

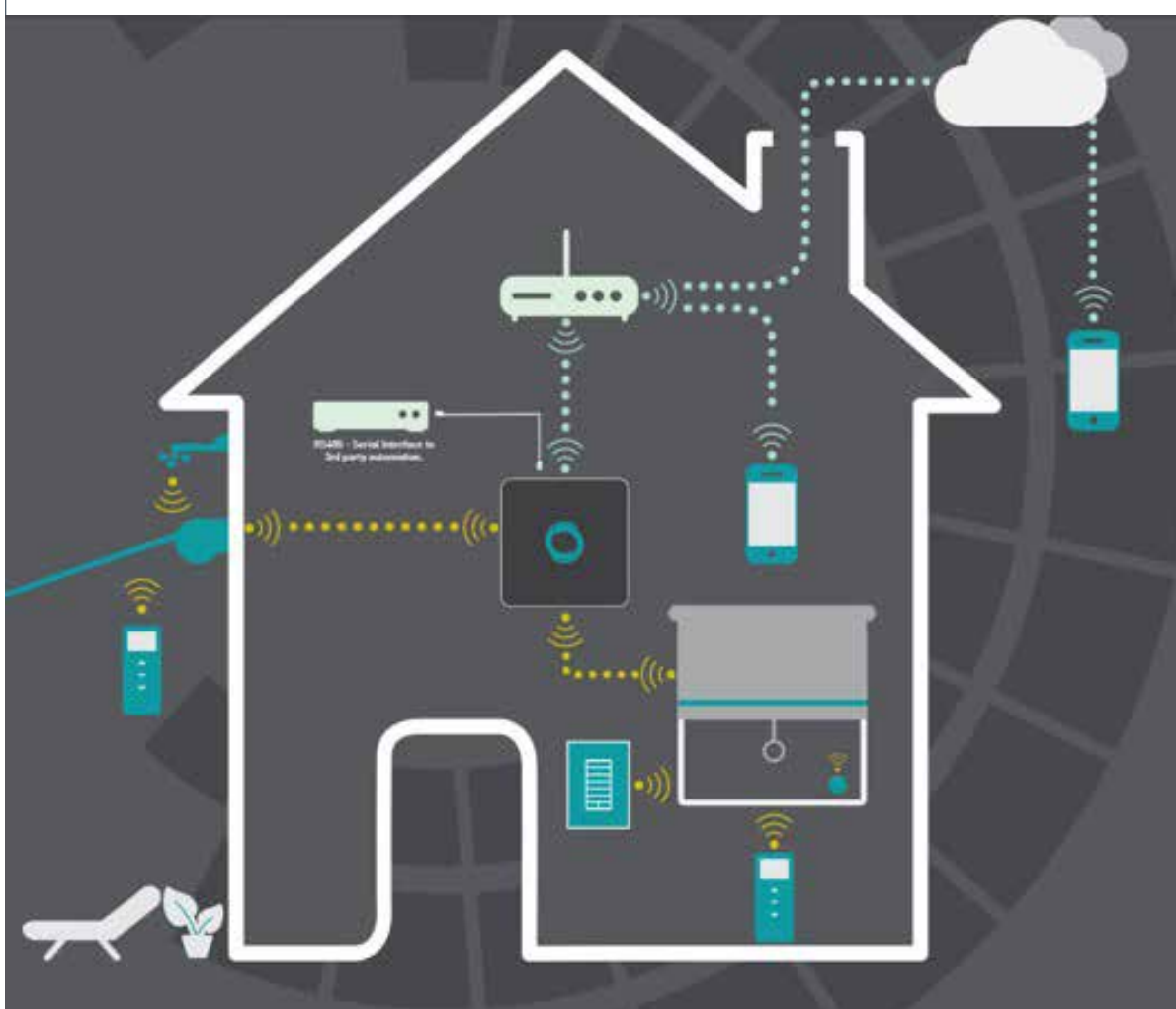
# Window Attachments Offer Added Savings

## Automated Shades: a Smarter Way to Save

There are three ways to operate your shades or blinds:

- Manual
- Motorized
- Automated

PNNL research has shown that using motorized controls to raise and lower cellular shades on a set schedule to minimize heat gain during the day while allowing some views provided 17% heating energy savings and 15% cooling energy savings compared to vinyl blinds operated in typical use (some up, some down).



Automating the operation of your window attachments with a smart device that you can "set and forget" helps make energy savings even simpler.

Consider installing hard wiring for automated lighting when you are building a new home, doing extensive remodeling, or getting new windows installed.



To ensure you are getting window attachments that will actually help cut your energy bills, look for products that carry a rating and label from the Attachments Energy Rating Council.

If you already have double-pane windows and you'd like to do something to improve their efficiency, but you aren't quite ready to replace your windows with new double-pane or triple-pane, low-emissivity, insulated-frame windows, then window attachments might be just what you need.

When it comes to energy savings, not all window attachments are equal. Although vinyl slatted blinds are the most popular window attachment, they aren't the highest performing from an energy efficiency standpoint.

Window attachments include a variety of products, like insulated cellular shades, roller blinds, solar screens, awnings, and interior or exterior storm windows that can keep the heat in or out, while also reducing glare, adding privacy, and providing shade.

The U.S. Department of Energy's Pacific Northwest National Laboratory has conducted several studies at the PNNL Lab Homes in Richland, Washington, to evaluate the energy savings from different types of window attachments. In Lab Home studies comparing cellular shades to vinyl venetian blinds under various operating schedules heating season savings ranged from 2% to 16% and cooling season savings ranged from 6% to 13%.

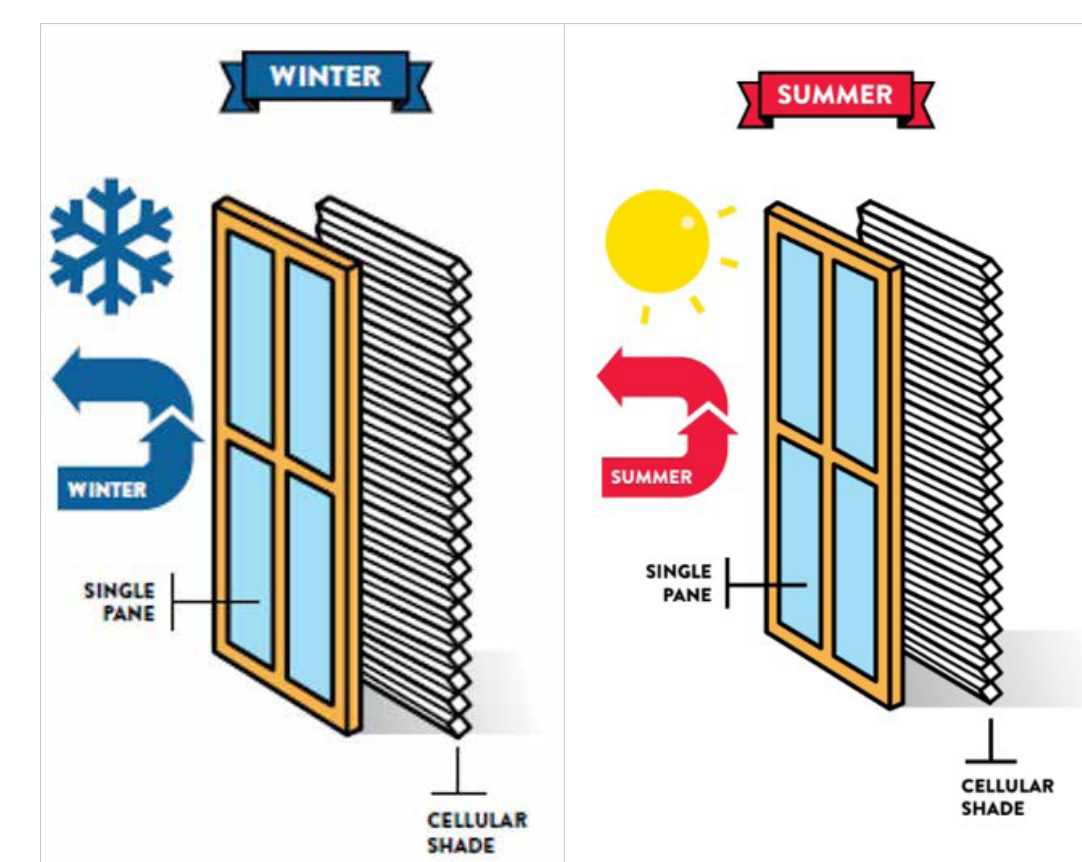


PNNL researchers used the lab homes to study solar screens, cellular shades, storm windows, and other window products.

Exterior roller shades that use sun-filtering solar screens are an excellent way to keep summer heat from entering the home. The screens also provide privacy by blocking views into the home while allowing views out. Lab Home studies of these products showed cooling savings of 12% to 25% compared to an identical home using interior vinyl venetian style blinds on the same windows.



Window attachments can reduce unwanted heat loss and heat gain through your windows for utility bill savings.



Window attachments can boost the performance of your existing windows as much as 25% by keeping heat out in the summer and in in the winter.



PNNL studies showed that keeping solar cellular shades down all the time saved 25% in heating and cooling costs.



Our studies showed solar screens could cut air conditioning costs up to 25%

