



**Lochinvar**<sup>®</sup>  
High Efficiency Water Heaters, Boilers and Pool Heaters

**COPPER-FIN II<sup>®</sup>**  
**PACKAGE SYSTEMS**  
**Submittal Sheet**

**CFP-Sub-15**

**COPPER-FIN II<sup>®</sup> PREASSEMBLED GAS WATER HEATER PACKAGE SYSTEMS**

**JOB NAME** \_\_\_\_\_

**LOCATION** \_\_\_\_\_

**ENGINEER** \_\_\_\_\_

**WHOLESALE** \_\_\_\_\_

**MECH. CONTRACTOR** \_\_\_\_\_

**MODEL NO.** \_\_\_\_\_

**TYPE GAS** \_\_\_\_\_

**Btu/hr INPUT** \_\_\_\_\_

**RECOVERY RATE IN GPH** \_\_\_\_\_ **@** \_\_\_\_\_ **°F RISE**

**NOTES**

**STANDARD FEATURES**

- › 85% Thermal Efficiency (AHRI Certified)
- › 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 (0992-2072)
  - › Adjustable High Limit w/ Manual Reset
  - › All Bronze 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
  - › Building Management System Integration with 0-10 VDC Input
  - › 0-10V 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
  - › 0-10V 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
- › Combustible Floor Kit (0402-0752)
- › Stack Frame

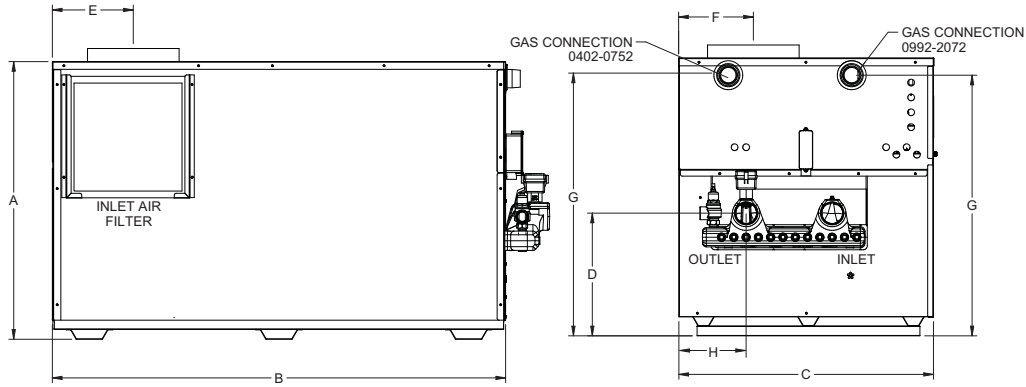
**FIRING CODES**

- › 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 registered
- › Texas Commission on Environmental Quality

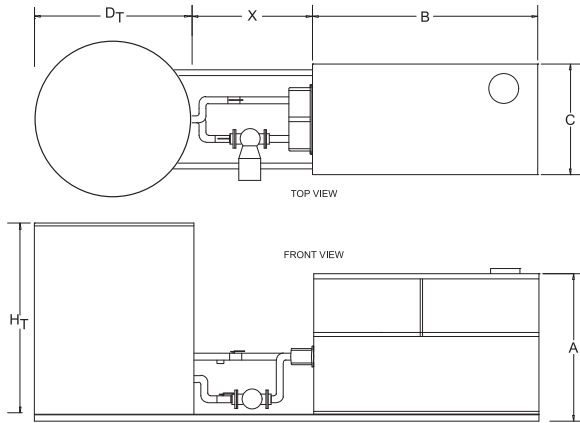
# Copper-Fin II® Gas Water Heater Dimensions & Specifications



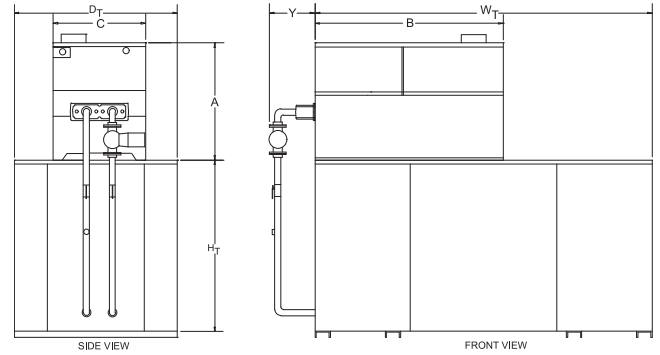
Copper-Fin II Water Heater													Dimensions & Specifications		
Model Number	Input MBH	GPH @ 100°F Rise	A	B	C	D	E	F	G	H	Vent Size	Air Inlet	Gas Conn	Shipping Weight	
CFN0402PM	399	412	31-1/2"	37-3/4"	22-1/4"	12-1/2"	7"	7"	29"	6-1/2"	6"	6"	1-1/4"	454	
CFN0502PM	500	515	31-1/2"	45-1/2"	22-1/4"	12-1/2"	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.

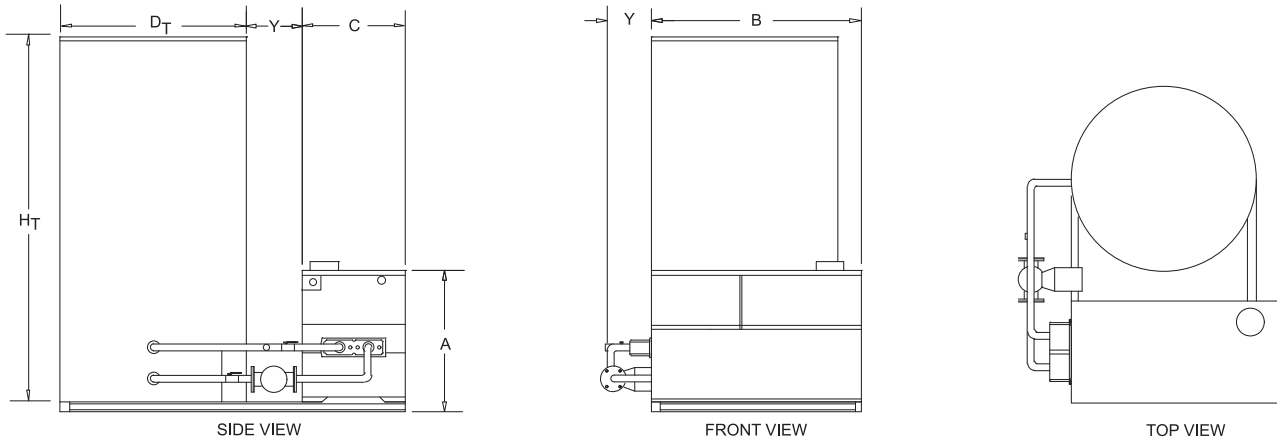
**PS Configuration** CF 402-2072PM with a 119 to 504 gallon capacity jacketed and insulated Lock-Temp Vertical Storage Tank.



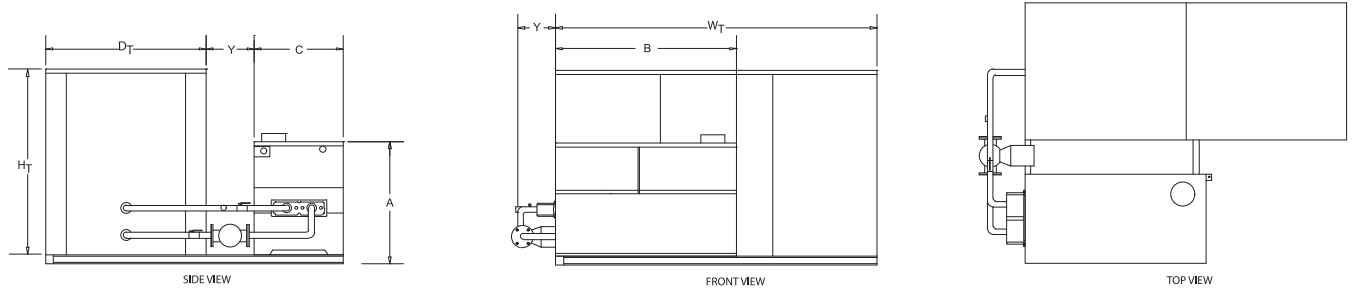
**PT Configuration** CF 402-2072PM with a 300 to 2500 gallon capacity jacketed and insulated Lock-Temp Horizontal Storage Tank.



**PU Configuration** CF 402-2072PM with a 119 to 504 gallon capacity jacketed and insulated Lock-Temp Vertical Storage Tank.



**PW Configuration** CF 402-2072PM with a 300 to 2500 gallon capacity jacketed and insulated Lock-Temp Horizontal Tank.



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"

*Note:* For Heater Dimensions "A", "B", "C" Consult Dimensions and Specifications Table on Back Page.

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

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