

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the Council:

SUBJECT: Community Services - Authorize a new Facility Equipment Automation Project for the renovation of Pueblo Park, appropriate grant funds, and approve a contract for play equipment. Expenditure: \$82,736.90

RECOMMENDATION

Recommendation of the Community Services Director that the City Council:

1. Authorize a new Facility Equipment Automation Project (FEAP) for the renovation of Pueblo Park;
2. Appropriate \$150,000 funds from the Proposition A-Los Angeles County Regional Park Open Space District grant to the new FEAP; and
3. Approve the award of a contract in the amount of \$82,736.90 with Dave Bang and Associates, Inc. of Tustin, CA for the purchase and installation of new play equipment.

Funding

Funding for the project is available using Proposition A funding under the Los Angeles County Regional Park Open Space District grant.

BACKGROUND

In 2011, the City of Torrance received a \$150,000 grant from the Los Angeles County Regional Park Open Space District (RPOSD) to be used for recreational amenities in our park system. Out of all the City's parks, Pueblo Park is in the most need of refurbishment based on the age of the existing equipment and amenities. On May 15, 2012, the Torrance City Council approved the use of these funds for Pueblo Park in Resolution (2012-49) recommending the funds be used for a pre-fabricated restroom and new play equipment (Attachment A). An application to use the funds for this purpose was subsequently approved by the County Board of Supervisors.

Pueblo Park has been master planned several times over the past decade, but the needs of the community continued to overshoot the available funding. The Department has planned the renovations in phases so parts of the project can be implemented with available funding instead of waiting for the project total to be on hand like Lago Seco or Seaside Heroes Parks. As such, Pueblo Park was not included in the previous Capital Project budgets and to begin the renovation process the park project will need to be added as a new FEAP.

ANALYSIS

The first phase has already begun with the assistance of the Public Works Department's Del Amo Boulevard Project. New sidewalk, decorative concrete with curb and guttering along with a new traffic signal was completed in August 2012. In addition, the basketball court will be renovated under FEAP 772 over the next few months. The final piece of phase one is the installation of play equipment.

Staff conducted research on various playground equipment styles, materials and themes. It was determined that Playworld Systems best meets the vision of the Department. Their product is high in quality of material and construction, easy to maintain, and offered in a variety of innovative themes and colors. Dave Bang and Associates, Inc, the authorized representative for Playworld Systems, was asked to provide renderings of the Playworld Systems playground equipment based on the dimensions of the project. Site visits were made to other cities that have this play equipment installed and reference checks were completed. Staff worked extensively with the community and have implemented their ideas on design and color scheme into the new design of the play equipment (Attachment B). The new design was subsequently approved by the Parks and Recreation Commission at their June 2012 meeting.

Dave Bang and Associates as a result of a formal bid, was awarded a contract by the San Bernardino School District for the full product line of Playworld Systems equipment. The contract price has been extended to the City of Torrance as a cooperative purchase allowing us to purchase this equipment at a significant reduction against the retail price.

The Torrance Municipal Code, (Section 22.3.15), (EXCEPTIONS COOPERATIVE PURCHASES) states;

"a) The provisions of this Article will not apply to purchases made pursuant to any cooperative governmental purchase program, which purchases will be made in accordance with such procedures and regulations as shall be established by the City Manager.

b) For the purposes of this Section, the term cooperative governmental purchase program means any combination between the City of Torrance and any other public agency or public agencies for the joint purchase of property or services".

To expedite the project, it was determined that it is the best interest of the City to also have Dave Bang and Associates provide, removal of the old playground equipment, site preparation, play, installation of the play surface and playground equipment and signage. It is anticipated that the entire process will take approximately 10 weeks upon award of a contract. It is being requested that City Council approve the award a contract for the purchase and installation of play equipment at Pueblo Park with Dave Bang and Associates, Inc. for an amount \$82,736.90 (Attachment C).

The second phase for the renovation of Pueblo Park is planned to occur later this year which deals with the empty church property. Staff intend hire a landscape architect to design the playing field, walkway, bathroom location/site preparation, landscaping, irrigation, lighting, and fencing. This phase will be shared with Exxon Mobil in the hopes that they can contribute to the project. The remaining Prop A grant funding will be used to install a pre-

fabricated bathroom. Any residual funds left over after the restroom will be used for small park amenities such as new benches and drinking fountains.

A final and long term phase is the rehabilitation of the Pueblo Community Building, including new fencing and lighting, and a design and install of a plaza or courtyard at the front of the building. This phase is dependent on future funding being available.

Respectfully submitted,



JOHN JONES
Community Services Director

CONCUR:



LeROY JACKSON
City Manager

Attachment A. Resolution 2012-49
 B. Play Equipment Rendering
 C. Agreement with Dave Bang and Associates, Inc.

RESOLUTION NO. 2012-49**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TORRANCE APPROVING THE APPLICATION FOR EXCESS GRANT FUNDS FROM THE LOS ANGELES COUNTY REGIONAL PARK AND OPEN SPACE DISTRICT FOR A PRE-FABRICATED RESTROOM AND THE REPLACEMENT OF PLAY EQUIPMENT AT PUEBLO PARK.**

WHEREAS, the people of the County of Los Angeles on November 3, 1992, and on November 5, 1996, enacted Los Angeles County Proposition A, Safe Neighborhood Parks, Gang Prevention, Tree-Planting, Senior and Youth Recreation, Beaches and Wildlife Protection (the Propositions), which, among other uses, provides funds to public agencies and nonprofit organizations in the County for the purposes of acquiring and/or developing facilities and open space for public recreation; and

WHEREAS, the Propositions also created the Los Angeles County Regional Park and Open Space District (the District) to administer said funds; and

WHEREAS, the District has set forth the necessary procedures governing applications for grant funds under the Propositions; and

WHEREAS, the District's procedures require the Applicant to certify, by resolution, the approval of the application(s) before submission of said application(s) to the District; and

WHEREAS, the application form contains assurances that the Applicant must comply with; and

WHEREAS, the Applicant certifies, through this resolution, that the application is approved for submission to the District; and

WHEREAS, the Applicant will enter into a Project Agreement with the District for the performance of the Project as described in the application.

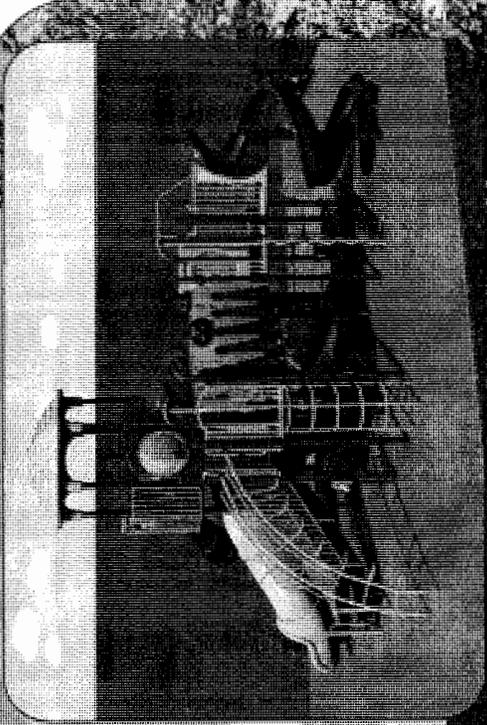
NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF TORRANCE, CALIFORNIA, DOES HEREBY:

1. Approves the filing of an application with the District for Excess Funds allocated pursuant to the 1996 Proposition for the above named Project; and
2. Certifies that said Applicant understands the assurances and certifications in the application form; and
3. Certifies that said Applicant understands its obligation to operate and maintain the property(s) in perpetuity; and
4. Certifies that said Applicant will sign and return, within 30 days, both copies of the project agreement sent by the District for authorizing signature; and

ATTACHMENT B



Shown with:
Posts: Red
Components 1: Beige
Components 2: Red
Rounded Plastic: Blue/Yellow
2-Color Plastic: Blue/Yellow
Deck: Brown
Roof: Yellow
Crazy Bench/ADA Stairs: Blue/Red
Drawing # C2138CH81
June 19, 2012
Eric Huber, Associate
Designed for children ages 5-12



 **PLAYWORLD SYSTEMS**
The world needs play!

Pueblo Park
OPTION D

dave bang associates, inc.
Since 1979
P.O. Box 1088, Tustin, CA 92781 P: 1-800-669-2585
License #795052 • www.davebang.com

CONTRACT SERVICES AGREEMENT

This CONTRACT SERVICES AGREEMENT ("Agreement") is made and entered into as of November 20, 2012 (the "Effective Date"), by and between the CITY OF TORRANCE, a municipal corporation ("CITY"), and DAVE BANG ASSOCIATES INCORPORATED OF CALIFORNIA, a California corporation ("CONTRACTOR").

RECITALS:

- A. CITY wishes to retain the services of an experienced and qualified CONTRACTOR to install new play equipment at Pueblo Park.
- B. CONTRACTOR represents that it is qualified to perform those services.

AGREEMENT:

1. SERVICES TO BE PERFORMED BY CONTRACTOR

CONTRACTOR will provide the services listed in the Scope of Services attached as Exhibit A. CONTRACTOR warrants that all work and services set forth in the Scope of Services will be performed in a competent, professional and satisfactory manner.

2. TERM

Unless earlier terminated in accordance with Paragraph 4 below, this Agreement will continue in full force and effect from the Effective Date through June 30, 2013.

3. COMPENSATION

A. CONTRACTOR's Fee.

For services rendered pursuant to this Agreement, CONTRACTOR will be paid in accordance with the Compensation Schedule attached as Exhibit B, provided, however, that in no event will the total amount of money paid the CONTRACTOR, for services initially contemplated by this Agreement, exceed the sum of \$82,736.90 ("Agreement Sum"), unless otherwise first approved in writing by CITY.

B. Schedule of Payment.

Provided that the CONTRACTOR is not in default under the terms of this Agreement, upon presentation of an invoice, CONTRACTOR will be paid the fees described in Paragraph 3.A. above, according to the Compensation Schedule. Payment will be due within 30 days after the date of the invoice.

4. **TERMINATION OF AGREEMENT**

A. Termination by CITY for Convenience.

1. CITY may, at any time, terminate the Agreement for CITY's convenience and without cause.
2. Upon receipt of written notice from CITY of such termination for CITY's convenience, CONTRACTOR will:
 - a. cease operations as directed by CITY in the notice;
 - b. take actions necessary, or that CITY may direct, for the protection and preservation of the work; and
 - c. except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
3. In case of such termination for CITY's convenience, CONTRACTOR will be entitled to receive payment for work executed; and costs incurred by reason of such termination, along with reasonable overhead and profit on the work not executed.

B. Termination for Cause.

1. If either party fails to perform any term, covenant or condition in this Agreement and that failure continues for 15 calendar days after the nondefaulting party gives the defaulting party written notice of the failure to perform, this Agreement may be terminated for cause; provided, however, that if during the notice period the defaulting party has promptly commenced and continues diligent efforts to remedy the default, the defaulting party will have such additional time as is reasonably necessary to remedy the default.
2. In the event this Agreement is terminated for cause by the default of the CONTRACTOR, the CITY may, at the expense of the CONTRACTOR and its surety, complete this Agreement or cause it to be completed. Any check or bond delivered to the CITY in connection with this Agreement, and the money payable thereon, will be forfeited to and remain the property of the CITY. All moneys due the CONTRACTOR under the terms of this Agreement will be retained by the CITY, but the retention will not release the CONTRACTOR and its surety from liability for the default. Under these circumstances, however, the CONTRACTOR and its surety will be credited with the amount of money retained, toward any amount by which the cost of completion exceeds the Agreement Sum and any amount authorized for extra services.

3. Termination for cause will not affect or terminate any of the rights of the CITY as against the CONTRACTOR or its surety then existing, or which may thereafter accrue because of the default; this provision is in addition to all other rights and remedies available to the CITY under law.

C. Termination for Breach of Law.

In the event the CONTRACTOR or any of its officers, directors, shareholders, employees, agents, subsidiaries or affiliates is convicted (i) of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of a contract or subcontract; (ii) under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a public consultant or contractor; (iii) under state or federal antitrust statutes arising out of the submission of bids or proposals; or (iv) of violation of Paragraph 19 of this Agreement; or for any other cause the CITY determines to be so serious and compelling as to affect CONTRACTOR's responsibility as a public consultant or contractor, including but not limited to, debarment by another governmental agency, then the CITY reserves the unilateral right to terminate this Agreement or to impose such other sanctions (which may include financial sanctions, temporary suspensions or any other condition deemed appropriate short of termination) as it deems proper. The CITY will not take action until CONTRACTOR has been given notice and an opportunity to present evidence in mitigation.

5. **FORCE MAJEURE**

If any party fails to perform its obligations because of strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental control, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond the reasonable control of the party obligated to perform, then that party's performance shall be excused for a period equal to the period of such cause for failure to perform.

6. **RETENTION OF FUNDS**

CONTRACTOR authorizes CITY to deduct from any amount payable to CONTRACTOR (whether or not arising out of this Agreement) any amounts the payment of which may be in dispute or that are necessary to compensate CITY for any losses, costs, liabilities, or damages suffered by CITY, and all amounts for which CITY may be liable to third parties, by reason of CONTRACTOR's acts or omissions in performing or failing to perform CONTRACTOR's obligations under this Agreement. In the event that any claim is made by a third party, the amount or validity of which is disputed by CONTRACTOR, or any indebtedness

exists that appears to be the basis for a claim of lien, CITY may withhold from any payment due, without liability for interest because of the withholding, an amount sufficient to cover the claim. The failure of CITY to exercise the right to deduct or to withhold will not, however, affect the obligations of CONTRACTOR to insure, indemnify, and protect CITY as elsewhere provided in this Agreement.

7. CITY REPRESENTATIVE

Robert Carson is designated as the "City Representative," authorized to act in its behalf with respect to the work and services specified in this Agreement and to make all decisions in connection with this Agreement. Whenever approval, directions, or other actions are required by CITY under this Agreement, those actions will be taken by the City Representative, unless otherwise stated. The City Manager has the right to designate another City Representative at any time, by providing notice to CONTRACTOR.

8. CONTRACTOR REPRESENTATIVE(S)

The following principal(s) of CONTRACTOR are designated as being the principal(s) and representative(s) of CONTRACTOR authorized to act in its behalf with respect to the work specified in this Agreement and make all decisions in connection with this Agreement:

Eric Huber

9. INDEPENDENT CONTRACTOR

The CONTRACTOR is, and at all times will remain as to CITY, a wholly independent contractor. Neither CITY nor any of its agents will have control over the conduct of the CONTRACTOR or any of the CONTRACTOR's employees, except as otherwise set forth in this Agreement. The CONTRACTOR may not, at any time or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of CITY.

10. BUSINESS LICENSE

The CONTRACTOR must obtain a City business license prior to the start of work under this Agreement, unless CONTRACTOR is qualified for an exemption.

11. OTHER LICENSES AND PERMITS

CONTRACTOR warrants that it has all professional, contracting and other permits and licenses required to undertake the work contemplated by this Agreement.

12. FAMILIARITY WITH WORK

By executing this Agreement, CONTRACTOR warrants that CONTRACTOR (a) has thoroughly investigated and considered the scope of services to be performed, (b) has carefully considered how the services should be performed, and (c) fully understands the facilities, difficulties and restrictions attending performance of the services under this Agreement. If the services involve work upon any site, CONTRACTOR warrants that CONTRACTOR has or will

investigate the site and is or will be fully acquainted with the conditions there existing, prior to commencement of services set forth in this Agreement. Should CONTRACTOR discover any latent or unknown conditions that will materially affect the performance of the services set forth in this Agreement, CONTRACTOR must immediately inform CITY of that fact and may not proceed except at CONTRACTOR's risk until written instructions are received from CITY.

13. CARE OF WORK

CONTRACTOR must adopt reasonable methods during the term of the Agreement to furnish continuous protection to the work, and the equipment, materials, papers, documents, plans, studies and other components to prevent losses or damages, and will be responsible for all damages, to persons or property, until acceptance of the work by CITY, except those losses or damages as may be caused by CITY's own negligence.

14. CONTRACTOR'S ACCOUNTING RECORDS; OTHER PROJECT RECORDS

Records of the CONTRACTOR's time pertaining to the project, and records of accounts between CITY and the CONTRACTOR, will be kept on a generally recognized accounting basis. CONTRACTOR will also maintain all other records, including without limitation specifications, drawings, progress reports and the like, relating to the project. All records will be available to CITY during normal working hours. CONTRACTOR will maintain these records for three years after final payment.

15. INDEMNIFICATION

CONTRACTOR will indemnify, defend, and hold harmless CITY, the Successor Agency to the Former Redevelopment Agency of the City of Torrance, the City Council, each member thereof, present and future, members of boards and commissions, its officers, agents, employees and volunteers from and against any and all liability, expenses, including defense costs and legal fees, and claims for damages whatsoever, including, but not limited to, those arising from breach of contract, bodily injury, death, personal injury, property damage, loss of use, or property loss however the same may be caused and regardless of the responsibility for negligence. The obligation to indemnify, defend and hold harmless includes, but is not limited to, any liability or expense, including defense costs and legal fees, arising from the negligent acts or omissions, or willful misconduct of CONTRACTOR, its officers, employees, agents, subcontractors or vendors. It is further agreed, CONTRACTOR's obligations to indemnify, defend and hold harmless will apply even in the event of concurrent negligence on the part of CITY, the City Council, each member thereof, present and future, or its officers, agents and employees, except for liability resulting solely from the negligence or willful misconduct of CITY, its officers, employees or agents. Payment by CITY is not a condition precedent to enforcement of this indemnity. In the event of any dispute between CONTRACTOR and CITY, as to whether liability arises from the sole negligence of the CITY or its officers, employees, agents, subcontractors or vendors, CONTRACTOR will be obligated to pay for CITY's defense until such time as a final judgment has been entered adjudicating the CITY as solely negligent. CONTRACTOR will not be entitled in

the event of such a determination to any reimbursement of defense costs including but not limited to attorney's fees, expert fees and costs of litigation.

16. NON-LIABILITY OF CITY OFFICERS AND EMPLOYEES

No officer or employee of CITY will be personally liable to CONTRACTOR, in the event of any default or breach by the CITY or for any amount that may become due to CONTRACTOR.

17. INSURANCE

- A. CONTRACTOR and its subcontractors must maintain at its sole expense the following insurance, which will be full coverage not subject to self insurance provisions:
1. Automobile Liability, including owned, non-owned and hired vehicles, with at least the following limits of liability:
 - a. Primary Bodily Injury with limits of at least \$500,000 per person, \$500,000 per occurrence; and
 - b. Primary Property Damage of at least \$250,000 per occurrence; or
 - c. Combined single limits of \$1,000,000 per occurrence.
 2. General Liability including coverage for premises, products and completed operations, independent contractors/vendors, personal injury and contractual obligations with combined single limits of coverage of at least \$1,000,000 per occurrence.
 3. Workers' Compensation with limits as required by the State of California and Employer's Liability with limits of at least \$1,000,000.
- B. The insurance provided by CONTRACTOR will be primary and non-contributory.
- C. CITY ("City of Torrance"), the Successor Agency to the Former Redevelopment Agency of the City of Torrance, the City Council and each member thereof, members of boards and commissions, every officer, agent, official, employee and volunteer must be named as additional insured under the automobile and general liability policies.
- D. CONTRACTOR must provide certificates of insurance and/or endorsements indicating appropriate coverage, to the City Clerk of the City of Torrance before the commencement of work.
- E. Each insurance policy required by this Paragraph must contain a provision that no termination, cancellation or change of coverage can be made without thirty days notice to CITY.

18. SUFFICIENCY OF INSURERS

Insurance required by this Agreement will be satisfactory only if issued by companies admitted to do business in California, rated "B+" or better in the most recent edition of Best's Key Rating Guide, and only if they are of a financial category Class VII or better, unless these requirements are waived by the Risk Manager of CITY ("Risk Manager") due to unique circumstances. In the event the Risk Manager determines that the work or services to be performed under this Agreement creates an increased or decreased risk of loss to CITY, the CONTRACTOR agrees that the minimum limits of any insurance policies or performance bonds required by this Agreement may be changed accordingly upon receipt of written notice from the Risk Manager; provided that CONTRACTOR will have the right to appeal a determination of increased coverage by the Risk Manager to the City Council of CITY within 10 days of receipt of notice from the Risk Manager.

19. CONFLICT OF INTEREST

A. No officer or employee of the CITY may have any financial interest, direct or indirect, in this Agreement, nor may any officer or employee participate in any decision relating to the Agreement that effects the officer or employee's financial interest or the financial interest of any corporation, partnership or association in which the officer or employee is, directly or indirectly interested, in violation of any law, rule or regulation.

B. No person may offer, give, or agree to give any officer or employee or former officer or employee, nor may any officer or employee solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any way pertaining to any program requirement, contract or subcontract, or to any solicitation or proposal.

20. NOTICE

A. All notices, requests, demands, or other communications under this Agreement will be in writing. Notice will be sufficiently given for all purposes as follows:

1. Personal delivery. When personally delivered to the recipient: notice is effective on delivery.
2. First Class mail. When mailed first class to the last address of the recipient known to the party giving notice: notice is effective three mail delivery days after deposit in an United States Postal Service office or mailbox.

3. Certified mail. When mailed certified mail, return receipt requested: notice is effective on receipt, if delivery is confirmed by a return receipt.
4. Overnight delivery. When delivered by an overnight delivery service, charges prepaid or charged to the sender's account: notice is effective on delivery, if delivery is confirmed by the delivery service.
5. Facsimile transmission. When sent by fax to the last fax number of the recipient known to the party giving notice: notice is effective on receipt. Any notice given by fax will be deemed received on the next business day if it is received after 5:00 p.m. (recipient's time) or on a non-business day.
6. Addresses for purpose of giving notice are as follows:

CONTRACTOR Eric Huber
 Dave Bang Associates
 Incorporated of California
 P.O. Box 1088 Tustin, CA 92781

Fax: (800) 729-2483

CITY: City Clerk
 City of Torrance
 3031 Torrance Boulevard
 Torrance, CA 90509-2970
 Fax: (310) 618-2931

- B. Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified, will be deemed effective as of the first date the notice was refused, unclaimed or deemed undeliverable by the postal authorities, messenger or overnight delivery service.
- C. Either party may change its address or fax number by giving the other party notice of the change in any manner permitted by this Agreement.

21. **PROHIBITION AGAINST ASSIGNMENT AND SUBCONTRACTING**

This Agreement and all exhibits are binding on the heirs, successors, and assigns of the parties. The Agreement may not be assigned or subcontracted by either CITY or CONTRACTOR without the prior written consent of the other.

22. INTEGRATION; AMENDMENT

This Agreement represents the entire understanding of CITY and CONTRACTOR as to those matters contained in it. No prior oral or written understanding will be of any force or effect with respect to the terms of this Agreement. The Agreement may not be modified or altered except in writing signed by both parties.

23. INTERPRETATION

The terms of this Agreement should be construed in accordance with the meaning of the language used and should not be construed for or against either party by reason of the authorship of this Agreement or any other rule of construction that might otherwise apply.

24. SEVERABILITY

If any part of this Agreement is found to be in conflict with applicable laws, that part will be inoperative, null and void insofar as it is in conflict with any applicable laws, but the remainder of the Agreement will remain in full force and effect.

25. TIME OF ESSENCE

Time is of the essence in the performance of this Agreement.

26. GOVERNING LAW; JURISDICTION

This Agreement will be administered and interpreted under the laws of the State of California. Jurisdiction of any litigation arising from the Agreement will be in Los Angeles County, California.

27. COMPLIANCE WITH STATUTES AND REGULATIONS

CONTRACTOR will be knowledgeable of and will comply with all applicable federal, state, county and city statutes, rules, regulations, ordinances and orders.

28. WAIVER OF BREACH

No delay or omission in the exercise of any right or remedy by a nondefaulting party on any default will impair the right or remedy or be construed as a waiver. A party's consent or approval of any act by the other party requiring the party's consent or approval will not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and will not be a waiver of any other default concerning the same or any other provision of this Agreement.

29. ATTORNEY'S FEES

Except as provided for in Paragraph 15, in any dispute, litigation, arbitration, or other proceeding by which one party either seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing party will be awarded reasonable attorney's fees, together with any costs and expenses, to resolve the dispute and to enforce any judgment.

30. EXHIBITS

All exhibits identified in this Agreement are incorporated into the Agreement by this reference.

31. CONTRACTOR'S AUTHORITY TO EXECUTE

The persons executing this Agreement on behalf of the CONTRACTOR warrant that (i) the CONTRACTOR is duly organized and existing; (ii) they are duly authorized to execute this Agreement on behalf of the CONTRACTOR; (iii) by so executing this Agreement, the CONTRACTOR is formally bound to the provisions of this Agreement; and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which the CONTRACTOR is bound.

CITY OF TORRANCE,
a municipal corporation

DAVE BANG ASSOCIATES
INCORPORATED OF CALIFORNIA,
a California corporation

Frank Scotto, Mayor

By: _____

ATTEST:

Eric Huber
Vice President

Sue Herbers
City Clerk

APPROVED AS TO FORM:
JOHN L. FELLOWS III
City Attorney

By: _____

Attachments: Exhibit A Scope of Services
 Exhibit B Compensation Schedule

Revised: 10/29/2008

EXHIBIT A**SCOPE OF SERVICES**

This agreement shall include the following components:

- Removal and disposal of all existing play equipment in the area identified below.
- Removal and disposal of all existing wood fiber, grass, and 40 linear feet of sidewalk, along with the excavation to 12" for the new play area.
- Construction of a fluctuation ramp to ADA standards.
- Purchase and installation of new Play Equipment as identified in exhibit C.
- Supply and installation of 130 cubic yards of wood fiber and filter fabric.

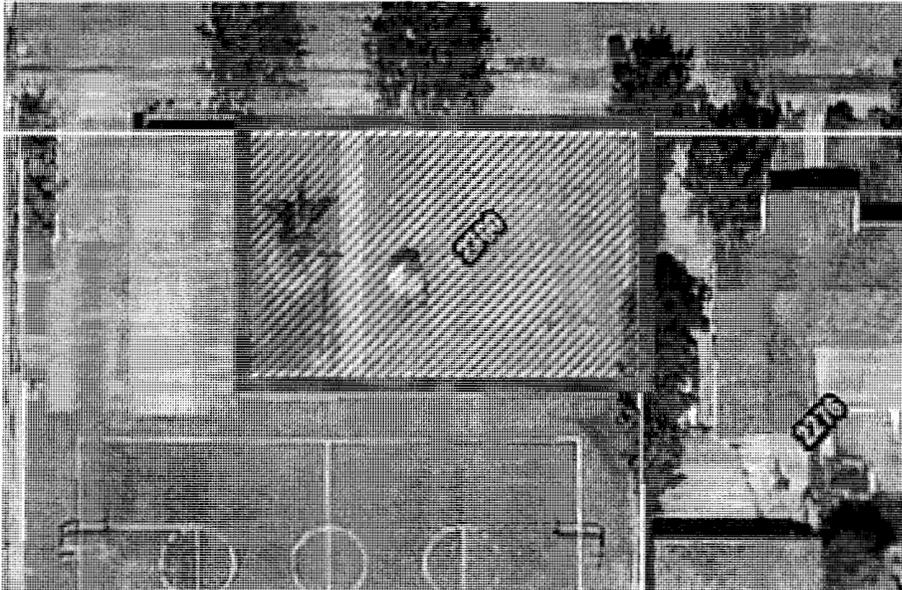
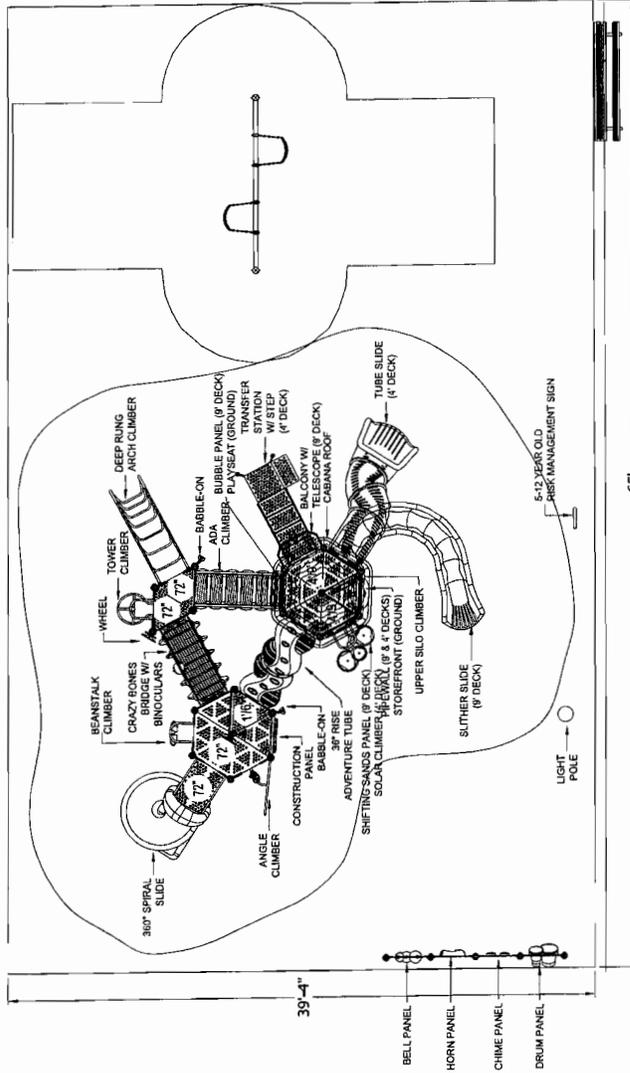


EXHIBIT B**COMPENSATION SCHEDULE**

- Contractor shall be paid in full at the completion of the project.

EXHIBIT C

PLAY EQUIPMENT SPECIFICATIONS



2012 CHALLENGERS

SITE PLAN
PROJECT NO: C12138CHR1
DATE: 18-MAY-12
SCALE: 1/8" = 1'-0"
DRAWN BY: Marilyn Allen

ASPHALT

65'

39'-4"

- BELL PANEL
- HORN PANEL
- CHIME PANEL
- DRUM PANEL

LIGHT POLE

5-12 YEAR OLD RISK MANAGEMENT SIGN

PLAYWORLDTM

© 2007 Playworld Systems, Inc.
Playworld is a brand of Playworld Systems, Inc.

PUEBLO PARK

OPTION D

Since 1979
dave bang associates, inc.
P.O. Box 1888, Turin, CA 92781 P: 1-800-669-2585
License #795057 • www.davebang.com

PUEBLO PARK

Design Number: C12138CHR1 - Bill Of Material

Ref. No.	Part No.	Description	Quantity
Posts			
1	ZZCH0048	3.5in OD x 160in STEEL POST W/ RIVETED CAP	10
2	ZZCH0058	3.5in OD x 172in STEEL POST W/RIVETED CAP	1
3	ZZCH0076	3.5in OD x 200in STEEL POST W/RIVETED CAP	1
4	ZZCH0259	3.5in OD x 224in STEEL POST W/O CAP	6
5	ZZCH0356	3.50in x 88in STEEL POST w/CAP	5
Decks & Kick Plates			
6	ZZCH0617	TRIANGULAR COATED DECK ASSEMBLY	6
7	ZZCH0618	1/2 HEX COATED DECK ASSEMBLY	5
8	ZZUN2290	COATED DECK TO DECK CONNECTION KIT	8
ADA Items			
9	ZZCH2027	TRANSFER STATION (48in DECK)	1
10	ZZCH8230	DECK TO DECK ACCESSIBLE CLIMBER (24in RISE)	1
11	ZZUN2019	APPROACH STEP FOR TRANSFER STATION	1
Slides			
12	ZZCH2736	ONE PIECE 360 PLASTIC SPIRAL SLIDE	1
13	ZZCH3006	30in ROUND TUBE SLIDE ENTRANCE/EXIT	1
14	ZZCH3206	SLITHER SLIDE 2.0 ENTRANCE & EXIT	1
15	ZZUN3008	30in ROUND LEFT TUBE SECTION	1
16	ZZUN3009	30in ROUND RIGHT TUBE SECTION	1
17	ZZUN3037	ROUND TUBE SLIDE SUPPORT LEG 2ft	1
18	ZZUN3207	SLITHER SLIDE 2.0 (STRAIGHT SECTION)	1
19	ZZUN3208	SLITHER SLIDE 2.0 (RIGHT SECTION)	6
20	ZZUN3246	SLITHER SLIDE 2.0 SUPPORT LEG 6ft-6in	1
21	ZZUN3249	SLITHER SLIDE 2.0 SUPPORT LEG 3ft-6in	1
Activity Panels			
22	ZZCH4290	POST MOUNTED STEERING WHEEL	2
23	ZZCH4356	BALCONY	1
24	ZZCH4570	PLAY SEAT	1
25	ZZCH4646	STORE FRONT PANEL	1
26	ZZCH4807	OVAL INSERT PANEL (DECK MOUNT)	3
27	ZZUN4438	TELESCOPE - PIPE WALL MOUNT WITH LENS (CH/EX)	1
28	ZZUN4793	CONSTRUCTION PANEL INSERT	1
29	ZZUN4796	OVAL BUBBLE PANEL INSERT	1
30	ZZUN4806	SHIFTING SANDS PANEL INSERT	1
Crawl Tubes			
31	ZZCH5636	VERTICAL S ADVENTURE TUBE	2
Barriers			
32	ZZCH4095	CENTERLINE PIPE WALL BARRIER	1
33	ZZCH4115	LOWER DECK GUARDRAIL	1
34	ZZCH4456	UPPER SILO CLIMBER EXTENDED BARRIER	1
35	ZZCH4745	CONTAINMENT PIPE WALL (HEX TOWER)	1
Climbers			



PUEBLO PARK

Design Number: C12138CHR1 - Bill Of Material

Ref. No.	Part No.	Description	Quantity
36	ZZCH7168	6ft TOWER CLIMBER	1
37	ZZCH7196	ANGLED CLIMBER LARGE (72in DECK)	1
38	ZZCH7430	DEEP RUNG ARCH CLIMBER (72in DECK)	1
39	ZZCH7658	SOLAR CLIMBER (48in & 42in DECK)	1
40	ZZCH7945	UPPER SILO CLIMBER	1
41	ZZCH8130	BEANSTALK CLIMBER (72in DECK)	1
Bridges			
42	ZZCH6427	CRAZY BONES 6ft ARCH BRIDGE w/BINOCULARS	1
Audible Activities			
43	ZZCH4467	GROUND TO GROUND BABBLE-ON	1
44	ZZCH4587	DRUM PANEL (GROUND LEVEL)	1
45	ZZCH4589	BELL PANEL (GROUND LEVEL)	1
46	ZZCH4607	CHIME PANEL (GROUND LEVEL)	1
47	ZZCH4611	HORN PANEL GROUND LEVEL	1
Roofs & Arches			
48	ZZCH9858	CH HEX CABANA ROOF	1



PUEBLO PARK

Design Number: C12138CHR1 - 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)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
1	ZZXX0175	1	5-12 YEARS OLD RISK MANAGEMENT SIGN	Certified	42.75		212	0	1.00	0.07	0
2	ZZXX0260	2	BELT SEAT W/SILVER SHIELD CHAIN FOR 8ft TOP RAIL	Certified	17.60		126	2	0.50	0.00	2
3	ZZXX0295	1	8ft SINGLE POST SWING ASSEMBLY	Certified	264.58		489	0	2.00	0.26	0
4	ZZXX1412	1	8ft PERMANENT BENCH (COATED PLANKS & FRAME)	N/A	101.49		278	0	1.50	0.16	0
5	ZZCH0048	10	3.5in OD x 160in STEEL POST W/ RIVETED CAP	Certified	502.10		695	0	10.00	1.25	0
6	ZZCH0058	1	3.5in OD x 172in STEEL POST W/RIVETED CAP	Certified	52.01		74	0	1.00	0.13	0
7	ZZCH0076	1	3.5in OD x 200in STEEL POST W/RIVETED CAP	Certified	61.01		86	0	1.00	0.13	0
8	ZZCH0259	6	3.5in OD x 224in STEEL POST W/O CAP	Certified	387.06		546	0	6.00	0.78	0
9	ZZCH0356	5	3.50in x 88in STEEL POST w/CAP	Certified	148.55		202	0	5.00	0.65	0
10	ZZCH0617	6	TRIANGULAR COATED DECK ASSEMBLY	Certified	179.40		761	12	6.00	0.00	0
11	ZZCH0618	5	1/2 HEX COATED DECK ASSEMBLY	Certified	391.60		1,340	20	7.50	0.00	0
12	ZZJUN2290	8	COATED DECK TO DECK CONNECTION KIT	Certified	2.32		35	0	4.00	0.00	0
13	ZZCH2027	1	TRANSFER STATION (48in DECK)	Certified	254.26		517	3	2.50	0.09	0
14	ZZCH8230	1	DECK TO DECK ACCESSIBLE CLIMBER (24in RISE)	Certified	295.60		1,047	0	1.50	0.00	0
15	ZZJUN2019	1	APPROACH STEP FOR TRANSFER STATION	Certified	35.83		76	1	1.00	0.04	0
16	ZZCH2736	1	ONE PIECE 360 PLASTIC SPIRAL SLIDE	Certified	886.53		1,940	3	6.00	0.20	1
17	ZZCH3006	1	30in ROUND TUBE SLIDE ENTRANCE/EXIT	Certified	144.97		1,083	2	2.00	0.03	1
18	ZZCH3206	1	SLITHER SLIDE 2.0 ENTRANCE & EXIT	Certified	85.37		542	2	2.00	0.03	1
19	ZZJUN3008	1	30in ROUND LEFT TUBE SECTION	Certified	26.02		236	0	0.25	0.00	0
20	ZZJUN3009	1	30in ROUND RIGHT TUBE SECTION	Certified	26.02		236	0	0.25	0.00	0
21	ZZJUN3037	1	ROUND TUBE SLIDE SUPPORT LEG 2ft	N/A	15.40		46	0	0.50	0.03	0
22	ZZJUN3207	1	SLITHER SLIDE 2.0 (STRAIGHT SECTION)	Certified	19.59		167	0	0.25	0.00	0
23	ZZJUN3208	6	SLITHER SLIDE 2.0 (RIGHT SECTION)	Certified	117.54		1,046	0	1.50	0.00	0



PUEBLO PARK

Design Number: C12138CHR1 - 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)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
24	ZZUN3246	1	SLTHER SLIDE 2.0 SUPPORT LEG 6ft-6in	Certified	21.61		77	0	0.25	0.03	0
25	ZZUN3249	1	SLTHER SLIDE 2.0 SUPPORT LEG 3ft-6in	Certified	15.01		65	0	0.25	0.03	0
26	ZZCH4290	2	POST MOUNTED STEERING WHEEL	Certified	15.66		106	2	0.50	0.00	2
27	ZZCH4356	1	BALCONY	Certified	71.66		224	2	1.00	0.00	1
28	ZZCH4570	1	PLAY SEAT	Certified	37.65		294	2	0.50	0.00	1
29	ZZCH4646	1	STORE FRONT PANEL	Certified	33.98		291	3	1.00	0.00	1
30	ZZCH4807	3	OVAL INSERT PANEL (DECK MOUNT)	Certified	84.48		786	0	1.50	0.00	0
31	ZZUN4438	1	TELESCOPE - PIPE WALL MOUNT WITH LENS (CH/EX)	Certified	13.23		230	1	0.50	0.00	1
32	ZZUN4793	1	CONSTRUCTION PANEL INSERT	Certified	27.44		456	1	0.50	0.00	1
33	ZZUN4796	1	OVAL BUBBLE PANEL INSERT	Certified	5.87		141	1	0.50	0.00	1
34	ZZUN4806	1	SHIFTING SANDS PANEL INSERT	Certified	22.97		294	1	0.50	0.00	1
35	ZZCH5636	2	VERTICAL S ADVENTURE TUBE	Certified	264.04		2,625	6	6.00	0.00	2
36	ZZCH4095	1	CENTERLINE PIPE WALL BARRIER	Certified	28.74		74	0	0.50	0.00	0
37	ZZCH4115	1	LOWER DECK GUARDRAIL	Certified	12.42		73	0	0.50	0.00	0
38	ZZCH4456	1	UPPER SILO CLIMBER EXTENDED BARRIER	Certified	30.28		78	1	0.50	0.00	1
39	ZZCH4745	1	CONTAINMENT PIPE WALL (HEX TOWER)	Certified	36.60		98	0	0.50	0.00	0
40	ZZCH7168	1	6ft TOWER CLIMBER	Certified	108.67		253	2	2.00	0.90	1
41	ZZCH7196	1	ANGLED CLIMBER LARGE (72in DECK)	Certified	62.71		189	2	1.00	0.00	1
42	ZZCH7430	1	DEEP RUNG ARCH CLIMBER (72in DECK)	Certified	111.06		236	2	2.00	0.06	1
43	ZZCH7658	1	SOLAR CLIMBER (48in & 42in DECK)	Certified	91.33		281	2	1.50	0.03	1
44	ZZCH7945	1	UPPER SILO CLIMBER	Certified	136.94		275	1	2.00	0.00	1
45	ZZCH8130	1	BEANSTALK CLIMBER (72in DECK)	Certified	92.45		444	2	1.50	0.03	1
46	ZZCH6427	1	CRAZY BONES 6ft ARCH BRIDGE w/BINOCULARS	Certified	308.76		2,419	2	4.00	0.00	1
47	ZZCH4467	1	GROUND TO GROUND BABBLE-ON	Certified	43.15		261	2	1.50	0.00	1
48	ZZCH4587	1	DRUM PANEL (GROUND LEVEL)	Certified	44.64		448	2	1.00	0.00	1
49	ZZCH4589	1	BELL PANEL (GROUND LEVEL)	Certified	46.46		392	2	1.00	0.00	1



PUEBLO PARK

Design Number: C12138CHR1 - 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 Recycled Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
50	ZZCH4607	1	CHIME PANEL (GROUND LEVEL)	Certified	52.00			421	2	1.50	0.00	1
51	ZZCH4611	1	HORN PANEL GROUND LEVEL	Certified	43.14			501	2	1.00	0.00	1
52	ZZCH9858	1	CH HEX CABANA ROOF	Certified	194.15			1,067	0	1.00	0.00	0
Totals:					6,114.70	763	1,362	24,877	88	99.25	4.92	29
					2,751.62 Kg	343 Kg	613 Kg	25 Metric Tons				3.74 m3



PUEBLO PARK

Design Number: C12138CHR1 - 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)	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 C12138CHR1, 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.





Product Specifications

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3.5in OD x 160in STEEL POST W/ RIVETED CAP

3.5 in. Support Post - 13 ga.

Shall be fabricated of 3.5 in. outside diameter, 13 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Crown/Post/End Cap

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. Ultimate tensile strength shall be 40 ksi. Yield strength shall be 21 ksi. Each crown and post cap shall be fastened to the end of the tubing with drive rivets. Plastic post end caps and plastic rivets are unacceptable. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

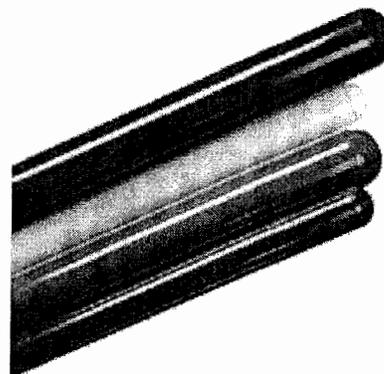
Drive Rivet

The rivet shall be fabricated of 2117 aluminum alloy. The pin shall be fabricated of 7075 aluminum alloy.

Steel Tubing - 3.5 in. OD, 13 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

ZZCH0048



* See Note

Component Number:	ZZCH0048
Specification Rev:	ECN343
Component Weight:	50.21 Lbs.
Amount of Concrete:	0.13 Yds.
Pre-Consumer Recycle:	10.04 Lbs.
Post-Consumer Recycle:	20.58 Lbs.
CO2e Footprint:	64.20 Kgs.

3.5in OD x 172in STEEL POST W/RIVETED CAP

3.5 in. Support Post - 13 ga.

Shall be fabricated of 3.5 in. outside diameter, 13 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Crown/Post/End Cap

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. Ultimate tensile strength shall be 40 ksi. Yield strength shall be 21 ksi. Each crown and post cap shall be fastened to the end of the tubing with drive rivets. Plastic post end caps and plastic rivets are unacceptable. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

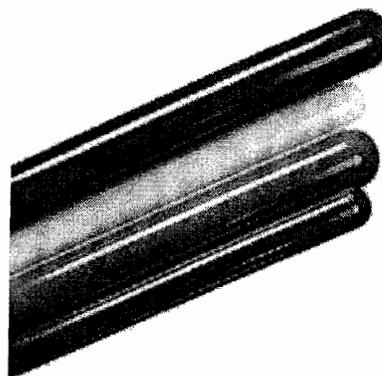
Drive Rivet

The rivet shall be fabricated of 2117 aluminum alloy. The pin shall be fabricated of 7075 aluminum alloy.

Steel Tubing - 3.5 in. OD, 13 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

ZZCH0058



* See Note

Component Number:	ZZCH0058
Specification Rev:	ECN343
Component Weight:	52.01 Lbs.
Amount of Concrete:	0.13 Yds.
Pre-Consumer Recycle:	10.40 Lbs.
Post-Consumer Recycle:	21.32 Lbs.
CO2e Footprint:	68.70 Kgs.

3.5in OD x 200in STEEL POST W/RIVETED CAP

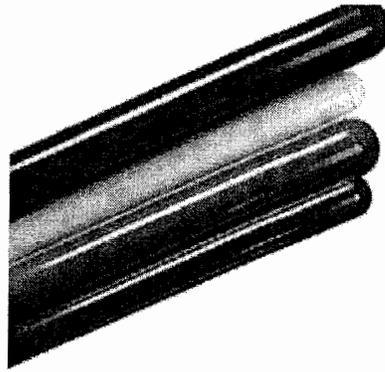
3.5 in. Support Post - 13 ga.

Shall be fabricated of 3.5 in. outside diameter, 13 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat

ZZCH0076

Crown/Post/End Cap

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. Ultimate tensile strength shall be 40 ksi. Yield strength shall be 21 ksi. Each crown and post cap shall be fastened to the end of the tubing with drive rivets. Plastic post end caps and plastic rivets are unacceptable. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.



Drive Rivet

The rivet shall be fabricated of 2117 aluminum alloy. The pin shall be fabricated of 7075 aluminum alloy.

Steel Tubing - 3.5 in. OD, 13 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

* See Note

Component Number:	ZZCH0076
Specification Rev:	ECN343
Component Weight:	61.01 Lbs.
Amount of Concrete:	0.13 Yds.
Pre-Consumer Recycle:	12.20 Lbs.
Post-Consumer Recycle:	25.01 Lbs.
CO2e Footprint:	79.30 Kgs.

3.5in OD x 224in STEEL POST W/O CAP

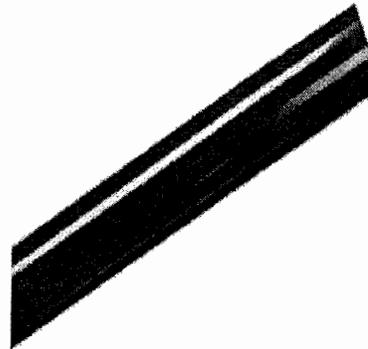
Steel Tubing - 3.5 in. OD, 13 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

3.5 in. Support Post - 13 ga.

Shall be fabricated of 3.5 in. outside diameter, 13 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

ZZCH0259



* See Note

Component Number:	ZZCH0259
Specification Rev:	PA0997
Component Weight:	64.51 Lbs.
Amount of Concrete:	0.13 Yds.
Pre-Consumer Recycle:	12.90 Lbs.
Post-Consumer Recycle:	26.45 Lbs.
CO2e Footprint:	84.10 Kgs.

3.50in x 88in STEEL POST w/CAP

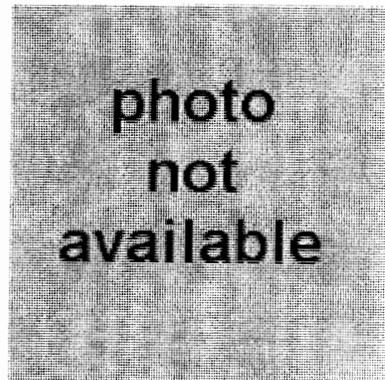
3.5 in. Support Post with End Cap

Shall be fabricated of 3.5 in. Outside diameter, 13 gauge galvanized steel tubing. (See Tubing) Shall have a factory installed 319 type aluminum alloy end cap secured with drive rivets. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 3.25 in. OD, 13 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

ZZCH0356



* See Note

Component Number: ZZCH0355
Specification Rev: PA1181
Component Weight: 29.71 Lbs.
Amount of Concrete: 0.13 Yds.
Pre-Consumer Recycle: 5.94 Lbs.
Post-Consumer Recycle: 12.18 Lbs.
CO2e Footprint: 37.20 Kgs.

TRIANGULAR COATED DECK ASSEMBLY

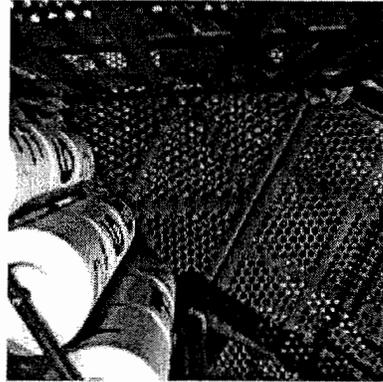
Coated Deck / Platform - 12 ga

Shall be an all welded assembly fabricated of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface and sides shall be die formed from a single sheet of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface shall have .34 in. (9mm) diameter perforated holes. Entire weldment shall have a protective coating. (See Coated Finish)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

ZZCH0617



* See Note

Component Number: ZZCH0617
Specification Rev: PA697
Component Weight: 29.90 Lbs.
Number of Users: 2
Pre-Consumer Recycle: 2.61 Lbs.
Post-Consumer Recycle: 7.95 Lbs.
CO2e Footprint: 119.60 Kgs.

1/2 HEX COATED DECK ASSEMBLY

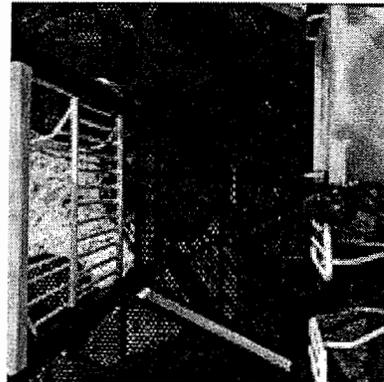
Coated Deck / Platform - 12 ga

Shall be an all welded assembly fabricated of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface and sides shall be die formed from a single sheet of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface shall have .34 in. (9mm) diameter perforated holes. Entire weldment shall have a protective coating. (See Coated Finish)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

ZZCH0618



* See Note

Component Number: ZZCH0618
Specification Rev: PA698
Component Weight: 78.32 Lbs.
Number of Users: 4
Pre-Consumer Recycle: 6.06 Lbs.
Post-Consumer Recycle: 19.52 Lbs.
CO2e Footprint: 251.70 Kgs.

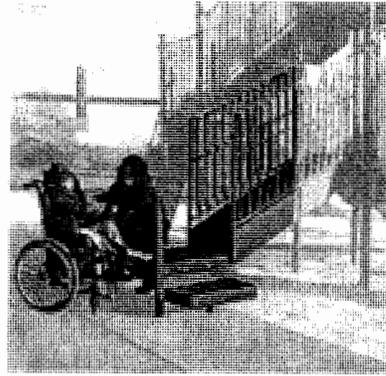
TRANSFER STATION (48in DECK)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly

ZZCH2027

and an strap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.



* See Note

Transfer Deck Support Leg

Shall be an all welded assembly fabricated of 2.375 in. outside diameter, 12 gauge galvanized steel tubing; 1.66 in. outside diameter, 13 gauge galvanized steel tubing; and .188 in. hot rolled flat steel. (See Tubing.) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Barrier CH/EX sm rung

Shall be an all-welded assembly fabricated of .815 in. Outside diameter, 15 gauge galvanized steel tubing; 1.029 in. Outside diameter, 14 gauge galvanized steel tubing and 1.315 in. Outside diameter, 14 gauge galvanized steel tubing. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Grabbit

Shall be an all welded assembly fabricated of 2.375 in. outside diameter, 12 gauge galvanized steel tubing; 1.029 in. outside diameter, 14 gauge galvanized steel tubing; and .188 in. zinc plated, hot rolled, pickled and oiled flat steel. (See Tubing) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Coated Transfer Deck - sm holes

Shall be an all welded assembly die formed from a single sheet of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface shall have .344 in. diameter perforated holes. Entire deck weldment shall have a protective coating. (See Coated Finish)

Coated Transfer Stair - sm holes

Shall be an all welded assembly fabricated of 14 gauge hot rolled, pickled and oiled flat steel for the step treads, and 11 gauge hot rolled, pickled and oiled flat steel for the stringers. Step surfaces shall have .34 in. diameter perforated holes. Entire stair weldment shall have a protective coating. (See Coated Finish)

Steel Tubing - .815 in. OD, 15 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.315 in. OD, 14 ga.

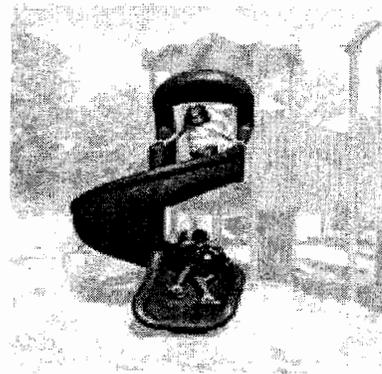
Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Component Number:	ZZCH2027
Specification Rev:	ECN713
Component Weight:	254.26 Lbs.
Number of Users:	3
Amount of Concrete:	0.09 Yds.
Pre-Consumer Recycle:	33.85 Lbs.
Post-Consumer Recycle:	81.32 Lbs.
CO2e Footprint:	478.30 Kgs.

Cast of regular 319 (319.07) aluminum. Ultimate tensile strength shall be 23 ksi. Yield strength shall be 13 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.



* See Note

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Spiral Slide Barrier (11 GA)

Shall be an all welded assembly fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing, 1.029 in. outside diameter, 14 gauge galvanized steel tubing, 11 gauge yellow zinc plated hot rolled pickled and oiled flat steel. (See Tubing) Vertical tubing shall have coped lower ends. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Slide Gate (13 GA)

Shall be an all welded assembly fabricated of 1.66 outside diameter, 13 gauge galvanized steel tubing, 1.315 in. outside diameter, 14 gauge galvanized steel tubing, and 14 gauge galvanized steel. (See Tubing) Finished with a baked on polyester powder coating (See Superdurable Polyester Powder Coat Finish) All tube to tube weld connections shall be coped before welding to provide a clean look and the strongest joint possible. Flattened or partially flattened tubing weld connections are not acceptable.

5 in. T Post

Shall be an all welded assembly fabricated of 5 in. outside diameter, 11 gauge galvanized steel tubing and .25 in. hot rolled, pickled and oiled flat steel. (See Tubing) Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Spiral Slide Exit Support Leg

Shall be an all welded assembly fabricated of 3.5 in. outside diameter, 13 gauge galvanized steel tubing, and 11 gauge zinc plated steel. (See Tubing) Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Spiral Slide & Canopy - plastic

Shall be rotationally molded from Exxon CP-812 polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Cross-sectional design shall be .25 in. (6 mm) nominal thickness, double wall construction with molded-in longitudinal ribs and textured outside surfaces. Spiral slide shall have a minimum side rail height of 15.5" (394 mm). Shall have a canopy designed to channel the user into a sitting position for slide entry. Entrance platform design that allows full view of users at the slide exit region.

Coated Deck / Platform - 12 ga

Shall be an all welded assembly fabricated of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface and sides shall be die formed from a single sheet of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface shall have .34 in. (9mm) diameter perforated holes. Entire weldment shall have a protective coating. (See Coated Finish)

Component Number:	ZZCH2736
Specification Rev:	ECN1756
Component Weight:	886.53 Lbs.
Number of Users:	3
Amount of Concrete:	0.20 Yds.
Pre-Consumer Recycle:	24.27 Lbs.
Post-Consumer Recycle:	54.37 Lbs.
CO2e Footprint:	1,556.50 Kgs.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Steel Tubing - 3.5 in. OD, 13 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 5 in. OD, 11 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.66 in. OD, 13 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

30in ROUND TUBE SLIDE ENTRANCE/EXIT

Casting - 319 Alum.

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Exit Support Post - 3.5 in.

Shall be an all welded assembly fabricated of 3.5 in. outside diameter, 13 gauge galvanized steel tubing and 11 gauge zinc plated hot rolled flat steel. (See Tubing) Finished with a baked on polyester powder coating. (See SuperDurable Polyester Powder Coat Finish) ASTM Specifications: A-36,

Rotomolded Component

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts may be molded into the plastic to provide attachment points.

Steel Tubing - 3.5 in. OD, 11ga.

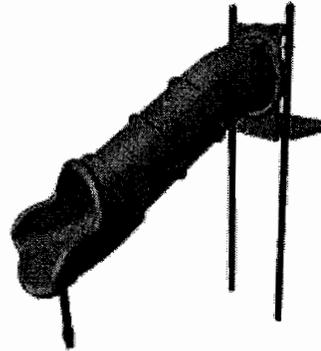
Tensile strength shall be 48,000 psi. Yield strength shall be 45,000 psi.

SLITHER SLIDE 2.0 ENTRANCE & EXIT

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly

ZZCH3006



* See Note

Component Number:	ZZCH3006
Specification Rev:	PA1143
Component Weight:	145.10 Lbs.
Number of Users:	2
Amount of Concrete:	0.03 Yds.
Pre-Consumer Recycle:	0.83 Lbs.
Post-Consumer Recycle:	1.59 Lbs.
CO2e Footprint:	838.40 Kgs.

ZZCH3206

and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Rail 14 ga. w/ inserts

Shall be fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing (See Tubing). Shall have factory installed crimped threaded inserts at each end. Finished with a baked on polyester powder coating. (See SuperDurable Polyester Powder Coat Finish)

Exit Support Post - 3.5 in.

Shall be an all welded assembly fabricated of 3.5 in. outside diameter, 13 gauge galvanized steel tubing and 11 gauge zinc plated hot rolled flat steel. (See Tubing) Finished with a baked on polyester powder coating. (See SuperDurable Polyester Powder Coat Finish) ASTM Specifications: A-36,

Rotomolded Slide

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.

Glide Slide Canopy

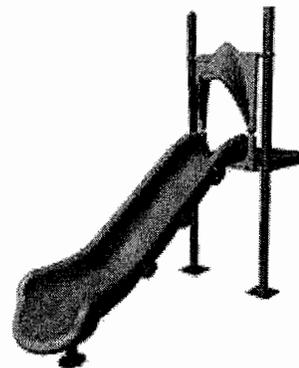
Shall be rotationally molded from Exxon CP-812 polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Shall have molded in threaded inserts, and 1.315 in. outside diameter, 14 gauge galvanized steel tubing color matched to the plastic. Tubing shall be finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Steel Tubing - 3.5 in. OD, 13 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.



* See Note

Component Number:	ZZCH3206
Specification Rev:	PA1205
Component Weight:	85.37 Lbs.
Number of Users:	2
Amount of Concrete:	0.03 Yds.
Pre-Consumer Recycle:	1.73 Lbs.
Post-Consumer Recycle:	3.61 Lbs.
CO2e Footprint:	421.60 Kgs.

CENTERLINE PIPE WALL BARRIER

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Pipe Wall Barrier - CH/EX sm.rung

Shall be an all-welded assembly fabricated of 3/16 in. hot rolled, pickled and oiled flat steel; 1.029 in. outside diameter, 14 gauge galvanized steel tubing and .815 in. outside diameter, 15 gauge galvanized steel tubing. (See Tubing). Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

ZZCH4095



* See Note

Component Number:	ZZCH4095
Specification Rev:	PA835
Component Weight:	28.74 Lbs.

Steel Tubing - .815 in. OD, 15 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Pre-Consumer Recycle: 0.60 LBS.
Post-Consumer Recycle: 1.30 Lbs.
CO2e Footprint: 67.30 Kgs.

LOWER DECK GUARDRAIL

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Guardrail / Barrier - CH/EX sm. Rung

Shall be an all-welded assembly fabricated of .815 in. outside diameter, 14 gauge galvanized steel tubing and 1.029 in. outside diameter, 14 gauge galvanized steel tubing. Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

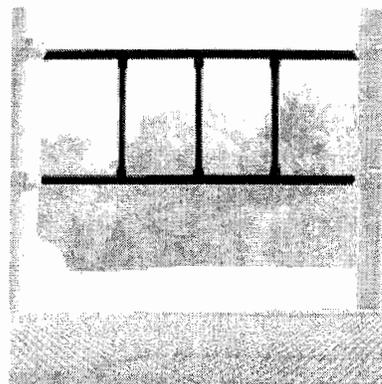
Steel Tubing - .815 in. OD, 15 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

ZZCH4115



* See Note

Component Number: ZZCH4115
Specification Rev: PA836
Component Weight: 12.42 Lbs.
Pre-Consumer Recycle: 2.94 Lbs.
Post-Consumer Recycle: 6.20 Lbs.
CO2e Footprint: 70.00 Kgs.

POST MOUNTED STEERING WHEEL

Steering Wheel w/ bearings

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. ASTM Specifications: B-26. Federal Specifications: QQ-A-601. Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish) Shall have factory installed oil light bearings pressed into the casting.

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index),

ZZCH4290



* See Note

Component Number: ZZCH4290
Specification Rev: ECN1393
Component Weight: 7.83 Lbs.
Number of Users: 1
Pre-Consumer Recycle: 2.72 Lbs.
Post-Consumer Recycle: 2.93 Lbs.
CO2e Footprint: 41.40 Kgs.

D-1000 (Material Density), D-000 (Tensile Strength), D-040 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

BALCONY

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Balcony Barrier w/ 15 ga.

Shall be an all-welded assembly fabricated of 1.029 in. outside diameter, 14 gauge galvanized steel tubing and 0.815 in. outside diameter, 15 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) All tube to tube weld connections shall be coped before welding to provide a clean look and the strongest joint possible. Flattened or partially flattened tubing weld connections are not acceptable.

Coated Deck / Platform - 12 ga

Shall be an all welded assembly fabricated of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface and sides shall be die formed from a single sheet of 12 gauge hot rolled, pickled and oiled flat steel. Deck surface shall have .34 in. (9mm) diameter perforated holes. Entire weldment shall have a protective coating. (See Coated Finish)

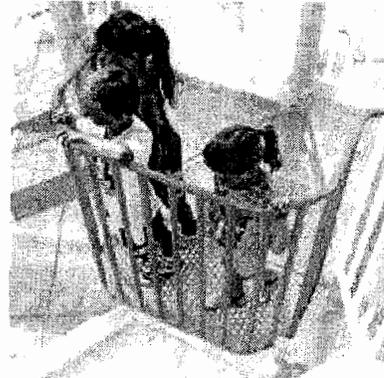
Steel Tubing - .815 in. OD, 15 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

ZZCH4356



* See Note

Component Number:	ZZCH4356
Specification Rev:	ECN1155
Component Weight:	71.66 Lbs.
Number of Users:	2
Pre-Consumer Recycle:	11.09 Lbs.
Post-Consumer Recycle:	25.27 Lbs.
CO2e Footprint:	206.80 Kgs.

UPPER SILO CLIMBER EXTENDED BARRIER

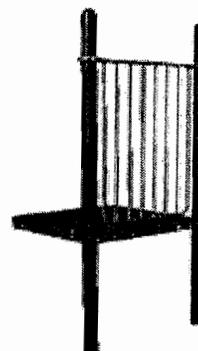
3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Barrier - 1.029" OD / .815" OD / 7 GA

Shall be an all welded assembly fabricated of .815 in. outside diameter, 15 gauge galvanized steel tubing, 1.029 in. outside diameter, 14 gauge galvanized steel tubing, and 7 gauge hot rolled pickled and oiled flat steel. (See Tubing) Finished with a baked on

ZZCH4456



* See Note

Component Number:	ZZCH4456
Specification Rev:	PA1134

polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - .815 in. OD, 15 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Component weight: 30.28 Lbs.
Number of Users: 1
Pre-Consumer Recycle: 6.19 Lbs.
Post-Consumer Recycle: 12.76 Lbs.
CO2e Footprint: 71.60 Kgs.

GROUND TO GROUND BABBLE-ON

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Hose Clamp

Fabricated from 18-8 stainless steel. Purchased commercially.

Babble-On Tube (no pvc)

Shall be an all welded assembly fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing, and 7 gauge hot rolled pickled and oil flat steel. (See Tubing) Shall be finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Babble-On Horn with Screen

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

1.63 in. Polyethylene Tubing

Shall be fabricated of low density polyethylene.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Anchor Stake (fab metal)

Shall be fabricated of 3/8 in. low carbon steel, with 8 gauge wire and yellow zinc plated finish.

PLAY SEAT

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2)

ZZCH4467



* See Note

Component Number: ZZCH4467
Specification Rev: ECN1815
Component Weight: 43.15 Lbs.
Number of Users: 2
Pre-Consumer Recycle: 3.75 Lbs.
Post-Consumer Recycle: 7.85 Lbs.
CO2e Footprint: 251.20 Kgs.

ZZCH4570

piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Panel Tab

Shall be cast of regular 319 (319.0-F) aluminum having an ultimate tensile strength of 27 ksi and a yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish) ASTM Specifications: B-26.Federal Specifications: QQ-A-601.

Rotomolded Seat

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.



* See Note

Component Number:	ZZCH4570
Specification Rev:	ECN623
Component Weight:	37.65 Lbs.
Number of Users:	2
Pre-Consumer Recycle:	1.58 Lbs.
Post-Consumer Recycle:	3.08 Lbs.
CO2e Footprint:	243.30 Kgs.

DRUM PANEL (GROUND LEVEL)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Panel Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

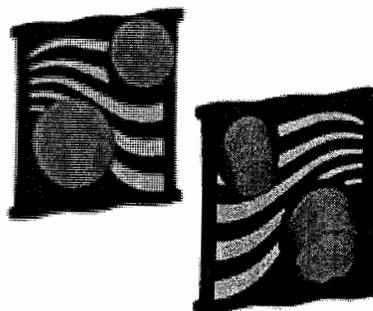
Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

Rotomolded Drum

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts are molded into the plastic to provide attachment points for the drum

ZZCH4587



* See Note

Component Number:	ZZCH4587
Specification Rev:	PA0978
Component Weight:	44.64 Lbs.
Number of Users:	2
Pre-Consumer Recycle:	8.72 Lbs.
Post-Consumer Recycle:	3.31 Lbs.
CO2e Footprint:	397.80 Kgs.

BELL PANEL (GROUND LEVEL)

Bell - Aluminum

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See

ZZCH4589

Superdurable Polyester Powder Coat / ASTM Specifications: B-26.
Federal Specifications: QQ-A-601

Connector - reg 319 aluminum

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Connector / Adapter - 535 Almag

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

Plastic Panel - .5 in.

Shall be fabricated of .50 in. (12 mm) high density sheet polyethylene. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact), D-746 (Brittleness), D-1525 (Vicat Softening Point).



* See Note

Component Number:	ZZCH4589
Specification Rev:	ECN2156
Component Weight:	46.91 Lbs.
Number of Users:	2
Pre-Consumer Recycle:	14.93 Lbs.
Post-Consumer Recycle:	10.36 Lbs.
CO2e Footprint:	349.30 Kgs.

CHIME PANEL (GROUND LEVEL)

Casting - Chime Parts

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2)

ZZCH4607



* See Note

Component Number:	ZZCH4607
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piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Panel Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Chime

Shall be fabricated of 1.315 in. outside diameter, 18 gauge galvanized steel tubing. (See Tubing) Finished with a baked on powder coating. (See Superdurable Polyester Powder Coat Finish)

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

Plastic Panel - .5 in.

Shall be fabricated of .50 in. (12 mm) high density sheet polyethylene. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact), D-746 (Brittleness), D-1525 (Vicat Softening Point).

Steel Tubing - 1.315 in. OD, 18 ga.

Tensile strength shall be 48,000 psi. Yield strength shall be 45,000 psi.

Spacer / Connector - Delrin

Shall be machined from black Delrin.

HORN PANEL GROUND LEVEL

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Connector / Adapter - 535 Almag

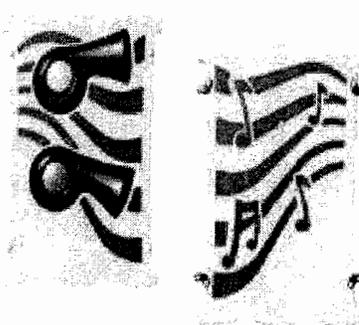
Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Horn Whistle

Shall be a fabricated assembly of cut plastic tube glued to both a mouthpiece and a cap. Differing lengths of the whistle will produce the notes D#, A#, and F#.

Specification Rev: ECN2096
Component Weight: 54.97 Lbs.
Number of Users: 2
Pre-Consumer Recycle: 15.78 Lbs.
Post-Consumer Recycle: 11.38 Lbs.
CO2e Footprint: 403.80 Kgs.

ZZCH4611



* See Note

Component Number: ZZCH4611
Specification Rev: PA1058
Component Weight: 43.14 Lbs.
Number of Users: 2
Pre-Consumer Recycle: 9.65 Lbs.
Post-Consumer Recycle: 3.31 Lbs.

Hose Clamp

Fabricated from 18-8 stainless steel. Purchased commercially.

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

Rotomolded Component

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts may be molded into the plastic to provide attachment points.

Bellows

Shall be rotationally molded from linear low density polyethylene. Shall have a nominal wall thickness of 0.125 inch.

STORE FRONT PANEL

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Oval Panel Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See SuperDurable Polyester Powder Coat Finish)

Rotomolded Plastic Panel - .25 in.

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.

CONTAINMENT PIPE WALL (HEX TOWER)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Spacer / Connector - Almag 35

CO2e Footprint:

471.70 Kgs.

ZZCH4646



* See Note

Component Number:	ZZCH4646
Specification Rev:	PA768
Component Weight:	33.98 Lbs.
Number of Users:	3
Pre-Consumer Recycle:	1.64 Lbs.
Post-Consumer Recycle:	3.35 Lbs.
CO2e Footprint:	237.20 Kgs.

ZZCH4745

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See SuperDurable Polyester Powder Coat Finish)

Containment Barrier SmR - CH

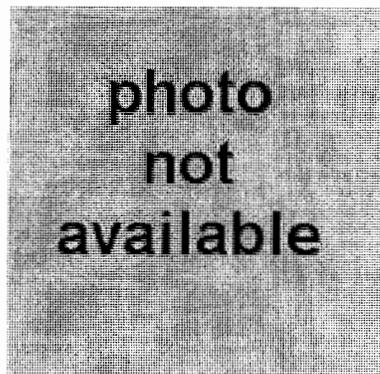
Shall be an all welded assembly fabricated of .815 in. outside diameter, 15 gauge galvanized steel tubing; 1.029 in. outside diameter, 14 gauge galvanized steel tubing; and .188 in., zinc plated hot rolled flat steel. Shall be finished with a baked on polyester powder coat or PrismCoat (See PrismCoat / Powder Coat Finish).

Steel Tubing - .815 in. OD, 15 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.



* See Note

Component Number:	ZZCH4745
Specification Rev:	PA837
Component Weight:	36.60 Lbs.
Pre-Consumer Recycle:	7.53 Lbs.
Post-Consumer Recycle:	15.33 Lbs.
CO2e Footprint:	95.30 Kgs.

OVAL INSERT PANEL (DECK MOUNT)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

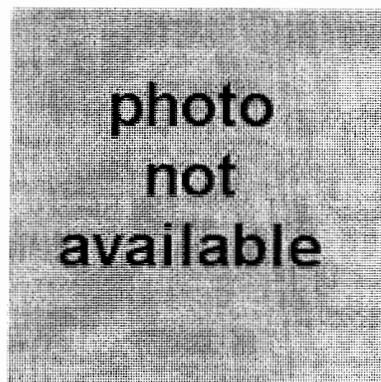
Panel Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Rotomolded Oval Plastic Panel

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.

ZZCH4807



* See Note

Component Number:	ZZCH4807
Specification Rev:	PA1064
Component Weight:	28.16 Lbs.
Pre-Consumer Recycle:	0.82 Lbs.
Post-Consumer Recycle:	1.67 Lbs.
CO2e Footprint:	210.00 Kgs.

VERTICAL S ADVENTURE TUBE

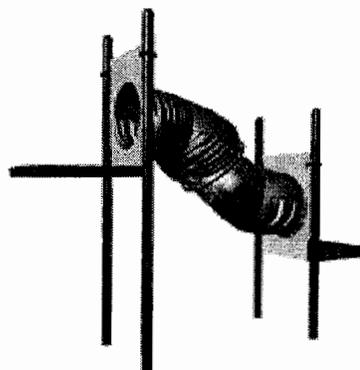
3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Connector / Adapter - 535 Almag

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester

ZZCH5636



* See Note

Component Number:	ZZCH5636
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Specification Rev:	PA10/6
Component Weight:	132.02 Lbs.
Number of Users:	3
Pre-Consumer Recycle:	14.21 Lbs.
Post-Consumer Recycle:	3.31 Lbs.
CO2e Footprint:	1,045.60 Kgs.

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

Rotomolded Component

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts may be molded into the plastic to provide attachment points.

CRAZY BONES 6ft ARCH BRIDGE w/BINOCULARS

Casting - 319 Alum.

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Bracket - 12 ga.

Shall be fabricated of 12 gauge hot rolled flat steel. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Bushing - Polyethylene

Material shall be U.H.M.W. polyethylene. Color shall be natural.

Sheet - Thermoplastic

Material shall be PTEG transparent thermoplastic with an ultimate tensile strength of 7,700 PSI and a compressive strength of 8,000 PSI.

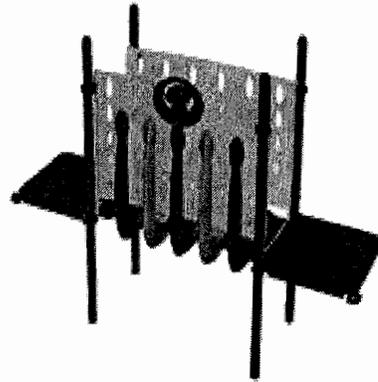
Plate - 8 Ga.

Shall be fabricated from 8 guage galvanized hot rolled flat steel. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening

ZZCH6427



* See Note

Component Number:	ZZCH6427
Specification Rev:	PA1057
Component Weight:	308.76 Lbs.
Number of Users:	2
Pre-Consumer Recycle:	49.56 Lbs.
Post-Consumer Recycle:	13.34 Lbs.
CO2e Footprint:	1,987.20 Kgs.

Rotomolded Component

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts may be molded into the plastic to provide attachment points.

Rotomolded Bridge Plank

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.

Angle Clip / Plank

Shall be fabricated of 12 gauge hot rolled, pickled, and oiled flat steel. Angle clip / plank shall have a protective coating. (See Coated Finish)

6ft TOWER CLIMBER

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Climber Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Climber - Tower

Shall be an all welded assembly of 1.9 in. outside diameter, 13 gauge steel tubing, 1.315 in. outside diameter, 14 gauge galvanized tubing, 1.029 in. outside diameter, and 11 gauge galvanized steel. (See Tubing) Entire assembly shall be finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Arch Entry Barrier / Pipe Wall Barrier

Shall be an all-welded assembly fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing; 1.029 in. outside diameter, 14 gauge galvanized steel tubing and .188 in. hot rolled, pickled and oiled flat steel. Shall be finished with a baked-on polyester powder coat. (See Superdurable Polyester Powder Coat Finish)

Spacer - 13 ga.*

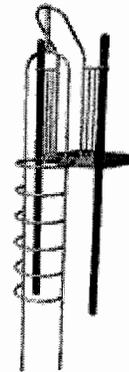
Shall be fabricated of 1.9 in. outside diameter, 13 gauge galvanized steel tubing (See Tubing). ASTM Specifications: A-135, E-8 and A-500. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.315 in. OD, 14 ga.

ZZCH7168



* See Note

Component Number:	ZZCH7168
Specification Rev:	PA1175
Component Weight:	108.67 Lbs.
Number of Users:	2
Amount of Concrete:	0.90 Yds.
Pre-Consumer Recycle:	22.03 Lbs.
Post-Consumer Recycle:	44.86 Lbs.
CO2e Footprint:	228.80 Kgs.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Steel Tubing - 1.9 in. OD, 13 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

ANGLED CLIMBER LARGE (72in DECK)

Casting - Critter Pod

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Bracket - 1.315 O.D., 7 gauge HRPO

Shall be an all-welded assembly fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing; and 7 gauge (or .188 in.) hot rolled, pickled and oiled flat steel. (See Tubing). Finished with a baked on polyester powder coating. (See Polyester Powder Coat Finish)

Climber - 1.315" O.D.

Shall be an all welded assembly fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating. (See Polyester Powder Coat Finish)

Barrier Gate - Round Tube -Upper (7 Gauge Tab)

Shall be fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing and 7 gauge hot rolled, pickled and oiled flat steel. (See Tubing) All tube to tube weld connections shall be coped before welding to provide a clean look and the strongest joint possible. Flattened or partially flattened tube weld connections are not acceptable. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 1.315 in. OD, 14 ga.

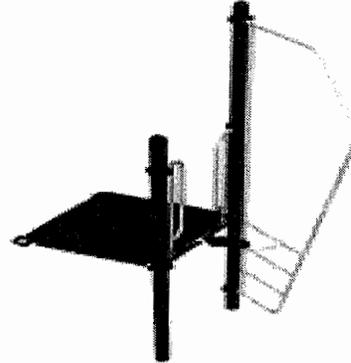
Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

DEEP RUNG ARCH CLIMBER (72in DECK)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2)

ZZCH7196



* See Note

Component Number:	ZZCH7196
Specification Rev:	ECN1498
Component Weight:	62.71 Lbs.
Number of Users:	2
Pre-Consumer Recycle:	13.10 Lbs.
Post-Consumer Recycle:	26.47 Lbs.
CO2e Footprint:	172.10 Kgs.

ZZCH7430

piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Gate Adaptor Connector

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601. Components are powder coated with a polyester powder and cured at temperatures between 375 and 400 F. Epoxy or hybrid paints are not acceptable. ASTM Specifications: B-117 (Salt Spray Resistance Test), D-2794 (Impact Resistance Test), D-1734 (Mandrel Flexibility Test), D-2247 (Humidity Resistance Test), D-822 (Weatherability Test), D-3363 (Pencil Hardness Test), D-3359-B (Crosshatch Adhesion Test), and D-2454 (Overbake Resistance Test).

Deep Rung Arch Climber

Shall be an all welded assembly fabricated of 1.029 in. outside diameter, 14 gauge galvanized steel tubing; 1.315 in. outside diameter, 14 gauge galvanized steel tubing; and 1.66 in. outside diameter, 13 gauge galvanized steel. (See Tubing) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Barrier Gate - Round Tube -Upper (7 Gauge Tab)

Shall be fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing and 7 gauge hot rolled, pickled and oiled flat steel. (See Tubing) All tube to tube weld connections shall be coped before welding to provide a clean look and the strongest joint possible. Flattened or partially flattened tube weld connections are not acceptable. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Steel Tubing - 1.66 in. OD, 13 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.



* See Note

Component Number:	ZZCH7430
Specification Rev:	ECN1542
Component Weight:	111.06 Lbs.
Number of Users:	2
Amount of Concrete:	0.06 Yds.
Pre-Consumer Recycle:	21.78 Lbs.
Post-Consumer Recycle:	44.38 Lbs.
CO2e Footprint:	217.50 Kgs.

SOLAR CLIMBER (48in & 42in DECK)

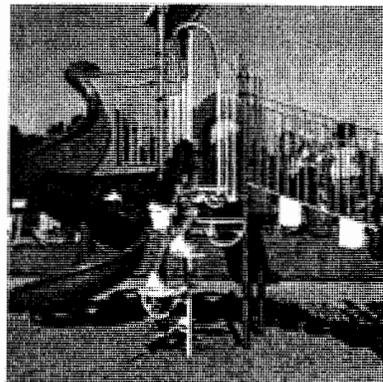
3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Climber Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

ZZCH7658



* See Note

Component Number:	ZZCH7658
Specification Rev:	ECN1346

Solar Climber (new w/ step brace)

Shall be an all welded assembly of 1.9 in. outside diameter, 13 gauge steel tubing with crimped insert, 2.375 in. outside diameter, 12 gauge steel tubing, 1.029 in. outside diameter, 14 gauge steel tubing, 12 gauge hot rolled pickled and oiled flat steel plate and 14 gauge hot rolled pickled and oiled flat steel plate. (See Tubing) Entire assembly shall be finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Component weight:	97.33 LBS.
Number of Users:	2
Amount of Concrete:	0.03 Yds.
Pre-Consumer Recycle:	8.89 Lbs.
Post-Consumer Recycle:	14.24 Lbs.
CO2e Footprint:	252.50 Kgs.

Arch Entry Barrier / Pipe Wall Barrier

Shall be an all-welded assembly fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing; 1.029 in. outside diameter, 14 gauge galvanized steel tubing and .188 in. hot rolled, pickled and oiled flat steel. Shall be finished with a baked-on polyester powder coat. (See Superdurable Polyester Powder Coat Finish)

Solar Climber Step Disc

Shall be fabricated from colored marine grade, .50 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

UPPER SILO CLIMBER

Connector - reg 319 aluminum

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

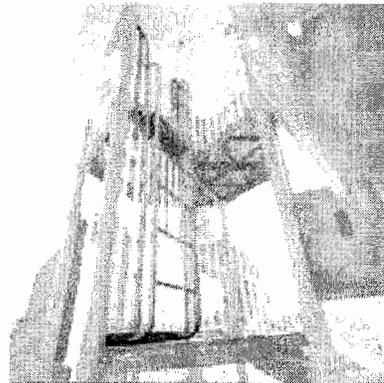
3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Silo Climber (Using connector)

Shall be fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing; 1.029 in. outside diameter, 14 gauge galvanized steel tubing; 11 gauge hot rolled flat steel. (See Tubing)

ZZCH7945



* See Note

Component Number:	ZZCH7945
Specification Rev:	ECN1641
Component Weight:	136.94 Lbs.
Number of Users:	1
Pre-Consumer Recycle:	23.55 Lbs.
Post-Consumer Recycle:	48.63 Lbs.
CO2e Footprint:	250.70 Kgs.

Finished with a baked on polyester powder coating. (See SuperDurable Polyester Powder Coat Finish) ASTM Specifications: A-135, A-500 and E-8.

Infill barrier w/ sm rungs

Shall be an all welded assembly fabricated of 1.029 in. outside diameter, 14 gauge galvanized steel tubing, .815 in. outside diameter, 15 gauge galvanized steel tubing and .188 in. x 2 in. hot rolled flat steel (See Tubing). Finished with a baked on polyester powder coating. (See SuperDurable Polyester Powder Coat Finish)

Barrier Gate - Round Tube - (7 Ga and 11 Ga)

Shall be fabricated of 1.315 in. outside diameter, 14 gauge galvanized steel tubing, 11 gauge hot rolled steel, and 7 gauge hot rolled, pickled and oiled flat steel. (See Tubing) All tube to tube weld connections shall be coped before welding to provide a clean look and the strongest joint possible. Flattened or partially flattened tube weld connections are not acceptable. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

In-fill Deck

Shall be an all welded assembly fabricated of 12 gauge hot rolled pickled and oiled steel. Entire deck shall have a protective coating. (See Coated Finish)

Steel Tubing - .815 in. OD, 15 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

BEANSTALK CLIMBER (72in DECK)

Beanstalk Climber

Shall be fabricated of 1.90 in. Outside diameter, 13 gauge galvanized steel tubing and 1.315 in. Outside diameter, 14 gauge galvanized steel tubing. (See Tubing) Finished with a baked on powder coating. (See Superdurable Polyester Powder Coat Finish)

Arch Entry Barrier / Barrier Gate w/Coping

Shall be fabricated of 1.029 in. outside diameter, 14 gauge galvanized steel tubing; 1.315 in. outside diameter, 14 gauge galvanized steel tubing; and .188 in. galvanized hot rolled flat steel (See Tubing). ASTM Specifications: A-135, E-8 and A-500. Finished with a baked on polyester powder coating. (See Polyester Powder Coat Finish) All tube to tube weld connections shall be coped before welding to provide a clean look and the strongest joint possible. Flattened or partially flattened tubing weld connections are not acceptable.

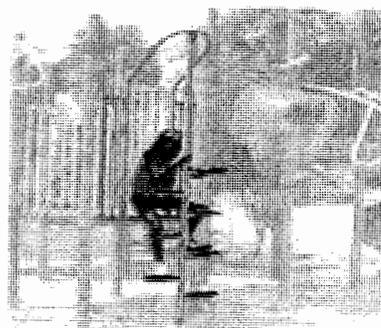
Climber Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall

ZZCH8130



* See Note

Component Number:	ZZCH8130
Specification Rev:	ECN1358
Component Weight:	92.45 Lbs.
Number of Users:	2
Amount of Concrete:	0.03 Yds.
Pre-Consumer Recycle:	23.04 Lbs.
Post-Consumer Recycle:	39.47 Lbs.
CO2e Footprint:	395.40 Kgs.

be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Handle / Step Climber Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

3.5 in. Die Cast Alloy Clamp

Shall be die cast of high strength 380 aluminum alloy. Clamps shall be provided as hinged assemblies to facilitate structure assembly and an S-lap design to eliminate string entanglement. (See Die Cast Clamps) Finished with a shot blast and a powder coating. (See Superdurable Polyester Powder Coat Finish) Because a hinged clamp design provides the easiest and most flexible installation, clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable due to poor weatherability and inherent rust problem.

Panel Connector

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Barrier - Pipe Wall - Access. Climber

Shall be fabricated of 1.66 in. outside diameter, 13 gauge galvanized steel tubing, 1.029 in. outside diameter galvanized steel tubing, and .25 in. hot rolled, pickled and oiled flat steel. (See Tubing) Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Frame - Access Climber base

Shall be an all-welded assembly fabricated of 2 in. x 3 in. x 11 gauge galvanized rectangular steel tubing, 8 gauge galvanized steel, and 7 gauge, hot rolled pickled and oiled flat steel. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening

ZZCH8230



* See Note

Component Number:	ZZCH8230
Specification Rev:	ECN1915
Component Weight:	295.60 Lbs.
Pre-Consumer Recycle:	39.81 Lbs.
Post-Consumer Recycle:	76.68 Lbs.
CO2e Footprint:	878.70 Kgs.

Rotomolded Accessible Climber Base (Steps)

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable

Steel Tubing - 1.66 in. OD, 13 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Steel Tubing - 2 in. x 3 in., 11 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

Bracket - 7 gauge HRPO

Shall be fabricated of 7 gauge hot rolled, pickled and oiled flat steel. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

CH HEX CABANA ROOF

Rotomolded Hex Roof

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.

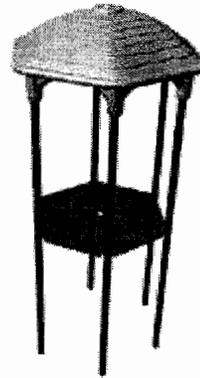
Rotomolded Component

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts may be molded into the plastic to provide attachment points.

Plastic Panel - .75 in.

Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

ZZCH9858



* See Note

Component Number:	ZZCH9858
Specification Rev:	ECN1619
Component Weight:	194.15 Lbs.
Pre-Consumer Recycle:	0.99 Lbs.
Post-Consumer Recycle:	0.00 Lbs.
CO2e Footprint:	817.90 Kgs.

APPROACH STEP FOR TRANSFER STATION

Kickplate / Nose Bracket

Shall be fabricated from a single sheet of 14 gauge galvanized sheet steel. Shall have a minimum G60 galvanizing and regular spangle commercial quality. Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

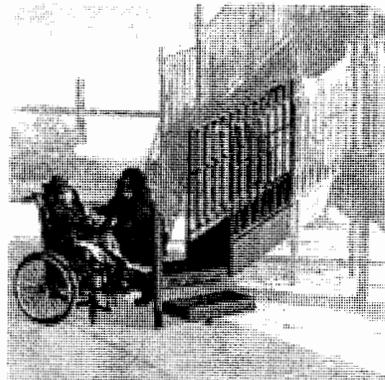
2.375 in. Support Post with Plate

Shall be fabricated of 2.375 in. outside diameter, 12 gauge galvanized steel tubing; and .125 in. zinc plated, hot rolled flat steel. (See Tubing) Finished with a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Approach Step

Approach step shall be an all-welded assembly fabricated of 11

ZZUN2019



* See Note

C12138CHR1 SPECS

9/4/2012

12 gauge and 14 gauge hot rolled, pickled and oiled flat steel. Approach step surface and sides shall be die-formed from a single sheet of 12 gauge hot rolled, pickled and oiled flat steel. Approach step surface shall have .344 in. (8 mm) diameter perforated holes. Entire deck weldment shall have a protective coating. (See Coated Finish)

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

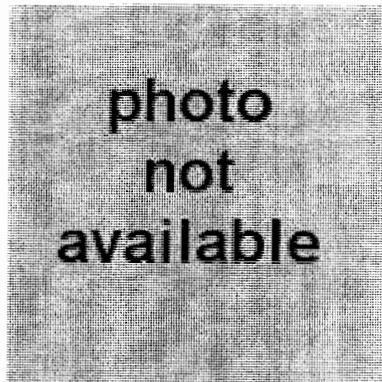
Component Number:	ZZUN2019
Specification Rev:	PA769
Component Weight:	35.83 Lbs.
Number of Users:	1
Amount of Concrete:	0.04 Yds.
Pre-Consumer Recycle:	3.65 Lbs.
Post-Consumer Recycle:	9.81 Lbs.
CO2e Footprint:	70.00 Kgs.

COATED DECK TO DECK CONNECTION KIT

Hardware Reference

See General Hardware Spec .

ZZUN2290



* See Note

Component Number:	ZZUN2290
Specification Rev:	ECN176
Component Weight:	0.29 Lbs.
Pre-Consumer Recycle:	0.00 Lbs.
Post-Consumer Recycle:	0.00 Lbs.
CO2e Footprint:	3.30 Kgs.

30in ROUND LEFT TUBE SECTION

Rotomolded Component

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts may be molded into the plastic to provide attachment points.

ZZUN3008



* See Note

Component Number:	ZZUN3008
Specification Rev:	PA1143
Component Weight:	26.02 Lbs.
Pre-Consumer Recycle:	0.00 Lbs.
Post-Consumer Recycle:	0.00 Lbs.
CO2e Footprint:	180.60 Kgs.

30in ROUND RIGHT TUBE SECTION

Rotomolded Component

Shall be rotationally molded from linear low density polyethylene. (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable. Threaded inserts may be molded into

ZZUN3009



* See Note

Component Number:	ZZUN3009
Specification Rev:	PA1143
Component Weight:	26.02 Lbs.
Pre-Consumer Recycle:	0.00 Lbs.
Post-Consumer Recycle:	0.00 Lbs.
CO2e Footprint:	180.60 Kgs.

ROUND TUBE SLIDE SUPPORT LEG 2ft

Casting - 319 Alum.

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

Slide Support Post (w/o plate)

Shall be fabricated from 2.375 in. Outside diameter, 12 gauge galvanized steel tubing.(See Tubing) Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

ZZUN3037



* See Note

Component Number:	ZZUN3037
Specification Rev:	PA1143
Component Weight:	15.40 Lbs.
Amount of Concrete:	0.03 Yds.
Pre-Consumer Recycle:	3.74 Lbs.
Post-Consumer Recycle:	6.53 Lbs.
CO2e Footprint:	42.80 Kgs.

SLITHER SLIDE 2.0 (STRAIGHT SECTION)

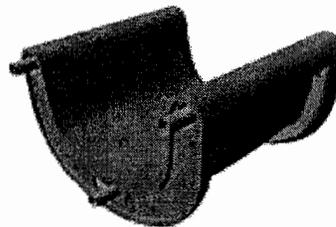
Rotomolded Slide Section

Shall be rotationally molded from linear low density polyethylene and 1.315 inch outside diameter x 14 gauge galvanized steel tubing inserted. (See Steel Tubing) (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

ZZUN3207



* See Note

Component Number:	ZZUN3207
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Specification Rev: PA1205
Component Weight: 19.59 Lbs.
Pre-Consumer Recycle: 0.20 Lbs.
Post-Consumer Recycle: 0.41 Lbs.
CO2e Footprint: 128.00 Kgs.

SLITHER SLIDE 2.0 (RIGHT SECTION)

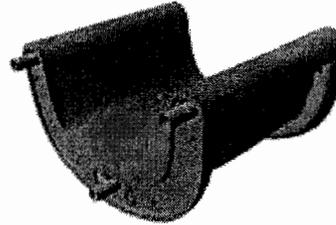
Rotomolded Slide Section

Shall be rotationally molded from linear low density polyethylene and 1.315 inch outside diameter x 14 gauge galvanized steel tubing inserted. (See Steel Tubing) (See Rotationally Molded Plastic Parts) Dry-blended or molded-in color resins are not acceptable.

Steel Tubing - 1.315 in. OD, 14 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

ZZUN3208



* See Note

Component Number: ZZUN3208
Specification Rev: PA1205
Component Weight: 19.59 Lbs.
Pre-Consumer Recycle: 0.20 Lbs.
Post-Consumer Recycle: 0.41 Lbs.
CO2e Footprint: 133.40 Kgs.

SLITHER SLIDE 2.0 SUPPORT LEG 6ft-6in

Casting / Almag 35

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. Ultimate tensile strength shall be 40 ksi. Yield strength shall be 21 ksi. Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Slide Support Post (w/o plate)

Shall be fabricated from 2.375 in. Outside diameter, 12 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

ZZUN3246



* See Note

Component Number: ZZUN3246
Specification Rev: PA1205
Component Weight: 21.61 Lbs.
Amount of Concrete: 0.03 Yds.
Pre-Consumer Recycle: 0.79 Lbs.
Post-Consumer Recycle: 0.99 Lbs.
CO2e Footprint: 70.30 Kgs.

SLITHER SLIDE 2.0 SUPPORT LEG 3ft-6in

Casting / Almag 35

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. Ultimate tensile strength shall be 40 ksi. Yield strength shall be 21 ksi. Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

ZZUN3249

Slide Support Post (w/o plate)

Shall be fabricated from 2.375 in. Outside diameter, 12 gauge galvanized steel tubing. (See Tubing) Finished with a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.



* See Note

Component Number:	ZZUN3249
Specification Rev:	PA1205
Component Weight:	15.01 Lbs.
Amount of Concrete:	0.03 Yds.
Pre-Consumer Recycle:	0.79 Lbs.
Post-Consumer Recycle:	0.99 Lbs.
CO2e Footprint:	59.60 Kgs.

TELESCOPE - PIPE WALL MOUNT WITH LENS (CH/EX)

Steering Wheel Clamp

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. (See Cast Almag Clamps) Finished with a 420 micro finish and a baked on polyester powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Telescope - Cast Aluminum

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating baked on polyester powder coating. (See superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

Casting - 319 Alum.

Cast of regular 319 (319.0-F) aluminum. Ultimate tensile strength shall be 27 ksi. Yield strength shall be 18 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish) ASTM Specifications: B-26. Federal Specifications: QQ-A-601.

Clear Polycarbonate / Lexan -.188"

Shall be machined from a sheet of .188 in. clear polycarbonate with UV resistant properties. Ultimate tensile strength is 9,900 p.s.i. Yield tensile strength is 9,000 p.s.i.

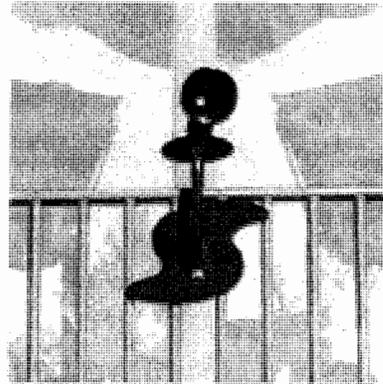
Bracket - Pipe Wall Mnt.

Shall be an all welded assembly fabricated of 1.029 in. outside diameter, 14 gauge galvanized steel tubing and .188 in. zinc plated, hot rolled flat steel. (See Tubing) Finished with a baked on polyester powder coat or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Steel Tubing - 1.029 in. OD, 14 ga.

Tensile strength shall be 55,000 psi. Yield strength shall be 50,000 psi.

ZZUN4438



* See Note

Component Number:	ZZUN4438
Specification Rev:	PA1093
Component Weight:	13.23 Lbs.
Number of Users:	1
Pre-Consumer Recycle:	2.98 Lbs.
Post-Consumer Recycle:	4.62 Lbs.
CO2e Footprint:	216.60 Kgs.

CONSTRUCTION PANEL INSERT

ZZUN4793

Panel Shaft Connector

Shall be machined from black Delrin.

Ball Bearing - .5 in. Dia.

Shall be .5 in. diameter and be manufactured from AISI 440-C stainless steel and hardened to RC 58-65.

Plastic Panel - .75 in.

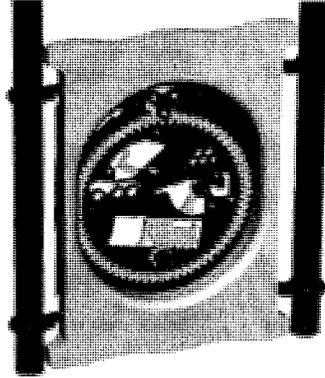
Shall be fabricated from colored marine grade, .75 in. high density polyethylene and machined. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact) D-746 (Brittleness), D-1525 (Softening Point).

Plastic Panel - .5 in.

Shall be fabricated of .50 in. (12 mm) high density sheet polyethylene. Shall be ultraviolet (UV) stabilized. Meets FDA requirements. ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-638 (Tensile Strength), D-648 (Heat Distortion Temperature) D-790 (Flexural Modulus), D-1693 and D-2561 (Environmental Stress Crack Resistance), D-2240 (Hardness), D-1822 (Tensile Impact), D-746 (Brittleness), D-1525 (Vicat Softening Point).

Clear Polycarbonate / Lexan -.188"

Shall be machined from a sheet of .188 in. clear polycarbonate with UV resistant properties. Ultimate tensile strength is 9,900 p.s.i. Yield tensile strength is 9,000 p.s.i.



* See Note

Component Number:	ZZUN4793
Specification Rev:	PA1067
Component Weight:	27.44 Lbs.
Number of Users:	1
Pre-Consumer Recycle:	7.58 Lbs.
Post-Consumer Recycle:	0.00 Lbs.
CO2e Footprint:	387.10 Kgs.

OVAL BUBBLE PANEL INSERT

ZZUN4796

Plastic Bubble/Window

Bubble shall be oval-shaped and shall be vacuum-formed .188 in. (.48 cm) XL Lexan, which is a high impact polycarbonate with ultraviolet stabilizers, and withstands wide temperature ranges. Oval bubble surface shall be protected with Ultramask for improved clean up.



* See Note

Component Number:	ZZUN4796
Specification Rev:	PA1064
Component Weight:	5.87 Lbs.
Number of Users:	1
Pre-Consumer Recycle:	0.00 Lbs.
Post-Consumer Recycle:	0.00 Lbs.
CO2e Footprint:	129.40 Kgs.

SHIFTING SANDS PANEL INSERT

ZZUN4806

Shifting Sands Activity

Shifting sands activity shall be fabricated from .5 in. and .75 in. high density colored polyethylene and machined to size and shape..ASTM Specifications: D-1238 (Melt Index), D-1505 (Material Density), D-

57
 550 (Tensile Strength), D-750 (Flexural Modulus), D-1030
 (Environmental Stress Crack Resistance)



* See Note

Component Number: ZZUN4806
Specification Rev: PA1064
Component Weight: 22.97 Lbs.
Number of Users: 1
Pre-Consumer Recycle: 5.31 Lbs.
Post-Consumer Recycle: 0.00 Lbs.
CO2e Footprint: 247.40 Kgs.

5-12 YEARS OLD RISK MANAGEMENT SIGN

Sign Frame

Shall be an all welded assembly fabricated of .25 in. hot rolled flat steel and 2.375 in. outside diameter, 12 gauge galvanized steel tubing. (See Tubing) Finished with powder coating or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

Risk Management Sign

Shall be fabricated of .250 in. (6 mm) thick Modulite® fiberglass-reinforced plastic (FRP) panels. Modulite is a non-yellowing, R-70 clear resin (a UV stabilized, acrylic-modified polyester resin) reinforced with high solubility, chopped strand fiberglass mat. Glass content shall be no less than 28% of total sign weight. Glass fibers should not be readily discernible on the sign face. Shall have custom, digitally printed graphics that become inseparable from the panel to disallow delamination. Shall have an ambient temperature range of -65 F to 350 F. Shall have a minimum Barcol hardness of 50. Shall have a tensile strength of 12,000 psi. Shall have a compressive strength of 20,000 psi. Shall have a flexural strength of 18,000 psi. Shall have a minimum impact strength of 6 ft./lb. Shall have a fire resistance of 500 F. Material shall not be permanently defaced by steam, acids, aromatics, scratching, inks, or paints. Shall be readily cleaned with paint remover and solvents without affecting appearance or legibility of finish or graphics. Panel shall have a semi-gloss finish. Edges must not crazed or cracked, but be smooth and clean. Laminated panels shall not be acceptable.

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.

BELT SEAT W/SILVER SHIELD CHAIN FOR 8ft TOP RAIL

Chain 4/0 Silver Shield

ASTM B695 Type 1- Class 40 A - 1.7 mil coating of zinc equal in corrosion protection to a hot dip galvanized zinc finish. Meets ASTM spec B454, Military spec Mil-C-81562A for mechanical zinc coating required by SATM A-153, Class D.

ZZXX0175



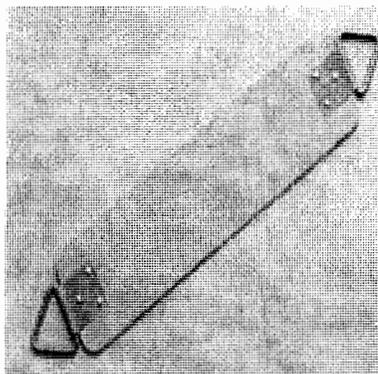
* See Note

Component Number: ZZXX0175
Specification Rev: PA680
Component Weight: 42.75 Lbs.
Amount of Concrete: 0.07 Yds.
Pre-Consumer Recycle: 7.72 Lbs.
Post-Consumer Recycle: 15.83 Lbs.
CO2e Footprint: 191.90 Kgs.

ZZXX0260

Swing Seat - Seat

Shall be fabricated from .5 in. (13 mm) thick ethylene propylene diene monomer with a T-301 full hard .020 in. (.51 mm) carbon steel insert. A triangular galvanized steel bracket and plate shall be secured to seat with galvanized rivets for chain attachments. Seat shall be slash-proof.



* See Note

Component Number:	ZZXX0260
Specification Rev:	ECN1836
Component Weight:	8.80 Lbs.
Number of Users:	1
Pre-Consumer Recycle:	4.99 Lbs.
Post-Consumer Recycle:	2.72 Lbs.
CO2e Footprint:	50.60 Kgs.

8ft SINGLE POST SWING ASSEMBLY

Swing Clevis - cast iron

Shall be manufactured of superior grade cast ductile iron and galvanized. Shall have an integrated bronze bearing.

3.5 in. Swing Hanger / Band - cast iron

Shall be manufactured of superior grade cast ductile iron and galvanized. The swing hanger and band together shall have an ultimate tensile load of 5000 lbs. Shall be finished with a baked on polyester powder coat. (See Superdurable Polyester Powder Coat Finish)

3.5 in. Swing Top Rail With 5 in. Clamps

Shall be an all-welded assembly fabricated of 3.5 in. outside diameter, 8 gauge galvanized steel tubing and .25 in. hot rolled flat steel. Shall be finished with a baked-on polyester powder coat or PrismCoat. (See PrismCoat / Polyester Powder Coat Finish)

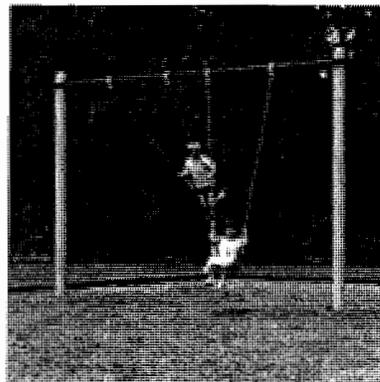
5 in. Cast Clamp Band

Shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. Finished with a 420 micro finish and a baked on polyester powder coating. (See Superdurable Polyester Powder Coat Finish)

Steel Tubing - 3.5 in. OD, 8 ga.

Tensile strength shall be 48,000 psi. Yield strength shall be 45,000 psi.

ZZXX0295



* See Note

Component Number:	ZZXX0295
Specification Rev:	ECN815
Component Weight:	264.58 Lbs.
Amount of Concrete:	0.26 Yds.
Pre-Consumer Recycle:	48.18 Lbs.
Post-Consumer Recycle:	98.77 Lbs.
CO2e Footprint:	437.60 Kgs.

8ft PERMANENT BENCH (COATED PLANKS & FRAME)

Bench Frame - Coated

Shall be an all welded assembly consisting of 2.375 in. outside diameter, 12 gauge hot rolled, pickled and oiled steel tubing and 12 gauge hot rolled, pickled and oiled steel plate. Finished with a protective coating. (See Coated Finish)

Coated Perf. Bench Plank - .5" holes

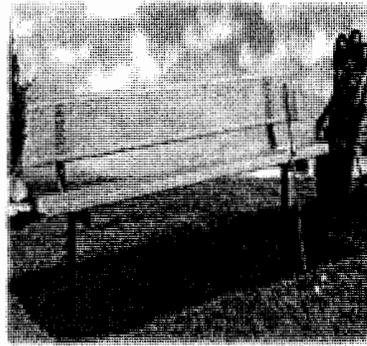
Bench planks shall be an all-welded assembly fabricated of 14 gauge hot rolled, pickled and oiled flat steel. Bench planks surface and sides shall be die-formed from a single sheet of 14 gauge hot rolled,

ZZXX1412

painted and oiled gal steel. Bench planks surface shall have .01 in. (10 mm) diameter perforated holes. Bench planks shall have a protective coating. (See Coated Finish)

Steel Tubing - 2.375 in. OD, 12 ga.

Tensile strength shall be 75,000 psi. Yield strength shall be 60,000 psi.



* See Note

Component Number:	ZZXX1412
Specification Rev:	ECN1048
Component Weight:	101.49 Lbs.
Amount of Concrete:	0.16 Yds.
Pre-Consumer Recycle:	10.96 Lbs.
Post-Consumer Recycle:	28.87 Lbs.
CO2e Footprint:	260.40 Kgs.

* The photos shown are for product representation only. The actual products may vary in size and color depending upon application.

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 800/669-2585 FAX 800/729-2483

Quotation

CA 86212RR

To **City of Torrance**
Attn: John Jones
3031 Torrance Boulevard
Torrance, CA 90503
"Pueblo Park - Option #D"
Play Equipment Non-Theme Remove Grass

Quotation Date November 15, 2012	Salesperson Eric Huber
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Terms
 Net 30 with purchase order

Estimated Shipping Date 3-5 Weeks	Shipped Via Truck	F.O.B. Torrance
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Quantity	Description	Unit Price	Total Extended
1	Playworld #C12138CHR1, Custom Challenger Playstructure with 3.5" OD powder coated galvanized steel posts, one piece powder coated aluminum hinged clamps, one piece Eco-Armor coated perforated steel deck with Playground Rules Sign		58,321.00
1	Playworld #SWING-SP8, Single Post Swing with (2) Belt Seats, 8' high		1,079.00
			<u>59,400.00</u>
	Less Discount for Cooperative Purchase with the San Bernardino School District		(17,820.00)
			<u>41,580.00</u>
	Tax 9.00%		3,742.20
	Shipping		6,114.70
	TOTAL DELIVERED		<u>51,436.90</u>
	*Installation, site prep, borders and rubber safety surfacing NOT included. *Shipped by common carrier - Will need 3-4 people to unload *Price Based upon San Bernardino City USD Cooperative Bid #15-11 THANK YOU FOR THIS CHANCE TO QUOTE		

WE ARE PLEASED TO SUBMIT THE ABOVE QUOTATION FOR YOUR CONSIDERATION. SHOULD YOU PLACE AN ORDER, BE ASSURED IT WILL RECEIVE OUR PROMPT ATTENTION. THIS QUOTATION IS SUBJECT TO THE CONDITIONS OF OUR CREDIT APPLICATION, AND IS VALID FOR **30** DAYS. THEREAFTER IT IS SUBJECT TO CHANGE WITHOUT NOTICE. FAX COPY DEEMED TO BE LEGAL EQUIVALENT OF ORIGINAL. ALL PAST DUE ACCOUNTS SUBJECT TO 1 1/2% MONTHLY FINANCE CHARGE IN THE EVENT LEGAL ACTION IS REQUIRED TO EFFECT COLLECTION, VENUE SHALL BE TUSTIN, CA.

By **Eric Huber**

Accepted _____

Date _____

PLEASE SIGN AND RETURN ONE COPY WHEN ORDERING.

Thank You!

dave bang assoc., inc.**** Since 1979 ****

P.O. Box 1088, Tustin, California 92781
 800/669-2585 FAX 800/729-2483

Quotation

CA 86213R

To **City of Torrance**
Attn: John Jones
3031 Torrance Boulevard
Torrance, CA 90503

"Pueblo Park - Option #D"**Installation - Non-Theme, Remove Grass**

Quotation Date November 15, 2012	Salesperson Eric Huber
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Terms
 Net 30 with purchase order

Estimated Shipping Date 3-5 Weeks	Shipped Via Truck	F.O.B. Torrance
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Quantity	Description	Unit Price	Total Extended
Lump Sum	Remove and Dispose of Existing Play Equipment		1,500.00
Lump Sum	Installation of New Play Equipment per attached plan #C12138CHR1		15,000.00
Lump Sum	Supply and Install 130 cubic yards of wood fiber and filter fabric		7,000.00
Lump Sum	Remove and Dispose of existing wood fiber, grass, and 40 linear feet of concrete sidewalk, excavate to 12". Construct fluctuation ramp		7,800.00
TOTAL INSTALLATION			31,300.00
<p>*All Work Performed by a Licensed Contractor *Price INCLUDES Prevailing Wages</p>			
THANK YOU FOR THIS CHANCE TO QUOTE			

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By **Eric Huber**

Accepted _____

Date _____

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Thank You!