

IS 17758: 2022 Textiles Automotive - Non-Woven Carpet/Mat

Automotive non-woven carpet/Mat are made from fibres, processed through a needle-punch technique, which gives them strength and texture suitable for automotive use. They protect vehicle interiors, play an essential role in maintaining cleanliness, comfort, and safety. Placed on vehicle floors, seat backs, and luggage areas, these carpets prevent dirt, moisture, and wear from damaging interior surfaces, enhancing both the functionality and aesthetics of vehicles.

This Indian Standard IS 17758, developed by the Bureau of Indian Standards (BIS), defines the specifications for the design, quality and testing of non-woven carpets/mats used in automobiles. Automotive carpets serve different parts of the vehicle, classified into three main types: floor mats, trim surface mats, and mats for deck areas, seat backs, and luggage compartments. Each type meets specific criteria tailored to its purpose. For example, floor mats need higher durability due to frequent use, while trim surface mats focus on protecting interior panels. Each mat is required to have a backing layer that keeps it securely in place and resists slipping. The standard also ensures that the mats meet strict quality criteria for size, weight, and thickness, allowing for comfortable placement in various parts of the vehicle while also providing a neat fit. The standard also includes tests for properties like tear strength, fire resistance, wear resistance, odour control and colour fading.

The standard also defines environmental and safety limits, such as restrictions on volatile organic compounds (VOCs) and heavy metals (like lead and chromium), to ensure the materials used are environmentally compliant and safe for use in confined vehicle spaces.

These specifications together support a product that meets durability, safety, comfort, and environmental expectations commonly held by consumers of automotive products.