



IS 4135 : 1974 Hospital Rubber Sheetings.

Hospital rubberized sheetings are primarily used to waterproof surfaces, including mattresses and treatment tables, and are often placed as underlays in treatment and recovery areas. The core feature of these sheetings is their high resistance to liquids, which prevents fluids from seeping into mattresses or other absorbent surfaces, thus maintaining a sanitary environment. The rubberized quality of the fabric also lends it the durability and flexibility required to withstand constant use in a hospital setting, where beds, examination tables, and equipment are frequently cleaned and sterilized. This impermeability to liquids, combined with elasticity, makes the fabric resilient under the rigorous demands of healthcare applications.

In terms of consumer expectations, healthcare providers rely on these sheetings to provide a dependable barrier against moisture and contaminants while remaining safe and comfortable for patients. The rubberized hospital sheetings are expected to be completely impermeable to liquids, withstand high-frequency washing and disinfection, and maintain integrity after repeated sterilization. Additionally, the sheetings must be free of any harmful chemicals that could pose a risk to patients with sensitive skin or allergies. Elasticity and durability are essential, as these sheetings should not lose their form or effectiveness over time. Their comfort and softness are also important considerations, as patients often come into direct contact with these materials, and any irritants or allergens could impact patient care.

The IS 4135 standard addresses these expectations through a comprehensive set of specifications and safeguards, ensuring that products meet the rigorous demands of hospital use. The standard specifies the minimum requirements for critical properties, including tensile strength, water resistance, and flexibility, thereby ensuring that these sheetings can endure the physical demands of repeated handling, washing, and sterilization. Durability testing is an essential part of the standard, which requires the sheetings to maintain their properties even after exposure to disinfectants and multiple wash cycles. This ensures that hospitals can rely on the fabric's long-term effectiveness, which is especially critical in high-traffic areas where hygiene cannot be compromised. Additionally, the standard includes guidelines on permissible chemical composition, protecting patients and healthcare staff from potential exposure to harmful chemicals.