	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 - Yale Design Standard Division: 08 00 00 Openings	Section: <b>08 80 00</b> Requirements for Glass and Glazing
		Date: December 2023
		Author: Office of Facilities

## **PART 1 - INTRODUCTION**

### 1.1 PURPOSE

This section contains general design criteria for glass and glazing

## **PART 2 - GENERAL DESIGN REQUIREMENTS**

### 2.1 SYSTEM DESIGN AND PERFORMANCE REQUIREMENTS

Protect glazed openings from glass breakage caused by vandalism.


### 2.2 PRODUCT STANDARDS

- A. Glazing materials must conform to standards contained in the Flat Glass Marketing Association glazing manual.
- B. Glass type and thickness must meet ASTM 1300 standards in combination with other applicable factors. The minimum thickness for each lite is 6 mm.

### 2.3 MATERIALS

Glass and glazing materials must conform to the following standards.

- A. Glass Schedule
  - Curtain wall—1" thick insulating unit, clear glass, with reflective coating on the second surface - -
  - Aluminum window—1" thick insulating unit, clear glass
  - Storefront—1" thick insulating unit, clear glass
  - Skylight—1-1/16" thick insulating unit, with tinted exterior pane and clear laminated interior pane
  - Handrails—3/8" thick tempered safety glass (non-structural)
  - Steel windows—5/8" thick insulating unit, with inner and outer lights of 3/16" annealed glass
- B. Glazing Sheets
  - Primary glass, Federal Specification DD-G-451—clear and tinted float glass and wire glass
  - Heat-treated glass products, Federal Specification DD-G-1403—heat strengthened glass, tempered glass, and spandrel glass
  - Coated glass products
  - Laminated glass products
  - Mirrors, silvering, copper coating, and protective organic coating
  - Plastic glazing—acrylic, polycarbonate
  - Wire glass
  - Fire-rated glazing

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C. Insulating Glass units

Sealed insulating units must be fabricated from two panes of glass, with air space between. The units must include a dual sealing system, spacer, desiccant, and corner reinforcement. Glass thicknesses and heat strengthening must be determined by manufacturer for wind loading conditions. A 10-year insulation glass warranty is required.

D. Lead Caming

1. Match the existing lead profile for ridges, grooves, width, and thickness.
2. True lead caming must be 0.4% antimony and 99.6% pure lead.
3. Applied lead caming must be 0.4% antimony and 99.6% pure lead, with two sided adhesive

E. Antique Glass

Use antique glass for leaded glazing. Use colored and textured glass manufactured by the SA Bendheim Company to match the variable thickness, texture, and color of the original glass.

Date	Description of Change	Pages / Sections Modified	ID
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