

Standard Information

Standard Number: ANSI Z21.63 / CSA 11.3

Standard Name: Standard for Portable Type Gas Camp Heaters

Standard Edition and Issue Date: 3rd Edition Revised December 1, 2014

Date of Revisions: December 1, 2014

Date of Previous Revisions to Standard: 2nd Edition Revised August 1, 2011

Effective Date of New/Revised Requirements

Effective Date (see Processing Schedule below): **June 1, 2016**

Impact, Overview, Fees and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date of **June 1, 2016** unless the product is found to comply with new/revised requirements.

Overview of Changes: Adds coverage for catalytic type camp heaters. Numerous changes to construction, test, instructions and manufacturer production line test requirements.

Processing Schedule: So that production of products bearing Listing Marks will not be interrupted, the following schedule of **approximate** dates has been established to ensure Listing Reports are found compliant by Effective Date:

- October 1, 2015 = 8 Month Report Review – Intertek will review all Reports. Update if compliance is verified or issue Findings Letter/Quote for any re-evaluations needed
- December 1, 2015= 6 Month Quote Cut-off – Quotes returned for necessary re-evaluations
- May 2, 2016 = 30 Day Warning – Client advised of all non-compliant Reports to be Suspended
- **June 1, 2016** = Effective Date – ATM Suspended for all non-compliant Reports

Fees: An initial review of Listing Report (s) will be covered by a direct billing project and will be invoiced at not more than \$1000 per report.

Client Action Required:

Information – To assist our Intertek Engineer with review of your Certification Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements not apply to your product (s).

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



Standards Update Notice (SUN)

Issued: August 28, 2015

Description of New/Revised Technical Requirements

Clause	Verdict	Comment
1.1		This Standard applies to unvented portable type gas camp heaters of the catalytic and infrared type only up to and including a maximum input of 12,000 Btu/hr (3 517 w) using propane, butane, and liquefied petroleum gas mixtures thereof, and intended for outdoor use.
4.1.9		Valve bodies, regulators, casings, and other parts intended to maintain gas tightness to the atmosphere shall be made of materials having a melting point of not less than 800°F (427 °C). Shaft seals, gaskets, and lubricants shall be exempt from this provision.
4.3.6		Aluminum tubing shall not be used as gas conduit unless the tubing is located within the confines of the heater and is therefore not subject to possible damage from external forces or impact. Metallic tubing and fittings used as gas conduits shall be capable of withstanding a temperature of 1 000°F (538 °C) without melting. Tubing and fittings used as gas conduit shall not be exposed to temperatures in excess of those specified in Table 1, Maximum tubing and fitting temperatures, when the heater is operated as specified in Clause 5.12, Wall, floor and ceiling temperatures.
4.4.5		The perimeter of the catalytic pad shall be assembled in a manner to preclude the passage of fuel gas through other than the surface of the catalytic material.
4.4.6		The gas diffusion layer or catalytic layer shall be homogeneous.
4.4.7		The gas diffusion layer or catalytic layer shall not warp during any of the tests specified herein.
4.4.8		The appliance shall be designed such that normal cleaning and maintenance shall not easily or readily cause damage to the catalytic layer.
4.6.2		Ignition devices and safety shut-off systems shall comply with the applicable construction provisions of the Standard for <i>Automatic Gas Ignition Systems and Components, ANSI Z21.20, CAN1-6.4</i> , or the Standard for <i>Manually Operated Electric Gas Ignition Systems and Components, ANSI Z21.92 • CSA 6.29</i>
4.8.8		The inlet of the pressure regulator shall be fitted for attachment to: a) Connection No. 510 as specified in the Standard for <i>Compressed Gas Cylinder Valve Outlet and Inlet Connections, ANSI/CGA-V-1</i> ; or b) a CGA No. 791 Cylinder Connection Device and complying with the <i>Standard for Cylinder Connection Devices, ANSI Z21.81 • CSA 6.25</i> or the <i>Standard for Adapters and Cylinder Connection Devices for Portable LP-Gas Cylinder Assemblies, UL 2061</i> ; c) a CGA No. 810 Cylinder Connection Device and complying with the <i>Standard for Cylinder Connection Devices, ANSI Z21.81 • CSA 6.25</i> , or the <i>Standard for Adapters and Cylinder Connection Devices for Portable LP-Gas Cylinder Assemblies, UL 2061</i> ; d) a CGA No. 600 Cylinder Connection Device as specified in the <i>Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections, ANSI/CGA-V-1</i> ; or For appliances for use with butane and or propane/butane mixtures, the cylinder connection need not be of the type No. 600 if the unit is for use with an UL 147B cylinder specified by the manufacturer of the appliance.
4.11.2		The heater shall be equipped with a canopy, guard, grille, or screen that will protect the catalytic pad against damage from the insertion of a probe constructed as shown in Figure 1, Test probe used to determine protection of catalytic pad.

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4.12		<p>Instructions</p> <p>Each heater shall be accompanied by detailed printed instructions and diagrams for the proper assembly, maintenance, safe use, and operation. The safety-related items included in the instructions shall be prominently displayed and shall precede the instructions concerning the functional use of the appliance. The instructions shall be marked with directions to the consumer to retain them for future reference. The instructions shall be reviewed by the testing agency for comprehensibility, accuracy, and compatibility with results of test. Instructions shall bear the symbol of the organization conducting tests for compliance with this Standard.</p> <p>Either the front cover or the first page of the instructions shall bear the following boxed warnings:</p>
4.13.7		<p>For propane/butane mixtures and butane fuel, canisters shall be specified by the manufacturer and tested with the appliance for listing. The appliance shall be marked with the model number of the canister found to be acceptable and recommend by the manufacturer and placed in the instructions.</p>
5.2		<p>Test gases</p> <p>In conducting the performance tests specified herein, gas with characteristics approximately as follows shall be used.</p>
5.5		<p>Hydrocarbon emission</p> <p>The hydrocarbon emission of a catalytic heater shall be deemed satisfactory when a concentration of hydrocarbons (unreacted fuels expressed as propane HD-5) not in excess of 500 ppm is produced in a room with no air changes occurring during combustion of the amount of gas necessary to reduce the oxygen content of the room to a quantity equal to 19.4 percent (1.0 percent carbon dioxide) by volume, corrected to 60°F (15.6 °C) and 30.0 inches mercury.</p>
5.8.1		<p>The pilot burner shall effect ignition of the gas at the main burner(s) under the conditions specified in the following tests. A pilot burner that becomes extinguished after having completed main burner ignition is considered as complying with this provision.</p>
5.12.2		<p>The temperature of an integral LP cylinder(s) should be monitored and at no time shall the cylinder temperature exceed 125°F (51.7 °C) while the appliance is operating or after it is turned off. Cylinder temperature shall be measured as an average of four equally spaced thermocouples mounted to the cylinder vapor space.</p>
6.1		<p>The following manufacturing and production tests are intended to provide the means for certifying agencies to uniformly apply quality control standards to all appliances certified as complying with this Standard. The manufacturer's test method(s) shall be capable of relating back to the test(s) specified in the standard where specific references are made.</p>
6.2		<p>The manufacturer shall check, inspect, and test the components and the assemblies of each appliance in the following manner:</p> <ul style="list-style-type: none"> a) Inspect raw materials and purchased components using a sampling plan mutually acceptable to the manufacturer and the certifying agency. In addition to inspecting parts of the appliance, the manufacturer shall inspect LP-gas cylinders purchased for shipment with appliances; b) Test fire each burner and manifold and control assembly for proper burner and gas valve operation and verify the gas tightness of the manifold and control assembly; and c) Verify that the perimeter of the catalytic pad is sealed to preclude the passage of fuel gas through other than the surface of the catalytic material (see Clause 4.4.5). This test shall be conducted on completely assembled appliances, when practicable.



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6.3		Using a sampling plan mutually acceptable to the manufacturer and certifying agency, the manufacturer shall also conduct the following tests on controls: a) test pressure-regulating devices to determine compliance with Clause 4.8.5; b) test manual valves for continued operation to determine compliance with Clause 4.7.9; c) test non-metallic internal parts of gas controls for compliance with Clause 4.3.9; and d) test each control for leakage as specified in Clause 4.7.7 (or Clause 4.7.10) and Clause 4.8.3 (or Clause 4.8.6), using a sampling plan mutually acceptable to the manufacturer and certifying agency. Under this sampling plan, the frequency of conducting the tests specified in “-a” through “-c” above need not be the same.
6.4		Using a sampling plan mutually acceptable to the manufacturer and the certifying agency, completely assembled appliances shall be tested to determine satisfactory operation with respect to: a) burner operating characteristics (see Clause 5.6); b) pilot operating characteristics (see Clause 5.7); c) safety shut-off systems (see Clause 5.8); d) combustion (see Clause 5.4); e) hydrocarbon emission (see Clause 5.5); and f) temperature of handled parts (see Clause 5.11).
Table 1		Maximum tubing and fitting temperature
Figure 1		Test probe used to determine protection of catalytic pad
		CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with the new/revised requirements.