



## CONDENSING BOILER START-UP FORM

(REFER TO THE PRODUCT MANUAL FOR QUESTIONS REGARDING THE INSTALLATION AND OPERATION OF THIS PRODUCT)

JOB NAME:

DATE:

### INSTALLATION and START-UP PREPARATION PERFORMED BY:

COMPANY:

CONTACT:

ADDRESS:

CITY:

STATE:

ZIP:

TELEPHONE:

### Boiler Information

Unit #	MODEL	SERIAL #	PUMP MODEL	PUMP HP
1				
2				
3				
4				
5				
6				
7				
8				

### Tank Information

Tank #	MODEL	CAPACITY	SERIAL #	TYPE	ORIENT.
1				<input type="checkbox"/> Buffer <input type="checkbox"/> DHW Storage	<input type="checkbox"/> Vertical <input type="checkbox"/> Horizontal
2				<input type="checkbox"/> Buffer <input type="checkbox"/> DHW Storage	<input type="checkbox"/> Vertical <input type="checkbox"/> Horizontal
3				<input type="checkbox"/> Buffer <input type="checkbox"/> DHW Storage	<input type="checkbox"/> Vertical <input type="checkbox"/> Horizontal
4				<input type="checkbox"/> Buffer <input type="checkbox"/> DHW Storage	<input type="checkbox"/> Vertical <input type="checkbox"/> Horizontal

### BOILER START-UP PREP LIST

#### Gas Preparations

Diameter, Gas Line to Unit:		Regulator:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Feet from regulator to heater:		Sediment trap installed (per NFPA 54:9.6.8)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Common Gas Line Size:		Feet of gas line from meter to heater:		
Total 90° Elbows:		Static Gas Pressure:		
High Fire Gas Pressure:		Regulator Vent Line or Vent Limiter?	Choose one	



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## Water Preparations

<b>Common Pipe Size:</b>				<b>Water Heater Pipe Size:</b>			
<b>Qty. of elbows between heater &amp; tank:</b>				<b>HW recirc piped to common discharge from heater to DHW tank:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Piping Arrangement:</b>	<b>Choose One</b>			<b>Expansion tank:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Sensor Location:</b>	<b>Choose One</b>			<b>Sensor Installed Correctly; (Thermal paste &amp; completely in well):</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Water Quality</b>				<b>Has Existing System Been Flushed?</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
				<b>Is There A Mag-Separator Installed?</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Water Treatment:</b>	<b>Choose One</b>			<b>Isolation valves on HWR &amp; HWS of heaters:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Recirculator Pump:</b>	<b>Make:</b>			<b>Pump HP:</b>			
	<b>Model:</b>			<b>GPM &amp; Head (If Available):</b>			
<b>Thermal mixing valve installed on the discharge of the DHW tank.</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Thermal mixing valve piped properly:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>T&amp;PR and PRV installed and piped to floor drains:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<b>T&amp;PR sized for combined BTUH of heating system:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Isolation valves on HWR &amp; HWS of heaters:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No				

## Electrical Preparations

<b>Voltage, Incoming Supply:</b>	<b>Choose One</b>		<b>Breaker Size:</b>			
<b>Separate Pump Power:</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Disconnects:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Neutral to Ground, Less than 1Volt:</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Outdoor Air Sensor:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>BMS Interface:</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Conductor Control:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>BMS interface:</b>	<b>Choose One</b>		<b>BMS Gateway:</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No



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## Venting and Air Intake

Combustion Air Opening Type:	Choose One	Combustion Air Opening Size:	
Venting Material:	Choose One	Venting type:	Choose One
Vent Termination:	Choose One	Venting Adapter:	Choose One
Combustion Air Openings 12" From Floor:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Room Air Ventilation Opening Size:	
Flue Drain Type:	Choose One	Flue Test Port:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Flue Drain Trapped Properly:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Proper Vent Clearances:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Vent Height:		Lateral Length:	
<b>Total elbows used (including boot tee)</b>			
90° Vent Elbows:		45° Vent Elbows:	
Correctly Terminated:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Vent Properly Supported:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Condensate Neutralizer Kit Piped to Floor Drain:	<input type="checkbox"/> Yes <input type="checkbox"/> No		

## Service Clearances

Front:		Rear:	
Right Side:		Left Side:	
Top:			

## Notes and Comments:



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## BOILER START-UP Checklist

### Gas Supply

Natural Gas

LP Gas

Static Pressure (Unit Off):

Dynamic Pressure (100% Fire):

Gas Pipe Diameter:

"wc

"wc

" (Inches)

Is there an inlet gas lockup regulator on the supply?  Yes  No

If **YES**, is it ten feet upstream from the appliance?  Yes  No, Explain:

### Combustion

#### High Fire:

O<sub>2</sub>:  %

CO<sub>2</sub>:  %

CO:  ppm

Excess Air:  %

Stack Temperature:  °F

#### Low Fire:

O<sub>2</sub>:  %

CO<sub>2</sub>:  %

CO:  ppm

Excess Air:  %

Stack Temperature:  °F

### Water

Supply Temperature:  °F

Return Temperature:  °F

Delta T:  °F

### Electrical

Supply Voltage:

Total Amp Draw:



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## Venting and Air Intake

*Refer to O&M Manual!*

VENT: Material: Choose One Diameter (In.)

Component	COMBUSTION AIR					VENT					
	Equivalent Length Per Piece	X	Quantity	=	Subtotal Equivalent Length	Equivalent Length Per Piece	X	Quantity	=	Subtotal Equivalent Length	
Straight Pipe		X		=	A		X		=	D	
90° Elbow		X		=	B		X		=	E	
45° Elbow		X		=	C		X		=	F	
<b>Combustion Air Total Equivalent Length</b>				=		<b>Vent Total Equivalent Length</b>				=	

**Vent / Air Termination:**

- Vertical vent w/ room air     
  Horizontal vent w/ room air     
  Vertical direct vent  
 Horizontal direct vent     
  Vertical vent with sidewall air

**Notes: (Refer to O&M Manual)**

- 1 Make sure total equivalent length does not exceed max equivalent length shown in Manual.
- 2 Vent and combustion air terminals do not count toward total equivalent length.
- 3 Pressure drop for flexible polypropylene liner is 20% greater than for rigid pipe.  
 Multiply measure flexible polypropylene line length by 1.2 to obtain equivalent length.
- 4 Max equivalent length of flexible polypropylene liner is 48 feet.
- 5 All elbows referenced are short radius.

## Clearances

*Refer to O&M Manual!*

<b>Front:</b>		<b>Rear:</b>	
<b>Right Side:</b>		<b>Left Side:</b>	
<b>Top:</b>			

## Notes and Comments: