

IS 9471 (Part 2): 1980 Specification for Modular Lower Limb Orthotic Components Part II Stirrups, Split

Split stirrups are specialized components used in modular lower limb orthotic braces engineered to enhance orthotic devices' functionality and adaptability. They are designed to provide support and control for the ankle joint and accommodate various footwear. These components are essential for ensuring the proper function and comfort of lower limb orthotic devices, i.e., external medical device (such as a brace, caliper or splint).

Here are the key points about split stirrups specifications as defined in IS 9471 (Part 2):

Overview: The document specifies the dimensional, workmanship and other requirements for split stirrups used in modular lower limb braces.

Types: The standard specifies the following four types of split stirrups, based on their lobe configurations, each designed for different levels of motion and support:

- Type 1 Free Motion: Allows unrestricted movement in both plantar flexion and dorsiflexion.
- Type 2 Limited Motion: Provides controlled movement with limited flexion.
- Type 3 Foot Drop: Specifically designed to support the foot in cases of foot drop.
- Type 4 Double Action: Offers equal control in both plantar flexion and dorsiflexion.

Materials: Stirrups are made from **mild steel or stainless steel** sheets, with specific thickness and finishing requirements, ensuring durability and strength.

Shapes & Dimensions: They come in various sizes and dimensions to fit different brace designs and user needs.

Usage: They are used in conjunction with ankle joint units to provide the necessary support and control for lower limb braces.

Workmanship and Finish: Stirrups must be free from defects, deburred, buffed clean, and plated with zinc or nickel-chromium to prevent corrosion and ensure a smooth finish.

Packing and Marking: Stirrups should be marked with the manufacturer's details and packed in polyethylene bags.