

## Laminated Float Glass

1. Comply with ASTM C1172, and comply with testing requirements in 16 CFR Part 12 for Category II materials and **ANSI Z97.1**, Class A, and with other specified requirements.
2. Use materials that have a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after fabrication and installation.
3. Where laminated Glass edges will be in direct contact with adjacent materials such as Sealants, provide one of the following:
  - a) Manufacturers test data demonstrating long-term durability of the interlayer against delamination, discoloration, or any other loss of performance.
  - b) Provide edge protection tape demonstrating compatibility with the Glass interlayer and adjacent material.
4. Laminating Quality Requirements
  - a) Prior to laminating, cut Glass to required sizes and profiles as determined by accurate measurement of openings to be glazed, making allowance for required edge clearances. Cut and process edges in accordance with Glass manufacturer's recommendations. Do not cut or treat edges in the field.
  - b) Fabricate laminated Glass to produce Glass free of scuff vinyl markings, handprints, tag residue, and foreign substances such as lint, hair, vinyl shavings in the central Glass area and the outer 200/o area when viewed from a distance of 3 ft and 10 ft respectively. Handprints, tag residue, scuff vinyl markings and foreign substances must be separated by distance greater than 12 in. if not detectable at less than the viewing distances.
  - c) Delaminations, blow-ins, short interlayers, and air or gas pockets shall not be permitted in the central Glass area. In the outer 200/o area, delamination will not be permitted, blow-ins, air or gas pockets, and short interlayers shall be limited to a maximum dimension of 0.1 in. in diameter, and 0.06 in. long respectively.
  - d) Hazing: Hazing or clouding due to improper fabrication of the laminate interlayers is not acceptable
  - e) No splicing of the interlayer material is permitted.
  - f) Laminate units with the specified interlayer in autoclave with heat plus pressure process in strict accordance with the interlayer manufacturer's requirements for the following:
    - 1 Vacuum bag pressure and pre-vacuum times.
    - 2 Relative humidity.

- 3 Provide quality data of fabrication process.
  - 4 Heat strengthening flatness.
  - 5 Autoclave-settings including temperature, pressure, and time.
- g) Permanent deformation of the Glass during lamination which causes debonding stress on the interlayer shall be limited to 1/100th of the bond strength of the laminate. Provide procedures to comply with this criterion at the edges of each laminated unit.

