



Lochinvar[®]
HIGH EFFICIENCY BOILERS & WATER HEATERS

**COPPER-FIN II[®]
WATER HEATER
Submittal Sheet**

CFE-Sub-07

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

JOB NAME _____

LOCATION _____

ENGINEER _____

MECH. CONTRACTOR _____

MODEL NO. _____

TYPE GAS _____

Btu/hr INPUT _____

RECOVERY RATE IN GPH _____ **@** _____ **°F RISE**

NOTES

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, "HLW" Stamped
 - › Gasketless design
 - › 160 psi working pressure
- › On/Off Switch
- › Combustible Floor Rated (CF 0992-2072)
- › Adjustable High Limit w/ Manual Reset
- › Low Lead 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
- › 1 Year Warranty on Parts (See Warranty for Details)
- › 5 Year Limited Warranty (See Warranty for Details)

SMART SYSTEM[™] FEATURES _____

- › **SMART SYSTEM[™] Operating Control**
- › 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 - Louvers
 - › Auxiliary Proving Switch Contacts - Louvers
 - › 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
- › 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

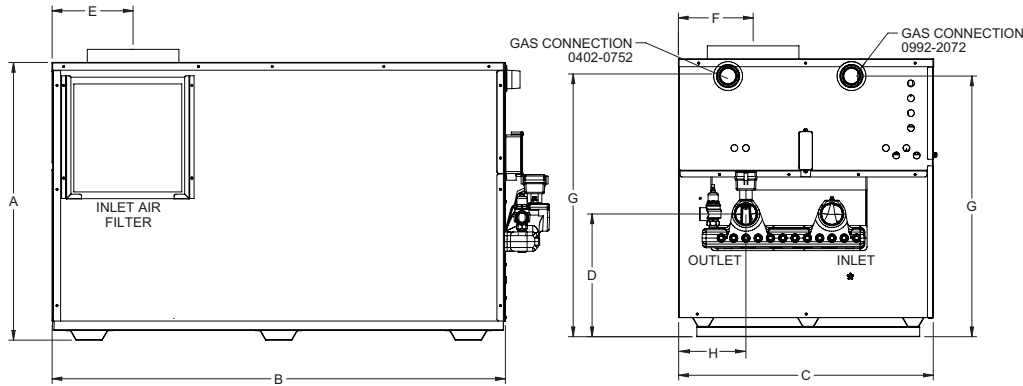
FIRING CODES _____

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

CERTIFICATIONS _____

- › ANSI Z21.10.3/CSA 4.3 certified
- › South Coast Air Quality Management District
- › Texas Commission on Environmental Quality

Copper-Fin II® Gas Water Heater Dimensions & Specifications



Copper-Fin II Water Heater													Dimensions & Specifications			
Model Number	Input MBH	GPH @ 100°F Rise	A	B	C	D	E	F	G	H	Vent Size	Air Inlet	Gas Conn	Shipping Weight		
CFN0402PM	399	412	31-1/2"	37-3/4"	22-1/4"	12-1/2"	7"	7"	29"	6-1/2"	6"	6"	1-1/4"	454		
CFN0502PM	500	515	31-1/2"	45-1/2"	22-1/4"	12-1/2"	7"	7"	29"	6-1/2"	6"	6"	1-1/4"	467		
CFN0652PM	650	670	31-1/2"	56-3/4"	22-1/4"	12-1/2"	8-1/2"	8-1/4"	29"	6-1/2"	8"	8"	1-1/4"	551		
CFN0752PM	750	773	31-1/2"	64"	22-1/4"	12-1/2"	8-1/2"	8-1/4"	29"	6-1/2"	8"	8"	1-1/4"	611		
CFN0992PM	990	1,020	36"	48-1/4"	33-1/2"	15-3/4"	8-1/2"	8-1/2"	33-3/4"	8-3/4"	10"	10"	2"	843		
CFN1262PM	1,260	1,298	36"	58-1/2"	33-1/2"	15-3/4"	10-1/2"	9-1/2"	33-3/4"	8-3/4"	12"	12"	2"	939		
CFN1442PM	1,440	1,484	36"	68-3/4"	33-1/2"	15-3/4"	10-1/2"	10-1/2"	33-3/4"	8-3/4"	12"	12"	2"	1,035		
CFN1802PM	1,800	1,855	36"	82-1/4"	33-1/2"	15-3/4"	11"	11"	33-3/4"	8-3/4"	14"	12"	2"	1,168		
CFN2072PM	2,070	2,133	36"	92-1/2"	33-1/2"	15-3/4"	11"	11"	33-3/4"	8-3/4"	14"	12"	2"	1,285		

Notes: Change 'N' to 'L' for LP gas models. No deration on LP models. Water connections for models CF 0402-0752 are 2" NPT on 6-1/2" centers. Header increases "B" dimension 3-1/2" for models CF 0402-0752 and 6-1/4" for models CF 0992-2072. Water connections for models CF 0992-2072 are 2-1/2" NPT on 11-1/4" centers. Pump and flanges are shipped loose for field installation. Performance data is based on manufacturer test results.

Venting Options

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



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