

STANDARD INFORMATION

Standard: ANSI Z21.13 / CSA 4.9

Standard ID:

Gas-Fired Low Pressure Steam and Hot Water Boilers [ANSI Z21.13:2022 Ed.7]

Gas-Fired Low Pressure Steam and Hot Water Boilers [CSA 4.9:2022 Ed.7]

Previous Standard ID:

Gas-Fired Low Pressure Steam and Hot Water Boilers [ANSI Z21.13:2017 Ed.6]

Gas-Fired Low Pressure Steam And Hot Water Boilers [CSA 4.9:2017 Ed.6]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **March 1, 2024**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- New construction requirements and performance testing for use of corrugated piping
- New requirement for wording in the instructions
- requirement for wording in the users information manual
- Removal of the term LP and changed to Propane on the rating plate
- Update of the conversion kit warning provided on the instructions
- Update of the conversion label

Specific details of new/ revised requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
4	Info	Construction
4.11	Info	Gas supply lines
4.11.11		Nonferrous semi-rigid tubing employed as gas conduit shall have a wall thickness in accordance with Table 5 <u>unless it complies with exceptions noted in Table 5. The tubing as noted in the exceptions below Table 5 is limited to a maximum pressure of 0.5 psi (3.5 kPa) or less.</u>
4.33	Info	Instructions
		Each boiler shall be accompanied by clear, concise, printed instructions and diagrams stated in terms clearly understandable to the consumer and adequate for proper field assembly, installation, maintenance, safe use, and operation of the boiler.
		Instructions shall bear the seal or symbol of the certification body.
		These instructions shall be supplied in a pocket which is a part of the boiler whenever practical. If no pocket can be provided, the instructions shall be supplied in an envelope marked with instructions to the installer to affix them adjacent to the boiler and to the consumer to retain them for future reference.
4.33.1		Units of measure required shall be expressed in either imperial units of measure, or both imperial and metric units of measure.
		The instructions shall be reviewed by the certification body for comprehensibility, accuracy, and compatibility with results of test and with the ANSI Z223.1/NFPA 54 and/or CAN/CSA B149.1.
		The instructions shall include
		b) installation instructions indicating
		<u>x) for appliances that allow indoor installation within a residential living space or home, a statement that “The installer must verify that at least one carbon monoxide alarm has been installed within a residential living space or home following the alarm manufacturer’s instructions and applicable local codes before putting the appliance into operation”;</u>



CLAUSE	VERDICT	COMMENT
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User's information manual

4.34 Each boiler shall be accompanied by separate printed instructions, to be referred to as the user's information manual, attached with a clip or located in a pocket within the confines of the boiler and readily visible when the automatic control valve is exposed. At the option of the manufacturer, a label may be placed adjacent to the automatic control valve indicating the location of the user's information manual.

For a boiler utilizing materials containing crystalline silica, or if the manufacturer determines crystalline silica might be found in "after service" materials, and if the crystalline silica might be exposed during installation, servicing, or removing the boiler, the manufacturer shall provide appropriate warnings and instructions at the beginning of the user's information manual, using letters that are easily readable.

The user's information manual shall contain the following minimum instructions:

i) for appliances that allow indoor installation within a residential living space or home, the following statement: "This product burns gas to produce heat. The appliance must be properly installed, operated, and maintained to avoid exposure to appreciable levels of carbon monoxide and the installer is required to confirm that at least one carbon monoxide alarm is installed in the living space before the appliance is put into operation. It is important for the carbon monoxide alarms to be installed, maintained, and replaced following the alarm manufacturer's instructions and applicable local codes";

4.35	Info	Marking
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Rating plate(s)

Each boiler shall bear a plate or a combination of adjacent plates located so to be easily read when the boiler is in a normally installed position. A plate visible after removal of an access panel without the use of tools is satisfactory. Tools may be used to remove an outdoor access panel.

4.35.2 Rating plate(s) shall use Class IIIA marking material when affixed by the manufacturer, or Class IIA1 marking material when shipped detached (see Clause 4.35.7).

This plate(s) shall include the following information:

i) type of gas for which equipped: Nat., Propane, or _____ Btu LP gas-air mixture. The heating value for the LP gas-air mixture shall be indicated;



CLAUSE	VERDICT	COMMENT
5	Info	Performance <i>New section added;</i> Corrugated metal tubing
5.31		Corrugated metal tubing employed as gas conduit shall comply with the following tests. Tests shall be applied on the complete assembly, including end fittings. Application of the tests to each assembly shall be at the discretion of the certifying agency to provide the maximum stress on the assembly. See standard for details.
6	Info	Manufacturing and production tests <i>New clause added;</i>
6.4		Manufacturers using corrugated metal tubing as gas conduit (not certified to ANSI Z21.24 • CSA 6.10) shall use a program, which includes a mutually acceptable schedule to conduct the testing specified in Clause 5.31.
Annex D	Info	Provisions for gas appliance conversion kits Instructions Each conversion kit shall be accompanied by clear, concise printed instructions and diagrams, stated in terms clearly understandable, adequate for the proper field assembly, installation, service, and safe use of the conversion kit. b) The following boxed warning: <div data-bbox="472 1157 1081 1528" style="border: 1px solid black; padding: 10px;"><p style="text-align: center;">WARNING</p><p>This conversion kit shall be installed by a qualified installer, service agency, or the gas supplier in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, an explosion, or production of carbon monoxide can result causing property damage, personal injury, or loss of life. The qualified installer, service agency, or the gas supplier is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.</p></div> The warning shall be in letters having a minimum uppercase letter height of 0.100 in (2.54 mm) with a minimum vertical spacing between lines of 0.038 in (0.97 mm). * Lowercase letters shall be compatible with uppercase letter size specification. The signal word WARNING may be preceded by the safety alert symbol or positioned to match format used throughout instruction, or both. * This letter height and line spacing corresponds to 10-point type and normal vertical spacing, zero leaded. <i>Note: The boxed warning has been updated from the previous edition of the standard.</i>
D.4		



CLAUSE	VERDICT	COMMENT
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Marking

Each conversion kit shall be provided with the following markings:

D.5		<p>d) <u>The following Class IIIA marking, with explicit instructions to affix the label in a conspicuous location adjacent to the rating plate:</u></p> <p><u>“This appliance was converted on _____ (day/month/year) to _____ gas with Kit No. _____ by _____ (name and address of organization making this conversion), that accepts the responsibility for the correctness of this conversion.”</u></p> <p><u>The text in parenthesis may be placed after or underneath the space provided to enter date, gas, and organization’s information.</u></p>
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