Bureau of Indian Standards

IS 281: 2009 - Specification for Mild Steel Sliding Door Bolts for Use with Padlocks

Sliding door bolts are essential locking mechanisms widely used in building construction to **secure doors, gates**, and similar structures with **padlocks**. Their robust construction and ease of use make them popular in residential, commercial, and industrial applications where **durability and security** are required.

When purchasing these bolts, key concerns include **size**, **material strength**, **ease of operation**, and **durability**. You want the bolt to be **sturdy**, **corrosion-resistant**, and capable of **smooth sliding** to ensure it functions reliably over time. Additionally, the **finish** matters, as you want the bolt to resist **rust** and look good.

This Indian Standard **IS 281: 2009** specifies the requirements for such mild steel sliding door bolts. The standard covers **two main types: plate type and clip/bolt type**, with size options ranging from 150 mm to 450 mm. The sliding door bolts are required to be made from **robust materials** like mild steel sheets and rods, conforming to specific grades per IS 1079, IS 513, and IS 2062, and should pass prescribed **bend and tensile tests** to ensure durability and performance under stress.

Dimensional specifications are provided to ensure standardized **length, thickness, and fit** for both types. Design features such as **smooth sliding action**, **countersunk screw holes**, and **rounded edges** are mandated to avoid **sharp or harmful defects**. **Surface finishes**, including stove enamel, copper oxidizing, nickel, or chromium plating, are recommended for **corrosion resistance**, as per IS 1378 and IS 1068. **Safety mechanisms**, such as **securely riveted parts**, keep the locking mechanism safe from tampering.

Manufacturing processes ensure that parts like hasps and staples are firmly riveted or constructed to prevent slippage. Each bolt must be marked with the manufacturer's name or trademark.