

R381-100-6: OUTDOOR ENVIRONMENT

Purpose

This section provides rules and information about the facilities outdoor play area and equipment.

General Information

Children benefit from being outside and it is important for them to have a safe play area in good repair. Having a well-designed, age-appropriate play area may lessen injuries. Although not required by rule, a monthly safety check of the outdoor play area and equipment is highly recommended.

- (1) **There shall be an outdoor play area for children that is safely accessible to children.**

Rationale / Explanation

The purpose of this rule is to prevent injury to children or a child escaping en route to the outdoor play area. A playground is considered safely accessible if it directly adjoins the building, if there is a fenced walkway from the building to the playground, or another way to ensure that the route from the building to the playground is free of potential hazards. *CFOC 3rd Ed. pg. 265 Standard 6.1.0.1*

Enforcement

Always Level 2 Noncompliance.

Assessment

The purpose of this rule is to ensure that children cannot access streets, parking lots, ditches, etc. when going to the playground. A Licensee can be in compliance with this rule by:

- having a playground that is directly adjacent to the building, so that children exit the building straight onto the playground.
- having a fenced walkway from the building to the playground.
- having the entire area that holds both the building and the playground fenced, provided the area inside the fence does not include parking lots, driveways, or anywhere else cars may be.
- having a playground that can be accessed via a sidewalk, if the sidewalk does not pass through a parking lot, or near a busy street or water hazard.
- blocking off a portion of a parking lot with traffic cones to create a walkway to the outdoor play area.

If the outdoor play area is surrounded by half walls, such as a deck area, with open air from the top of the wall to the roof, it can be considered an outdoor play area with a capacity based on the square footage.

- (2) **The outdoor play area shall have at least 40 square feet of space for each child using the playground at the same time as other children.**
- (3) **The outdoor play area shall accommodate at least 33 percent of the licensed capacity at one time or shall be at least 1600 square feet.**

Rationale / Explanation

The purpose of this rule is to allow children safe freedom of movement during active outdoor play. The American Academy of Pediatrics and the American Public Health Association recommend 75 square feet of outdoor space for each preschooler, 33 square feet for each infant, and 50 square feet for each toddler using the playground at one time. *CFOC, 3rd Ed. pg. 265 Standard 6.1.0.1*

Enforcement

Always Level 3 Noncompliance.

Assessment

These measurements are taken, and capacity determined, at the time of initial licensure. The area is not re-measured on subsequent licensing inspections, unless the outdoor play area appears overly crowded during the inspection.

A Licensee can be in compliance with this rule by having more than one playground, as long as they are all safely accessible and fenced as required by R430-100-6(2)(3)(4).

Because accessible open air is vital for children, indoor space cannot replace outdoor space.

- (4) **The outdoor play area shall be enclosed within a 4 foot high fence or wall, or a solid natural barrier that is at least 4 feet high. When children play outdoors, they must play in the enclosed play area except during off-site activities described in Section R430-100-20(5).**

Rationale / Explanation

The purpose of this rule is to prevent children from leaving the outdoor play area and to prevent their access to streets and other hazards. *CFOC 3rd Ed. pg. 268 Standard 6.1.0.8*

It also serves to keep unwanted people and animals out of the playground.

Enforcement

Level 1 Noncompliance if there is no fence or barrier or the fence or barrier is less than 3 feet high.

Level 3 Noncompliance otherwise.

Assessment

A Licensee will not be considered out of compliance if a fence is less than 4 feet in height due to temporary weather conditions, such as snow on the ground at the base of the fence.

The four foot fence or barrier requirement is to prevent children from escaping the outdoor play area. When there is a perimeter fence which meets the four foot requirement the rule is in compliance. Interior only fences, or fences outside a play area already enclosed by a four foot fence, are not required to meet the four foot measurement.

Fences are to be measured as follows:

Each side of the fence is to be measured at its lowest point (include a gate), and then the average of these measurements is calculated. However, when calculating the average, when any side of the fence measures higher than 4 feet, a measurement of 4 feet (rather than the actual height of the fence) is used for the measurement of that side of the fence. The height of the fence will be measured from the side the children play.

Fences will be measured on the side the children are cared for.

When the gate at the bottom of a ramp (which is between the ramp and the fenced outdoor play area), is 4' high and closed, do not be concerned about the height of the fence on the ramp. When the gate is open, or less than 4' high, then only the outermost section of the ramp fence that encloses the entire ramp/outdoor play area would need to be 4' high. The rest of the ramp fence would be considered an interior fence (but only when the gate is open or not 4' high).

- (5) **There shall be no gaps in fences greater than 5 inches at any point, nor shall gaps between the bottom of the fence and the ground be more than 5 inches.**

Rationale / Explanation

The purpose of this rule is to prevent children from escaping through gaps in a fence, thus defeating the purposes of the fence as explained in subsection (4) above. *CFOC 3rd Ed. pg. 268 Standard 6.1.0.8*

The 5" measurement is based on the diameter of a small toddler's head.

Enforcement

Level 2 Noncompliance if the gap in a fence is higher than 36".

Level 1 Noncompliance otherwise.

Assessment

This rule applies to exterior fences only.

The Licensing Specialist will walk the entire perimeter of the fence to assess for fence gaps. To be a finding, the fence gap must be 5 inches x 5 inches or greater in size, or circular with a diameter greater than 5 inches. The bottom of fences will not be pushed to see if a gap can be created.

If there is a gap 3 feet or greater, a finding will be issued for not having a fence (100-6(4)).

(6) There shall be no openings greater than 3-1/2 by 6-1/4 inches and less than 9 inches in diameter anywhere in the outdoor play area where children's feet cannot touch the ground.

Rationale / Explanation

Openings that fit these dimensions are called "entrapment hazards". An entrapment hazard is an opening that a child's body could fit through, but not his/her head. Children often enter openings feet first and attempt to slide through the opening. If the opening is not large enough it may allow the body to pass through the opening and entrap the head. When the ground forms the lower boundary of an opening, it is not considered to be a head entrapment hazard. This rule is based on guidelines from the Consumer Product Safety Commission (CPSC). *CFOC, 3rd Ed. pgs. 237-238 Standard 5.3.1.1; pg. 272 Standard 6.2.1.9*

Enforcement

Always Level 2 Noncompliance.

Assessment

This rule applies to entrapment's outside of the use zone(s) of any piece of playground equipment and to entrapment's where a child's feet could not touch the ground.

Licensors will use the following measurements, taken from the ground up to the bottom of the entrapment, to determine if the entrapment is in a place where a child's feet could not touch the ground.

- Infant and toddler playgrounds: more than 23 1/4 inches above the ground
- Two-year-olds (for preschool playgrounds): more than 25 1/4 inches above the ground
- School age only playgrounds: more than 33 inches above the ground

Entrapments above 4' on fences will not be assessed as a hazard. Partially bound openings, such as those found in picket fences, will not be considered out of compliance.

Licensors will assess entrapment hazards using the torso probe (6-1/2 inches by 3-1/4 inches). When the torso probe can pass through the opening, they use the head probe (9 inches in diameter) and place it in the opening. When the head probe can not pass through the opening, it is an entrapment hazard and the rule is not in compliance.

When there are entrapments in the railings of a staircase leading to the playground, a closed gate at the bottom of the stairs or anywhere else that makes the stairs inaccessible when children are on the playground would create compliance with this rule.

Entrapment hazards that are higher than 48 inches from any surface a child could climb on and directly under a platform will not be considered out of compliance.

- (7) **When in use, the outdoor play area shall be free of animal excrement, harmful plants, objects, or substances, and standing water.**

Rationale / Explanation

The purpose of this rule is to prevent injury to children and the spread of disease.

Proper maintenance of outdoor play areas and outdoor play equipment is a key factor in ensuring a safe play environment for children. Each outdoor play area is unique and requires a routine maintenance check program developed specifically for that outdoor play area. *CFOC, 3rd Ed. pg. 259 Standard 5.7.0.1*

Standing water is a drowning hazard. Small children can drown within 30 seconds in as little as 2 inches of water. In addition, standing water is breeding grounds for mosquitoes, which can spread disease. *CFOC, 3rd Ed.pg. 68 Standard 2.2.0.4; pg. 228 Standard 5.2.8.2*

Enforcement

Level 1 Noncompliance for metal animal swings, unanchored swings or **unanchored** large metal slides.

Level 2 Noncompliance otherwise.

Assessment

This rule does not prohibit preschoolers or school age children from using child-size gardening tools under adult supervision.

Animal excrement does not include isolated bird droppings.

Harmful Plants Include:

Castor Bean	Mushrooms	Rose Bushes	Toadstools
Cactus	Poison Ivy	Stinging Nettle	Puncture Weeds
Jimson Weed	Poison Oak	Thistles	

Harmful Objects Include:

Animal swings	Standing ladders
Dead animals	Un-anchored swings
Exposed live electrical wire	Un-anchored metal slides
Fence post stirrups	Rope, cord, wire, or chain attached to a structure
Empty refrigerators or freezers	Re-bar or metal rods sticking out of a wall or fence
Raised decks or balconies 5' or higher without a protective barrier at least 3 feet in height	Open basement stairwells 5' or deeper without a protective barrier at least 3 feet in height
Re-bar or metal rods sticking out of the ground less than 48'	

Ropes used to suspend a swing or tether-ball are considered to be in compliance with this rule.

Ladders permanently attached to a structure and ladders lying down are not considered findings under this rule.

Empty ice chests or coolers are not a finding

Standing Water

Standing water includes two inches or more of standing water and a diameter of 5 inches by 5 inches or more. Below is a list of common places standing water is found:

Buckets or other containers of water	Wading pools when not being supervised
Fountains, birdbaths, etc.	Wading pools when the pool is not in use
Garbage cans or other similar containers	Wheelbarrows

Standing water does not include:

- Water being used as part of a supervised project such as painting on the sidewalk with water.
- Water in a water table.
- Temporary puddles on the ground caused by rain or sprinklers.

(8) The outdoor play area shall have a shaded area to protect children from excessive sun and heat whenever there are children in the outdoor play area.

Rationale / Explanation

The purpose of this rule is to prevent both sunburn and heat exhaustion.

It can take less than 10 minutes for a child's skin to burn, and it is estimated that 80% of a person's lifetime sun damage occurs before the age of 18. Individuals who suffer severe childhood sunburns are an increased risk for skin cancer. *CFOC, 3rd Ed. pg. 267 Standard 6.1.0.7*

Children do not adapt to extremes in temperature as effectively as adults. Children produce more metabolic heat per mass unit than adults when walking or running. They also have a lower sweating capacity and cannot dissipate heat by evaporation as quickly. *CFOC, 3rd Ed. pg. 93, Standard 3.1.3.2*

Enforcement

Level 2 Noncompliance with the exception listed under Level 3.

Level 3 Noncompliance in cold weather when children are mostly covered by cold weather clothing.

Assessment

Shade can come from trees, awnings, patio roofs or other structures. The side of the building can provide shade if children are taken outside during a time of the day when the building is providing some shade.

Because outdoor play is required each day, weather permitting, there must be some provision for shade year round.

(9) An outdoor source of drinking water, such as a drinking fountain, individually labeled water bottles, or a pitcher of water and individual cups that are taken outside, shall be available to children whenever the outside temperature is 75 degrees or higher.

Rationale / Explanation

The purpose of this rule is to prevent dehydration and heat exhaustion. Children do not adapt to extremes in temperature as effectively as adults. Children produce more metabolic heat per mass unit than adults when walking or running. They also have a lower sweating capacity and cannot dissipate heat by evaporation as quickly. *CFOC, 3rd Ed. pg. 93, Standard 3.1.3.2*

The purpose of the requirement for individually labeled water bottles or individual drinking cups is to prevent the spread of disease.

Enforcement

Level 1 Noncompliance if children do not have an outdoor source of drinking water and the temperature is 90 degrees or higher.

Level 3 Noncompliance otherwise.

Assessment

The outdoor temperature will be determined by any available electronic means.

Water must be accessible to the children in their play area. If a drinking fountain is on the playground, but behind a closed gate, it is not available to the children so it will be a rule violation.

Although it is not recommended, drinking water can come from a hose as long as the hose is attached to a source of culinary water (the same water that is used inside) and not a secondary water source (such as water used to irrigate or water gardens and lawns).

When the outdoor temperature is 75 degrees or higher and the source of drinking water is an outside fountain, the drinking fountain must be in working order.

(10) All outdoor play equipment and areas shall comply with the following safety standards.

(a) All stationary play equipment used by infants and toddlers shall meet the following requirements:

- (i) There shall be no designated play surface that exceeds 3 feet in height.**
- (ii) If the height of a designated play surface or climbing bar on a piece of equipment, excluding swings, is greater than 18 inches, it shall have use zones that meet the following criteria:**
 - (A) The use zone shall extend a minimum of 3 feet in all directions from the perimeter of each piece of equipment.**
 - (B) Use zones may overlap if two pieces of equipment are positioned adjacent to one another, with a minimum of 3 feet between the perimeters of the two pieces of equipment.**
 - (C) The use zone in front of a slide may not overlap the use zone of any other piece of equipment.**
- (iii) The use zone in the front and rear of all swings shall extend a minimum distance of twice the height from the swing seat to the pivot point of the swing, and shall not overlap the use zone of any other piece of equipment.**
- (iv) The use zone for the sides of a single-axis swing shall extend a minimum of 3 feet from the perimeter of the structure, and may overlap the use zone of a separate adjacent piece of equipment.**
- (v) The use zone of a multi-axis swing shall extend a minimum distance of 3 feet plus the length of the suspending members, and shall never overlap the use zone of another piece of equipment.**

- (vi) The use zone for merry-go-rounds shall never overlap the use zone of another piece of equipment.
- (vii) The use zone for spring rockers shall extend a minimum of 3 feet from the at-rest perimeter of the equipment.

Rationale / Explanation

These rules are based on guidelines from the Consumer Product Safety Commission, which are designed to prevent serious head injuries or other life threatening injuries to children. Injuries from falls are more likely to occur when equipment spacing is inadequate. *CFOC, 3rd Ed. pg. 272 Standard 6.2.2.1; pg. 273 Standard 6.2.2.4*

The use zones around equipment for infants and toddlers are smaller than those around equipment for preschoolers and school age children. This is because infants and toddlers do not jump or fall as far a distance from equipment as older children do. This rule allows two-year-olds to play on infant and toddler equipment with these smaller use zones.

Enforcement

Always Level 1 Noncompliance.

Assessment

The use zone extends all the way up the height of the equipment and on the top of the equipment. This means there cannot be tree branches a child could climb onto or any branches that create a hazard in the use zone above the equipment. Pliable green leaves in the use zone are not considered out of compliance.

If swing sets do not have a horizontal bar on the outside of the supporting pole or beam, the side use zone will be measured from the swing seat, not from the supporting side pole or beam.

Side supporting poles or beams from two swing sets may be placed right next to each other. They do not have to share a supporting pole or beam.

A use zone is not required for sand diggers.

If a preschooler or school age child plays on infant/toddler equipment, the equipment must have a 6 foot use zone as required for preschool or school age children.

Stumps being used for seating are not considered playground equipment.

Portable stumps that children can move around are not considered playground equipment.

When multiple stumps are installed in the ground and intended to be used for children to step from one stump to another stump, they are considered playground equipment and must be in compliance with the rules for playground equipment. Such stepping stumps are considered "linked play", so while the stumps are installed individually, for playground rules they are to be viewed as one piece of equipment. This means that each stump does not require a use zone, but the use zone bubble is required around the group of stumps. Sometimes this type of play structure is in the shape of disks or pillars.

Inflatable bounce houses used by children in care are considered stationary play equipment and all applicable rules must be in compliance, including use zones.

A play house with an attached slide is a piece of stationary play equipment. If the slide is blocked so that the children cannot use it, then it will be considered a play house.

Tunnels that have handles a child could hold on to climb will be assessed as stationary play equipment so all applicable rules apply including, use zones and cushioning apply.

- (10) All outdoor play equipment and areas shall comply with the following safety standards.
- (a) All stationary play equipment used by infants and toddlers shall meet the following requirements:
 - (viii) Swings shall have enclosed seats.

Rationale / Explanation

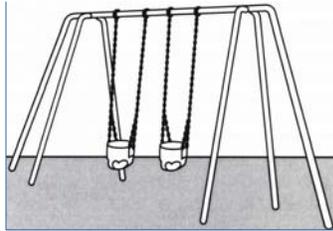
This rule is based on guidelines from the Consumer Product Safety Commission, which are intended to prevent injury to infants and toddlers from falling out of a swing.

Enforcement

Always Level 1 Noncompliance.

Assessment

An enclosed seat means a bucket seat, as specified by CPSC. Below are pictures of two examples of acceptable enclosed seats. The seat on the right has a T-strap that goes between the child's legs.



- (10) All outdoor play equipment and areas shall comply with the following safety standards.
- (b) All stationary play equipment used by preschoolers or school age children shall meet the following requirements for use zones:
 - (i) If the height of a designated play surface or climbing bar on a piece of equipment, excluding swings, is greater than 20 inches, it shall have use zones that meet the following criteria:
 - (A) The use zone shall extend a minimum of 6 feet in all directions from the perimeter of each piece of equipment.
 - (B) The use zones of two pieces of equipment that are positioned adjacent to one another may overlap if the designated play surfaces of each structure are no more than 30 inches above the protective surfacing underneath the equipment. In such cases, there shall be a minimum of 6 feet between the adjacent pieces of equipment.
 - (C) There shall be a minimum use zone of 9 feet between adjacent pieces of equipment if the designated play surface of one or both pieces of equipment is more than 30 inches above the protective surfacing underneath the equipment.
 - (ii) The use zone in the front and rear of a single-axis swing shall extend a minimum distance of twice the height of the pivot point of the swing, and may not overlap the use zone of any other piece of equipment.
 - (iii) The use zone for the sides of a single-axis swing shall extend a minimum of 6 feet from the perimeter of the structure, and may overlap the use zone of a separate piece of equipment.
 - (iv) The use zone of a multi-axis swing shall extend a minimum distance of 6 feet plus the length of the suspending members, and shall never overlap the use zone of another piece of equipment.

- (v) The use zone for merry-go-rounds shall never overlap the use zone of another piece of equipment.
- (vi) The use zone for spring rockers shall extend a minimum of 6 feet from the at-rest perimeter of the equipment.

Rationale / Explanation

These rules are based on guidelines from the Consumer Product Safety Commission, which are designed to prevent serious head injuries or other life threatening injuries to children. Injuries from falls are more likely to occur when equipment spacing is inadequate. *CFOC, 3rd Ed. pg. 272 Standard 6.2.2.1; pg. 273 Standard 6.2.2.4*

Enforcement

Always Level 1 Noncompliance.

Assessment

Refer to rule 100-6(10)(a) for use zone enforcement information.

- (10) All outdoor play equipment and areas shall comply with the following safety standards.**
(c) Two-year-olds may play on infant and toddler play equipment.

Assessment

If two-year-olds use the infant and toddler equipment at the same time as infants and toddlers, the group size may not exceed 8 children. If there are more than 8 children the Licensing Specialist will issue a finding to 100-24(1), not this rule.

- (10) All outdoor play equipment and areas shall comply with the following safety standards.**
(d) Protective cushioning is required in all use zones.

Rationale / Explanation

Protective cushioning is material that is placed in the use zones under and around stationary play equipment in order to cushion a child's fall from the equipment. Acceptable cushioning materials include the following: sand, gravel, shredded tires, shredded wood products, and unitary cushioning material. Cushioning materials must meet *ASTM Specification F 1292*.

This rule is based on guidelines from the Consumer Product Safety Commission. Improper cushioning material under playground equipment is the leading cause of playground related injuries. Over 70% of all accidents on playgrounds are from children falling. Hard surfaces such as concrete, blacktop, packed earth, or grass are not acceptable under most play equipment. A fall onto one of these hard surfaces could be life threatening. *CFOC, 3rd Ed. pg. 237-238 Standard 5.3.1.1; pg. 273-274 Standard 6.2.3.1*

Enforcement

Always Level 1 Noncompliance.

Assessment

A rounded tunnel sitting on the ground is not considered playground equipment unless it has a flat 2" by 2" surface on it. This means that a rounded tunnel sitting on the ground does not require protective cushioning or a use zone. Raised tunnels do need use zones and cushioning.

An embankment slide does not require a use zone or cushioning except at the bottom of the slide chute. This use zone must be at least as wide as the slide chute.

Equipment with a height of 6 inches or greater requires cushioning.

If the protective cushioning is frozen the equipment may not be used by children in care. If the children are not playing outside, the Licensing Specialist will ask the staff if the children have been using the equipment while the cushioning was frozen. If children have used the equipment a finding will be issued.

To determine the depth of cushioning, measure from the highest designated play surface (at least 2 inch by 2 inch flat surfaces a child can access), climbing bar, or swing pivot point. Flat surfaces, at least 2 inch by 2 inch, are not considered accessible if they are 38 inches or higher from the highest designated play surface, climbing bar, or swing pivot point.

This rule will be out of compliance if grass has grown into the loose fill cushioning in the use zone of a piece of playground equipment. The Licensing Specialist will assess by assessing if the loose fill is still soft enough to displace. The first time the Licensing Specialist observes this they will give Verbal TA but will document it on the checklist.

If different types of cushioning material is used and mixed together, the measurement will be taken for the cushioning with the strictest compliance.

(10) All outdoor play equipment and areas shall comply with the following safety standards.

- (e) If sand, gravel, or shredded tires are used as protective cushioning, the depth of the material shall meet the CPSC guidelines in Table 1. The provider shall ensure that the material is periodically checked for compaction, and if compacted, shall loosen the material to the depth listed in Table 1. If the material cannot be loosened due to extreme weather conditions, the provider shall not allow children to play on the equipment until the material can be loosened to the required depth.
- (f) If shredded wood products are used as protective cushioning, the depth of the shredded wood shall meet the CPSC guidelines in Table 2.

Rationale / Explanation

Compaction of protective cushioning occurs when sand or gravel becomes packed and hard, so that it does not provide adequate cushioning. Compaction of shredded wood products is desirable, as it actually improves the cushioning ability of the material.

Enforcement

Level 1 Noncompliance if there is less than 75% of the required depth of protective cushioning.

Level 2 Noncompliance if there is 75% or more of the required depth of protective cushioning, or if there is 100% of the required protective cushioning, but it needs to be redistributed or if the protective cushioning is compacted and needs to be loosened.

Assessment

The following criteria will be used to determine whether sand is fine or coarse, and whether gravel is fine or medium:

- Fine Sand – Particles of white sand purchased in bags marked "play sand." 100% of the material must pass through a #16 screen.
- Coarse Sand – Usually obtained from a supplier to the landscaping and construction trades. 98% of the material must pass through a #4 screen.
- Fine Gravel – Gravel particles are rounded and 3/8 inch or less in diameter.
- Medium Gravel – Gravel particles are rounded and 1/2 inch or less in diameter.

To determine the required depth of cushioning, the Licensing Specialist will measure from the highest designated play surface, highest swing pivot point, or highest climbing bar to the ground. The height will determine the depth of loose fill cushioning required. These requirements are listed in the next 3 tables.

To determine the required depth of protective cushioning, the Licensing Specialist will follow these instructions:

1. Dig to the bottom of the cushioning in three spots.
2. Place the bottom edge of a metal or wood ruler at the bottom of the hole, and refill the hole with the cushioning.

3. Do not take measurements directly under an at rest swing seat, or directly at the bottom of the slide shoot where children exit.
4. The measurements of each hole will be written on the worksheet portion of the checklist.
5. If any of the holes were low, the licensor will then average the three measurements to determine if the cushioning needs to be redistributed or if more cushioning is required. If all of the holes have the required depth, it will be determined that there is adequate cushioning.
6. When the three measurements show the cushioning is low, four additional holes will be dug in the corners of the playground area.
7. The additional measurements will also be listed on the checklist worksheet.
8. The seven measurements will be averaged to determine if the cushioning needs to be redistributed or if more cushioning must be added.
9. These instructions will be followed for each play area with stationary play equipment. The area will be defined by the borders of the cushioning.
10. If the facility has a variety of stationary play equipment that varies in height, the licensor will assess the cushioning around each piece of equipment. For instance, if there is a swing that requires nine inches and a climber that requires six inches each piece of equipment will be measured separately.

To determine if the loose fill cushioning is compacted, the Licensing Specialist will determine if the shovel goes easily into the cushioning.

When there is a mixture of cushioning material, licensors will assess the depth for whichever material requires the most depth.

If the provider has documentation from the manufacturer stating that less than six inches is required, the provider may apply for a variance and provide the documentation from the manufacturer.

Gardening bark mulch does not have the cushioning properties required by *ASTM Specification F 1292*, and cannot be used as playground cushioning material.

Due to the changes in CPSC guidelines, when 12 inches of cushioning is required, the cushioning will be considered in compliance if there is at least 9 inches. If a cushioning product is not allowed, due to the height of the equipment, the provider may not use the product for cushioning and a finding will be issued.

Highest Designated Play Surface, Climbing Bar, or Swing Pivot Point	Fine Sand	Coarse Sand	Fine Gravel	Medium Gravel	Shredded Tires
4' high or less	6"	6"	6"	6"	6"
Over 4' up to 5'	6"	6"	6"	6"	6"
Over 5' up to 6'	12"	12"	6"	12"	6"
Over 6' up to 7'	12"	Not Allowed	9"	Not Allowed	6"
Over 7' up to 8'	12"	Not Allowed	12"	Not Allowed	6"
Over 8' up to 9'	12"	Not Allowed	12"	Not Allowed	6"
Over 9' up to 10'	Not Allowed	Not Allowed	12"	Not Allowed	6"
Over 10' up to 11'	Not Allowed	Not Allowed	Not Allowed	Not Allowed	6"
Over 11' up to 12'	Not Allowed	Not Allowed	Not Allowed	Not Allowed	6"

Table 2 Depths of Protective Cushioning Required for Shredded Wood Products			
Highest Designated Play Surface, Climbing Bar, or Swing Pivot Point	Engineered Wood Fibers	Wood Chips	Double Shredded Bark Mulch
4' high or less	6"	6"	6"
Over 4' up to 5'	6"	6"	6"
Over 5' up to 6'	6"	6"	6"
Over 6' up to 7'	9"	6"	9"
Over 7' up to 8'	12"	9"	9"
Over 8' up to 9'	12"	9"	9"
Over 9' up to 10'	12"	9"	9"
Over 10' up to 11'	12"	12"	12"
Over 11'	12"	Not Allowed	Not Allowed

- (10) All outdoor play equipment and areas shall comply with the following safety standards.
- (g) If wood products are used as cushioning material:
 - (i) the providers shall maintain documentation from the manufacturer verifying that the material meets ASTM Specification F 1292, which is adopted by reference; and

Enforcement

Always Level 3 Noncompliance.

Assessment

If the depth of wood cushioning is 9 inches or greater, ASTM documentation will not be required.

- (10) All outdoor play equipment and areas shall comply with the following safety standards.
- (g) If wood products are used as cushioning material:
 - (ii) there shall be adequate drainage under the material.

Rationale / Explanation

Inadequate drainage under wood cushioning material can result in trapped water freezing, which makes the material unable to absorb the impact from falls. It can also lead to the growth of bacteria, mold, and the breeding of mosquitos.

Enforcement

Always Level 2 Noncompliance.

Assessment

Adequate drainage will be assessed by digging into the wood product. If one of the following happens when the wood product is dug into, it means there is not adequate drainage under the wood:

- Water fills the hole that has been dug.
- In freezing weather, frozen water forms an ice block under the material.
- There is mold growing in the material.

- (10) All outdoor play equipment and areas shall comply with the following safety standards.
- (h) If a unitary cushioning material, such as rubber mats or poured rubber-like material is used as protective cushioning:

- (i) the licensee shall ensure that the material meets the standard established in ASTM Specification F 1292. The provider shall maintain documentation from the manufacturer that the material meets these specifications.

Enforcement

Always Level 3 Noncompliance.

- (10) All outdoor play equipment and areas shall comply with the following safety standards.
 - (h) If a unitary cushioning material, such as rubber mats or poured rubber-like material is used as protective cushioning:
 - (ii) the licensee shall ensure that the cushioning material is securely installed, so that it cannot become displaced when children jump, run, walk, land, or move on it, or be moved by children picking it up.

Enforcement

Always Level 1 Noncompliance.

This item is considered out of compliance if the unitary cushioning material is set on top of the ground and not secured in place, such that it could become displaced when children jump, run, walk, land, or move on it, or if children could easily pick it up and move it.

Rubber mats are not required to be glued down when any of the following conditions are met:

1. The tiles are interlocking, without significant gaps between the tiles.
2. There is a border around the tiled play area that holds the tiles in place so they cannot be dislodged by children running or jumping on them.
3. If the equipment may be placed on grass due to the height of the equipment.

- (10) All outdoor play equipment and areas shall comply with the following safety standards.
 - (i) Stationary play equipment that has a designated play surface less than the height specified in Table 3, and that does not have moving parts children sit or stand on, may be placed on grass, but shall not be placed on concrete, asphalt, dirt, or any other hard surface.

Rationale / Explanation

The purpose of this rule is to prevent injuries from falls onto a hard surface. Over 70% of all accidents on playgrounds are from children falling. *CFOC, 3rd Ed. Pg. 237-238 Standard 5.3.1.1*

Enforcement

Always Level 1 Noncompliance.

The equipment over the tiles is used only by infants and toddlers.

Table 3 Heights of Designated Play Surfaces That May Be Placed on Grass		
Infants & Toddlers	Preschoolers	School Age
Less than 18"	Less than 20"	Less than 30"

(10) All outdoor play equipment and areas shall comply with the following safety standards.

- (j) On stationary play equipment used by infants and toddlers, protective barriers shall be provided on all play equipment platforms that are over 18 inches above the ground. The bottom of the protective barrier shall be less than 3-1/2 inches above the surface of the platform, and there shall be no openings greater than 3-1/2 inches in the barrier. The top of the protective barrier shall be at least 24 inches above the surface of the platform.
- (k) On stationary play equipment used by preschoolers, protective barriers shall be provided on all play equipment platforms that are over 30 inches above the ground. The bottom of the protective barrier shall be less than 3-1/2 inches above the surface of the platform, and there shall be no openings greater than 3-1/2 inches in the barrier. The top of the protective barrier shall be at least 29 inches above the surface of the platform.
- (l) On stationary play equipment used by school age children, protective barriers shall be provided on all play equipment platforms that are over 48 inches above the ground. The bottom of the protective barrier shall be less than 3-1/2 inches above the surface of the platform, and there shall be no openings greater than 3-1/2 inches in the barrier. The top of the protective barrier shall be at least 38 inches above the surface of the platform.

Rationale / Explanation

A "protective barrier" is an enclosing structure such as bars, lattice, or a solid panel, around an elevated platform on a piece of play equipment. It is intended to prevent a child from either accidentally or deliberately falling or jumping from the platform.

Enforcement

Level 1 Noncompliance if a play equipment platform over 48 inches does not have a protective barrier.

Level 2 Noncompliance otherwise.

Assessment

A provider has the option of adding more than the required amount of protective cushioning in order to lessen the height of a platform so that it does not need a protective barrier.

Equipment with roofs must still have the required height for all protective barriers.

(10) All outdoor play equipment and areas shall comply with the following safety standards.

- (m) There shall be no openings greater than 3-1/2 by 6-1/4 inches and less than 9 inches in diameter on any piece of stationary play equipment, or within or adjacent to the use zone of any piece of stationary play equipment.

Rationale / Explanation

Openings that fit these dimensions are called "entrapment hazards". An entrapment hazard is an opening that a child's body could fit through, but not their head. Children often enter openings feet first and attempt to slide through the opening. If the opening is not large enough it may allow the body to pass through the opening and entrap the head. When the ground forms the lower boundary of an opening, it is not considered to be a head entrapment hazard. This rule is based on guidelines from the Consumer Product Safety Commission, which are intended to prevent injury to children. *CFOC, pgs. 216-217 Standard 5.075; pg. 261 Standard 5.186*

Enforcement

Always Level 1 Noncompliance.

Assessment

This rule does not include openings where one of the edges of the opening is on the ground. It only includes entrapment hazards where a child's feet cannot touch the ground. The following measurements, taken from the ground up to the bottom of the entrapment hazard, will be used to determine if the entrapment hazard is in a place where a child's feet could not touch the ground.

- Infant and toddler playgrounds: more than 23 1/4 inches above the ground
- Two-year-olds (for preschool playgrounds): more than 25 1/4 inches above the ground
- School age only playgrounds: more than 33 inches above the ground

Directly adjacent to the use zone of a piece of stationary play equipment means within 6 inches of the perimeter of the use zone.

(10) All outdoor play equipment and areas shall comply with the following safety standards.

- (n) There shall be no strangulation hazards on, within the use zone of, or adjacent to the use zone of any piece of stationary play equipment.**

Rationale / Explanation

This rule is based on guidelines from the Consumer Product Safety Commission, which are intended to prevent injury to children.

A strangulation hazard is something on which a child's clothes or something around a child's neck could become caught on a component of playground equipment.

Other examples of protrusion and strangulation hazards include bolt ends that extend more than two threads beyond the face of the nut, hardware configurations that form a hook or leave a gap or space between components, and open "S" type hooks. Special attention should be paid to the area at the top of slides and sliding devices. Ropes should be anchored securely at both ends, and should not be capable of forming a loop or a noose. If they do not meet these criteria, they pose a strangulation hazard. *CFOC, pgs. 216-217 Standard 5.075; pg. 260 Standard 5.185*

Enforcement

Level 1 Noncompliance if there is a strangulation hazard on a slide, swing, or merry-go-round.

Level 2 Noncompliance otherwise.

Assessment

Directly adjacent to the use zone of a piece of stationary play equipment means within 6 inches of the perimeter of the use zone.

Licensing Specialists will follow new instructions from ASTM and no longer assess for gaps at the top of slide chutes. Strangulation hazards are only a finding when a child who becomes entangled cannot touch the ground with his/her feet. Licensing Specialists will measure from the ground to the strangulation hazard. If the measurement is greater than the following measurement, a finding will be issued.

- 23 1/4 inches for infant and toddler playgrounds
- 25 1/4 inches for two-year-old and preschool playgrounds
- 33 inches for school age playgrounds

Strangulation hazards include:

- A bolt, screw, or other protrusion that passes the protrusion gauge test and which also project upward from a horizontal plane.
- A bolt, screw or other protrusion that increases in size or diameter as it moves away from the surface. (For example, a bolt with a washer on the outside of a nut, where the washer is greater in diameter than the nut. Or, a bolt with a large bolt head, where the bolt head is not flush with the surface.)
- Bolt ends that extend more than two threads beyond the face of the nut.
- On slides: a gap on the top or sides of a slide that the 1/8", 2" diameter protrusion gauge could pass all the way through.
- On "S" hooks: a gap in an "S" hook that a dime could fit into.
- Hanging ropes, cords, or chains, on stationary play equipment, longer than 12" that can make a loop 5" in diameter, **except** ropes, cords, or chains with swings attached to the bottom of them.
- Ropes, cords, or chains that hang into the use zone of a piece of playground equipment and are attached to something solid will be assessed as strangulation hazards.

Connectors such as "S" hooks, no matter where they are located on a piece of equipment, must be inspected as a strangulation hazard. If the connector has an opening greater than .04 (dime) and the opening does not face downward, a finding will be issued. The only connectors that will not be inspected are;

1. If at the top of a free standing swing greater than 8 feet in height.
2. If at the top of a swing with a cross bar but the cross bar is greater than 8 feet high.



These images are from CPSC and can be found at www.cpsc.gov/PagesFiles/63943/324.pdf.

The following protrusion or strangulation hazards are **not** noncompliance items:

- Protrusion or strangulation hazards on the underside of platforms which are over 48 inches high are not a finding.
- Hazards on the top of swing cross bars when the top of the swing is over 8 feet tall and there is not a horizontal bar between the support poles, nor is the swing attached to any other component or platform.
- Protrusions or strangulation hazards that are molded as a part of the design for dramatic play, such as the eye piece of a telescope or the ear of an animal, as long as that part is in good repair and no parts are missing.
- Hand hold and foot bars that were designed for that purpose such as those found on spring rockers. (This does not include hand holds on climbing walls.)
- Protrusion/strangulation hazards in recessed areas unless it extends passed the recessed area.
- Caps not flush with the equipment.
- Ropes or cords attached to tether-ball.

(10) All outdoor play equipment and areas shall comply with the following safety standards.

- (o) There shall be no crush, shearing, or sharp edge hazards on, within the use zone of, or adjacent to the use zone of any piece of stationary play equipment.

Rationale / Explanation

This rule is based on guidelines from the Consumer Product Safety Commission, which are intended to prevent injury to children.

ASTM defines a crush hazard as a juncture at which the user could suffer contusion, laceration, abrasion, amputation, or fracture during use of the playground equipment. A crush hazard is created when two parts of a piece of play equipment come together in such a way that they could crush a child's fingers, toes, or other body parts. A shearing hazard is created when two parts of a piece of play equipment move against each other in such a way that they could sever a child's fingers or other body parts. A sharp edge hazard is created when there is a sharp point or edge on a piece of play equipment that could cut or puncture a child's skin. *CFOC, pgs. 216-217 Standard 5.075; pg. 260 Standard 5.184, 5.185*

Enforcement

Always Level 2 Noncompliance.

Assessment

Directly adjacent to the use zone of a piece of stationary play equipment means within 6 inches of the perimeter of the use zone.

Molded plastic steering wheels that are a part of piece of stationary play equipment will not be assessed as a crush hazard.

(10) All outdoor play equipment and areas shall comply with the following safety standards.

- (p) There shall be no tripping hazards, such as concrete footings, tree stumps, tree roots, or rocks within the use zone of any piece of stationary play equipment.**

Rationale / Explanation

This rule is based on guidelines from the Consumer Product Safety Commission, which are intended to prevent injury to children. *CFOC, pgs. 216-217 Standard 5.075*

Enforcement

Always Level 3 Noncompliance.

Assessment

If a provider adds something, like a tire to cushion a cement footing, the object is considered a tripping hazard unless it is flush to the ground.

(11) The provider shall maintain playgrounds and playground equipment to protect children's safety.

Rationale / Explanation

Proper maintenance of playgrounds and playground equipment is a key factor in ensuring a safe play environment for children. Each playground is unique and requires a routine maintenance check program developed specifically for that playground. *CFOC, pgs. 216-217 Standard 5.075; pgs. 262-263 Standard 5.194, 5.196*

Enforcement

Level 1 Noncompliance if the lack of maintenance could cause equipment failure.

Level 3 Noncompliance otherwise.

Assessment

Adequate maintenance includes the following:

- Ensuring that there are no missing, bent, broken, or worn out components that could cause equipment to fail.
- Ensuring that all hardware is secure, and there are no missing nuts or bolts that could cause the equipment to fail.
- Ensuring that equipment does not have excessive wear that could cause the equipment, or a component of it, to fail.
- Ensuring that metal is not rusted or corroded to the point that it could cause the structure to fail.
- Ensuring that wood on children's play equipment is not rough or splintery.
- Ensuring that all equipment and equipment parts are stable.
- Ensure that tiles used for cushioning do not have gaps greater than 1 inch.

Findings will be issued to this rule if equipment or components could fail or cause an injury to children while using the equipment.