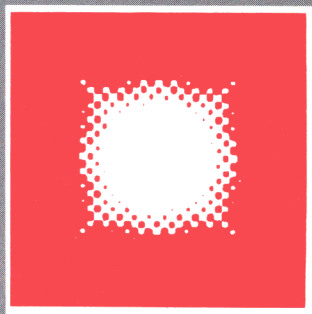


SPECIFICATIONS

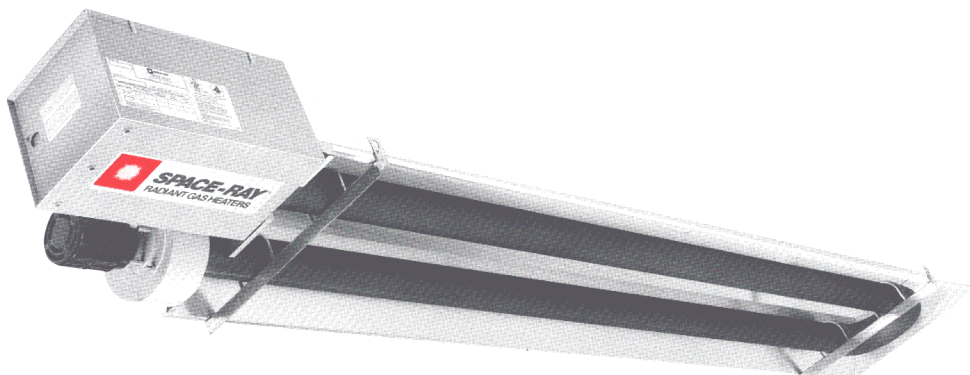


SPACE-RAY®

Infrared Gas Heaters For Industry Since 1958



COLD BLOCKER™ INFRARED GAS TUBE HEATERS



APPLICATIONS

- | | | | |
|-----------------------|------------------------|-----------------------|--------------------|
| ■ Residential Garages | ■ Enclosed Patios | ■ Golf Driving Ranges | ■ Farm Buildings |
| ■ Workshops | ■ Club Houses | ■ Restaurants | ■ Barns |
| ■ Swimming Pools | ■ Entry Ways | ■ Warming Stations | ■ Greenhouses |
| ■ Solariums | ■ Small Unheated Areas | ■ Storage Warehouses | ■ Mechanical Rooms |

ANNOUNCING THE SPACE-RAY® COLD BLOCKER™

A new compact size energy efficient infrared gas tube heater is now available for use in residential and light commercial buildings. The Space-Ray Cold Blocker industrial strength infrared heater is made especially for residential garages, workshops or virtually any small unheated space. It's compact size (only 9 feet 3 inches in overall length) allows placement in those small, hard to heat areas where longer infrared tube heaters could not previously be used.

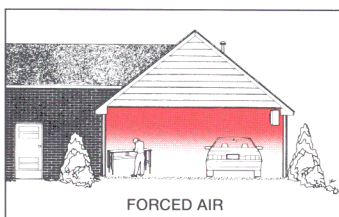
HEAT FROM THE BOTTOM UP

The new Space-Ray Cold Blocker heats from the bottom up. People, objects and floors are warmed directly by the sun like radiant infrared heat. These surfaces absorb the heat and then re-radiate it back to the surrounding air to maintain a blanket of warmth within the heated space. Working like this, from the bottom up, saves energy and lowers fuel bills.

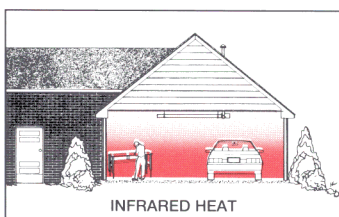
In contrast, with a conventional forced air heating system, energy dollars must be spent to constantly heat, circulate and re-heat the cold air. Forced air works from the top down, heating the air in the upper sections of the building and stratifying from the ceiling downward. This makes the floor area the last and most difficult to heat.

FUEL SAVINGS UP TO 50%

With the Space-Ray Cold Blocker, improved comfort levels can be achieved along with lower fuel bills. In many buildings, owners have experienced annual fuel savings of between 30% and 50% when compared to conventional forced air systems. Now this savings and comfort can be yours too.



Forced air works from the top down, heating the air first and stratifying from the ceiling downward. More heat is wasted in the upper area of the building.



Infrared heat works from the bottom up, warming people, floors and objects first without heating the air. Comfortable heat is retained at floor level.

VERSATILE AND RELIABLE

The Space-Ray Cold Blocker is both versatile and reliable. Each unit is factory pre-assembled for easy, low cost installation and it's available in four sizes from 20,000-50,000 BTU/Hr. All models are available in either natural or propane gas and have been design certified by both the American and Canadian Gas Association Laboratories (A.G.A. and C.G.A.). Reliability and durability are underscored through the use of high quality materials like calorized (heat treated) tubes, maintenance free draft inducer assemblies and redundant step opening gas valves.

CALL FOR MORE INFORMATION

So, when you think comfort heating for residential garages or light commercial buildings, think about the new Space-Ray Cold Blocker. Call our toll-free number, 1-800-438-4936 for more information and the name of the Space-Ray representative nearest you.

FEATURES

COLD BLOCKER TUBE HEATER FEATURES

- Four different input sizes from 20,000 to 50,000 BTU/Hr.
- Natural or propane gas
- U-tube design for uniform energy distribution
- Compact size for easy installation from 6' to 20' above floor

VACUUM SYSTEM

- Products of combustion are pulled through the combustion chamber for increased radiant efficiency and greater safety
- No draft hoods; totally enclosed combustion chamber

BURNER SYSTEM

- One-piece cast iron burner
- 10-year limited warranty on burner
- Direct outside air for combustion
- 4" O.D. combustion air intake and vent
- Direct spark ignition system with step opening gas valve and 100% Gas Shut-Off Safety Control (pre-purge)
- Monitoring lights for visual diagnosis of maintenance needs

RADIANT EMITTER TUBE SYSTEM

- 3" O.D. calorized aluminized steel emitter tube for long life and high radiant efficiency
- 5-year limited warranty on the emitter tube
- Smooth cast iron "U" bend

REFLECTOR SYSTEM

- Highly efficient aluminum reflectors
- Reflector ends are enclosed for maximum radiant heat output and minimum convection loss
- Suitable for horizontal or angle mount up to 45 degrees

OTHER

- Lower mounting height kit required on heater installations between 6 and 8 feet
- Optional deflector kit for reduced clearances to combustible materials
- Optional decorative grille kit for drop ceiling applications

TECHNICAL SPECIFICATIONS

MODEL NO.	INPUT BTU/H	MODEL NO.	INPUT BTU/H
CB20	20,000	CB40	40,000
CB30	30,000	CB50	50,000

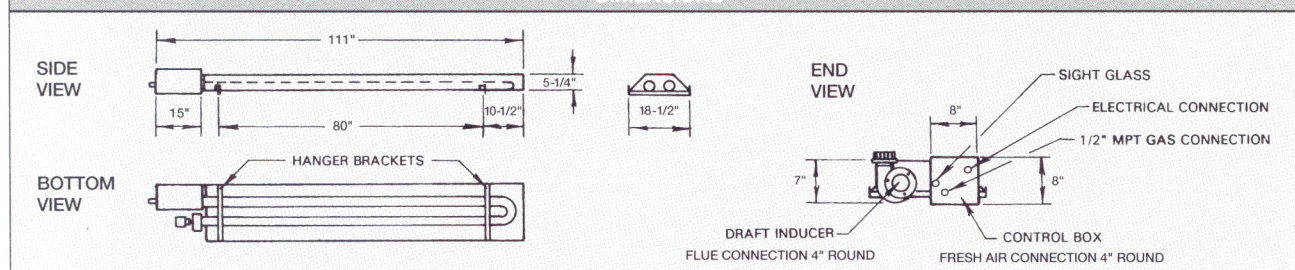
GAS TYPE	BURNER PRESSURE	SUPPLY PRESSURE		VOLTAGE	AMPS
		MIN.	MAX.		
NATURAL	3.5"W.C.	5"W.C.	14"W.C.	120 VAC 60 HZ	2.6
PROPANE	10"W.C.	11"W.C.	14"W.C.		

MINIMUM CLEARANCES TO COMBUSTIBLES

MODEL	MOUNTING ANGLE	SIDES ³		CEILING	BELOW ²	ENDS
		FRONT	REAR			
CB(50,40)	0°	12"	12"	4"	57" ¹	8"
	45°	40"	4"	4"	57"	8"
CB(30,20)	0°	8"	8"	4"	41" ¹	8"
	45°	30"	4"	4"	41"	8"

NOTES: 1) In U.S., the clearances below with deflector are: CB(50,40) - 42" and CB(30,20) - 33"
 2) In Canada, the clearances below the heater are: CB(50,40) - 48" (36" with deflector) and CB(30,20) - 36" (27" with deflector)
 3) Maintain 30" side clearance with deflector

DIMENSIONS



VENTING REQUIREMENTS

In residential applications, heaters must be vented outside the building with a flue pipe. In commercial applications, heaters can be common vented, vented or indirect vented. A **vented** installation must be vented outside the building with a flue pipe. An **indirect vented** installation requires a minimum ventilation flow of 4 CFM per 1000 BTU/hour of total installed heater capacity on natural gas by either gravity or power ventilation (4.18 CFM per 1000 BTU/hour on propane).

INSTALLATION REQUIREMENTS

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 NFPA54) or CGA B149 (latest edition) installation codes. 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.

FOR YOUR SAFETY

Operate Cold Blocker infrared heaters with proper care and observe all safety precautions. Carefully follow printed installation, operating and cleaning instructions furnished with the heater. Do not store gasoline or combustible products in the vicinity of the heater. Keep children, clothes and drapery away from the heater. Do not touch the heater or the tubes while the heater is in operation. Adequate ventilation must always be provided in accordance with codes.

SPACE-RAY®

A Division of Gas-Fired Products, Inc.

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