



BENCHMARK BOILER INSTALLATION FORM

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

Please insure that the Edge Firmware is updated as the first step in the startup process

Completed By: _____ Date: _____

Location

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

Equipment Classification

Unit Type:	Serial Number of all units (Add additional in Notes if needed)					
<input type="checkbox"/> BMK750	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK1000	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK1500	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK2000	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK2500	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK3000	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK4000	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK5000N	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK5000	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> BMK6000	_____	_____	_____	_____	_____	_____

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 AERCO O&M? 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. Are all units installed in accordance with the clearances defined in the Benchmark O&M? Yes No
 - a. If not, why not?
10. Is the Header Sensor installed 2 to 10 ft. from the last boiler? Yes No

Gas Supply

The questions below are related to the information in the Benchmark Gas Supply Design Guide, GF-2030

- Type of Gas Supply Natural Gas (NG) Propane (LP) Dual Fuel (DF)
- Are external gas supply regulators installed in accordance with the AERCO O&M requirements? Natural Gas: Yes No
Propane: Yes No
 - If no, please confirm gas pressure Natural Gas: _____ Propane: _____
- What is the make and model number of the external gas supply regulators?
Natural Gas: Make: _____ Model: _____
Propane: Make: _____ Model: _____
- What is the static gas supply pressure to the external supply regulator? NG: _____ LP: _____
- Were the external gas supply regulators supplied by AERCO? Yes No
 - If No, please attach regulator specification sheet and return to AERCO with this form.
- Are the external gas supply vent regulator lines installed per local code & manufacturer's requirement? Yes No
- What is the size & length of the gas supply header? Natural Gas: _____ Propane: _____
- Are there any other appliances connected to the gas supply line? Yes No
 - If Yes, please indicate the total BTU connected load: _____ MBH
- Is the gas supply system installed in accordance with the AERCO BMK Gas Components & Supply Design Guide GF-2030? Yes No

Venting

The questions below are related to the information in the Benchmark Venting and Combustion Air Guide, GF-2050

- What is the total vent length run? _____
 - What is the total number of elbows in the ducting? 30° _____ 45° _____ 90° _____
 - Are all elbows spaced 5 feet apart and 2 feet from the starter piece on the first elbow? Yes No
- Is the vent pitched back toward the boiler (1/4" per ft. length) per the AERCO Venting Guide? Yes No
- Venting material used is (choose one): AL29-4C Polypropylene PVC CPVC
- Venting manufacturer is: _____
- Please describe venting configuration (check all that apply):
 Individual Vent Sidewall Termination Roof Termination Damper/Fan
 Breeched/Common (Units Vented Together)
- Does the layout (overall length, pressure drop, breeching calculations, vent pipe wall thickness, etc.) comply with GF-2050? Yes No

Combustion Air

The questions below are related to the information in the Benchmark Venting and Combustion Air Guide, GF-2050

- Combustion air supplied through (check all that apply):
 Louvers to outside wall 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? _____
 - What is the size of louvered opening? _____
- 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-2050? Yes No

Hydronic Installation

1. If there are multiple units, are the units piped "reverse-return"? Yes No
2. Are balancing valves or circuit setters installed? Yes No
3. Are motorized isolation valves installed? Yes No
4. 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
5. Is the **remote interlock** connection on the C-More or Edge Controller utilized? Yes No
 - a. Please list all devices connected to the remote interlock: _____
6. Is the **delayed interlock** utilized & receiving external power: Yes No
 - a. Please list all devices connected to the remote interlock: _____
7. Is the system (check all that apply):

<input type="checkbox"/> Water Source Heat Pump	<input type="checkbox"/> Primary/Secondary Pumping	<input type="checkbox"/> Other (Please specify)
<input type="checkbox"/> A Variable Flow System	<input type="checkbox"/> Used for Reheat	_____
<input type="checkbox"/> Reverse Return	<input type="checkbox"/> Combination Control	
8. What is the design system flow rate? _____ GPM
9. What is the design plant delta T? _____ °F
10. What ancillary components are connected to the I/O board of Manager, Backup Manager and Clients? _____

Mode of Operation

Individual Unit Control (choose one):

- | | |
|--|--|
| <input type="checkbox"/> Remote Set Point (Analog) | <input type="checkbox"/> Combination Boiler/Water Heater |
| <input type="checkbox"/> Remote Set Point (Network/MODBUS) | <input type="checkbox"/> ACS (see below) |
| <input type="checkbox"/> Direct Drive | <input type="checkbox"/> BMS (see below) |
| <input type="checkbox"/> Indoor/Outdoor Reset | <input type="checkbox"/> BMS II (see below) |
| <input type="checkbox"/> Constant Setpoint | <input type="checkbox"/> BST (see below) |

If BST, ACS, BMS or BMS II is used, the mode of operation is (choose one):

- | | |
|---|--|
| <input type="checkbox"/> Constant Setpoint | <input type="checkbox"/> Combination Control Panel (CCP) |
| <input type="checkbox"/> Indoor/Outdoor Reset | <input type="checkbox"/> Network (MODBUS) |
| <input type="checkbox"/> Combination Plant (Space Heating/DHW - BST Only) | |

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

- | | |
|------------------------------------|--|
| <input type="checkbox"/> Gateway | <input type="checkbox"/> Other: (Please specify) |
| <input type="checkbox"/> ProtoNode | _____ |

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

- | | |
|--|--|
| <input type="checkbox"/> BACNet (choose one): | |
| <input type="checkbox"/> IP (ProtoNode Only) | <input type="checkbox"/> MS/TP |
| <input type="checkbox"/> PTP | <input type="checkbox"/> ARC156 (XPC Model Only) |
| <input type="checkbox"/> IP (Edge Only) | |
| <input type="checkbox"/> Johnson Controls - N2 | |
| <input type="checkbox"/> LonWorks | |

Summary

1. Is the boiler plant 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 boiler plant 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 if necessary.

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

ADDITIONAL NOTES: