Sample Report

Site Visits
Any Capitol, Any State
Date

Unit #1: Single-family wood-frame home

Measures: Attic air sealing and insulation, wall air sealing and insulation, new gas wall furnace, weatherstrip and door sweep (WS&DS), kitchen and bath fans ducted to exterior, water heater vent replaced, other

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Comments, Concerns, and Recommendations:

- The attic hatch has no fastening method. It depends on the lid's weight for an air seal. [1]
- The stick-on foam weatherstrip used on the attic hatch does not appear to be very durable. [2] & [3]
- The top of the attic hatch is not insulated. [3]
- The furnace vent stack is elbowed in the attic instead of going straight up through roof. Why? Did the design contribute to failure? [4]
- The attic cellulose blow was somewhat uneven but acceptable. [4]
- The attic wire penetrations were not air sealed. [5]

- Wind snapped the newly installed furnace vent stack at the roof line. (CAA had no notice before its arrival and immediately arranged for a repair.) [6]

Unit #2: Single-family brick home

Measures: Attic air sealing and insulation, wall air sealing, WS&DS, replacement door, whole-house fan cover, new attic hatch, furnace closet air sealing, other

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Comments, Concerns, and Recommendations:

- The whole-house fan cover was attached with foil tape to the fan grille. This work was cosmetically poor and difficult to remove/replace if the client wishes to use the fan. [2]
- Same concerns with attic hatch as in Unit #1. Also, the hatch was not finished to match the home. [3]
- The attic wire penetrations were not air sealed. [4]
- The attic cellulose was very uneven but acceptable. [5]
- The furnace closet ceiling appears leaky. (A blower door test would be necessary to confirm.) [6]

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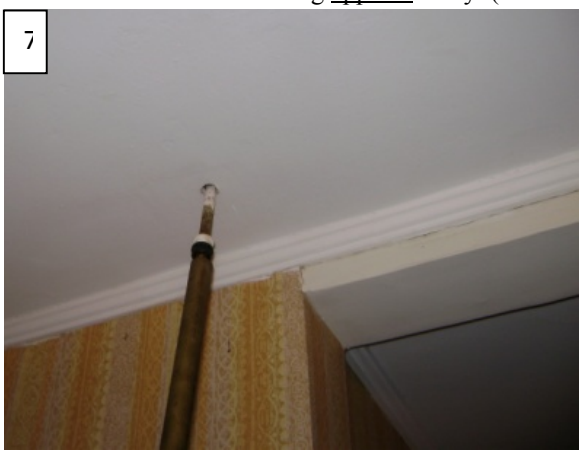

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- A hole punched in the ceiling drywall by a pole fixture was not treated. [7]
- A hole leading to the crawl space at the door stool was not treated. [8]
- Plenum joints were sealed with duct tape, rather than mastic and webbed drywall joint tape. [9]
- The plenum was not insulated. [9]
- The heat/AC duct insulation is failing in several places and apparently untreated. [10]
- The team blew insulation over items the client had stored in the attic. [10]

Unit #3: Shotgun-style, wood-frame single-family home

Measures: Attic air sealing and insulation, gas water heater vent, wall air sealing and insulation, bathroom vent, WS&DS, replacement door, attic hatch, other

Comments, Concerns, and Recommendations:

- There was no access to the attic. The hatch was located in a closet packed with stuff. (The entire home extremely crowded.)
- A new door was barely visible behind furniture and assorted decorations.
- No infrared was available to check wall insulation.
- Observable measures, e.g., interior caulk, gas water heater vent, appear acceptable.

Unit #4: Single-family brick home

Measures: Attic air sealing and insulation, wall air sealing, WS&DS, new attic hatch, furnace closet air sealing (it is unclear whether this was attempted), other

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Comments, Concerns, and Recommendations:

- The water heater in the utility room was accessible only from the carport. There appears to be some confusion about the building envelope (utility room in or out?) as some air sealing was attempted but the walls were left uninsulated. [1]
- Foam was sprayed directly on a gas water heater vent pipe to air seal the utility room ceiling penetration. Does this violate the fire code? [1]
- The furnace closet is open to the attic. The closet door seal appears leaky. No blower door was available for testing. [2]

Unit #5: Single-family brick home

Measures: Attic air sealing and insulation, wall air sealing, other

No inspection was performed as the client was just returning from the hospital on our arrival.

Unit #6: Single-family brick home

Measures: Attic air sealing and insulation, wall air sealing, whole-house fan cover, attic hatch treatment, WS&DS, window AC unit air sealing, furnace closet air sealing, other

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Comments, Concerns, and Recommendations:

- The pictured air seal of the furnace closet ceiling was very leaky during the blower door test. [1]
- The attic hatch has no fastening method. It depends on the lid's weight for an air seal. [1]
- The attic hatch cover is actually a piece of broken 3/8" drywall with a painted cardboard cover. It's totally ineffective. [2-3]
- The top of the attic hatch was not insulated. [3]
- The stick-on foam weatherstrip used on attic hatch does not appear to be very durable. [4]
- The attic cellulose blow was uneven but acceptable. [5]
- The furnace plenum was not air sealed or insulated. [6]

Unit #7: Single-family wood-frame home – In-progress unit

Measures: Attic air sealing and insulation, repair exhaust fan duct, repair two cracked windows, install WS&DS, seal window AC units, add new bath fan, repair ceilings, air seal pull-down stairs, add wall insulation, seal pipes under sinks, air seal furnace closet, caulk all windows & doors, seal ceiling register, other

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Comments, Concerns, and Recommendations:

- Installer is drilling and probing the wall cavity. Concern: The installer was extremely rough with the vinyl siding; completely removing it instead of unzipping and propping up. Installer is using lead-safe practices. [1]
- Not pictured: The insertion tube used to dense blow the wall appears too short to achieve proper density at tops of cavities.
- A new bath fan is sitting in a recently cut hole. [2]
- When asked, the CAA director on site with us said poly groundcover will be installed in the crawl space, but this is not on the work order or materials list. [3]

Unit #8: Single-family wood-frame home – In-progress unit

Measures: Attic air sealing and insulation, wall insulation and air sealing, ceiling repair, extensive interior caulking, replacement door, WS&DS, roof tar, vent range hood, new bath fan, vent gas water heater, furnace closet air sealing, other

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Comments, Concerns, and Recommendations:

- A section of ceiling is being replaced. [1]
- The workers are prepping the wall for dense-blow cellulose. Note the siding is unzipped and propped up correctly. (See unit #7.) Good lead-safe practices were employed. [2]
- Very thorough molding caulking is underway. [3]
- The range hood is ducted to the exterior. [4]
- The gas water heater vent will be replaced. [5]
- There is no mention of groundcover on the work order for the crawl space. [6]

Unit #9: Single-family wood-frame home

Measures: Attic air sealing and insulation, wall air sealing and insulation, new range hood, two new bath fans, seal off whole-house fan, 4 smoke detectors, 1 CO detector, replacement pull-down attic stairs, whole-house fan cover, new gas furnace, new gas water heater, caulk all interior molding, WS&DS, other

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Comments, Concerns, and Recommendations:

- Blower door shows that the majority of air sealing attempted was effective.
- New attic pull-down stairs were neatly installed but produce little energy savings. [1]
- A close-up of installation directions says nails should be installed through provided holes in spring brackets, but there are no nails and the other bracket is identical. [2] & [3]
- The pull-down cover is ¼" plywood and has no insulation or weatherstrip. [3]
- The attic cellulose blow was somewhat uneven but acceptable. [4] & [5]
- Client items are buried in cellulose. [4] & [5]
- A new bath fan was installed behind an apparently operable existing fan. [6]
- The whole-house fan treatment (not pictured) leaked badly during the blower door test.
- A high final CFM_{50} (3,100) is probably mostly attributable to duct leaks, air leaks at the pull-down stairs and whole-house fan cover, and voids at wall cavity tops.
- An infrared scan of the walls showed numerous wall bays where the insulation was either poorly packed or nonexistent at the top. This is probably the result of using an installation tube that's too short, such as the one in Unit #7 above.

Unit #10: Single-family wood frame home (no picture)

Measures: Attic air sealing and insulation, wall insulation and air sealing, repair kitchen exhaust fan duct, install new bath fan, 3 smoke detectors, 1 CO detector, WS&DS, whole-house fan cover, furnace closet air sealing, other

Comments, Concerns, and Recommendations:

- The majority of work appears to be done well.
- A blower door was not available to check the effectiveness of the air sealing.
- An infrared scan similar to the scan for Unit #9 shows wall cavity tops having insulation voids and poor density.

Unit #11: Single-family wood-frame home

Measures: Attic air sealing and insulation, wall insulation and air sealing, new range hood, new bath fan, WS&DS, replacement door, whole-house fan cover, new attic hatch, 4 smoke detectors, 1 CO detector, 1 fire extinguisher, replacement furnace, other

Comments, Concerns, and Recommendations:

- The majority of work appears to be done well.
- A blower door was not available to check the effectiveness of the air sealing.
- An infrared scan similar to the scan for unit #9 showed wall cavity tops having insulation voids and poor density.