

STANDARD INFORMATION

Standard: ANSI Z83.11 / CSA 1.8

Standard ID: Gas Food Service Equipment [CSA/ANSI Z83.11/CSA 1.8:2025 Ed.5]

Previous Standard ID:

Gas Food Service Equipment [ANSI Z83.11:2016 Ed.4]

Gas Food Service Equipment (R2021) [CSA 1.8:2016 Ed.4]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **January 4, 2027**

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 Reports not updated to this version by the effective date above will be withdrawn.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 coverage has been added for appliances equipped with a heat reclaimer
- Coverage for draft regulators as draft regulators are used with heat reclaimers
- New requirement for tableside cooking devices that it cannot be operated normally with the top grate inverted
- Updated high altitude instructions, marking, and testing requirements
- New requirements for a power transformer that is used to supply a control
- Update of combustion test to supply the calculation method
- Added new test for the use of a flue bypass valve
- Added Canadian equivalent requirements to those of the U.S. Department of Transportation (DOT)
- Annex I has been added to detail the method of measuring and calculating input rate
- Annex J has been added to cover high altitude conversion kits

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		<i>New section added;</i>
		Heat reclainer
4.21		A venting system with the inclusion of a draft regulator and/or heat reclainer shall be designed to include a safety control system that will detect downdraft and blockage conditions and address these conditions by redirecting flue gas flow to an alternative vent passageway and/or shutting off the fuel supply to the appliance using an approved fuel gas shutoff valve.
		See standard for details.
		<i>New section added;</i>
		Flue bypass valve
4.22		A flue bypass valve shall only be used with a heat reclainer and shall be integrated into the corresponding draft hood, flue riser(s), or flue deflector(s) for the discharge of flue gases to meet the definition of a venting system.
		See standard for details.
4.29	Info	Open top grates
		<i>New clause added;</i>
		Design requirements for tableside cooking appliance
4.29.7		A tableside cooking appliance shall be so designed that it cannot be operated normally with the top grate inverted. The top grate shall be so designed that it cannot be readily displaced laterally.



CLAUSE	VERDICT	COMMENT
4.39	Info	Marking Nameplate(s) An appliance shall bear a nameplate, or a combination of adjacent plates, of Class II or Class IIIA marking material located so as to be easily accessible and read when the appliance is in the normally installed position. The front panel may be removed without the use of special tools. The following shall appear on the nameplate(s): <u>o) for appliances with factory-installed orifices for altitudes over 2000 ft (610 m), the elevation that the appliance is equipped for. If the appliance is installed at an elevation other than that specified on the plate, the installer shall contact the manufacturer for the proper high-altitude conversion kit;</u>
4.39.2		<i>New clause added;</i>
		Controls
4.40		A power transformer used to supply a control that complies with CSA C22.2 No. 156 and UL 244A fulfills the overload heating requirements specified in the Standard for Low Voltage Transformers – Part 3: Class 2 and Class 3 Transformers, CSA No. 663, or the Standard for Low Voltage Transformers – Part 3: Class 2 and Class 3 Transformers, UL 5085-3.
5	Info	Performance
5.1	Info	General <i>New clause added;</i>
		Appliance testing for compliance without vent pipe connection
5.1.7		Unless otherwise specified herein, an appliance tested for compliance with this Standard shall not be connected to a vent pipe but shall depend for venting of the flue gases solely on the provisions incorporated within it. When a draft hood and/or heat reclaimer is provided with an appliance, the draft hood shall be attached during the conduct of the tests specified herein as it would be in service.
5.4	Info	Combustion <i>New section added;</i>
		Air free CO measurement
5.4.1		An appliance shall not produce carbon monoxide in excess of 0.08% in an air-free sample of the flue gases when the appliance is tested in a room having a normal oxygen supply when tested in accordance with Clause 5.4.1.2.
		The method of calculation for air-free carbon monoxide is as follows:
		See standard for details.



CLAUSE	VERDICT	COMMENT
<p><i>New clause added;</i></p>		
5.18	Draft regulator	<p>The draft regulator shall comply with all tests outlined in Clause 5.17.</p>
<p><i>New section added;</i></p>		
<p>Heat reclaimers</p>		
5.21		<p>A heat reclaimer and flue bypass valve, when provided, will be treated as a component of the associated draft hood, flue riser(s), or flue deflector(s).</p>
<p>See standard for details.</p>		
5.22	Info	Operational tests of electrical components and parts
<p><i>New section added;</i></p>		
<p>Transformer burnout test</p>		
5.22.5		<p>For a power transformer employed as specified in Clause 4.40, the transformer shall be placed on a layer of bleached cheesecloth. A non-time-delay fuse shall be connected from the core of the transformer to the ground. Each secondary winding of the transformer shall be short-circuited one at a time for 7 h or until ultimate results occur. Each secondary windings of the power transformer shall be tested.</p>
<p>See standard for details.</p>		
<p><i>New section added;</i></p>		
<p>Flue bypass valve failure test</p>		
5.31		<p>A flue bypass valve shall be constructed to fail to a bypass position (see Clause 4.24.2) in case of power loss.</p>
<p>See standard for details.</p>		
16	Info	Tableside cooking appliances construction
<p>Instructions</p>		
16.10		<p>The installation instructions shall include</p>
<p><u>c) a statement that the fuel cylinder(s) shall be constructed for use with butane gas and be marked in accordance with</u></p>		



CLAUSE	VERDICT	COMMENT
16.11	Info	Marking Nameplate(s) Each appliance shall bear a nameplate, or a combination of adjacent plates, of Class II or Class IIIA marking material located so as to be easily accessible and read when the appliance is in the normally installed position. If installed behind the front panel, the front panel shall be removable without the use of special tools. The following shall appear on the plate(s):
16.11.2		<ul style="list-style-type: none">a) <u>The cylinder(s) supplied with the appliance shall be marked in accordance with the applicable specifications of the U.S. DOT or Transport Canada for Type 2P and 2Q fuel containers.</u>b) For a tableside cooking appliance that uses regulated pressure, the identifying mark of the regulator shall be shown.
Annex A	Info	Items unique to the United States
A.1	Info	Electrical equipment and wiring <i>New clause added:</i> Electrical equipment and solid-state components compliance Electrical equipment, wiring, and accessories built in or supplied for use with the appliance shall be submitted with the appliance. An appliance-type control containing solid-state components shall comply with the applicable requirements in CSA C22.2 No. 156 and UL 244A. Compliance with UL 60730-1 and/or the applicable Part 2 from the UL 60730 series fulfills these requirements. A control, or transformer that is part of a control, that complies with CSA C22.2 No. 14 and UL 508, or UL 508C, or CSA C22.2 No. 24, and UL 8673 is not required to comply with CSA C22.2 No. 156 or UL 244A. A power transformer used to supply a control that complies with CSA C22.2 No. 156 and UL 244A is not required to be tested to the overload heating requirements specified in CSA No. 66.3 or UL 5085-3. The power transformer and any fixed impedance regulating network or other device that is used to limit current shall comply with Clause 5.22.5.1. A control that is not relied upon to prevent a risk of electric shock or fire injury to persons is not required to comply with CSA C22.2 No. 156 or UL 244A. Such controls shall meet the following: <ul style="list-style-type: none">a) the minimum required circuit spacings per CSA C22.2 No. 156 and UL 244A; andb) the component electrical and ambient temperature ratings suitable for the end use application.



CLAUSE	VERDICT	COMMENT
		<p><i>New clause added;</i></p> <p>Electrical equipment and wiring standards for appliances</p> <p>Electrical equipment and wiring supplied on an appliance shall be of approved types or shall be investigated as an integral part of the appliance for construction and performance equivalent to approved types. Electrical equipment and wiring shall be judged with respect to its suitability for the particular application.</p> <p>Electrical equipment and wiring conforming to nationally recognized Standards shall be deemed an approved type.</p> <p>An appliance-type control containing solid-state components shall comply with the applicable requirements in the standard for Solid-State Speed Controls CSA C22.2 No. 156, and the Standard for Solid-State Controls for Appliances UL 244A.</p> <p>Compliance with the Standard for Automatic Electrical Controls for Household and Similar Use, Part 1: General Requirements, UL 60730-1, and/or the applicable Part 2 from the UL 60730 series fulfills these requirements.</p> <p>Exceptions: 1. A control, or transformer that is part of a control, that complies with the Standard for Industrial Control Equipment CSA C22.2 No. 14, and the Standard for Industrial Equipment Control UL 508; or the Standard for Safety Power Conversion Equipment UL 508C, or the Standard for Temperature-Indicating and Regulating Equipment CSA C22.2 No. 24, and the Standard for Temperature Indicating and Regulating Equipment UL 8673, is not required to comply with CSA C22.2 No. 156 or UL 244A</p> <p>2. A power transformer used to supply a control that complies with CSA C22.2 No. 156 and UL 244A is not required to be tested to the overload heating requirements specified in the standard for Low Voltage Transformers-Part 3: Class 2 and Class 3 Transformers, CSA No. 66.3 or the Standard for low Voltage Transformers-Part 3: Class and Class 3 Transformers, UL 5085-3.</p> <p>3. The power transformer and any fixed impedance regulating network or other device that is used to limit current shall comply with Clause 5.22.5.1.</p> <p>4. A control that is not relied upon to prevent a risk of electric shock, fire injury to persons is not required to comply with CSA C22.2 No. 156 or UL 244A. Such controls must still meet the following:</p> <p>a) Minimum required circuit spacings per CSA C22.2 No. 156 and UL 244A; and,</p> <p>b) Component electrical and ambient temperature ratings suitable for the end use application.</p>



CLAUSE	VERDICT	COMMENT
		<p><i>New annex added;</i></p> <p>Formula for calculation of input</p>
Annex I		<p>Gas input measurement procedure for gas appliances</p> <p>The following is the rate calculation procedure necessary for measuring the gas input of a gas appliance using a positive displacement-type gas meter.</p> <p>See standard for details.</p>
		<p><i>New annex added;</i></p> <p>Provisions for high-altitude conversion kits (optional)</p> <p>Annex J</p> <p>The following provisions are for use by manufacturers who wish to make available high-altitude field conversion kits to be used for installations at altitudes above 2000 ft (610 m).</p> <p>See standard for details.</p>