



# 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 combustion gas leakage 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