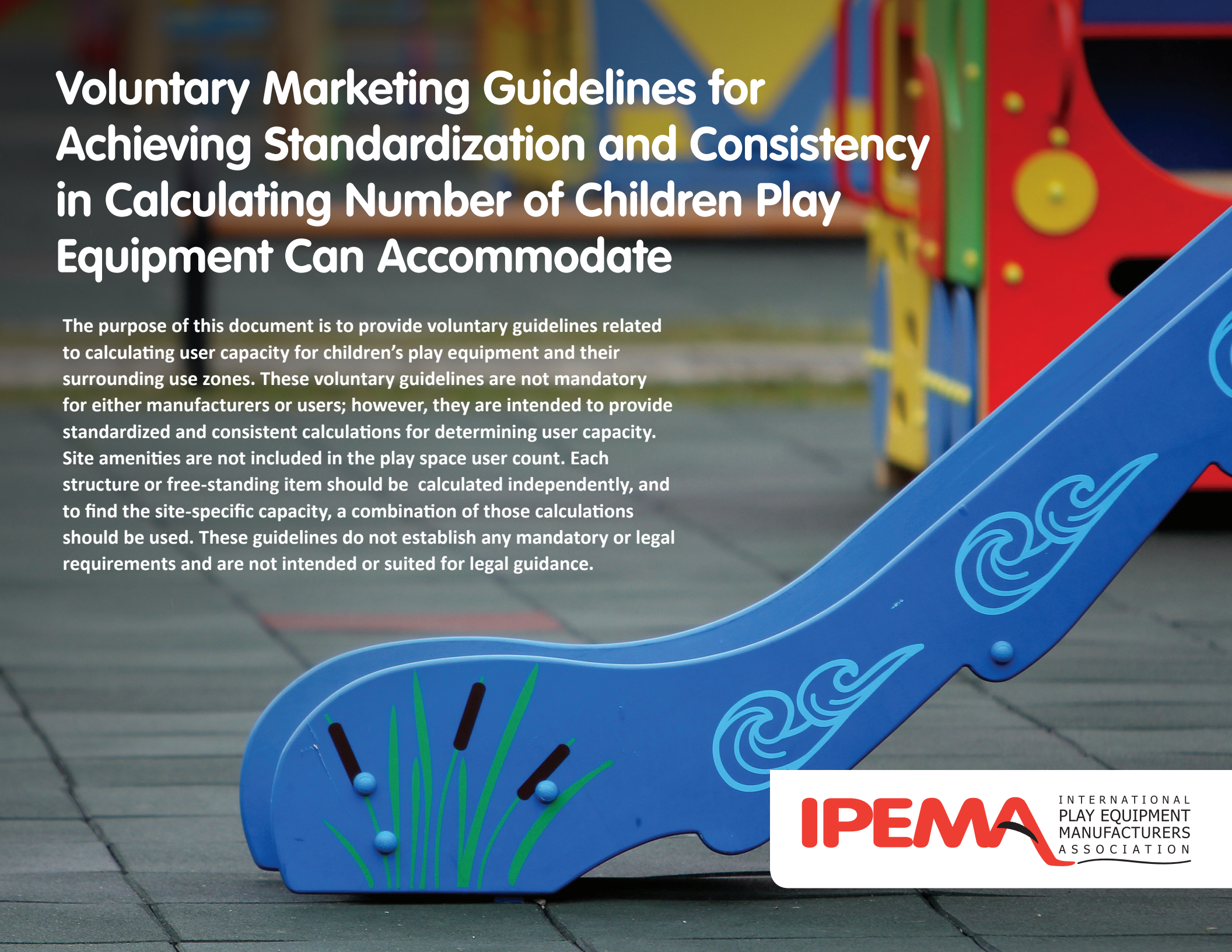
Voluntary Marketing Guidelines for Achieving Standardization and Consistency in Calculating Number of Children Play Equipment Can Accommodate

The purpose of this document is to provide voluntary guidelines related to calculating user capacity for children's play equipment and their surrounding use zones. These voluntary guidelines are not mandatory for either manufacturers or users; however, they are intended to provide standardized and consistent calculations for determining user capacity. Site amenities are not included in the play space user count. Each structure or free-standing item should be calculated independently, and to find the site-specific capacity, a combination of those calculations should be used. These guidelines do not establish any mandatory or legal requirements and are not intended or suited for legal guidance.



IPEMA
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List of Voluntary Marketing Guidelines

- Rounding: Calculations for each structure are done per component without rounding, then totaled for the structure and rounded to the nearest whole number.

- Platforms, ramps, stairs and other transitional play surfaces should be 1/3 of the users established for structural loading.

- Slides should accommodate 2 users per bed way (one at the run out and one at the entry). Longer slides do not get more users. Wide bed way slides meant for side-by-side use by 2 or more users could be considered 2 or more bed ways.

- Free standing panels vary widely in their function and should be defined by the individual companies. For example, an imaginative play panel with a steering wheel would have one user yet two wheels can accommodate two users. A tic tac toe panel would have two users; a play counter can accommodate 3 or 4 users. Elevated play panels are not counted as they are already included in the platforms, ramps, stairs and other transitional play surfaces count.

- Overheads that are designed for one-way traffic (32" wide or less) should be ½ the number of users established for structural loading. For two-way overheads (over 32") accommodation should be 2/3 the number of users established for structural loading.

- Planar nets should be 2/3 of the users established for structural loading.

- Balance Beams and stepping forms should be ½ the number of users established for structural loading.

- Crawl tunnels should be ½ the number of users established for structural loading.

- 3-dimensional climbing spaces should be calculated as follows:
  - If the number of users is less than 100, use the number of users established for structural loading.
  - If the number of users is 100-200, use 75% of structural loading users.
  - If the number of users is greater than 200, use 50% of structural loading users.

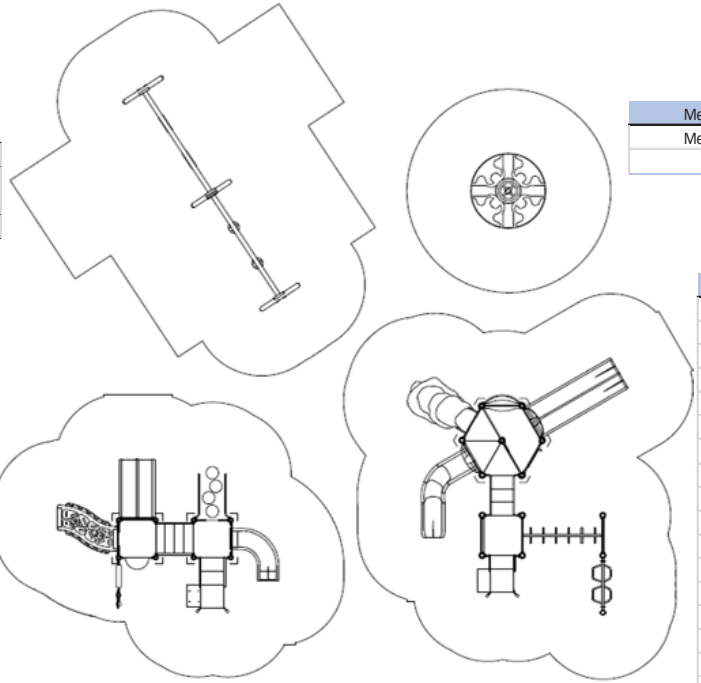
- Climbers (free standing and composite) should be defined by the individual companies but should not exceed ¾ of the number of users established for structural loading with a minimum of 1 user.

- Components with designated occupancy such as see saws, spring riders, spinners, etc. should accommodate users as per design.

- For each structure or freestanding equipment, additional capacity of users should be covered by adding an additional 25% of the user calculation. This covers users moving between play events, those socially interacting with kids on the equipment, etc.

Child Capacity Calculation Example

2 Bay Swing	Structural Loading Users	Calculation Adjustment	Users
2x belt seat	2.0	1	2
2x bucket seat	2.0	1	2
		Total	4



Merry go Round	Designated Occupancy	Calculation Adjustment	Users
Merry go Round	12.0	1	12
		Total	12

2-5 Structure	Structural Loading Users	Calculation Adjustment	Users
Climber 1	2.8	2/3	1.9
double wide slide	4.0	1	4.0
stepping form climber	4.0	1/3	1.3
elbow slide	2.0	1	2.0
Transfer Station + two steps	12.5	1/3	4.2
Arch Bridge	9.6	1/3	3.2
Bubble deck panel	-	0	0.0
Store ground play Panel	1.0	1	1.0
music ground Panel	2.0	1	2.0
square deck	23.7	1/3	7.9
		Total	27.4

5-12 structure	Structural Loading Users	Calculation Adjustment	Users
Double wide slide	4.0	1	4.0
vertical rock climber	4.3	1/2	2.1
30" Rise stairs	7.9	1/3	2.6
overhead 1	5.5	1/2	2.8
2-Rung End Access Ladder	2.0	1/2	1.0
overhead 2	4.0	1/2	2.0
Transfer Station + one step	9.9	1/3	3.3
deck play panel	-	0	0.0
curved slide	2.0	1	2.0
boulder climber	13.5	1/2	6.7
Balcony Deck	2.6	1/3	0.9
Hex Roof	-	0	0.0
square deck	11.8	1/3	3.9
tri Deck	5.9	1/3	2.0
tri Deck	5.9	1/3	2.0
tri Deck	5.9	1/3	2.0
half hex deck	13.9	1/3	4.6
ground playseat (under balcony)	1.0	1	1.0
		Total	42.9

Structures / Equipment	Users	Rounded to nearest
Merry go Round	12	12
2 Bay Swing	4	4
2-5 Structure	27.4	27
5-12 structure	42.9	43
Total		86
25% for circulation		22
Child Capacity		108

International Play Equipment Manufacturers Association
www.ipema.org | 717-238-1744
Published August 2020