Attachments Energy Rating Council (AERC) Energy Improvement Program Introduction

AERC Intro

Q: What is the AERC?

A: The AERC is an independent, public interest, nonprofit organization partially funded and supported by the Department of Energy with additional support from the Window Covering Manufacturers Association. AERC's mission is to rate, label and certify the energy performance of window attachments. Made up of a diverse set of stakeholders, including manufacturers, government bodies, testing labs, and utilities, the AERC team works together to deliver a successful national energy performance rating program.

Q: What is energy efficiency?

A: Energy efficiency is using the least possible amount of energy to reach a desired outcome, whether driving home from work, heating or cooling a home, or having enough light to read a book.

Q: What role do window attachments play in comfort and energy efficiency?

A: Window attachments help regulate the amount of sunlight that enters and heat that escapes from homes and buildings through the window. Now consumers can select just the right window treatments for their desired level of comfort by using AERC ratings for an apples-to-apples comparison of window attachments.

Q: Why is comfort and energy efficiency important in a home?

A: 89% of Americans say it is important that their home is energy-efficient. Window attachments bearing the AERC Energy Improvement label have been certified for energy efficiency. With Hunter Douglas AERC certified products, energy efficiency and comfort go hand-in-hand due to their ability to provide temperature and light control, glare reduction, enhance privacy, while saving energy.

Q: How can AERC help dealers close sales?

A: AERC provides verified, third-party energy performance ratings which helps eliminate consumer confusion about competing claims. Also, AERC allows customers to compare products and make more informed decisions to quickly decipher which products offer superior energy performance.

The Benefits of AERC Rated and Certified Products

Using a sophisticated process of material testing and window modeling, AERC gauges the degree to which a window attachment—such as a shade, blind or shutter—will improve the performance of that window in reducing heating and cooling usage.

In a cool climate (or winter), AERC rated and certified window treatments can:

- Help keep interiors warmer
- Reduce heat from escaping
- Use free sunlight to warm spaces
- Eliminate chilly drafts
- Lower heating energy costs

In a warm climate (or summer), AERC rated and certified window treatments can:

- Help keep interiors cooler
- Block solar heat gain
- Minimize harsh sunlight and glare
- Reduce hot outside air from entering
- Lower cooling energy costs

In a mixed climate, AERC rated and certified window treatments can provide the benefits of both cool and warm climates year round.

Certification

Q: What Hunter Douglas products are AERC rated and certified?

A: The first products in the AERC certified product database include Duette® (with the Duette fabrics Architella® India Silk and Architella Alexa Metallic™, as well as Alustra® Duette Honeycomb Shades coming mid-2020) and Applause® Honeycomb Shades in the Cellular Shade category and Sonnette™ Cellular Roller Shades in the Roller Shade category.

Other product lines are being considered for certification. Additionally, AERC is working on an Automation rating based on an improved schedule to open and close shades for greater energy savings.

Q: Are other manufacturers certifying products?

- **A:** Hunter Douglas, as an industry leader, is the first manufacturer to earn a national energy performance rating and certification for interior window covering products through the AERC. AERC anticipates other manufacturers certifying in mid-2020.
- Q: Do the Hunter Douglas AERC certified products include all fabric colors?
- **A:** Yes, AERC certified Hunter Douglas products include all fabric colors Hunter Douglas offers in each certified fabric.

Q: Will the AERC Energy Improvement Program be available in Canada?

A: AERC is launching first in the U.S. and is working with manufacturers who want to expand to Canada. Hunter Douglas anticipates making it available once AERC expands.

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FREQUENTLY ASKED QUESTIONS

AERC Energy Improvement Program, continued

Q: Will window attachments receive an ENERGY STAR® certification?

A: AERC and manufacturers are actively working with the U.S. Environmental Protection Agency (EPA) to earn ENERGY STAR recognition for window attachments. Products that earn the ENERGY STAR label meet strict energy-efficiency specifications set by the EPA. When applicable, automated window attachments that are AERC rated and certified could qualify for ENERGY STAR's Smart Home Energy Management Systems (SHEMS) specification.

AERC Rating & Energy Improvement Label

Q: How is the Energy Improvement rating calculated?

A: AERC ratings represent the amount of energy saved that would otherwise be lost through a window without the use of a window attachment. These ratings are based on several factors: U-factor, Solar Heat Gain Coefficient (SHGC), Visual Transmittance (VT), Air Leakage (AL) (when applicable), how often the shades on average are manually opened and closed on a daily basis, the baseline window, orientation, season and climate. This information is then factored into simulations using software developed by the Lawrence Berkeley National Lab (LBNL). To find the U-factor, SHGC, VT and AL, visit the AERC section in the Reference Guide.

Q: Why is the Energy Improvement rating based on a manual and typical use operation?

A: One goal of the AERC Energy Improvement rating is to educate consumers on energy saving potential of window attachments based on how consumers manually operate their shades in a typical daily manner. The good news is that window attachments save energy with no change in operation schedule and can save even more if consumers follow the AERC Automation schedule. The AERC Automation schedule can be found in the AERC section in the Reference Guide.

Q: What is the baseline window?

A: All AERC certified products have been simulated over a double-pane, clear glass window to generate energy performance values. This window type is the most common in the market and in housing stock.

Q: What happens to a home's energy consumption over the course of a year when you add a window attachment?

A: The energy improvement rating calculates the energy savings gained by adding a window attachment to an existing baseline (clear glass, double-pane) window for both heating (Cool Climate rating) and cooling (Warm Climate rating).

Q: Is this a whole home energy saving number?

A: The AERC Energy Improvement rating is not a whole home energy saving number; rather, it represents the amount of energy that would otherwise be lost through the window without using a window attachment. Different areas of your home account for energy loss such as poor insulation, holes in interior or exterior walls, improperly attached vents, outlets and more that are all measured in a whole home saving number.

Q: What do the AERC ratings mean?

A: There are two types of AERC ratings for each window attachment product category: a Cool Climate rating and a Warm Climate rating, each on a scale from 0 to a Max Improvement rating. Find your climate zone on the map, then review with your customer the Cool and/or Warm Climate ratings on the label. Note that the grey area represents a Mixed Climate. Additionally, as a rule of thumb if you use your air conditioning and heating regularly no matter where you live, use both Climate Ratings.

Climate Zones



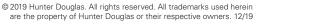
Q: Where can I find the AERC Energy Improvement labels?

A: Custom window covering manufacturers are not required to place the Energy Improvement label on products. PDFs of all Hunter Douglas AERC Energy Improvement labels will be located on the Hunter Douglas AERC webpage: *hunterdouglas.com/aerc*.

Q: How do I read the AERC Energy Improvement label?

A: Take a look at the label on the next page. The most important thing to remember is that the closer the rating (listed in bold on the left) is to the Max number (listed on the right), the better the rating. And overall, the higher the rating, the greater the potential for energy savings and comfort.

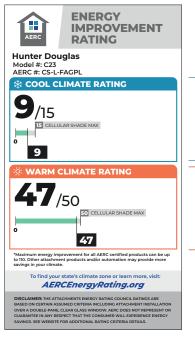
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FREQUENTLY ASKED QUESTIONS

AERC Energy Improvement Program, continued



Cool Climate Rating The closer the Cool Climate rating is to the Max Improvement rating, the less energy is required to **heat** the home.

Warm Climate Rating The closer the Warm Climate rating is to the Max Improvement rating, the less energy is required to cool the home.

NOTE: Use both Cool Climate and Warm Climate ratings for the gray Mixed Climate rating area noted on the map.

AERC Label

To learn more, including detailed information about the U-factor and SHGC, visit *AERCEnergyRating.org*.

Q: What is the AERC Disclaimer?

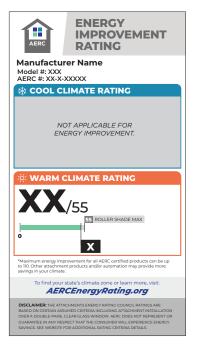
- A: The AERC Disclaimer is important to point out to consumers and can be found at the bottom of the Energy Improvement label for each certified product. It reads: AERC Disclaimer: The Attachments Energy Rating Council ratings are based on certain assumed criteria including attachment installation over a double-pane, clear glass window. AERC does not represent or guarantee in any respect that the consumer will experience energy savings. See the [*AERCEnergyRating.org*] website for additional rating criteria details.
- Q: Will AERC replace the Hunter Douglas Energy Efficiency Star Chart?
- A: The Energy Efficiency Star Chart is an internal comparison of the energy efficiency performance of Hunter Douglas products, which is still informative, as it ranks our products against each other—it is important to acknowledge that not all product lines will be AERC certified.

Q: Why didn't AERC use R-values? Wouldn't that be easier?

A: In the past, manufacturers would measure window coverings based on R-value which is the resistance a material has to heat flow, or temperature conduction. There has been some confusion on R-values since it can be tested in multiple ways, it was hard to compare products between different manufacturers because there wasn't an apples-to-apples comparison. Before, different test labs would use double-pane vs single-pane windows which would completely change the R-value and in the end, this can be very misleading to consumers. With AERC certified products, now all certified manufacturers are held to the same testing standards. AERC uses U-factor which aligns with the window industry standard rating program. Due to the complex nature of windows and window covering systems U-factor is a better measurement over R-value because R-value is more applicable to insulation which is a simple product system.

Q: What if a product only performs well in one climate?

A: Some products provide focused savings for a specific climate, Cool or Warm, for example Roller and Solar Screen Shades block solar heat gain in hot, sunny climates but they may not perform as well in a Cool Climate. If this is the case, a "Not Applicable for Energy Improvement" is listed in the Cool Climate Rating of the label. So it's important to understand your customers' energy needs so you can find a product that meets their comfort level and energy demands.



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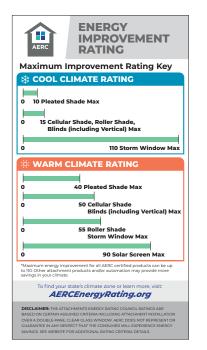


FREQUENTLY ASKED QUESTIONS

AERC Energy Improvement Program, continued

Q: What is the Cool and Warm Climate Rating Max for each product category?

A: LBNL, through the AERCalc software they developed for this program, simulated and defined the Max Improvement rating number for each product category. Please see below for the Max Improvement Ratings in both the Cool and Warm Climate for each category.



Q: Why are some Cool Climate ratings lower than expected?

A: LBNL simulation accounts for "typical use" of a window attachment based on a study by D&R International. The study accounts for a typical, manual operation of a portion of window attachments being left in the down position during sunny winter days, thus eliminating the free solar heat gain that warms the space.

In cool climates, a window attachment should be operated to allow sunlight into a space when direct sunlight is entering or closed on cloudy, cold days and also closed at night to keep in the heat gained from daylight sun.

Once AERC adds assumptions for Automation, the Cool Climate ratings will increase. Based on real lab home studies conducted by the Pacific Northwest National Lab, with Hunter Douglas automated products, we know automated shades improve energy savings when operated on a schedule designed for energy savings.

Q: Will AERC information be on the AERC certified product?

A: Yes, manufacturers are required to have the AERC certified product database listing number and website on the product's permanent label, for Hunter Douglas, it is located on the product's headrail.

Q: When will Automation be considered for the AERC Energy Improvement Program?

A: Hunter Douglas is actively working with AERC to create a standard automation schedule to facilitate greater energy performance, which can allow manufacturers with automated shades to receive higher ratings.

Q: If an AERC Automation rating unlocks additional energy saving potential, how can I help my client now if Automation ratings aren't available yet?

- A: Hunter Douglas is preparing recommendations based on the AERC Automation schedule prior to the AERC Automation ratings. As of now the ratings are based on a consumer's typical manual use. Please see The Link for future information.
- Q: How will dealers learn more about AERC and Hunter Douglas rated and certified products?
- A: Further information can be found in the Learning Center, The Link, and on the dedicated Hunter Douglas webpage at *hunterdouglas.com/aerc*.

Q: Where can consumers find AERC certified products?

A: To find the best energy-efficient window attachment(s) for your home or building, visit the AERC Hunter Douglas website at *hunterdouglas.com/aerc* or the AERC Certified Product Search at *AERCEnergyRating.org*.

