

# TEN OF THE GREATEST ENGINEERING FEATS

The curiosity and vision of the world's engineers has resulted in some of the finest and most impressive accomplishments of engineering and construction skill. Here at Kingsbridge, we have a real appreciation for the fine work that engineers do so we've put our heads together and compiled a list of some of the most astounding engineering triumphs the world has to offer.



## BUILD TIME & COST COMPARISON

The pie charts below compare build time and build cost for each of the ten engineering projects.



TIME TO BUILD



COST

- **The New Valley Project**  
23 years and \$90 billion
- **The Millau Viaduct**  
3 years and \$524 million
- **The Grand Canyon Skywalk**  
2 years and \$30 million
- **The Panama Canal**  
34 years and \$375 million
- **The Palm Islands**  
14 years and \$12.3 billion
- **The Channel Tunnel**  
6 years and \$15 billion
- **The Trans-Siberian Rail Road**  
10 years and \$770 million
- **The Itaipu Dam**  
10 years and \$19.6 billion
- **The The Burj Khalifa**  
5 years and \$1.5 billion
- **The Bailong Elevator**  
3 years and \$19 million

## SOURCES

- <http://www.cnn.com/2013/07/04/travel/engineering-feats/>
- <http://www.roughguides.com/gallery/amazing-engineering/#/0>
- [http://www.encyclopedia.com/topic/Trans-Siberian\\_Railroad.aspx](http://www.encyclopedia.com/topic/Trans-Siberian_Railroad.aspx)
- [http://en.wikipedia.org/wiki/Itaipu\\_Dam](http://en.wikipedia.org/wiki/Itaipu_Dam)
- <http://www.skyscrapercity.com/showthread.php?t=1207213>



THE NEW VALLEY PROJECT

Egypt

### INTERESTING FACT

Currently under construction, the New Valley Project is a system of canals **designed to carry water** from Lake Nasser in Southern Egypt to areas of the Sahara Desert.



THE BAILONG ELEVATOR

Zhangjiajie, China

### INTERESTING FACT

This **330 metre high** glass elevator is built into the side of a massive cliff in the Wulingyuan area of Zhangjiajie, China and was **designated as a World Heritage Site** in 2002.



THE MILLAU VIADUCT

Millau, France

### INTERESTING FACT

Generally considered one of the most impressive feats of engineering of all time, the viaduct is the tallest road bridge in the world. Measuring in at **886 feet**, it's **taller than the Eiffel Tower**.



THE BURJ KHALIFA

Dubai, United Arab Emirates

### INTERESTING FACT

Standing at an incredible **828 metres tall**, the Burj Khalifa is both the tallest building and the **tallest freestanding structure in the world**.



THE GRAND CANYON SKYWALK

Arizona, United States

### INTERESTING FACT

Completed in 2007, the Grand Canyon Skywalk **can support 71 million pounds** – that's the equivalent of 71 Boeing 747s at full capacity!



THE ITAIPU DAM

Brazil & Paraguay

### INTERESTING FACT

Itaipu Dam is the world's largest operating hydroelectric facility and it took **40,000 workers 10 years** to build it!



THE PANAMA CANAL

Panama, Central America

### INTERESTING FACT

Connecting the Pacific and Atlantic oceans, the Panama Canal took **34 years to construct** until its opening in 1914.



THE TRANS-SIBERIAN RAIL ROAD

Eastern Russia, China, Mongolia & Japan

### INTERESTING FACT

The railway runs through **8 time zones** and connects an incredible **87 towns and cities!**



THE PALM ISLANDS

Dubai, United Arab Emirates

### INTERESTING FACT

The Palm Islands sit just off the coast of Dubai and form the **largest man-made archipelago in the world!**



THE CHANNEL TUNNEL

Connecting Folkestone, UK with Calais, France

### INTERESTING FACT

First proposed in 1802, but started in 1988, The Channel Tunnel is the **world's longest stretch of underwater tunnel**, and **cost £9.5 billion** to complete.