



## BENTON RURAL ELECTRIC ASSOCIATION

402 7TH Street • P.O. BOX 1150 • PROSSER, WASHINGTON 99350 • 509/786-2913 • Fax: 509/786-0291

A Touchstone Energy® Cooperative 

Dear Contractor,

I am glad that you are interested in our window rebate program.

I have included three documents with this letter. One is our form to indicate your intention to participate in the program. The second is a pre-installation inspection report that I will need to have filled out on each job. Last, but not least, is BPA's weatherization specs and two pages that stipulate how glazing is to be installed. I don't think you'll find any concerns or surprises in there. Please call with any questions after you have looked these over.

The broad outlines of Benton REA's window rebate program are as follows:

- Benton REA will pay \$3 per square foot of window area to the homeowner when the u-value is .3 or better, and \$4 per square foot if the u-value is .22 or better. The u-value may be evaluated as a weighted average.
- Sliding glass doors must be .35 or better.
- The windows being replaced must be single pane, single pane with storm or double pane metal framed windows.
- The new windows must be the same size or smaller than the originals.
- We want to know about the project before work begins and we want to be notified when the work is done. For each project, we would need some sort of record, diagram or report that shows the residence address, which windows are being replaced and what they are to be replaced with; our "Window Pre-Inspection Sheet" works well for this requirement. We would also need a copy of the job invoice, detailing what window sizes and u values for each were installed and the total square footage as well.

As with any BPA program, there are requirements for Benton REA. Having said that, we want to make this program as simple as possible. If you have observations and suggestions about other steps we might take to streamline this program, please give us your thoughts.

We look forward to working with you.

Sincerely,

Eric Miller  
Energy Services - Benton REA  
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# Benton Rural Electric Association BPA Window Rebate Program **Contractor Agreement**

Eligible windows (and sliding glass doors) for replacement are: single pane, single pane with storm and double pane metal framed units. Replacement prime windows will have a NFRC weighted average u-value of .30 or better. Sliding glass doors will have a u-value of .35 or better. No rebate will be available for windows that exceed the existing square footage of window area. Safety glass will be used where appropriate and all glazing units will be installed in a manner that adheres to the provisions on pages 18 and 19 of the BPA Weatherization Specifications protocol (revised Oct.1, 2014).

Before work begins on the residence, Contractor will provide to Benton REA a report, diagram, or other record identifying the residence and the address. It should indicate the windows that are to be replaced and what they are to be replaced with. Promptly after completing the job, the Contractor is required to provide Benton REA with a copy of the homeowner's invoice detailing the u-value and size of each replacement window, as well as the total square footage installed. This program is viable through September of 2018.

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Company Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Contractor License Number: \_\_\_\_\_

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Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Authorized Company Representative



## **12 PRIME WINDOW, SLIDING GLASS DOOR, AND FRENCH DOOR REPLACEMENTS**

### **12.1 General Window Requirements**

Comply with these general requirements on all window and patio door replacements. Window requirements also apply to patio doors unless otherwise stated.

1. Replacement windows must be certified and labeled for U-factor in accordance with the simulation, testing, and certification procedures of the National Fenestration Rating Council Incorporated (NFRC).
2. Caulk and prime all exterior wood, including frame, sash, trim, stops and sills on all sides and ends.
3. Support the bottom rail of a patio door within 1/2 inch of exterior edge of the frame. Any wood that touches the ground or concrete must be pressure-treated.
4. Incorporate the replacement window and window opening into the home's water-resistive barrier using proper flashing techniques for each specific window type.
5. Hardware and fasteners must be aluminum, stainless steel, or another noncorrosive material.
6. Seal the structural frame to the window, and seal surrounding gaps and cracks.
  - a. Frame: Install caulk or low-expansion foam between window frame and rough opening. Install backer rod or non-expanding foam and caulk where gap is greater than 3/8 inch.
  - b. Exposed framing components: Caulk at exposed wood-to-wood framing cracks; remove sash weights, if applicable, and seal and insulate weight channels.
7. Cover gaps of over 3/8 inch between the exterior siding and the window with solid trim material. Fill all exterior or interior voids over 3/8 inch in width or depth with window manufacturer-approved materials, such as non-expanding foam, backer rod, or similar product prior to caulking, if caulking will be applied.
8. Verify that windows operate smoothly and safely.

### **12.2 Window Installation Requirements**

Comply with these requirements when replacing windows.

#### **12.2.1 Replacing Nailing-Fin Windows**

Comply with these requirements to install a nailing-fin window securely in the rough opening.

1. At the sill, insert the flashing underneath the existing siding and on top of existing building paper. The bottom nailing fin of the window will cover this flashing.
2. Install the window by sliding the top fin under the building paper. Side and bottom fins should rest on top of the building paper. Use flat shims to provide a level surface and support under the vertical structural members of the new window frame. Don't allow the fins to support the window's weight.

3. Use fasteners with heads wide enough in diameter to span the holes or slots in the window fin. Avoid over-driving the fasteners or otherwise deforming the window fin.
4. Flash the window with 15-pound felt, house wrap, or a peel-and-stick membrane.
  - a) First, flash the side fins of the window, overlapping the sill flashing;
  - b) Then, flash the top fin of the window, overlapping the side flashing.
5. Windows that are exposed to wind-driven rain or without overhangs above them should have a rigid head flashing to prevent rainwater from draining onto the window.
  - a) If the tops of the windows are already protected by an overhanging metal head flashing, tuck the new flashing behind this head flashing.
  - b) If the tops of exposed windows aren't protected by head flashing, insert new metal head flashing behind the existing siding and building paper at the top of the window and over the head trim piece. The head flashing should extend beyond the sides of the window enough to divert water away from vertical joints of the window.
  - c) Tuck the head flashing up behind the exterior siding at least 1 inch. Metal head flashing must have a downward bending lip of at least  $\frac{1}{4}$  inch on the front and ends.
6. Thoroughly caulk all filler and trim pieces surrounding the replacement window.

### **12.2.2 Block-Frame or Finless Windows**

Comply with the following requirements when installing block-frame or finless windows.

1. If window-weight cavities are present and accessible, remove the weights, fill the cavities with insulation, and seal the cavities.
2. Support block-frame or finless windows under their main vertical supports with shims that level the window.
  - a. Use flat shims if the sill surface is flat.
  - b. Use tapered shims or a sill angle if the sill surface is sloping.
3. Windows without fins must be secured to the rough opening within 4 inches of each side corner and a minimum 12 inches on center along the remainder of the frame with one of these fastening methods.
  - a. Screws fastened through the window frame. Use screws that are designed for fastening block-frame windows.
  - b. Jamb clips or plates that are fastened first to the window and then to the opening in separate steps.
4. Protect the existing sill with a metal or plastic sill pan or rigid sill flashing if necessary for drainage and to protect the existing sill that protrudes from the exterior wall. Or, install a new sill as part of the window replacement.
5. Fill any gaps over  $\frac{3}{8}$  inch that are between the exterior siding and the block-frame window. Install backer rod in all exterior or interior voids over  $\frac{3}{8}$  inch in depth or width before caulking.
6. Caulk around the perimeter of the window to the existing frame to prevent water intrusion.

### **12.2.3 Flush-Fin Window Replacement**

Replace windows in stucco walls using windows with flush fins, also called stucco fins, which have no nail holes. Flush-frame windows are replacement windows that fasten to the window opening and mount directly over the flat siding surrounding the window opening. This flush-fin window-replacement technique is similar to block-frame window installation.

1. If window-weight cavities are present and accessible, remove the weights, fill the cavities with insulation, and seal the cavities.
2. Support the replacement window on the existing sill with one of the following materials.
  - a. A flat or tapered continuous wood support.
  - b. Flat shims under the window's main vertical supports.
  - c. Tapered shims under the window's main vertical supports if the sill is sloping.
3. Apply a sealant that remains flexible to the back of the flush fin of the replacement window in order to seal it to the surface of the exterior wall. Leave a gap in the caulking at the bottom fin for one inch on each side of the window's weep holes to allow water to drain.
4. Windows must be secured to the rough opening within 4 inches of each side corner and a minimum 12 inches on center along the remainder of the frame with one of these fastening methods.
  - a. Screws fastened through the window frame. Use screws that are designed for fastening block-frame windows.
  - b. Jamb clips or plates that are fastened first to the window and then to the opening in separate steps.

## **12.3 Safety Glass and Emergency Egress**

All windows must meet the following safety glazing and egress requirements. Use safety glazing in locations where the risk of breakage is high. Egress windows are windows with an opening sash large enough for people to use as a fire escape.

Safety glazing requirements apply to replacement windows, replacement patio doors, multi-glazing inserts, and storm windows. Each pane of glass requiring safety glazing must bear the manufacturer's permanent safety glazing label. This label of identification is etched or ceramic-fired on the glazing and clearly visible in one of the corners of the lite.

### **12.3.1 Hazardous Locations Requiring Safety Glazing**

Comply with state and local code for required safety-glazing locations.

### **12.3.2 Emergency Egress Openings**

Where an existing window meets code-required egress requirements, the replacement window must also meet those egress requirements.