

# DESIGN OF STEEL CABLE – STAYED PEDESTRIAN BRIDGE

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## ABSTRACT

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When there is a population, demands on infrastructure are exist. Pedestrian bridges act as a convenience part for pedestrian to cross over a road or even a river.

Bridge structure exists in several types: simply-supported, suspension, arch and cable-stayed is the examples. I'd design the cable-stayed structure for my project work.

The full span of the structure is 45.0 meter, which is sufficient to cross over a 6 lane motorway. The structural cable is designed to carry the structural load and transfer it to the column and foundation. It is to in prevent the deflection of the floor beam. Since there is no column designed at the mid-span to support the load. The cable is then “locked” using a device called “anchorage bearing block”.

Structural steelwork preferable some particular design due to the speed of prefabrication and so-site construction work. The connection of the structural member is done by using weld bolt connection.