



## IS 3480:2024 – Flexible Steel Conduits for Electrical Wiring(*First Revision*)

**Flexible steel conduits** used in electrical wiring are designed to protect and route electrical cables in areas where rigid conduit systems are impractical or where flexibility is required, such as in machinery, industrial equipment, or areas subject to movement or vibration.

The flexible steel conduit is typically made of **galvanized steel strips** wound in a spiral or interlocked form, providing strength, flexibility, and mechanical protection to the electrical wiring inside.

Customers expect the flexible steel conduits to be able to adapt to **different installation angles** and spaces without damage, provide **robust protection** to the electrical cables from mechanical damage, abrasion, and external impacts, ensuring **long-term performance**, be resistant to corrosion from exposure to moisture, chemicals, and other environmental factors, should not interfere with the electrical circuits and maintain electrical continuity to ground in case of faults and should provide long-lasting protection, resisting wear and tear under normal operating conditions.

**IS 3480:2024** defines the specifications for **flexible steel conduits** that offer **protection, flexibility, and durability** for electrical wiring in a wide range of environments. By setting material, design, performance, and safety requirements, the Indian Standard ensures that the conduits meet the **quality expectations** of customers. The standard addresses critical aspects such as **mechanical strength, corrosion resistance, flexibility, and fire resistance**, providing a secure and reliable solution for electrical installations that require flexibility, movement, or exposure to harsh conditions.

The standard mandates that the flexible steel conduits undergo several **quality control tests and** ensures that the conduit meets the required mechanical and electrical safety parameters, and confirms that the conduit can withstand harsh operating conditions and provide long-term protection for electrical wiring.

By adhering to this standard on conduits, manufacturers and installers can ensure that the electrical cables are protected from external damage, thus maintaining the safety of the electrical wiring system.