

QUICK REFERENCE GUIDE FOR GLASS INSPECTORS

Expansion Sealing

ASTM Standards Overview:

General Rule: Inspect glass under normal lighting conditions from the correct distance based on the size and end use of the glass.

Defect Size and Acceptance:

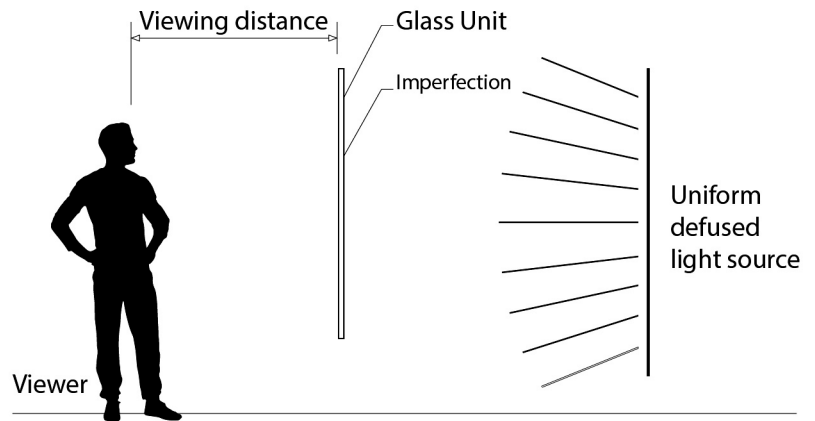
- Lite Size ≤ 6 sq ft: Max 1 scratch (≤ 1 inch), 1 debris ($\leq 1/16$ inch).
- Lite Size 6-35 sq ft: Max 2 scratches (≤ 1 inch), 2 debris ($\leq 1/16$ inch), spaced ≥ 24 inches apart.
- Lite Size > 35 sq ft: Max 3 scratches (≤ 1 inch), 3 debris ($\leq 1/16$ inch), spaced ≥ 24 inches apart.
- Chips and Shells: Size limits vary, generally $\leq 1/8$ inch from edge.

Glass Inspection Procedure:

- Clean glass surface before inspection with a microfiber cloth and glass cleaning solution.
- Use an appropriate background (e.g., black/white sheet) behind the glass for proper visibility.
- Inspect the glass in the intended installation environment (indoor/outdoor).
- Measure and document flaws with a ruler and create a diagram.

For comprehensive guidelines, refer to the ASTM standards:

- ASTM - C1036 - Standard for flat glass
- ASTM - C1048 - Standard for heat-treated and tempered glass
- ASTM - C1172 - Standard for laminated glass
- ASTM - E2190 - Standard for insulated glass performance and evaluation



Defect Size Chart

Detection /Distance	Blemish Intensity
3.3 m /(132 in.)	Heavy
1 m (/39 in.)	Medium
0.2 m /(8 in.)	Light
> 0.2 m /(8 in.)	Faint