

ENERGY STAR for Windows, Doors and Skylights
Stakeholder Meeting
August 13, 2008

ENERGY STAR Windows and Solar Heat Gain

Helping Consumers Identify the Right Fit

Nils Petermann
Alliance to Save Energy

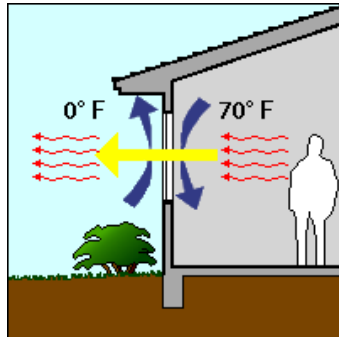


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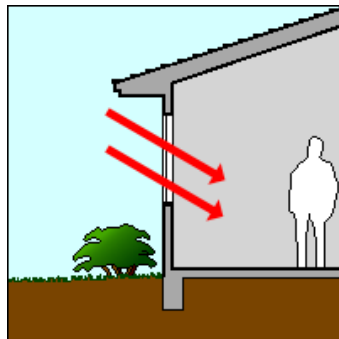
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Creating an Energy-Efficient World

U-factor and SHGC Matter



U-Factor

Straightforward: Low U-factor = good



Solar Heat Gain Coefficient

Common approach: Specify SHGC only in the South

But SHGC matters also in the North!

New ENERGY STAR approach:
attempt to account for SHGC impact on
average homes across country



Not all Homes are Average



Source: www.wackystuff/typepad.com



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Not all People are Average



- People usually know best what they prefer for themselves and their homes



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Source: www.xaboom.com

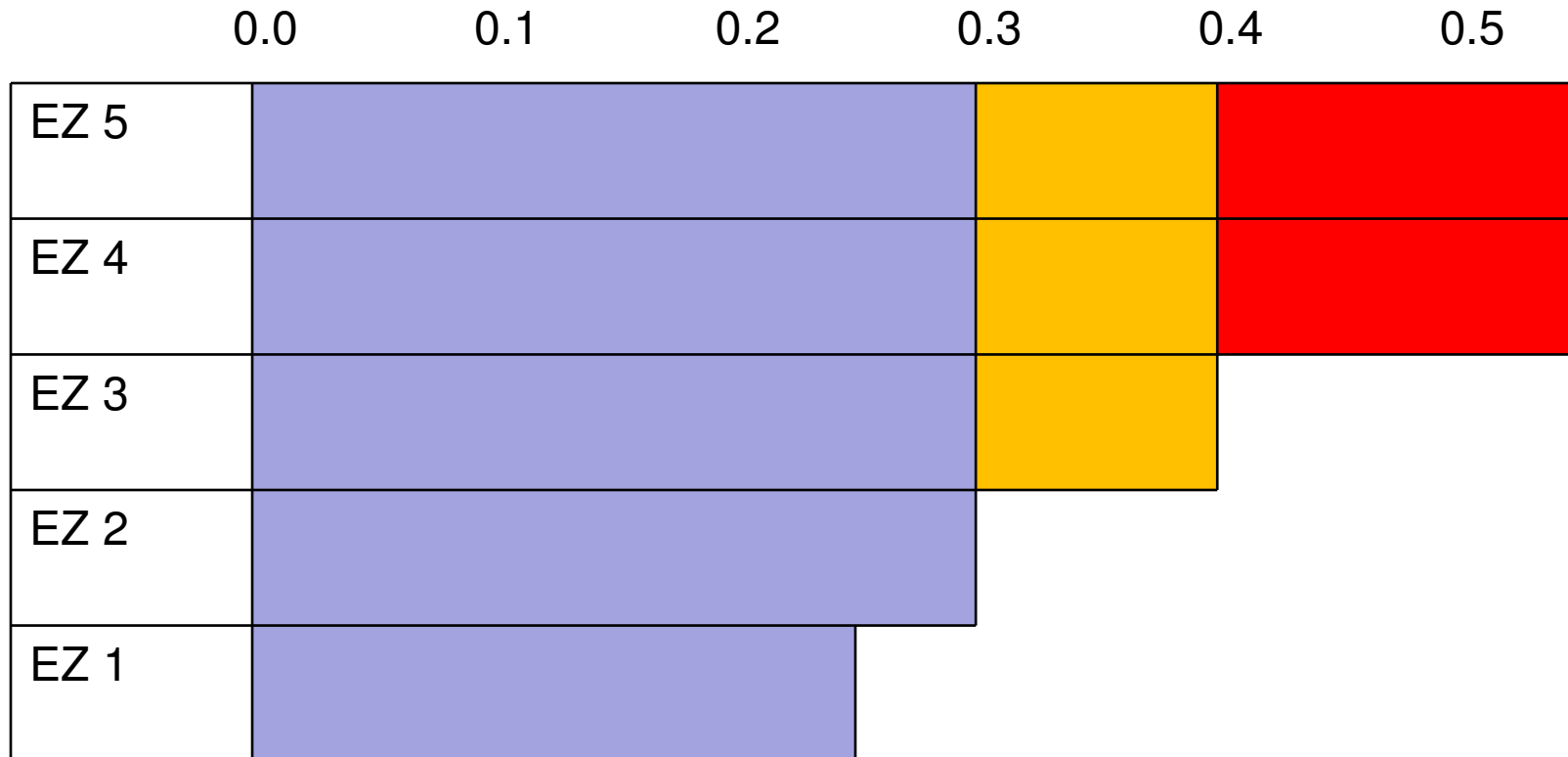
Is NFRC Information Sufficient?

| | |
|---|---|
|  National Fenestration Rating Council® CERTIFIED | World's Best Window Co. Millennium 2000+ Vinyl-Clad Wood Frame Double Glazing • Argon Fill • Low E Product Type: Vertical Slider |
| ENERGY PERFORMANCE RATINGS | |
| U-Factor (U.S./I-P) 0.35 | Solar Heat Gain Coefficient 0.32 |
| ADDITIONAL PERFORMANCE RATINGS | |
| Visible Transmittance 0.51 | Air Leakage (U.S./I-P) 0.2 |
| Condensation Resistance 51 | — |
| <small>Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information. www.nfrc.org</small> | |

- SHGC does not offer point of comparison
- Even architects often confuse center-of-glass with whole-window numbers (literature vs. labels)
- A simple descriptor would help, e.g.:
 - Moderate solar heat gain
 - High solar heat gain
 - Low solar heat gain



Possible Classification of Solar Heat Gain Potential



Low

Moderate

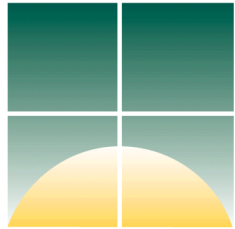
High



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Thank You!

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