



Indian Standard IS 2745:1983 – Your Guide to Non-Metal Helmets for Firemen and Civil Defence Personnel

In high-risk jobs like firefighting and civil defence, **helmets play a crucial role in safety**, protecting against impacts, heat, and other hazards. A good helmet should offer **solid impact protection, be comfortable to wear, and resist fire and electrical risks**, keeping the wearer safe in challenging conditions.

Indian Standard IS 2745, developed by the Bureau of Indian Standards (BIS), specifies the materials, construction, workmanship, and performance of non-metal helmets intended for firemen and civil defence personnel. These helmets are made with non-metallic materials to meet strict safety standards. The **helmet design** includes a **hard outer shell, padding to absorb impact, a retention system for secure fit, and optional neck protection and visor for extra coverage**.

IS 2745 mandates various tests to confirm the helmet's safety. These include **shock absorption and penetration resistance** tests to assess durability in high-impact situations, a **water absorption test** to ensure low water intake, and a **flammability test** to confirm fire resistance. **Electrical resistance tests** also verify the helmet's insulation against electrical hazards.

With the **BIS Standard Mark**, these helmets meet the rigorous requirements of **IS 2745**, ensuring reliable protection for **firemen and civil defence personnel** against physical and environmental hazards.