

Easy Radiant "Works"

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Engineering Submittal Data PPRTH Patio Radiant Tube Heaters.

For either indoor or outdoor installation. Not for use in residential dwellings

Model	O/A Length	Input (BTU)	Weight	٦
PPRTH-50-15	17'	50,000	88 lbs	
PPRTH-75-20	22'	75,000	115 lbs	
PPRTH-85-25	27'	85,000	124 lbs	

CLEARANCES TO COMBUSTIBLES

BTU RANGE	BELOW	TOP	SIDES	BACK
				(Angle Mount)
50,000	48" / 121.92 cm	4" / 10.16 cm	25" / 63.5 cm	16" / 40.64 cm
75,000	48" / 121.92 cm	4" / 10.16 cm	25" / 63.5 cm	16" / 40.64 cm
85,000	48" / 121.92 cm	4" / 10.16 cm	25" / 63.5 cm	16" / 40.64 cm

Clearances "below" can be reduced by 40% beginning 15 ft. downstream of burner.



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SPECIFICATIONS

APPROVALS

- * Intertek ETL
- * Certified for use in Canada and the USA
- * Tested and certified at the Intertek laboratories to all applicable CAN/CGA, CSA, and ANSI standards.
- * Commercial, Industrial, and Residential, indoor/outdoor approvals.

BURNER CONTROL BOX

- * Totally enclosed controls
- * Sight glass for visual combustion observation
- * Controls serviceable while in operation and isolated from combustion air
- * Easy access to controls with the removal of six (6) .5" hex-head self-taping screws with exclusive removable panel control box design.
- * Thermally protected and permanently lubricated blower motor
- * 5' long grounded cap and cord plug in 110v connection

COMBUSTION AIR & VENTING

- * 4" combustion air inlet and exhaust
- * Certified for direct sidewall, roof, and open venting
- * Maximum 60' of combined intake and vent line (NOT including length of unit) in any combination (eg. 15' intake, 45' vent). Deduct 5' from 60' allowance for every 90-degree bend in intake/vent line.

GAS SPECIFICATIONS

Pressures	NG	<u>LP</u>	
in W.C.P.	(inches)	(inches)	
Manifold	3.5"	10"	
Min. Inlet	7"	11.5"	
Max. Inlet	14"	14"	

ELECTRICAL SPECIFICATIONS

- * 120 V.A.C., 60 Hz, 1 Ph., 3 wire
- * Supplied via 5 ft. 120v 3 wire cap and cord plug in connection
- * Factory ready for 120v or 24v thermostatic controls
- * Ignition current 3 amps
- * Running current 1 amp

CONTROLS

- * Norton ceramic hot surface mini igniter
- * Air proving safety switch monitors for blocked flu and intake air
- * Independent flame sensing rod
- * Honeywell Smart valve OR White Rogers valve with proprietary electronic controls made in the USA

COMBUSTION & EMITTER TUBES

- * All emitter & combustion tubes are 16 ga., 4" OD
- * Tubes press fitted with swaged ends
- * Primary combustion tubes constructed of high temperature specialty alloys
- * Secondary tubes are constructed of of high temperature specialty alloy. Secondary tubes are coated with high temperature, corrosion resistant black coating.
- * High temperature, aluminized steel turbulator baffle factory installed (if required)

REFLECTOR

- * Highly polished, high grade seamless aluminum for maximum reflective efficiency
- *Mirror polish for superior reflectivity and emission

"NO IFS, ANDS, OR BUTS" WARRANTY

- * 4 Years on ALL heater components
- * 20 year burnout guarantee on combustion and emitter tubes

MANUFACTURED IN CANADA WITH NORTH AMERICAN MADE COMPONENTS AND MATERIALS

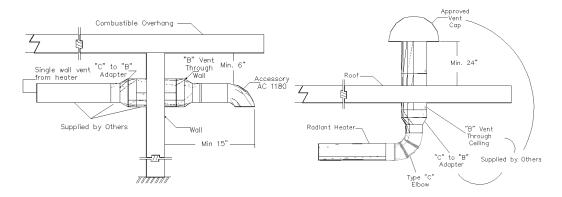
COMMON ACCESSORIES PART# DESCRIPTION **NOTES** AC1010 110v Analog Thermostat For control of single or multiple units AC1060 24v Analog Thermostat In Celsius. For Fahrenheit, use part #AC1062 AC1070 Stainless Steel 1/2" Flexible Gas Connector US Only AC1072 Neoprene 1/2" Flexible Gas Connector Canada/US AC1080 Outside Air Adapter AC1100 Outside Air Wall Cap Combustion Air Flex Duct AC1110 AC1120 4" x 4" x 6" Exhaust Tee For common venting - Note: units MUST be jointly controlled AC1130 90 Degree Elbow AC1180 Sidewall Exhaust Cap - 4" OD - type B Vent Required for direct sidewall venting AC1190 Sidewall Exhaust Cap - 4" ID - type C Vent Required for direct sidewall venting AC1220 Fresh Air Intake Package 10' flex duct, screened intake cap, c/w clamps & connectors AC2000 24v Light Activated Set Back Digital Stat

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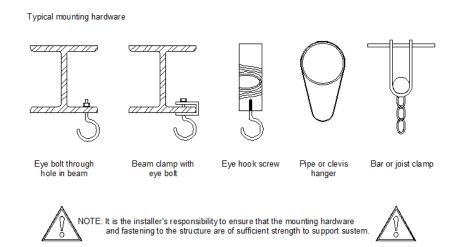
FIELD SPECIFICATIONS

SIDEWALL VENTING

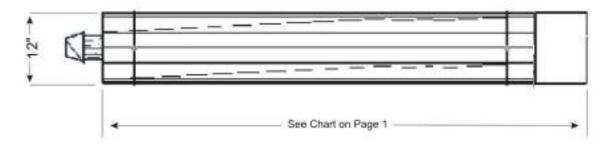
ROOF VENTING



*Note: Vent lines longer than 10' must be insulated or constructed of insulated type "B" material.



DIMENSIONS



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WRITTEN SPECIFICATIONS

- Gas fired radiant tube heaters shall be Patio Radiant Tube Heater (PPRTH) series heaters manufactured by Easy Radiant Works, Wainfleet, Ontario, Canada.
- Radiant tube heaters shall be furnished and installed in compliance with all applicable governing codes and in compliance with included manufactures specifications. In cases where manufacturers instructions and governing codes conflict, installer shall defer to whichever is most stringent.
- Radiant tube heaters shall be Design Certified by Intertek ETL, and comply with all applicable standards including CAN/CGA, CSA, and ANSI. All radiant tube heaters must bear the ETL certification mark and manufacturers serial number.
- Radiant tube heaters shall be supplied with a manufacturers warranty covering all components for a period of no less than four (4) years. Combustion and radiant emitter tubes shall be warranted against burnout for a period of no less than twenty (20) years.
- Radiant tube heaters shall be supplied with a copy of the manufacturers installation and operation manual.
- Burner controls shall be totally contained within a
 control housing that is isolated from combustion air.
 Control housing shall be of such construction that
 internal components are accessible for diagnostic
 purposes while heater is in operation. Control housing
 shall be of the removable panel type, with access
 granted to controls by the removal of six (6) exterior
 hex-head self-taping screws.
- Combustion tubes shall be constructed of 16 ga. (0.065"), 4" dia. aluminized steel tube coated with black high temperature coating.
- Emitter tubes shall be constructed of 16 ga. (0.065"), 4" dia. low carbon steel tube. Emitter tubes shall be coated with high temperature black coating.
- Combustion and emitter tubes joints shall be of press fit design with swaged ends at 4" ID. Tubes shall be mechanically secured by means of manufacturer provided self drilling screws.

- Reflector material shall have a minimum thickness of 0.025" (+/- .001"), shall be constructed of seamless 3003 aluminum sheet, and be tempered to specifications H24-H25. Reflector finish shall be a minimum of "Brite-one-side".
- Heaters shall be equipped with an electronic hotsurface igniter that is enclosed in a protective metal jacket.
- Heaters shall be equipped with an independent flame sensor.
- Heaters shall be equipped with a sight glass for visual confirmation of combustion and igniter operation.
- Heaters shall utilize the Honeywell Smart Valve or a White Rogers valve with proprietary control module for control sequencing and gas flow regulation.
- Units shall utilize two dedicated mechanical air pressure switches, one for blocked flue and one for combustion intake air pressures. Air switches shall be factory set to correct pressures with no requirement for field adjustment.
- Units shall be constructed with a five foot (5') long grounded 110v capped connector.
- Units shall be supplied ready to accept both 110v and 24v thermostatic controls.
- If required, heaters shall be equipped with a preinstalled turbulator baffle constructed of aluminized steel, and pre-installed by the factory in a marked 10' section of emitter tube for installation on the exhaust end of the heater.
- Heater shall be constructed that total safety shut down will occur in the events of: loss of combustion, blocked flue, blocked air intake, blower failure, loss of 110v power, increase of gas pressure beyond specification, or combustion failure on ignition attempt. Unit shall lock out operation entirely in the event that there are three (3) to five (5) consecutive failures, and only be reset by means of disconnection of 110v power supply.

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California Title 24 Requirements

Type: Patio heater Intensity: Low

Radiant Tube Type: Yes

Portable: No

Vented: Yes (optional)

Physically Possible to Measure Radiant Coefficient: No

Combustion Efficiency: Approx. 86%

Radiant Coefficient: n/a

Effective Heating Area: PPRTH-50-15 - ~210 ft/3

PPRTH-75-20 - ~280 ft/3 PPRTH-85-25 - ~350 ft/3

Efficiency Index: n/a

CONTACT INFORMATION

SUBMITTED BY:	DATE:
<u>JOB</u>	<u>CONTRACTOR</u>
JOB TITLE:	COMPANY:
ADDRESS:	ADDRESS:
CITY:	CITY:
STATE/PROV.:	STATE/PROV.:
ZIP/POSTAL:	ZIP/POSTAL:
CONTACT NAME:	CONTACT NAME:
CONTACT NUMBER:	CONTACT NUMBER:
ENGINEER	EQUIPMENT REPRESENTATIVE
COMPANY:	COMPANY:
ADDRESS:	ADDRESS:
CITY:	CITY:
STATE/PROV.:	STATE/PROV.:
ZIP/POSTAL:	ZIP/POSTAL:
CONTACT NAME:	CONTACT NAME:
CONTACT NUMBER:	CONTACT NUMBER:

WARNING! Heaters must be installed and serviced by qualified and licensed gas personnel only. Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment. **This spec-sheet is not the installation manual.**