

# GUIDELINES FOR THE DESIGN OF



# CABLE-STAYED BRIDGES



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# GUIDELINES FOR THE DESIGN OF CABLE-STAYED BRIDGES

These guidelines are reported by  
the ASCE Committee on Cable-Stayed Bridges:

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## ABSTRACT

Loadings and materials used for design of cable-stayed bridges are discussed. The effects of highway and railroad loadings and their special considerations, seismic effects, and dynamic wind load effects are thoroughly presented and guidelines for design given. A chapter on stability of cable-stayed bridges, as well as cable materials, their testing, strength, fatigue strength, and behavior of anchorages is included.

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## INTRODUCTION

These guidelines are intended for the design of cable-stayed bridges.

They are intended as performance specifications to be used with any national code.

However, national codes for live loads and other important provisions differ. Yet safety level depends on all loads and resistance parameters. Therefore, a more complex treatment of the design requirements may be required under certain conditions.

The guidelines in these papers are the best estimates by the ASCE Committee on Cable Suspended Bridges. They have been developed based on current practice and the latest thinking for this type of bridges. Equations given in SI-UNITS with equations in parenthesis in English Units.



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