

SWING INSTRUCTIONS

General requirements

Shackle and chain connectors should have less than 40% wear.

Swing chain links need to be smaller than 8.6mm or covered or have rope threaded through them to stop finger entrapments. Don't have excess chain links.

Ropes need to be a minimum of 12mm diameter but no greater than 45mm. In good condition with no substantial fraying or cuts. Remove excess rope as must not be able to make a loop.

Swings should be set up with top beam connectors set 5% wider than the actual swing.

Softfall Zones

Swing fall zones can be calculated as per below:

Ground to pivot height [where the swing moves from], minus the height of the swing seat (minimum 350mm) x 0.867 then add 1.5m fall zone – typically 2.7-3.3m from the swing front and back.

Ensure no other equipment is placed in the safety fall zone and that slides do not run into the safety zone.

Equipment with forced movement, i.e. swings, slides etc must not have overlapping fall zones, therefore if the swing fall zone is 3.3m and the slide side fall zone is 1m then that is 4.3m fall zone. Fixed equipment needs a 1.5m fall space so if adjacent to swings, as above example, then needs a 4.8m separation.

Equipment without forced movement can have overlapping fall zones but only if it is two pieces of equipment without forced motion, i.e. moveable boxes, fort.

Swings should also have 1m freefall from the centre of the swing to each side where the swing frame is, this does not include the structure holding up the swing.

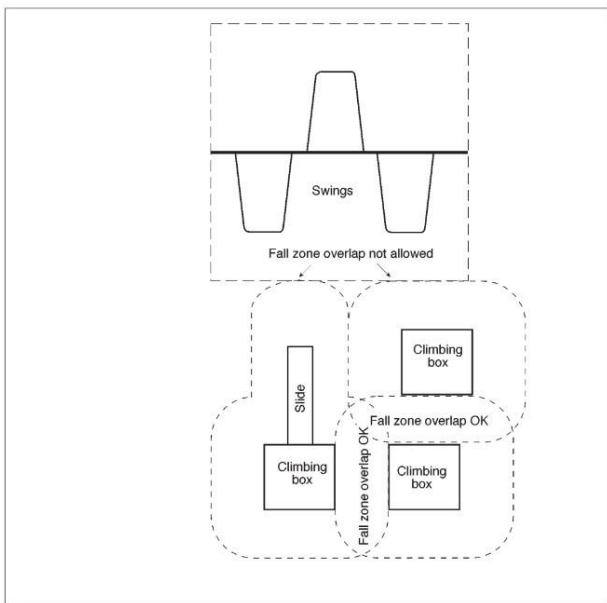


Figure 3.5 – Fall zones

Bucket, Tyre and Strap Swings



Seat height from ground – 350-500mm

Seat separation – 590-620mm: calculation is 20% of the swing suspension (distance from pivot height to top of seat) + 200mm

Side clearance from swing to frame – 490-520mm: calculation is 20% of the swing suspension (distance from pivot height to top of seat) + 300mm

No hard wooded seat swings allowed – throw these in the bin. If the plastic strap seat has damage, sand it off smooth or replace it. If there is cracking in the steel connection to the plastic, then throw it in the bin.

Barrel Swing



Swing height distance from ground is 400-450mm

Seat separation – 590-620mm: calculation is 20% of the swing suspension (distance from pivot height to top of seat) + 200mm

Side clearance from swing to frame – 490-520mm: calculation is 20% of the swing suspension (distance from pivot height to top of seat) + 300mm

Edges need to be 3m bevelled to ensure they are not sharp

Nest Swing



Swing height distance from ground is 400-450mm

Seat separation – 590-620mm: calculation is 20% of the swing suspension (distance from pivot height to top of seat) + 200mm.

Side clearance from swing to frame – 490-520mm: calculation is 20% of the swing suspension (distance from pivot height to top of seat) + 300mm.

These swings need to be compliant with NZS 5828. Most of the ones that you buy are not. Please check certification before buying, please check certification on existing swings. If you are unable to find documentation for them, they are unlikely to be compliant. The issue with these is that if they aren't compliant, they are good at taking out teeth and causing head injuries in small people.

Single Pivot Swings and Sensory Swings



Sensory swings need to be over softfall as with any other swing

Swing height from ground – 400mm.

Fall zone is calculated on 360 rotation [approx. 4 metre radius around the swing so they require a vast amount of area required for a single activity] Most swing setups in Playcentre's do not have this amount of space so will mean single point tyre or basket swings are non-compliant and should be removed due to the risk of injury resulting from collision with adjacent poles/ other swings.

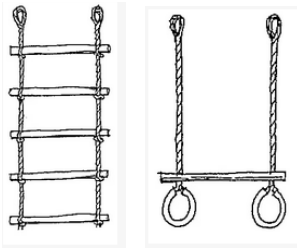
Recommended as high supervision item with adult being at arm's length when in use.

These swings need a secondary means of connection.



this image is just showing the secondary connection.

Trapeze and Ladder Swings



Ladder swings encourage climbing to a height above the maximum fall height allowed in ECE centre's of 1.5m so should not be used, we encourage their removal from site. If the top rung of the ladder is less than 1.5m high and there is no ability for a child to climb further then the ladder can remain.

Trapeze swings will often have a fall height in excess of 1.5m at the calculation point so should not be used, we encourage their removal from site. If the trapeze bar height is less than 1.5m and there is no ability for a child to climb further than the trapeze can remain.

Rope Swings (eg from tree branches)

These are only ok if there is sufficient softfall and they fall within the same standards as a single point swing. Therefore, they need a large softfall area around them. Ropes must be greater than 25-45mm and connections shall be secure so they cannot come loose of their own use. Connections should not be able to come undone without the need for tools. Rope should not be able to form a loop.