

**SUBMITTAL  
DATA**



# **Bistro IO-100 SERIES**

**HIGH EFFICIENCY  
INFRARED PATIO HEATER  
FOR OUTDOOR INSTALLATION  
AND HIGH INTENSITY HEATER  
FOR NON-RESIDENTIAL INDOOR USE**

<b>PROJECT:</b>	
<b>ENGINEER:</b>	
<b>CONTRACTOR:</b>	
<b>DISTRIBUTOR:</b>	
<b>INFRASAVE MODEL #:</b>	
<b>FUEL:</b>	N.G.                      L.P.G.
<b>APPROVED BY:</b>	
<b>DATE:</b>	
<b>APPROVAL #:</b>	

Bistro IO-100 Series is certified by CSA International to:

- ANSI Z83.26 / CSA 2.37 Standard for Gas-Fired Outdoor Infrared Patio Heaters
- ANSI Z83.19b / CSA 2.35b Standard for Gas-Fired High-Intensity Infrared Heaters



**NOTICE:**

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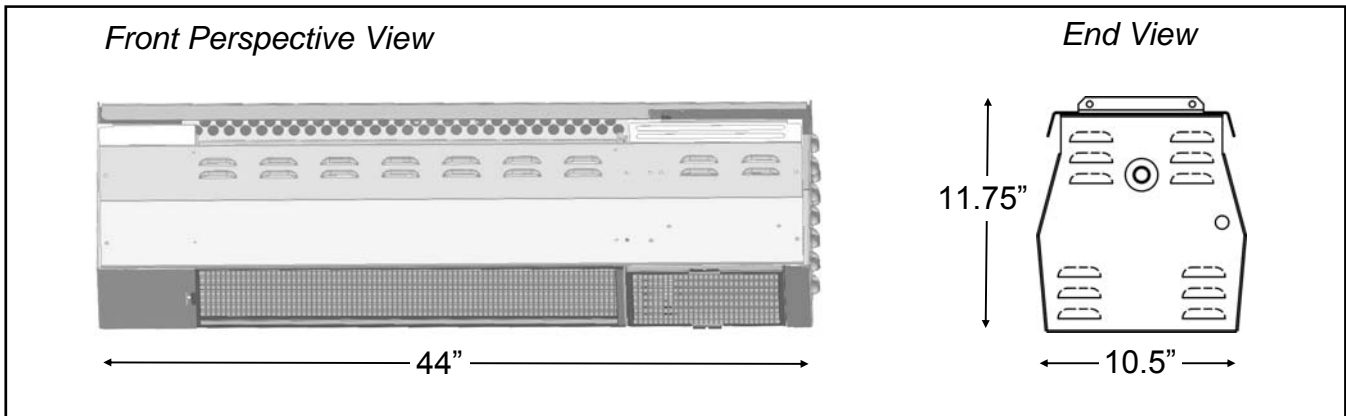
**[www.Infrasave.com](http://www.Infrasave.com)**

**APPROVALS:**

The IO-100 Series heater has been tested and approved by CSA International:

- For Outdoor Use: ANSI Z83.26-CSA 2.37 Gas-fired Outdoor Infrared Patio Heaters
- For Indoor Use: ANSI Z83 19b-CSA 2 35b Gas-fired High-Intensity Infrared Heaters

**DIMENSIONS / SPECIFICATIONS IO-100 SERIES**

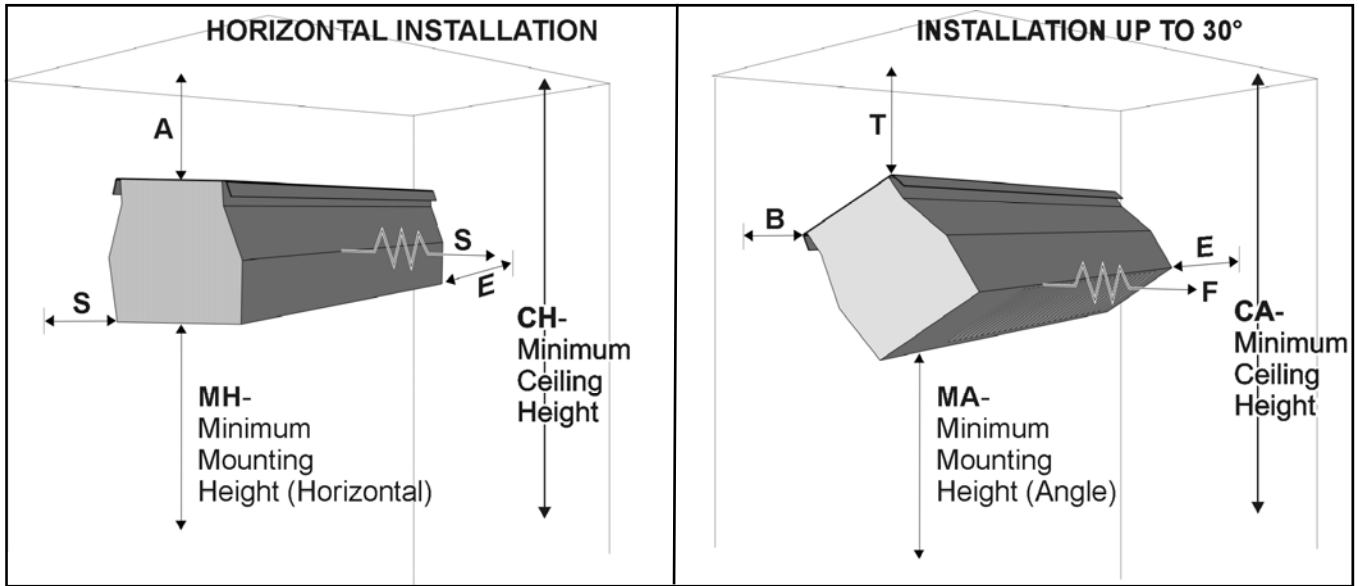


JOB QTY	MODEL NO.	INPUT BTUH	GAS	FINISH		1/2" GAS INLET PIPE SIZE		MANIFOLD PRESSURE	ELECT-RICAL	WEIGHT (LBS.)
				HIGH TEMP. BLACK	MARINE STAIN-LESS	MINIMUM GAS LINE PRESSURE	MAXIMUM GAS LINE PRESSURE			
	IO-135-N	35,000	NAT			6" W.C.	14" W.C.	5" W.C.	VOLT-AGE 24VAC	32
	IO-135-L	35,000	LP			11" W.C.	14" W.C.	10" W.C.		32
	IO-150-N	50,000	NAT			6" W.C.	14" W.C.	5" W.C.	CUR-RENT AMPS 40VA*	44
	IO-150-L	50,000	LP			11" W.C.	14" W.C.	10" W.C.		44
	IO-152-N	50,000/ 36,500	NAT			6" W.C.	14" W.C.	5" W.C.		44

\* Transformer required for a multiple heater installation:

- The first heater requires 40 VA and each additional heater 20 VA
- The sum total will be the required rating of the system or zone Transformer
- If total VA required is between transformer rating sizes, select the next higher VA rated transformer.

## MINIMUM CLEARANCE TO COMBUSTIBLES



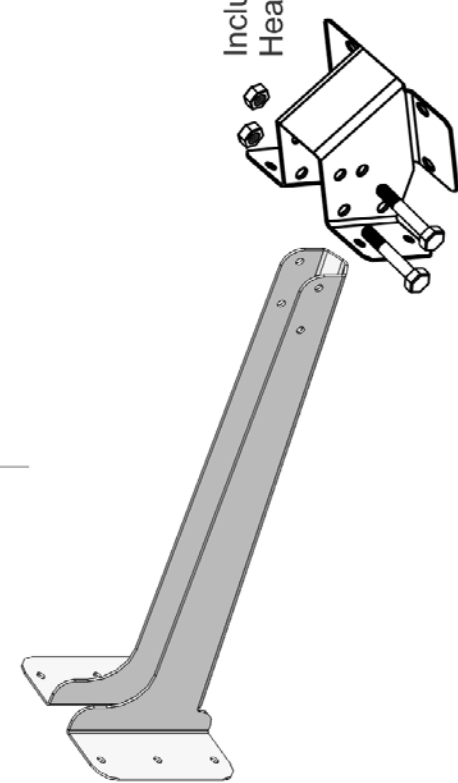
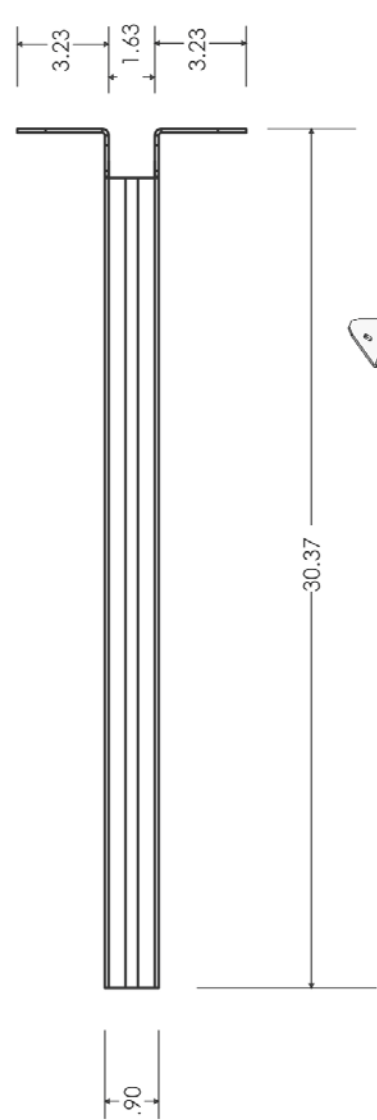
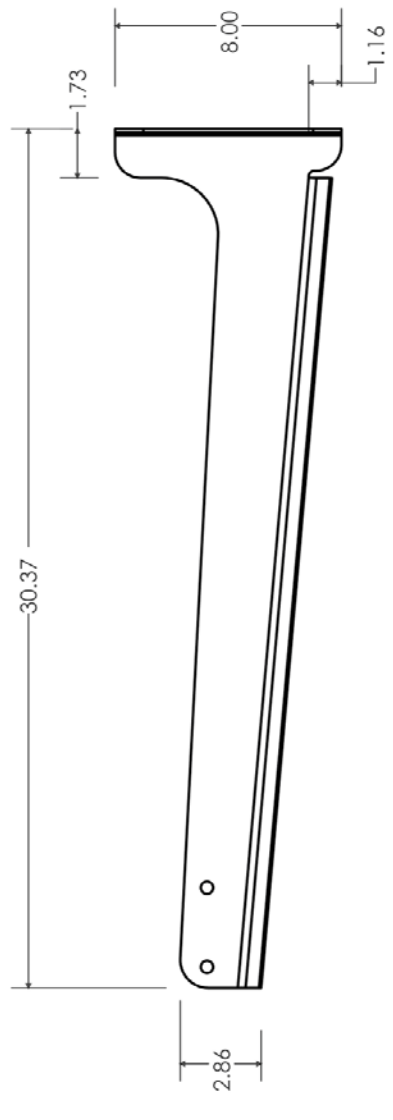
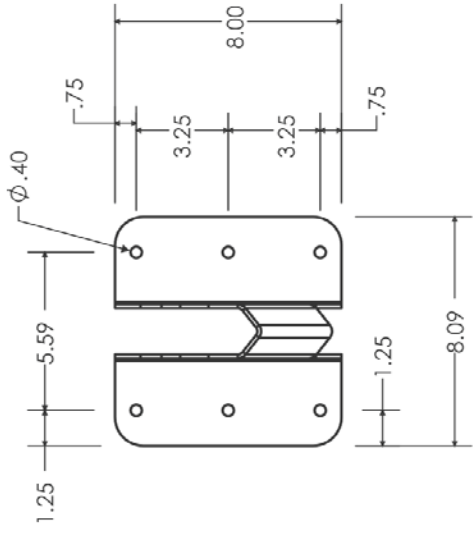
Note: Ensure mounting height in any location is sufficient to prevent patrons from coming in contact with heater, and clearance to combustible material is maintained.

QTY	Application	MODEL	Ends	Under	HORIZONTAL				UP TO MAXIMUM 30° ANGLE				
			E	U	A	S	MH	CH	T	B	F	MA	CA
	<b>OUTDOOR</b>	IO-135	14"	-	13"	14"	108"	133"	17"	9"	60"	102"	133"
	<b>OUTDOOR</b>	IO-150	14"	-	16"	19"	120"	148"	20"	8"	62"	114"	148"
	<b>OUTDOOR</b>	IO-152	14"	-	16"	19"	120"	148"	20"	8"	62"	114"	148"
	<b>INDOOR</b>	IO-135	14"	45"	18"	18"	108"	138"	20"	11"	60"	102"	136"
	<b>INDOOR</b>	IO-150	14"	60"	21"	23"	120"	153"	25"	10"	62"	114"	153"

### **Do not store or place anything directly under heater**

Notes:

1. The clearance to combustible material represents the minimum distance that must be maintained between the outer heater surface and a nearby surface. The stated clearance to combustibles represents a surface temperature of: **Indoor** = 90F° (50C°) above room temperature; **Outdoor** = 117F° (65C°) above ambient temperature.
2. It is the installer's responsibility to ensure that building materials with a low heat tolerance which may degrade at lower temperatures are protected to prevent degradation. Examples of low heat tolerance materials include awnings, vinyl siding, fabrics, some plastics, filmy materials, etc.



**OPTIONAL MOUNTING ARM JP-2300-MK - IO-100 SERIES**

## Bistro IO-100 SERIES COMPONENT DESCRIPTION

<b>IO-135 &amp; IO-150 SINGLE-STAGE CONTROL</b>		PATIO CONTROL PANEL 24 VOLT
		WIRELESS REMOTE CONTROL
		ThermoControl Plus:      TC+1                      TC+2                      TC+4
<b>IO-152 2-STAGE CONTROL</b>		JM-0201-TS Single Switch Gang 2-Stage Control - 1 Zone - 1 to 4 Heaters
		JM-0202-TS Double Switch Gang 2-Stage Control - 2 Zones - 2 to 8 Heaters
		JM-0203-TS Triple Switch Gang 2-Stage Control - 3 Zones - 3 to 12 Heaters
<b>IGNITION</b>		SPARK IGNITED PILOT; DIRECT SPARK MODULE: 3 TRIAL IGNITION SEQUENCE; AUTOMATIC SOFT LOCK-OUT WITH AUTO RESET AFTER 30 MINUTES FOR IGNITION RETRIAL
<b>IO-135 &amp; IO-150 COMBINATION GAS VALVE</b>		SINGLE-STAGE NATURAL GAS: 5" W.C. MANIFOLD PRESSURE SINGLE-STAGE PROPANE: 10" W.C. MANIFOLD PRESSURE
<b>IO-152 COMBINATION GAS VALVE</b>		TWO-STAGE NATURAL GAS ONLY: 5" / 3.0" W.C. MANIFOLD PRESSURE
<b>WIND SCREEN</b>		ALUMINUM EGG-CRATE
<b>CABINET</b>		409 STAINLESS STEEL WITH BLACK POWDER COAT FINISH
		MARINE GRADE 316 STAINLESS STEEL
<b>VENTURI TUBE</b>		ALUMINIZED STEEL ASSEMBLED TO BURNER HOUSING
<b>BURNER</b>		SINGLE ATMOSPHERIC BURNER; 3-TRIAL SPARK IGNITED PILOT WITH SOFT LOCKOUT (30 MINUTE RETRIAL CYCLE); ELECTRONIC FLAME MONITORING / MAINTENANCE SYSTEM
<b>CERAMIC TILE</b>		SCHWANK EFFECT TILE 14/4 WITH SURFACE INDENTATIONS TO INCREASE EMITTING SURFACE AREA, AND HARD FINISHED EDGES
<b>CERAMIC TILE RETAINERS</b>		STAINLESS STEEL
<b>COMBUSTION</b>		TILE SURFACE TEMPERATURE: 1,760°F [960°C] "COLD STATE" COMBUSTION TRANSFERS HEAT INSTANTANEOUSLY TO TILE SURFACE AND MINIMIZES EMISSIONS:  CO: 10 – 48 ppm, air free [11 – 50 mg/kWh] NOx: 9 – 14 ppm, air free [15 – 25 mg/kWh]