# IGU Inspection Criteria per ASTM Standards 

## Inspection:

- For inspection of Insulated Glass Units (IGUs) refer to ASTM E 2190
- For inspection of Clear Flat glass lites refer to ASTM C 1036
- For inspection of Coating related defects refer to ASTM C 1376
- For inspection of Laminated Glass lites refer to ASTM C 1172
- For inspection of Heat treated/Tempered Glass refer to ASTM C 1048

1. Visual inspection should be done with the naked eye.
2. The inspector shall place the glass in a vertical position with light in transmission.
3. Inspector shall view through the glass at an agle of 90 from a distance of 10 ft .
4. Lighting should be daylight level or other uniform backlight that simulates daylight without direct sunlight or flash light.
5. View at the distance specified by defect type.


## Quality Criteria:

1. Determine approximate lite surface area $\left(\mathrm{ft}^{2}\right)$
2. Determine defect location - central or outer viewing area. The central area is considered to form a square or rectangle defined by the center $80 \%$ of the length and $80 \%$ of the width dimensions centered on a lite of glass. The remaining area is considered the outer area.

Viewing area is $\mathbf{3}^{\prime}$ away from the glass.

Nonviewing area is 6 ' away from the glass.

## Allowable Linear Blemish

(Viewing distance starting at 11'):

Faint or light scratch (3") Allowed.
Medium scratch < (3") allowed with a minimum separation of (2')
Medium or heavy scratch > (3") are not allowed.

To determine scratch intensity, start at 11' and move closer until scratch becomes visible, refer to the tables.

| Detection Distance | Blemish Intensity | Blemish | Central Area Inches | Outer Area Inches |
| :---: | :---: | :---: | :---: | :---: |
| Over 11' | Heavy | Coating Scratch | 2" Max Length | 3" Max Length |
| 11' to 3' | Medium | Mark/ Contaminant | 2" Max Length | 3" Max Length |
| 3' to 8" | Light | Coating Rub | None Allowed | Length plus Width not to exceed $3 / 4$ " |
| Less than 8" | Faint | Crazing*/ Corrosion | None Allowed | None Allowed |

