



RECON WATER HEATER INSTALLATION FORM

Please complete **ONE (1) form for each SITE** and return to AERCO for warranty validation within 30 days of start-up. After completion, e-mail this form to: **STARTUP@AERCO.COM**.

Completed By: _____ Date: _____

Site Location

Installation Name: _____ SST Technician: _____
 Street Address: _____ Company: _____
 City, State, Zip: _____ Phone #: _____
 AERCO Sales Rep: _____

Equipment Classification

Unit Type:	RECON 500	RECON 1000
Unit Serial Number(s)	_____	_____
	_____	_____
	_____	_____
(Add additional in	_____	_____
Notes if needed)	_____	_____

General Installation

- Is the condensate disposal system adequately sized and does it drain properly? Yes No
- Is the condensate disposal system installed in accordance with the instructions in the latest version of the RECON O&M? Yes No
- Is the relief valve piped to drain or within 12" of floor? Yes No
- Is there an electrical service switch at or near the unit? Yes No
- Does any electrical conduit, ductwork or piping impede the serviceability of the unit or the ability to remove the sheet metal covers? Yes No
- Is there an adequately sized condensate neutralizer kit installed? Yes No
- Have all electrical components been verified for proper grounding? Yes No
- Has all communication wire been properly shielded? Yes No
- Does each unit have a strainer installed in inlet to the water heater? Yes No
- What is the strainer mesh size? _____
- What is the system pressure? _____ PSI
- The system application is:

Potable Water Process Storage tank Other _____
- Are all units installed in accordance with the clearances defined in the RECON O&M? Yes No

a. If not, why not? _____

Gas Supply

The questions below are related to the information in the Innovation-Recon Gas Supply Design Guide, GF-5030

1. Type of Gas Supply Natural Gas (NG) Propane (LP) Dual Fuel (DF)
2. What is the dynamic gas supply pressure to the water heater under load? NG _____ LP _____
3. If the static pressure is more than 14" WC, is an external gas supply regulator installed per unit? Natural Gas: Yes No
Propane: Yes No
4. What is the make and model number of the external gas supply regulators?
Natural Gas: Make: _____ Model: _____
Propane: Make: _____ Model: _____
5. What is the static gas supply pressure to the external supply regulator? NG: _____ LP: _____
6. Were the external gas supply regulators supplied by AERCO? Yes No
a. If No, please attach regulator specification sheet to this form and return both to AERCO.
7. Are the external gas supply vent regulator lines installed per local code & manufacturer's requirement? Yes No
8. What is the size & length of the gas supply header? Natural Gas: _____ Propane: _____
9. Are there any other appliances connected to the gas supply line? Yes No
a. If Yes, please indicate the total BTU connected load: _____ MBH
10. Is the gas supply system installed in accordance with the Innovation-Recon Gas Components & Supply Design Guide GF-5030? Yes No

Venting

The questions below are related to the information in the Innovation-Recon Venting and Combustion Air Guide, GF-5050

1. What is the total vent length run? _____
a. What is the total number of elbows in the ducting? 30° _____ 45° _____ 90° _____
b. Are all elbows spaced 5 feet apart and 2 feet from the starter piece on the first elbow? Yes No
2. Is the vent pitched back toward the boiler (1/4" per ft. length) per the AERCO Venting Guide? Yes No
3. Venting material used is (choose one): AL29-4C Polypropylene PVC CPVC
4. Venting manufacturer is: _____
5. Please describe venting configuration (check all that apply):
 Individual Vent Sidewall Termination Roof Termination Damper/Fan
 Breeched/Common (Units Vented Together)
6. Does the layout (overall length, pressure drop, breeching calculations, vent pipe wall thickness, etc.) comply with GF-5050? Yes No

Combustion Air

The questions below are related to the information in the Innovation-Recon Venting and Combustion Air Guide, GF-5050

1. Combustion air supplied through (check all that apply):
 Louvers to outside wall vent Horizontal ducting Direct or ducted combustion air
 Louvers to another room Vertical ducting Combustion air fan
2. What is the size of the ducting to individual units? _____
a. What is the size of the common ducting, if applicable? _____
3. Are there any draft inducers, combustion air fans or draft controllers on site? Yes No
a. If Yes, list all that apply: _____
b. Explain configuration: _____
4. Does the layout (overall length, pressure drop, breeching calculations, etc.) comply with GF-5050? Yes No

RECON Water Heater Installation

1. Are isolation valves installed in the inlet piping? Yes No
2. Are isolation valves installed in the outlet piping? Yes No
3. Is a hose bib installed in the outlet piping? Yes No
4. Are check valves installed in the cold water inlet? Yes No
5. Are check valves installed in the recirculation line? Yes No
6. Building recirculation is piped to: Inlet Side of Heater None
7. Record distance of building connections (ft) _____ & cold water feed (ft) _____ to the bank of unit(s)
8. Are motorized isolation valves installed? Yes No
9. What are the maximum/minimum design flow rates through the unit? Max _____ GPM, Min _____ GPM
a. Were the maximum & minimum flow rates verified? Yes No
10. Is the remote interlock utilized? Yes No
a. Please list all devices connected to the remote interlock: _____
11. Is the delayed interlock utilized? Yes No
a. Please list all devices connected to the delayed interlock: _____
12. What is the design system flow rate? _____ GPM
13. What is the design plant delta T? _____ °F

Domestic Water Heating Mode

1. Does the System use a Storage Tank? Yes No
a. What is the size of the Storage Tank? _____ Gallons
2. Storage tank position is: Vertical Horizontal
3. Position of aquastat: Upper 1/3 Middle 1/3 Lower 1/3 No aquastat
4. What is the aquastat temperature setting? _____ °F
5. If using a sensor, what is the Domestic Hot Water setpoint? _____ °F

Mode of Operation

Individual Unit Control (choose one):

- Remote Set Point (0 to 10V Input) Domestic Hot Water (DHW) Water Heater Management (WHM)

If Network (MODBUS), the network type is (choose one):

- Gateway Other: _____
 ProtoNode

If Building Automation System (BAS) Protocol is in use (choose one):

- BACNet (choose one):
 IP (ProtoNode Only) MS/TP
 PTP ARC156 (XPC Model Only)
- Johnson Controls - N2
 LonWorks

Water Quality

AERCO recommends that a sample of the unit's input water supply be tested to determine if it will have an adverse effect on the unit. Testing can be via a standard water quality test kit, widely available at retail hardware and home improvement stores. The following questions can be answered by such test kits.

1. What is the pH of the water? _____ (a pH between 6.5 to 9.5 is recommended)
2. What is the hardness of the water? _____ Grains per Gallon (1-10 is recommended)
or mg/l (5-75 is recommended)
3. What is the TDS (Total Dissolved Solids) of the water? _____ PPM (less than 350 is recommended)
4. Is there a water softening or treatment system installed? Yes No
 - a. If yes, what type?
 Salt No Salt Chemical Injection Other _____

Summary

1. Are the water heater(s) installed in accordance with AERCO guidelines and industry best practices? Yes No

a. If No, please describe the issues.

b. Who has been contacted? Please provide name & number for each person contacted. (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> AERCO Applications Engineer: _____ | <input type="checkbox"/> General Contractor: _____ |
| <input type="checkbox"/> Mechanical Contractor: _____ | <input type="checkbox"/> Building Owner: _____ |
| <input type="checkbox"/> Design Engineer: _____ | <input type="checkbox"/> Plumber: _____ |
| <input type="checkbox"/> Controls Engineer: _____ | <input type="checkbox"/> Electrician: _____ |

2. Is there any conflict between the Installation & the Engineer's Specification or Design Plans? Yes No

a. If Yes, please describe the issues.

b. Who has been contacted? Please provide name & number for each person contacted. (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> AERCO Applications Engineer: _____ | <input type="checkbox"/> General Contractor: _____ |
| <input type="checkbox"/> Mechanical Contractor: _____ | <input type="checkbox"/> Building Owner: _____ |
| <input type="checkbox"/> Design Engineer: _____ | <input type="checkbox"/> Plumber: _____ |
| <input type="checkbox"/> Controls Engineer: _____ | <input type="checkbox"/> Electrician: _____ |

3. Are there any conflicts or physical restrictions that will prevent the water heaters from receiving proper preventative maintenance in the future? Yes No

a. If Yes, please describe the issues.

b. Who has been contacted? Please provide name & number for each person contacted. (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> AERCO Applications Engineer: _____ | <input type="checkbox"/> General Contractor: _____ |
| <input type="checkbox"/> Mechanical Contractor: _____ | <input type="checkbox"/> Building Owner: _____ |
| <input type="checkbox"/> Design Engineer: _____ | <input type="checkbox"/> Plumber: _____ |
| <input type="checkbox"/> Controls Engineer: _____ | <input type="checkbox"/> Electrician: _____ |

4. Please outline any exceptions that have been granted by AERCO Applications Engineering for this installation.
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a. AERCO Application Engineering Sign Off (If Necessary):

NOTES: