

NFRC

Independent Verification Program
Keystone Certification – May 6, 2015



NFRC Independent Verification Program

- ENERGY STAR® Version 6.0
- NFRC 713 Program
- Status of IVP Studies



ENERGY STAR Version 6

- General Requirements
- Update to Zone's criteria
- Clarifications on product subcategories
- New requirements



General Requirements

- Version 6.0 effective January 1, 2015
- Applying NFRC and ENERGY STAR labels are mandatory



Windows

Version 5

Climate Zone	U-Factor ¹	SHGC ²	
Northern	≤ 0.30	Any	Prescriptive
	=0.31	≥ 0.35	Equivalent Energy Performance
	=0.32	≥ 0.40	
North-Central	≤ 0.32	≤ 0.40	
South-Central	≤ 0.35	≤ 0.30	
Southern	≤ 0.60	≤ 0.27	

Version 6

Climate Zone	U-Factor ¹	SHGC ²	
Northern*	≤ 0.27	Any	Prescriptive
	= 0.28	≥ 0.32	Equivalent Energy Performance
	= 0.29	≥ 0.37	
	= 0.30	≥ 0.42	
North-Central	≤ 0.30	≤ 0.40	
South-Central	≤ 0.30	≤ 0.25	
Southern	≤ 0.40	≤ 0.25	

***Takes effect
January 1, 2016**

Air Leakage ≤ 0.3 cfm/ft²



Doors

Version 5

Glazing Level	U-Factor ¹	SHGC ²
Opaque	≤ 0.21	No Rating
≤ ½-Lite	≤ 0.27	≤ 0.30
> ½-Lite	≤ 0.32	≤ 0.30

Version 6

Glazing Level	U-Factor ¹	SHGC ²
Opaque	≤ 0.17	No Rating
≤ ½-Lite	≤ 0.25	≤ 0.25
> ½-Lite	≤ 0.30	Northern North-Central ≤ 0.40
		Southern South-Central ≤ 0.25

Air Leakage for Sliding Doors ≤ 0.3 cfm/ft²
 Air Leakage for Swinging Doors ≤ 0.5 cfm/ft²



Skylights

Version 5

Climate Zone	U-Factor ¹	SHGC ²
Northern	≤ 0.55	Any
North-Central	≤ 0.55	≤ 0.40
South-Central	≤ 0.57	≤ 0.30
Southern	≤ 0.70	≤ 0.30

Version 6

Climate Zone	U-Factor ¹	SHGC ²
Northern	≤ 0.50	Any
North-Central	≤ 0.53	≤ 0.35
South-Central	≤ 0.53	≤ 0.28
Southern	≤ 0.60	≤ 0.28



Air Leakage ≤ 0.3 cfm/ft²

Product Subcategories

- Sidelite:
 - A fenestration product with the NFRC product code FXSL.
 - Under Door criteria
- Transom:
 - A fenestration product with the NFRC product code FXTR.
 - Under Window criteria



New Requirements

- Air Leakage rating 
- Installation instructions 

Air Leakage

Product	Air Leakage Rating
Window, Sliding Door, or Skylight	≤ 0.3 cfm/ft ²
Swinging Door	≤ 0.5 cfm/ft ²
Air Leakage	ASTM E283 in accordance with NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440-11

AL Labels

- Displaying “ ≤ 0.3 ” or “ ≤ 0.5 ” in the Air Leakage portion of the NFRC temporary label; or
- Placing one of the following labels on the product:
 - (a) AAMA Gold Label
 - (b) Keystone Certifications, Inc. NAFS Structural Certification Label
 - (c) National Accreditation & Management Institute, Inc. (NAMI) NAFS Structural Certification Label
 - (d) WDMA Hallmark Certification Label



Installation Instructions

- To qualify for ENERGY STAR, products shall have generic installation instructions readily available online or packaged with the product.
- Eight (8) elements: Tools, pictures, safety guidelines for removal and disposal, flashing / shimming (flush/level), sealing and weatherproofing, and variations of different opening instructions.



NFRC 713 Program

- [NFRC 713-2015](#)
- 10% of products tested (324)
 - 50% nominated by EPA
 - 50% nominated by NFRC IVP algorithm
- Refer to NFRC 713.01-2015: Manufacturer Guideline document



Enrollment

- IVP Participation form
- Product line identification tool
- Participation fees:
 - Member / Non-member / Small Business*



Product Selected

- Refer to checklist in [NFRC 713.01-2015](#)
- Work with NFRC on product and laboratory
- Member / Non-member: reimbursement is a maximum of \$500 / product and NFRC pays for testing fees
- * Small Business: no reimbursement and participant is responsible for testing fees



U-factor / SHGC Verification

- U-factor is verified based on the results of a NFRC 102 test
- SHGC is verified based on the low-e surface location



Air Leakage Verification

- Participants will provide NFRC the product's air leakage certification authorization issued by the certification body
- When applicable, verify AL rating in CPD
- AL ratings meet product type requirements



Installation Instructions Verification

- Participants shall provide NFRC the product's installation instructions.
 - NFRC staff and or test lab shall verify the manufacturer's installation instructions include the EPA mandated elements and are available online or packaged with the product.
- Test lab shall verify instructions were included in packaging.



Categorization of Issues

- Section 7 of NFRC 713 – Categorization of Issues
- Actions are listed for labeling, certification, and component issues, and the results of testing.



Status of IVP Studies

- 2014: 240 studies (4 failures)
- 2015: 324 studies – started in April



Thank You

Questions

