



# 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: \_\_\_\_\_ SST Technician: \_\_\_\_\_  
 Street Address: \_\_\_\_\_ Company: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_ Phone #: \_\_\_\_\_  
 AERCO Sales Rep: \_\_\_\_\_

## Equipment Classification

Unit Type:	INN 600	INN 800	INN 1060	INN 1350
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 Innovation 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 Innovation 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, 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 AERCO INN Gas Components & Supply Design Guide GF-5030?  Yes  No

## Venting

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

- 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
- What is the size of the ducting to individual units? \_\_\_\_\_
  - What is the size of the common ducting, if applicable? \_\_\_\_\_
- Are there any draft inducers, combustion air fans or draft controllers on site?  Yes  No
  - If Yes, list all that apply: \_\_\_\_\_
  - Explain configuration: \_\_\_\_\_
- Does the layout (overall length, pressure drop, breeching calculations, etc.) comply with GF-5050?  Yes  No

## Innovation Water Heater Installation

- Are isolation valves installed in the inlet piping?  Yes  No
- Are isolation valves installed in the outlet piping?  Yes  No
- Is a hose bib installed in the outlet piping?  Yes  No
- Are check valves installed in the cold water inlet?  Yes  No
- Are check valves installed in the recirculation line?  Yes  No
- Building recirculation is piped to:  Inlet Side of Heater  None
- Record distance of building connections (ft) \_\_\_\_\_ & cold water feed (ft) \_\_\_\_\_ to the bank of INN unit(s)
- Are motorized isolation valves installed?  Yes  No
- What are the maximum/minimum design flow rates through the unit? Max \_\_\_\_\_ GPM, Min \_\_\_\_\_ GPM
  - Were the maximum & minimum flow rates verified?  Yes  No
- Is the remote interlock utilized?  Yes  No
  - Please list all devices connected to the remote interlock: \_\_\_\_\_
- Is the delayed interlock utilized?  Yes  No
  - Please list all devices connected to the delayed interlock: \_\_\_\_\_
- What is the design system flow rate? \_\_\_\_\_ GPM
- What is the design plant delta T? \_\_\_\_\_ °F

## Domestic Water Heating Mode

- Does the System use a Storage Tank?  Yes  No
  - What is the size of the Storage Tank? \_\_\_\_\_ Gallons
- Storage tank position is:  Vertical  Horizontal
- Position of aquastat:  Upper 1/3  Middle 1/3  Lower 1/3  No aquastat
- What is the aquastat temperature setting? \_\_\_\_\_ °F
- 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 TSD (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.
- \_\_\_\_\_

~~XXXXXX~~ AERCO Application Engineering Sign Off:

\_\_\_\_\_

**NOTES:**