

IS 9471 : PART 7 : 2024

<u>Modular lower limb orthotic components - Specification: Part 7 orthotic joint bars,</u> <u>ankle and knee (Upper And Lower)</u>

Orthotic devices plays a crucial role in assisting individuals with lower **limb disabilities** or injuries. These devices aim to provide **support**, improve **mobility**, and enhance the quality of life for users. Among the various components that make up these orthotic devices, the orthotic **joint bars** for the ankle and knee (both upper and lower) are particularly significant.

Orthotic joint bars are essential components in the construction of modular **lower limb braces.** These braces are designed to provide support, enhance mobility, and improve the quality of life for individuals with **lower limb impairments**. The joint bars of ankle and knee are used by the physically impaired persons to **control the mobility** of these joints. The device is fixed as an aid to perform some of the normal functions of the ankle and knee joints.

This standard specifies following type of orthotic joint bars Ankle 3 bar i.e. **Knee upper bar** and **Knee lower bar**. This standard outlines the types of materials that can be used, ensuring they are **strong** and **durable**. The standard provides detailed dimensions for the **joint bars** to ensure a proper fit and function and ensures **compatibility** with various types of orthotic devices and other components, allowing for easy integration. The standard also mentions about physical properties like Bend test to ensure they meet the required standards for **strength**, durability, and performance.

This standard is essential for manufacturers to ensure that their orthotic joint bars are safe, effective, and reliable for users.