

Job: ~~Campbell Soup - Paris TX~~
 Engineer: _____
 Contractor: _____
 Prepared By: A Deal
 Model: ~~WH1-4001~~ ~~H2-4004~~ Indoor Date: ~~4-17-14~~

Raytherm™ - Type WH

Water Heaters
Commercial

Models 2100 - 4001

EFFICIENT

- ▶ 82% thermal efficiency – highest of any atmospheric water heater available today

THERMAL SHOCK PROOF

- ▶ Twenty-year warranty against thermal shock damage up to 150°F differential
- ▶ Maximum operating temperature: 210°F

LIGHTWEIGHT

- ▶ A floor load of 70 lbs./sq. ft. or less

HIGH RECOVERY

- ▶ Cuts fuel costs substantially because the standby and radiation losses associated with tank-type water heaters are eliminated

LOW WATER OPERATING TEMPERATURE

- ▶ Operates with water temperature as low as 105°F without condensing

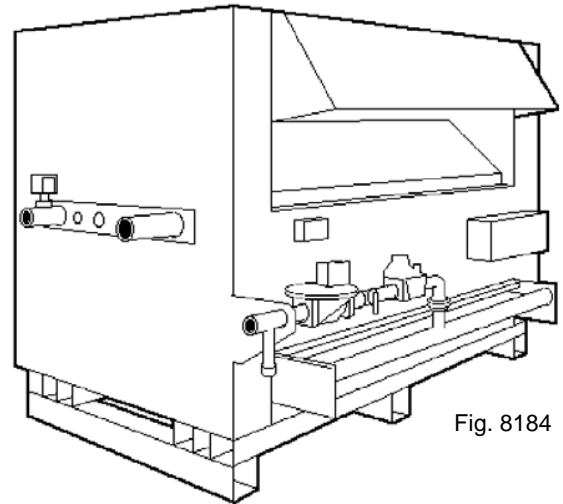


Fig. 8184

MODELS W 2100-4001 (INDOOR)

Heat Exchanger

- ASME Inspected and Stamped 160 PSIG
- National Board Approved
- Headers
 - Glass-lined Cast Iron (standard)
 - Bronze
- Finned Tubing
 - Copper (standard)
 - Cupro Nickel
- ASME Steel Tube Sheet
- Silicone O-Rings
- 125 PSIG ASME Pressure Relief Valve
- Temperature and Pressure Gauge
- Water Connections
 - Left Hand (standard)
 - Right Hand
- Flow Configuration – Single-pass

Controls

- 115V, 60Hz, 1 Ph Power Supply
- 115/24V Transformer
- 100% Pilot Shut-off/Lockout
- Electronic, Intermittent Ignition (IID) Pilot
- High Limit Control, Manual Reset
- High Limit Control, Auto Reset – Models 3001-4001
- On/Off Switch
- Flow Switch
- Economaster II Pump Time Delay

Gas Control Train

- Manual Main Gas Shut-off Cock
- Main Gas Pressure Regulator
- Redundant Safety Shut-off Valve
- Control Valve
- Firing Mode
 - On/off
 - Two-stage Firing
 - Motorized Modulation
- Fuel
 - Natural Gas
 - Propane Gas
- Design Certified to ANSI Z21.10.3 Requirements

Construction

- Front Controls
- Stainless Steel Burners
- Polytuf Powder Coat Finish
- Built-in Draft Diverter
- Draft Inducer - Optional
 - Motorized Draft Inducer - Indoor

Water Heater Controller

- Required on Model W2 only
- Modulating – 104-220°F, Mounted
 - By Others

Temperature Controllers

- Single-stage (Loose)
- Two-stage (Loose)
- 1-8 Stages - Y2B Outdoor Reset
- 1-8 Stages - Y3B Outdoor Reset
- 1-8 Stages - Y4B Outdoor Reset
- 1-8 Stages - Y5B Outdoor Reset

Additional Safety Controls

- Low Water Cut-off Probe
- High Gas Pressure Switch – Manual
- Low Gas Pressure Switch – Manual
- High Limit Control, Auto Reset
- _____
- _____

Regulatory Agency Requirements

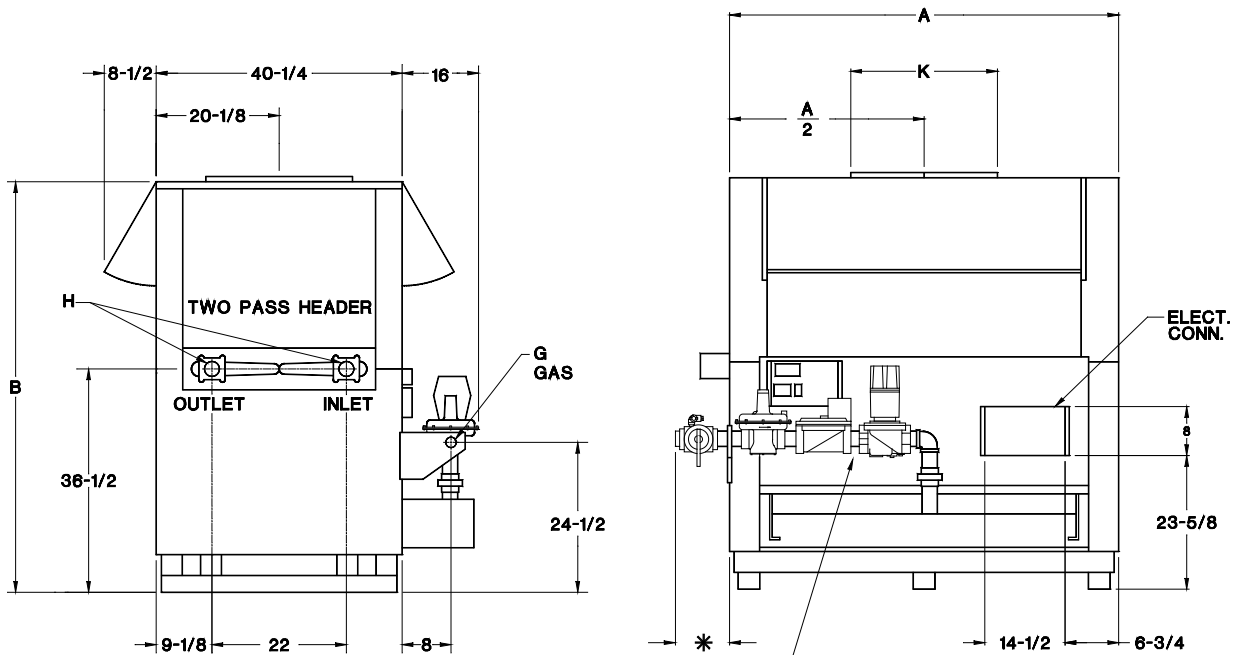
- Industrial Risk Insurers (IRI)
- _____
- _____



Raypak

Raytherm - Type WH Water Heaters

Model H2-4001



BOILER RATE OF FLOW AND PRESSURE DROP

	Model No.	10° ΔT		20° ΔT		30° ΔT		40° ΔT	
		GPM	ΔP FT	GPM	ΔP FT	GPM	ΔP FT	GPM	ΔP FT
TWO-PASS	H-2100	N/A	N/A	172	11.0	115	5.0	N/A	N/A
	H-2500	N/A	N/A	N/A	N/A	137	7.5	102	4.3
	H-3001	N/A	N/A	N/A	N/A	164	11.2	123	6.5
	H-3500	N/A	N/A	N/A	N/A	191	16.2	144	9.3
	H-4001	N/A	N/A	N/A	N/A	N/A	N/A	164	12.8
ONE-PASS	H-2100	344	14.0	N/A	N/A	N/A	N/A	N/A	N/A
	H-2500	N/A	N/A	205	5.3	N/A	N/A	N/A	N/A
	H-3001	N/A	N/A	246	7.8	N/A	N/A	N/A	N/A
	H-3500	N/A	N/A	287	11.0	191	5.0	N/A	N/A
	H-4001	N/A	N/A	328	14.8	219	6.8	N/A	N/A

N/A – Not Applicable

NOTES:

- Values represent maximum flows and pressure drops for closed heating systems.
- Maximum acceptable flow through heat exchanger tubes is 200 GPM (two-pass); 400 GPM (one-pass)
- Single-pass heat exchangers are to be used only when flow rates exceed the allowable for two-pass

MODELS WH 2100 THROUGH 4001

Model No.	MBTUH Gas		Dimensions (inches)					Shipping Weight Lbs. (Approx.)
			Width A	Height Overall B	Gas Conns. G	Water Conns. H	Flue Dia. K	
	Input	Output						
WH-2100	2100	1722	61.0	68-1/4	*	3	24	1400
WH-2500	2499	2049	70.0	68-1/4	*	3	26	1580
WH-3001	3000	2460	81-1/4	68-1/4	2	3	28	1750
WH-3500	3500	2870	92-1/2	68-1/4	2	3	30	1920
WH-4001	4000	3280	103-3/4	68-1/4	2	3	32	2100

* 1-1/2" or 2", contingent on water heater type code requirements

NOTE: Ratings are for elevations up to 2,000 feet. For elevations over 2,000 feet, reduce ratings 4% for every 1,000 feet above sea level.

Job: _____
Engineer: _____
Contractor: _____
Prepared By: _____ Date: _____

Power Vent

For Raytherm®
Models 2100-4001

Versatile

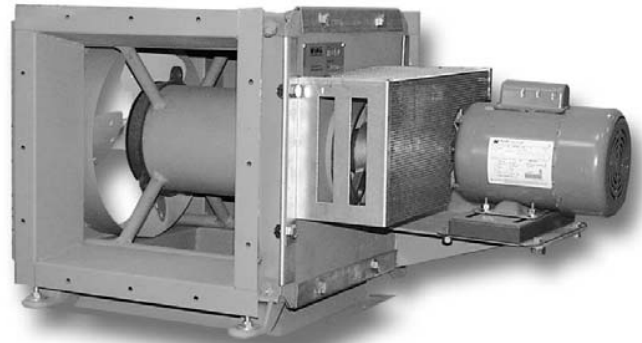
Suitable for use with hydronic heating boilers and hot water heaters

Permits sidewall venting

Allows use of smaller diameter vent pipe

Efficient

Maintains thermal efficiency of 82% on all appliance sizes



Features

- Induced draft
- Plenum sized for appliance capacity
- Pre-wired and shipped loose for field mounting
- Air flow proving switch, mounted and wired
- Fan motor relay, mounted and wired
- Heavy-duty galvanized steel cabinet
- Polytuf powder coat finish
- Indoor construction
- Easy installation
- Limited one-year warranty
- Shipped loose for field mounting

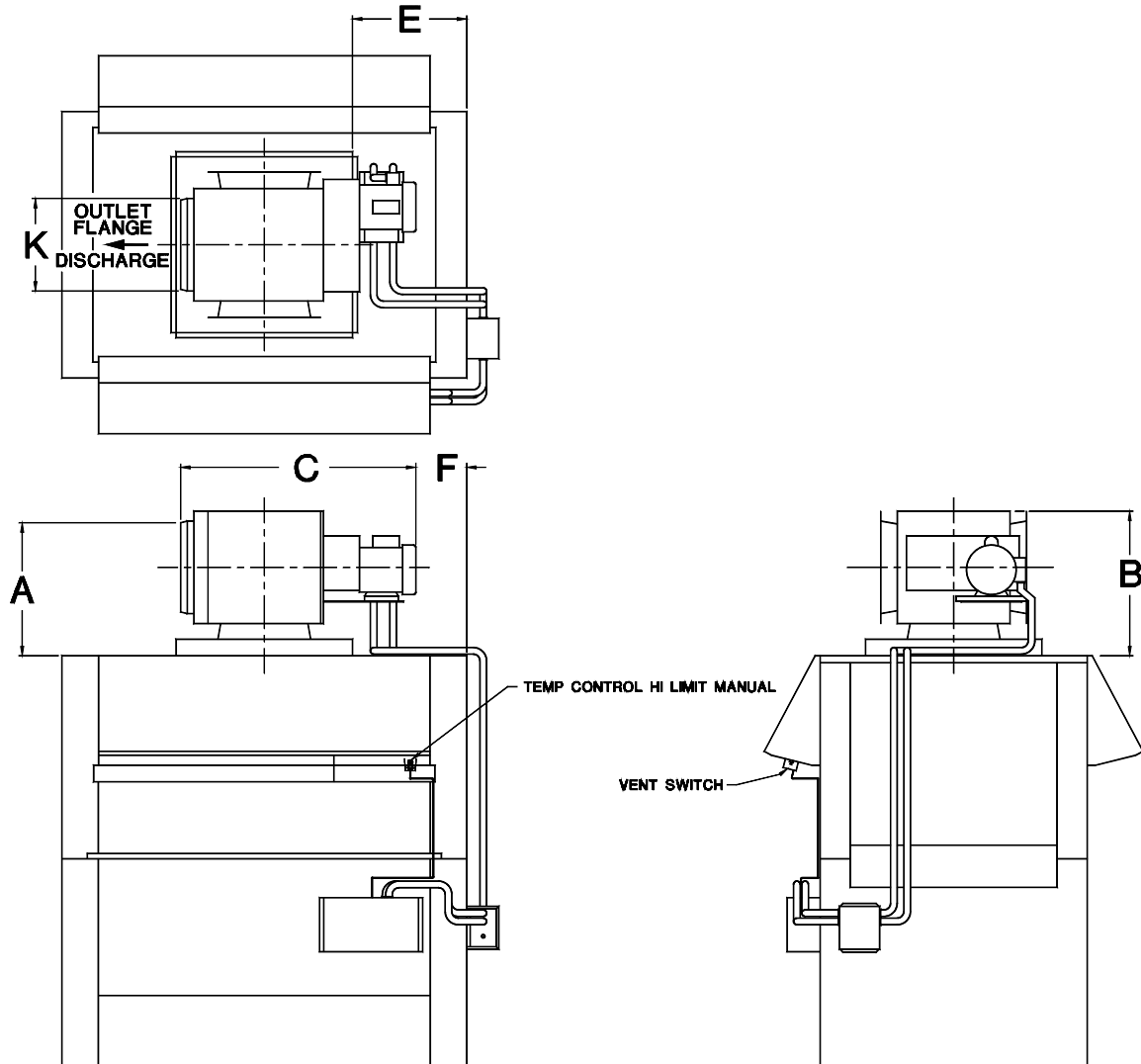


Raypak®
A Rheem® Company

Power Vent

For Raytherm 2100 - 4001

Model _____



Raytherm Model	MBTU	Max. Runt (ft.)		Dimensions						Electrical Ratings			Max. CFM @ 70°F
		Vert.	Horiz.	A	B	C	E	F	K	Volts	Amps	HP	
2100	2100	20	60	16-7/8	22-3/8	33-1/2	17-1/4	7-11/16	14	115	7.2	1/2	1900
2500	2499	20	60	16-7/8	22-3/8	33-1/2	21-3/4	12-3/16	14	115	7.2	1/2	1900
3001	3000	20	60	24-1/4	27-3/8	44-3/4	23-5/8	10-1/8	16	115	10.7	3/4	3400
3500	3500	20	60	24-1/4	27-3/8	44-3/4	29-1/4	15-3/4	16	115	10.7	3/4	3400
4001	4000	20	60	24-1/4	27-3/8	44-3/4	34-7/8	21-3/8	18	115	10.7	3/4	3400

- Notes:
1. Vent pipe sizes are based on standard horizontal discharge with maximum sixty feet of horizontal length with no elbows, 300°F nominal flue temperature, and sea-level operation. (Allow 10 ft. equivalent length adjustment for each 90° elbow.) For installation under other conditions, please consult the factory.
 2. Left discharge is standard.
 3. Vent pipe must meet Category III appliance venting requirements.
 4. Follow installation instructions provided by power vent manufacturer.

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