

IS 800 : 2007 Code of Practice for General Construction in Steel (Third Revision)

IS 800, Indian Standard Code of practice for general construction in steel is the basic standard that provide guidelines for structural design in steel and has influence on many other codes and recommendations governing the design of various other types of special steel structures. IS 800 is one of the most widely used standard by professionals, students and faculty of civil engineering.

The standard was first published in the year 1956 and subsequently revised in the years, 1962 and 1984. In order to update the standard and thereby incorporate provisions of the latest practices in the field, the revision of the standard was taken up under Structural Engineering and Structural Sections Sectional Committee, CED 7. A large number of academic, research, design and contracting organizations and technical experts were involved in the revision process. Considerations were given to the developments taking place in the country and abroad in the steel sector. Necessary modifications have been incorporated in accordance with the latest design methodology to make the standard more useful. The most significant aspect of the present revision is that the standard is now based on the Limit State Method of design, thereby reflecting the latest technological developments and the state-of-the-art in the field. The implementation of IS 800:2007 is expected to improve the safety, reliability and efficiency of steel structures. The standard would also significantly contribute in rational, economic and efficient utilization of steel in the country.

The standard consists of the following sections:

- Section 1 - General design requirements
- Section 2 - Materials
- Section 3 - General design requirements
- Section 4 - Methods of structural analysis
- Section 5 - Limit state design
- Section 6 - Design of tension members
- Section 7 - Design of compression members
- Section 8 - Design of members subjected to bending
- Section 9 - Members subjected to combined forces
- Section 10 - Connections
- Section 11 - Working stress design
- Section 12 - Design and detailing for earthquake loads
- Section 13 - Fatigue
- Section 14 - Design assisted by testing
- Section 15 - Durability
- Section 16 - Fire resistance
- Section 17 - Fabrication & erection