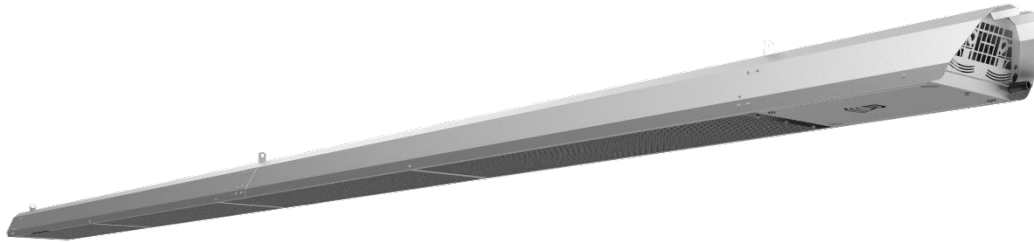


INFRARED HEATER



SUPERIOR
RADIANT PRODUCTS

Series ETSV80 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 indoor and 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	Natural Gas	Propane Gas
ETSV 80		
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

Natural gas		ETSV 80
Heat Input	BTU/hr	80,000
Partial Heat Input	BTU/hr	50,000

Propane		ETSV 80
Heat Input	BTU/hr	79,000
Partial Heat Input	BTU/hr	49,000

Electrical Supply

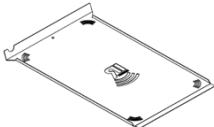

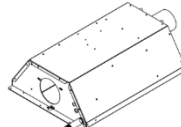


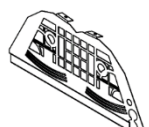
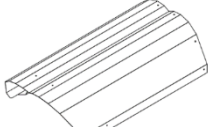
120 VAC 60Hz. 1Amp: 36" Cord with grounded 3 prong plug.

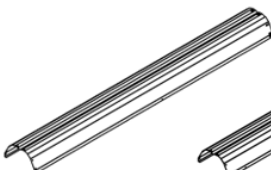
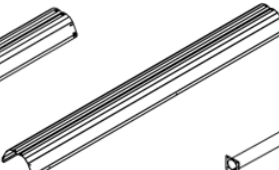
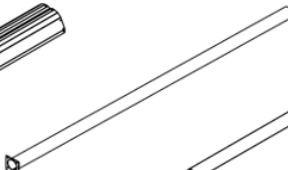
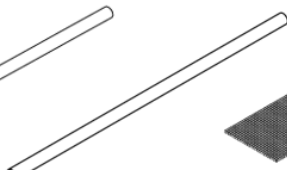
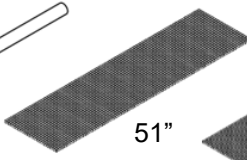
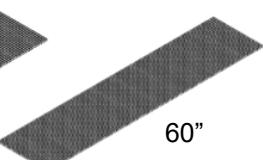
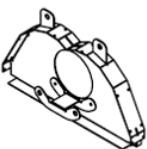
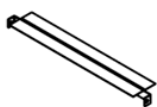
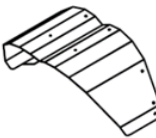
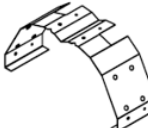
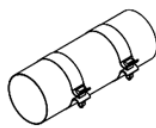
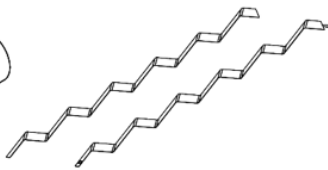
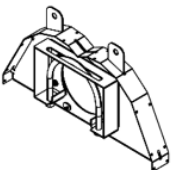
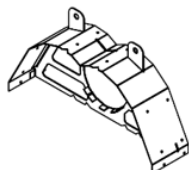
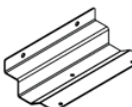
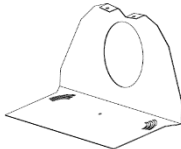



Flue and Outside Air Connection

4" O.D. male connection for flue adapter and outside air (optional) provided at the heater

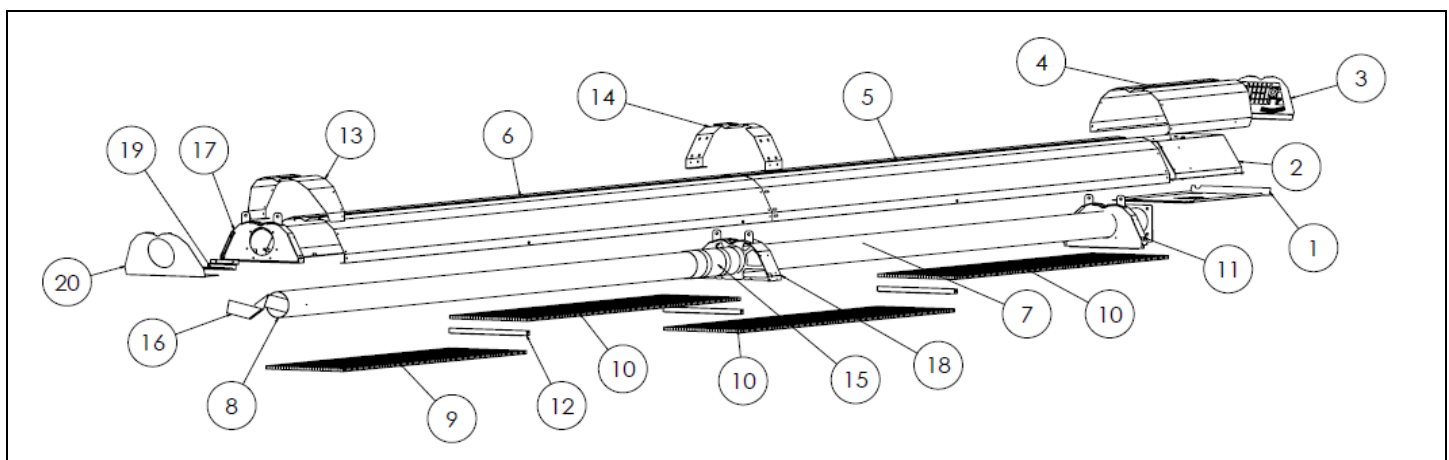
STEP 2 UNPACKING

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

BOX 1		BOX 2				
 1 Service Cover QTY (1)	 Instruction Manual	 2 ETSV08N2MS QTY (1)	 5/16 Nut QTY (4)	 5/16 Lock Washer QTY (4)	 3 US225AL QTY (1)	 4 US234AL QTY (1)

BOX 3					
 5 CR197AL QTY (1)	 6 CR196AL QTY (1)	 7 UT021 QTY (1)	 8 CT001 QTY (1)	 9 CR195 QTY (1)	 10 CR094 QTY (3)
 11 US230S QTY (1)	 12 CR091V QTY (3)	 13 US292AL QTY (1)	 14 CR204AL QTY (1)	 15 CR010 QTY (1)	 16 CT006 & CT007 QTY (1 EA)
 17 CR214 QTY (1)	 18 CR216 QTY (1)	 19 CR203 QTY (1)	 20 US349 QTY (1)	 EH013 QTY (75)	 EH113 QTY (15)
				 CH198 QTY (10)	

STEP 3 ASSEMBLY OVERVIEW

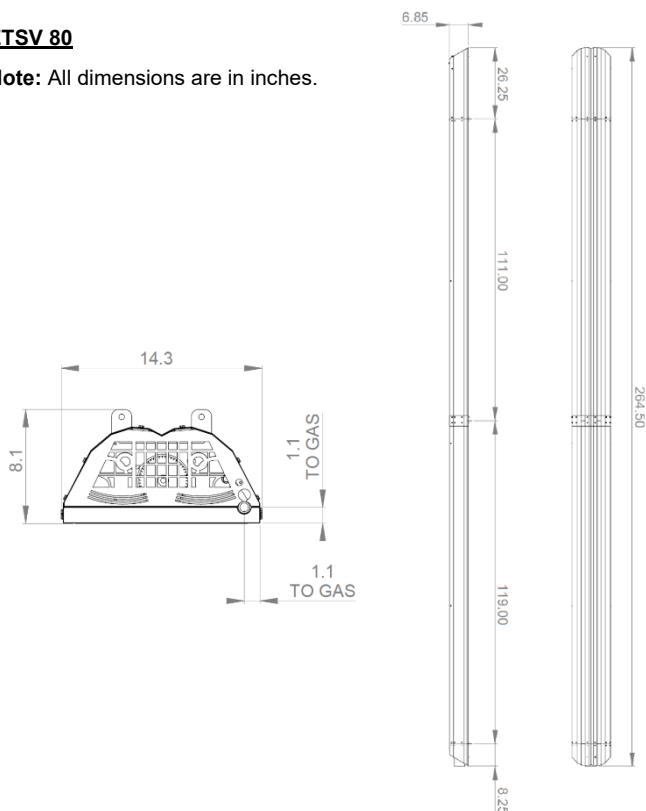


STEP 4 INSTALLATION

Dimensional Chart

ETSV 80

Note: All dimensions are in inches.



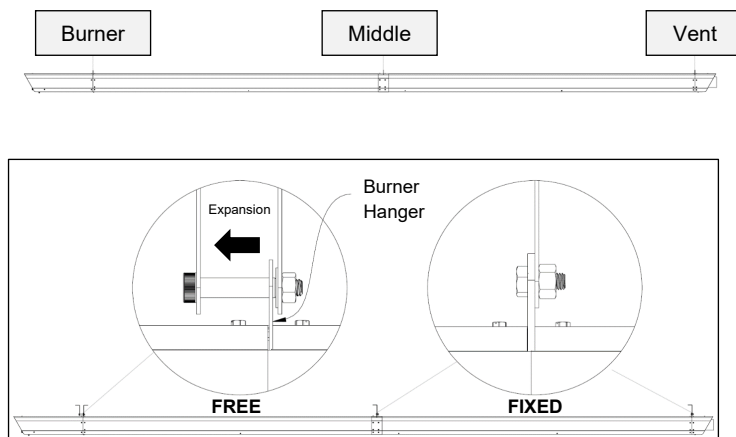
Heater Mounting

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.

Rigid Surface Mounting

In order to allow for lateral tubing expansion in the case of rigid mounting, the burner hanger must be **free** and the rest of the hangers must be **fixed**, as outlined below.



Installation Sequence

Note: See manual for detailed installation sequence.

1. Begin by installing the hangers on the flanged tube.
2. Fasten reflectors (and canopies) onto hangers using the correct hardware (screws AND spacers in specified locations, see instruction manual).
3. Install the burner head onto the flanged tube.
4. Ensure middle hanger is in the CORRECT POSITION prior to next step.
5. Tighten tube at vent hanger.
6. Install reflector joint canopy.
7. Install baffles.
8. Install burner head reflector over burner head.
9. Install grille and service cover.
10. Install 60" deco grilles first and then the 54" deco grille. Deco grille supports in-between each deco grille.
11. Install exhaust support, exhaust grille, and exhaust cover.
12. Attach vent adapter.

Lighting & Shutdown Instructions

Lighting

13. Open manual gas supply valve (ensure gas supply lines have been purged).
14. Turn the thermostat up.
15. When the thermostat calls for heat, blower motor will energize.
16. When the motor approaches nominal running RPM, the air-proving switch closes and activates the ignition module.
17. 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.
18. 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.
19. 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

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