

Cantilever Bridges

What Is a Cantilever Bridge?

A cantilever bridge uses cantilevers to create an area for people or vehicles to travel on.

A cantilever is something that sticks out to the side, while being supported by something else. Imagine that your body is the support for your arm and put your arm out to the side. In this case, your arm is being a cantilever. Usually, two cantilevers meet in the middle to create a bridge. Imagine a diving board, with one side attached firmly to let a person stand at the other end. This is a cantilever.

Famous Cantilever Bridges

The Forth Bridge, near Edinburgh, was the world's first large steel structure. It first opened in 1890 and measured a total of 2467 metres!



The Pont De Quebec Bridge in Canada is now the world's longest cantilever bridge. It allows people and vehicles, including trains, to cross. It took around 30 years to build.



Did You Know...?

Cantilever bridges are often used to cross over areas of water. Sometimes, these areas of water are too long for the cantilever arms to cover. In this situation, an extra bridge can be added in between the two arms. It usually has supporting beams and is known as a beam or a truss bridge.

More Cantilever Facts

The first cantilever bridge was built in 1867 by Heinrich Gerber. He wished to create a bridge long enough to cross larger distances such as the Main River in Germany. He was able to create a structure which had arms that met in the middle of the Main River, allowing it to be crossed. Compared to today's cantilever bridges, Gerber's was basic and small but this design allowed more complex and larger structures to be built. It was innovative and new, making Gerber a famous name in the engineering of bridges.

