

Sydney Harbour Bridge

What is the Sydney Harbour Bridge?

The Sydney Harbour Bridge is a major landmark and tourist attraction found in Sydney, Australia. It is the world's largest, but not the longest, steel arch bridge. It connects the southern and northern shores of the Sydney Harbour. The bridge is also known as "The Coathanger" because of its arch-based construction.

Did you know...?

Its total length is 1149 metres.

Its arch span is 503 metres.

The top arch is 134 metres above sea level.

It contains 6 million hand-driven rivets.

The total steelwork weighs 52,800 tonnes, with 39,000 tonnes in the arch.

It contains eight vehicle lanes, two train lines, a footway and a cycleway.

History of the Sydney Harbour Bridge

A bridge across the Sydney Harbour to connect the southern and northern shores had been proposed by many people since 1815, however it was not until 1922 that the New South Wales government began to think about this project seriously. The New South Wales government received around twenty proposals from six companies. The winning company was the English firm Dorman Long and Company of Middlesbrough and the design of the bridge was prepared by Dr. John Bradfield, who was the head engineer. The road surface on the bridge is named the Bradfield Highway after him. He is also regarded as the 'father' of the bridge as it was his vision and engineering expertise that allowed this dream to become a reality.

Did you know...?

BridgeClimb started in 1998. This allows tourists and locals to climb the bridge using catwalks, ladders and stairs to admire the spectacular views of Sydney Harbour and the city.

Did you know...? At the time, the final cost of the bridge was £10 057 170, 7 shillings and 9 pence. In total, that would equal approximately \$500 million.

What happened before the Sydney Harbour Bridge was built?

Before any work on the bridge could begin, the engineers had to come up with a way of letting the steel arch expand and contract. On hot days, steel expands (gets bigger) and on cold days, steel contracts (gets smaller). The engineers came up with a solution and installed two extremely large hinges on both ends of the bridge that allow it to move, without the arch collapsing in on itself.



Did you know...?

The top of the arch rises and falls about 180mm due to changes in the temperature.

Timeline of Construction

1925: Work on both ends of the bridge began. It occurred at Dawes Point in the south and McMahon's Point in the north.

1929: The building of the arch was underway. Large cranes were used to lift the large steel sections of the arch into place. These were held together by rivets.

1930: The two halves of the arch finally met on 20th August.

1931: The building of the road deck began. The cranes were once again used to hoist the hangers (vertical pieces of steel that connect the arch and the road deck) and the platforms that formed the road deck. The bridge went through a series of tests to make sure that it was structurally sound and safe. It was test-loaded by using up to 96 steam locomotives placed in various locations and arrangements.

1932- After six years of construction, the Sydney Harbour Bridge was opened on the 19th March by Premier Jack Lang.