

Suspension Bridges

A suspension bridge uses ropes, or cables to suspend or hand the deck of the bridge. On the simplest suspension bridge, the deck is

PROS

- * can span farther than any other bridge design
- * easy to build – few parts
- * low maintenance
- * earthquake resistant

CONS

- susceptible to harmonic resonance
 - wind can build up a harmonic pattern as was the Tacoma Narrow Bridge collapse.
- * flexible so no train rails
- * time consuming to build
- * earthquake resistant
- * requires towers or a tie downs for the cables
- * high tension forces at the cable connections

