INNOVATION 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: _____ Technician: _____

Street Address: _____ Company: _____

City, State, Zip: _____ Phone #: _____

PVI Sales Rep: _____

Equipment Classification

Unit Type:	INN 1600	INN 2000	CEN 1600 Propane	CEN 2000 Propane
Unit Serial Number(s)				
(Add additional in				
Notes if needed)				

General Installation

1. Is the condensate disposal system adequately sized and does it drain properly? ☐ Yes ☐ No
2. Is the condensate disposal system installed in accordance with the instructions in the latest version of the Innovation OMM-0175? ☐ Yes ☐ No
3. Is the relief valve piped to drain or within 12” of floor? ☐ Yes ☐ No
4. Is there an electrical service switch at or near the unit? ☐ Yes ☐ No
5. Does any electrical conduit, ductwork or piping impede the serviceability of the unit or the ability to remove the sheet metal covers? ☐ Yes ☐ No
6. Is there an adequately sized condensate neutralizer kit installed? ☐ Yes ☐ No
7. Have all electrical components been verified for proper grounding? ☐ Yes ☐ No
8. Has all communication wire been properly shielded? ☐ Yes ☐ No
9. Does each unit have a strainer installed in inlet to the water heater? ☐ Yes ☐ No
10. What is the strainer mesh size? _____
11. What is the system pressure? _____ PSI
12. The system application is:

    ☐ Potable Water ☐ Process ☐ Storage tank ☐ Other _____

13. Are all units installed in accordance with the clearances defined in the Centurion O&M? ☐ Yes ☐ No

    a. If not, why not? _____

Gas Supply

The questions below are related to the information in the Innovation Gas Supply Design Guide, TAG-0113

1. Type of Gas Supply Natural Gas (NG) ☐ Propane (LP) ☐
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 PVI.
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 AERCO Innovation Gas Components & Supply Design Guide TAG-0113? ☐ Yes ☐ No

Venting

The questions below are related to the information in the Innovation Venting and Combustion Air Guide, TAG-0112

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 water heater (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 TAG-0112? ☐ Yes ☐ No

Combustion Air

The questions below are related to the information in the Innovation Venting and Combustion Air Guide, TAG-0112

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 TAG-0112? ☐ Yes ☐ No

Innovation 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 INN 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):

☐ Edge ☐ Other: _____

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

BACNet (choose one):

☐ IP ☐ MS/TP

☐ PTP ☐ ARC156 (XPC Model Only)

☐ Johnson Controls - N2

☐ LonWorks

Water Quality

PVI 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 mgl (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)
   - ☐ AERCO Applications Engineer: _____ ☐ General Contractor: _____
   - ☐ Mechanical Contractor: _____ ☐ Building Owner: _____
   - ☐ Design Engineer: _____ ☐ Plumber: _____
   - ☐ Controls Engineer: _____ ☐ 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)
   - ☐ AERCO Applications Engineer: _____ ☐ General Contractor: _____
   - ☐ Mechanical Contractor: _____ ☐ Building Owner: _____
   - ☐ Design Engineer: _____ ☐ Plumber: _____
   - ☐ Controls Engineer: _____ ☐ 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)
   - ☐ AERCO Applications Engineer: _____ ☐ General Contractor: _____
   - ☐ Mechanical Contractor: _____ ☐ Building Owner: _____
   - ☐ Design Engineer: _____ ☐ Plumber: _____
   - ☐ Controls Engineer: _____ ☐ Electrician: _____

4. Please outline any exceptions that have been granted by AERCO Applications Engineering for this installation.

   a. AERCO Application Engineering Sign Off (If Necessary):

NOTES: