Job: _____

Engineer: _____

Contractor: _____

Prepared By: _____

Model: _____ Date: _____

Raytherm® - Type H

Hydronic Heating Boilers Commercial

Models 2100-4001 (Indoor)

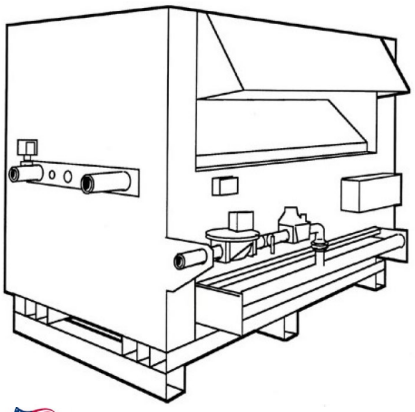
Efficient
- **Up to 82% thermal efficiency**

Thermal shock proof
- **Limited 25-year thermal shock warranty**

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

Dependable
- **The simple atmospheric design provides a low cost and long life solution**

Low water operating temperature
- **Operates with inlet water temperature as low as 105°F without condensing**



Proudly Assembled in the USA

Heat exchanger
- ASME H Stamped; 160 PSIG MAWP
- National Board
- Headers
  - ☐ Glass-lined cast iron (standard)
  - ☐ A-1 Bronze (optional)
- Finned Tubing
  - ☐ Copper (standard)
  - ☐ A-3 Cupronickel (optional)
- ASME Steel tube sheet
- Silicone O-Rings
- Pressure Relief Valve
  - ☐ ASME 60 PSIG (standard)
  - ☐_____ PSIG (optional)
- T&P Gauge
- Water Connections
  - ☐ Left hand (standard)
  - ☐ A-6 Right hand (optional)
- Flow configuration
  - ☐ Two-pass (standard)
  - ☐ Single-pass (cast iron only)

Controls
- 120V, 60Hz, 1 Ph Power supply
- 120/24V 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 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
  - ☐ H-3 Two-stage firing
  - ☐ H-4 On/off
  - ☐ H-9 Four-stage firing
- Fuel
  - ☐ Natural gas
  - ☐ Propane gas (minimum grade HD-5)
- Design certified ANSI Z21.13/ CSA 4.9

Construction
- CSA Low lead certified ≤ .25% Lead
- Front controls
- Stainless steel burners
- Polytuf powder coat finish
- Built-in draft diverter
- Draft Inducer (optional)
  - ☐ D-2 Motorized draft inducer

Temperature controllers
- ☐ B-6 Two-stage (H3)
- ☐ B-__ TempTracker Mod+ Hybrid, 2-16 Boilers (All)
- ☐ B-__ Two-stage digital (H3)
- ☐ B-__ Four-stage digital (H9)
- ☐ B-60 Stage interface (H3/H9)

Additional safety controls
- ☐ F-9 Low water cut-off probe
- ☐ I-1 High limit control, auto reset
- ☐ S-1 Low gas pressure switch
- ☐ S-2 High gas pressure switch
- ☐ _____ _____
- ☐ _____ _____

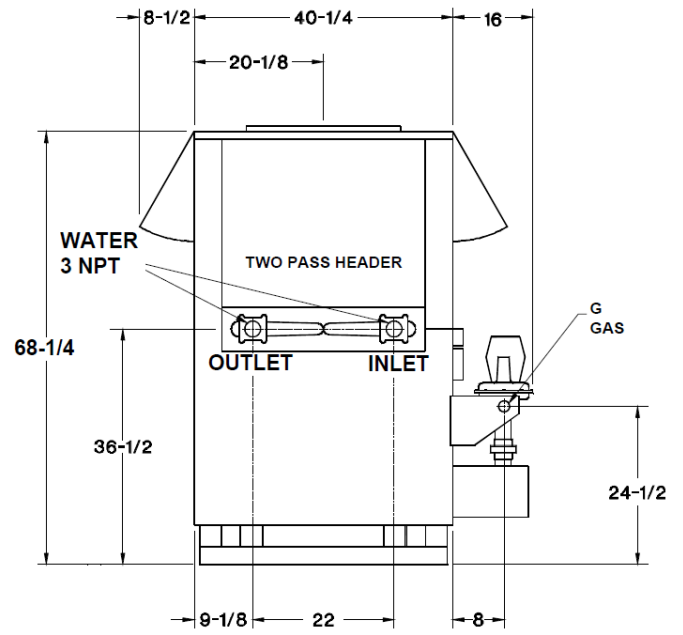
Regulatory agency requirements
- ☐ _____
- ☐ _____

Raypak® A Rheem® Company

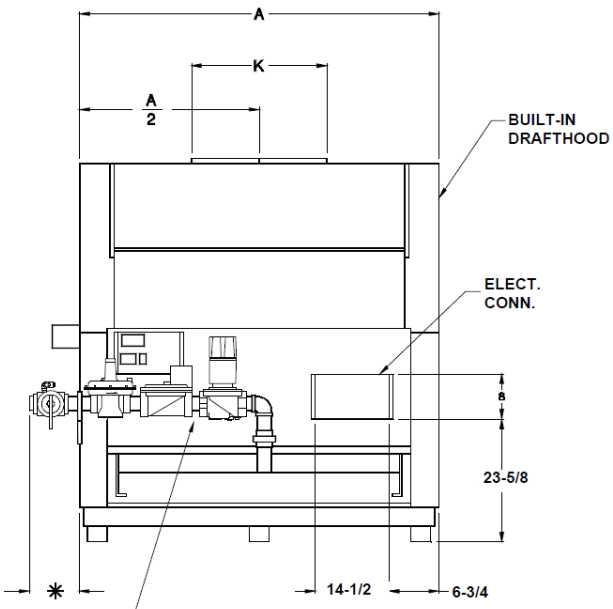
AHRI CERTIFIED www.ahridirectory.org

Raytherm - Type H
Hydronic Heating Boilers

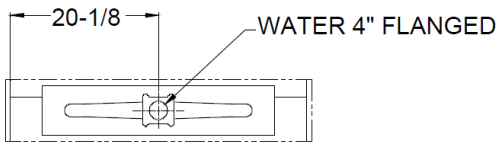
Model _____



✱ DIMENSION VARIES FOR EACH MODEL SIZE AND TYPE. CONSULT FACTORY FOR DETAILS



GAS TRAIN ILLUSTRATED FOR REFERENCE ONLY. ACTUAL BOILER GAS CONTROLS MAY VARY FOR EACH MODE, SIZE AND TYPE. CONSULT FACTORY FOR DETAILS



OPTIONAL ONE PASS

Models 2100 - 4001

Model	MBTUH (kW) Natural & Propane Gas		Dimensions in. (mm)				Electrical Rating	Approx. Shipping Weight (Lbs.)
			Width	Gas Conn.	Water Conn.	Flue Dia		
	Input	Output	A	G	H	K		
H-2100	2100 (615)	1722 (505)	61 (1549)	(a)	3 (b)	24	Less than 8.0 amps without pump at 120VAC	1400
H-2500	2499 (732)	2049.2 (601)	70 (1778)	(a)	3 (b)	26		1580
H-3001	3000 (879)	2460 (721)	81-1/4 (2064)	2	3 (b)	28		1750
H-3500	3500 (1026)	2870 (841)	92-1/2 (2350)	2	3 (b)	30		1920
H-4001	4000 (1172)	3280 (961)	103-3/4 (2635)	2	3 (b)	32		2100

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

(a) 1-1/2” or 2” contingent on boiler type code requirements
(b) 4” on one-pass option

Raytherm - Type H
Hydronic Heating Boilers

Model _____

BOILER RATE OF FLOW AND PRESSURE DROP

	Model No.	10° ΔT		20° ΔT		30° ΔT		40° ΔT		Minimum Flow			Maximum Flow		
		GPM	ΔP FT	GPM	ΔP FT	GPM	ΔP FT	GPM	ΔP FT	GPM	ΔP FT	ΔT	GPM	ΔP FT	ΔT
TWO-PASS	H-2100	Exceeds Maximum Flow		174	11.2	116	5.1	Less than Minimum Flow		90	3.2	38	200	14.8	17
	H-2500					138	7.8	103	4.4	103	4.4	40	200	15.8	21
	H-3001					166	11.6	124	6.7	124	6.7	40	200	16.7	25
	H-3500					191	16.2	145	9.5	145	9.5	40	200	17.5	29
	H-4001							166	13.0	166	13.0	40	200	18.7	33
ONE-PASS	H-2100	344	14.0							180	4.0	19	400	18.0	9
	H-2500	400	18.8	205	5.3					180	4.1	23	400	18.8	10
	H-3001			246	7.8					180	4.3	27	400	19.5	12
	H-3500			287	11.0	191	5.0			180	4.5	32	400	20.5	14
	H-4001			328	14.8	219	6.8			180	4.7	36	400	21.5	16

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