

## Summary of IS 4948: Welded Steel Wire Fabric for General Use

IS 4948:2020 specifies the requirements for **welded steel wire fabric** used in general applications such as **fencing, window grills, and crates**. This Indian Standard ensures that the fabric meets stringent quality, durability, and performance expectations. It defines the product as a material composed of **mild or stainless steel wires**, arranged at right angles and welded at intersections using electric welding techniques.

The standard mandates the use of high-quality raw materials, requiring mild steel wires to conform to **IS 280** and stainless steel wires to grade X04 Cr17 Ni12 Mo2 or X04 Cr18 Ni10 of IS 6528, ensuring **strength**. To maintain uniformity and precision, it specifies tolerances of  $\pm 5\%$  for mesh size and  $\pm 1\%$  or 25 mm for sheet or roll dimensions.

IS 4948 also outlines rigorous testing requirements, such as **weld shear strength tests** with a minimum average value of **21 kg/mm<sup>2</sup>**, performed at regular intervals to ensure robust connections at all intersections. It further addresses **anti-corrosion treatments**, including **galvanizing, painting, and phosphating**, based on consumer needs.

The standard ensures that manufacturers provide clear marking and labeling for easy identification of product details, such as mesh size, wire diameter, Width, and length of the welded steel wire fabric. This transparency promotes trust and reliability for consumers.

By adhering to IS 4948, manufacturers produce welded steel wire fabric that meets **safety, durability, and performance standards**, aligning with consumer and industrial expectations.