Results : Optical Characterisation

Sample Reference	IX70G
Visible Light Transmittance (%)	71.61
Visible Light Reflectance (%)	9.73
Solar Direct Transmittance (%)	37.03
Solar Direct Reflectance (%)	11.34
Total Solar Energy Rejection (%)	50.18
Emittance, e	0.75
Solar Heat Gain Coefficient, F	0.50
Shading Coefficient	0.57
*IR Transmission at 1100nm (%)	1.77

Note:

1. Sample size was limited to 100 x 100 mm to fit into the spectrometer.
2. Test was conducted using a PerkinElmer Spectrometer (Lambda 750 UV-VIS-NIR).
3. The sample comes with film on inner surface of glass.
4. *IR Transmission was provided upon the request of A & B Films.

The light transmittance, reflectance and other solar related values of the test glass were calculated based on the information and conventional boundary conditions provided in ISO 9050: 1990(E).

Calculation:

For computing of the solar heat gain coefficient and shading coefficient, the following assumptions were made (for summer design):

i) h_o = 22.7 W/m^2.°C
ii) Room temperature = 24°C
iii) Glass temperature = 32°C
iv) Outside wind speed of 4m/s
v) Inside wind speed of 0 m/s

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