



CREW LEADER Field Guide

v.9.27.2013

Standards of Reference

[SWS – Standard Work Specification](#)

[Technical Standards for the Building Analyst Professional](#)

[Clarifications to Technical Standards for the Building Analyst Professional](#)

[ASHRAE 62.2-2010](#)

Perform an exterior and interior visual/sensory inspection

Candidate performed exterior walk around

Candidate performed interior walk around

Conduct health and safety tests

Combustion Safety and Efficiency Tests Candidate properly conducted combustion gas leakage testing

Candidate properly recommended soapy solution to verify positives

Candidate completed visual inspection of flue system for problems

Candidate identified existing heating / cooling system components safety concerns

CAZ Testing

Candidate set up home for natural conditions

Proper manometer setup

Candidate correctly measured baseline pressure differential

Set up home in worst case condition (**NOT A SCOREABLE ITEM**)

All exhaust appliances running

Correct door closures - measured quantitatively or qualitatively

Air handler operation impact checked

Candidate correctly measured worst-case CAZ depressurization

Candidate calculated minimum draft pressure based on existing weather conditions

Candidate checked for worst case spillage in heating system

Candidate checked for worst case spillage in DHW

Candidate correctly identified time limits for spillage based on BPI Standards

Candidate correctly determined if the appliance passes the spillage test

Candidate identified what steps should be taken if it does not pass (ask candidate)

Candidate correctly performed worst case draft test on DHW

Candidate made appropriate recommendations according to BPI standards (using correct table)

Candidate compared diagnostic results to appropriate table in the BPI standards

CO Testing

Candidate tested ambient CO outdoors

Candidate tested ambient CO indoors

Properly interpreted measurements

Candidate measured heating system flue gas CO during combustion safety testing

Candidate conducted Steady State Efficiency test on heating plant

Candidate accurately measured heat rise delta T

Candidate measured DHW flue gas CO during combustion safety testing

Candidate appropriately applied BPI action levels based on test results for CO in the flue

Candidate monitored ambient CO levels in the CAZ during entire combustion safety tests

Candidate checked for items, excessive debris inside oven

Candidate's sampling location appropriate for the oven test

Candidate appropriately applied BPI action levels based on test results for CO in oven

Conduct diagnostic tests

Blower Door Test

Candidate set combustion appliances to pilot or disabled them

Candidate properly set-up the blower door frame/shroud/fan

Candidate properly set-up the manometer

Candidate properly set-up house for testing

Candidate correctly measured baseline pressure differential

Candidate accurately took CFM50 measurement

Candidate discussed ventilation needs in relation to ASHRAE 62.2 2010

Pressure Pan Test

Candidate properly set-up the manometer
Accurate measurements taken
Candidate properly interpreted the results of the pressure pan testing

Pressure Diagnostics

Candidate measured zonal pressure differential to one appropriate zone
Candidate properly interpreted the results

LAB Section

Maintain Quality Control

Candidate identified need to check for deviations from the workscope
Candidate identified need to report any deviations from the workscope
Candidate verified the need to ensure installers track material usage

Set Up Containment Area (non lead-safe) - Window/Door Prop

Candidate prepared area for containment set up
Candidate identified interior area to be protected with containment
Candidate identified exterior area to be protected with containment
Candidate displayed ability to cover entire interior space with proper protective material
Candidate displayed ability to cover exterior space at least 3 feet from the exterior wall
Candidate maintained quality control by verifying that the containment area is complete (visual ONLY)
Candidate completed airsealing props within the contained space
Candidate maintained containment integrity while completing the air sealing props

Air sealing measures - Single Attempt Only; Performed within Window/Door Prop

Large Opening Prop

Candidate identified leaks and bypasses on the prop
Candidate selected appropriate materials for prop
Candidate displayed ability to seal gaps and cracks
Candidate maintained quality control by verifying that the seal is complete (visual ONLY)
Large Opening prop smoke test - test the prop with smoke to verify seal

Large Opening with Heat Source Prop

Candidate identified leaks and bypasses on the prop
Candidate selected appropriate materials for the prop
Candidate selected appropriate sealant for the prop
Candidate displayed ability to seal gaps and cracks
Candidate checked that the seal is complete
Candidate looked for potential fire code violations
Candidate maintained quality control by verifying that the seal is complete (visual ONLY)
Large Opening with Heat Source prop depressurized - test the prop with smoke to verify seal

Clean up

Candidate returned unused material to a central location
Candidate returned tools to a central location
Candidate properly contained and disposed of materials and waste
Candidate cleaned work area
Candidate made note of the need to restore occupant belongings