(4) *Bracing* means members providing structural support to the assembled, installed slide.

(5) *Casual contact* means contact of any body part with the slide occurring by chance or nonchalant encounters.

(6) *Center of gravity* means the point that represents the mean position of the concentrated mass of a body.

(7) *Curved slide* means a slide whose runway curves out of the vertical plane at any point along the slide path.

(8) *Cutting hazard* means a slide surface that would cut the skin under casual contact.

(9) *Designated waterline* means the horizontal line through whichever of the following is applicable: (i) The midpoint of the operating range of the skimmers, or (ii) on pools with overflow systems, the height of the overflow rim.

(10) *Edge guards* means shields designed to cover sharp edges on slides.

(11) [Reserved]

(12) *Freestanding slide* means a slide designed for aboveground pools that is not fastened to the pool deck or the ground. This slide may have attachments to the aboveground pool to prevent misalignment.

(13) *Friction* means the force tending to reduce the velocity of the slider on the slide.

(14) [Reserved]

(15) *Intended use* means behavior on swimming pool slides as disclosed by the manufacturer, as specified in this part 1207, or to which the slide may be subjected by a reasonable user (including reasonably foreseeable misuse).

(16) *Ladder angle* means the angle of the ladder measured from a plumbline.

(17) *Ladder platform* means a platform built into the slide ladder.

(18) *Operational strength* means the strength of the slide and/or its components after installation according to the manufacturer's instructions.

(19) *Performance test* means a test to measure the functional or structural characteristics of the slide and may include:

(i) Observations and measurements of the slide's functioning in the ''intended use'' mode, installed according to the manufacturer's installation instructions, and/or

(ii) Observations and measurements of the slide's response to dynamic and static loads.

(20) [Reserved]

(21) *Pinching hazard* means any configuration of slide components that would pinch or entrap the fingers or toes of a child or an adult.

(22) *Puncture hazard* means any slide surface or protrusion that would puncture a child's skin under casual contact.

(23) *Runway* means the surface on which the user slides in the intended use of a slide.

(24) *Runway rail* means a raised edge or guard that keeps the slider on the runway.

(25) *Runway length* means the length of the runway measured along its centerline.

(26) *Slide width* means the width of the slide runway measured between the inside of the left and right runway rails.

(27) *Straight slide* means a slide whose runway curves only in the vertical plane.

(28) *Swimming pool slide* means any device used to enter a swimming pool by sliding down an inclined plane.

(29) *Tamperproof* means that tools are required to alter or remove portions of the slide such as guards, treads, etc.

(30) *Trajectory* means the path of a slider's center of gravity from start to finish.

(31) [Reserved]

(32) *Tread contact surface* means foot contact surfaces of ladder, step, stair, or ramp.

[41 FR 2751, Jan. 19, 1976, as amended at 43 FR 58813, Dec. 18, 1978]

§ 1207.4 Recommended standards for materials of manufacture.

(a) *General*. The materials used in swimming pool slides should be compatible with man and compatible with the environment in which they are installed. These materials should be capable of fulfilling the design requirements prescribed by § 1207.5.

(b) *Effects of environment*. The choice of materials for swimming pool slides should be such that the operational strength of the entire slide assembly, as defined by the performance tests in

§ 1207.5, should not be adversely affected by exposure to rain, snow, ice, sunlight, local, normal temperature extremes, local normal wind variations, expected local air pollution products, and the mechanical, electrical, and chemical environment in and around swimming pools. For purposes of this part 1207, ''local normal'' temperature extremes and wind variations are defined as the average annual record limits for the past 10 years at any slide installation point in the U.S.A. where such statistical information exists (see reference (a) in § 1207.11)

(c) *Materials selection*. The selection of all materials for swimming pool slides should be such that all surfaces and edges that may come in contact with the user are assembled, arranged, and/or finished (deburred, polished, etc.) so that they will not constitute a cutting, pinching, puncturing, or abrasion hazard under casual contact and intended use by children or adults.

(d) *Toxicity*. The selection of materials used in swimming pool slides should be such that the assembled and installed products should not be toxic to man or harmful to the environment under intended use and reasonably foreseeable abuse or disposal. All paints and finishes used on swimming pool slides shall comply with 16 CFR 1303.2(b)(2) and 1303.4(a).

(e) *Chemical compatibility*. The selection of materials for swimming pool slides should be such that the assembled and installed product, and the parts, are chemically compatible with the materials and environment contacted under intended use and reasonably foreseeable abuse.

[41 FR 2751, Jan. 19, 1976, as amended at 43 FR 58813, Dec. 18, 1978]

§ 1207.5 Design.

(a) *Strength*. The strength of the assembled and installed swimming pool slide shall be such that no structural failures of any component part shall cause failures of any other component part of the slide as described in the performance tests in paragraphs (d)(4) and (f)(9) of this section.

(b) *Edges*. Edges of swimming pool slide runways, ladders, handrails, and deck anchor flanges shall be designed, finished (deburred, polished, etc.), or protected in such a manner as to prevent cutting human tissue on casual contact and intended use. If edge guards are used, they shall be permanently affixed to the structure in a tamper-proof fashion.

(c) *Ladders, steps, stairs, or ramps*—(1) *General*. Swimming pool slide ladders, steps, stairs, or ramps shall have treads, not rungs, if the angle of the incline is 15° or greater from a plumbline.

(2) *Angle*. Swimming pool slide ladders not using rungs shall be designed and installed in such a manner that the user's center of gravity will be approximately positioned directly over each step during the use of the ladder. When tread design ladders are used, the minimum installed angle shall be not less than 15° from a plumbline dropped from a ladder step as shown in figure A. If stairs or ramps are used to ascent to the top of the slide, they shall be designed in accordance with reference (c) of § 1207.11, pages 457–463.

(NOTE: To convert the English system values given in the figures to metric values, the following conversion factors should be used: 1 inch=2.54 cm., 1 foot=30.48 cm., 1 square inch=6.452 sq. cm., 1 lb. (mass)=0.4536 kg., 1 lb. (force)=4.448 newtons, and 1 ft.-lb.=1.356 newton-meters.)