

# Haze in Glass Products

Light that is scattered when passing through glass products can produce a milky or smoky condition that is known as Haze. Haze in glass products can look like or be perceived to be a very fine film of dust or coating on the glass that cannot be removed.

Compared to clear glass, coated glass products can have a higher haze level due to the very slight roughness of the coatings. In addition, laminated glass products can also have a higher haze level than clear glass because of the haze in the interlayer. Haze can be seen when looking at or through glass products at an oblique angle under relatively high light levels. Haze is generally not considered a defect in the glass

Below is a comparison of haze levels of various glass products as measured by *ASTM -D1003 –Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics*.

| Product                           | Glass Thickness (mm)                             | Visible Trans (%) | Haze (%) |
|-----------------------------------|--|-------------------|----------|
| <b>Monolithic Glass</b>           |  |                   |          |
| Clear                             | 3  | 91                | 0.09     |
| Typical Pyrolytic Low E           | 4  | 85                | 0.57     |
| LoE <sup>-i89</sup> ®             | 3  | 88                | 0.08     |
| LoE <sup>2</sup> -272®            | 3  | 80                | 0.10     |
| LoE <sup>2</sup> -272® Temperable | 3  | 80                | 0.35     |
| LoE <sup>3</sup> -366®            | 3  | 71                | 0.10     |
| LoE <sup>3</sup> -366®            | 5.7  | 69                | 0.15     |
| LoE <sup>3</sup> -366® Temperable | 3  | 71                | 0.35     |
| <b>Laminated Glass</b>            |  |                   |          |
| 8.6 mm PVB                        | 3/0.090" PVB/3                                   | 89                | 0.39     |
| 8.6 mm SentryGlas®                | 3/0.090" SG/3                                    | 89                | 0.81     |
| <b>IG Units</b>                   |  |                   |          |
| Clear IG                          | 3 / 16mm AS / 3                                  | 83                | 0.18     |
| Laminated IG                      | 3 LoE <sup>2</sup> -272® / 16mm AS / 8.6 Lam SGP | 72                | 0.95     |
| Laminated IG                      | 3 LoE <sup>2</sup> -272® / 16mm AS / 8.6 Lam PVB | 72                | 0.65     |

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