



## **IS 15833:2009 STAINLESS STEEL TOWER BOLTS**

Tower bolts provides a secure and efficient way to **latch doors, window, cabinets, gates**, and other fixtures to enhance security. The Indian Standard, IS 15833:2009, establishes the specifications for **barrel-type** tower bolts constructed from **stainless steel**. The standard addresses various aspects of these bolts, including **dimensions, material** composition, **manufacturing techniques, finishing**, marking, and packaging. It places particular emphasis on using **corrosion-resistant stainless steel**, ensuring the bolts' suitability for environments with **high humidity**, such as coastal areas.

Consumers anticipate that stainless steel tower bolts will exhibit several crucial quality attributes:

- **Durability:** The bolts should be robust enough to endure repeated use and resist wear and tear without bending or breaking.
- **Corrosion Resistance:** A key expectation, especially in humid environments, is the ability of the bolts to withstand corrosion and maintain their functionality and appearance over time.
- **Smooth Operation:** The bolts should operate smoothly and effortlessly, providing ease of use when engaging and disengaging the locking mechanism.
- **Aesthetics:** While primarily functional, the bolts should also have a visually appealing finish. A polished, smooth surface enhances their aesthetic appeal and complements the overall design of the door or window.

The standard directly addresses these expectations by outlining **specific material** requirements and **manufacturing** guidelines. It mandates the use of stainless steel grades known for their **strength** and **corrosion resistance**, such as X07Cr18Ni9 or X10Cr17Mn6 Ni4 N20 of **IS 6911** for sheets and X04Cr13 or X12Cr13 or X04Cr18Ni10 or X07Cr18Ni9 of **IS 6527** for bolts. The manufacturing process emphasizes **precision**, requiring bolts to be well-made, free from defects, and **finished** to the correct **shape** for smooth **operation**. The requirement for countersunk screw holes in bolts made from thicker sheets further enhances their functionality and aesthetic appeal by allowing for flush mounting of screws. The standard also specifies a polished bright finish for the bolts, contributing to their **visual appeal**. Finally, provisions for marking and packaging ensure product traceability and protection during transport.