I MINA'TRENTAI SIETTE NA LIHESLATURAN GUÅHAN
2023 (FIRST) Regular Session
VOTING RECORD

Bill No. 93-37 (COR) As amended on the Floor.	**Speaker Antonio R. Unpingco Legislative Session Hall** **Guam Congress Building** **July 28, 2023**					
NAME	**Aye**	**Nay**	**Not Voting/ Abstained**	**Out During Roll Call**	**Absent**	**Excused**
Senator Chris Barnett	✓					
Senator Frank Blas, Jr.	✓					
Senator Joanne Brown	✓					
Senator Christopher M. Dueñas	✓					
Senator Thomas J. Fisher	✓					
Senator Jesse A. Lujan	✓					
Vice Speaker Tina Rose Muña Barnes	✓					
Senator William A. Parkinson	✓					
Senator Sabina Flores Perez	✓					
Senator Roy A. B. Quinata	✓					
Senator Joe S. San Agustin	✓					
Senator Dwayne T. D. San Nicolas	✓					
Senator Amanda L. Shelton	✓					
Senator Telo T. Taitague	✓					
Speaker Therese M. Terlaje	✓					
TOTAL	**15**	**0**				
	Aye	**Nay**	**Not Voting/ Abstained**	**Out During Roll Call**	**Absent**	**Excused**

CERTIFIED TRUE AND CORRECT:

JOAQUIN P. TAITAGUE
Substitute Clerk of the Legislature

I = Pass

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2023 (FIRST) Regular Session

Bill No. 93-37 (COR)
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*****

Introduced by: Therese M. Terlaje
Telo T. Taitague
Joanne Brown
Chris Barnett

AN ACT TO *ADD* A NEW ARTICLE 26 TO CHAPTER 4 OF DIVISION 1, TITLE 26, GUAM ADMINISTRATIVE RULES AND REGULATIONS, RELATIVE TO ADOPTING THE RULES AND REGULATIONS GOVERNING INSTITUTIONAL PLAYGROUNDS, ATTACHED HERETO AS "EXHIBIT A."

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative Findings and Intent. *I Liheslaturan Guåhan* finds that the proposed rules and regulations for the governing of institutional playgrounds were submitted by the Department of Public Health and Social Services (DPHSS) to *I Liheslaturan Guåhan* pursuant to the Administrative Adjudication Law. The rules and regulations are intended to provide standards for playground equipment to protect the health and safety of Guam's children who attend childcare facilities and schools. The Division of Environmental Health (DEH) of DPHSS held a public hearing to receive comments from the community on April 22, 2019. According to DPHSS, twenty-six (26) members of the public attended the hearing. The Division of Environment Health conducted a sample survey and anticipates that the economic impact of the proposed rules and regulations would be approximately Nine Hundred

Sixteen Thousand Dollars ($916,000) in the first two (2) years of its implementation. According to the DEH, this amount includes the estimated cost of complying with existing provisions and new requirements in the proposed regulations. Pursuant to the Administrative Adjudication Law, the proposed rules and regulations were also reviewed by the Office of the Attorney General and approved by the Governor of Guam to be consistent with § 9303 of Article 3, Chapter 9, Title 5, Guam Code Annotated.

It is, therefore, the intent of *I Liheslaturan Guåhan* to adopt the rules and regulations governing institutional playgrounds, subject to revisions based on public feedback and recommendations during the Guam Legislature's public hearing process.

Section 2. *I Liheslaturan Guåhan* hereby adopts a new Article 26 to Chapter 4 of Division 1, Title 26, Guam Administrative Rules and Regulations, attached hereto as "Exhibit A," entitled: "Rules and Regulations Governing Institutional Playgrounds."

Section 3. Notwithstanding any other law or the default approval of the Guam Administrative Rules and Regulations, § 426026 of the Rules and Regulations Governing Institutional Playgrounds; Article 26; Title 26, Guam Administrative Rules and Regulations, Division 1, Chapter 4, attached to this Bill as "Exhibit A," is *amended* to read:

"**§ 426026. Effective Date.**

These rules and regulations are effective immediately upon adoption; however, existing child care facilities and schools have one thousand ninety-five (1095) calendar days from the date of adoption to fully comply."

EXHIBIT A

RULES AND REGULATIONS GOVERNING INSTITUTIONAL PLAYGROUNDS

Article 26
26 Guam Administrative Rules and Regulations
Division 1
Chapter 4

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
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Mangilao, Guam 96913-6304
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§426001. Purpose. These rules and regulations are intended to provide standards for playgrounds and playground equipment to protect the health and safety of Guam's children who attend child care facilities and schools which are regulated by the Division of Environmental Health, Department of Public Health and Social Services, and are based on the current U.S. Consumer Product Safety Commission's *Public Playground Safety Handbook.*

§426002. Authority. These rules and regulations are adopted pursuant to Public Law No. 31-73 and Title 10 Guam Code Annotated, Chapter 20 (General Provisions).

§426003. Title. These rules and regulations shall be known and cited as the "Rules and Regulations Governing Institutional Playgrounds."

§426004. Definitions.

(a) *"Barrier"* shall mean an enclosing device around an elevated platform that is intended to prevent both inadvertent and deliberate attempts to pass through the device.

(b) *"Child Care Facility"* shall mean any person or place which receives or arranges placement of one (1) or more children who are not related to such person, whether for gain or otherwise, apart from the parents or guardian, with or without the transfer of the right of custody, for the purpose of providing regular care or training for such child or children during either the day or night, or both. Except as otherwise provided, the term child care facility includes, but is not limited to, all facilities defined by the Department of Public Health and Social Services as *family day care homes, foster family homes, group day care homes, residential treatment facilities, day care center, day nurseries, nursery school, kindergarten school, day care homes* or similar institutions or units regardless of name.

(c) *"Composite Structure"* shall mean two or more play structures attached or functionally linked, to create one integral unit that provides more than one play activity.

(d) *"Critical Height"* shall mean the fall height below which a life-threatening head injury would not be expected to occur.

(e) *"Department"* shall mean the Guam Department of Public Health and Social Services (DPHSS).

(f) *"Designated Play Surface"* shall mean any elevated surface for standing, walking, crawling, sitting, or climbing, or a flat surface greater than 2 inches wide by 2 inches long having an angle less than 30° from horizontal.

(g) *"Director"* shall mean the Director of the Department of Public Health and Social Services or his/her designated representative.

(h) *"Division of Environmental Health"* (or the *"Division"*) shall mean the division of the DPHSS established through Title 10 Guam Code Annotated, Chapter 20, §20103.

(i) *"Embankment Slide"* shall mean a slide that follows the contour of the ground and at no point is the bottom of the chute greater than 12 inches above the surrounding ground.

(j) *"Entanglement"* shall mean a condition in which the user's clothes or something around the user's neck becomes caught or entwined on a component of playground equipment.

(k) *"Entrapment"* shall mean any condition that impedes withdrawal of a body or body part that has penetrated an opening.

(l) *"Fall Height"* shall mean the vertical distance between the highest designated play surface on a piece of equipment and the protective surfacing beneath it.

(m) *"Footing"* shall mean a means for anchoring playground equipment to the ground.

(n) *"Full Bucket Seat Swing"* shall mean a swing generally appropriate for children less than 4 years of age that provides support on all sides and between the legs of the occupant and cannot be entered or exited without adult assistance.

(o) *"Geotextile (filter) Cloth"* shall mean a fabric that retains its relative structure during handling, placement, and long-term service to enhance water movement, retard soil movement, and to add reinforcement and separation between the soil and the surfacing and/or sub-base.

(p) *"Guardrail"* shall mean an enclosing device around an elevated platform that is intended to prevent inadvertent falls from the elevated surface.

(q) *"Infill"* shall mean material(s) used in a protective barrier or between decks to prevent a user from passing through the barrier (e.g., vertical bars, lattice, solid panel, etc.).

(r) *"Imminent Health Hazard"* shall mean a significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires immediate correction or cessation of operation to prevent injury based on the number of potential injuries, and the nature, severity, and duration of the anticipated injury.

(s) *"Loose-Fill Surfacing Material"* shall mean a material used for protective surfacing in the use zone that consists of loose particles such as sand, gravel, engineered wood fibers, or shredded rubber.

(t) *"Playground Equipment"* shall mean equipment for use by children ages 6 months through 12 years in the playgrounds found in childcare facilities and schools regulated by the Division of Environmental Health.

(u) *"Playground Operator"* shall mean any person or business having control of a facility and/or the persons working or employed therein.

(v) *"Preschool-Age Children"* shall mean children 2 years of age through 5 years of age.

(w) *"Projection"* shall mean anything that extends outward from a surface of the playground equipment and must be tested to determine whether it is a protrusion or entanglement hazard, or both.

(x) *"Protective Barrier"* — See definition for Barrier.

(y) *"Protective Surfacing"* shall mean shock absorbing (i.e., impact attenuating) surfacing material in the use zone that conforms to the requirements in §426009(d) of these rules and regulations.

(z) *"Protrusion"* shall mean a projection which, when tested, is found to be a hazard having the potential to cause bodily injury to a user who impacts it.

(aa) *"Roller Slide"* means a slide that has a chute consisting of a series of individual rollers over which the user travels.

(ab) *"School"* means any establishment, public or private, for the care and education of students from kindergarten through grade twelve and any college or university or institution of higher learning.

(ac) *"School-Age Children"* shall mean children 5 years of age through 12 years of age.

(ad) *"Slide Chute"* shall mean the inclined sliding surface of a slide.

(ae) *"Stationary Play Equipment"* shall mean any play structure that has a fixed base and does not move.

(af) *"Supervisor"* shall mean any person tasked with watching children on a playground and may be paid professionals (e.g., childcare, or elementary school, or park and recreation personnel), paid seasonal workers (e.g., college or high school students), volunteers (e.g., PTA members), or unpaid caregivers (e.g., parents) of the children playing in the playground.

(ag) *"Toddlers"* shall mean children 6 months through 23 months of age.

(ah) *"Tube Slide"* shall mean a slide in which the chute consists of a totally enclosed tube or tunnel.

(ai) *"Unitary Surfacing Material"* shall mean a manufactured material used for protective surfacing in the use zone that may be rubber tiles, mats, or a combination of energy absorbing materials held in place by a binder that may be poured in place at the playground site and cures to form a unitary shock absorbing surface.

(aj) *"Upper Body Equipment"* shall mean equipment designed to support a child by the hands only (e.g., horizontal ladder, overhead swinging rings).

(ak) *"Use Zone"* shall mean the surface under and around a piece of equipment onto which a child falling from or exiting from the equipment would be expected to land; these areas are also designated for unobstructed flow around the equipment.

§426005. Institutional Playground Permit.

(a) No person shall directly or indirectly in any manner, conduct, control, manage, maintain, or operate a playground at a child facility or school unless a valid Institutional Playground Permit is issued by the Department to operate such a facility has been obtained and posted. Any person, before constructing a new institutional playground, or making an addition to, or major alteration of, an existing playground and playground equipment shall first submit plans and specifications of such playground and equipment or changes to the Director.

(b) The form for the Institutional Playground Permit shall be prescribed by the Director.

(c) The expiration date of the Institutional Playground Permit shall be one year from the application date.

(d) The Institutional Playground Permit shall be renewed at least 15 days prior to the expiration of the permit every calendar year.

(e) The Institutional Playground Permit shall be posted by the Director in a conspicuous place on the premises designated by him. No person other than the Director shall remove, deface, destroy or conceal such permit.

§426006. Transfer of Institutional Playground Permit Prohibited.

It shall be unlawful to transfer an Institutional Playground Permit to another person or to another location or to post it on or use it in any way in connection with any other premises than that for which it is issued.

§426007. Applications.

(a) An application for an Institutional Playground Permit to operate all new or existing institutional playground shall be made in writing on a form prescribed by the Department, signed by the applicant or his authorized agent, and shall contain such information that will determine that the facility and its operation are in compliance with the applicable provisions of these regulations. The following information shall be included:

(1) Plan of playground area to include equipment placement and distance measurements; and

(2) Type of equipment design, layout, and maintenance.

(b) Before pre-operation inspections of the institutional playground area and equipment is conducted, its plans and specifications shall be submitted to the Director in accordance with the requirements established in these regulations, which shall include, but are not limited to, the following:

(1) The dimensions of the proposed playground layout including equipment use

zones;

(2) List of playground equipment and specifications;

(3) Surface material specifications around playground equipment;

(4) Intended age group for each playground and equipment;

(5) Proper signage and or labeling;

(6) Level of maintenance;

(7) Amount of supervision; and

(8) Documentation of ASTM and or CSPC Standard compliance

(c) Before the application for an Institutional Playground Permit shall be approved, the Department shall verify that the institutional playground and playground equipment meet the minimum sanitary requirements and standards. This shall include the access onto the premises to conduct inspections and investigations.

(d) If, upon inspection, the Director is satisfied that the institutional playground meets the qualifications and standards prescribed in these rules and regulations, a non-transferable Institutional Playground Permit shall be issued. The Institutional Playground Permit shall be posted in a conspicuous area designated by the Director.

(e) An application for renewal of Institutional Playground Permit shall be submitted to the Department no earlier than 30 days prior to its expiration date.

(f) A non-refundable deposit of Twenty Dollars ($20.00) shall be made to the 'Treasurer of Guam' at the time the application for Institutional Playground Permit is submitted to the Department. Upon completion and processing of the application, the deposit amount shall be deducted from the appropriate fee listed in §426008.

(g) Any application that remains inactive for sixty (60) consecutive days shall be considered permanently inactive, removed from the file for processing, and then destroyed, and the non-refundable Twenty Dollars ($20.00) deposit shall be automatically forfeited.

(h) An applicant who wishes to re-apply after his or her application has become permanently inactive under the provision of §426007(g) shall be considered a new applicant and shall submit a new application with supporting documents and pay all required fees, including the Twenty Dollars ($20.00) non-refundable deposit fee.

§426008. Fees.

Fees for the issuance of an Institutional Playground Permit shall be as follows:

(a) The annual Institutional Playground Permit fee shall be Fifty Dollars ($50.00).

(b) Issuance of a duplicate Institutional Playground Permit shall be Ten Dollars ($10.00).

(c) Amendments to an existing Institutional Playground Permit shall be Ten Dollars ($10.00).

(d) An applicant for an Institutional Playground Permit may request for the permit to be expedited and processed on the same day the request is submitted. The Department may grant such requests provided the applicant has met all the requirements of the Department to obtain an Institutional Playground Permit, including the requirement for the pre-operation structural inspection. The Department shall assess a fee of Seventy-Five Dollars ($75) for expedited processing in addition to the regular processing fee.

(e) The cost of the structural inspection, also known as a pre-operation inspection, is included in the initial payment for the Institutional Playground Permit. However, a fee of Fifty Dollars ($50) an hour shall be assessed for all subsequent inspections. With the exception of the

first hour; fractional hours shall be rounded up to the nearest whole hour if more than one half (0.5) hour and rounded down if less than one half (0.5) hour.

(f) Requests for an expedited structural inspection may be granted as determined by the Director if such inspection does not cause the disruption of any pre-existing inspections scheduled for other applicants. The fee for expedited structural inspections shall be One Hundred Fifty Dollars ($150) in addition to all other required fees established in these rules and regulations.

(g) Any childcare facility or school whose Institutional Playground Permit is suspended under the provisions of §426016 of these rules and regulations and who is granted reinstatement by the Department as set out in §426018 of these rules and regulations, shall first pay a re-opening fee of One Hundred Dollars ($100) before the permit is returned or re-issued.

(h) The fee schedule established in §426008 shall become effective immediately upon enactment.

§426009. General Playground Considerations.

(a) Selecting a Site.

(1) Size and Location. The playground shall comprise a minimum of seventy-five square feet for each child using the playground at any one time that directly adjoins the indoor facilities or that can be reached by a route that is free of hazards.

(2) Travel Path to Playground. There shall be no hazards along the path to the playground.

(3) Shading. Shade shall be provided by utilizing existing shade (e.g., trees), designing play structures as a means for providing shading (e.g., elevated platforms with shaded space below), or creating more shade (e.g., man-made structures) so that adequate

shade is provided for each child on the playground. All equipment and trees providing shade shall be maintained as often as necessary to prevent injury.

(4) Grading and Drainage. Playground sites shall be graded to prevent pooling of water. Grading shall not be hazardous to playground users and shall not be sloped to where loose fill materials will wash away during periods of heavy rain.

(5) The identified factors in Table 1 shall be considered when selecting a site for a new playground.

Table 1

Site Factor	Questions to Ask	If yes, then...Mitigation
There shall be no hazards on travel paths of children to and from the playground	Are there hazards in the way?	Clear hazards.
There shall be no nearby accessible hazards such as roads with traffic, lakes, ponds, streams, drop-offs cliffs, etc.	Could a child inadvertently run into a nearby hazard? Could younger children easily wander off toward the hazard?	Provide a method to contain children within the playground. For example, a dense hedge or a fence. The method should allow for observation by supervisors. If fences are used, they should conform to local building codes and or ASTM F-2019.
There shall be limited sun exposure and more shading.	Is sun exposure sufficient to heat exposed bare metal slides, platforms, steps, and surfacing enough to burn children?	Bare metal slides, platforms, and steps should be shaded or located out of direct sun. Provide warnings that equipment and surfacing exposed to intense sun can burn children or staff.
	Will children be exposed to the sun during the most intense part of the day?	Consider shading the playground or providing shaded areas nearby.
There shall be proper slope and drainage.	Will loose-fill materials wash away during periods of heavy rain?	Consider proper drainage re-grading to prevent wash outs.

(b) Playground Layout.

(1) Age Separation.

For playgrounds intended to serve children of all ages, the layout of pathways and the landscaping of the playground shall show the distinct areas for the different age groups. The areas shall be separated at least by a buffer zone, which could be an area with shrubs or benches.

(2) Conflicting activities.

The play area shall be organized into different sections to prevent injuries caused by conflicting activities and children running between activities. Active, physical activities shall be separate from more passive or quiet activities. Areas for playground equipment, open fields, and sand boxes shall be located in different sections of the playground. Popular, heavy-use pieces of equipment or activities shall be dispersed to avoid crowding in any one area. Different types of equipment have different use zones that shall be maintained. The following are general requirements for locating equipment within the playground site.

(A) Moving equipment, such as swings and merry-go-rounds, shall be located toward a corner, side, or edge of the play area while ensuring that the appropriate use zones around the equipment are maintained.

(B) Slide exits shall be located in an uncongested area of the playground.

(C) Adjacent components on composite structures shall be complementary. For example, an access component shall not be located in a slide exit zone.

(3) Sight Lines.

Playgrounds shall be laid out to allow supervision of children as they move throughout the playground environment. Visual barriers shall be minimized as much as

possible. In playgrounds with separate areas for different ages, the older children's area shall be visible from the younger children's area to ensure provision of multiple children while they are engaged in interactive play.

(4) Signage and/or Labeling.

Signs and/or labels shall be posted in the playground area or on the equipment to provide supervisors with the age appropriateness of the equipment. All signs and/or labels shall readily identify the equipment's age appropriateness.

(5) Supervision.

Playground use shall be supervised by a designated adult at all times when children are present. The number of children per staff member, excluding staff for cooking, housekeeping, and maintenance, shall not exceed the staff ratios in Table 2.

Table 2

Age of Child	Child:Staff Ratio
Birth to 12 months	4:1
13 months to 2 years	6:1
25 months to 3 years	10:1
37 months to 4 years	15:1
4 years and up	20:1

Supervisors shall be aware that not all playground equipment is appropriate for all children who may use the playground. Supervisors shall look for posted signs indicating the appropriate age of the users and direct children to equipment appropriate for their age. Supervisors shall understand the basics of playground safety such as:

(A) Checking for broken equipment and ensuring children do not play on it.

(B) Checking for and removing unsafe modifications, especially ropes tied to equipment, before letting children play.

(C) Checking for properly maintained protective surfacing.

(D) Making sure children are wearing foot wear.

(E) Watching and stopping dangerous horseplay, such as throwing protective surfacing materials, jumping from heights, etc.

(F) Watching for, and stopping, children from wandering away from the play area.

(c) Selecting Equipment.

Playgrounds shall be in scale with their sizes, abilities, and developmental levels. The selection, quantity, arrangement, and use of available materials and equipment shall be age-appropriated, durable, and meet the recommendations of the Americans with Disabilities Act (ADA) for all children, including children with special needs.

(1) Prohibited Equipment

Prohibited playground equipment for use on playgrounds include:

(A) Trampolines

(B) Swinging gates

(C) Giant strides

(D) Climbing ropes that are not secured at both ends

(E) Heavy metal swings (e.g. animal figures)

(F) Multiple occupancy swings (With the exception of tire swings)

(G) Rope swings

(H) Swinging dual exercise rings and trapeze bars (*NOTE: The requirement against the use of exercise rings does not apply to overhead hanging rings such as those used in ring trek or ring ladder.)*

(d) Surfacing.

(1) Equipment where protective surfacing is not required.

The requirements for protective surfacing do not apply to equipment that requires a child to be standing or sitting at ground level. Examples of such equipment are:

(A) Sand boxes

(B) Activity walls at ground level

(C) Play houses

(D) Any other equipment that children use when their feet remain in contact with the ground surface.

(2) Selecting a Surfacing Material.

Playground equipment shall not be installed without protective surfacing. Concrete, asphalt, or other hard surfaces shall never be directly under playground equipment. Grass and dirt are not considered protective surfacing because wear and environmental factors can reduce their shock absorbing effectiveness. Carpeting and mats shall not be used unless they are tested to and comply with American Society for Testing Materials (ASTM) F1292.

(A) Unitary surfacing materials.

Unitary material used as a playground surface shall be provided with test data from the manufacturer identifying the critical height rating. In addition, site requirements shall be obtained from the manufacturer because some unitary materials require installation over a hard surface while others do not. Manufacturer's

instructions shall be followed closely, as some unitary systems require professional installation.

(B) Loose-fill surfacing materials.

Loose-fill is prohibited for playgrounds intended for toddlers. Loose-filled surfacing materials, such as engineered wood fiber or rubber mulch products, shall be designed specifically for use as playground surfacing. When installing loose-fill surfacing materials, maintenance requirements provided by the manufacturer of engineered wood fiber and rubber mulch shall be followed. The manufacturer shall provide:

(i) Critical height;

(ii) Minimum fill-depth data; and

(iii) Toxicity.

Table 3 provides the minimum required depths of loose-fill material needed based on material type and fall height.

Table 3.

Minimum compressed loose-fill surfacing depths				
Inches (feet)	Of	(Loose-Fill Material)	Protects to	Fall Height
6"		Shredded/recycled rubber		10
9		Sand		4
9		Pea Gravel		5
9		Wood mulch (non-CCA)		7

9	Wood chips	10

* Shredded recycled rubber loose-fill surfacing does not compress in the same manner as other loose-fill materials. However, care should be taken to maintain a constant depth as displacement

Other loose-fill materials are generally landscaping-type materials that can be layered to a certain depth and resist compacting. Some examples include wood mulch, wood chips, sand, pea gravel, and shredded recycled rubber mulch.

(C) The Department prohibits installing playgrounds over hard surfaces, such as asphalt, concrete, or hard packed earth, unless the installation adds the following layers of protection:

(i) Immediately over the hard surface there shall be a 3- to 6-inch base layer of loose-fill (e.g., gravel for drainage);

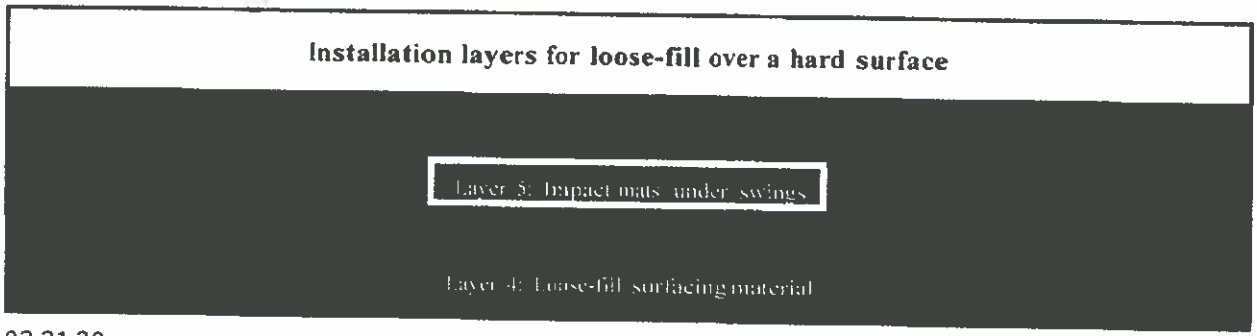
(ii) The next layer shall be a Geotextile cloth;

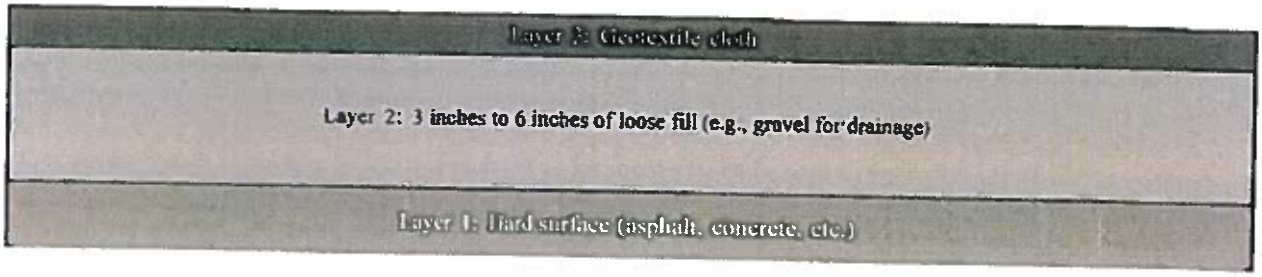
(iii) On top of that, there shall be a loose-fill layer as shown in Figure 1; and

(iv) Embedded in the loose-fill layer shall be impact attenuating mats under high traffic areas, such as under swings, at slide exits, and other places where displacement is likely.

Figure 1 provides a visual representation of the layers that shall be added over hard surfaces.

Figure 1





(e) Equipment Materials.

(1) Durability and Finish.

(A) Playgrounds shall only include equipment that is manufactured and constructed of materials that have a demonstrated record of durability in a playground or similar setting.

(B) Finishes, treatments, and preservatives shall be selected carefully so that they do not present a health hazard to users.

(2) Hardware

When installed and maintained in accordance with the manufacturer's instructions:

(A) All fasteners, connectors, and covering devices shall not loosen or be removable without the use of tools.

(B) All fasteners, connectors, and covering devices that are exposed to the user shall be smooth and shall not be likely to cause laceration, penetration, or present a clothing entanglement hazard.

(C) Lock washers, self-locking nuts, or other locking means shall be provided for all nuts and bolts to protect them from detachment.

(D) Hardware in moving joints shall also be secured against unintentional or unauthorized loosening.

(E) All fasteners shall be corrosion resistant and be selected to minimize corrosion of the materials they connect. This is particularly important when using wood treated with ACQ/CBA/CA-B as the chemicals in the wood preservative corrode certain metals faster than others.

(F) Bearings or bushings used in moving joints shall be easy to lubricate or be self-lubricating.

(G) All hooks, such as S-hooks and C-hooks, shall be closed. A hook is considered closed if there is no gap or space greater than 0.04 inches, about the thickness of a dime.

(3) Metals.

(A) Bare metal for platforms, slides, or steps shall not be used. If painted metal surfaces are used on platforms, steps, and slide beds, they shall be oriented so that the surface is not exposed to direct sun year-round and shall not pose a burn hazard to playground users.

(4) Paints and Finishes.

(A) Metals not inherently corrosion resistant shall be painted (non-lead based), galvanized, or otherwise treated to prevent rust.

(B) The playground operator shall ensure that the users cannot ingest, inhale, or absorb potentially hazardous amounts of preservative chemicals or other treatments applied to the equipment as a result of contact with playground equipment.

(C) Painted surfaces shall be maintained to prevent corrosion and deterioration.

(D) Paint and other finishes shall be maintained to prevent rusting of exposed metals and to minimize children playing with peeling paint and paint flakes.

(5) Wood.

(A) Wood shall be both naturally rot-resistant and insect-resistant (e.g., cedar or redwood) or shall be treated to avoid such deterioration.

(B) Creosote-treated wood (e.g., railroad ties, telephone poles, etc.) and coatings that contain pesticides shall not be used.

(C) When selecting wood products and finishes for playgrounds:

(i) Avoid "film-forming" or non-penetrating stains (latex semi-transparent, latex opaque and oil-based opaque stains) on outdoor surfaces.

(ii) Creosote, pentachlorophenol, tributyl tin oxide, and chromated copper arsenate (CCA), are too toxic or irritating and shall not be used as preservatives for playground equipment wood.

(iii) Pesticide-containing finishes shall not be used.

(iv) CCA-treated wood shall not be used as playground mulch.

(f) Assembly and Installation.

(1) All instructions from the manufacturer shall be followed when assembling and installing equipment.

(2) After assembly, and before its first use, equipment shall be thoroughly inspected for safety.

(3) The manufacturer's assembly and installation instructions, and all other materials collected concerning the equipment, shall be kept in a permanent file.

(4) Any equipment anchoring processes used shall be completed in strict accordance with the manufacturer's specifications.

§426010. Playground Hazards.

(a) Crush and Shearing Points.

Anything that could crush or shear limbs shall not be accessible to children on a playground. Crush and shear points can be caused by parts moving relative to each other or to a fixed part during a normal use cycle, such as a seesaw.

(b) Entanglement and Impalement.

Projections on playground equipment shall not be able to entangle children's clothing or be large enough to impale. To avoid this risk:

(1) The diameter of a projection shall not increase in the direction away from the surrounding surface toward the exposed end.

(2) Bolts shall not expose more than two threads beyond the end of the nut.

(3) All hooks, such as S-hooks and C-hooks, shall be closed. A hook is considered closed if there is no gap or space greater than 0.04 inches. Any connecting device containing an in-fill that completely fills the interior space preventing entry of clothing items into the interior of the device is exempt from this requirement.

(A) Strings and Ropes.

(i) Supervisors shall ensure that children do not wear jewelry, jackets or sweatshirts with drawstring hoods or other upper body clothing with drawstrings.

(ii) Remove any ropes, dog leashes, or similar objects that have been attached to playground equipment.

(iii) Equipment with ropes that are not secured at both ends shall not be used.

(c) Entrapment.

(1) Head Entrapment.

A part or a group of parts shall not form openings that could trap a child's head. Children shall not wear helmets while on playground equipment.

When the distance between any interior opposing surfaces is greater than 3.5 inches and less than 9 inches, all dimensions of the opening shall be considered together to evaluate the possibility of entrapment.

(2) Partially bound openings and angles.

Angles formed by two accessible adjacent parts shall be greater than 55 degrees unless the lowest leg is horizontal or below horizontal.

(d) Sharp Points, Corners, and Edges.

(1) Exposed open ends of all tubing not resting on the ground or otherwise covered shall be covered by caps or plugs that cannot be removed without the use of tools.

(2) Wood parts shall be smooth and free from splinters.

(3) All corners, metal and wood, shall be rounded.

(4) All metal edges shall be rolled or have rounded capping.

(5) There shall be no sharp edges on slides.

(6) If steel-belted radials are used as playground equipment, they shall be closely examined regularly to ensure that there are no exposed steel belts/wires.

(7) Frequent inspections shall be conducted by the playground supervisor to prevent injuries caused by splintered wood, sharp points, corners, or edges that may develop as a result of wear and tear on the equipment.

(e) Suspended Hazards.

Suspended components:

(1) Shall be located away from high traffic areas.

(2) Shall either be brightly colored or contrast with the surrounding equipment and surfacing.

(3) Shall not be able to be looped back on themselves or other ropes, cables, or chains to create a circle with a 5 inch or greater perimeter.

(4) Shall be fastened at both ends unless they are 7 inches or less long or attached to a swing seat.

(5) These requirements do not apply to swings, climbing nets, or if the suspended component is more than 7 feet above the protective surfacing and is a minimum of one inch at its widest cross-section dimension.

(f) Tripping Hazards.

Play areas shall be free of tripping hazards (i.e., sudden change in elevations) to children who are using the playground.

(1) All anchoring devices for playground equipment, such as concrete footings or horizontal bars at the bottom of flexible climbers, shall be installed below ground level and beneath the base of the protective surfacing material.

(2) Surfacing containment walls shall be highly visible.

(3) Any change of elevation shall be obvious, such as the use of contrasting color of the containment barrier from the surfacing color.

(g) Used Tires.

When using recycled tires for playground use:

(1) Steel-belted radials shall be closely examined regularly to ensure that there are no exposed steel belts wires.

(2) Tire shall not collect water or debris, and drainage holes shall be on the underside of tires to reduce water collection.

(3) Recycled tire rubber mulch products shall be inspected before installation to ensure that all metal has been removed.

§426011. Playground Maintenance.

Manufacturer's maintenance instructions and required inspection schedules shall be strictly followed. If manufacturer's requirements are not available, a maintenance schedule shall be developed based on actual or anticipated playground use. Frequently used playgrounds shall require more frequent inspections and maintenance.

(a) Maintenance Inspections.

A comprehensive maintenance program shall be developed for each playground, where all playground areas and equipment are inspected for excessive wear, deterioration, and potential hazards through the use of the Playground Checklist Form (Appendix A). Detailed inspections shall give special attention to moving parts and other parts that can be expected to wear. Maintenance inspections shall be carried out in a systematic manner by personnel familiar with the playground, such as maintenance workers, playground supervisors, etc. of the childcare facility and school.

(b) Repairs.

Any problems found during the maintenance inspection of the playground shall be noted and fixed as soon as possible by the owner/operator or the responsible party of the playground.

(1) All repairs and replacements of equipment parts shall be completed following the manufacturer's instructions.

(2) User modifications, such as loose ended ropes tied to elevated parts, shall be removed immediately.

(3) Consult the manufacturer for maintenance schedules for each piece of equipment. Based on these schedules, a maintenance schedule for the entire playground can be created. This routine maintenance schedule shall not replace regular inspections.

(c) Maintaining Loose-Fill Surfacing.

The playground shall be checked frequently to ensure surfacing has not displaced significantly, particularly in areas of the playground most subject to displacement (e.g., under swings and slide exits). Displaced loose-fill surfacing shall be raked back into proper place so that a constant depth is maintained throughout the playground. Impact attenuating mats that significantly reduce displacement shall be installed below or level with surfacing so as not to be a tripping hazard. The following shall be inspected during regular checks of surfacing:

(1) Areas under swings and at slide exits.

(2) Pooling water on mulch surfacing.

(d) Recordkeeping.

Records of all maintenance inspections and repairs shall be retained, including the manufacturer's maintenance instructions (until equipment is removed from the playground) and the Playground Checklist Form (Appendix A), which shall be kept for a minimum of 2 years.

When any inspection is performed, the person performing it shall sign and date the form used. A record of any accident and injury reported to have occurred on the playground shall also be retained and a copy shall be submitted to the Division of Environmental Health. This will help identify potential hazards or dangerous design feature that shall be corrected.

§426012. Parts of the Playground.

(a) Platforms, Guardrails and Protective Barriers.

(1) Platforms.

(A) Platforms shall be generally flat (i.e., within ± 2° of horizontal).

(B) Openings in platforms shall be provided to allow for drainage.

(C) Platforms shall minimize the collection of debris.

(D) Platforms intended for toddlers shall be no more than 32 inches from the ground.

(2) Stepped Platforms.

Unless there is an alternate means of access egress, the maximum difference in height between stepped platforms shall be:

(A) Toddlers: 7 inches.

(B) Preschool-age: 12 inches.

(C) School-age: 18 inches.

An access component (such as a rung) shall be required if the difference in height is more than 12 inches for preschool-age and 18 inches for school-age children.

(D) Toddlers: if the space is less than 7 inches, infill shall be used to reduce the space to less than 3.0 inches.

(E) Preschool-age: if the space exceeds 9 inches and the height of the lower platform above the protective surfacing exceeds 30 inches, infill shall be used to reduce the space to less than 3.5 inches.

(F) School-age: if the space exceeds 9 inches and the height of the lower platforms above the protective surfacing exceeds 48 inches, infill shall be used to reduce the space to less than 3.5 inches.

(3) Fall Height.

(A) The fall height of a platform is the distance between the top of the platform and the protective surfacing beneath it.

(4) Guardrails and Protective Barriers.

Protective barriers provide greater protection than guardrails and shall be designed to discourage children from climbing over or through the barrier. Guardrails and barriers shall:

(A) Completely surround any elevated platform.

(B) Except for entrance and exit openings, the maximum clearance opening without a top horizontal guardrail shall be 15 inches.

(C) Prevent unintentional falls from the platform.

(D) Prevent the possibility of entrapment.

(E) Facilitate supervision.

(F) Guardrails may have a horizontal top rail with infill consisting of vertical bars having openings that are greater than 9 inches. These openings do not present an entrapment hazard but do not prevent a child from climbing through the openings.

(G) A barrier shall minimize the likelihood of passage of a child during deliberate attempts to defeat the barrier. Any openings between uprights or between the platform surface and lower edge of a protective barrier shall prevent passage.

(H) Guardrails or protective barriers shall be provided on elevated platforms, walkways, landings, stairways, and transitional surfaces. Equipment intended for toddlers shall use barriers on all elevated walking surfaces above 18 inches.

(I) Guardrails and barriers shall be high enough to prevent the tallest children from falling over the top. The lower edge shall be low enough so that the smallest children cannot walk under it. Barriers shall be low enough to prevent the smallest child from getting under the barrier in any way. These requirements do not apply if the guardrail or barrier would interfere with the intended use of the equipment, such as:

(i) Climbing Equipment.

(aa) Platforms layered so that the fall height is:

1) Toddlers: 7 inches or less.

2) Preschool-age: 20 inches or less.

3) School-age: 30 inches or less.

(b) Access Methods to Play Equipment.

Access to platforms over 6 feet high (except for free standing slides) shall provide an intermediate standing surface so that the child can pause and make a decision to keep going up or find another way down. For more difficult access methods, it shall have easier components for egress.

(1) Ramps, Stairways, Rung Ladders, and Step Ladders.

Steps or rungs for ramps, stairways, rung ladders, and step ladders shall be evenly spaced, including the spacing between the top step or rung and the surface of the platform. Table 4 provides the required dimensions for: access slope; tread or rung width; tread depth; rung diameter; and vertical rise for rung ladders, step ladders, and stairways.

Table 4.

Required dimensions for access ladders, stairs, and ramps*			
	AGE OF INTENDED USER		
Type of Access	Toddler	Preschool-age	School-age
Ramps (not intended to meet ADA/ABA specifications)			
Slope (vertical: horizontal)	≤ 1:8	≤ 1:8	≤ 1:8
Width (single)	≥ 19"	≥ 12"	≥ 16"
Width (double)	≥ 30"	≥ 30"	≥ 36"
Stairways			
Slope	≤ 35°	≤ 50°	≤ 50°
Tread width (single)	12-21"	≥ 12"	≥ 16"
Tread width (double)	≥ 30"	≥ 30"	≥ 36"
Tread depth (open riser)	Not appropriate	≥ 7"	≥ 8"
Tread depth (closed riser)	≥ 8	≥ 7	≥ 8"
Vertical rise	≤ 7	≤ 9"	≤ 12"
Step ladders			
Slope	35-65	50-75°	50-75°
Tread width (single)	12-21"	12-21"	≥ 16"
Tread width (double)	Not appropriate	Not appropriate	≥ 36"
Tread depth (open riser)	Not appropriate	≥ 7"	≥ 3"
Tread depth (closed riser)	8"	≥ 7"	≥ 6
Vertical rise	≥ 5 "and ≤ 7"	≤ 9"	≤ 12"
Rung ladders			
Slope	Not appropriate	75-90°	75-90°
Rung width	Not appropriate	≥ 12"	≥ 16"
Vertical rise	Not appropriate	≤ 12"	≤ 12"
Rung diameter	Not appropriate	0.95-1.55"	0.95-1.55"
* entrapment prevention requirements apply to all openings in access components			

(A) Openings between steps or rungs and between the top step or rung and underside of a platform shall prevent entrapment.

(B) When risers are closed, treads on stairways and ladders shall prevent the accumulation of sand, water, or other materials on or between steps.

(C) Climbing equipment shall allow children to descend as easily as they ascend.

(2) Rungs and Other Hand Gripping Components.

(A) All hand grips shall be secured in a manner that prevents them from turning.

(B) Toddlers:

(i) Handrails or other means of hand support shall have a diameter or maximum cross-section between 0.60 and 1.20 inches.

(C) Preschool-age and school-age:

(i) Rungs, handrails, climbing bars, or other means of hand support intended for holding shall have a diameter or maximum cross-section between 0.95 and 1.55 inches.

(3) Handrails.

Continuous handrails extending over the full length of the access shall be provided on both sides of all stairways and step ladders, regardless of the height of the access. Handrails are not required in rung ladders as rungs or side supports provide hand support on these more steeply inclined accesses.

(A) Handrail Height.

Handrails shall be available for use at the appropriate height, beginning with the first step. The vertical distance between the top front edge of a step or ramp surface and the top surface of the handrail above it shall be as follows:

(i) Toddlers: between 15 and 20 inches.

(ii) Preschool-age: between 22 and 26 inches.

(iii) School-age: between 22 and 38 inches.

(4) Transition from Access to Platform.

(A) Handholds shall provide support from the access component until the child has fully achieved the desired posture on the platform.

(B) Any opening between a handrail and an adjacent vertical structure (e.g., vertical support post for a platform or vertical slat of a protective barrier) shall not pose an entrapment hazard.

(C) Access methods that do not have handrails, such as rung ladders, flexible climbers, arch climbers, and tire climbers, shall provide hand supports for the transition between the top of the access and the platform.

(c) Major Types of Playground Equipment.

(1) Balance Beams. The fall height of a balance beam is the distance between the top of the walking surface and the protective surfacing beneath it. The fall height of a balance beam shall be a maximum of:

(A) Toddlers: balance beams are prohibited.

(B) Preschool-age: 12 inches.

(C) School-age: 16 inches.

(2) Climbing and upper body equipment includes:

(A) Arch climbers

(B) Dome climbers

(C) Flexible climbers (usually chain or net)

(D) Parallel bars

(E) Sliding poles

(F) Spiral climbers

(G) Upper body equipment (horizontal overhead ladders, overhead rings, track ride).

§426013. Design Considerations.

(a) Layout of Climbing Components.

When climbing components are part of a composite structure, their level of challenge and method of use shall be compatible with the traffic flow from nearby components. Upper body devices shall be placed so that the swinging movement generated by children on this equipment cannot interfere with the movement of children on adjacent structures, particularly children descending on slides. The design of adjacent play structures shall not facilitate climbing to the top support bars of upper body equipment.

(b) Fall Heights.

(1) Climbers:

(A) Unless otherwise specified in this section, the fall height for climbers is the distance between the highest part of the climbing component and the protective surfacing beneath it.

(B) If the climber is part of a composite structure, the fall height is the distance between the highest part the climber intended for foot support and the protective surfacing beneath it.

(C) Toddlers: The maximum fall height for free standing and composite climbing structures shall be 32 inches.

(2) Upper Body Equipment:

The fall height of upper body equipment is the distance between the highest part of the equipment and the protective surface below.

(c) Climbing Rungs.

(1) Rungs shall be generally round.

(2) All rungs shall be secured in a manner that prevents them from turning.

(3) Climbing rungs shall follow the same diameter requirements as in §426012(b)(2).

(d) Use Zone.

(1) The use zone shall extend a minimum of 6 feet in all directions from the perimeter of the stand-alone climber.

(2) The use zone of a climber may overlap with neighboring equipment; provided the other piece of equipment allows overlapping use zones, and

(A) There is at least 6 feet between equipment when adjacent designated play surfaces are no more than 30 inches high; or

(B) There is at least 9 feet between equipment when adjacent designated play surfaces are more than 30 inches high.

(e) Climbers shall not have climbing bars or other rigid structural components in the interior of the climber onto which a child may fall from a height of greater than 18 inches.

(1) Arch Climbers.

(A) Arch climbers shall not be used as the sole means of access to other equipment for preschoolers.

(i) Free standing arch climbers shall be prohibited for toddlers or preschool-age children.

(ii) The rung diameter and spacing of rungs on arch climbers shall follow the requirements for rung ladders in §426012(b)(1).

(2) Flexible Climbers.

(A) Flexible climbers that provide access to platforms shall be securely anchored at both ends.

(i) When connected to the ground, the anchoring devices shall be installed below ground level and beneath the base of the protective surfacing material.

(ii) Connections between ropes, cables, chains, or between tires shall be securely fixed.

(iii) Flexible climbers shall not be the sole means of access to equipment intended for toddlers and preschool-age children.

(iv) Free-standing flexible climbers shall be prohibited on playgrounds intended for toddlers and preschool children.

(v) Spacing between the horizontal and vertical components of a climbing grid shall not form entrapment hazards.

(vi) The perimeter of any opening in a net structure shall be less than 17 inches or greater than 28 inches.

(3) Horizontal (Overhead) Ladders.

(A) Horizontal ladders shall not be used on playgrounds intended for toddlers and 3-year-olds. The requirements below are designed to accommodate children ages 4 through 12 years. The first handhold on either end of upper body

equipment shall not be placed directly above the platform or climbing rung used for mount or dismount.

(B) The horizontal distance out to the first handhold shall be:

(i) No greater than 10 inches but not directly above the platform when access is from a platform.

(ii) At least 8 inches but no greater than 10 inches when access is from climbing rungs.

(iii) The spaces between adjacent rungs of overhead ladders shall be greater than 9 inches to prevent entrapment.

(iv) Horizontal ladders intended for preschool-age children shall have rungs that are parallel to one another and evenly spaced.

(C) The maximum height of a horizontal ladder (i.e., measured from the center of the grasping device to the top of the protective surfacing below) shall be:

(i) Preschool-age: no more than 60 inches.

(ii) School-age: no more than 84 inches.

(D) The center-to-center spacing of horizontal ladder rungs shall be as follows:

(i) Preschool-age: no more than 12 inches.

(ii) School-age: no more than 15 inches.

(E) The maximum height of the take-off landing platform above the protective surfacing shall be:

(i) Preschool-age: no more than 18 inches.

(ii) School-age: no more than 36 inches.

(4) Overhead Rings.

(A) Overhead rings shall not be used on playgrounds intended for toddlers and 3-year-olds. The requirements below are designed for playground structures intended to be used by children 4 through 12 years of age:

(i) The first handhold on either end of upper body equipment shall not be placed directly above the platform or climbing rung used for mount or dismount.

(ii) The horizontal distance out to the first handhold shall be:

aa) No greater than 10 inches but not directly above the platform when access is from a platform.

ba) At least 8 inches but no greater than 10 inches when access is from climbing rungs.

(iii) The maximum height of overhead rings measured from the center of the grasping device to the protective surfacing shall be:

aa) Preschool-age: 60 inches.

ba) School-age: 84 inches.

(iv) If overhead swinging rings are suspended by chains, the maximum length of the chains shall be 7 inches.

(v) The maximum height of the take-off landing platform above the protective surfacing shall be:

aa) Preschool-age: no more than 18 inches.

ba) School-age: no more than 36 inches.

(5) Sliding Poles.

(A) Sliding poles shall not be used by toddlers or preschool-age children.

(B) Sliding poles shall be continuous with no protruding welds or seams along the sliding surface.

(C) The pole shall not change direction along the sliding portion.

(D) The horizontal distance between a sliding pole and any structure used for access to the sliding pole shall be between 18 inches and 20 inches.

(E) The pole shall extend at least 60 inches above the level of the platform or structure used for access to the sliding pole.

(F) The diameter of sliding poles shall be no greater than 1.9 inches.

(G) Sliding poles and their access structures shall be located so that traffic from other events will not interfere with the users during descent.

(H) The upper access area through the guardrail or barrier shall be 15 inches wide at most.

(i) Fall Height.

aa) For sliding poles accessed from platforms, the fall height is the distance between the platform and the protective surfacing beneath it.

ba) For sliding poles not accessed from platforms, the fall height is the distance between a point 60 inches below the highest point of the pole and the protective surfacing beneath it.

ca) The top of the sliding pole's support structure shall not be a designated play surface.

(6) Track Rides.

(A) Track rides shall not be used on playgrounds for toddlers and preschool-age children.

(i) Track rides shall not have any obstacles along the path of the ride, including anything that would interfere in the take-off or landing areas.

(ii) Two track rides next to each other shall be at least 4 feet apart.

(iii) The handle shall be between 64 inches and 78 inches from the surfacing and follow the gripping requirements in §426012(b)(2).

(iv) Nothing shall be tied or attached to any moving part of a track ride.

(v) Rolling parts shall be enclosed to prevent crush hazards.

(B) Fall Height.

(i) The fall height of track ride equipment is the distance between the maximum height of the equipment and the protective surface beneath the equipment.

(ii) Equipment support posts with no designated play surfaces are exempt from this requirement.

(7) Log Rolls.

(A) Log rolls shall not be used for toddlers and preschool-age children.

(i) Log rolls shall have handholds to assist with balance that follow the guidelines in §426012(b)(2).

(ii) The highest point of the rolling log shall be a maximum of 18 inches above the protective surface below.

(iii) When not part of a composite structure, the use zone may overlap with neighboring equipment if the other piece of equipment allows overlapping use zones and there is at least 6 feet between equipment when adjacent designated play surfaces are no more than 30 inches high; or there is at least 9 feet between equipment when adjacent designated play surfaces are more than 30 inches high.

(B) Fall Height.

(i) The fall height of a log roll is the distance between the highest portion of the rolling log and the protective surfacing beneath it.

(8) Merry-Go-Rounds.

(A) Preschool-age children shall always be supervised when using merry-go-rounds. The following requirements apply when the merry-go-round is at least 20 inches in diameter.

(i) Merry-go-rounds shall not be used on playgrounds intended for toddlers.

(ii) The standing/sitting surface of the platform shall have a maximum height of:

aa) Preschool-age: 14 inches above the protective surface.

ba) School-age: 18 inches above the protective surface.

(iii) The rotating platform shall be continuous and approximately circular.

(iv) The surface of the platform shall not have any openings between the axis and the periphery that permit a rod having a diameter of 5/16 inch to penetrate completely through the surface.

(v) The difference between the minimum and maximum radii of a non-circular platform shall not exceed 2 inches.

(vi) The underside of the perimeter of the platform shall be no less than 9 inches above the level of the protective surfacing beneath it.

(vii) There shall not be any accessible shearing or crushing mechanisms in the undercarriage of the equipment.

(viii) Children shall be provided with a secure means of holding on. Where handgrips are provided, they shall conform to the general requirements for hand gripping components in §426012(b)(2).

(ix) No components of the apparatus, including handgrips, shall extend beyond the perimeter of the platform.

(x) The rotating platform of a merry-go-round shall not have any sharp edges.

(xi) A means shall be provided to limit the peripheral speed of rotation to a maximum of 13 ft/sec.

(xii) Merry-go-round platforms shall not have any up and down (oscillatory) motion.

(xiii) Use Zone.

aa) The use zone shall extend a minimum of 6 feet beyond the perimeter of the platform.

ba) The use zone may not overlap other use zones, unless the rotating equipment is less than twenty inches in diameter and the adjacent equipment allows overlap.

(xiv) Fall Height.

aa) The fall height for a merry-go-round is the distance between the perimeter of the platform where a child could sit or stand and the protective surfacing beneath it.

(9) Seesaws.

(A) Fulcrum Seesaws.

(i) Fulcrum seesaws shall not be used for toddlers or preschool-age children.

(ii) The fulcrum shall not present a crush hazard.

(iii) Partial car tires, or some other shock-absorbing material, shall be embedded in the ground underneath the seats, or secured on the underside of the seats.

(iv) The maximum attainable angle between a line connecting the seats and the horizontal is 25°.

(v) There shall not be any footrests.

(B) Spring-centered seesaws shall follow the requirements for spring rockers including the use of footrests.

(C) Use zone for fulcrum and spring-centered seesaws

(i) The use zone shall extend a minimum of 6 feet from each outside edge of the seesaw.

(ii) The use zone may overlap with neighboring equipment if the other piece of equipment allows overlapping use zones and

(iii) There is at least 6 feet between equipment when adjacent designated play surfaces are no more than 30 inches high; or

(iv) There is at least 9 feet between equipment when adjacent designated play surfaces are more than 30 inches high.

(D) Handholds.

(i) Handholds shall be provided at each seating position for gripping with both hands and shall not turn when grasped.

(ii) Handholds shall not protrude beyond the sides of the seat.

(E) Fall Height.

(i) The fall height for a seesaw is the distance between the highest point any part of the seesaw can reach and the protective surfacing beneath it.

(10) Slides.

Improper use of slides shall not be permitted by the supervisor. Regardless of the type of slide, bare metals shall not be used on the platforms, chutes, and steps unless shade is provided above bare metal, or other materials that may reduce the surface temperature such as, but not limited to, plastic or coated metal, are used.

(A) Slide Platform.

All slides shall be provided with a platform with sufficient length to facilitate the transition from standing to sitting at the top of the inclined sliding surface. Embankment slides are exempt from platform requirements because they

are on the ground level; however, they shall not have any spaces or gaps as noted below.

The platform shall:

(i) Be at least 19 inches deep for toddlers.

(ii) Be at least 14 inches deep for preschool-age and school-age children.

(ii) Be horizontal.

(iii) Be at least as wide as the slide chute.

(iv) Be surrounded by guardrails or barriers.

(v) Not have any spaces or gaps that could trap strings, clothing, body parts, etc. between the platform and the start of the slide chute.

(vii) Provide handholds to facilitate the transition from standing to sitting and decrease the risk of falls (except tube slides where the tube perimeter provides hand support). These shall extend high enough to provide hand support for the tallest child in a standing position, and low enough to provide hand support for the smallest child in a sitting position.

(viii) Provide a means to channel a user into a sitting position at the entrance to the chute, such as a guardrail, hood, or other device that discourages climbing.

(B) Slide Chutes.

(i) Embankment Slides.

(a) The slide chute of an embankment slide shall have a maximum height of 12 inches above the underlying ground surface. This design basically eliminates the hazard of falls from elevated heights.

(b) Embankment slides shall follow all of the requirements given for straight slides where applicable (e.g., side height, slope, use zone at exit, etc.).

(c) There shall be some means provided at the slide chute entrance to minimize the use of embankment slides by children on skates, skateboards, or bicycles.

(C) Roller Slides.

(i) Roller slides shall meet applicable requirements for other slides (e.g., side height, slope, use zone at exit, etc.).

(ii) The space between adjacent rollers and between the ends of the rollers and the stationary structure shall be less than 3/16 inch.

(D) Spiral Slides.

(i) Spiral slides shall follow the requirements for straight slides where applicable (e.g., side height, slope, use zone at exit, etc.).

(ii) Special attention shall be given to design features which may present problems unique to spiral slides, such as lateral discharge of the user.

(iii) Only short spiral slides (one 360° turn or less) shall be used for toddlers and pre-school age children.

(E) Straight Slides.

(i) Flat open chutes shall have sides at least 4 inches high extending along both sides of the chute for the entire length of the inclined sliding surface.

(ii) The sides shall be an integral part of the chute, without any gaps between the sides and the sliding surface.

(iii) Slides may have an open chute with a circular, semicircular or curved cross section provided that:

aa) The vertical height of the sides is no less than 4 inches when measured at right angles to a horizontal line that is 8 inches long when the slide is intended for toddlers, 12 inches long when the slide is intended for preschool-age children, and 16 inches long when the slide is intended for school-age children; or

ba) For any age group, the vertical height of the sides is no less than 4 inches minus two times the width of the slide chute divided by the radius of the slide chute curvature.

(1) For Toddlers:

The average incline of a slide chute shall be no more than 24° (that is, the height to horizontal length ratio does not exceed 0.445). No section of the slide chute shall have a slope greater than 30°. The slide chute shall be between 8 and 12 inches wide.

(2) For Preschool- and School-Age Children:

The average incline of a slide chute shall be no more than 30°. No section of the slide chute shall have a slope greater than 50°.

(F) Tube Slides.

(i) Tube slides shall meet all the applicable requirements for other slides (e.g., side height, slope, use zone at exit, etc.).

(ii) Means, such as barriers or textured surfaces, shall be provided to prevent sliding or climbing on the top (outside) of the tube.

(iii) The minimum internal diameter of the tube shall be no less than 23 inches.

(iv) Supervisors shall be aware of children using tube slides.

(G) Chute Exit Region.

All slides shall have an exit region to help children maintain their balance and facilitate a smooth transition from sitting to standing when exiting. The chute exit region shall:

(i) Be between 0 and -4° as measured from a plane parallel to the ground.

(ii) Have edges that are rounded or curved to prevent lacerations or other injuries that could result from impact with a sharp or straight edge.

(iii) For toddlers the chute exit region shall:

aa) Be between 7 and 10 inches long if any portion of the chute exceeds a 24° slope.

ba) Be no more than 6 inches above the protective surfacing.

ca) Have a transition from the sliding portion to the exit region with a radius of curvature of at least 18 inches.

(iv) For preschool and school-age the chute exit region shall:

aa) Be at least 11 inches long.

ba) Be no more than 11 inches above the protective surfacing if the slide is no greater than 4 feet high.

ca) Be at least 7 inches but not more than 15 inches above the protective surfacing if the slide is over 4 feet high.

(H) Slide Use Zone.

(i) Toddlers:

aa) In an area where only toddlers play, the use zone shall be at least 3 feet around the perimeter of the slide.

(1) The area at the end of the slide shall not overlap with the use zone for any other equipment.

ba) In areas with unlimited access for stand-alone slide, the use zone shall be at least 6 feet around the perimeter.

(1) For slides that are part of a composite structure, the minimum use zone between the access components and the side of the slide chute shall be 3 feet.

(2) The use zone at the end of the slide shall be at least 6 feet from the end of the slide and not overlap with the use zone for any other equipment.

(ii) Preschool and school-age:

aa) The use zone in front of the access and to the sides of a slide shall extend a minimum of 6 feet from the perimeter of the

equipment. This requirement does not apply to embankment slides or slides that are part of a composite structure.

ba) The use zone in front of the exit of a slide shall never overlap the use zone of any other equipment; however, two or more slide use zones may overlap if their sliding paths are parallel.

ca) For slides less than or equal to 6 feet high, the use zone in front of the exit shall be at least 6 feet.

da) For slides greater than 6 feet high, the use zone in front of the exit shall be at least as long as the slide is high up to a maximum of 8 feet.

(iii) Fall Height.

aa) The fall height for slides is the distance between the transition platform and the protective surfacing beneath it.

(I) Entanglement Hazard.

(i) To reduce the chance of clothing entanglement:

aa) Projections up to 3 inches in diameter shall not stick up more than 1/8 inch from the slide.

ba) There shall be no gaps at the tops of slides where the slide chute connects with the platform that can entangle clothing or strings.

(J) Other Sliding Equipment.

(i) Equipment where it is foreseeable that a primary use of the component is sliding shall follow the same guidelines for entanglement.

(11) Spring Rockers.

(A) Seat design shall not allow the rocker to be used by more than the intended number of users.

(i) For Toddlers:

aa) The seat shall be between 12 and 16 inches high.

ba) Spring rockers with opposing seats intended for more than one child shall have at least 37 inches between the seat centers.

(ii) For Preschoolers:

aa) The seat shall be between 14 and 28 inches high.

ba) Each seating position shall be equipped with handgrips and footrests. The diameter of handgrips shall follow the requirements for hand gripping components in §426012(b)(2).

(B) The springs of rocking equipment shall minimize the possibility of children crushing their hands or their feet between coils or between the spring and a part of the rocker.

(C) The use zone shall extend a minimum of 6 feet from the "at rest" perimeter of the equipment.

(D) The use zone may overlap with neighboring equipment if the other piece of equipment allows overlapping use zones and:

(i) There is at least 6 feet between equipment when adjacent designated play surfaces are no more than 30 inches high; or

(ii) There is at least 9 feet between equipment when adjacent designated play surfaces are more than 30 inches high; and

(iii) The spring rocker is designed to be used from a seated position.

(E) Fall Height.

(ii) The fall height for spring rockers is the distance between either the highest designated playing surface or the seat, whichever is higher, and the protective surfacing beneath it.

(12) Swings.

(A) General Swing Requirements:

(i) Hardware used to secure the suspending elements to the swing seat and to the supporting structure shall not be removable without the use of tools.

(ii) S-hooks shall be pinched closed, so there is no gap or space greater than 0.04 inches (about the thickness of a dime).

(iii) Swings shall be suspended from support structures that discourage climbing.

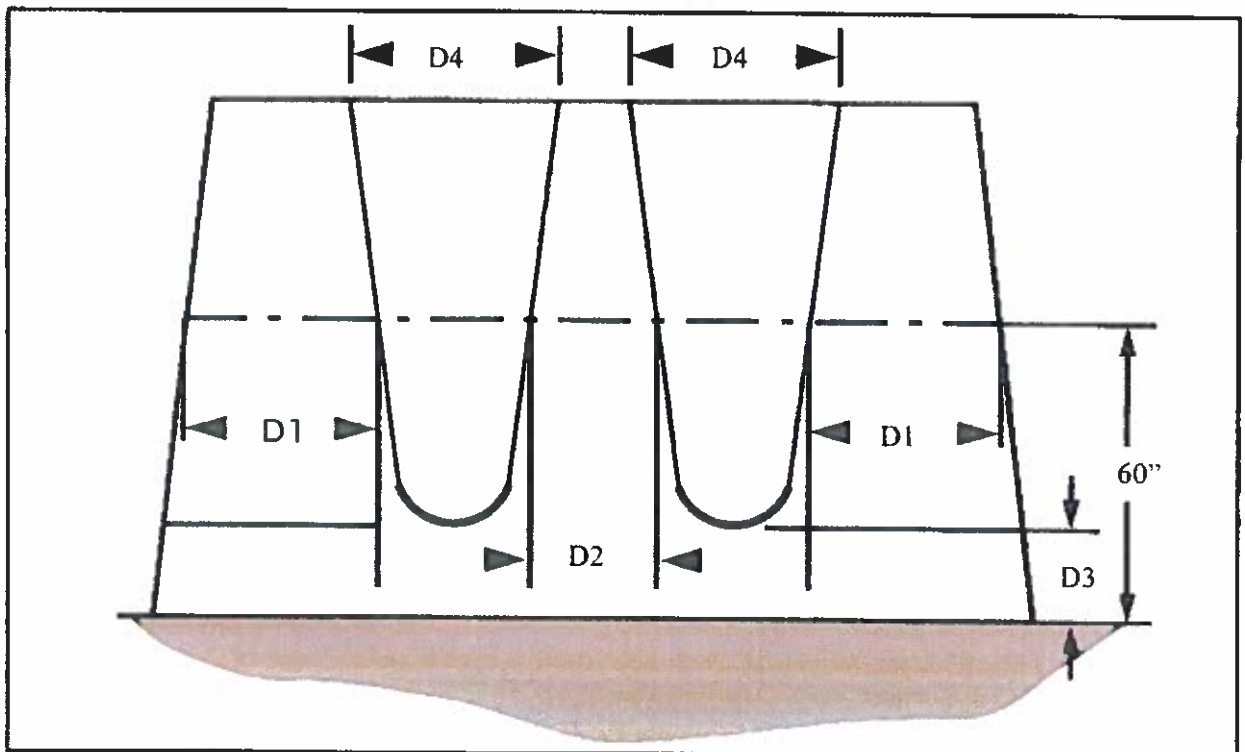
(iv) A-frame support structures shall not have horizontal cross-bars.

(v) Fiber ropes are prohibited as a means of suspending swings since they may degrade over time.

(vi) Swing structures shall be located away from other equipment

or activities to help prevent young children from inadvertently running into the path of moving swings. If additional protection around the perimeter of the swing area, such as a low blockade, fence or hedge is provided, the blockade shall not be an obstacle within the use zone of a swing structure or hamper supervision by blocking visibility. The minimum clearance dimensions for swings are provided in Table 5.

Table 5



Minimum clearance dimensions for swings

Reason	Dimension	Toddler Full bucket	Preschool-age Belt	School-age Belt
Minimizes collisions between a swing and the supporting structure	D1	20 inches	30 inches	30 inches
Minimizes collisions between swings	D2	20 inches	24 inches	24 inches

Allows access	D3	24 inches	12 inches	12 inches
Reduces side-to-side motion	D4	20 inches	20 inches	20 inches

(vii) Fall Height.

aa) The fall height for swings is the vertical distance between the pivot point and the protective surfacing beneath it.

(B) Single-axis swings.

(i) Belt Seats Without Adult Assistance:

aa) The use zone to the front and rear of single-axis swings shall not overlap the use zone of other equipment.

ba) No more than two single-axis swings shall be hung in each bay of the supporting structure.

ca) Swings shall not be attached to composite structures.

da) Swing seats shall be designed to accommodate no more than one user at any time.

ea) Wood and metal swing seats are prohibited.

fa) Edges of seats shall have smoothly finished or rounded edges and shall conform to the protrusion requirement in §426013(12)(G)(i).

(ii) If loose-fill material is used as a protective surfacing, the height requirements shall be determined after the material has been compressed.

(C) Full Bucket Seat Swings.

(i) The seats and suspension systems of full bucket swings, including the related hardware, shall follow all of the criteria for conventional single axis swings.

(ii) Full bucket seats shall provide support on all sides and between the legs of the occupant.

(iii) The full bucket seat materials shall not present a strangulation hazard, such as rope or chain used as part of the seat.

(iv) Openings in swing seats shall conform to the entrapment criteria in §426010(c).

(v) Full bucket seat swings shall be suspended from structures that are separate from those for other swings or suspended from a separate bay of the same structure.

(vi) Full bucket seat swings shall not allow the child to enter and exit alone.

(vii) Pivot points shall be more than 47 inches but no more than 96 inches above the protective surfacing.

(D) Use Zone for Single-Axis Swings Belt and Full Bucket.

(i) The use zone for a belt swing shall extend to the front and rear of a single-axis swing a minimum distance of twice the vertical distance from the pivot point and the top of the protective surface beneath it.

(ii) The use zone for a full bucket swing shall extend to the front and rear a minimum of twice the vertical distance from the top of the occupant's sitting surface to the pivot point.

(iii) The use zone in front of and behind swings shall never overlap with any other use zone.

(iv) The use zone to the sides of a single-axis swing shall extend a minimum of 6 feet from the perimeter of the swing. This 6-foot zone may overlap that of an adjacent swing structure or other playground equipment structure.

(E) Multi-Axis (Tire) Swings.

(i) A multi-axis tire swing shall not be suspended from a structure having other swings in the same bay.

(ii) Multi-axis swings shall not be attached to composite structures.

(iii) To minimize the hazard of impact, heavy truck tires shall not be used. Further, if steel-belted radials are used, they shall be closely examined to ensure that there are no exposed steel belts or wires that could be a potential protrusion or laceration hazard. Plastic materials can be used as an alternative to stimulate actual automobile tires. Drainage holes shall be provided in the underside of the tire to prevent collection of water and prevent mosquito breeding in tires.

(iv) Special attention shall be given for the maintenance of the hanger mechanism because the likelihood of failure is higher for tire swings due to the added stress of rotational movement and multiple occupants.

(v) The hanger mechanisms for multi-axis tire swings shall not have any accessible crush points.

(vi) The minimum clearance between the seating surface of a tire swing and the uprights of the supporting structure shall be 30 inches when the tire is in a position closest to the support structure.

(vii) The minimum clearance between the bottom of the seat and the protective surface shall not be less than 12 inches.

(F) Multi-Axis Swing Use Zones.

(i) The use zone shall extend in any direction from a point directly beneath the pivot point for a minimum distance of 6 feet plus the length of the suspending members. This use zone shall never overlap the use zone of any other equipment.

(ii) The use zone shall extend a minimum of 6 feet from the perimeter of the supporting structure. This 6-foot zone may overlap that of an adjacent swing structure or other playground equipment structure.

(G) Protrusions on Suspended Members of Swing Assemblies.

(i) Nothing, including bolts or other parts, on the front, back, or underside of a swing shall protrude more than 1/8 of an inch.

(13) Fall Height and Use Zones for Composite Structures.

When two or more complementary play components are linked together in a composite structure (e.g., combination climber, slide, and horizontal ladder), the use zone shall extend to a minimum of 6 feet from the external perimeter of the structure. Where slides are attached to a platform higher than 6 feet from the protective surfacing, the use zone shall extend further in front of the slide.

(A) Fall Height and Use Zones Not Specified Elsewhere.

(i) If playground equipment does not belong in one of the categories listed above, the following general requirements shall be applied:

aa) The use zone shall extend a minimum of 6 feet in all directions from the perimeter of the equipment.

ba) The use zones of two stationary pieces of playground equipment that are positioned adjacent to one another may overlap if the adjacent designated play surfaces of each structure are no more than 30 inches above the protective surface and the equipment is at least 6 feet apart.

ca) If adjacent designated play surfaces on either structure exceed a height of 30 inches, the minimum distance between the structures shall be 9 feet.

da) Use zones shall be free of obstacles.

§426014. Inspection and Grading.

(a) Access.

(1) An employee or representative of the Department shall, after proper presentation of credentials, have access to all parts of the playground area, at any reasonable time for the purpose of making inspections and shall allow for the examination and copying of any and all records pertinent to its operation to determine compliance with these rules and regulations. Denial of access shall be cause for suspension of the Institutional Playground Permit.

(2) The person in charge of the child care facility or school shall ensure that he/she, or a designee, is present during inspections of the playground by the Department.

(b) Frequency of Inspections.

As often as may be deemed necessary, the Director shall inspect the playground, and may inspect every playground equipment, or activities subject to these rules and regulations.

(c) Report of Inspections.

Whenever an inspection of a playground is conducted, the findings shall be recorded on a form authorized by the Director, shall summarize the requirements of these rules and regulations, and shall set forth a demerit value for each requirement. Demerit value assignments shall be from one through six. Inspection remarks shall be written to reference, by section number, the section violated and shall state the correction to be made. The rating score of the establishment shall be the total of the demerit values for all violations. A copy of the completed inspection report form shall be issued to the operator of the establishment at the conclusion of the inspection. The completed form is a public document that shall be made available for public disclosure to any person who requests it according to law.

(d) Grading.

(1) A demerit score, ranging from 6 points to 1 point, shall be assigned for each violation, which shall be indicated in the inspection report.

(2) Grades of an institutional playground shall be as follows:

(A) Grade A: An institutional playground having a total demerit score of not more than ten;

(B) Grade B: An institutional playground having a total demerit score of more than ten but not more than twenty;

(C) Grade C: An institutional playground having a total demerit score of more than twenty but not more than forty; and

(D) Grade D: An institutional playground having a total demerit score of more than forty.

(3) The Department shall issue a placard reflecting the letter grade of the most recent inspection.

(4) The Department shall establish a specific and reasonable period of time for correction of the violations found, in accordance with the following provision:

(A) When the demerit score of the establishment is twenty or less, all violations of one through five demerits must be corrected within a period of time not to exceed 30 days; or

(B) When the demerit score of the establishment is more than twenty but less than forty-one, all items of one through five demerit points must be corrected within a period of time not to exceed 15 days; or

(C) When one or more six demerit point items are in violation, regardless of demerit score, such items must be corrected within a period of time not to exceed 10 days; and

(D) When the demerit score of the establishment is more than forty, the Institutional Playground Permit shall be immediately suspended.

(5) The operator shall at the time of inspection correct a violation of a critical item of these rules and regulations. Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the Director may agree to or specify a longer time frame, not to exceed 10 calendar days after the inspection, for the operator to correct violations of a critical item.

(6) The operator shall correct noncritical violations by a date and time agreed to or specified by the Director but no later than 30 calendar days after the inspection. The Director may approve a compliance schedule that extends beyond this time limit if a written schedule of compliance is submitted by the operator and no health hazard exists or will result from allowing an extended schedule of compliance.

(e) Except as specified in (f) of this section, an operator shall immediately discontinue operations and notify the Department if an imminent health hazard may exist because of an emergency such as a fire, flood, extended interruption of electrical or water service, sewage backup, misuse of poisonous or toxic materials, gross insanitary occurrence or condition, or other circumstance that may endanger public health.

(f) An operator need not discontinue operations in an area of a playground that is unaffected by the imminent health hazard.

(g) Failure to report an imminent health hazard to the Department may result in immediate suspension of the permit.

(h) Posting.

The Inspection Report and Letter Grade Placard shall be posted in a conspicuous area designated by the Director. No person other than the Director shall remove, deface, destroy or conceal such report and placard. The original inspection report shall be retained by the Director. Failure to post, or its unauthorized removal, will result in the issuance of the appropriate demerit point(s).

(i) Appeal.

A child care facility or school shall have an opportunity to appeal any notice or inspection findings of the Department if a written request for a hearing is filed with the Director within the period of time established in the Department's notice or report.

§426015. Hearing.

If any provision or the application of any provision of these regulations is held invalid, that invalidity shall not affect other provisions or applications of these rules and regulations.

(a) A child care facility or school whose Institutional Playground Permit is to be suspended or revoked shall be notified by the Director in writing of the Department's intention and the reasons therefore.

(b) A child care facility or school that receives a notice of violation with intent to suspend or revoke as described in §426016 and that wishes to contest shall request a hearing with the Director in writing no later than 15 calendar days after receipt of the notice and shall state the grounds for objecting to the intended suspension or revocation.

(c) Upon completion of a hearing, the Director shall make a written determination concerning the violation and whether a suspension or revocation is to be imposed.

§426016. Suspension or Revocation of Institutional Playground Permit.

(a) The Director may suspend or revoke any Permit issued under the provisions of Title 10 GCA, Chapter 21, § 21109, or any rules and regulations promulgated concerning Institutional Facilities.

(b) Suspension of a permit may be imposed without prior hearing in the discretion of the Director by giving written notice thereof to the holder, in which case, the holder shall have 5 days within which to request a hearing. Suspension without prior hearing may be imposed for such time until the violation is corrected; or may by imposed as a penalty for repeated violations, in

which case, it shall not exceed 5 days; or may be imposed pending a hearing under subsections (c) or (d) of this section. When a hearing is requested following a suspension without prior hearing, it shall be discretionary with the Director as to whether the suspension shall be continued pending the hearing.

(c) Suspension of a permit may occur following a hearing. Suspension may be imposed for such time until the violation is corrected or may be imposed as a penalty for repeated violation, in which case, it shall not exceed 6 months.

(d) A revocation may occur following a hearing conducted in accordance with the provisions of the Administrative Adjudication Law (Title 5 GCA, Chapter 9).

(e) Following a hearing, a judicial review of the Director's decision may be held in accordance with the provisions of the Administrative Adjudication Law (Title 5 GCA, Chapter 9). Pending a final determination of such judicial review, it shall be discretionary with the Superior Court of Guam to stay the enforcement of the order of suspension or revocation upon the furnishing of adequate bond.

§426017. Suspension without Hearing.

(a) An Institutional Playground Permit may be suspended without prior hearing:

(1) If the permit holder denies the Director access to areas and equipment governed by these rules and regulations.

(2) When the demerit score of the institutional playground is more than 40;

(3) At the discretion of the Director for violating any provisions of these rules and regulations; and

(4) For twice violating the same requirement deemed critical (violation with 6 demerit point) under these rules and regulations within any six-month period, in which case, it shall not exceed 5 days.

(b) A suspension without prior hearing may remain in effect until the violation is corrected by the child care facility or school. The Director shall have the discretion to decide whether the suspension shall be continued pending a hearing.

§426018. Reinstatement of Institutional Playground Permit.

When the holder of an Institutional Playground Permit believes that corrections have been made of the cited violation(s) upon his premises or some other violation for which his permit has been suspended, he may make application to the Director for reinstatement of the permit. This application may be in the form of a letter. Upon the receipt of such application, the Director shall make an inspection of the premises. If the findings of this inspection show that the violation has been corrected, the Director may, in his discretion, reinstate the permit, but shall reinstate the permit where suspension was imposed for such time until violations were corrected.

§426019. Revoked Institutional Playground Permit May Not Be Reinstated.

When an Institutional Playground Permit has been revoked, it no longer has any validity and may not be reinstated except upon order of a court.

§426020. New Institutional Playground Permit Barred for Two Years.

No person whose permit has been revoked shall be eligible to obtain a new permit for a period of two years.

§426021. Ceasing of Operations.

The Director shall order a child care facility or school to immediately cease operation of the playground and use of any specific playground equipment whenever he finds that the

playground or playground equipment jeopardizes the health and safety of the people. Operations for that particular location of playground or playground equipment shall not be resumed until authorized by the Department.

§426022. Closing and Notification to Chief of Police.

(a) The Director shall enforce the closing of any child care facility, school, or activity whose permit has been suspended or revoked. Upon the request of the Director, the Chief of Police shall provide police personnel to enforce such closing.

(b) The Director shall notify the Chief of Police of any suspension or revocation of an Institutional Playground Permit.

§426023. Closure to Be Posted.

Whenever any establishment requiring a permit is closed by the Director, the Director shall post a notice, easily visible to the public, stating that said establishment is closed by order of the Director.

§426024. Administrative Penalties.

(a) The Director may impose a fine payable to the "Treasurer of Guam" for any operator that operates without a valid Institutional Playground Permit. The monetary fine for this administrative violation shall be charged to the operator based on the following:

(1) A fine not less than One Thousand Dollars ($1,000) per violation, but not exceeding Five Thousand Dollars ($5,000), for operating without a valid Institutional Playground Permit.

(2) For §426024 (a) (l) above, the Department shall treat each additional day as a separate violation per day of continuing violation.

(b) The Director shall issue a notice of violation and administrative penalty against an operator and provide an opportunity to request a hearing on the proposed penalty. The request must be made within 10 days of the date that the notice is served upon the operator.

(c) Any operator may seek review of any administrative penalty imposed before the Superior Court of Guam. Such review shall be upon the record established before the Director and not de novo. The Superior Court may sustain, modify or vacate any administrative penalty it reviews.

(d) If any operator fails to comply with an administrative penalty order after it has become final, the Attorney General shall bring a civil action to enforce the order and to recover the amount ordered or assessed, plus current interest from the date of the final order or decision. To prevail in such an action, the Director need establish only that:

(1) Notice was given as required;

(2) A hearing was granted to the defendant or that the defendant requested no hearing; and

(3) The penalty was imposed and has become final either because the administrative order was not appealed to the Superior Court, or that after judicial review the administrative order remains an unsatisfied obligation.

§426025. Variance.

In the event that an establishment or person is unable to comply with certain requirements of these rules and regulations, upon a showing of good cause which is not the result of negligence or malfeasance, the Director may grant a variance from the requirements of a particular rule by making a written determination. Before a variance from a requirement of these rules is approved, the child care facility or school shall first submit a written statement of the proposed variance from

the requirement citing relevant section number(s). The written statement shall include an alternate plan to address the potential public health hazards and nuisances under the relevant rule sections. The Director, not his/her representative, is delegated the authority to approve such variance.

§426026. Effective Date.

These rules and regulations are effective immediately upon adoption; however, existing child care facility and schools have 730 calendar days from the date of adoption to fully comply.

§426027. Severability.

If any provision of these rules and regulations or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall not affect other provisions or applications of these regulations which can be given effect without the invalid provisions or application, and to this end the provisions of these regulations are severable.

APPENDIX A: SUGGESTED GENERAL MAINTENANCE CHECKLISTS

DATE OF INSPECTION: _____

Surfacing §426009(d)

- ☐ Adequate protective surfacing under and around the equipment.
  - ☐ Install/replace surfacing
- ☐ Surfacing materials have not deteriorated.
  - ☐ Replace surfacing
  - ☐ Other maintenance: _____
- ☐ Loose-fill surfacing materials have no foreign objects or debris.
  - ☐ Remove trash and debris
- ☐ Loose-fill surfacing materials are not compacted.
  - ☐ Rake and fluff surfacing
- ☐ Loose-fill surfacing materials have not been displaced under heavy use areas such as under swings or at slide exits.
  - ☐ Rake and fluff surfacing

Drainage §426009(a)(4)

- ☐ The entire play area has satisfactory drainage, especially in heavy use areas such as under swings and at slide exits
  - ☐ Improve drainage
  - ☐ Other maintenance: _____

Playground Hazards

- ☐ There are no sharp points, corners or edges on the equipment §426010(d).
- ☐ There are no missing or damaged protective caps or plugs §426010(d)(1).
- ☐ There are no hazardous protrusions §426013(e)(12)(G) and (Appendix B).
- ☐ There are no potential clothing entanglement hazards, such as open S-hooks or protruding bolts §426009(e)(2) §426010(b), §426013(e)(12), and (Appendix B)
- ☐ There are no crush and shearing points on exposed moving parts §426010(a).
- ☐ There are no trip hazards, such as exposed footings or anchoring devices and rocks, roots, or any other obstacles in a use zone §426010(f).

NOTES

Security of Hardware §426009(e)(2)

- ☐ There are no loose fastening devices or worn connections
  - ☐ Replace fasteners
  - ☐ Other maintenance _____
- ☐ Moving parts, such as swing hangers merry-go-round bearings, and track rides are not worn
  - ☐ Replace part
  - ☐ Other maintenance _____

Durability of Equipment §426009(e)(1)

- ☐ There are no rust rot cracks or splinters on any equipment (check carefully where it comes in contact with the ground).
- ☐ There are no broken or missing components on the equipment (e.g., handrails guardrails, protective barriers, steps, or rungs)
- ☐ There are no damaged fences benches or signs on the playground
- ☐ All equipment is securely anchored

Leaded Paint §426009(e)(4)

- ☐ Paint (especially lead paint) is not peeling, cracking, chipping, or chalking.
- ☐ There are no areas of visible leaded paint chips or accumulation of lead dust
- ☐ Mitigate lead paint hazards

Playground Maintenance §426011

- ☐ There are no user modifications to the equipment, such as strings and ropes tied to equipment, swings looped over top rails, etc
  - ☐ Remove string or rope
  - ☐ Correct other modification
- ☐ The entire playground is free from debris or litter such as tree branches, soda cans, bottles glass, etc
  - ☐ Clean playground
- ☐ There are no missing trash receptacles
  - ☐ Replace trash receptacle
- ☐ Trash receptacles are not full
  - ☐

Empty trash

INSPECTION BY _____

Routine Inspection and Maintenance Issues

- ☐ Broken equipment such as loose bolts, missing end caps, cracks, etc.
- ☐ Broken glass & other trash
- ☐ Cracks in plastics
- ☐ Loose anchoring
- ☐ Hazardous or dangerous debris
- ☐ Insect damage
- ☐ Problems with surfacing
- ☐ Displaced loose-fill surfacing - See Section 426011(c)
- ☐ Holes, flakes, and/or buckling of unitary surfacing
- ☐ User modifications (such as ropes tied to parts or equipment rearranged)
- ☐ Vandalism
- ☐ Worn, loose, damaged, or missing parts
- ☐ Wood splitting
- ☐ Rusted or corroded metals
- ☐ Rot

Annex 1

Public Health Reasons

Institutional playground equipment is for use by children ages 6 months through 12 years in the playground areas of childcare facilities and schools. To ensure that each playground equipment is age appropriate, durable, and meet the standards of the U.S. Consumer Product Safety Commission (CPSC) and meet the recommendations of the Americans with Disabilities Act (ADA), the Division of Environmental Health of the Department of Public Health and Social Services (DPHSS) adopted the Rules and Regulations Governing Institutional Playgrounds, which mirrors the U.S. Consumer Product Safety Commission Handbook for Public Playground Safety[1].

Playgrounds that are properly constructed and maintained may reduce the risk of accidents and injuries. According to the Centers for Disease Control Prevention (CDC), approximately 75% of injuries related to playground equipment occur on public playgrounds[2]. Most occur at schools and daycare centers. Approximately 60% of the injuries are severe and result in hospitalization or death. The most prevalent injuries are fractures and contusions/abrasions, which account for 51% of all injuries[3].

§426005. Institutional Playground Permit.

Issuance of an Institutional Playground Permit confirms that the facility has been inspected and meets the minimum requirements of these regulations. Furthermore, the Institutional Playground Permit authorizes DPHSS to enter the permitted playground area to conduct an inspection of the playground and playground equipment in the enforcement for these regulations and applicable law. By applying for an Institutional Playground Permit, knowing that such an

inspection may be called for, the operator gives implied consent to the inspection and is considered to have surrendered the right to object to an inspection in return for the grant of the Institutional Playground Permit.

An updated floor plan, not necessarily drawn to scale, shows the relationship between the playground area, playground equipment, and other physical features of the playground area. This is necessary to facilitate ease of inspection and egress. All playgrounds are expected to comply with other regulatory codes.

§426009. General Playground Considerations.

§426009(a)(1). Size and Location.

The requirement for a minimum of 75 sq. ft. per child of outdoor recreational area to be occupied by grades kindergarten through twelfth grade allows for freedom of movement without collisions among active children. Providing more square feet per child may correspond to a decrease in the number of injuries associated with gross motor play equipment[4], such as swings and climbers.

The space requirement of 75 sq. ft. per child is only applicable during recess or playtime when a portion of the childcare facility or school population makes use of the recreational area. Compliance to this requirement will be determined by the total number of children using that area at a given time, and not by the total occupancy.

§426009(a)(3). Shading.

According to the American Academy of Dermatology, one in five Americans will develop some form of skin cancer during their lifetime, and five or more sunburns double the risk of developing skin cancer[1]. Utilizing existing shade (e.g., trees), designing play structures as a means

for providing shading (e.g., elevated platforms with shaded space below), or creating more shade (e.g., man-made structures) are potential ways to design a playground to help protect children's skin from the sun. The shade will provide comfort and prevent sunburn. Access to sun and shade is beneficial to children while they play outdoors[5].

§426009(b)(1). Age Separation.

The areas should be separated at least by a buffer zone, which could be an area with shrubs or benches. This separation will reduce the chance of injury from older, more active children running through areas filled with younger children with generally slower movement and reaction times.

§426009(b)(4). Signage and/or Labeling.

Playground signs and labels provide important information to adults to help keep children safe. Although the intended user group should be obvious from the design and scale of equipment, signs and/or labels posted in the playground area, or on the equipment, should give some guidance to supervisors as to the age appropriateness of the equipment. Table 1 below provides examples of age appropriate equipment.

EXAMPLES OF AGE APPROPRIATE EQUIPMENT		
Toddler — Ages 6-23 months • Climbing equipment under 32" high • Ramps • Single file step ladders • Slides • Spiral slides less than 360° • Spring rockers • Stairways • Swings with full bucket seats	**Preschool — Ages 2-5 years** • Certain climbers • Horizontal ladders less than or equal to 60" high for ages 4 and5 • Merry-go-rounds • Ramps • Rung ladders • Single file step ladders • Slides • Spiral slides up to 360° • Spring rockers • Stairways • Swings – belt, full bucket seats (2-4 years) & rotating tire	**Grade School — Ages 5-12 years** • Arch climbers • Chain or cable walks • Free standing climbing events with flexible parts • Fulcrum seesaws • Ladders – Horizontal, Rung, & Step • Overhead rings • Merry-go-rounds • Ramps • Ring treks • Slides • Spiral slides more than one 360° turn • Stairways • Swings – belt & rotating tire • Track rides • Vertical sliding poles

Table 1.

§426009(b)(5). Supervision.

The quality of supervision of children at play will depend on the quality of the supervisor's knowledge of safe play behavior. Playground supervisors need to be aware of the type of supervision most likely needed for their playground. Playground supervisors need to be aware that not all playground equipment is appropriate for all children who may use the playground. Supervisors should look for posted signs indicating the appropriate age of the users and direct children to equipment appropriate for their age. Toddlers and preschool-age children require more attentive supervision than older children; however, one should not rely on supervision alone to prevent injuries. Supervisors shall understand the basics of playground safety such as:

(a) Checking for broken equipment and ensuring children do not play on it.

(b) Checking for and removing unsafe modifications, especially ropes tied to equipment, before letting children play.

(c) Checking for properly maintained protective surfacing.

(d) Making sure children are wearing foot wear.

(e) Watching and stopping dangerous horseplay, such as throwing protective surfacing materials, jumping from heights, etc.

(f) Watching for, and stopping, children from wandering away from the play area.

The number of children per staff member, excluding staff for cooking, housekeeping, and maintenance, shall not exceed the staff ratios as specified in §426009(b)(5) of the regulations.

§426009(c). Selecting Equipment.

When selecting playground equipment, it is important to know the age range of the children who will be using the playground. Children at different ages and stages of development have different needs and abilities. Playgrounds should be designed to stimulate children and encourage them to develop new skills but should be in scale with their sizes, abilities, and developmental levels. Consideration should also be given to providing play equipment that is accessible to children with disabilities which encourages integration within the playground. Play equipment and play surfaces should conform to recommendations from the American with Disabilities Act (ADA). Such play equipment and play surfaces that are safe and accessible to children with disabilities will encourage all children to play together on the playground.

Having well-designed, age-appropriate play equipment lessens injuries. Playgrounds designed for older children might present inherent hazards to pre-school age children. Equipment that is sized for larger and more mature children poses challenges that younger, smaller, and less mature children may not be able to meet.

§426009(d)(2). Selecting a Surfacing Material.

The number one cause of injury on playgrounds is falls to the surface. The surfacing under and around playground equipment is one of the most important factors in reducing the likelihood of life-threatening head injuries. Maintaining the correct depth of loose-fill material is crucial for safety. A fall onto a shock absorbing surface is less likely to cause a serious head injury than a fall onto a hard surface. However, some injuries from falls, including broken limbs, may occur no matter what playground surfacing material is used. Safety standards regarding playground surfacing may be found in ASTM F1292, which may also be purchased from ASTM International. Figure 1 shows examples of appropriate and inappropriate surface materials. Appropriate surfacing is any material tested to ASTM F1291 standard, including unitary surfaces, engineered wood fiber, etc., pea gravel, sand, shredded or recycled rubber mulch, wood mulch (not CCA-treated), and wood chips. Inappropriate surfacing is any asphalt, carpet not tested to ASTM F1291 standard such as concrete, dirt, grass, and CCA treated wood mulch.

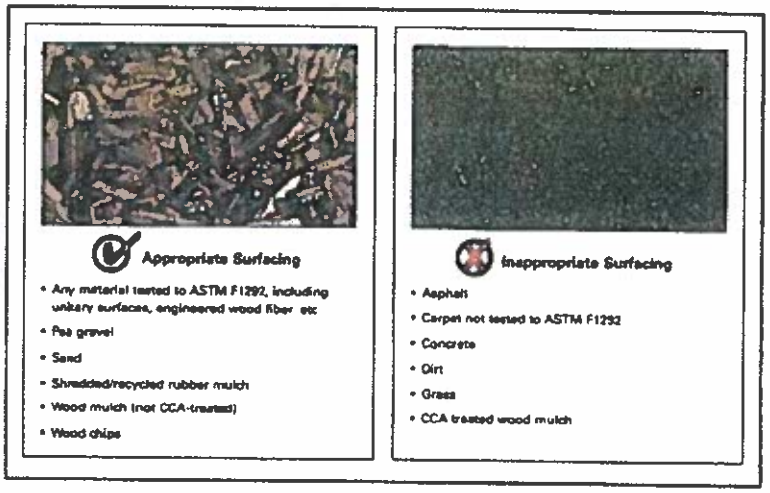


Figure 1.

§426009(e)(5). Wood.

There is recent concern for the use of wood-preserving chemicals in the manufacture and construction of play structures. There is a wide range of opinions as to the possibility that the most

common preservative, Chromated Copper Arsenate (CCA), poses a health risk to those using playgrounds constructed of CCA-preserved wood. The Consumer Product Safety Commission has published an informative report regarding this issue[6].

Because wood is an irritating substance, different woods have different degrees of irritation. The combination of chemical and wood irritation may lead to an adverse reaction. Some effects that can be associated with pressure-treated wood are irritation of skin, eyes, nose or throat[7].

When selecting wood products and finishes for playgrounds, CPSC staff recommends:

(a) Avoid "film-forming" or non-penetrating stains (latex semi-transparent, latex opaque and oil-based opaque stains) on outdoor surfaces.

(b) Creosote, pentachlorophenol, tributyl tin oxide, and chromated copper arsenate (CCA), are too toxic or irritating and shall not be used as preservatives for playground equipment wood.

(c) Pesticide-containing finishes shall not be used.

(d) CCA-treated wood shall not be used as playground mulch.

§426010. Playground Hazards.

§426010(a). Crush and Shearing Points.

Crush and shear points can be caused by parts moving relative to each other or to a fixed part during a normal use cycle, such as a seesaw. Components in the play area should be inspected to make sure there are no sharp edges or points that could penetrate skin. Moving components such as merry-go-rounds, seesaws and swings should be checked to ensure there are no moving parts or mechanisms that might crush a child's finger.

§426010(b) Entanglement and Impalement.

Children may be injured by protruding, incorrectly installed, or malfunctioning devices on play equipment. A protrusion hazard is a component or a piece of hardware that is capable of impaling or cutting a child, if a child should fall against a hazard. Some protrusions are also capable of catching strings or items of clothing worn around a child's neck. This type of entanglement is especially hazardous because it might result in strangulation. Examples of entanglement and impalement hazards include:

- Bolts that extend more than two threads beyond the face of the nut as shown in Figure 2.
- Hardware configurations that form a hook or leave a gap or space between components as shown in Figure 3.
- Open "S" type hooks.
- Rungs or handholds that protrude outward from a support structure that may be capable of penetrating the eye socket.

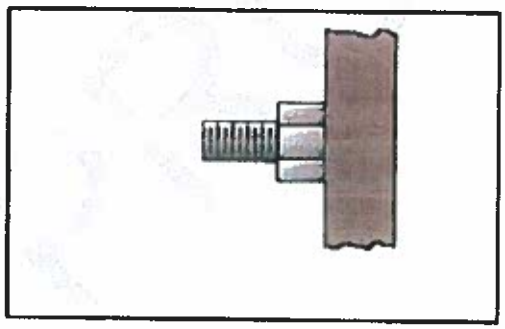


Figure 2.

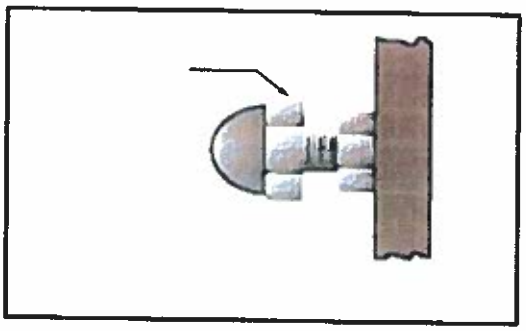


Figure 3.

§426010(b)(3)(A). Strings and Ropes.

Drawstrings on hoods of jackets, sweatshirts, and other upper body clothing can become entangled in playground equipment and can cause death by strangulation. The U.S. Consumer Product Safety Commission (CPSC) has received reports of deaths when these items became caught on the playground equipment, especially slides and swings. These items included strings on clothing (such as hoods and attached mittens), loose clothing (such as scarves and ponchos), and other items (such as jump ropes) placed around the neck, which caught on protrusions, open-ended hooks, gaps, and other parts of playground equipment. Figure 4, or a similar sign or label, can be placed on or near slides or other equipment where potential entanglements may occur.

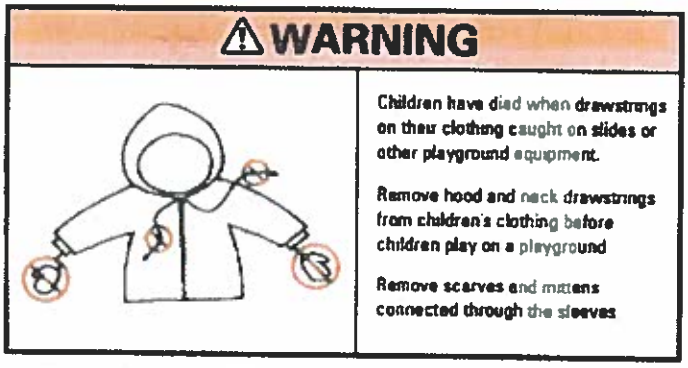


Figure 4.

§426010(c)(1). Head Entrapment.

Head entrapment is a serious concern on playgrounds since it could lead to strangulation and death. A child's head may become entrapped if the child enters an opening either feet-first or head-first. Head entrapment by head-first entry generally occurs when children place their heads through an opening in one orientation, turn their heads to a different orientation, then are unable to get themselves out.

Head entrapment by feet-first entry involves children who generally sit or lie down and slide their feet into an opening that is large enough to permit their bodies to go through but is not large enough to permit their heads to go through. There have been recent head entrapment incidents in which children wearing their bicycle helmets became entrapped in spaces that would not normally be considered a head entrapment.

Certain openings could present an entrapment hazard if the distance between any interior opposing surfaces is greater than 3.5 inches and less than 9 inches. When one dimension of an opening is within the range, all dimensions of the opening should be considered together to evaluate the possibility of entrapment. Younger children may not have the necessary intellectual ability or motor skills to reverse the process that caused their heads to become trapped, especially if they become scared or panicked.

Figure 5 shows examples of entrapment below a barrier and between the vertical bars of a barrier.

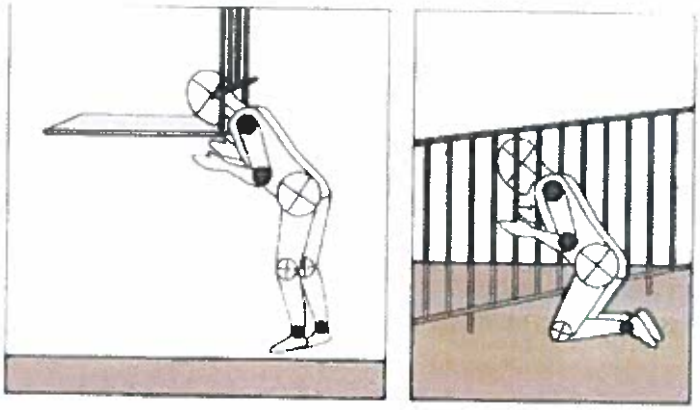


Figure 5.

§426010(c)(2). Partially Bound Openings and Angles.

Children can also become entrapped in partially bound openings, such as those formed by two or more playground parts. V-shaped openings are found on picket fences and at the tops of

certain old metal slides. To prevent entanglement on this type of equipment, its openings should be modified to form angles wider than 55 degrees. Figure 6 shows an example of an entrapment in an angle less than 55 degrees on a fort.

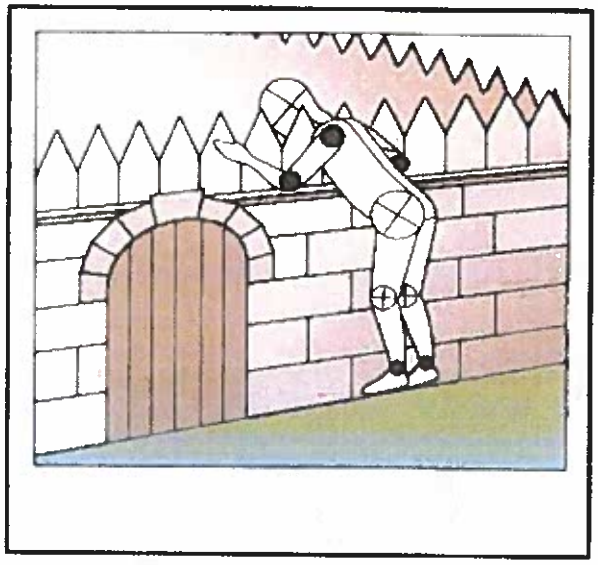


Figure 6.

§426010(d). Sharp Points, Corners, and Edges.

Ensure that sharp points, corners, and edges are not exposed. Sharp points, corners, or edges on any part of the playground or playground equipment may cut or puncture a child's skin. Sharp edges can cause serious lacerations if protective measures are not taken.

§426010(e). Suspended Hazards.

Children using a playground may be injured if they run into or trip over suspended components such as cables, wires, ropes, or other flexible parts connected from one piece of the playground equipment to another or hanging to the ground. These components can become

hazards when they are within 45 degrees of horizontal and are less than 7 feet above the protective surfacing.

§426010(f). Tripping Hazards.

Two common causes of tripping are anchoring devices for playground equipment and containment walls for loose-fill surfacing materials. If not installed properly, anchoring devices such as concrete footings or horizontal bars at the bottom of flexible climbers can sustain additional injuries from impact if they fall on exposed footings.

§426011. Playground Maintenance.

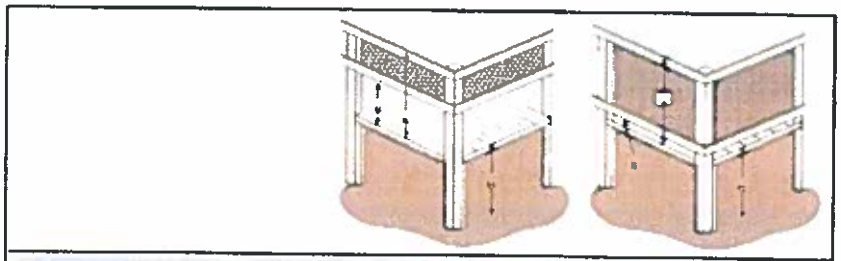
Inadequate maintenance of equipment has resulted in injuries on playgrounds. Because the safety of playground equipment and its suitability for use depend on good inspection and maintenance, the manufacturer's maintenance instructions and recommended inspection schedules should be strictly followed. For each piece of equipment, the frequency of thorough inspections will depend on the type and age of equipment, the amount of use, and the local climate. Regular outdoor inspections are critical to prevent deterioration of equipment and accumulation of hazardous materials within the play site, and to ensure that appropriate repairs are made as soon as possible.

§426012. Parts of the Playground.

§426012(a)(4). Guardrails and Protective Barriers.

Guardrails and protective barriers are used to minimize the likelihood of accidental falls from elevated platforms. Children falling from elevated play areas may suffer fatal head injuries. Guardrails are designed to protect against falls from elevated surfaces, but do not discourage

climbing or protect against climbing through or under. Protective barriers provide a greater protection as they should prevent children climbing over or through barrier. Guardrails and barrier recommendations are shown in Figure 7.



	Guardrail	Barrier
Protects against accidental falls from platform	Yes	Yes
Discourages Climbing over	No	Yes
Protects against climbing through	No	Yes
Toddlers		
A Top edge distance from platform	Not recommended	A = 24" or higher
B Bottom edge distance from platform	Not recommended	B < 3"
H Recommended when platform fall height is	Not recommended	H = 18" or higher
Preschool-age		
A Top edge distance from platform	A = 29" or higher	A = 29" or higher
B Bottom edge distance from platform	9" < B < 23"	B < 3.5"
H Recommended when platform fall height is	20" < H < 30"	H = 30"
School-age		
A Top edge distance from platform	A = 38" or higher	A = 38" or higher
B Bottom edge distance from platform	9" < B < 28"	B < 3.5"
H Recommended when platform fall height is	30" < H < 48"	H = 48"

Figure 7.

§426012(b)(2). Rungs and Other Hand Gripping Components.

Unlike steps of stairways and step ladders that are primarily for foot support, rungs can be used for both foot and hand supports. For toddlers, handrails or other means of hand support with a diameter or maximum cross-section of 0.90 inches is preferred to achieve maximal grip strength and benefit the weakest children.

For preschool-age and school-age, rungs, handrails, climbing bars, or other means of hand support intended for holding with a diameter or maximum cross-section of 1.25 inches is preferred to achieve maximal grip strength and benefit the weakest children.

§426012(b)(3). Handrails.

Falling and tripping, particularly on the stairs, is one of the common causes of accidents. The best way to prevent accidents on stairs is to provide handrails on both sides regardless of the height of the access. Handrails on stairways and step ladders are intended to provide hand support, stability, and to prevent injurious falls.

§426012(c)(1). Balance Beams.

Balance beams can add an element of risk to a playground. The possibility of falling off provides an element of unpredictability to play. Children using balance beam must utilize skill that can be difficult for children, and thus, they may fall off at times. This is why it is important to follow the fall height of a balance beam.

§426012(c)(2). Climbing and Upper Body Equipment.

Climbing equipment is generally designed to present a greater degree of physical challenge than other equipment on public playgrounds. This type of equipment requires the use of the hands to navigate up or across the equipment. "Climbers" refers to a wide variety of equipment, such as but not limited to Figures 8, 9, 10, and 11.

Geodesic Dome Climber

Figure 8.

Simple Arch Climber

Figure 9.

Overhead Horizontal Ladder

Figure 10.

Overhead Loop Ladder

Figure 11.

§426013. Design Considerations.

§426013(d). Use Zone

Injuries from falls are more likely to occur when equipment spacing is inadequate. All equipment should be arranged so that children playing on one piece of equipment will not interfere with children playing on or running to another piece of equipment. Collisions between children utilizing different pieces of equipment more often occur when equipment is inappropriately placed. Ample space to enable movement around and use of equipment also helps to restrict the number of pieces crowding and reducing the potential for injury. The use zone surrounding a freestanding arch climber is shown in Figure 12.

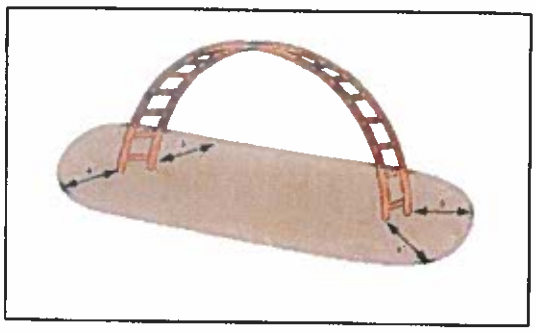


Figure 12.

§426013(e)(1). Arch Climbers.

Arch Climbers consist of rungs attached to convex side supports. They may be free standing as shown in Figure 13 or be provided as a more challenging means of access to other equipment as shown in Figure 14.

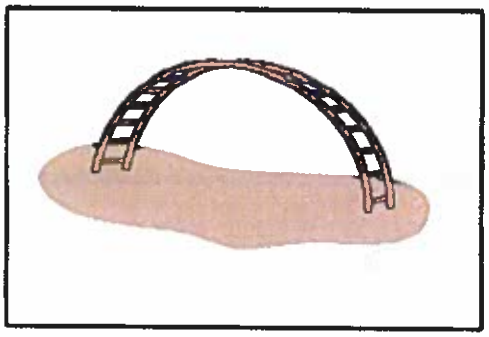


Figure 13. Freestanding arch

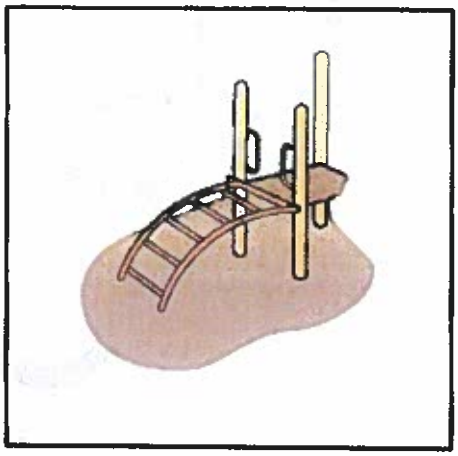


Figure 14. Arch climber

§426013(e)(2). Flexible Climbers.

Flexible climbers use a grid of ropes, chains, cables, or tires, for climbing. Entrapment hazard is identified when the perimeter of the net openings is between 17 inches and 28 inches. The perimeter of any opening in a net structure should be less than 17 inches or greater than 28 inches. Figure 15 shows the entrapment hazards in flexible climbers.

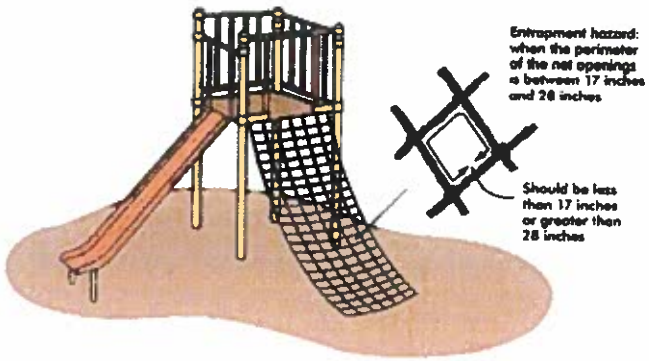


Figure 15.

§426013(e)(7). Log Rolls.

Log rolls help older children master balance skills and increase strength. Children must balance on top of the log as they spin it with their feet. An example of a log roll is shown in Figure 16.

Figure 16.

§426013(e)(8). Merry-Go-Rounds.

Merry-go-rounds are the most common rotating equipment found on playgrounds. Merry-go-rounds may present a physical hazard to preschool-age children who have little or no control over such products once they are in motion. Therefore, children in this age group should always

be supervised when using merry-go-rounds. Figure 17 shows the minimum and maximum radii of a merry-go-round platform.

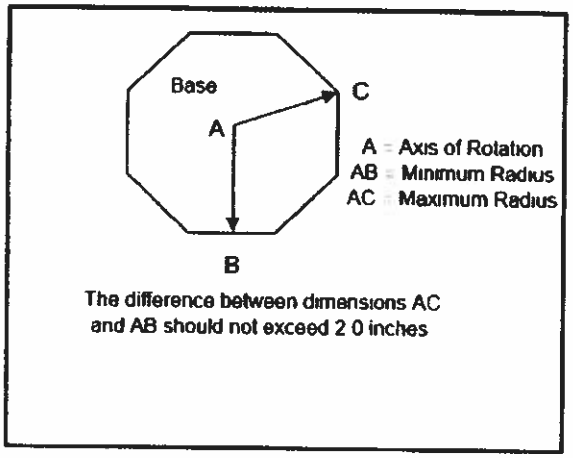


Figure 17.

§426013(e)(9). Fulcrum Seesaws.

Partial car tires, or some other shock-absorbing material, shall be embedded in the ground underneath the seats, or secured on the underside of the seats to help prevent limbs from being crushed between the seat and the ground, as well as cushion the impact. A typical Fulcrum Seesaw is shown in Figure 18.

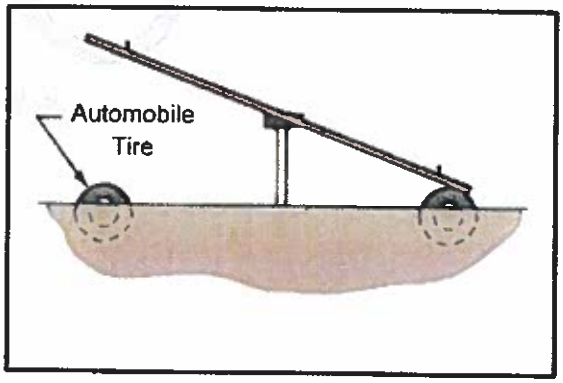


Figure 18.

§426013(e)(10). Slides.

The CPSC knows of incidents in which children suffered second and third degree burns to their hands, legs, and buttocks when they sat on metal stairs, decks, or slides. Young children are most at risk because, unlike older children who react quickly by pulling away their hands or by getting off a hot surface, very young children may remain in place when they contact a hot surface. Placing metal equipment (such as slides) in the shade prevents the buildup of heat on play surfaces.

§426013(e)(10)(E)(iii)(aa). Straight Slides.

Figure 19 shows the minimum side height for slide with circular cross section.

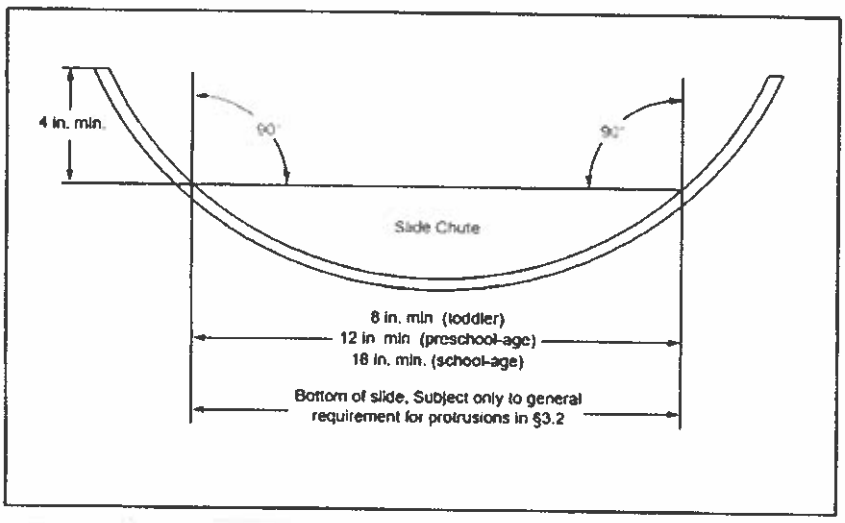


Figure 19.

§426013(e)(10)(E)(iii)(ba). Straight Slides.

Figure 20 shows the formula for the minimum vertical side height for a slide with a curved chute.

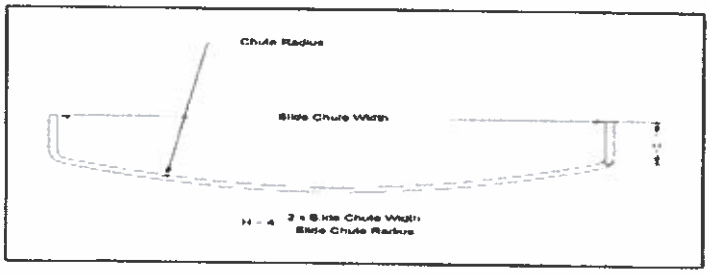


Figure 20.

§426013(e)(10)(E)(iii)(ba)(1). Straight Slides.

Figure 21 shows the slide slope which is the ratio of the height of the platform to the horizontal length.

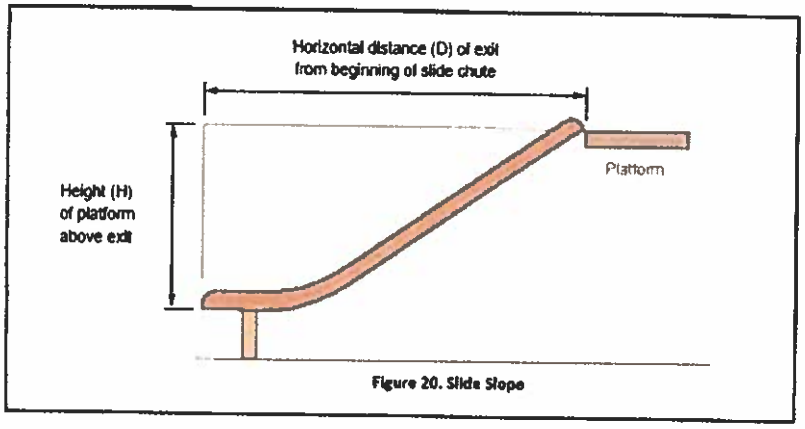


Figure 21.

§426013(e)(10)(H)(i)(ba). Slide Use Zone.

All fixed equipment shall have a minimum of six feet use zone (clearance space) from walkways, buildings, and other structures that are not used as part of play activities. Injuries from falls are more likely to occur when equipment spacing is inadequate. Figure 22 shows the use zone for stand-alone slides.

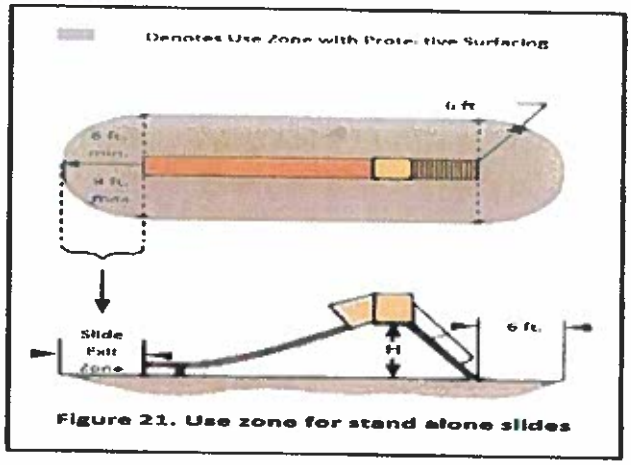


Figure 22.

§4260013(e)(11)(B): Spring Rockers.

Playground injuries often involve pinching, catching, or crushing of body parts or clothing by equipment mechanisms. The springs of rocking equipment shall minimize the possibility of children crushing their hands or their feet between coils or between the spring and a part of the rocker. Figure 23 shows an example of a spring rocker.

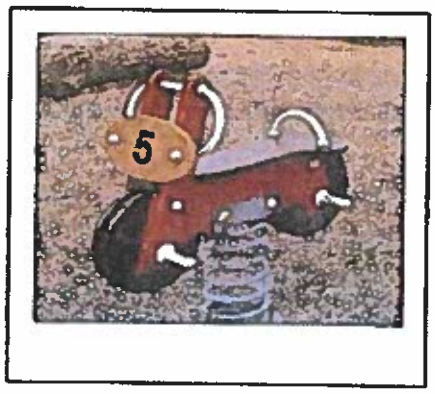


Figure 23.

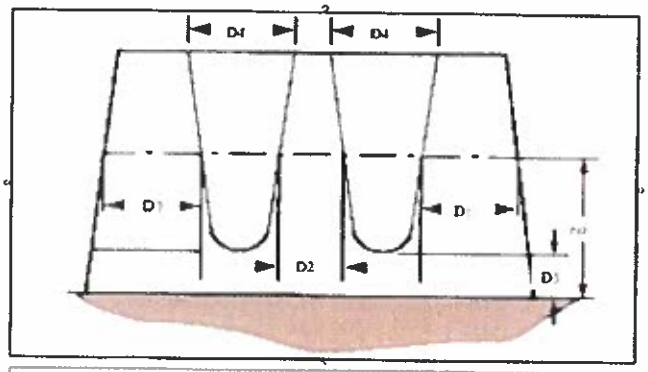
§4260013(e)(12): Swings.

Children of all ages generally enjoy the sensations created while swinging. Mostly they sit on the swings; however, it is common to see children jumping off swings. Younger children also tend to swing on their stomachs, and older children may stand on the seats. To prevent injuries, these behaviors should be discouraged.

§4260013(e)(12)(A)(vi): General Swing Requirements.

There shall be some clearance space between swings and other play structures (including other swings). Swings should have a use zone (clearance space) on the sides of the swing of six feet. The use zone to the front and rear of the swings should extend a minimum distance of twice the height of the pivot point measured from a point directly beneath the pivot to the protective

surface. A use zone area is necessary to avoid body contact with children in swings. Figure 24 shows the minimum clearance dimensions for swings.



Minimum clearance dimensions for swings

Reason	Dimension	Toddler Full bucket	Preschool age Belt	School age Belt
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Figure 24.

§4260013(e)(12)(C). Full Bucket Seat Swings.

Full bucket seat swings are similar to single-axis swings since they move in a to-from direction. However, full bucket seat swings are intended for children under 4 years of age to use with adult assistance. Full bucket seats are recommended to provide support on all sides of a child and between the legs of the occupant. Figure 25 shows an example of full bucket seat swings.

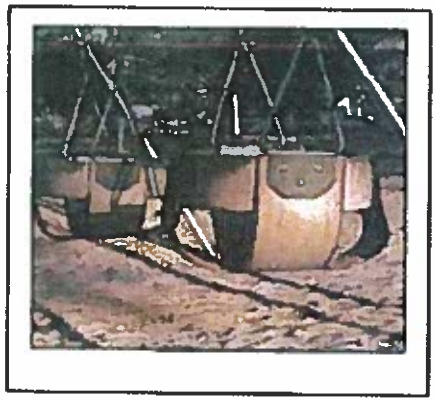


Figure 25.

§4260013(e)(12)(D). Use Zone for Single-Axis Swings – Belt and Full Bucket.

The use zone in front of, and behind, the swing should be greater than to the sides of such a swing since children may deliberately attempt to exit from a single-axis swing while it is in motion. Figure 26 shows the use zone for single-axis belt swings.

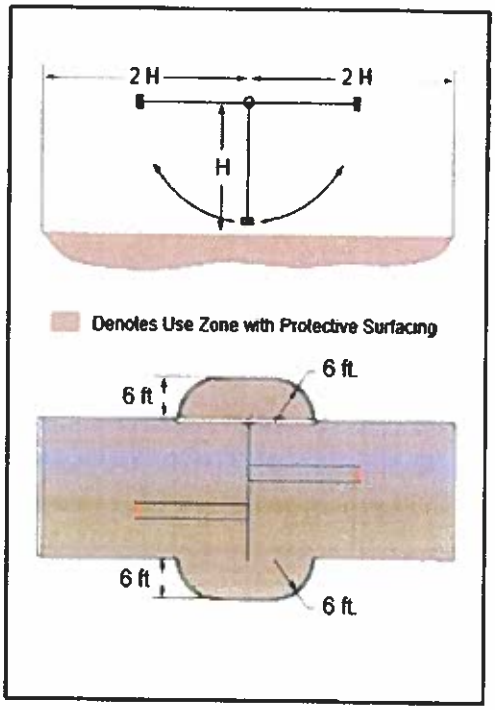


Figure 26.

§4260013(e)(12)(E). Multi-Axis (Tire) Swings.

Tire swings are usually suspended in a horizontal orientation using three suspension chains or cables connected to a single swivel mechanism that permits both rotation and swinging motion in any axis.

The minimum clearance between the seating surface of a tire swing and the uprights of the supporting structure shall be 30 inches when the tire is in a position closest to the support structure. The minimum clearance between the bottom of the seat and the protective surface shall not be less than 12 inches. The multi-axis swing clearance is shown on Figure 27.

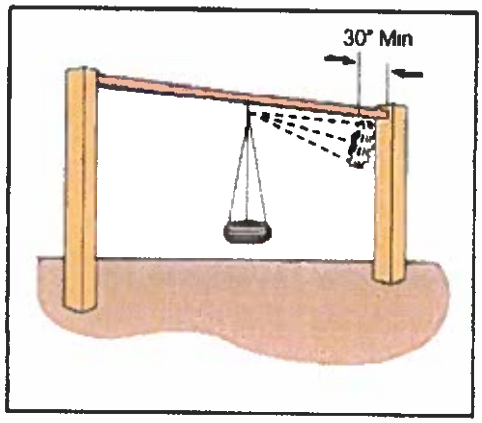


Figure 27.

§4260013(e)(12)(F)(i). Multi-Axis Swing Use Zones.

The use zone shall extend in any direction from a point directly beneath the pivot point for a minimum distance of 6 feet plus the length of the suspending members. This use zone shall never overlap the use zone of any other equipment. If another piece of equipment is in the use zone, a child could come in contact with it and it could cause serious injury. Figure 28 shows the use zone for multi-axis swings.

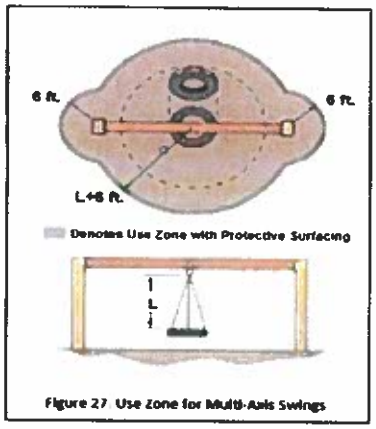


Figure 28.

§4260013(e)(12)(G). Protrusions on Suspended Members of Swing Assemblies.

Protrusions on suspended members of swing assemblies are extremely hazardous because of the potential for impact incidents.

§4260013(e)(13). Fall Height and Use Zones for Composite Structures.

When two or more complementary play components are linked together in a composite structure (e.g., combination climber, slide, and horizontal ladder), the use zone shall extend to a minimum of 6 feet from the external perimeter of the structure. Where slides are attached to a platform higher than 6 feet from the protective surfacing, the use zone shall extend further in front of the slide. The use zones for a composite structure is shown on Figure 29.

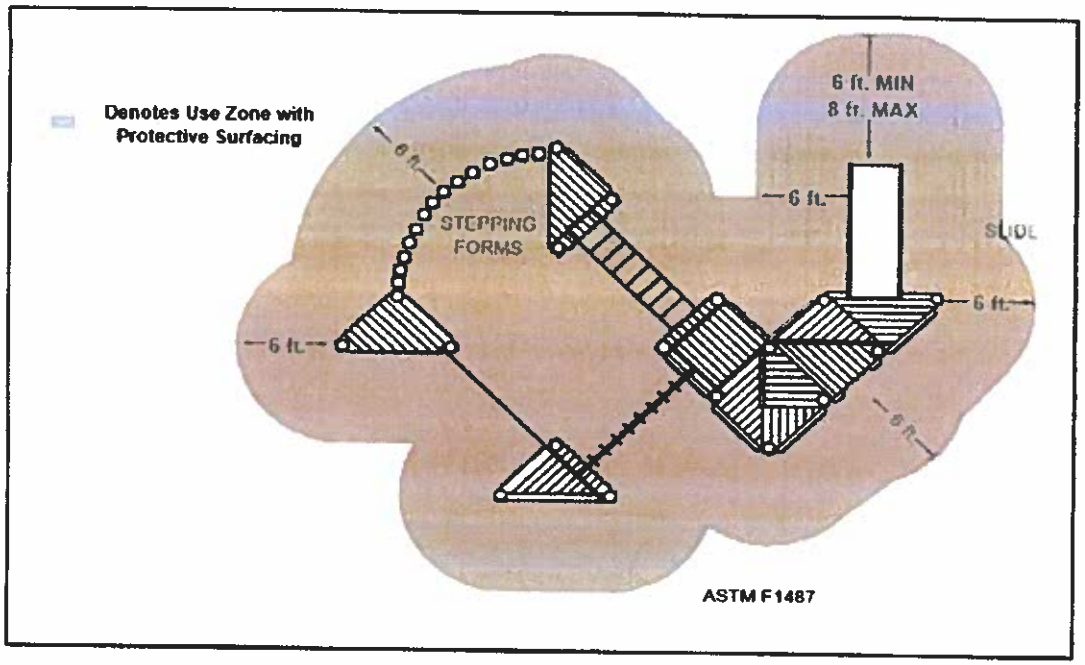


Figure 29.

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