#### **EXPLANATION OF GLASS PERFORMANCE FIGURES**

The sample pane of glass referred to in the explanations hereafter is the glass whose performance is being adjudicated.

### **VISIBLE LIGHT TRANSMISSION**

This figure indicates the amount of light that passes through the sample pane of glass.

For example, if the sample pane of glass has a Visible Light Transmission performance figure of 32, it means that if light source is placed in front of the sample pane of glass, 32% of that light will pass through that pane of glass.

**Selection**: Selection is subject to the wishes of the specifier

### **VISIBLE LIGHT REFLECTION**

This figure indicates the amount of light that is reflected away from the surface of the sample pane of glass.

For example, if the sample pane of glass has a Visible Light Reflection performance figure of 9, it means that of the 100% of light that strikes the surface of the glass, 9% is reflected back towards the light source.

As a guide, clear glass has a Visible Light Reflection performance figure of 8.

**Selection**: The lower the figure the better. Consideration must be given to the effect of

the light reflected from the glass into the surrounding environment.

## **SOLAR ENERGY (HEAT)**

Solar Energy (Heat) striking the surface of a pane of glass re-acts in three ways; a portion is transmitted through the glass, a portion is reflected away from the glass surface and a portion is absorbed within the glass.

#### **DIRECT SOLAR ENERGY (HEAT) TRANSMISSION**

This figure indicates the amount of Solar Energy (Heat) that is transmitted directly through the sample pane of glass.

For example, if the sample pane of glass has a Direct Solar Energy (Heat) Transmission performance figure of 29, it means that of the 100% of solar energy (heat) that strikes the surface of the pane of glass, 29% is transmitted directly through that pane of glass.

**Selection**: The lower the figure, the better the performance

### SOLAR ENERGY (HEAT) REFLECTANCE

This figure indicates the amount of Solar Energy (Heat) that is reflected away from the surface of the sample pane of glass.

For example, if the sample pane of glass has a Solar Energy (Heat) Reflectance performance figure of 8, it means that of the 100% of Solar Energy (Heat) striking the glass surface, 8% is reflected away from that surface.

**Selection**: Is subject to the wishes of the specifier

#### TOTAL SOLAR ENERGY (HEAT) TRANSMISSION

The amount of Solar Energy (Heat) absorbed within the sample pane of glass is re-radiated out through both surfaces of the glass pane. This figure indicates the amount of Direct and Re-radiated Solar Energy (Heat) that is transmitted through the sample pane of glass.

For example, if the sample pane of glass has a Total Solar Energy (Heat) Transmission performance figure of 41, it means that of the 100% of Solar Energy (Heat) that strikes the glass surface, 41% is transmitted through the glass directly or through re-radiation.

**Selection**: The lower the figure, the better the performance.

## TOTAL SOLAR ENERGY (HEAT) ELIMINATION

This is a function of the Total Solar Energy (Heat) Transmission performance figure referred to above.

For example, a Total Solar Energy (Heat) Transmission performance figure of 41 will generate a Total Solar Energy (Heat) Elimination performance figure of 59.

**Selection**: the higher the figure, the better the performance.

### **SHADING CO-EFFICIENT**

This figure is a function of the Total Solar Energy (Heat) transmitted through the sample pane of glass as compared to the Total Solar Energy (Heat) transmitted through a 3mm thick pane of clear glass which has a shading co-efficient of 1.00

For example, if the sample pane of glass has a Shading Co-efficient of 0.48, it means that the sample pane of glass allows the transmission of 48% of the Total Solar Energy (Heat) that would be transmitted through the 3mm thick pane of glass.

**Selection**: The lower the figure, the better the performance.

# **U-VALUE**

This figure indicates the amount of energy (measured in Watts) that is lost through 1m<sup>2</sup> of the sample pane of glass for every degree of temperature difference between the outside and the inside ambient air.

**Selection**: the lower the figure, the better the performance

#### **ULTRA VIOLET ELIMINATION**

Is the amount of Ultra Violet either absorbed or reflected by the glass.

For example, the UV Elimination on 6mm Clear Float would be  $\pm$  17% opposed to > 95% on the 6.38mm Clear PVB Laminated Safety Glass.

**Selection**: The higher the figure, the better the performance