

Indian Standard (IS 15748:2022) - Protective Clothing for Heat and Flame

Protective clothing is essential for workers exposed to **heat and flame** hazards in industrial settings. This is designed to safeguard the wearer's body, except hands, against heat, flames, and molten metal splashes.

Consumers expect **protective clothing** to be **heat-resistant, durable, and comfortable**. Key quality parameters include **flame retardancy, high tensile strength**, resistance to **molten metal splashes**, and **breathability** to allow moisture wicking.

This standard IS 15748:2022, specifies performance requirements for protective clothing made from flexible materials, which are designed to protect the wearer's body, except the hands, from heat and/or flame. For protection of the wearer's head and feet, the only items of protective clothing are gaiters, hoods, and overboots.

This standard covers the general and the design requirements and **additional design requirements** for molten splash protective garments. The method of sampling, Pre-treatment, aging and conditioning temperature and humidity. General performance requirements includes Heat resistance at a temperature of $(180 \pm 5) ^\circ\text{C}$ and $(260 \pm 5) ^\circ\text{C}$, flame spread etc. the various physical requirements include **Tensile strength, tear, burst and seam strength and also Heat transmission performance requirements are specified.**

By adhering to IS 15748:2022, manufacturers ensure their **flame-resistant clothing** meets industry standards for safety, providing workers with **reliable protection** in high-risk environments.