



# **ENERGY STAR<sup>®</sup> for Windows, Doors, and Skylights**

## **Program Update for NFRC Fall Membership Meeting**

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# Program Update Topics

- 1) Most Efficient 2019 for Windows
- 2) U.S. / Canada ENERGY STAR Alignment
- 3) ENERGY STAR and Storm Windows
- 4) Verification Testing Update
- 5) Next Steps on ENERGY STAR WDS Criteria
- 6) Upcoming Program Milestones



## Most Efficient 2019 for Windows

- ENERGY STAR Most Efficient recognition criteria will remain unchanged in 2019

Climate Zone	U-factor	SHGC
Northern	$\leq 0.20$	$\geq 0.20$
North-Central	$\leq 0.20$	$\leq 0.40$
South-Central	$\leq 0.20$	$\leq 0.25$
Southern	$\leq 0.20$	$\leq 0.25$

- Full criteria found at:  
[www.energystar.gov/mostefficient](http://www.energystar.gov/mostefficient)
- EPA and LBNL/DOE are still interested in future criteria for products with automated dynamic glazing



## U.S. / Canada ENERGY STAR Alignment

- EPA and Natural Resources Canada (NRCan) had previously discussed the possibility of aligning the U.S. and Canadian ENERGY STAR specifications
- Canada has set new, higher performance levels for ENERGY STAR fenestration products and established more aggressive national building standards for these products
- ENERGY STAR will monitor developments in Canada and consider future options for alignment, where feasible



## ES Storm Window Specification Process

- **Jan 2016** - Framework Document issued
- **July 2017** - Draft 1 and Criteria Analysis Report released
- **April 2018** - Draft 2 and Additional Analysis released
- **July 2018** - Final Draft released
- **September 2018** – Version 1.0 (Final) released
- **October 2018** – Initial Certification Bodies announced and Qualified Product List (QPL) initiated

All documents posted on the specification development webpage:  
[www.energystar.gov/stormwindows](http://www.energystar.gov/stormwindows) (click on “For Partners”)



# ENERGY STAR Certification Process

EPA has a well developed certification (and verification) process based on ISO Standards 17025 and 17065

- Requirements and SOPs can found on-line at:  
[www.energystar.gov/3rdpartycert](http://www.energystar.gov/3rdpartycert)
- Only ISO Std 17065 accredited Certification Bodies can certify products
- For Storms, certification using documented physical testing will be part of the process (emissivity, solar transmittance, air leakage)
- Verification testing will also include physical checks of the product
- ENERGY STAR does not require performance numbers to be reported on the product or package: can look up numbers on-line
- ENERGY STAR has its own certified product listing database



## Verification Testing Update

- Reminder: EPA now requires that **5%** of ENERGY STAR fenestration product lines be selected for verification testing
  - Product selection: ½ by EPA and ½ by certification body
  - Please keep ENERGY STAR product line selections up-to-date
- **Problems are being found** – both in performance and labeling
- A new process allows manufacturers an opportunity to inspect a failed product after thermal testing, but before component evaluation (cut-up)
- NFRC has indicated to EPA that thermal test results from products with 2 sets of coatings of different surfaces (for example - surface 2 and 4<sup>th</sup> surface) are problematic to test in a hotbox – research/analysis/guidance is needed to address this issue



## Next Steps on ENERGY STAR WDS Criteria

- EPA will continue conducting market and technical research
  - Technical advancement and available products analysis
  - ENERGY STAR market penetration data
  - Costs and energy savings analysis
  - Updated codes and standards review
- EPA plans to publish a Discussion Guide (formerly called a Framework Document) for Windows, Doors and Skylights (WDS) Version 7.0
  - Document will not propose criteria, but will present methodology, sources, and other issues for consideration/comment
  - See "*Standard Operating Procedure for Revising or Establishing an ENERGY STAR Product Specification*" at [www.energystar.gov](http://www.energystar.gov)





# Upcoming Program Milestones

Milestone	Expected Date
ENERGY STAR Storm Window Specification	Completed
EPA Market and Technical Research on WDS	On-going
WDS Ver7.0 Discussion Guide	Q1-Q2 2019
Response to Ver 7.0 Discussion Comments	Q2-Q3 2019
WDS Ver 7.0 Draft 1 Specification (if indicated)	Depends on analysis results



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**General ENERGY STAR Fenestration Questions**

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