



BUILDING ANALYST Field Guide

[Standards of Reference: ANSI/BPI-1200-S-2015 Standard Practice for Basic Analysis of Buildings](#)

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Fuel Delivery

Correctly inspected gas/propane system for leaks/potential problems - NON-SCORABLE
 Calibrate combustible gas detector (CGD) outside
 Appropriate locations checked with appropriate speed
 Mentioned method of verifying significant gas/propane leak (bubble solution) - ask

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Combustion Safety Tests

Correctly identified heating/cooling system types
 Visual inspection of venting system for problems - NON-SCORABLE
 Determined condition accurately
 Correctly set up for natural conditions
 Correctly recorded pressure differential in the CAZ prior to turning on exhaust appliances
 Correctly set up home in worst case condition - NON-SCORABLE
 All exhaust appliances running
 Correct door closures - measured quantitatively or qualitatively
 Air handler operation impact checked accurately
 Correctly checked for worst case spillage in heating system
 Correctly determined if the appliance passes the spillage test
 Correctly checked for worst case spillage in the domestic water heater
 Correctly determined if the appliance passes the spillage test

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CO Testing

Correctly prepared CO monitor for use while outside of the building
 Correctly tested ambient CO indoors
 Correctly measured heating system flue gas CO during combustion safety testing
 Correctly measured DHW flue gas CO during combustion safety testing
 Appropriately applied BPI action levels based on test results for CO in the flue (choose DHW or heating system)
 Correctly monitored ambient CO levels in the CAZ during entire combustion safety tests
 Tested for CO in oven - NON-SCORABLE
 Correctly checked for items, excessive debris inside oven
 Oven test sampling location appropriate

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Heating System Distribution (Hydronic and Forced Air)

Properly identified supplies and returns on hydronic systems
 Properly identified supplies and returns on ducted distribution systems

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Infiltration Evaluation

Combustion appliances set to pilot or disabled
 Proper set up of the blower door frame/shroud/fan
 Proper set up of the manometer
 Proper house setup for testing
 Correctly measured baseline pressure differential
 Accurate CFM50 measurement
 Correctly measured existing ventilation fan flow
 Conducted sample room by room inspection with blower door running
 Correctly demonstrated usage of the pressure pan

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Domestic Water Heater Inspection

Correctly identified type of domestic water heater
 Accurately determined condition of basic safety controls