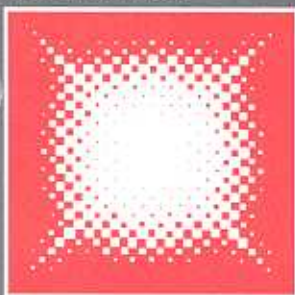


SPECIFICATIONS



SPACE-RAY®

INFRARED GAS HEATERS FOR INDUSTRY SINCE 1958

LARGE CAPACITY

LTU/LTS Series Tube Heaters



LTU / LTS SERIES FEATURES

- 4 New Capacities From 180,000 to 250,000
- Higher Intensity For Higher Mounting Heights
- Longer Emitter Tube Lengths From 50' To 80'
- Factory Pre-Assembled For Easy And Low Cost Installation
- 5 Year Warranty On Emitter Tube
- 10 Year Limited Warranty On Burner

MODEL	INPUT BTU/HR	MINIMUM MOUNTING HEIGHT
LTU180	180,000	18 FEET
LTU200	200,000	18 FEET
LTU225	225,000	20 FEET
LTU250	250,000	20 FEET
LTS180	180,000	18 FEET
LTS200	200,000	18 FEET
LTS225	225,000	20 FEET
LTS250	250,000	20 FEET

Indicate model number based on BTU/hr. input (e.g., 225,000 BTU/HR.), total emitter length (e.g., 50 feet), and gas type (e.g., natural gas). The unit selection for a straight tube would be LTS225-50-N and for a U-tube would be LTU225-50-N.



PULL-THROUGH SYSTEM

- The products of combustion are pulled through the combustion chamber for increased radiant efficiency and greater safety.
- Totally enclosed combustion chamber and no draft hoods.
- Heavy duty draft inducer with permanently lubricated, totally enclosed, fan cooled, and heavy duty ball bearing motor for maintenance-free operation.
- Draft inducer can be rotated 45° or 90° for sidewall venting.
- Up to 75 feet sidewall vent capability.

BURNER SYSTEM

- Heavy duty cast iron burner.
- Inside or outside air for combustion.
- Certified up to 50 feet outside combustion air duct.
- Reliable direct spark ignition system and 100% gas shut-off safety control.
- 30 second pre-purge prior to ignition.
- State-of-the-art step opening redundant combination gas valve for quiet ignition and added safety.
- Diaphragm air switch for proof of venting before gas flow and ignition.
- 3-step monitoring light system.
- Burner inspection sight glass.

RADIANT EMITTER TUBE SYSTEM

- Heavy duty 4" O.D. titanium alloy Alumi-Therm combustion chamber and aluminized steel emitter tubes.
- Emitter tubes are calorized for high emissivity, corrosion resistance and radiant efficiency.
- The calorization process produces an emitter tube which is highly radiant absorptive on the interior and highly radiant emissive on the exterior.
- Optional 90° elbows for LTS Series.

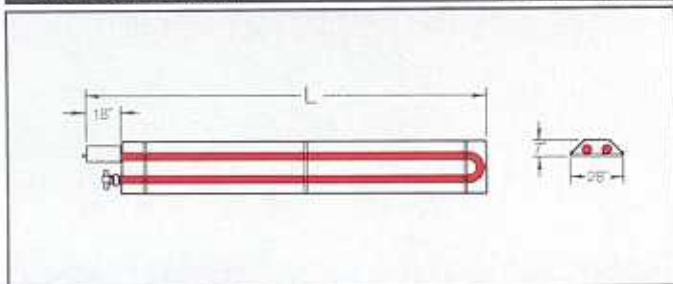
REFLECTOR SYSTEM

- Fully factory assembled on the tube body – saves installation time and money.
- Highly efficient aluminum reflectors with reflectivity rating of 97.5%.
- Reflector ends are enclosed for maximum radiant heat output and minimum convection loss.
- Easy to use mounting brackets.
- Suitable for horizontal or angle mounting up to 45 degrees.

SPECIFICATIONS

LTU BOTTOM VIEW

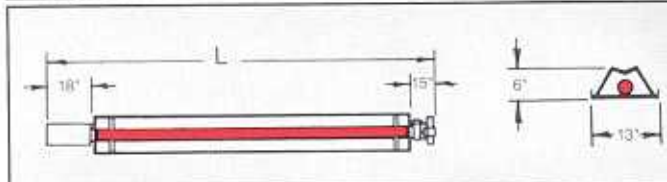
LTU END VIEW



MODEL	TOTAL TUBE LENGTH (FT)	OVERALL DIMENSION "L" (FT)
LTU 180, 200, 225, 250	50'	27' 7"

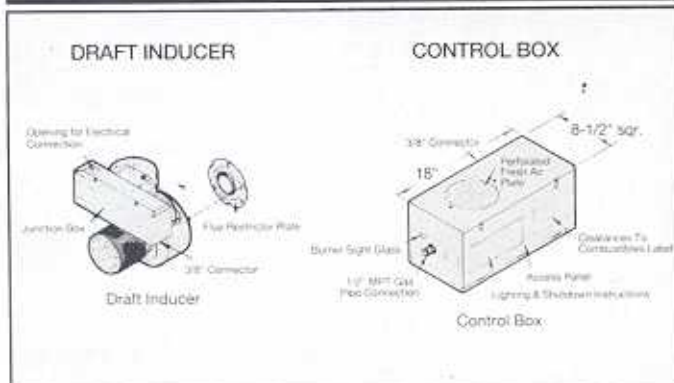
LTS BOTTOM VIEW

LTS END VIEW



MODEL	TOTAL TUBE LENGTH (FT)	OVERALL DIMENSION "L" (FT)
LTS 180, 200, 225, 250	50'	52' 9"
LTS 180, 200, 225, 250	60'	62' 9"
LTS 180, 200, 225, 250	70'	72' 9"
LTS 180, 200, 225, 250	80'	82' 9"

LTU AND LTS



Flue Connection: 6" Round Fresh Air Connection: 8" Round

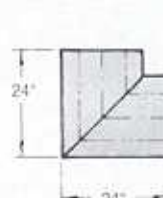
LTS OPTIONS

90° ELBOW



90° Elbow

CORNER REFLECTOR



Corner Reflector

NOTE: OPTIONAL SIDE REFLECTORS AND DEFLECTOR KITS ARE AVAILABLE

CLEARANCE TO COMBUSTIBLES

MODEL NO.	SIDES	CEILING	BELOW		45°		
			FIRST 20 FEET	OVER 20 FEET*	ENDS	FRONT	REAR
LTU180 - LTU250	84"	18"	132"	72"	48"	84"	24"
LTS180 - LTS250	84"	18"	132"	72"	48"	84"	24"

*Emitter tube 20 feet downstream from Control Box

GAS AND ELECTRICAL SUPPLY REQUIREMENTS

GAS TYPE	BURNER PRESSURE	SUPPLY PRESSURE MIN	SUPPLY PRESSURE MAX	VOLTS	AMPS	TYPE IGNITION
NATURAL	3.5" W.C.	7" W.C.	14" W.C.	120VAC	2.6	DIRECT SPARK
PROPANE	10" W.C.	12" W.C.	14" W.C.	60HZ		

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

COMBUSTION AIR AND VENTILATION

Combustion air and venting requirements for all gas-fired heating equipment must be provided per the National Fuel Gas Code NFPA54 or the authority having jurisdiction over the installation. In contaminated atmospheres or high humidity areas, optional outside air for combustion can be supplied. Heaters can be common vented, direct vented, or indirect vented. Refer to the 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/Hr. of total installed heater capacity on natural gas by either gravity or power ventilation (4.18 CFM per 1000 BTU/Hr. 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 YOUR SAFETY

OPERATE SPACE-RAY GAS INFRARED HEATERS WITH PROPER CARE, OBSERVE ALL SAFETY PRECAUTIONS AND OBSERVE LISTED CLEARANCES TO COMBUSTIBLES. Installation and service must be performed by a licensed contractor. The installation must conform to local codes. In the absence of local codes, the installation must conform with the National Fuel Gas Code ANSI Z223.1 (latest edition also known as NFPA 54) or CGA B149 installation codes (latest edition). These codes are available from the National Fire Protection Association, Inc., Batterymarch Park, Quincy, MA 02269 or the Canadian Gas Association, 55 Scarsdale Road, Toronto, Ontario M3B 2R3 Canada.

SPACE-RAY®

A Division Of Gas-Fired Products, Inc.

PO BOX 36485 CHARLOTTE, NC 28236

TELEPHONE (TOLL FREE) 1-800-438-4936

(704)372-3485

FAX(704)332-5843