



Indian Standard IS 17150:2019 – Mini Domestic water heater for use with Piped Natural Gas (PNG)

As we all are aware that the natural gas is a **fossil fuel** that is primarily made up of **methane**. It is commonly used for **heating, cooking, and electricity generation**. Natural gas is considered one of the **safest** and **most reliable** sources of **energy** as it only catches fire when it forms a 5–15% mixture with air. This gas is used a source for many **household electrical equipment**, and **Mini domestic water heater** is one of them. These water heaters are typically used to meet **smaller water heating** needs in households.

The most important feature expected from a mini water heater is its **safety** and that it must contain **safety mechanisms** to **prevent overheating and gas leaks**, hence, protecting its users from **potential hazards**. **High energy efficiency** is also expected from these water heaters as it will **minimize gas consumption** and **lower utility bills** while providing adequate **heating performance**. A mini water heater should be easy to use as well as **durable** which ensures **longevity** of the device.

The **Indian Standard IS 17150**, specifies the main **constructional** and **performance characteristics** for the instantaneous domestic water heater, while setting appropriate test methods for evaluating **test characteristics**. The **constructional features** ensures that the **material, connections, ignition devices** and **overheat protection device** maximizes the **safety** of the consumer. Also, performance requirements like **Gas soundness, Water soundness, Gas consumption, thermal efficiency, flame stability** and other important tests ensures its **durability and reliability**, contributing to the product's **long-term performance** along with ensuring that the water heaters achieve a **minimum efficiency level**.

By ensuring compliance to this Indian Standard, manufacturers ensure that Mini Domestic Water Heaters not only meet **technical** and **safety standards** but also align with consumer **expectations** regarding **quality, efficiency, and user safety**, thereby enhancing overall **satisfaction** of the consumer.