

To Build the Tallest



For almost 4 000 years, the Great Pyramid of Egypt held the record for the world's tallest building, standing in a 140 meters high.

Then in the 14th century, a small town in Britain finally built something taller, a very different kind of structure. Instead of a massive pile of stone like a pyramid, medieval builders removed as much stone as they dared. Effectively they created a stone skeleton to support the cathedral. They designed an innovative network of pointed arches and ribbed vaults that channeled the great weight of the building through its stone columns, allowing it to reach higher than ever.

What made it taller than the Great Pyramid, were the three enormous spires standing on top of the cathedral. The tallest standing at 18 meters high doubled the height of the main building and rewrote the record books. The spires stood for over 2 centuries before collapsing with a storm. With them, Lincoln Cathedral was 14 meters taller than the Great Pyramid.

To build higher than that required a revolutionary new building material: steel.

Inspired by engineering from the Industrial Revolution, the Eiffel Tower was almost twice the height of Lincoln Cathedral. In 1930, New York's Chrysler building was the first world's tallest to use a steel skeleton. Just one year later, the mighty Empire State Building used a new construction method to go even higher.

The next major breakthrough came in 1972 with New York's slick and very tall World Trade Center. Soon after, Chicago's even taller, Sears Tower. Glass walls fixed to a completely steeled structure made these buildings light. Later, the Petronas Towers in Kuala Lumpur used steel and glass over an outside frame of concrete built around a central concrete core. All this reinforced concrete provided the strength and the shape. Skyscrapers no longer needed to be box-like. They had become sculpture. Taipei 101 was the first building to reach half a kilometer high.

It was and is still hard to imagine going any higher.

Yet ...

Adapted from <https://www.edutheque.fr/espace-partenaire/bbc/affichage-ressources/video/to-build-the-tallest.html>

Note importante : Transcript mis à disposition par la ressource BBC sur la plateforme Edutheque, consulter les [conditions générales d'utilisation](#)

**- SUPPORT D'ENTRAÎNEMENT -
NE PAS UTILISER CE DOCUMENT À L'ÉPREUVE DE LANGUE EN CCF**