



Building Performance Institute, Inc.

Heating Professional – Guide to Performance Test

This form includes those items that will/may be evaluated on the Field Examination for Heating based on the building stock. Candidates should familiarize themselves with each item detailed on this form in preparation for the Field Examination.

Health and Safety

Exhibited adequate knowledge of H&S issues to look for

Identified existing moisture-related problems

Identified existing other indoor contaminant sources

Identified existing fire and other safety hazards

Correctly recommended additional diagnostic tests and/or remediation

Demonstrated comprehension of interaction of building envelope conditions, duct leakage, and combustion appliance performance

Diagnostic Tests and Inspections

Properly conducted gas (fuel) leak testing

Properly conducted Steady State Efficiency (SSE) testing

Blower door test

Calculated ventilation needs correctly – Onsite

Proper equipment set-up

Accurate cfm50 measurement

Combustion safety tests – **If Taking Building Analyst Test at Same Time, Carry Those Combustion Safety Test Scores Over To This Section**

Set up for natural conditions and measured baseline pressure differential

Created worst case conditions

Correctly measured worst-case CAZ depressurization

Checked for worst case spillage of each relevant appliance

Performed worst case draft test – tested DHW, furnace/boiler and then both

Measured worst-case CO

Checked for spillage, draft, CO under natural conditions

(only necessary to perform this test if spillage detected under worst case)

Made appropriate recommendations according to BPI standards - Onsite

CO Testing

Equipment use proper

Tested ambient both indoors and outdoors and properly interpreted

Tested for CO in all combustion appliances and properly interpreted

Vent System Assessment

Identified problems accurately

Made appropriate recommendations - Onsite

Ducted Systems

- Accurately measured Total Leakage
- Made Appropriate Duct Sealing Recommendations - Onsite
- Accurately Measured Heat Rise Delta T
- Made Appropriate Heat Rise Correction Recommendations
- Performed Appropriate System Balancing Diagnostic Testing
- Made Appropriate System Balancing Recommendations - Onsite
- Properly conducted Heat Exchanger Inspection
- Recommended Replacement of Heat Exchanger as appropriate
- Inspected Fan on/off Settings
- Made Appropriate Fan Setting Correction Recommendations

Hydronic Systems

- Evaluated Controls And Safety Devices
- Assessed Zone Configuration
- Assessed Conservation Opportunities/Performance Enhancements
- Identified pipe insulation needs
- Accurately assessed distribution problems

Steam Systems

- Evaluated Controls And Safety Devices
- Assessed Distribution System
- Assessed Conservation Opportunities/Performance Enhancements
- Identified steam pipe insulation needs
- Accurately assessed distribution problems

Heat Loss / Load Calculation

- Discussed heat loss calculation / savings estimates and understands implications
- Accurately identified conservation measures that could impact sizing
- Identified distribution system issues relating to these calculations
- Understands relationship between calculations, current usage and proposed savings

Domestic Hot Water

- Properly evaluated safety devices
- Properly evaluated system efficiency
- Made appropriate recommendation for system improvement or replacement - Onsite
- Made appropriate recommendations for conservation measures - Onsite