



Building Performance Institute, Inc.

Envelope Professional – Guide to Performance Test

This form includes those items that will/may be evaluated on the Field Examination for Envelope 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 air contaminant sources

Identified existing fire and other safety hazards

Correctly recommended additional diagnostic tests and/or remediation - Onsite

Demonstrated comprehension of interaction of building envelope conditions and combustion appliance performance

Accurately identified structural problems and their relationship to retrofitting insulation and/or performing air sealing

Combustion safety tests

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

CO Testing

Equipment use proper

Tested ambient both indoors and outdoors and properly interpreted

Tested for CO in all combustion appliances and properly interpreted

Blower Door & Air Sealing

Understood BPI ventilation requirements and how they are applicable to this test site

Specified mechanical ventilation as appropriate to a comprehensive work scope

Properly identified significant cellar/crawl space leakage locations and how to seal - Onsite

Properly identified significant attic leakage locations and how to seal - Onsite

Properly identified significant exterior wall leakage locations and how to seal - Onsite

Properly identified other significant leakage locations (e.g., attached garage)

and how to seal - Onsite

Demonstrated how to conduct zonal pressure differential testing and properly interpreted results and how to utilize information in developing a work scope

Insulation

Identified cost-effective opportunities for adding insulation

Identified appropriate materials and installation techniques for adding insulation
Specifically noted areas benefiting from using dense-pack technique or foam
Identified need for additional attic ventilation

Indicated areas where baffling may be required

For fire protection

To prevent of wind-washing

Demonstrated an understanding of air barrier and thermal boundary alignment

Duct Sealing

Demonstrated ability to perform duct leakage diagnostic and testing .

Demonstrated ability to identify duct leakage locations using diagnostic techniques
and to prioritize repairs

Demonstrated an understanding of appropriate materials
and applications for duct sealing work.

Test Out

Candidate identified need for blower door testing after changes to building shell

Candidate identified need for CAZ testing after any retrofit work

Candidate identified other diagnostic testing needs after any retrofit work