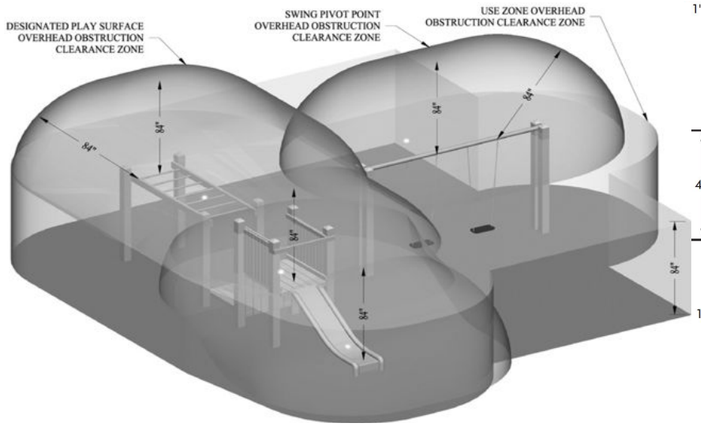
Playground Safety Handy Sheet



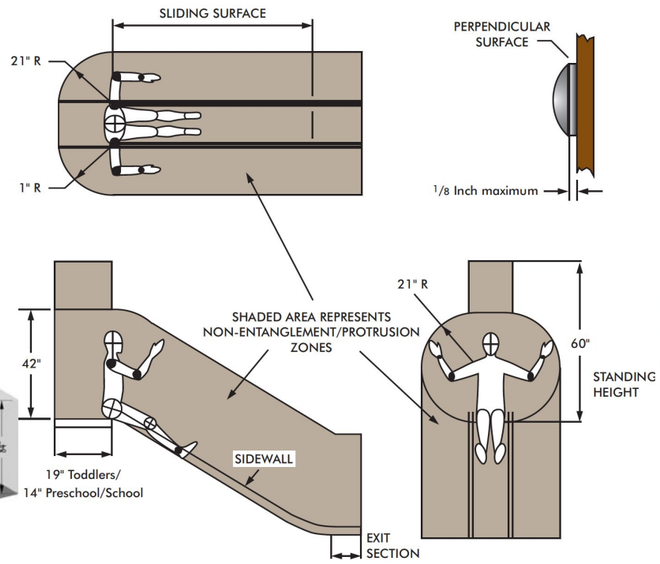
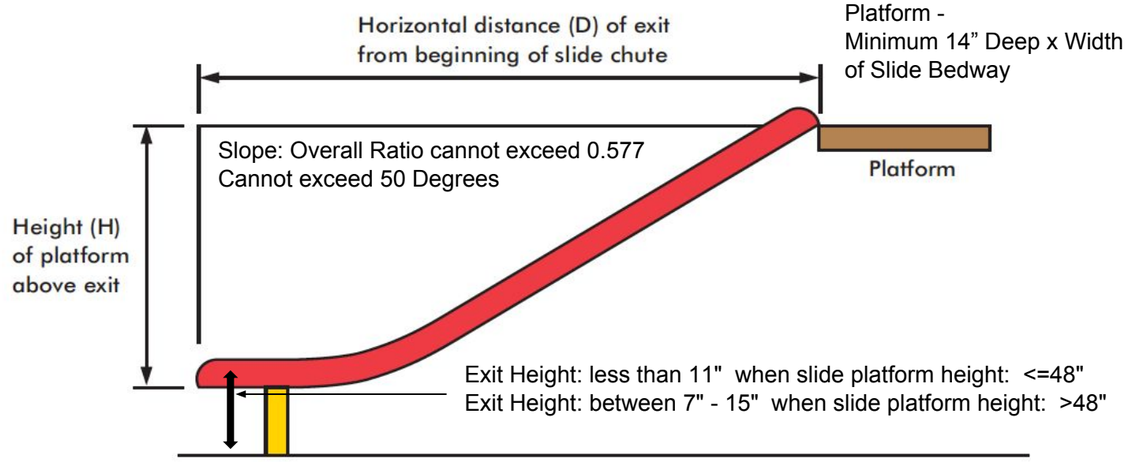


Figure B13. Recommended areas to test for slide entanglement protrusions



General Hazards

Head and Neck Entrapment	Openings 3.5” – 9” than a child can fall through or on	Use Torso Probe, Head Probe and Fish Probe
Protrusions	Eye, Temple and Impalement Hazards	Use the Test Gauges
Crush and Shear Points	Places where fingers or body parts can be crushed or sheared	Use Test Dowels / Rods
Sharp Points and Sharp Edges	Places that can cause severe lacerations	Visually Inspect and Use Professional Judgement
Entanglements	Locations where strings can get entangled – strangulation hazards	Use Test Gauges and Professional judgement
Suspended Hazards	Locations where a child can get clotheslined or hung	Visually Inspect and Use Professional Judgement

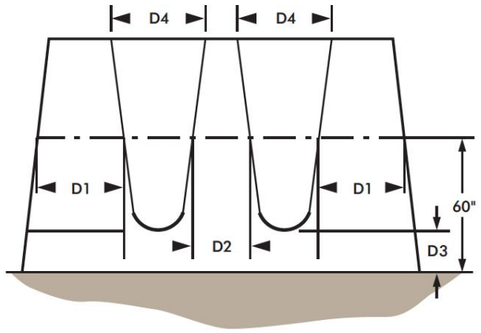


Figure 23. Minimum Clearances for Single-Axis Swings

Table 7. 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

Material from CPSC handbook and ASTM standards. This information is provided for reference only. A Professional should be consulted for formal Audits and Inspections Fry & Associates is not responsible for any application of this information or inaccuracies.

Updated June 2018

Examples of Age Appropriate Equipment (CPSC)

Toddler (6-23 mos.)	Preschool (2-5 yrs)
• Basic Climbing Equipment under 32” high • Ramps • Single File Step Ladders • Slides (less than 30 deg.) and less than 360 Deg. • Spring Rockers • Stairways • Swings with Bucket Seats	• Basic Climbers • Horizontal Ladders (Straight, 5’ and less height) • Merry Go Rounds • Ramps • Rung Ladders • Single File Step Ladders • Simple Slides • Spring Rockers • Stairways • Swings

FRY PARK AND PLAYGROUND EQUIPMENT

www.fryandassociates.com
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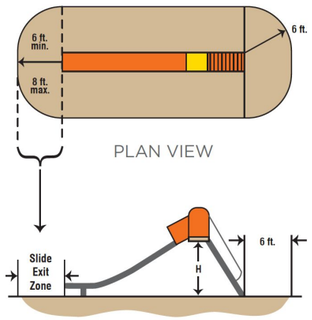
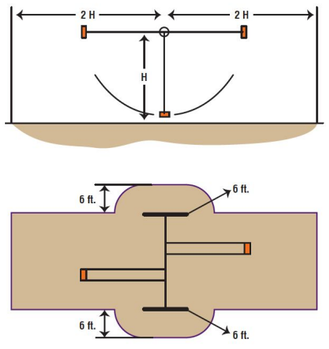
FALL ZONE FOR SLIDES

ASTMI F1487



SINGLE-AXIS TIRE SWING



MULTI-AXIS TIRE SWING

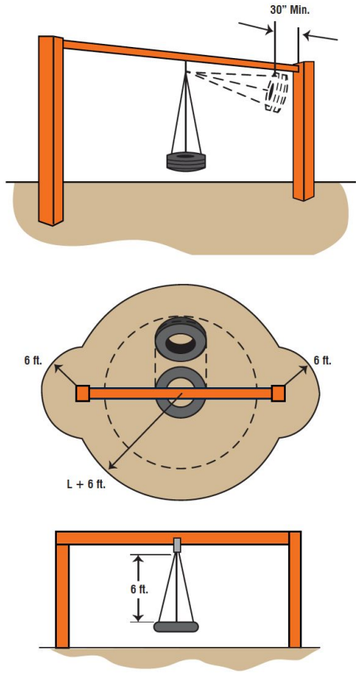
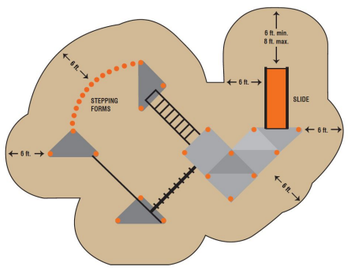


Table 2. Minimum compressed loose-fill surfacing depths

Inches	Of	(Loose-Fill Material)	Protects to	Fall Height (feet)
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 may still occur.

COMPOSITE PLAY STRUCTURES



Playground Fencing

Design	• Minimum 48” Above Grade • Max 4” Opening at bottom • Not Climbable • Area around fence should be free of climbable items
Mesh Size	• Max Opening 1.75” • Max 1.25” on parallel sides
Gates	• Must Open Outward • Self Closing and Self Latching • No Protrusions under 54” above grade • Minimum ½” Opening between square posts and gates
Nearby Curbs - Min. Distance from Pay Area	• No Parking - 2’6” • Angled Parking - 4’ • Perpendicular Parking - 5’

Fall Heights

	CPSC	ASTM F1487-17
Platform	The distance between the top of the platform and the protective surfacing beneath it.	Same
Slides	The distance between the transition platform and the protective surfacing beneath it	Same
Slides - Embankment	Transition Area / Chute - None	Transition Area / Chute - None Slide exit use zone shall be a minimum of 40 in. Access Platform < 12” above underlying surface - None
To/Fro Swings	The vertical distance between the pivot point and the protective surfacing beneath it	Same
Multi Axis Swings	The vertical distance between the pivot point and the protective surfacing beneath it.	Same
Climbers - Free Standing	The distance between the highest part of the climbing component and the protective surfacing beneath it	Same
Climbers - Access / Egress to Structure	The distance between the highest part of the climber intended for foot support and the protective surfacing beneath it	Same
Climbers - Freestanding Flexible	The distance between the highest part of the climbing component and the protective surfacing beneath it	The fall height for 3-dimensional matrix nets shall be the highest distance of either the interior or exterior fall height. The minimum fall height for structures with an overall height greater than 72 in. shall be 72 in. (1) The exterior fall height shall be the distance from the protective surfacing to the highest point at which a rigid vertical device contacts the climbing net structure when moved around the perimeter. (2) The interior fall height shall be the distance between the protective surfacing and the highest member where there is a clear vertical path to the protective surfacing with a diameter of 18 in. for climbing nets intended for 2 through 5-year-olds, and with a diameter of 20 in. for climbing nets intended for 5 through 12-year-olds.
Modular Structures	The distance between the highest designated playing surface and the protective surface beneath it	Same
Sliding Poles	• For sliding poles accessed from platforms, the fall height is the distance between the platform and the protective surfacing beneath it. • For sliding poles not accessed from platforms, the fall height is the distance between a point 60 inches below the highest portion of the pole	60 in. (1524 mm) below the highest portion of the pole to the protective surfacing below
Overhead Events	The distance between the maximum height of the equipment and the protective surface beneath it. (Support Posts Exempt)	Same
Merry-go-rounds / Rotating Equipment with a vertical axis	The distance between the perimeter of the platform where a child could sit or stand and the protective surfacing beneath it	The distance between the highest designated play surface and the protective surface below