

Safety Standards applicable to Outdoor Fire Features

- In the United States the standard governing the certification of Outdoor Fire Features is ANSI Z21.97. In Canada the standard is CSA 2.41. These standards are almost identical in scope with just a few variations between the two.

- The category these standards govern is called "Outdoor Decorative Gas Appliances" and these standards apply to both Manual Ignition and Automated (Electronic Ignition) Fire Features.

- In order for an Automated Fire Feature to be certified under these standards the Electronic Ignition System being used in the feature must first be certified under another set of standards. In the United States that standard is ANSI Z21.20 and in Canada that standard is CSA C22.2 No. 60730 . The category these standards govern is called "Automatic Ignition Systems".

- The Electronic Ignition Systems installed in all Fire by Design features have been certified in accordance with ANSI Z21.20 and CSA C22.2 No. 60730 in both 24 vac and 12 vac versions.

- All Fire by Design (aka "Appliances") have been certified in accordance with ANSI Z21.97 and CSA 2.41

- There are many companies in the United States and Canada that are qualified to certify gas appliances. The company we used to certify our features is LabTest Certification (www.labtestcert.com). Though they might not have the name recognition of other companies they are an IAS certified testing lab accredited by the Standards Council of Canada and the ANSI - ASQ National Accreditation Board.

- The Electronic Ignition Systems installed in the Fire by Design features is the ONLY system on the market specifically designed for use outdoors. Competitive systems use components designed for use on indoor appliances and their lackluster performance in wind and rain compared to the TOP FIRE system is proof of their inferior design.

- See attached Certificates of Conformity



Certificate of Conformity

Certificate: 14433-1S Rev.0

Master Contract: LC 1225106

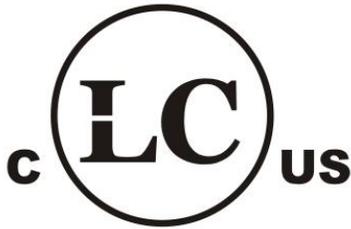
Project: 14433

Date Issued: April 27, 2017

Issued to: Fire by Design
3255 Pepper Lane Suite 109
Las Vegas, Nevada 89120
USA

Certification System Type 3
(ISO / IEC Guide 67)

The products listed below are eligible to bear the LabTest Certification Mark with adjacent indicators 'C' and 'US', and the subject area as shown below.



Issued by:


Certification Manager

PRODUCTS

- **All Weather Electronic Ignition System**
- **Models:** A-M, A-SC, A-HC, CGA-M, CGA-SC, CGA-HC
- **Ratings:**
 - Electrical:
24VAC / 1.5A / 60HZ or optional 12 Vac system
 - Gas Supply:
Minimum 3.5" W.C. / Maximum 14" W.C. – Natural Gas
Minimum 8" W.C. / Maximum 14" W.C. – Propane
 - Environmental:
IP54
-40°F ≤ Ta ≤ 175°F (-40°C ≤ Ta ≤ 79°C)

APPLICABLE REQUIREMENTS & SUBJECT AREA

- ANSI Z21.20-2014 • CAN/CSA-C22.2 No. 60730-2-5-14:

CONDITIONS OF ACCEPTABILITY

- Intended to be used to control gas burner.
- To be used with gas burners supplied with either natural gas or propane.

The 'C' and 'US' indicators adjacent to the LabTest Certification Mark shall signify that the product has been evaluated by an accredited laboratory to the applicable Standards respectively. The subject area shall be displayed with the LabTest Certification Mark to identify the Standard Number, and Revision Level.



Certificate of Conformity

Certificate: 14230-1G Rev.0

Master Contract: LC 1225106

Project: 14230

Date Issued: June 1, 2016

Issued to: Fire by Design
3255 Pepper Lane Suite 109
Las Vegas, Nevada 89120
USA

Certification System Type 3
(ISO / IEC Guide 67)

The products listed below are eligible to bear the LabTest Certification Mark with adjacent indicators 'C' and 'US', and the subject area as shown below.



Issued by:

Certification Manager

PRODUCTS

- **Outdoor Decorative Gas Appliance**
- **Model:** All Weather Electronic Ignition System – High Capacity (AWEIS - HC). See Table 1 for list of all models.
- **Ratings:**
 - AHC30-48-LP: Minimum 175,000/Maximum 350,000 BTU/hr at nominal 11" water column of propane.
 - AHC30-48: Minimum 165,000/Maximum 350,000 BTU/hr at nominal 7" water column of natural gas.

 - AHCT120-180-LP: Minimum 130,000/Maximum 205,000 BTU/hr at nominal 11" water column of propane.
 - AHCT120-180: Minimum 130,000/Maximum 205,000 BTU/hr at nominal 7" water column of natural gas.

 - AHCH696-6120-LP: Minimum 200,000/Maximum 260,000 BTU/hr at nominal 11" water column of propane.
 - AHCH696-6120: Minimum 200,000/Maximum 260,000 BTU/hr at nominal 7" water column of natural gas.

Electrical (all models): 24VAC / 1.5A / 60HZ or optional 12 Vac system

TABLE 1

Type	Model Number	Description	Nominal Gas Load (BTU/hr)
High Capacity Electronic Ignition System with Heat Shield, Flat Burner Pan or Drop-In Style Burner Pan and Round/Square Burner			
AHC30-48	AHC30	AWEIS High Capacity with 30" High Capacity Round/Square Burner	175,000
AHC30-48	AHC36	AWEIS High Capacity with 36" High Capacity Round/Square Burner	250,000
AHC30-48	AHC48	AWEIS High Capacity with 48" High Capacity Round/Square Burner	350,000
AHC30-48	AHC30-LP	AWEIS High Capacity with 30" High Capacity Round/Square Burner	175,000
AHC30-48	AHC36-LP	AWEIS High Capacity with 36" High Capacity Round/Square Burner	250,000
AHC30-48	AHC48-LP	AWEIS High Capacity with 48" High Capacity Round/Square Burner	350,000
High Capacity Electronic Ignition System with Heat Shield, Flat Burner Pan or Drop-In Style Burner Pan and T-Burner			
AHCT120-180	AHCT120	AWEIS High Capacity with 120" T-Burner and Burner Pan	130,000
AHCT120-180	AHCT132	AWEIS High Capacity with 132" T-Burner and Burner Pan	145,000
AHCT120-180	AHCT144	AWEIS High Capacity with 144" T-Burner and Burner Pan	160,000
AHCT120-180	AHCT156	AWEIS High Capacity with 156" T-Burner and Burner Pan	175,000
AHCT120-180	AHCT168	AWEIS High Capacity with 168" T-Burner and Burner Pan	190,000
AHCT120-180	AHCT180	AWEIS High Capacity with 180" T-Burner and Burner Pan	205,000
AHCT120-180	AHCT120-LP	AWEIS High Capacity with 120" T-Burner and Burner Pan	130,000
AHCT120-180	AHCT132-LP	AWEIS High Capacity with 132" T-Burner and Burner Pan	145,000
AHCT120-180	AHCT144-LP	AWEIS High Capacity with 144" T-Burner and Burner Pan	160,000
AHCT120-180	AHCT156-LP	AWEIS High Capacity with 156" T-Burner and Burner Pan	175,000
AHCT120-180	AHCT168-LP	AWEIS High Capacity with 168" T-Burner and Burner Pan	190,000
AHCT120-180	AHCT180-LP	AWEIS High Capacity with 180" T-Burner and Burner Pan	205,000
High Capacity Electronic Ignition System with Heat Shield, Flat Burner Pan or Drop-In Style Burner Pan and H-Burner			
AHCH696-6120	AHCH696	AWEIS High Capacity with 6" x 96" H-Burner and Burner Pan	200,000
AHCH696-6120	AHCH6108	AWEIS High Capacity with 6" x 108" H-Burner and Burner Pan	230,000
AHCH696-6120	AHCH6120	AWEIS High Capacity with 6" x 120" H-Burner and Burner Pan	260,000
AHCH696-6120	AHCH696-LP	AWEIS High Capacity with 6" x 96" H-Burner and Burner Pan	200,000
AHCH696-6120	AHCH6108-LP	AWEIS High Capacity with 6" x 108" H-Burner and Burner Pan	230,000

Type	Model Number	Description	Nominal Gas Load (BTU/hr)
AHCH696-6120	AHCH6120-LP	AWEIS High Capacity with 6" x 120" H-Burner and Burner Pan	260,000

APPLICABLE REQUIREMENTS & SUBJECT AREA

- ANSI Z21.97: 2014 / CSA 2.41: 2014 – Outdoor Decorative Gas Appliances
- CSA C22.2 No. 3 M1998 (R2014) – Electrical Features for Fuel Burning Equipment

CONDITIONS OF ACCEPTABILITY

- Intended to be used outdoors only with heat shield and approved media installed.
- Each model can be used with either natural gas or propane.

The 'C' and 'US' indicators adjacent to the LabTest Certification Mark shall signify that the product has been evaluated by an accredited laboratory to the applicable Standards respectively. The subject area shall be displayed with the LabTest Certification Mark to identify the Standard Number, and Revision Level.