



Lochinvar®

HIGH EFFICIENCY BOILERS & WATER HEATERS

COPPER-FIN II® WATER HEATER

Submittal Sheet

CFE-Sub-10

COPPER-FIN II® GAS WATER HEATERS (MODELS CF 402-2072)

Job Name: _____

Model No. _____

Location: _____

Type Gas: _____ BTU/Hr
Input _____

Engineer: _____

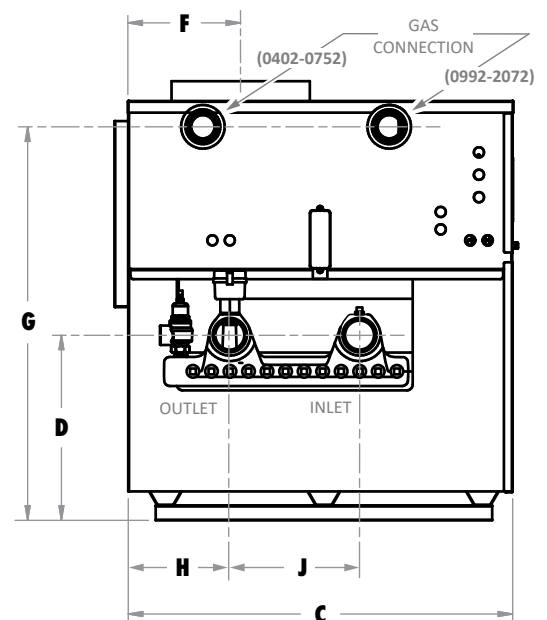
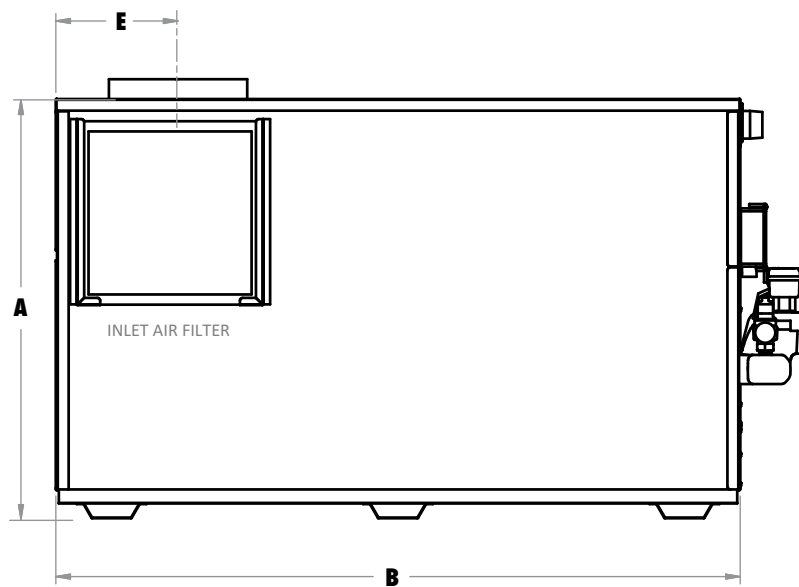
Recovery Rate in GPH _____ @ _____ °F Rise

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 Contact
 - › 0-10 VDC Rate Output Contacts

Optional Equipment

- Alarm on Any Failure
- BACnet MSTP Communications
- BMS Gateway - BACnet IP or LonWorks
- Combustible Floor Kit (CF 0402-0752)
- Cupro-Nickel Heat Exchanger
- High & Low Gas Pressure Switches w/Manual Reset
- Low Water Cut Off, Probe Type w/Manual Reset & Test
- Modbus Communications
- 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
- DirectAir® Vertical
- DirectAir® Vertical w/Sidewall Inlet
- Outdoor Installation
- Power DirectAir® Horizontal