Product Bulletin

One Way Vision - Solar Data

The one way product has been tested in a white/black dot matrix with 50% coverage in the following make-up:

1/8th clear annealed over 1/8th clear annealed with two layers of .015 PVB and our .007 film. (White outboard facing) - The results are as follows:

Visible Daylight	Transmittance	34%
Reflectance	White	24%
Reflectance	Black	7%
Ultra-Violet	Absorbance	>99.5%
Shading Coefficient		0.49
Relative Heat Gain		112
U-Value	Winter	1.09
U-Value	Summer	1.02
U-Value	European	5.7
Total Solar Heat	Transmittance	0.39

Notes

Visible Daylight is CIE Standard Illuminant C, publication 15.2 (1986).

Ultra Violet is based on solar wavelengths 300 to 380 nanometers, air mass 2.0, sun at 60° zenith angle, measured at normal to the glass surface.

North American (ASHRAE) Winter U-Value is based on an outdoor temperature at 0°F (-18°C), an indoor temperature of 70°F (21°C), and a 15 mph (24kph) wind velocity with no sun. Units are expressed as Btu/(hr x ft2 x °F).

North American (ASHRAE) Summer U-Value and shading coefficient are based on an outdoor temperature of 89°F (32°C), an indoor temperature of 75°F (24°C), a solar intensity of 248 Btu/hr/sf (789W/m2), and a 7.5 mph (12kph) wind velocity. U-Values are expressed as Btu/(hr x ft2 x °F).

North American Relative Heat Gain is based on an ASHRAE solar intensity of 200 Btu/(hr x ft2), (631W/m2), and an outdoor temperature 14°F (8°C) higher than the indoor temperature. Relative Heat Gain = SC(200) + U(14).

European U-Value (W/m2k) is based on ISO-DP10292 draft standard conditions.

International Total Solar Heat Transmittance (sometimes call Solar Factor) equals the total solar heat gain referenced to air, including the inward flowing portion of the absorbed radiation, and is based on CEN European draft conditions.