CONDENSING BOILER and WATER HEATER 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:** _____

APPLIANCE 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				☐ Buffer ☑ DHW Storage	☑ Vertical ☐ Horizontal
2				☑ Buffer ☐ DHW Storage	☐ Vertical ☑ Horizontal
3				☐ Buffer ☑ DHW Storage	☑ Vertical ☐ Horizontal
4				☑ Buffer ☐ DHW Storage	☐ Vertical ☑ Horizontal

BOILER / WATER HEATER START-UP PREP LIST

Gas Preparations

Diameter, Gas Line to Appliance:		**Step-Down Regulator:**	☐ Yes	☐ No
Feet from regulator to appliance:		**Sediment trap installed (per NFPA 54:9.6.8)**	☐ Yes	☐ No
Common Gas Line Size:		**Feet of gas line from meter to heater:**		
Total 90° Elbows:		**Static Gas Pressure:**		
		Regulator Vent Line or Vent Limiter?		

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Water Preparations

Common Pipe Size:		**Pipe Size to Appliance:**			
Qty. of elbows between heater & tank:		**HW recirc piped to common discharge from heater to DHW tank:**	☑ Yes	☐ No	
Piping Arrangement:		**Expansion tank:**	☐ Yes	☐ No	
Sensor Location:		**Sensor Installed Correctly; (Thermal paste & completely in well):**	☐ Yes	☐ No	
Water Quality (ph, Hard ness etc. See req. in manual)		**Has Existing System Been Flushed?**	☐ Yes	☐ No	
		Is There A Mag-Separator Installed?	☐ Yes	☐ No	
Water Treatment:		**Isolation valves on HWR & HWS of heaters:**	☑ Yes	☐ No	
Recirculator Pump:	**Make:**		**Pump HP:**		
	Model:		**GPM & Head (If Available):**		
Thermal mixing valve installed on the discharge of the DHW tank.	☐ Yes	☐ No	**Thermal mixing valve piped properly:**	☐ Yes	☐ No
T&PR and PRV installed and piped to floor drains:	☐ Yes	☐ No	**T&PR sized for combined BTUH of heating system:**	☐ Yes	☐ No
Isolation valves on HWR & HWS of heaters:	☐ Yes	☐ No			

Electrical Preparations

Voltage, Incoming Supply:			**Breaker Size:**		
Separate Pump Power:	☐ Yes	☐ No	**Disconnects:**	☐ Yes	☐ No
Neutral to Ground, Less than 1Volt:	☐ Yes	☐ No	**Outdoor Air Sensor:**	☐ Yes	☐ No
BMS Interface:	☐ Yes	☐ No	**Conductor Control:**	☐ Yes	☐ No
BMS interface:			**BMS Gateway:**	☐ Yes	☐ No

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Venting and Air Intake

Combustion Air Opening Type:		**Combustion Air Opening Size:**	
Venting Material:		**Venting type:**	
Vent Termination:		**Venting Adapter:**	
Combustion Air Openings 12" From Floor:	☐ Yes ☑ No	**Room Air Ventilation Opening Size:**	
Flue Drain Type:		**Flue Test Port:**	☐ Yes ☐ No
Flue Drain Trapped Properly:	☑ Yes ☐ No	**Proper Vent Clearances**	☐ Yes ☐ No
Vent Height:		**Lateral Length:**	

Total elbows used (including boot tee)

90° Vent Elbows:		**45° Vent Elbows:**	
Correctly Terminated:	☐ Yes ☐ No	**Vent Properly Supported:**	☐ Yes ☐ No
Condensate Neutralizer Kit Piped to Floor Drain:	☐ Yes ☐ 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 ☐	Static Pressure (Unit Off):		"wc
LP Gas ☑	Dynamic Pressure (100% Fire):		"wc
	Gas Pipe Diameter:		" (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:			Low Fire:		
O_2:		%	O_2:		%
CO_2:		%	CO_2:		%
CO:		ppm	CO:		ppm
Excess Air:		%	Excess Air:		%
Stack Temperature:		°F	Stack Temperatu		°F

Water

Supply Temperature:		°F	Return Temperature:		°F	Delta T:	0 °F

Electrical

Supply Voltage:		Total Amp Draw:	

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Venting and Air Intake

Refer to O&M Manual!

VENT: Material: | **Diameter (In.)**

Component	COMBUSTION AIR						VENT					
	Equivalent Length Per Piece	X	Quantity	=	Subtotal Eqvuivalent Length		Equivalent Length Per Piece	X	Quantity	=	Subtotal Equivalent Length	
Straight Pipe		X		=	0	A		X		=	0	D
90° Elbow		X		=	0	B		X		=	0	E
45° Elbow		X		=	0	C		X		=	0	F
	Combustion Air Total Equivalent Length			=	0		Vent Total Equivalent Length			=	0	

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 lent 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.

Clearances

Refer to O&M Manual!

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

Notes and Comments: