Appendix 52

ARCHITECTURAL GLASS AND GLAZING MATERIAL

1. BACKGROUND. Most accidental injuries involving flat glass are limited to certain glazed installations or areas classified as "hazardous locations." These hazardous locations are glazed installations which present a barrier in the normal path people travel as well as those located in areas such as bathrooms and shower rooms, where accidental falls are very likely. Other areas of high risk include windows and storm windows and doors.

2. DEFINITIONS.

a. Glazing Material. Glazing material is glass or a glass-like material, including rigid plastics, intended to be installed in prepared openings such as doors, windows, enclosures, and panels. Such installations are defined as having been glazed.

b. Ordinary Glazing Material.

(1) Annealed Glass. Ordinary annealed glass has been manufactured in such a way that it can be cut or subjected to other fabrication. Regular plate, float, sheet, window crystal, rolled and patterned surface glasses are examples of annealed glass.

(2) Wired Glass. Wired glass is annealed glass containing a wire mesh embedded in the body of the glass during manufacture. Broken pieces tend to remain attached to the wire.

c. Safety Glazing Material. Safety glazing material minimizes the likelihood of accidental cutting and piercing injuries resulting from human contact after breakage of the glazing material.

(1) Laminated Glass. Laminated glass is composed of two or more sheets of glass (usually annealed glass) bonded to an intervening layer or layers of resilient plastic material. When broken, the pieces of glass tend to adhere to the plastic material..

(2) Tempered Glass. Tempered Glass has been treated to make it stronger than annealed glass. It cannot be cut or drilled, and when it is broken at any point, the entire piece of glass immediately breaks into small fragments.

(3) Rigid Plastic. Some rigid plastic has glass-like properties (like transparency) and is used like glass. Some glazing plastics are polystyrene, acrylic, and polycarbonate.

3. INVESTIGATIVE PROCEDURES. Determine the following:

a. Status of the glass at the time of the accident: Whether the glass was installed, stored, or being transported.

b. Condition of the glass at the time of the accident: Whether the glass was normal, cracked, broken, or poorly supported.

c. Reaction of the glass to the impact: Whether the glass broke into jagged pieces, cracked (glass intact in opening), or broke into small fragments (crystals).

d. Accident that caused injury: Whether the injury was caused by scraping or impacting a sharp edge or a sharp point of glass.

4. SPECIFIC PRODUCT FACTORS.

a. Doors With Glazing Material. Determine:

(1) Type (entrance, patio, interior, other).

(2) Operation (sliding, single action, double action, double action).

(3) Construction materials (wood, aluminum, steel, combination).

(4) Location of glazing within the door.

(5) Location of the window or fixed panel in relation to the door.

b. Windows. Determine.

(1) Type (casement,double hung, awning, hopper, sliding, deadlight, bow).

(2) Construction materials (wood, aluminum, vinyl, steel, combination).

(3) Type of support (spring loaded, counterweights, vertical, horizontal, other).

(4) Operating condition of the window at the time of the accident (good, painted shut, difficult to operate open).

(5) Condition of door framing (good, loose, broken, missing).

c. Hardware and Condition (Window - Doors). Describe

(1) Hinges
(2) Locks
(3) Handles
(4) Operating levers.

d. Dimensions (Windows - Doors). Describe:

(1) Height
(2) Width
(3) Thickness
(4) Height of the unit from the floor; distance to adjacent structures.

e. Glass. Determine:

(1) Type (annealed, tempered, laminated, wired, plastic, other).

(2) Dimensions:

(a) Length
(b) Width
(c) Thickness in inches (1/32, 1/16, 1/8, 1/4, 3/8, other).

(3) Method of securing:

(a) Glazing compound
(b) Striping
(c) Other

5. SPECIFIC HUMAN FACTORS

a. Presence of Glass. Determine the victim's knowledge of the presence of glass.

b. Installation. Determine the victim's familiarity with glass installation.

c. Expectations. Determine the victim's expectations about the glass strength (expected glass to be weaker at this location; expected glass to be stronger; expected glass to be unbreakable).

d. Activity. Determine what the victim was doing at the time of the accident.