INTERNATIONAL
WINDOW FILM
ASSOCIATION®

P.O. Box 3871
Martinsville, VA 24115-3871
(276) 666-4932
Fax (276) 666-4933
email: admin@iwfa.com
www.iwfa.com

Although the International Window Film Association (IWFA) has no technical resources and makes no effort to detail or review performance specifications of any specific product or group of products, the IWFA does produce educational materials and provide information to its members and to the public for guidance in ascertaining the best general types of products for specific desired performance levels. To that end, the IWFA relies on information from outside organizations (both private and public) involved in the window film, window design, energy consulting, building construction, and energy analysis industries.

To that end and in the interest of accurate disclosure of general window film performance measurement criteria, the IWFA fully endorses the statement contained below about the use of SHGC versus IR as true measures of product performance. This statement was prepared by the Window Film Committee of the Association of Industrial Metalizers, Coaters and Laminators.

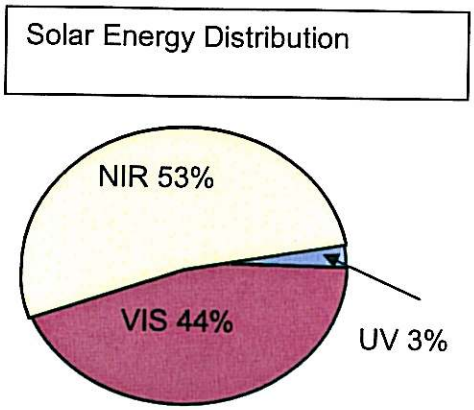
Statements of Infrared Rejection may Confuse Customers

Published by the AIMCAL-Window Film Committee

In countries without established testing and reporting procedures for thermal properties of fenestration, several manufacturers list an infrared (IR) rejection percentage to describe the solar heat control of their products. In the U.S. market, however, where the solar heat gain coefficient (SHGC) exists as a far more comprehensive and well-defined denominator of solar control, the use of IR rejection values is not necessary and can be misleading for consumers.

While infrared rejection is an important property of fenestration products it is not the only factor of solar heat control. Moreover, the effect of infrared rejection depends on which wavelengths are rejected, and there is no set standard determining which wavelengths are meant by an IR rejection percentage. Accordingly, IR rejection ratings do not offer a complete picture of solar heat control. Therefore it is misleading to consumers if manufacturers refer to IR rejection instead of the SHGC.

The SHGC predicts the heat gain of the total contribution of *all three* spectral regions of solar light - UV, visible light and near-infrared radiation (see the figure for relative contribution to solar energy by the three spectral regions). Thus, the SHGC provides the only valid evaluation of total solar heat gain of a fenestration product. The National Fenestration Rating Council sets the methodology for determining the SHGC of different products and includes this information on all of their fenestration labels.



The practice of using IR rejection ratings is particularly prevalent in parts of Asia where, without a commonly acknowledged body such as the NFRC, manufacturers are free to rate their products in ways that may not provide complete information about thermal performance. In the U.S., with its established thermal performance rating system, however, it is in the best interest of the fenestration market to provide optimum consumer information through the Solar Heat Gain Coefficient.