



## **IS 808 : 2021 Hot Rolled Steel Beam, Column, Channel and Angle Sections — Dimensions and Properties (fourth revision)**

IS 808 : 2021, defines **hot-rolled steel beam, column, channel and angle sections**. These are structural steel components used in construction and other applications.

These sections should have **precise dimensions, consistent material strength, and predictable sectional properties**, such as area, moment of inertia, and radii of gyration. These parameters are essential for ensuring the structural integrity and safety of the final product. IS 808 : 2021 addresses these expectations by providing:

- **Classifications:** The standard classifies these sections based on their shape and intended use, including beams, columns, channels, angles, and bearing piles.
- **Designation:** It establishes a clear system for designating each section based on its dimensions and type, facilitating easy identification and ordering.
- **Dimensions, Mass, and Tolerances:** The standard specifies nominal dimensions and mass for various sections, along with permissible tolerances. This ensures dimensional accuracy and consistency.
- **Steel Grades:** It references IS 2062, which specifies the material strength requirements for the steel used in these sections. This ensures the sections possess the required strength and durability.
- **Sectional Properties:** IS 808 : 2021 provides tables listing the sectional properties for each standardized section. This allows designers to accurately predict the structural behaviour of the sections.
- **Formulae for Customized Sections:** The standard includes formulae in its annexes that enable the calculation of geometrical sectional properties for customized sections, catering to specific design requirements.

By providing these detailed specifications, IS 808:2021 helps ensure the production and use of high-quality hot-rolled steel sections, meeting the critical expectations of consumers for accuracy, strength, and predictable structural performance