



COPPER-FIN II® PREASSEMBLED GAS WATER HEATER PACKAGE SYSTEMS

Job Name: _____ Model No. _____

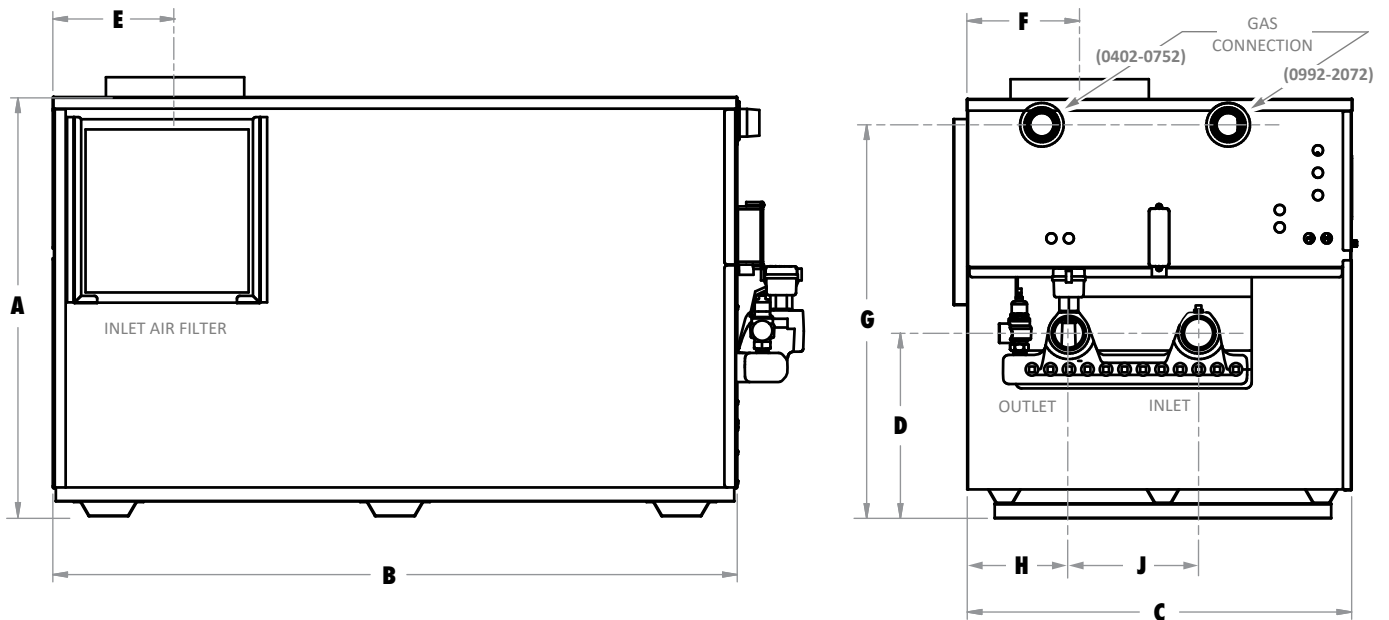
Location: _____ Type Gas: _____ BTU/Hr Input _____

Engineer: _____ Recovery Rate in GPH _____ @ _____ °F Rise

Agent/Wholesaler: _____ Equipment Tag(s): _____

Contractor: _____

NOTES:



Copper-Fin II® Water Heater Dimensions and Specifications

MODEL NUMBER	BTU/HR INPUT	GPH @ 100°F RISE	A	B	C	D	E	F	G	H	J	GAS CONN.	WATER CONN.	AIR INTAKE	VENT SIZE	SHIP WGT.
CFN402PM	399,000	412	31-1/2"	37-3/4"	22-1/4"	12-1/2"	7	7	29	6-1/2"	6-1/2"	1-1/4"	2	6	6	454
CFN502PM	500,000	515	31-1/2"	45-1/2"	22-1/4"	12-1/2"	7	7	29	6-1/2"	6-1/2"	1-1/4"	2	6	6	467
CFN652PM	650,000	670	31-1/2"	56-3/4"	22-1/4"	12-1/2"	8-1/2"	8-1/4"	29	6-1/2"	6-1/2"	1-1/4"	2	8	8	551
CFN752PM	750,000	773	31-1/2"	64	22-1/4"	12-1/2"	8-1/2"	8-1/4"	29	6-1/2"	6-1/2"	1-1/4"	2	8	8	611
CFN0992PM	990,000	1,020	36	48-1/4"	33-1/2"	15-3/4"	8-1/2"	8-1/2"	33-3/4"	8-3/4"	11-1/4"	2	2-1/2"	10	10	843
CFN1262PM	1,260,000	1,298	36	58-1/2"	33-1/2"	15-3/4"	10-1/2"	9-1/2"	33-3/4"	8-3/4"	11-1/4"	2	2-1/2"	12	12	939
CFN1442PM	1,440,000	1,484	36	68-3/4"	33-1/2"	15-3/4"	10-1/2"	10-1/2"	33-3/4"	8-3/4"	11-1/4"	2	2-1/2"	12	12	1,035
CFN1802PM	1,800,000	1,855	36	82-1/4"	33-1/2"	15-3/4"	11	11	33-3/4"	8-3/4"	11-1/4"	2	2-1/2"	12	14	1,168
CFN2072PM	2,070,000	2,133	36	92-1/2"	33-1/2"	15-3/4"	11	11	33-3/4"	8-3/4"	11-1/4"	2	2-1/2"	12	14	1,285

NOTES: Change 'N' to 'L' for LP gas models. No deration on LP models.
 Pump and flanges are shipped loose for field installation.
 Performance data is based on manufacturer test results.

COPPER-FIN II®



Codes & Registrations

ANSI Z21.13/CSA 4.9 Certified
South Coast Air Quality Management District Certified (SCAQMD)
Texas Commission on Environmental Quality

Standard Features

- › **85% Thermal Efficiency**
- › **Proportional Firing up to 4:1 Turndown**
 - › Hot Surface Ignition
 - › Low NOx Operation
 - › Sealed Combustion
 - › Low Gas Pressure Operation
- › **Vertical & Horizontal Venting**
 - › Category I Venting
 - › Double Wall “B” Vent Material
 - › Category IV Venting
 - › AL29-4C Stainless Steel Vent Material
- › **ASME Copper Finned Tube Heat Exchanger**
 - › ASME Certified, “H” Stamped
 - › Gasketless design
 - › 160 psi working pressure
- › On/Off Switch
- › Combustible Floor Rated (CF 0992-2072)
- › Adjustable High Limit w/ Manual Reset
- › All Bronze Circulating Pump
- › Flow Switch
- › Low Air Pressure Switch
- › Inlet & Outlet Temperature Sensors
- › Easy Access Terminal Strips
- › Downstream Test Cocks
- › 150 psi ASME Temperature and Pressure Relief Valve
- › See Warranty for Details:
 - › 1 Year Warranty on Parts
 - › 5 Year Limited Warranty

Smart System™ Features

- › 2 Line/16 Character LCD Display
- › Built in Cascading Sequencer for up to 8 water heaters
- › Front-End Loading Capability with Armor Water Heaters
- › Building Management System Integration with 0-10 VDC Input
- › 0-10 VDC Rate Output
- › Password Security
- › Low Water Flow Control & Indication
- › Inlet & Outlet Temperature Readout
- › Freeze Protection
- › Condensing Protection
- › Service Reminder
- › Time Clock
- › **Data Logging**
 - › Hours Running
 - › Ignition Attempts
 - › Last 10 Lockouts
- › **Programmable System Efficiency Optimizers**
 - › Night Setback
- › **Pump Control**
 - › Water Heater Pump
 - › Recirculation Pump
- › **High Voltage Terminal Strip**
 - › 120 VAC / 60 Hertz / 1 Phase Power Supply
 - › Pump Contacts with Pump Relay
- › **Low Voltage Terminal Strip**
 - › 24 VAC Auxiliary Device Relay Output
 - › Auxiliary Proving Switch Contacts
 - › Alarm on Any Failure Contacts
 - › Runtime Contacts
 - › Unit Enable/Disable Contacts
 - › Tank Sensor Contacts
 - › Contacts for Air Louvers
 - › Contacts on Any Failure
 - › Cascade Contacts
 - › 0-10 VDC BMS External Control Contacts
 - › 0-10 VDC Rate Output Contacts

Optional Equipment

- Alarm on Any Failure
- High & Low Gas Pressure Switches w/Manual Reset
- Cupro-Nickel Heat Exchanger
- Low Water Cut Off, Probe Type w/Manual Reset & Test
- Modbus Communications
- BMS Gateway - BACnet or LonWorks
- Combustible Floor Kit (CF 0402-0752)
- Stack Frame

Firing Codes

- M7 Firing Code - California Code
- M9 Firing Code - Hot Surface Ignition with Electronic Supervision

Venting Options

- Aire-Lock™ Direct Vent Sealed Combustion
- DirectAire® Vertical
- DirectAire® Vertical w/Sidewall Inlet
- Outdoor Installation
- Power DirectAire® Horizontal
- Powered Side Wall
- Sidewall

Copper-Fin II® Water Heater Package Systems: Configurations and Dimensions

Note: Additional package systems are available. Consult factory for dimensions and specifications.

VERTICAL ROUND JACKETED TANK DIMENSIONS			
Gallon	H _T	D _T	Weight
119	62-1/2"	28"	345
200	77-1/4"	32"	600
257	91"	34"	1108
318	80"	40"	1290
432	80"	46"	1,512
504	92"	46"	1,623

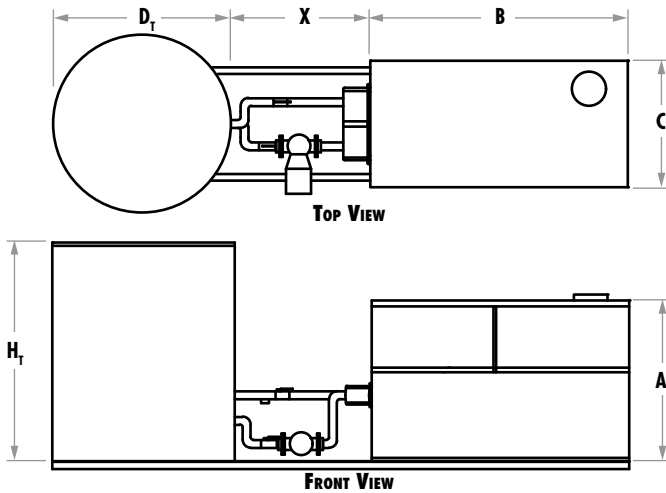
PIPING DIMENSIONS	
X	Y
42"	12"

Refer to *Dimensions and Specifications* table on page 1 for Heater Dimensions "A", "B", & "C"

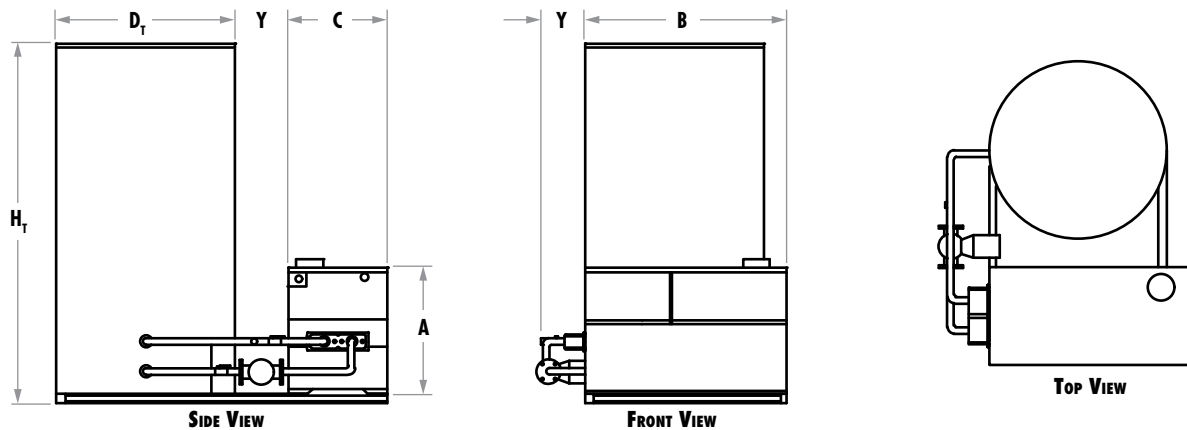
HORIZONTAL TANK DIMENSIONS				
Gallons	H _T	W _T	D _T	Weight
300	50-1/2"	78-1/4"	42-1/4"	1,700
400	50-1/2"	102-1/4"	42-1/4"	2,250
500	56-1/2"	90-3/4"	48-1/4"	2,450
600	56-1/2"	114-1/4"	48-1/4"	3,350
700	56-1/2"	130-1/4"	48-1/4"	4,000
800	62-1/2"	124-1/4"	54-1/4"	4,800
1,000	62-1/2"	138-1/4"	54-1/4"	5,100
1,250	68-1/2"	130-1/4"	60-1/4"	5,900
1,500	77-1/2"	126-1/4"	66-1/4"	6,500
2,000	80-1/2"	138-1/4"	72-1/4"	9,000
2,500	86-1/2"	144-1/4"	78-1/4"	10,000

NOTES: If overall dimensions are critical consult factory.
All package systems are skid mounted. Add 3" to tank H_T for I-Beam skid height.

PS Configuration Unit with 119 to 504 gallon capacity jacketed and insulated Lock-Temp Vertical Storage Tank



PU Configuration Unit with 119 to 504 gallon capacity jacketed and insulated Lock-Temp Vertical Storage Tank



PW Configuration Unit with 300 to 2500 gallon capacity jacketed and insulated Lock-Temp Horizontal Tank

