



TECHNICAL SERVICE DEPARTMENT
Technical Service Bulletin
1-800-432-8373



Allowable Leakage of Gas Valves - ANSI Standard

All residential gas water heaters produced by Rheem Manufacturing Company and sold in the United States are designed and certified by CSA (formerly American Gas Association). All residential gas water heaters are designed and tested according to the requirements of ANSI Z21.10.1 (American National Standards Institute). This applies to water heaters which are designed for use in residential applications, with a capacity not to exceed 120 gallons, and input rating less than or equal to 75,000 BTU.

Any components that are shipped with the Rheem/Ruud manufactured gas water heater(s) are considered part of the water heater system, therefore falls within the certifications of the CSA and ANSI Standards.

Section 1.20 of the ANSI Standard Z21.10.1 2004 states:

“Automatic valves, when provided, shall be accessible for servicing and replacement and shall comply with the standard for *Automatic Valves for Gas Appliances*, ANSI Z21.21 – CSA 6.5 or *Combination Gas Controls for Gas Appliances*, ANSI Z21.78 – CSA 6.20.”

Section 2.4 Leakage of the *ANSI Standard Z21.21-2005; CSA 6.5-2005 American National Standard/CSA Standard for Automatic Valves for Gas Appliances* states:

“Automatic valves when tested with air at the maximum leakage test pressure specified in Table IV, Leakage Test Pressures, shall not leak externally at a rate in excess of 200 cm³/hr.”

Valves in compliance with this standard are considered safe for use. Some electronic sensing devices will activate at a rate less than that stated in the manufacturing standard. Verification of a leak on a gas valve may be confirmed with a soapy water and bubble test.