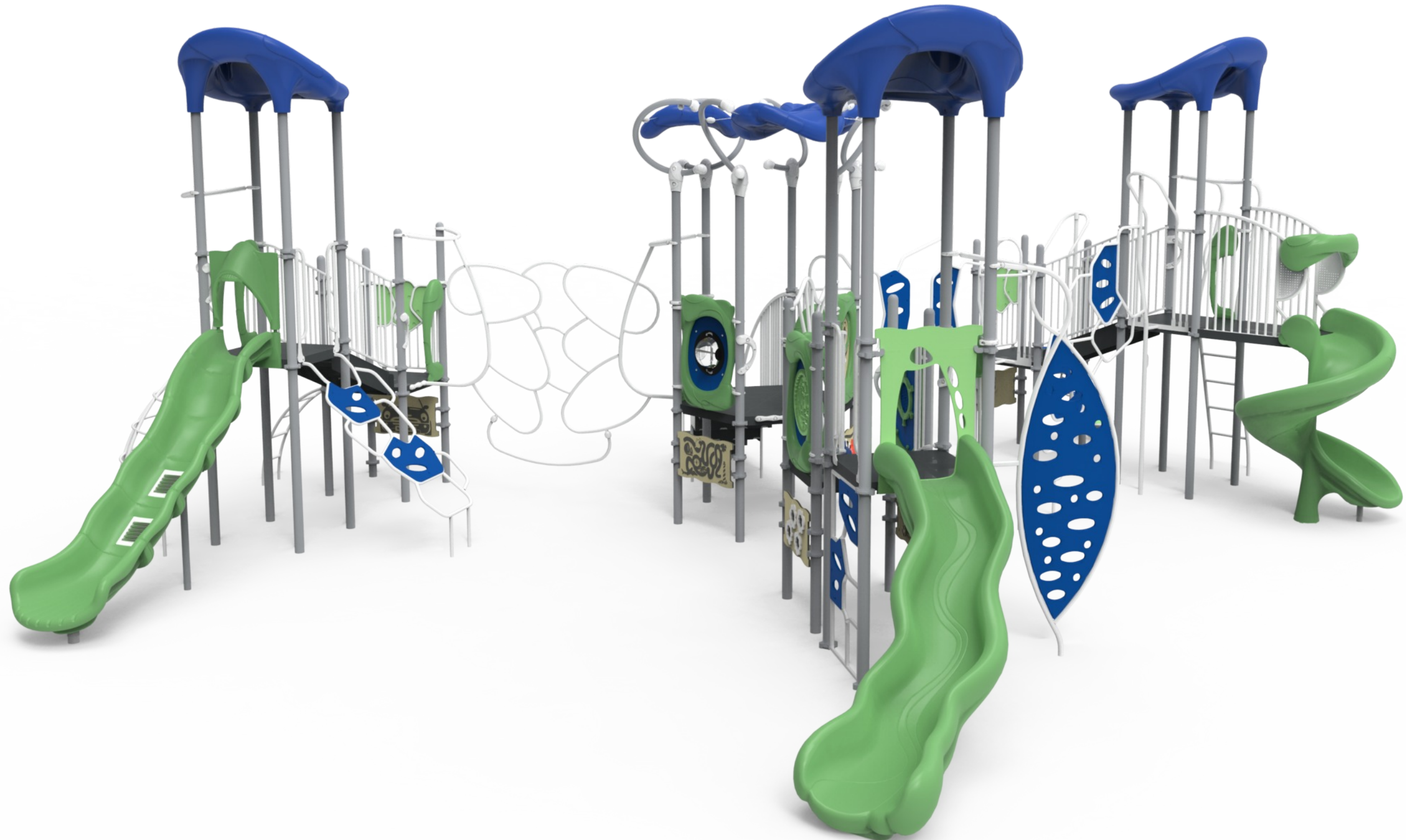


Ebb & Flow

Equipment Manufacturer



350-1706



Ebb & Flow

Equipment Manufacturer

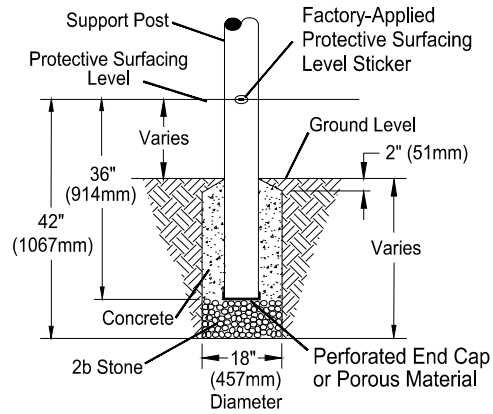


350-1706



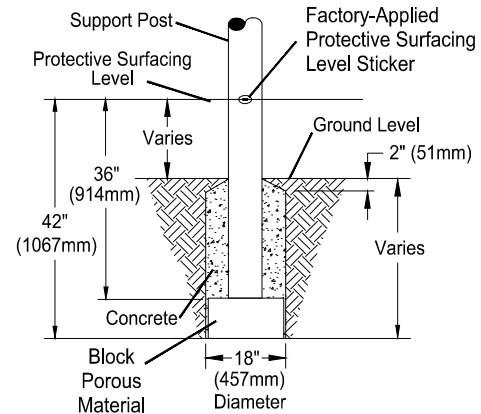
DETAIL 1

Support Post, Spiral Slide and RockBlocks Post Footing Detail



STONE OPTION

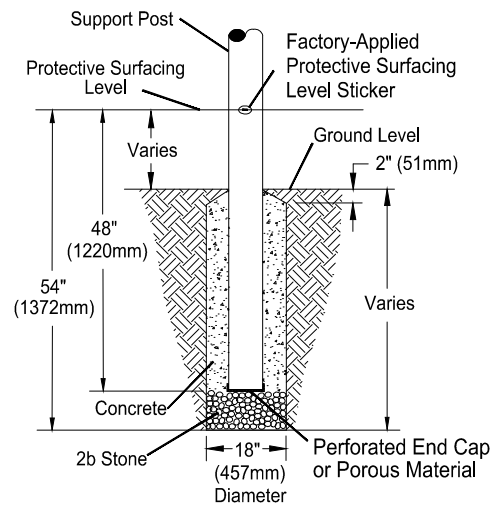
OR



BLOCK OPTION

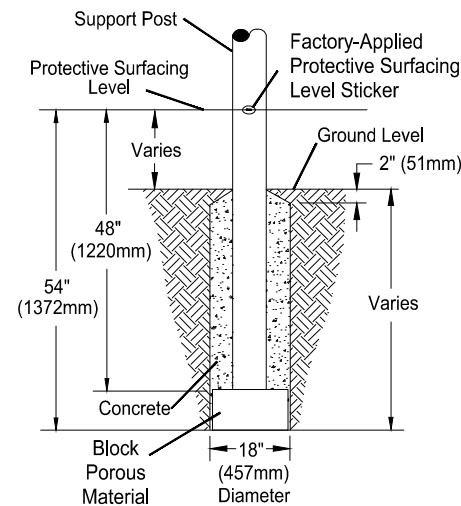
DETAIL 2

GroundZero, Cantilever and "T" Post Footing Detail



STONE OPTION

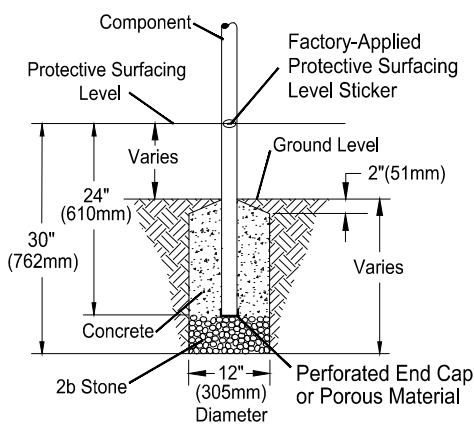
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BLOCK OPTION

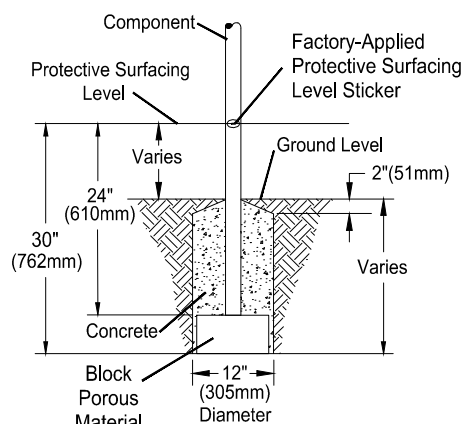
DETAIL 3

Component Footing Detail



STONE OPTION

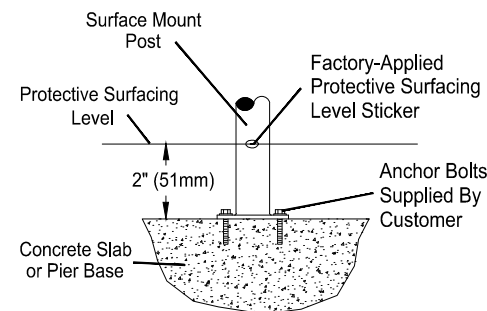
OR



BLOCK OPTION

DETAIL 4

Surface Mount Detail



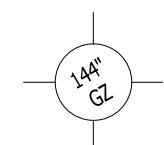
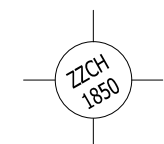
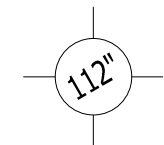
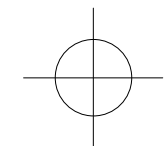
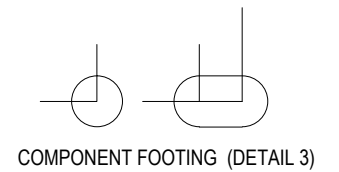
INSTALLATION NOTES:

- 1) Paved surfaces, such as asphalt and concrete, are not acceptable for use under your structure.
- 2) It is the consumer's responsibility to check with local utilities prior to excavating footings for any underground utility lines that may exist within the installation area.
- 3) It is the consumer's responsibility to check local soil conditions and drainage within the site area. Inquire with local contractors for appropriate recommendations.
- 4) If the structure is to be installed across uneven terrain, maintain the support post mark for protective surfacing level at the lowest grade. Adjust other footings accordingly.
- 5) The base of footings must be below frost lines.
- 6) Do not encase the bottom of support posts in concrete. Place all posts directly on packed stone.
- 7) Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.
- 8) Read completely the installation instructions provided with your structure prior to beginning construction.

SITE NOTES:

- 1) The site plan provided must be checked against the actual site area to ensure that placement of your structure meets required clearances.
- 2) The dimensions labeled are for location of footing holes, not exact placement of equipment. Assemble, plumb, and level equipment before pouring concrete.
- 3) There must be a minimum distance of 6' (1830mm) between any obstacle, sidewalk, etc., and your structure.
- 4) Slides must have a use zone that extends out from the lower exit section of the slide a distance that is at least 6' (1830mm) or equal to the vertical distance from the highest point of the sliding surface to the top of the protective surfacing, whichever is greater. The slide use zone should not extend greater than 8' (2438mm) from the end of the lower exit section.
- 5) The complete area, including the space under and around the equipment, must be covered with an impact attenuating material. See the 1997 publication, "Handbook for Public Playground Safety", published by the U.S. Consumer Product Safety Commission, for guidelines and recommendations on the type and depth of surfacing material. For a copy of the "Handbook for Public Playground Safety", write to: **U.S. Consumer Product Safety Commission, Office of Information and Public Affairs, Washington, D.C. 20207**
- 6) Supervise children as they play.

FOOTING LEGEND



FOOTING DETAIL

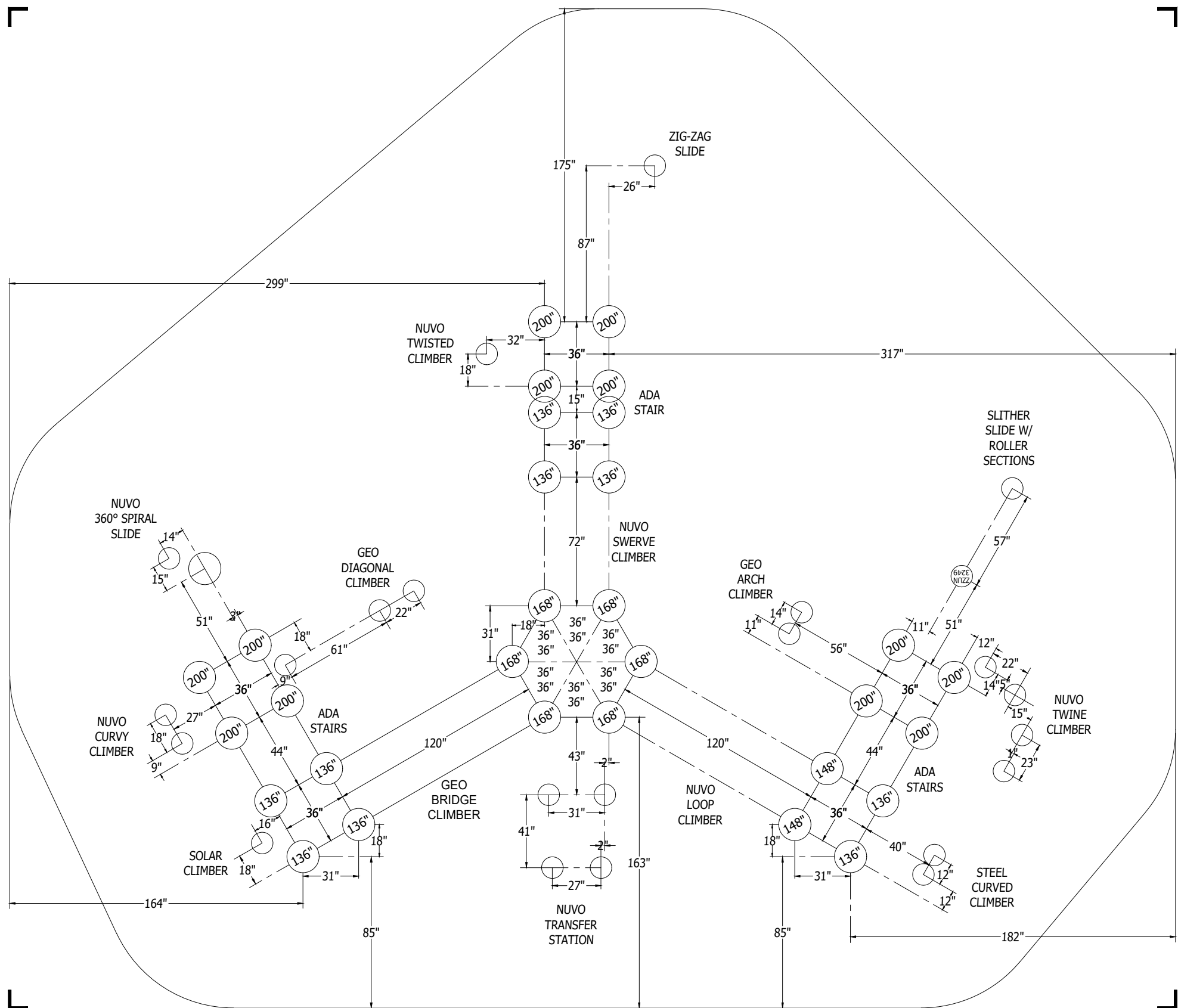
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NOT TO SCALE

DRAWN BY:
TECH SALES

Paper Size

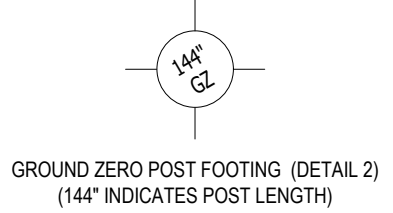
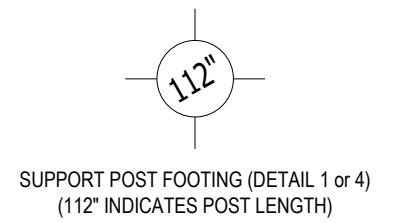
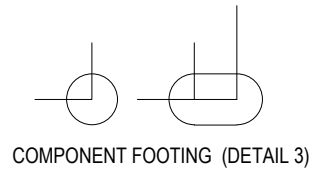
B

DATE:
28-JUNE-13



PLAYWORLD SYSTEMS, INC.
 1000 Buffalo Road
 Lewisburg, PA
 17837-9795 USA

FOOTING LEGEND



*PLAYGROUND SUPERVISION REQUIRED

PROJECT NO: 350-1706A	SCALE: 1/4"=1'-0"
DRAWN BY: M. MERTZ	Paper Size B
DATE: 22-SEPT-17	

EBB & FLOW
 CATALOG PRE-DESIGN

Ebb Flow

Design Number: 350-1706A - Bill Of Material

Ref. No.	Part No.	Description	Quantity
Posts			
1	ZZCH0028	3.5in OD x 136in STEEL POST W/ RIVETED CAP	10
2	ZZCH0038	3.5in OD x 148in STEEL POST W/ RIVETED CAP	2
3	ZZCH0077	3.5in OD x 200in STEEL POST W/O CAP	12
4	ZZCH0237	3.5in OD x 168in SWAGED STEEL POST	6
Decks & Kick Plates			
5	ZZCH0616	SQUARE COATED DECK ASSEMBLY	6
6	zzCH0619	FULL HEX COATED DECK ASSEMBLY	1
ADA Items			
7	ZZCH0678	NUVO- 48in TRANSFER STATION	1
Slides			
8	ZZCH3206	SLITHER SLIDE 2.0 ENTRANCE & EXIT	1
9	ZZCH3236	ZIGZAG SLIDE (60in DECK)	1
10	ZZCH3537	SLIDE- NUVO 360 SPIRAL SLIDE	1
11	ZZUN3208	SLITHER SLIDE 2.0 (RIGHT SECTION)	1
12	ZZUN3209	SLITHER SLIDE 2.0 (LEFT SECTION)	1
13	ZZUN3219	SLITHER SLIDE ROLLER SECTION	2
14	ZZUN3249	SLITHER SLIDE 2.0 SUPPORT LEG 3ft-6in	1
Activity Panels			
15	ZZCH4396	ACCESSIBLE MAZE PANEL	1
16	ZZCH4399	ACCESSIBLE PLANE PANEL	1
17	ZZCH4406	ACCESSIBLE DRIVING PANEL	1
18	ZZCH4407	ACCESSIBLE SOLAR SYSTEM PANEL	1
19	ZZCH4408	ACCESSIBLE BUGS PANEL	1
20	ZZCH4836	NUVO ACTIVITY PANEL	4
21	ZZUN4829	NUVO MOVE IT INSERT	1
22	ZZUN4839	NUVO JUMBLE INSERT	1
23	ZZUN4858	NUVO - CATACOMBS PANEL INSERT	1
24	ZZUN4869	NUVO - BALL MAZE PANEL INSERT	1
Barriers			
25	ZZCH4496	GEO BARRIER	2
Climbers			
26	ZZCH6956	NUVO SWERVE CLIMBER	1
27	ZZCH6957	NUVO LOOP CLIMBER	1
28	ZZCH6997	GEO VERTICAL CLIMBER (60in DK)	1
29	ZZCH7008	GEO ARCH CLIMBER (72in DK)	1
30	ZZCH7018	GEO DIAGONAL CLIMBER (72in DK)	1
31	ZZCH7039	72in TWINE CLIMBER	1
32	ZZCH7048	60in TWIST CLIMBER	1
33	ZZCH7059	72in CURVY CLIMBER	1
34	ZZCH7658	SOLAR CLIMBER (48in & 42in DECK)	1
35	ZZCH8339	STEEL CURVE CLIMBER	1
Bridges			

Ebb Flow

Design Number: 350-1706A - Bill Of Material

Ref. No.	Part No.	Description	Quantity
36	ZZCH6700	GEO BRIDGE CLIMBER	1
Audible Activities			
37	ZZCH4409	ACCESSIBLE BELL PANEL	1
38	ZZCH4467	GROUND TO GROUND BABBLE-ON	1
Roofs & Arches			
39	ZZCH9867	NUVO ROOF	3
40	ZZCH9868	NUVO SWIRL ROOF	3
Stairs and Ladders			
41	ZZCH9168	12in ACCESS STEPPED PLATFORM (DECK TO DECK)	1
42	ZZCH9170	24in ACCESS STEPPED PLATFORM (DECK TO DECK)	2
Additional Tool & Maintenance Kits			
43	ZZCHGUID	CHALLENGER GUIDELINES	1
44	ZZUN9910	SURFACING WARNING LABEL KIT	1
45	ZZUN9930	PIPE SYSTEMS MAINTENANCE KIT W/ AEROSOL	1

Ebb Flow

Design Number: 350-1706A - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled Content (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
1	ZZCH0028	10	3.5in OD x 136in STEEL POST W/ RIVETED CAP	Certified	435.10			585	0	10.00	1.25	0
2	ZZCH0038	2	3.5in OD x 148in STEEL POST W/ RIVETED CAP	Certified	94.22			127	0	2.00	0.25	0
3	ZZCH0077	12	3.5in OD x 200in STEEL POST W/O CAP	Certified	732.12			952	0	12.00	1.50	0
4	ZZCH0237	6	3.5in OD x 168in SWAGED STEEL POST	Certified	309.66			409	0	3.00	0.75	0
5	ZZCH0616	6	SQUARE COATED DECK ASSEMBLY	Certified	329.16			1,043	18	6.00	0.00	0
6	zzCH0619	1	FULL HEX COATED DECK ASSEMBLY	Certified	151.26			444	6	1.50	0.00	0
7	ZZCH0678	1	NUVO- 48in TRANSFER STATION	Certified	299.54			563	3	3.50	0.12	0
8	ZZCH3206	1	SLITHER SLIDE 2.0 ENTRANCE & EXIT	Certified	85.37			424	2	2.00	0.03	1
9	ZZCH3236	1	ZIGZAG SLIDE (60in DECK)	Certified	153.73			679	2	2.00	0.03	1
10	ZZCH3537	1	SLIDE- NUVO 360 SPIRAL SLIDE	Certified	650.00			1,417	2	6.00	0.15	1
11	ZZUN3208	1	SLITHER SLIDE 2.0 (RIGHT SECTION)	Certified	19.59			134	0	0.25	0.00	0
12	ZZUN3209	1	SLITHER SLIDE 2.0 (LEFT SECTION)	Certified	19.59			134	0	0.25	0.00	0
13	ZZUN3219	2	SLITHER SLIDE ROLLER SECTION	Certified	67.60			944	0	0.50	0.00	0
14	ZZUN3249	1	SLITHER SLIDE 2.0 SUPPORT LEG 3ft-6in	Certified	15.01			62	0	0.25	0.03	0
15	ZZCH4396	1	ACCESSIBLE MAZE PANEL	Certified	17.90			158	1	0.50	0.00	1
16	ZZCH4399	1	ACCESSIBLE PLANE PANEL	Certified	22.67			212	1	0.50	0.00	1
17	ZZCH4406	1	ACCESSIBLE DRIVING PANEL	Certified	24.07			202	1	0.50	0.00	1
18	ZZCH4407	1	ACCESSIBLE SOLAR SYSTEM PANEL	Certified	21.42			242	1	0.50	0.00	1
19	ZZCH4408	1	ACCESSIBLE BUGS PANEL	Certified	33.49			234	1	1.00	0.00	1
20	ZZCH4836	4	NUVO ACTIVITY PANEL	Certified	78.32			930	0	2.00	0.00	0
21	ZZUN4829	1	NUVO MOVE IT INSERT	Certified	30.79			391	2	0.50	0.00	1
22	ZZUN4839	1	NUVO JUMBLE INSERT	Certified	35.14			554	2	0.50	0.00	1
23	ZZUN4858	1	NUVO - CATACOMBS PANEL INSERT	Certified	24.02			256	1	0.50	0.00	1
24	ZZUN4869	1	NUVO - BALL MAZE PANEL INSERT	Certified	21.69			145	1	0.50	0.00	1
25	ZZCH4496	2	GEO BARRIER	Certified	76.66			317	0	2.00	0.00	0
26	ZZCH6956	1	NUVO SWERVE CLIMBER	Certified	93.54			539	2	2.00	0.00	1



Ebb Flow

Design Number: 350-1706A - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled Content (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
27	ZZCH6957	1	NUVO LOOP CLIMBER	Certified	157.88			1,047	2	2.00	0.00	1
28	ZZCH6997	1	GEO VERTICAL CLIMBER (60in DK)	Certified	62.16			219	2	1.00	0.00	1
29	ZZCH7008	1	GEO ARCH CLIMBER (72in DK)	Certified	80.01			250	2	2.00	0.06	1
30	ZZCH7018	1	GEO DIAGONAL CLIMBER (72in DK)	Certified	140.20			441	2	2.00	0.09	1
31	ZZCH7039	1	72in TWINE CLIMBER	Certified	100.51			410	1	4.00	0.12	1
32	ZZCH7048	1	60in TWIST CLIMBER	Certified	106.88			657	1	1.50	0.03	1
33	ZZCH7059	1	72in CURVY CLIMBER	Certified	85.42			474	1	2.00	0.06	1
34	ZZCH7658	1	SOLAR CLIMBER (48in & 42in DECK)	Certified	91.33			265	2	1.50	0.03	1
35	ZZCH8339	1	STEEL CURVE CLIMBER	Certified	48.50			101	1	1.50	0.06	1
36	ZZCH6700	1	GEO BRIDGE CLIMBER	Certified	167.87			455	3	2.00	0.00	1
37	ZZCH4409	1	ACCESSIBLE BELL PANEL	Certified	22.16			211	1	0.50	0.00	1
38	ZZCH4467	1	GROUND TO GROUND BABBLE-ON	Certified	43.15			240	2	1.50	0.00	1
39	ZZCH9867	3	NUVO ROOF	Certified	254.79			1,781	0	6.00	0.00	0
40	ZZCH9868	3	NUVO SWIRL ROOF	Certified	240.99			1,447	0	3.00	0.00	0
41	ZZCH9168	1	12in ACCESS STEPPED PLATFORM (DECK TO DECK)	Certified	70.28			277	1	2.00	0.00	0
42	ZZCH9170	2	24in ACCESS STEPPED PLATFORM (DECK TO DECK)	Certified	270.48			592	2	4.00	0.00	0
43	ZZCHGUID	1	CHALLENGER GUIDELINES	N/A	0.00			1	0	0.25	0.00	0
44	ZZUN9910	1	SURFACING WARNING LABEL KIT	Certified	0.05			1	0	0.25	0.00	0
45	ZZUN9930	1	PIPE SYSTEMS MAINTENANCE KIT W/ AEROSOL	N/A				90				
Totals:					5,784.32	843	1,549	21,052	69	97.25	4.56	25
					2,602.94 Kg	379 Kg	697 Kg	21 Metric Tons				3.47 m3



Ebb Flow

Design Number: 350-1706A - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled Content (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
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ASTM F1487

The lay-out for this custom playscape, design number 350-1706A, has been configured to meet the requirements of the ASTM F1487 standard. In addition, each of the above components listed as "Certified" have been tested and are IPEMA certified. Components listed as "Not Applicable" do not fall within the scope of the ASTM F1487 standard and have not been tested. IPEMA certification can be verified on the IPEMA website, www.ipema.org. In the interest of playground safety, IPEMA provides a Third Party Certification Service which validates compliance.

2010 ADA Standards for Accessible Design

The lay-out was also designed to meet the 2010 Standards published 15-Sep-2010, by the Department of Justice when installed over a properly maintained surfacing material that is in compliance with ASTM F1951 "Accessibility of Surface Systems Under and Around Playground Equipment" as well as ASTM F1292, "Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment", appropriate for the fall height of the structure.

Installation Times

Installation times are based on one experienced installer. A crew of three experienced individuals can perform the installation within the given time, each member working 1/3 of the given hours. [Eg. Installation Time = 30 hours. For a crew of three, each member will work 10 hours on the installation for a total of 30 hours on the project.]

Carbon Footprint

The CO2e (carbon footprint given in Kilograms and Metric Tons) listed above is a measure of the environmental impact this play structure represents from harvesting raw materials to the time it leaves our shipping dock. Playworld Systems nurtures a total corporate culture that is focused on eliminating carbon producing processes and products, reducing our use of precious raw materials, reusing materials whenever possible and recycling materials at every opportunity. Playworld Systems elected to adopt the Publicly Available Specification; PAS 2050 as published by the British Standards Institute and sponsored by Defra and the Carbon Trust. The PAS 2050 has gained international acceptance as a specification that measures the greenhouse gas emissions in services and goods throughout their entire life cycle.

Pre-Consumer Recycle Content

A measurement, in pounds, that qualifies the amount of material that was captured as waste and diverted from landfill during an initial manufacturing process and is being redirected to a separate manufacturing process to become a different product. E.g. 100% of our Aluminum Tubing is made from captured waste material during the manufacturing process of extruded Aluminum products such as rods, flat bars and H-channels.

Post-Consumer Recycle Content

A measurement, in pounds, that qualifies the amount of material that was once another product that has completed its lifecycle and has been diverted from a landfill as a solid waste through recycling and is now being used in a Playworld Systems' product. E.g. **20% to 40% of the steel in our steel tubing and sheet steel have been diverted from landfills. Automobiles are scrapped and recyclable steel is purchased by the steel mill that produces our raw product.

** The amount of Post-Consumer recycled steel fluctuates daily based on the availability of the recycled steel.

