

OFFICIAL ASTM GLASS IMPERFECTION STANDARDS



This summary is a brief guideline on the ASTM Glass Imperfection Standards.

Glass is not made to look at, it is made to look through. Anyone can find imperfections in glass if they look hard and close enough. The glass industry standards are set by ASTM International. Those standards cover a variety of glass issues.

Glass is used in both commercial and residential settings and as a result, customers set high expectations for products used in the construction industry. Glass is not perfect and the larger the piece of glass is, the less perfect it can be.

To determine what is an acceptable defect and what is not, you need to perform the following:

1. Stand 10 feet away from the glass.
2. Face the glass straight on at 90 degrees.
3. View the glass in daylight, not direct sunlight.
4. Inspect 80% of the central portion of the glass.
5. Inspection should not exceed viewing of more than the following in transmission or reflection.
 - a. 5 seconds for lites up to 6 sf.
 - b. 10 seconds for lites up to 35 sf.
 - c. 20 seconds for lites greater than 35 sf.

Under these conditions, if you cannot see the defect from 10 feet away, the ASTM standard states it is not a defect. If defects are visible beyond what is allowable as listed above, the glass maybe rejected.

Defects include scratches, seeds, bubbles, debris, stones, shells, chips and spots.

We comply with ASTM C1036 – Standard Specifications for Flat Glass, ASTM C1048 – Standard Specification for Heat Treated and Fully Tempered Glass and ASTM C1172 – Standard Specification for Laminated Architectural Flat Glass.