EXTENT OF THE IMPACT AREA (All settings) – measured from perimeter of equipment.

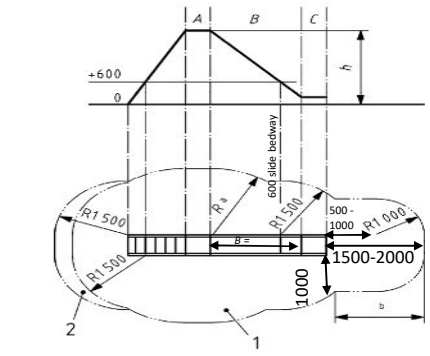
All measurements in mm

Fall Zones / Impact Area		General Free Height of Fall (FHoF) MAXIMUM HEIGHTS		
Fall Height	Fall Zone	**SECS** - 1800mm	**Other Settings** - 3000 Steep play element 2000	**Climbing** - Foot: 3000mm to support Hand: 4000mm minus 1000mm to support
No forced movement				
<600	≤1500			
Forced movement				
<600	1500			
≥ 600 - 1500	1500			
1550	1533			
1600	1567			
1650	1600			
1700	1633			
1750	1667			
1800	1700			
1850	1733			
1900	1767			
1950	1800			
2000	1833			
2050	1867			
2100	1900			
2150	1933			
2200	1967			
2250	2000			
2300	2033			
2350	2067			
2400	2100			
2450	2133			
2500	2167			
2550	2200			
2600	2233			
2650	2267			
2700	2300			
2750	2333			
2800	2367			
2850	2400			
2900	2433			
2950	2467			
3000	2500			

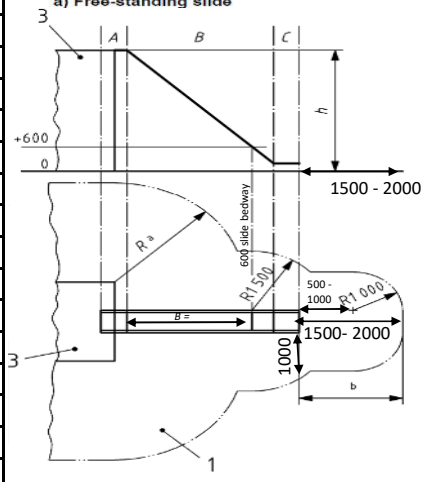
Slide Fall Zones / Impact Area

TYPE 1 R = Radius

A FHoF	fall zone R		Apply table
B < 1500		1500	Beyond run-out
B > 1500		2000	Beyond run-out
FHoF600	R	1500	Sides of slide
C		1000	Outer edge
C	R	1000	Corners/rounded
C FHoF		1000	default



a) Free-standing slide



b) Attachment slide

Key

A	starting section
B	sliding section
C	run-out section
1	impact area
2	impact area surface with no test requirement
3	play structure
h	free height of fall

Type 2 1000 Beyond run-out

SLIDE

Starting Section: Angle 0-5º and 350mm min length

Sliding Section Angle not to exceed 60º / average ≤40º

Type 1= Run-out 10º max Type 2= Run-out 5º max

Access Rail - 600-900mm (required on attached slide >1000mm)

Type 1 Slide R/out	Run out Height /	Length
B slide length of ≤1500mm	≤200mm high	≥300mm
B slide length of >1500mm	≤350mm high	≥500mm
B slide length of >7500mm	≤350mm high	≥1500mm

Rocking Equipment Fall Zone

(measured from extremity of motion)

Types 1, 2, 3 & 4 - seated 1000 / standing 1500

Carousel Fall Zone

Types A & B = 2000min radially to the side

or 3000mm for Type E Inclinded Disc

Types A, B, C & E - Shall NOT overlap other zones

Cableway Fall Zone

2000mm each side

2000mm beyond grip or seat 45º

General equipment Free Space

Type	Radius	Height
Standing	1000mm	1800mm
Sitting	1000mm	1500mm
Hanging	500mm	300mm- Above 1800mm- Below

> Greater than
< Less than
≤ Less than or equal too
≥ Greater than or equal too

Grip/Grasp

Grip 16-45mm Grasp 60mm max

Guardrail/Barrier (Not Easily Accessible)

Category	Height of playing surface	Guardrail	Barrier
Other Settings	<600 to ≤ 1000	Not required	Not required
	≥1000 to ≤ 2000	≥600 - ≤850	Optional
	≥2000 ≥ to ≤ 3000	Not Permitted	at least 700

Guardrail/Barrier (Easily Accessible)

All settings	0 to ≤ 600	Not required	Optional
	≥600 to ≤3000	Not Permitted	≥700
SECS	0 to ≤ 600	Not required	Optional
	≥600 to ≤1800	Not Permitted	≥700

Handrails

Other	Single Handrails ≥ 600 - < 900 above foot position
SECS	Single Handrails ≥ 450 - < 700 above foot position

Optional - 2 or more handrails; provided heights, spacing, entrapment & grip/grasp compliant.

Stairs

Angle at 20º - 45º	Conforms to Protection against falling

- Stairs leading to platfoms ≥1200mm in height a guardrail & handrail may replace barrier.
- Guardrails &/ barriers provided from first step and conform to grasp requirements
- Stairs higher than 1000mm and inclination > 45º, barrier shall comply with grasp requirements or handrail should be provided
- Minimum 3 risers, inclination shall be constant
- Spaced equally, uniform construction and horizontal (to within ±3º)
- Min projection of tread 140mm, min depth 110mm.
- Stairs 2000mm above ground require intermediate landings at height intervals not >2000mm
- Line shall not be continuous, but offset by at least width, or shall change direction by atleast 90º
- Intermediate landings shall be as wide as the stairs and ≥1000

Rung/Step Ladder

Inclines 70º - 90º - Rung ladder	Inclines 70º - 70º - Step ladder
Min gap 230mm between	Equally Spaced
Clearance 90mm from centre of rung or tread measured at 90º	

HEAD & NECK ENTRAPMENT

Probe E - Small Head 130mm	**Partially Bound**	
Probe C - Torso 89mm	45mm Neck	Head 155mm
Probe D - Large Head 230mm	Shoulders 230mm	

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Swing pivot height	Seat height	Length suspension (h_1 - h_3)	FHoF Free height of fall	Fall zone / Impact Area			$c \geq$	$s \geq$	Min distance between suspension members $F \geq (h_2 \times 5\%) + G$			
				A 0.867×	Solid & SECS B = 1750	Loose C = 2250	Min side (h_2 x20%)	Seat sep. (h_2 x20%)	300	350	400	450
h_1	h_3	h_2	D	h_2	$L = A + B$	$L = A + C$	+ 200 mm	+ 300 mm				
1800	350	1450	1075	1734	3484	3984	600	700	400	450	500	550
1900	400	1500	1150	1300.5	3050.5	3550.5	500	600	375	425	475	525
2000	400	1600	1200	1387.2	3137.2	3637.2	520	620	380	430	480	530
2100	400	1700	1250	1473.9	3223.9	3723.9	540	640	385	435	485	535
2200	400	1800	1300	1560.6	3310.6	3810.6	560	660	390	440	490	540
2300	400	1900	1350	1647.3	3397.3	3897.3	580	680	395	445	495	545
2400	400	2000	1400	1734	3484	3984	600	700	400	450	500	550
2500	400	2100	1450	1820.7	3570.7	4070.7	620	720	405	455	505	555
2600	400	2200	1500	1907.4	3657.4	4157.4	640	740	410	460	510	560
2700	400	2300	1550	1994.1	3744.1	4244.1	660	760	415	465	515	565
2800	400	2400	1600	2080.8	3830.8	4330.8	680	780	420	470	520	570
2900	400	2500	1650	2167.5	3917.5	4417.5	700	800	425	475	525	575
3000	400	2600	1700	2254.2	4004.2	4504.2	720	820	430	480	530	580
3100	400	2700	1750	2340.9	4090.9	4590.9	740	840	435	485	535	585
3200	400	2800	1800★	2427.6	4177.6	4677.6	760	860	440	490	540	590
3300	400	2900	1850	2514.3	4264.3	4764.3	780	880	445	495	545	595
3400	400	3000	1900	2601	4351	4851	800	900	450	500	550	600
3500	400	3100	1950	2687.7	4437.7	4937.7	820	920	455	505	555	605
3600	400	3200	2000	2774.4	4524.4	5024.4	840	940	460	510	560	610
3700	400	3300	2050	2861.1	4611.1	5111.1	860	960	465	515	565	615
3800	400	3400	2100	2947.8	4697.8	5197.8	880	980	470	520	570	620
3900	400	3500	2150	3034.5	4784.5	5284.5	900	1000	475	525	575	625
4000	400	3600	2200	3121.2	4871.2	5371.2	920	1020	480	530	580	630
4100	400	3700	2250	3207.9	4957.9	5457.9	940	1040	485	535	585	635
4200	400	3800	2300	3294.6	5044.6	5544.6	960	1060	490	540	590	640
4300	400	3900	2350	3381.3	5131.3	5631.3	980	1080	495	545	595	645
4400	400	4000	2400	3468	5218	5718	1000	1100	500	550	600	650
4500	400	4100	2450	3554.7	5304.7	5804.7	1020	1120	505	555	605	655
4600	400	4200	2500	3641.4	5391.4	5891.4	1040	1140	510	560	610	660
4700	400	4300	2550	3728.1	5478.1	5978.1	1060	1160	515	565	615	665
4800	400	4400	2600	3814.8	5564.8	6064.8	1080	1180	520	570	620	670
4900	400	4500	2650	3901.5	5651.5	6151.5	1100	1200	525	575	625	675
5000	400	4600	2700	3988.2	5738.2	6238.2	1120	1220	530	580	630	680
5100	400	4700	2750	4074.9	5824.9	6324.9	1140	1240	535	585	635	685
5200	400	4800	2800	4161.6	5911.6	6411.6	1160	1260	540	590	640	690
5300	400	4900	2850	4248.3	5998.3	6498.3	1180	1280	545	595	645	695
5400	400	5000	2900	4335	6085	6585	1200	1300	550	600	650	700
5500	400	5100	2950	4421.7	6171.7	6671.7	1220	1320	555	605	655	705
5600	400	5200	3000▲	4508.4	6258.4	6758.4	1240	1340	560	610	660	710

★ = Max FHoF- SECS (Supervised Early Childhood Services)

▲ = Max FHoF- All other settings

GUIDE

h_3 = Height of Seat

h_1 = Swing Height

h_2 = Length (h_1-h_3)

h_4 = Ground Clearance minimum -

Single-use swing

400 other settings

SECS 300

Group seat flexible

400 mm underside

100mm rigid onerous position

G = seat width (flexible default 400/300 SECS)

c = clearance to frame ($c \geq h_2$ x 20% +200)

s =seat separartion ($s \geq h_2$ x 20% +300)

F = chain separation ($F \geq h_2$ x 5% + G)

A = 0.867 x h_2 (part impact area)

B = 1750 mm solid/rubber + 500mm clearance obstacles (SECS solid or loose material)

C = 2250mm loose (optional SECS)

L = A + B or A + C (Extent of Fall Zone)

L_1 = Entire Length of Circulation Zone

W = Fall zone Width (default 1750/seat width ≤500mm)

D = Max FHoF ((h_1-h_3) ÷ 2) + h_3

1 = Rotational axis

3 = Swing seat assembly

Finger Entrapment

Chains < 8.6mm

Connectors < 8.6 or > 12mm

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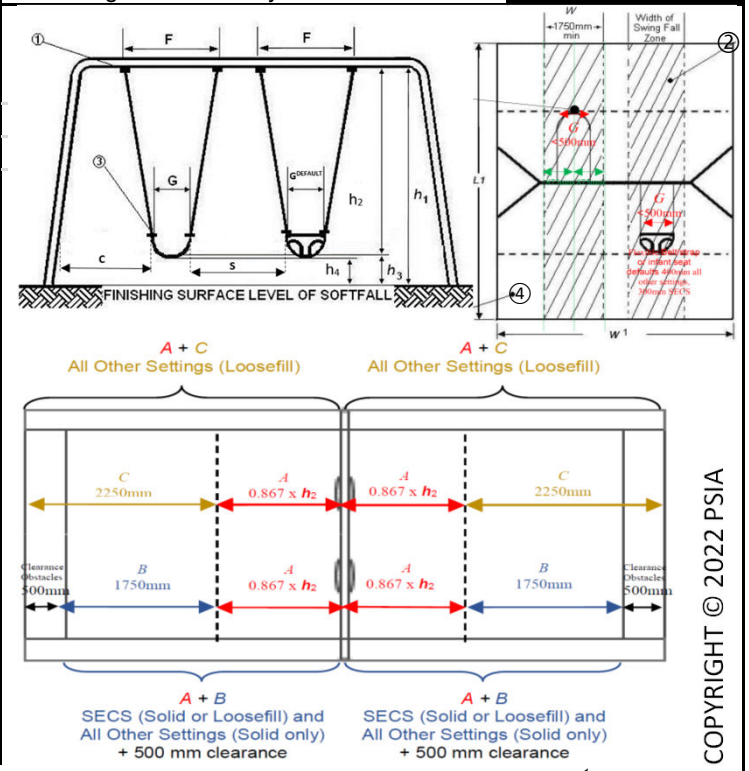
All measurements in mm



4 = Area to be covered by softfall 2 = Circulation Space (L^1 x $W1$)