



BENCHMARK NX 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 X 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)

☐ BMK NX 399 _____
☐ BMK NX 500 _____

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 BMK NX Operation & Maintenance Manual (OMM-0183)? ☐ 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 OMM-0183?
a. If not, why not? ☐ Yes ☐ No
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 NX Gas Supply Design Guide, TAG-0119:

1. Type of Gas Supply ☐ Natural Gas (NG) ☐ Propane (LP) ☐ Dual Fuel (DF)
2. Are external gas supply regulators installed in accordance with OMM-0183?
Natural Gas: ☐ Yes ☐ No
Propane: ☐ Yes ☐ No
a. If not, please confirm gas pressure: Natural Gas: _____ Propane: _____
3. What is the make and model number of the external gas supply regulators?
Natural Gas: Make: _____ Model: _____
Propane: Make: _____ Model: _____

4. What is the static gas supply pressure to the external supply regulator? NG: _____ LP: _____
5. Were the external gas supply regulators supplied by AERCO? ☐ Yes ☐ No
a. If not, please attach regulator specification sheet and return to AERCO with this form.
6. Are the external gas supply vent regulator lines installed per code & manufacturer's requirements? ☐ Yes ☐ No
7. What is the size & length of the gas supply header? Natural Gas: _____ Propane: _____
8. Are there any other appliances connected to the gas supply line? ☐ Yes ☐ No
a. If Yes, please indicate the total BTU connected load: _____ MBH
9. Is the gas supply system installed in accordance with TAG-0119? ☐ Yes ☐ No

Venting

The questions below are related to the information in the Benchmark NX Venting and Combustion Air Guide, TAG-0122.

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 TAG-0122? ☐ 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 overall length, pressure drop, breeching calculations, vent pipe wall thickness, etc.) comply with TAG-0122? ☐ Yes ☐ No

Combustion Air

The questions below are related to the information in the Benchmark NX Venting and Combustion Air Guide, TAG-0122

1. 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
2. What is the size of the ducting to individual units? _____
a. What is the size of the common ducting, if applicable? _____
b. What is the size of louvered opening? _____
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 (length, pressure drop, breeching calculations, etc.) comply with TAG-0122? ☐ 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 Edge X 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):

☐ Water Source Heat Pump

☐ Primary/Secondary Pumping

☐ Other (Please specify) _____

☐ A Variable Flow System

☐ Used for Reheat

☐ Reverse Return

☐ 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):

☐ Remote Set Point (Analog)

☐ Indoor/Outdoor Reset

☐ Remote Set Point (Network)

☐ Constant Setpoint

☐ BMS (see below)

If BST is used, the mode of operation is (choose one):

☐ Constant Setpoint

☐ Indoor/Outdoor Reset

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

☐ BACNet (choose one):

☐ IP (ProtoNode Only)

☐ MS/TP

☐ PTP

☐ IP (Edge X))

Summary

1. Is the boiler plant installed in accordance with AERCO guidelines and industry best practices? ☐ Yes ☐ No

a. If No, please describe 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 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)?

☐ AERCO Applications Engineer: _____ ☐ General Contractor: _____

☐ Mechanical Contractor: _____ ☐ Building Owner: _____

☐ Design Engineer: _____ ☐ Plumber: _____

☐ Controls Engineer: _____ ☐ Electrician: _____

4. Please outline any exceptions granted by AERCO Applications Engineering for this installation, if necessary.

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

Additional Notes: