

# LTU SERIES

SPECIFICATIONS

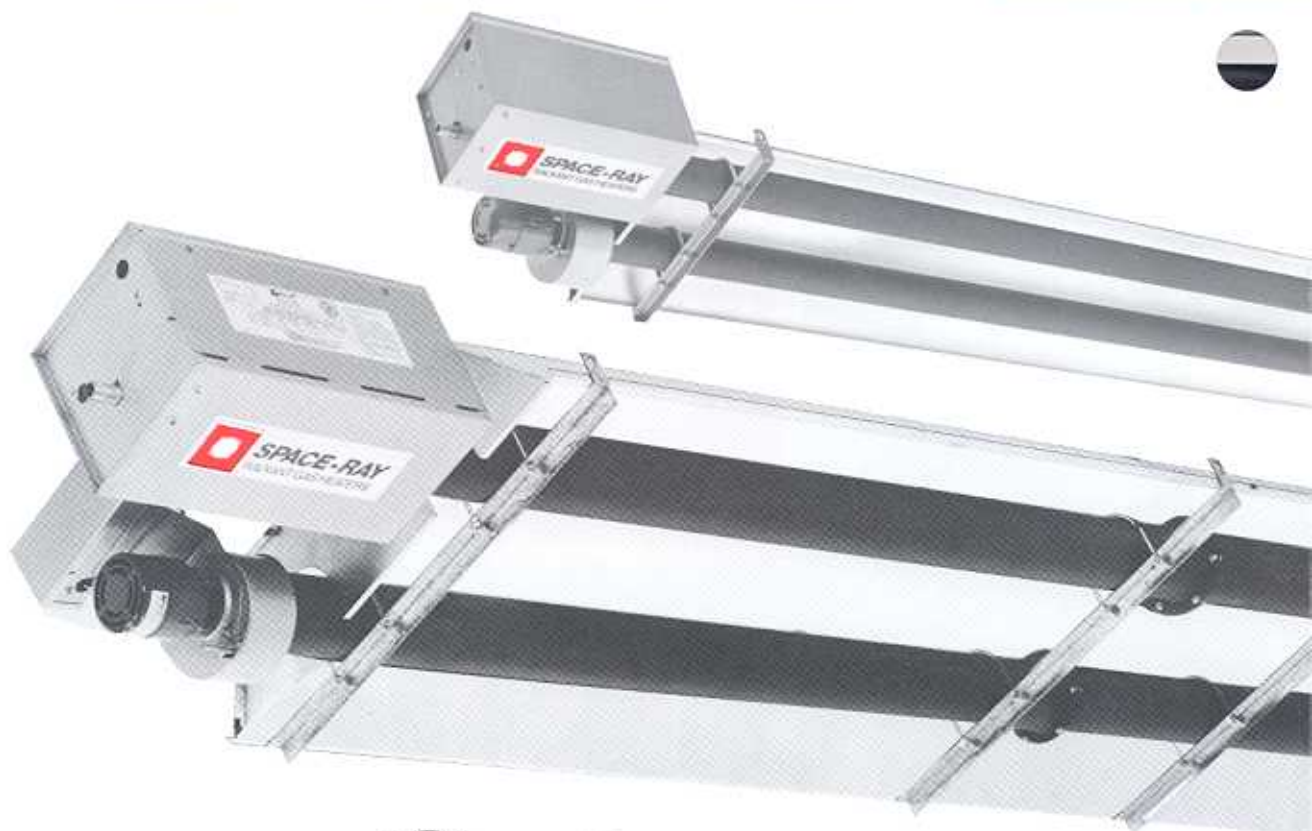
**SPACE-RAY®**

INFRARED GAS HEATERS

*Serving Industry Since 1958*

# INFRARED TUBE HEATERS

MODEL	INPUT BTU/HR.
LTU40	40,000
LTU50	50,000
LTU60	60,000
LTU75	75,000
LTU80	80,000
LTU90	90,000
LTU100	100,000
LTU110	110,000
LTU120	120,000
LTU125	125,000
LTU130	130,000
LTU140	140,000
LTU150	150,000
LTU160	160,000
LTU175	175,000



## LTU FEATURES

### PULL-THROUGH SYSTEM:

- Pull-through system - the products of combustion are pulled through the combustion chamber for increased radiant efficiency and greater safety
- A.G.A. and C.G.A. certified for vertical or horizontal venting
- A.G.A. and C.G.A. certified for maximum 75 ft. horizontal sidewall venting
- Draft inducer is equipped with permanently lubricated, totally enclosed, fan cooled, and heavy duty ball bearing motor for maintenance free operation
- Draft inducer assembly can be used for through-the-roof venting or rotated 45 degrees or 90 degrees for horizontal venting
- No draft hoods, totally enclosed combustion chamber

### BURNER SYSTEM:

- One piece cast iron burner with stainless steel flame retainer
- 10 year limited warranty on burner
- Inside or outside air for combustion
- A.G.A. and C.G.A. certified for 50 ft. outside fresh air inlet duct

- 4" O.D. standard fresh air inlet duct opening for LTU40-LTU75; 6" for LTU80-LTU175
- Burner inspection sight glass
- State-of-the-art step opening combination gas valve for quiet ignition
- Diaphragm Air Proving Switch - a safety device for proof of venting before gas flow and ignition
- Spark ignition system with 100% Gas Shut-off Safety Control (30 second pre-purge)

### RADIANT EMITTER TUBE SYSTEM:

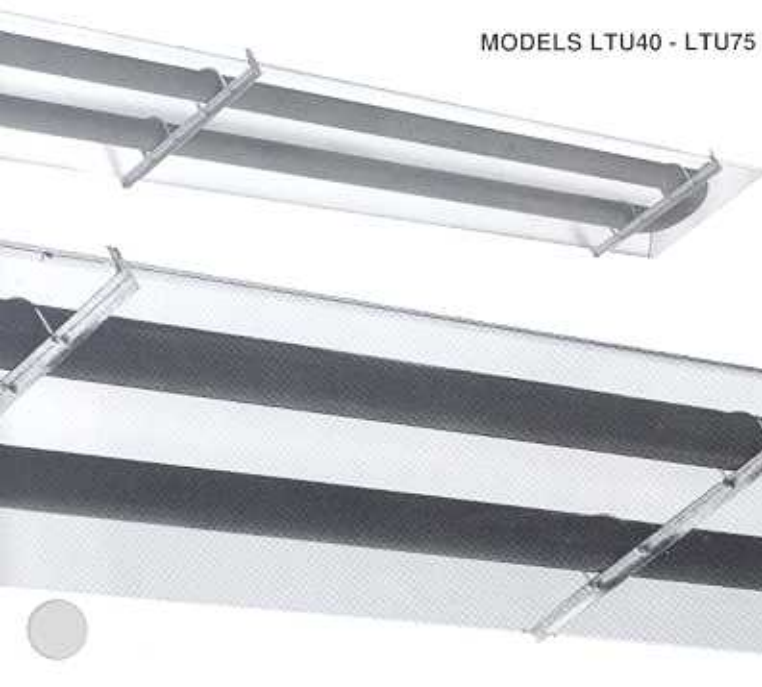
- All radiant emitter tubes are 16 gauge galvanized steel - 3" for LTU40-LTU75 and 4" for LTU80-LTU175
- Body assembly for some models is 15' long; other models require the use of an additional 5' body section
- Aluminized steel emitter tubes are galvanized for long life and high radiant efficiency
- The calorization process produces an emitter tube which is highly radiant absorptive on the interior and highly radiant emissive on the exterior
- 5 year limited warranty on the emitter tube

### REFLECTOR SYSTEM:

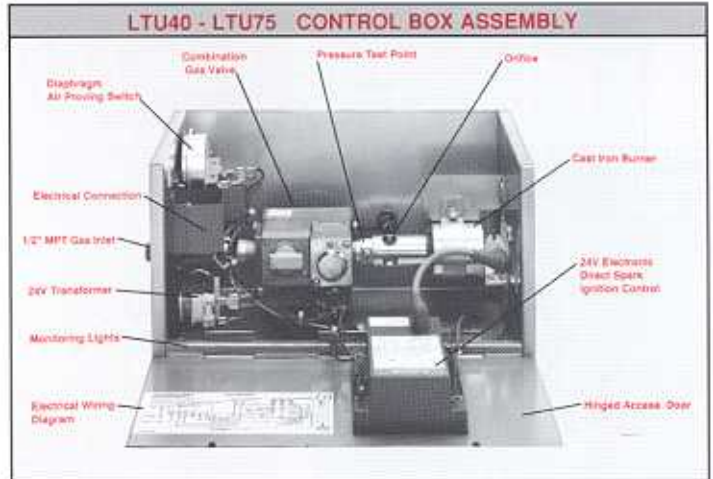
- Fully factory assembled on tube body
- Highly polished aluminum reflectors
- Reflector ends are enclosed for maximum radiant heat output and minimum convection loss
- Easy to use mounting brackets
- Suitable for horizontal or angle mount up to 45 degrees

### OTHER:

- Monitoring light system for on line diagnosis
- Uncomplicated maintenance access
- Quick slip-on electrical connectors
- Quick 115 volt terminal block connection
- 1/2" MPT gas inlet connection
- A.G.A. and C.G.A. approved for direct vented or indirect vented operation.



MODELS LTU40 - LTU75



MODELS LTU125-LTU175

- 15 different sizes to custom design your radiant heating system
- Factory pre-assembled for easy and low cost installation
- Pull-through system for increased radiant efficiency and more uniform tube temperature
- Highly efficient aluminum reflectors designed for more uniform floor level radiant energy distribution

TYPE GAS	BURNER PRESSURE	SUPPLY PRESSURE		VOLTAGE	AMPS	TYPE IGNITION
		MIN.	MAX.			
NATURAL	3.5" W.C.	5" W.C.	14" W.C.	120 VAC	2.6	DIRECT SPARK
PROPANE	10" W.C.	11" W.C.	14" W.C.	60 HZ		

NOTE: For all installations higher than 2000 ft. above sea level please consult the factory regarding recommended derating of heaters.

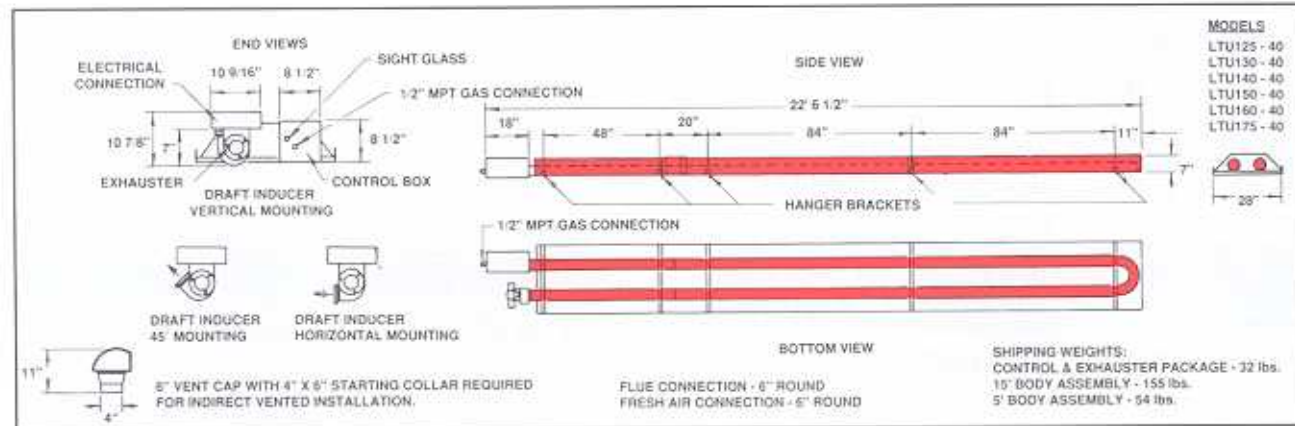
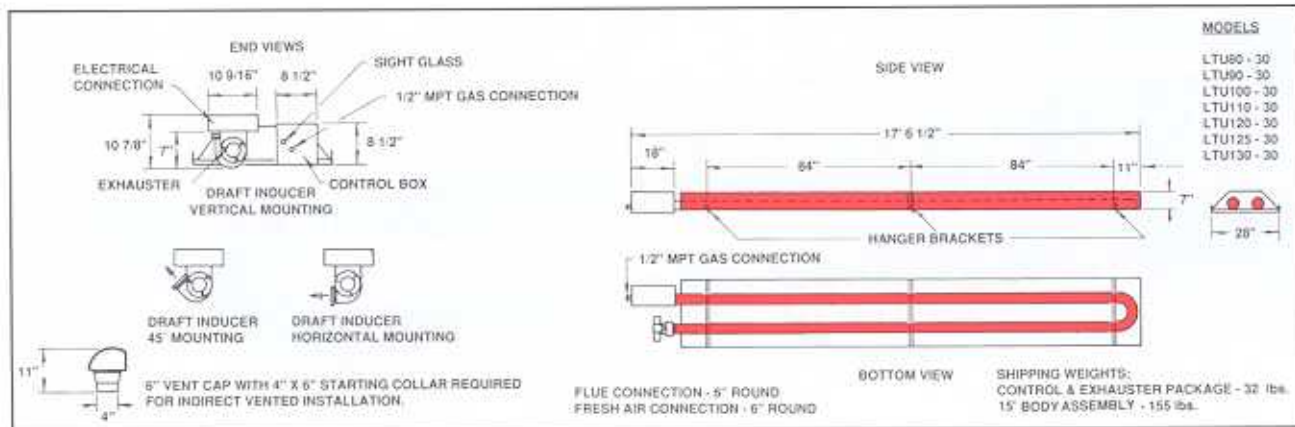
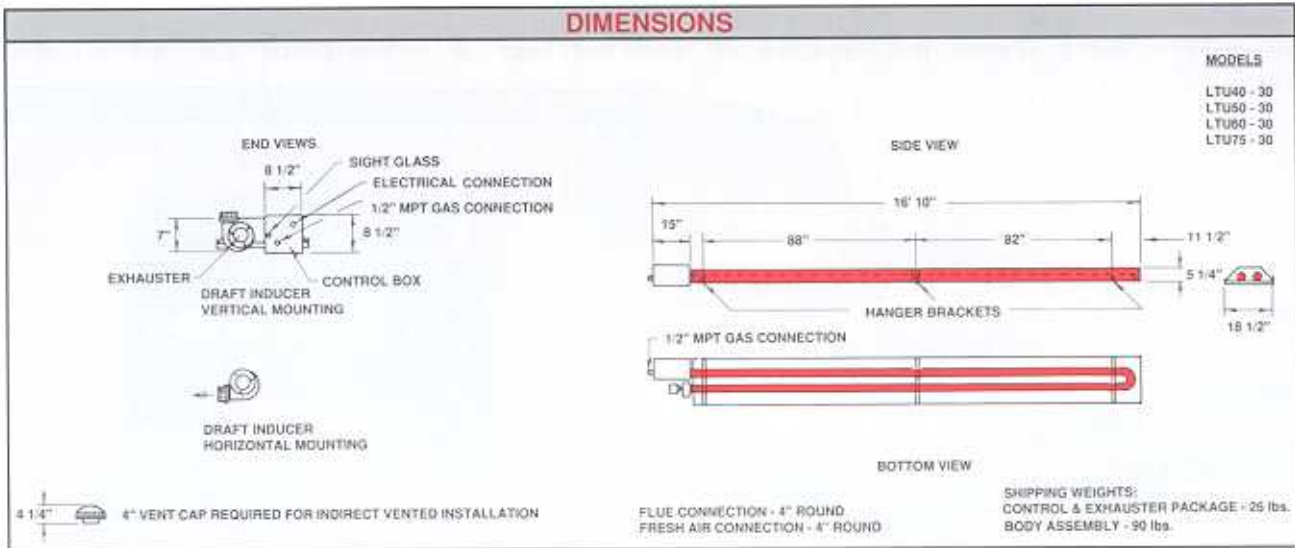
MOUNTING HEIGHTS		
MODEL	HEIGHT AT 45° ANGLE	HEIGHT AT HORIZONTAL
LTU40	9 TO 12 FEET	10 TO 14 FEET
LTU50	10 TO 13 FEET	11 TO 16 FEET
LTU60	11 TO 14 FEET	12 TO 18 FEET
LTU75	12 TO 15 FEET	13 TO 20 FEET
LTU80	12 TO 15 FEET	13 TO 20 FEET
LTU90	12 TO 16 FEET	13 TO 22 FEET
LTU100	12 TO 16 FEET	13 TO 23 FEET
LTU110	13 TO 17 FEET	14 TO 23 FEET
LTU120	13 TO 19 FEET	14 TO 24 FEET
LTU125	13 TO 19 FEET	14 TO 25 FEET
LTU130	13 TO 19 FEET	14 TO 27 FEET
LTU140	14 TO 20 FEET	15 TO 27 FEET
LTU150	14 TO 22 FEET	15 TO 30 FEET
LTU160	14 TO 23 FEET	15 TO 32 FEET
LTU175	15 TO 25 FEET	16 TO 35 FEET

This chart is intended as a guide only. Please consult your local Space-Ray representative for a detailed analysis of your particular radiant heating requirements.

**MINIMUM CLEARANCES TO COMBUSTIBLES**

Model No. (suffix indicates tube length)	Side	Ceiling	Below	End	45° Front	45° Rear
LTU40-30, LTU50-30	24"	6"	40"	30"	48"	12"
LTU60-30, LTU75-30	24"	6"	60"	30"	48"	12"
LTU80-30, LTU90-30	52"	6"	84"	30"	52"	12"
LTU100-30	66"	6"	88"	40"	66"	20"
LTU110-30, LTU120-30						
LTU125-30, LTU130-30	66"	6"	101"	40"	66"	20"
LTU125-40, LTU130-40						
LTU140-40, LTU150-40						
LTU160-40, LTU175-40	84"	6"	106"	48"	84"	24"

\*When used indirect vented, clearance to ceiling from top of exhaust hood must be 12" on LTU40 - LTU75, and 18" on LTU80 - LTU175.  
NOTE: Consult factory if reduced clearances are required.



**MOUNTING HEIGHT**

Space-Ray Tube Heaters may be mounted at various heights and angles, according to the results desired. Please consult your Space-Ray representative for your radiant heating requirements.

**COMBUSTION AIR AND VENTILATION:**

Combustion air and venting requirements for all gas-fired heating equipment must be provided per National Fuel Gas Code NFPA54 or the authority having jurisdiction over the installation. Heaters can be common vented, direct vented, or indirect vented. Refer to Installation and Operation Instructions for further information. A **vented installation** must be vented to the outside of the building with a flue pipe. An **indirect vented installation** requires a minimum ventilation flow of 4 CFM per 1000 BTU per hour of total installed heater capacity on natural gas by either gravity or power ventilation (4.18 CFM per 1000 BTU per hour on propane). For indirect vented applications, building exhaust openings must be located above the level of the heaters and inlet air openings must be located below the level of the heaters. For more ventilation information, consult the ASHRAE handbooks, local codes, and the Space-Ray Application Manual. For flue and duct sizing, refer to the Installation and Operation Instructions.

**WARNING:**

OPERATE SPACE-RAY INFRARED HEATERS WITH PROPER CARE AND OBSERVE ALL SAFETY PRECAUTIONS. Carefully follow the printed installation, operation and cleaning instructions furnished with these heaters. Follow the instructions on the nameplate of each heater and use in accordance with National, State and Local Codes or the authority having jurisdiction. Adequate ventilation must always be provided in accordance with the codes.

**SPACE-RAY®**

A Division of Gas Fired Products, Inc.

P.O. Box 36485 Charlotte, NC 28236 Telephone (Toll Free) 1-800-438-4936 (704) 372-3485 Fax (704) 332-5843