

Qualifications

May be eligible for Single-family, Multifamily, manufactured homes. Primary heating must be electrical. Pre-existing windows and patio doors must be: (1) single-paned with/without storms, any frame type (e.g., metal, wood, or vinyl) or (2) double-pane, metal frame only.

The replacement windows must have an NFRC minimum U-value of 0.30 or 0.22 for windows, and 0.35 or 0.30 for patio doors.

Window and patio door measures in Single-family and manufactured homes must be installed according to the [BPA Residential Weatherization Specifications and Best Practices Guide](#).



Connect with the local serving utility to confirm pre- and post-condition requirements.

PRE-CONDITION:

Single-paned with/without storms (metal, wood, or vinyl) or double-pane, metal frame only.

POST-CONDITION:

U-Values: Windows 0.30 - 0.22, Patio Doors 0.35 - 0.30

SPECIFICATION CHECKLIST

For details on all BPA requirements for this measure, please refer to the [BPA Residential Weatherization Specifications and Best Practices Guide](#).

- Confirm all windows and patio doors are installed with NFRC stickers attached.
- Support the bottom rail of a patio door within ½ inch of the exterior edge of the frame.
- Ensure replacement window and window opening have been properly incorporated into the home's water-resistive barrier using proper flashing techniques for each specific window type.
- Verify windows are caulked and sealed properly including structural frame, exterior wood, frame, sash, trim, stops and sills. Use of backer rod or non-expanding foam and caulk where gaps are greater than 3/8 inch.
- Confirm all hardware and fasteners are aluminum, stainless steel or another noncorrosive material.
- Verify that windows operate smoothly and safely.
- Ensure jobsite is left clean and orderly. Remove all scrap materials, tools and equipment.

Installation Examples



DOUBLE-PANED WINDOW, INSTALLED WITH PROPER FLASHING



UNINSULATED WINDOW WITH CONDENSATION



PROPER FLASHING WINDOW TO WEATHER BARRIER

Courtesy of U.S. Department of Energy



IMPROPERLY FLASHED WINDOW

Courtesy of U.S. Department of Energy



BACKER ROD FOR SEALING AROUND WINDOW

Courtesy of U.S. Department of Energy



HIGH-EXPANSION FOAM, NOT APPROPRIATE AROUND WINDOWS



BACKER ROD AND CAULK COMPLETE SEAL AROUND WINDOW FRAME

Courtesy of U.S. Department of Energy



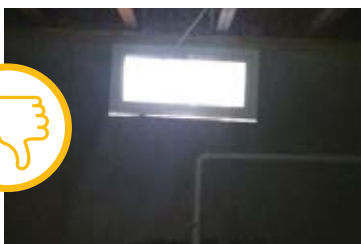
INCOMPLETE SEAL AROUND NEWLY INSTALLED WINDOW

Courtesy of U.S. Department of Energy



PROPER FIT WINDOW, LEVEL, AND SEALED

Courtesy of Santa Fe Community College



WINDOW INSTALL NOT SEALED, IMPROPERLY FIT

Courtesy of U.S. Department of Energy

MINIMUM REQUIRED DOCUMENTATION

Contact the serving [utility](#) for specifics on required documentation.

- Description of home (Single-family, Multifamily or manufactured).
- Number and square footage of windows or patio doors replaced.
- Pre-condition (frame type, i.e., wood, metal, single-or double-paned).
- Primary heating type.
- Invoice showing order or purchase date, cost, post-condition U-value (NFRC stickers or other verification).
- Documentation that the measure requirements have been met (e.g., manufacturer, model number, type, size and quantity of equipment or product installed or used).

PAIRS WELL WITH

- Attic, Floor, Wall Insulation.
- Whole-House Air Sealing.
- HVAC Upgrades.