

# World's tallest building opens

The \$4 billion, 160-storey *Burj Dubai* towers 818 metres above Dubai city and became the world's tallest building when it overtook the *Taipei 101* in July 2007

124th floor  
Observation platform

54 Otis  
elevators  
travelling  
at up to  
10 m/s

Cooling  
system  
sufficient  
to create  
12,750  
tonnes  
of ice  
each day

Armani  
Hotel

700  
private  
apartments

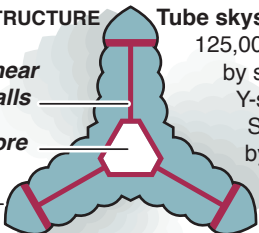
Corporate  
offices and  
suites

Spire  
Visible  
from 95km  
away

## STRUCTURE

**Shear  
walls**

**Core**



**Tube skyscraper:** Giant tube with 125,000 openings – supported by shear wall **buttresses** in Y-shaped clockwise spiral. Structure locked together by hexagonal core, which stops building from twisting in wind

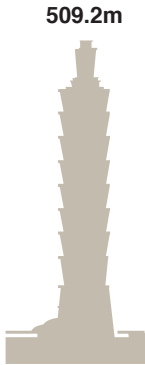
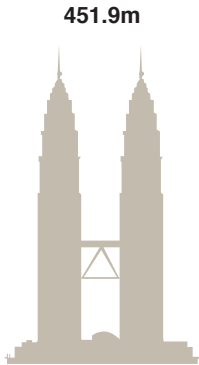
**Cladding:** 24,348 panels over total wall area of 132,190sq m, including 103,000sq m of reflective double-glazing and 15,500sq m of stainless steel

## WORLD'S TALLEST BUILDINGS (to architectural top)

442m

451.9m

509.2m



1973

Willis (Sears) Tower  
Chicago

1998

Petronas Towers  
Malaysia

2004

Taipei 101  
Taiwan

**Foundations:** 192 piles to depths of 50 metres and 10,000-tonne foundation slab requiring over 45,000 cubic metres of concrete

Sources: Emaar Properties, Openshaw Properties, Skidmore, Owings and Merrill

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