(28) **Retailer** means a person to whom a consumer product is delivered or sold for purposes of sale or distribution by such person to a consumer; the term retailer includes a person who cuts glazing material to size for consumers.

(29) **School building** means a building designed primarily for the conduct of educational instruction and includes the classrooms, libraries, administrative offices, auditoriums, eating and sanitary facilities, stadiums, gymnasiums and all other structures associated with such buildings.

(30) **Shower door and enclosure** means an assembly of one or more panels installed to form all or part of the wall and or door of a shower stall.

(31) **Sliding glass door (patio-type)** means an assembly of one or more panels, at least one of which is suitably movable for use as a means of human ingress or egress. The term includes the nonmovable and movable panels of such assembly.

(32) **Tempered glass** means a piece of specially heat treated or chemically treated glass that cannot be cut, drilled, ground, or polished after treatment without fracture. When fractured at any point, if highly tempered, the entire piece breaks into small particles.

(33) **Wired glass** means a single piece of annealed glass that contains wire embedded in the body of the glass.

(34) **Commission** means the Consumer Product Safety Commission.

(c) Test methods and recommended practices published by the American Society for Testing and Materials (ASTM), and referred to in this part 1201, are hereby incorporated by reference into this part.

(d) Test methods and recommended practices published by the American National Standards Institute (ANSI) and referred to in this part 1201, are hereby incorporated by reference into this part.
tested in accordance with the accelerated tests referenced in table 1, “Accelerated Tests” of this section. However, tempered glass, wired glass, and annealed glass are not required to be subjected to the accelerated environmental durability tests.

### Table 1—Accelerated Test (Applicable Paragraphs)

<table>
<thead>
<tr>
<th>Glazing materials</th>
<th>Specimen</th>
<th>Test equipment</th>
<th>Exposure</th>
<th>Criteria for passing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laminated glass</td>
<td>§1201.4(c)(1) and (c)(3)(i)</td>
<td>§1201.4(b)(3)(i)</td>
<td>§1201.4(d)(2)(i)</td>
<td>§1201.4(e)(2)(i)</td>
</tr>
<tr>
<td>Tempered glass</td>
<td>Exempt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wired glass</td>
<td>Exempt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annealed glass</td>
<td>Exempt</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) Separate testing is required for different glazing materials or for differences within a type of glazing material that could noticeably affect performance in the impact or environmental durability tests. Such differences could include (but are not limited to): Nominal thickness or thicknesses, method of manufacture (in appropriate cases), types and amounts of additives, and composition of base materials and adhesives.

(b) Test equipment—(1) Impact test frame and subframe. (See figures 1, 2, 3, and 4.) (i) The impact test frame shall be constructed to minimize movement and deflection of its members during testing. For this purpose, the structural framing and bracing members shall be steel angles 3 inches by 5 inches by 1/4 inch (7.7 centimeters by 12.7 centimeters by 0.7 centimeters) or other sections and materials of equal or greater rigidity.

(ii) The structural framing shall be welded or securely bolted at the corners and braced by one of the alternate methods shown in figure 1 and shall be securely bolted to the floor.

(iii) The inner subframe (see figures 2, 3, and 4) for securing the test specimen on all four edges shall be reinforced at each corner. The material is shown as wood in figure 3, but other materials may be used: Provided, The test specimen will contact only the neoprene strips, which shall have a Shore A durometer hardness of 30 to 50.

(iv) Any reasonable means may be used to secure the subframe to the test frame so long as the mounting is secure and the pressure on the glazing in the subframe is not significantly altered when the subframe is removed.

(v) Pressures on the test specimen shall be controlled, and the compression of the neoprene strips shall be between 10 and 15 percent of the original thickness of the neoprene. Securing methods such as wing bolts and clamps shall be uniformly spaced no greater than 18 inches (45 centimeters) apart with no fewer than two on any edge. To limit the compression of the neoprene and prevent distortion of the subframe, metal shims of an appropriate thickness shall be used as shown in figures 3 and 4.

(2) Impactor. (i) The impactor shall be a leather punching bag as shown in figure 5 on this section. The bag shall be filled with No. 7 1/2 chilled lead shot to a total weight of completed assembly as shown in figure 5, of 100 pounds ± 4 ounces (45.36 ± 0.11 kilograms). The rubber bladder shall be left in place and filled through a hole cut into the upper part. After filling the rubber bladder, the top should be either twisted around the threaded metal rod below the metal sleeve or pulled over the metal sleeve and tied with a cord or leather thong. Note that the hanging strap must be removed. The bag should be laced in the normal manner. The exterior of the bag shall be completely covered by 1/2 inch (1.3 centimeters) wide glass filament reinforced pressure sensitive tape. (Figure 5.)

(ii) Provisions shall be made for raising the impactor or to drop heights of up to 48 inches (1.22 meters). At its release it shall have been supported so that the rod going through its center was in line with the steel support cable in a manner designed to minimize wobble or oscillation after its release.

(3) Environmental durability test equipment—(1) Boil test. Two containers of
water shall be provided with means to maintain one at 150°F (66°C) ±2 °F (66°C) and the second at a slow boil at atmospheric pressure. The containers shall be large enough to accept a rack holding three specimens, each 12 inches (30 centimeters) square, of the glazing material in a vertical position. The rack shall be positioned so that each specimen is surrounded by at least one inch (2.5 centimeters) of water.

(ii) Simulated weathering test. The equipment shall be a xenon arc (water-cooled) Weather-Ometer employing a lamp rated at 6500 watts and automatic light monitoring and control systems. Borosilicate inner and outer filters shall be used. An appropriate water spray cycle shall be used. Operating procedures shall be in accordance with ASTM G 26–70, “Standard Recommended Practice for Operating Light—and Water-Exposure Apparatus (Xenon-Arc Type) for Exposure of Nonmetallic Materials,” April 13, 1970, as augmented for plastics by ASTM D 2565–70, “Standard Recommended Practice for Operating Xenon-Arc Type (Water-Cooled) Light- and Water-Exposure Apparatus for Exposure of Plastics,” Procedure B, June 12, 1970, which are incorporated by reference. Copies of both documents are available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103. They are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_regulations/ibr_locations.html. This incorporation by reference was approved by the Director for 4 hours. Specimens shall be quickly removed and immersed in the boiling water and left there for 2 hours.
The specimens shall then be removed, cooled, and dried for examination as specified in paragraph (e)(2)(i) of this section.

(ii) Accelerated weathering test. The specimens shall be retained in the Weather-Ometer (paragraph (b)(3)(i) of this section) for a period of 1200±1 hours, and exposed to a radiant flux of 50 microwatts per square centimeter (12 calories per second per square centimeter) while monitoring at a wavelength of 340 nanometers.

(A) [Reserved]

(B) Organic-coated glass—(1) Orientation specified. Three specimens shall be mounted with the surface that is intended to be oriented indoors faced away from the radiation source; the other three specimens shall be kept in darkness at 73 °F (23 °C) for use as controls. Materials so tested shall be labeled according to §1201.5(c) of this part 1201.

(2) Orientation unspecified. Three specimens shall be mounted with one of the surfaces toward the radiation; three specimens shall be mounted with the other surface toward the radiation, and three specimens shall be kept in darkness at 73 °F (23 °C) for use as controls. When the glazing material is symmetric across its thickness, three specimens shall be irradiated.

(e) Interpretation of results—(1) Impact test. A glazing material may be qualified for use in both Category I and Category II products if it meets the impact requirements for Category II. A glazing material shall be judged to pass the impact test if the specimen tested meets any one of the criteria listed in paragraphs (e)(1)(i) through (v) of this section:

(i) When breakage occurs (numerous cracks and fissures may occur) no opening shall develop in the test sample through which a 3 inch (76 millimeter) diameter solid steel sphere, weighing 4 pounds ±3 oz (1.81±0.08 kilograms), passes when placed (not dropped) in the opening and permitted to remain for a period of one second. For this criterion, the sample after being impacted shall be placed, while remaining in the subframe, in a horizontal, impact side up position with a minimum of one foot (31 centimeters) of free space immediately beneath the specimen.

(ii) When breakage occurs, what appear to be the 10 largest particles shall be selected within 5 minutes subsequent to the test and shall weigh no more than the equivalent weight of 10 square inches (64 square centimeters) of the original specimen. For the purposes of this section particle means a portion of a broken test specimen which is determined by identifying the smallest possible perimeter around all points in the portion of the broken test specimen, always passing along cracks or exposed surfaces.

(iii) [Reserved]

(iv) The specimen does not remain within the subframe and no breakage is caused by the impactor.

(v) The specimen does not break.

(2) Environmental durability tests— (i) Boil test. The glass itself may crack in this test, but no bubbles or other defects shall develop more than ½ inch (12 millimeters) from the outer edge of the specimen or from any crack that may develop. Any specimen in which the glass cracks to an extent that confuses the interpretation of the results shall be discarded, and another specimen shall be tested in its stead.

(ii) Accelerated weathering test—(A) [Reserved]

(B) Organic-coated glass. Specimens shall be judged satisfactory if they pass both the adhesion test and the tensile test described below in paragraph (e)(ii)(B) (I) and (2) of this section.

(I) Adhesion test (organic-coated glass only)—(i) Specimens. The specimens for this test are the 2 inch by 6 inch (5 centimeters by 15 centimeters) weathered specimens and the control specimens. The specimens shall be conditioned just prior to the performance of the adhesion test at 73 °F ±6 °F (23 ±3 °C) and 50±5 percent relative humidity for 24 hours.

(ii) Apparatus. The test apparatus shall consist of a constant-rate-of-extension-type (CRE) tensile tester with the moving crosshead set to move at 12 inches per minute (5 millimeters per second) and load range such that the average pull force will fall at 30 to 50 percent of full scale. A cutter shall be used containing new razor blades for cutting 1 inch (25 millimeter) wide
specimens of the organic coating on the glass. The razor blades shall be used one time only.

(iii) Procedure. Using the razor cutter, cut a straight, 1 inch (25 millimeter) wide strip of the organic coating in the lengthwise direction of the glass specimen along and within ¼ inch (6 millimeters) of one edge. Peel back, cleanly and evenly, about 2 inches (50 millimeters) of one end of the 1 inch (25 millimeters) wide organic strip. Attach a strip of reinforced pressure sensitive tape to the side of the organic strip opposite the adhesive, to extend this free end to about 8 inches (200 millimeters) in length. Place the end of the glass panel from which the organic strip was removed in the lower clamp of the tensile tester and the free end of the tape in the upper clamp. Peel the remainder of the organic strip from the glass mechanically and obtain a record of the pull force value. Determine and record the average pull force value for each specimen from the chart. Weathered and control specimens are to be tested alternately.

(iv) Interpretation of results. The organic coating tensile strength shall be judged satisfactory if the average tensile value of the weathered specimens is no less than 75 percent of the average of the control specimens. Weathered and control specimens are to be tested alternately.


§ 1201.6 Prohibited stockpiling.

(a) Stockpiling. For the purposes of this section, the term stockpiling means manufacturing or importing the affected products between the date of issuance of this part in the FEDERAL REGISTER and the effective date set out below in §1201.7 at a rate significantly greater (prescribed in paragraph (b) of this section) than the rate at which the affected products were produced or imported during a base period (prescribed in paragraph (c)(2) of this section).

(b) [Reserved]

(c) Organic-coated glass that has been tested for environmental exposure from one side only must bear a permanent label on the coating stating “GLAZE THIS SIDE IN” and shall bear in the central 50 percent of the surface area the following message in letters at least ¼ inch (7 millimeters) high: “SEE PERMANENT LABEL FOR IMPORTANT MOUNTING INSTRUCTION.” The latter message shall be attached to either side of the glazing by any means which shall ensure the message will remain in place until installation.

[42 FR 1441, Jan. 6, 1977, as amended at 45 FR 66007, Oct. 6, 1980]