

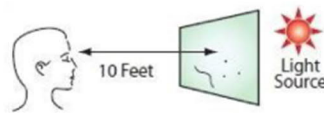


1.0 QUALITY CLASSIFICATIONS

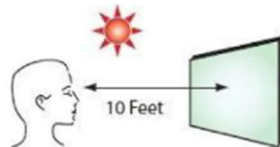
Glass quality standards are based on the American Society for Testing and Materials, Designation: ASTM C 1376 (Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass).

2.0 DEFINITIONS

- 2.1 **Scratch** – partial or complete removal of the coating along a thin, straight, or curved line.
- 2.2 **Mark/Contaminant** – a deposit of foreign material on the glass surface.
- 2.3 **Pinhole** – a small area where the coating is entirely or partially absent.
- 2.4 **Spot** – a small, opaque blemish in the coating.
- 2.5 **Nonuniformity** – obvious variation in reflected color of the coating within a lite of glass or between lites of coated glass in the same building or both.
- 2.6 **Viewed in transmission** – light from behind the glass is transmitted through the glass.



- 2.7 **Viewed in reflection** – the glass surface reflects light from in front of the glass.



3.0 VISUAL INSPECTION CRITERIA

3.1 Viewing Area

The **central viewing 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 viewing area**.

3.2 Viewing Distance and Viewing Angle

The glass shall be inspected in transmission at a distance of 10 ft. (3.0 m) at a viewing angle of 90° to the specimen against a bright, uniform background.

4.0 ACCEPTABLE DEFECTS AND VARIATIONS

4.1 Scratches or Marks/Contaminants (viewed in transmission)

- Scratches or Marks/Contaminants up to 50 mm (2") within the **central viewing area** are acceptable.
- Scratches or Marks/Contaminants up to 75 mm (3") within the **outer viewing area** are acceptable.

4.2 Pinholes or Spots (viewed in transmission)

- Pinholes or Spots up to 1.6 mm (1/16") within the **central viewing area** are acceptable.
- Pinholes or Spots up to 2.4 mm (3/32") within the **outer viewing area** are acceptable.

4.3 Nonuniformity for Coated Glass (viewed in reflection)

The phenomenon of color nonuniformity in coated glass may be visible within an individual lite or between lites of glass in a particular building.

Color and reflectance may vary slightly overall and be considered acceptable.

Due to the reflectivity of some glass coatings, distortion of reflected objects may be more apparent. This characteristic is more pronounced with heat-treated, laminated, and insulated glass.