

**IS 302-2-21: 2018 SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES PART 2 PARTICULAR REQUIREMENTS Section 21 Stationary Storage Type Electric Water Heaters (*Second Revision*)**

Stationary storage type electric water heaters are designed to heat and store water for various domestic, commercial, or industrial uses. These water heaters use electric heating elements to raise the temperature of water and maintain it within an insulated storage tank.

This standard specifies safety requirements for electric storage water heaters used in household and similar applications. It applies to stationary water heaters with a rated voltage not exceeding 250 V for single-phase appliances and 480 V for other appliances. The standard covers the construction, material specifications, electrical safety, and performance requirements to ensure safe operation under normal usage conditions.

Key aspects include protection against electric shock, overheating, fire hazards, and mechanical safety. It also outlines requirements for water resistance, insulation, and durability of components like heating elements, thermostats, and tanks. The standard aims to protect users by ensuring that water heaters function safely and reliably.