



## IS 16732: 2019 Galvanized Structural Steel – Specification

**Galvanized structural steel** is coated with a layer of zinc to protect it from corrosion. It is beneficial to use galvanized structural steel where strength and anti-corrosion properties are equally required. The zinc coating acts as a barrier, preventing moisture and oxygen from reaching the steel surface, which would otherwise lead to rusting and degradation. This steel is suitable for welded, bolted and riveted structures which is used in variety of applications like construction and outdoor applications including transmission line towers where durability and resistance to weathering and rust are essential.

The quality of a good quality structural steel is determined by a range of parameters like **corrosion resistance, durability, strength and surface quality**.

Indian Standard **IS 16732: 2019**, specifies requirements for steel including micro alloyed steel plates, strips, shapes and sections (angles, tees, beams, channels, etc), flats, bars, etc, for use as hot dip galvanized structural. IS 16732 includes steel in nine grades ranging from **EG250 to EG650**, which correspond to different levels of chemical composition, tensile strength and yield stress. Within each grade, there are different qualities (A, BR, B0, C) specifying the requirement of mode of de-oxidation.

The standard provides requirements for chemical composition, tensile test, bend test and impact test to determine the strength and ductile property of the material. The dimensional test and freedom from defect test ensures the surface quality of material. The galvanizing test specifies the thickness and uniformity of zinc coating. This test helps in determining the corrosion resistant property of the material. The marking and packaging requirement help customers to procure genuine product. Thus, IS 16732:2019 provides assurance that the galvanized structural steel that is being bought is durable, corrosion resistant and of high quality.

The product is covered under the mandatory certification by virtue of which galvanised structural steel sold, manufactured, or imported in India must comply with IS 16732 and the BIS Standard Mark is displayed, ensuring high-quality, galvanized structural steel being used for Indian infrastructure projects. IS 16732 provides assurance that the galvanized structural steel that is being bought is safe, durable, and of high quality. Next time you purchase, look for the BIS mark to ensure that product meet these standards, giving you satisfaction that the product fulfils the quality for which cost is being paid.