Burj Khalifa. It took more than 110,000 tons of concrete, 55,000 tons of steel rebar, and 22 million man-hours to complete the Burj Khalifa.

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| **Burj Khalifa** |
| برج خليفة |
| Viewed across [The Dubai Fountain](https://en.wikipedia.org/wiki/The_Dubai_Fountain) |
| [Wikimedia](https://foundation.wikimedia.org/wiki/Maps_Terms_of_Use) | © [OpenStreetMap](https://www.openstreetmap.org/copyright) |
| **Record height** |
| Tallest in the world since 2009[[I]](https://en.wikipedia.org/wiki/Burj_Khalifa#endnote_talleststatus) |
| **Preceded by** | [Taipei 101](https://en.wikipedia.org/wiki/Taipei_101) |
| **General information** |
| **Status** | Completed |
| **Type** | Mixed-use |
| **Architectural style** | [Neo-futurism](https://en.wikipedia.org/wiki/Neo-futurism) |
| **Location** | [Dubai](https://en.wikipedia.org/wiki/Dubai) |
| **Address** | 1 Sheikh Mohammed bin Rashid Boulevard |
| **Country** | [United Arab Emirates](https://en.wikipedia.org/wiki/United_Arab_Emirates) |
| **Named for** | [Sheikh Khalifa](https://en.wikipedia.org/wiki/Khalifa_bin_Zayed_Al_Nahyan) |
| **Construction started** | 6 January 2004 |
| **Topped-out** | 17 January 2009 |
| **Completed** | 1 October 2009 |
| **Opened** | 4 January 2010 |
| **Cost** | US$1.5 billion |
| **Owner** | [Emaar Properties](https://en.wikipedia.org/wiki/Emaar_Properties) |
| **Height** |
| **Architectural** | 828 m (2,717 ft) |
| **Tip** | 829.8 m (2,722 ft) |
| **Antenna spire** | 244 m (801 ft) |
| **Top floor** | 585.4 m (1,921 ft) |
| **Observatory** | 555.7 m (1,823 ft) |
| **Technical details** |
| **Structural system** | Reinforced concrete, steel, and aluminium |
| **Floor count** | [154 + 9 maintenance](https://en.wikipedia.org/wiki/Burj_Khalifa#Floor_plans) |
| **Floor area** | 309,473 m2 (3,331,100 sq ft) |
| **Lifts/elevators** | 57 |