

# INFRARED HEATER



**SUPERIOR**  
RADIANT PRODUCTS

## Series ETS 40/50 Infrared Heater Two-Stage



### STEP 1 BEFORE INSTALLING

#### WARNING

These instructions, the layout drawing, local codes and ordinances, and applicable standards such as to gas piping and electrical wiring comprise the basic information needed to complete the installation, and must be thoroughly understood along with general building codes before proceeding. **This guide is not intended to replace the Instruction Manual.**

Only personnel who have been trained and understand all applicable codes should undertake the installation. SRP Representatives are Factory Certified in the service and application of this equipment and can be called on for helpful suggestions about installation.

#### INSTALLATION AND GAS CODES

Heaters must be installed only for use with the type of gas appearing on the rating plate, and the installation must conform to the National Fuel Gas Code, ANSI Z223.1/NFPA 54 in the USA and CSA B149.1 and B149.2 Installation Codes in Canada.

**This heater is approved for outdoor installation.**

### General Specifications

#### Gas Supply

##### Inlet Pressure

	Natural Gas	Propane Gas
Minimum:	5.0" W.C.	11.5" W.C.
Maximum:	14.0" W.C.	14.0" W.C.

##### Manifold Pressure

ETS 40, ETS 50

	Natural Gas	Propane Gas
High Rate:	3.3" W.C.	10.2" W.C.
Low Rate:	1.5" W.C.	4.2" W.C.

##### Inlet Connection

	Natural Gas	Propane Gas
	½" Female NPT	½" Female NPT

### Configurations

		ETS 40	ETS 50
Natural gas	Heat Input	38,500	50,000
	Partial Heat Input	23,000	30,000
Propane	Heat Input	38,500	
	Partial Heat Input	23,000	

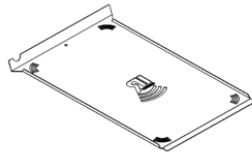
#### Electrical Supply

120 VAC 60Hz. 1Amp: 36" Cord with grounded 3 prong plug.

## STEP 2 UNPACKING

Note: A box contents label can be found on each box.

### BOX 1

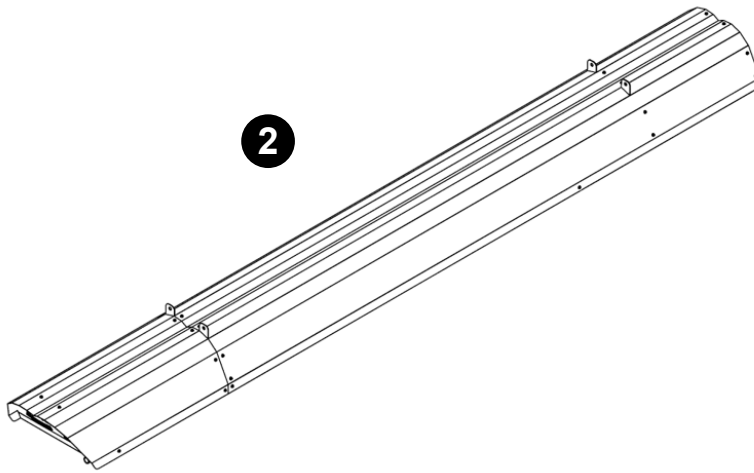


**1** Service Cover  
QTY (1)



Instruction Manual

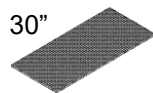
### BOX 2



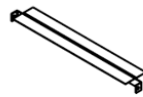
**2**



**3** CR094  
QTY (1)



**4** CR113  
QTY (1)



**5** CR091TG  
QTY (1)



**6** CR088AL  
QTY (1)

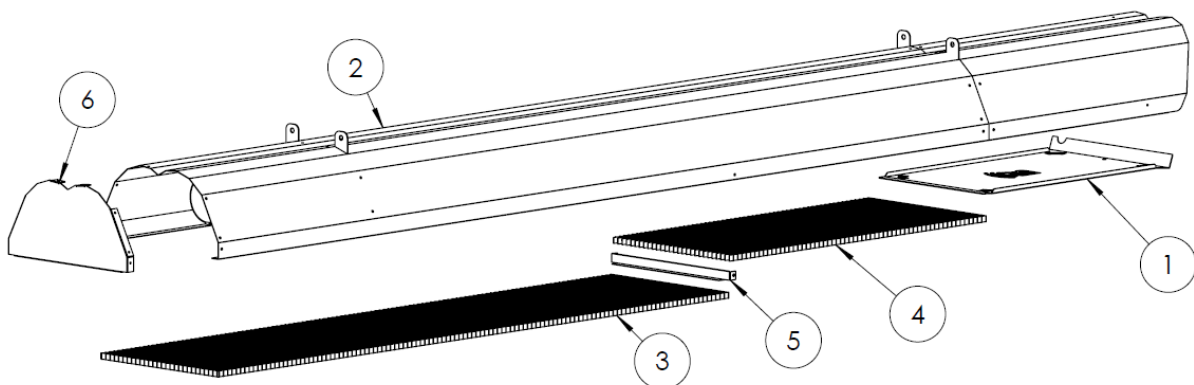


**7** EH113  
QTY (10)



**8** EH013  
QTY (8)

## STEP 3 ASSEMBLY OVERVIEW

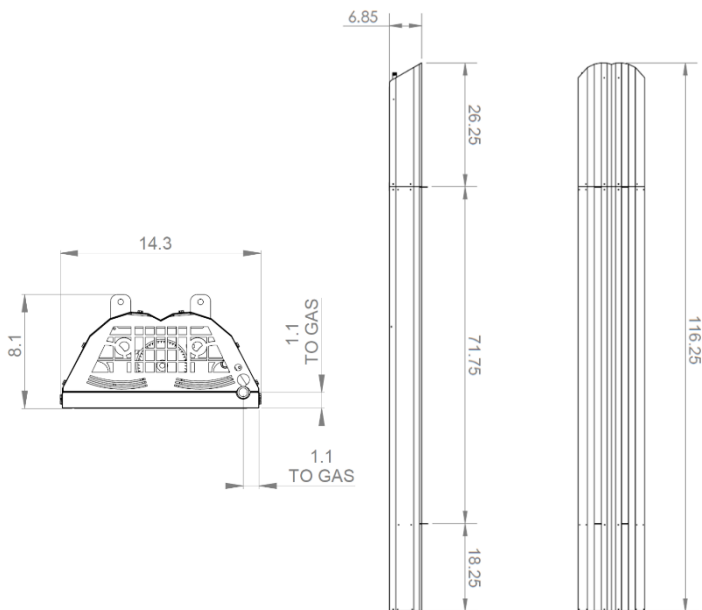


## STEP 4 INSTALLATION

### Dimensional Chart

#### ETS 40/50

**Note:** All dimensions are in inches.

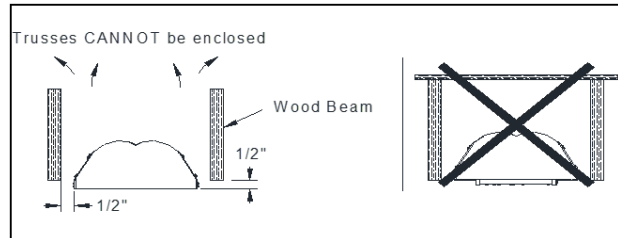


### Heater Mounting

The heater can be mounted in a variety of ways, using a combination of chains or mounting brackets.

**Note:** Minimum mounting height is 7' in Canada and 8' in the US.

This heater can be installed between wood beams with minimum distances as shown:



**Note:** Surfaces between joists or flush with the heater must not exceed 50°C (90°F) above ambient temperature

### Installation Sequence

**Note:** See manual for detailed installation sequence.

1. Carefully remove heater from box.
2. Install 30" deco grille first.
3. Install deco grille support (tabs facing towards exhaust).
4. Install 60" deco grille.
5. Install end cap.

### Lighting & Shutdown Instructions

#### Lighting

1. Open manual gas supply valve (ensure gas supply lines have been purged).
2. Turn on the switch.
3. The blower motor will energize.
4. When the motor approaches nominal running RPM, the air-proving switch closes and activates the ignition module.
5. The ignition module, after a pre-purge period of approximately 30 seconds, energizes the igniter. Additionally, the gas valve is energized for this ignition trial period of 15 seconds.
6. If a flame is detected, the ignition sensing rod "reads" a rectification signal and the gas valve remains open. The sparking stops when the flame signal is established.
7. If no flame is detected, the gas valve closes and a 30 sec inter-purge period begins. After the inter-purge, the module repeats the trial for ignition period. If flame is still not established, a third and final inter-purge followed by a final ignition trial cycle begins. After three trials, the module will lockout for a period of approximately 1 hour or until reset. (*Reset is accomplished by removing power from the module for at least 5 seconds.*) After this 1-hour period, the module re-attempts the full ignition sequence.

#### Shut Down

1. Turn off power to electronic control.
2. For longer periods of shut down, also close manual gas supply valve.