



2014 BPA Residential Weatherization Specifications

Summary of Changes

The following is a summary of major changes taking effect in the BPA Residential Weatherization Specifications on October 1st, 2014. This document is not a complete list of changes, nor does it include details about each change.

General Changes

- Improved clarity and organization.
- Reduce programmatic and non-energy requirements.
- Prescriptive air sealing, prescriptive duct sealing, and duct insulation will be optional measures and not required for attic and floor insulation.
- Simplified any requirements that overlap with building code.
- Manufactured homes have no mechanical ventilation requirement unless Whole-house air sealing is performed.

General Requirements

- Indoor air quality guide and disclosure form recommended but not required.
- Expanded material durability and labeling requirements.

Weatherization Health and Safety Best Practices

- Fibrous insulation installed where occupants may go for storage or maintenance must be covered with a vapor-permeable air barrier (house wrap).
- CO alarms are required for air sealing and duct sealing when a combustion appliance is present.

Installer Record

- Installer certificate recommended but not required.

Attic Insulation

- Shields around heat producing fixtures must extend 4" above insulation.
- Dams must be installed where insulation levels differ.
- Baffles must be installed at eave or soffit vents.
- Vented, vaulted ceilings must maintain a 1" gap between the insulation and roof deck; top and bottom vents must be present.
- Exhaust fans must terminate outside, be made of durable materials and be insulated to R-4.
- Insulation must be installed to the maximum thickness possible at the eaves.
- Attic hatch and pull down stairs must be insulated, weatherstripped and have a dam.
- Walls in attics must be insulated to R13 and covered with a vapor-permeable air barrier.
- Attics with floor decking must have insulation installed under the deck.
- Insulation used to create an unvented attic must be air tight and have a vapor barrier.
- Sloped cavities between vented upper and lower attics must be insulated; insulation may fill cavity entirely if slope is less than 8'.
- Exterior roof insulation must be at least R-20 rigid board insulation.



Floor Insulation

- Support materials must be secured to the joists using durable fasteners and spaced frequently enough to support the insulation depending on the joist span.
- Vertical walls between crawlspaces and basements must be insulated to R-13 for a 2 x 4 wall and R-21 for a 2 x 6 wall. Open floor framing cavities above walls must be blocked and sealed.
- Access hatches must be insulated to R-25 for horizontal accesses and R-13 for vertical accesses. Pre-assembled hatches may be used.
- New strategies such as blown insulation supported by a restrainer and spray foam insulation are now acceptable, with requirements for durability.
- Exterior foundation insulation specifications have been removed. There is no corresponding measure.

Wall Insulation

- Open wall cavities must be insulated to R-13.
- Fiberglass insulation cannot be installed in contact with below-grade masonry or foundation walls.

HVAC Duct Insulation

- Ducts must be insulated to R-8 (utilities may choose to increase this value to R-11).
- Duct sealing is recommended before insulation is installed.
- Manufactured home ducts located outside of the rodent barrier or where the rodent barrier has been removed must be insulated.

Prime Window, Sliding Glass Door, and French Door Replacements

- New requirements exist to properly flash and weather-proof different frame designs.
- Safety glazing location requirements refer to applicable state codes, since these may be different around the region.
- Where an existing window meets code-required egress requirements, the replacement window must also meet those egress requirements.
- Manufactured homes do not require mechanical ventilation.

Prescriptive Air Sealing

An additional measure for prescriptive air sealing is under development. Prescriptive air sealing is a simplified approach to reducing air leakage without the use of a blower door. The approach uses a checklist of leakage locations in attics and crawlspaces and appropriate sealing techniques for each location. Utilities are encouraged to use this measure in association with attic and floor insulation measures. BPA has chosen to make this an optional measure to allow utilities time to integrate it into their weatherization programs.

Whole-House Air Sealing

- Leakage testing must be performed by a technician with proper certification.
- A checklist of common air sealing locations and appropriate sealing techniques is included.
- The whole-house ventilation requirement has been updated to include spot ventilation for kitchens and bathrooms. With proper spot ventilation, the amount of whole-house ventilation necessary is roughly the same as the previous requirement.