

Visual Guide to NCRLAP's Requirements for Gross Motor Space and Equipment



This document illustrates common challenges related to gross motor safety for children 2-12 years old; however, it is not inclusive of all safety requirements. For more details and additional safety requirements, please see the document titled "NCRLAP's Requirements for Gross Motor Space and Equipment" found at ncrlap.org.



General gross motor safety considerations:

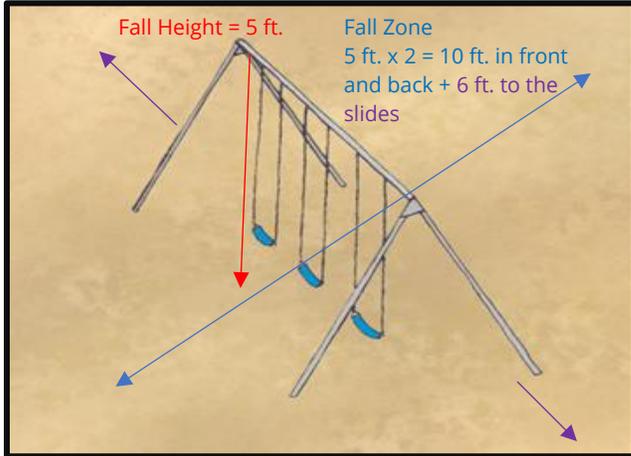
- All gross motor equipment that is over 18 in. tall requires protective surfacing and an adequate fall zone, even if the equipment is not anchored. Grass and dirt are not considered protective surfacing and surfacing should generally be the same material versus mixed.
- Remember to check high traffic areas often, such as the end of a slide or underneath swings, to ensure adequate surfacing as children's activities may displace surfacing in these areas.
- All hooks and other fasteners used for swings, overhead rings, tire swings etc. should be properly closed.
- Fencing needs to be 4 ft. tall in all places. All spaces regularly used for gross motor play should be fully enclosed by a fence.



A Closer Look at Fall Zones ...



At least 6 in. of protective surfacing is required under and around swings and climbing equipment over 18 in. tall and less than 6 ft. in height. Manufactured surfacing (rubber mulch or tiles, poured-in place, kick/wear mats, etc.) requires ASTM 1292 paperwork. The depth and fall zone requirements may vary depending on the type of surfacing and height of the equipment. For additional information see "NCRLAP's Requirements for Gross Motor Space and Equipment" at ncrlap.org.



To-fro swings (single axis):

Require 6 in. of protective surfacing throughout a fall zone that measures twice the height of the swings in the front and back, and 6 ft. from the sides of the support structure.

For example:

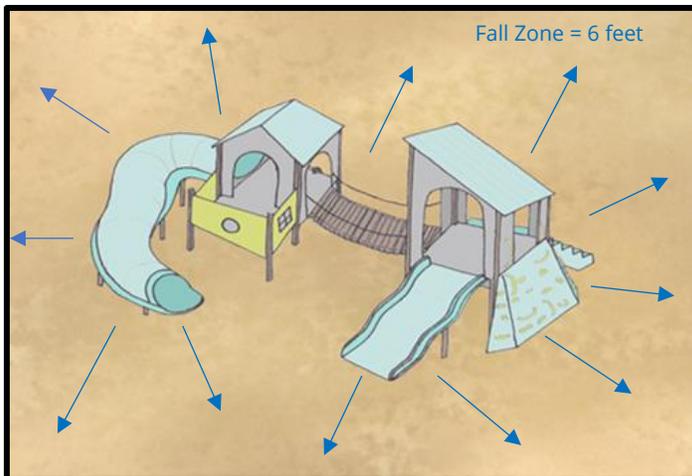
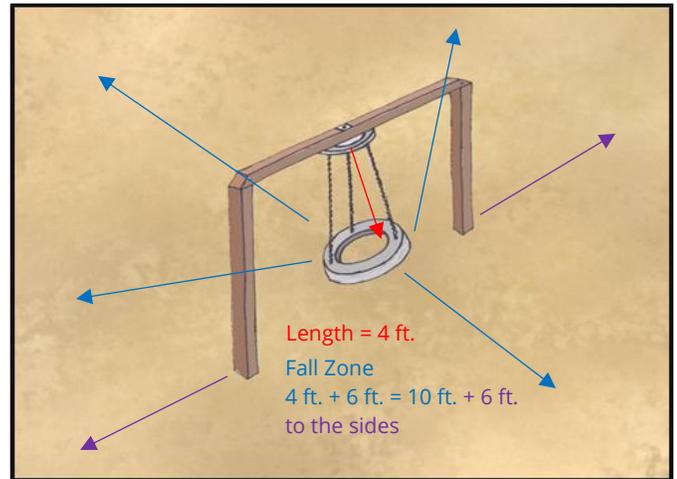
If the fall height of the swings is 5 ft. tall then the fall zone must be 10 ft. in front of and behind the swings (5 ft. x 2 = 10 ft.), and 6 ft. on each side.

Tire swing (multi-axis):

Requires 6 in. of protective surfacing throughout a fall zone that measures the length from the tire seat to top of the swing, also called the pivot point, plus 6 additional ft. in all directions. A 6-ft. fall zone is required from the sides of the support structure.

For example:

If 4 ft. from the top of the swing to the seat, then the fall zone must be 10 ft. in all directions (4 ft. + 6 ft. = 10 ft.), and 6 ft. on each side.



Climber (highest point is less than 6 ft. tall):

Requires 6 in. of protective surfacing throughout a fall zone that is 6 ft. in all directions around the climber. The fall zone is required even if there is a barrier or guardrail.

Lightweight seesaw (under 18 in. tall):

Does not require protective surfacing or a fall zone but should not be on a hard surface like concrete or tile, or too close to other objects.

Please note, when equipment is over 18 in. tall, whether it is anchored or not, 6 in. of protective surfacing that provides a fall zone of 6 ft. is required. This also applies to natural objects such as tree stumps used for climbing.

