



# CERTIFICATIONS

## **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](http://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.



# Certificate of Conformity

**Certificate:** 14394-1G Rev.0

**Master Contract:** LC 1225106

**Project:** 14394

**Date Issued:** September 16, 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:**

A handwritten signature in blue ink, appearing to read "Kavinder Dhillon".

Certification Manager

## **PRODUCTS**

- **Outdoor Decorative Gas Appliance**
- **Model:** Commercial Grade All Weather Electronic Ignition System (AWEIS), standard and high capacity. See Table 1 for list of all models.
- **Ratings:**
  - CSR6-36 – Minimum 25,000/Maximum 250,000 BTU/hr
  - CSLO6-36 – Minimum 45,000/Maximum 270,000 BTU/hr
  - CSRT48-120 – Minimum 50,000/Maximum 130,000 BTU/hr
  - CSRH624-696 – Minimum 52,000/Maximum 200,000 BTU/hr
  - CHR30-48 – Minimum 175,000/Maximum 350,000 BTU/hr
  - CHLO30-48 – Minimum 195,000/Maximum 370,000 BTU/hr
  - CHRT120-180 – Minimum 130,000/Maximum 205,000 BTU/hr
  - CHRH696-6120 – Minimum 200,000/Maximum 260,000 BTU/hr
- Electrical (all models): 24VAC / 1.5A / 60HZ or optional 12 Vac system

**TABLE 1**

Model Number	Description		Nominal Gas Load (BTU/hr)
Commercial Grade AWEIS Standard Capacity Electronic Ignition System Recessed Pilot Burner Configuration with Heat Shield Flat Burner Pan or Bowl Style Burner Pan and Round/Square Burner			
CSR6-36	CSR6	Commercial Grade AWEIS SC/Recessed with 6" Round/Square Burner	25,000
	CSR12	Commercial Grade AWEIS SC/Recessed with 12" Round/Square Burner	45,000
	CSR18	Commercial Grade AWEIS SC/Recessed with 18" Round/Square Burner	75,000
	CSR24	Commercial Grade AWEIS SC/Recessed with 24" Round/Square Burner	125,000
	CSR30	Commercial Grade AWEIS SC/Recessed with 30" Round/Square Burner	150,000
	CSR30HC	Commercial Grade AWEIS SC/Recessed with 30" High Capacity Round/Square Burner	175,000
	CSR36HC	Commercial Grade AWEIS SC/Recessed with 36" High Capacity Round/Square Burner	250,000
Commercial Grade AWEIS Standard Capacity Electronic Ignition System Lateral Offset Pilot Burner Configuration with Heat Shield Flat Burner Pan or Bowl Style Burner Pan and Round/Square Burner			
CSLO6-36	CSLO6	Commercial Grade AWEIS SC/Lateral Offset with 6" Round/Square Burner	45,000
	CSLO12	Commercial Grade AWEIS SC/Lateral Offset with 12" Round/Square Burner	65,000
	CSLO18	Commercial Grade AWEIS SC/Lateral Offset with 18" Round/Square Burner	95,000
	CSLO24	Commercial Grade AWEIS SC/Lateral Offset with 24" Round/Square Burner	145,000
	CSLO30	Commercial Grade AWEIS SC/Lateral Offset with 30" Round/Square Burner	170,000
	CSLO30HC	Commercial Grade AWEIS SC/Lateral Offset with 30" High Capacity Round/Square Burner	195,000
	CSLO36HC	Commercial Grade AWEIS SC/Lateral Offset with 36" High Capacity Round/Square Burner	270,000

Model Number	Description		Nominal Gas Load (BTU/hr)
Commercial Grade AWEIS Standard Capacity Electronic Ignition System Recessed Pilot Burner Configuration with Heat Shield Flat Burner Pan or Trough Style Burner Pan and T- Burner			
CSRT48-120	CSRT48	Commercial Grade AWEIS SC/Recessed with 48" T-Burner and Burner Pan	50,000
	CSRT60	Commercial Grade AWEIS SC/Recessed with 60" T-Burner and Burner Pan	62,000
	CSRT72	Commercial Grade AWEIS SC/Recessed with 72" T-Burner and Burner Pan	75,000

Model Number	Description		Nominal Gas Load (BTU/hr)
	CSRT84	Commercial Grade AWEIS SC/Recessed with 84" T-Burner and Burner Pan	87,000
	CSRT96	Commercial Grade AWEIS SC/Recessed with 96" T-Burner and Burner Pan	100,000
	CSRT108	Commercial Grade AWEIS SC/Recessed with 108" T-Burner and Burner Pan	115,000
	CSRT120	Commercial Grade AWEIS SC/Recessed with 120" T-Burner and Burner Pan	130,000
<b>Commercial Grade AWEIS Standard Capacity Electronic Ignition System Recessed Pilot Burner Configuration with Heat Shield Flat Burner Pan or Trough Style Burner Pan and H - Burner</b>			
CSRH624-696	CSRH624	Commercial Grade AWEIS SC/Recessed with 24" H-Burner and Burner Pan	52,000
	CSRH636	Commercial Grade AWEIS SC/Recessed with 36" H-Burner and Burner Pan	76,000
	CSRH648	Commercial Grade AWEIS SC/Recessed with 48" H-Burner and Burner Pan	100,000
	CSRH660	Commercial Grade AWEIS SC/Recessed with 60" H-Burner and Burner Pan	124,000
	CSRH672	Commercial Grade AWEIS SC/Recessed with 72" H-Burner and Burner Pan	150,000
	CSRH684	Commercial Grade AWEIS SC/Recessed with 84" H-Burner and Burner Pan	174,000
	CSRH696	Commercial Grade AWEIS SC/Recessed with 96" H-Burner and Burner Pan	200,000

Model Number	Description		Nominal Gas Load (BTU/hr)
Commercial Grade AWEIS High Capacity Electronic Ignition System Recessed Pilot Burner Configuration with Heat Shield Flat Burner Pan or Drop-In Style Burner Pan and Round/Square Burner			
CHR30-48	CHR30HC	Commercial Grade AWEIS HC/Recessed with 30" High Capacity Round/Square Burner	175,000
	CHR36HC	Commercial Grade AWEIS HC/Recessed with 36" High Capacity Round/Square Burner	250,000
	CHR48HC	Commercial Grade AWEIS HC/Recessed with 48" High Capacity Round/Square Burner	350,000
Commercial Grade AWEIS High Capacity Electronic Ignition System Lateral Offset Pilot Burner Configuration with Heat Shield Flat Burner Pan or Bowl Style Burner Pan and Round/Square Burner			
CHLO30-48	CHLO30HC	Commercial Grade AWEIS HC/Lateral Offset with 30" High Capacity Round/Square Burner	195,000
	CHLO36HC	Commercial Grade AWEIS HC/Lateral Offset with 36" High Capacity Round/Square Burner	270,000
	CHLO48HC	Commercial Grade AWEIS HC/Lateral Offset with 48" High Capacity Round/Square Burner	370,000

Model Number	Description		Nominal Gas Load (BTU/hr)
Commercial Grade AWEIS High Capacity Electronic Ignition System Recessed Pilot Burner Configuration with Heat Shield Flat Burner Pan or Trough Style Burner Pan and T- Burner			
CHRT120-180	CHRT120	Commercial Grade AWEIS HC/Recessed with 120" T-Burner and Burner Pan	130,000
	CHRT132	Commercial Grade AWEIS HC/Recessed with 132" T-Burner and Burner Pan	145,000
	CHRT144	Commercial Grade AWEIS HC/Recessed with 144" T-Burner and Burner Pan	160,000
	CHRT156	Commercial Grade AWEIS HC/Recessed with 156" T-Burner and Burner Pan	175,000
	CHRT168	Commercial Grade AWEIS HC/Recessed with 168" T-Burner and Burner Pan	190,000
	CHRT180	Commercial Grade AWEIS HC/Recessed with 180" T-Burner and Burner Pan	205,000
Commercial Grade AWEIS High Capacity Electronic Ignition System Recessed Pilot Burner Configuration with Heat Shield Flat Burner Pan or Trough Style Burner Pan and H - Burner			
CHRH696-6120	CHRH696	Commercial Grade AWEIS HC/Recessed with 6" x 96" H-Burner and Burner Pan	200,000
	CHRH6108	Commercial Grade AWEIS HC/Recessed with 6" x 108" H-Burner and Burner Pan	230,000
	CHRH6120	Commercial Grade AWEIS HC/Recessed 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 or burner pan and approved media installed.
- Approved media is to be landscape lava rock filler material topped with large chunk lava rocks, fire-glass, or steel log set.
- All models are acceptable for use with natural gas or propane, the "LP" designation after the model number indicates that model is for use with propane only. Without the "LP" model number designation, the model is for use with natural gas only.
- All 12Vac rated models shall include "-12Vac" added to the model name. Marking labels' electrical ratings shall be reflective of the 12Vac rating for all "-12Vac" models.
- Acceptable burner pan types include flat burner pan, bowl style burner pan, or round/square burner pan. Acceptable burner types include round/square burners, T-burners, and H-burners.
- Pilot configurations include a lateral offset and a recessed configuration.

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.