

MEMORANDUM

TO: Judge Robert Hebert
County Judge

B14-059

7-1-14
22B

FROM: Debbie Kaminski
Assistant Purchasing Agent

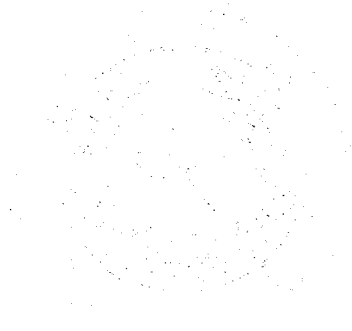
SUBJECT: Please sign and date the attached contract(s) approved in
Commissioners Court on July 1, 2014. Thank you.

DATE: October 3, 2014

RETURN TO: Norma Weaver
Administrative Assistant
Purchasing Department
301 Jackson, Suite 201
Richmond, Texas 77469

Miracle Recreation Equipment

**Fort Bend County, Texas
Invitation for Bid**



***Provide and Install Playground Equipment for Gordon Ranch
for Fort Bend County
BID 14-059***

SUBMIT BIDS TO:

**Fort Bend County
Purchasing Department
Travis Annex
301 Jackson, Suite 201
Richmond, TX 77469**

****NOTE:
All correspondence must include the term
"Purchasing Department" in address to assist in
proper delivery**

SUBMIT NO LATER THAN:

**Thursday, June 19, 2014
1:30 PM (Central)**

MARK ENVELOPE:

**Bid 14-059
Playground equipment**

***ALL BIDS MUST BE RECEIVED IN COUNTY PURCHASING OFFICE
BEFORE RECEIVING DATE AND TIME SPECIFIED.
BIDS RECEIVED WILL THEN BE OPENED AND PUBLICLY READ.
BIDS RECEIVED AFTER THE SPECIFIED TIME WILL BE RETURNED
UNOPENED.***

**Results will not be given by phone.
Results will be provided to bidders in writing
after Commissioners Court award.**

**Fort Bend County is always conscious
and extremely appreciative of your effort
in the preparation of this bid. Requests for
information must be in writing and directed
to:
Debbie Kaminski, CPPB
Assistant County Purchasing Agent
Debbie.Kaminski@fortbendcountytexas.gov**

**Prepared: 05/28/14
Issued: 06/04/14**

Vendor Information

Miracle Recreation Equipment Co
Legal Name of Contracting Company

Legal Name of Contracting Company

Federal ID Number (Company or Corporation) or Social Security Number (Individual)

281-288-1412
Telephone Number

Telephone Number

281-288-0043
Facsimile Number

Facsimile Number

3 Sinsprey Place

Complete Mailing Address (for Correspondence)

The Woodlands, TX 77382
City, State and Zip Code

City, State and Zip Code

8445 Solution Center

Complete Remittance Address (if different from above)

Chicago, IL 60677-8004
City, State and Zip Code

City, State and Zip Code

Jeffrey Bratton District Sales Manager
Authorized Representative and Title (printed)

Authorized ☒ Representative and Title (printed)

jeff@msyrecreation.com
Authorized Representative's Email Address

Authorized Representative's Email Address

Signature of Authorized Representative

Signature of Authorized Representative

Initials of Bidder:

1.0 GENERAL REQUIREMENTS:

- 1.1 Read this entire document carefully. Follow all instructions. You are responsible for fulfilling all requirements and specifications. Be sure you understand them.
- 1.2 General Requirements apply to all advertised bids; however, these may be superseded, whole or in part, by the scope, special requirements, specifications, special specifications or other data contained herein.
- 1.3 Governing Law: Bidder is advised that these requirements shall be fully governed by the laws of the State of Texas and that Fort Bend County may request and rely on advice, decisions and opinions of the Attorney General of Texas and the County Attorney concerning any portion of these requirements.
- 1.4 Bid Form Completion: Fill out, sign, and return to the Fort Bend County Purchasing Department one (1) complete bid form. An authorized representative of the bidder must sign the Contract Sheet. The Contract will be binding only when signed by the County Judge, Fort Bend County and a purchase order authorizing the item(s) desired has been issued. The use of liquid paper is not acceptable and may result in the disqualification of bid. If an error is made, vendor must draw a line through error and initial each change.
- 1.5 Bid Returns: Bidders must return all completed bids to the Fort Bend County Purchasing Department at 301 Jackson, Suite 201, Richmond, Texas no later than 1:30 P.M. on the date specified. Late bids will not be accepted. Bids must be submitted in a sealed envelope, addressed as follows: Fort Bend County Purchasing Agent, Travis Annex, 301 Jackson, Suite 201, Richmond, Texas 77469.
- 1.6 Addendums: No interpretation of the meaning of the drawings, specifications or other bid documents will be made to any bidder orally. All requests for such interpretations must be made in writing via email to Ms Debbie Kaminski, County Assistant Purchasing Agent, at Debbie.Kaminski@fortbendcountytexas.gov. Any and all interpretations and any supplemental instructions will be posted on County website at www.fortbendcountytexas.gov. Addenda will **ONLY** be issued by the Fort Bend County Purchasing Agent. It is the sole responsibility of each bidder to insure receipt of any and all addenda. All addendum issued will become part of the contract documents. Bidders must sign and include it in the returned bid package. Deadline for submission of questions and/or clarification is **Thursday, June 12, 2014 at 3:00 p.m. (CST)**. Requests received after the deadline will not be responded to due to the time constraints of this bid process.
- 1.7 References: All bidders must submit, **with Bid**, at least three (3) references from clients for whom a project similar to that specified herein has been successfully accomplished. References must include clients name, contact person and telephone number.

Initials of Bidder:



- 1.8 **Bid Bond:** All bidders must submit, **with Bid**, a cashier's check or certified check for at least five percent (5%) of the total bid price, payable to the order of Fort Bend County, or a Bid Bond in the same amount issued by a surety, acceptable to Fort Bend County, authorized to do business in the State of Texas, as a guarantee that the Bidder will do the work described herein at the rates stated herein. Unsuccessful bidder's Cashier's Check or Certified Check will be returned only after a written request to do so has been received in the Office of the Fort Bend County Purchasing Agent.
- 1.9 **Material Safety Data Sheets:** Under the "Hazardous Communication Act", commonly known as the "Texas Right To Know Act", a bidder must provide to Fort Bend County and using departments, with each delivery, material safety data sheets, which are, applicable to hazardous substances defined in the Act. Bidders are obligated to maintain a current, updated file in the Fort Bend County Purchasing Department. Failure of the bidder to maintain such a file will be cause to reject any bid applying thereto.
- 1.10 **Pricing:** Prices for all goods and/or services shall be firm for the duration of this Contract and shall be stated on the bid sheet. Prices shall be all inclusive. No price changes, additions, or subsequent qualifications will be honored during the course of the Contract. All prices must be written in ink or typewritten. If there are any additional charges of any kind, other than those mentioned above, specified or unspecified, bidder **MUST** indicate the items required and attendant costs or forfeit the right to payment for such items.
- 1.11 **Term Contracts:** If the Contract is intended to cover a specific time period, said time will be given in the specifications under scope.
- 1.12 **Recycled Materials:** Fort Bend County encourages the use of products made of recycled materials and shall give preference in purchasing to products made of recycled materials if the products meet applicable specifications as to quantity and quality. Fort Bend County will be the sole judge in determining product preference application.
- 1.13 **Evaluation:** Evaluation shall be used as a determinant as to which bid items or services are the most efficient and/or most economical for Fort Bend County. It shall be based on all factors, which have a bearing on price and performance of the items in the user environment. All bids are subject to tabulation by the Fort Bend County Purchasing Department and recommendation to Fort Bend County Commissioners Court. Compliance with all bid requirements, delivery and needs of the using department are considerations in evaluating bids. Pricing is **NOT** the only criteria for making a recommendation. The Fort Bend County Purchasing Department reserves the right to contact any bidder, at any time, to clarify, verify or request information with regard to any bid.

- 1.14 Disqualification of Bidder: Upon signing this bid document, a bidder offering to sell supplies, materials, services, or equipment to Fort Bend County certifies that the bidder has not violated the antitrust laws of this state codified in section 15.01, et seq., Business & Commerce Code, or the federal antitrust laws, and has not communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business. Any or all bids may be rejected if Fort Bend County believes that collusion exists among the bidders. Bids in which the prices are obviously unbalanced may be rejected. If multiple bids are submitted by a bidder and after the bids are opened, one of the bids is withdrawn, the result will be that all of the bids submitted by that bidder will be withdrawn; however, nothing herein prohibits a vendor from submitting multiple bids for different products or services.
- 1.15 Awards: Fort Bend County reserves the right to award this Contract on the basis of lowest and best bid in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one bidder, to reject any or all bids. In the event the lowest dollar bidder meeting specifications is not awarded a contract, the bidder may appear before the Commissioners Court and present evidence concerning its responsibility.
- 1.16 Contract Obligation: Fort Bend County Commissioners Court must award the Contract and the County Judge or other person authorized by the Fort Bend County Commissioners Court must sign the Contract before it becomes binding on Fort Bend County or the bidders. Department heads are not authorized to sign agreements for Fort Bend County. Binding agreements shall remain in effect until all products and/or services covered by this purchase have been satisfactorily delivered and accepted.
- 1.17 Name Brands: Specifications may reference name brands and model numbers. It is not the intent of Fort Bend County to restrict these bids in such cases, but to establish a desired quality level of merchandise or to meet a pre-established standard due to like existing items. Bidders may offer items of equal stature and the burden of proof of such stature rests with them. Fort Bend County shall act as sole judge in determining equality and acceptability of products offered.

2.0 SCOPE:

It is the intent of Fort Bend County to contract with one (1) vendor for all materials, supplies, equipment, tools, services, labor and supervision necessary to provide and install playground equipment at the Gordon Ranch Park located at 7714 FM 359, Richmond, TX 77406, hereinafter referred to as the "Project," as specified herein.

3.0 PRE-BID CONFERENCE:

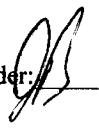
No pre-bid conference for this project.

4.0 LIQUIDATED DAMAGES:

If the Project is not substantially complete within the contract time as adjusted by extension of time approved by Commissioner Court, Fort Bend County will deduct (from the final payment, as liquidated damages), the sum of three hundred (\$300.00) per calendar day that the Project remains not substantially complete, such sum is agreed upon as a reasonable and proper measure of damages which Fort Bend County will sustain per day by failure of Contractor to substantially complete work within the contract time. It is understood that said sum shall be considered as liquidated damages and shall in no sense be considered as a penalty against the Contractor.

5.0 COMPLETION TIME AND PAYMENT:

- 5.1 Fort Bend County shall pay the Contractor in current funds for the Contractor's performance of the Contract the contract sum, as stated herein, after receipt of notice to proceed and a purchase order issued by the Fort Bend County Purchasing Agent.
- 5.2 Based upon Applications for payment submitted to the Parks Department, Fort Bend County shall make progress payments on account of the contract sum to the Contractor as provided below and elsewhere in the contract documents.
 - 5.2.1 The period covered by each application for payment shall be one calendar month ending on the last day of the month.
 - 5.2.2 Provided an application for payment is received by the Parks Department not later than the 15th day of a month, Fort Bend County shall make payment to the Contractor not later than the 15th day of the next month. If an application for payment is received by the Parks Department after the application deadline fixed above, payment shall be made by Fort Bend County not later than 30 days after the Parks Department receives the application for payment.
 - 5.2.3 Application for payment shall indicate the percentage of completion of each portion of the Project as of the end of the period covered by the application for payment.
 - 5.2.4 Subject to the provisions of the contract documents, the amount of each progress payment shall be computed as follows:
 - 5.2.4.1 Take that portion of the contract sum properly allocable to completed Project less retainage of ten percent (10%).
 - 5.2.4.2 Add that portion of the contract sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved by Fort Bend County, suitably stored off the site at a

Initials of Bidder: 

location agreed upon in writing), less retainage of ten percent (10%).

5.2.4.3 Subtract the aggregate of previous payments made by Fort Bend County.

5.2.4.4 The progress payment amount as determined in above shall be further modified under the following circumstances:

Add, upon substantial completion of the Project, a sum sufficient to increase the total payments to one hundred percent (100%) of the contract sum, less such amounts as Fort Bend County shall determine for incomplete work and unsettled claims.

5.2.4.5 Final payment, constituting the entire unpaid balance of the contract sum, shall be made by Fort Bend County to the Contractor when the Contract has been fully performed by the Contractor.


5.3 Before the first application for payment, the Contractor shall submit to the Parks Department a schedule of values allocated to various portions of the work, prepared in such form and supported by such data to substantiate its accuracy as the Parks Department may require. This schedule, unless objected to by the Parks Department shall be used as a basis for reviewing the Contractor's application for payment.

5.4 Contractor must provide with each application for payment a contractor's affidavit certifying bills against the Contractor for labor, material and expendable equipment employed in the performance of Contractor have been paid in full prior to acceptance of final payment from Fort Bend County.

5.5 The Contractor will permit Fort Bend County, or any duly authorized agent of Fort Bend County, to inspect and examine the books and records of the Contractor for the purpose of verifying the amount of work performed under the Contract. Fort Bend County's right to inspect survives the termination of the Contract for a period of five years.

6.0 LIMIT OF APPROPRIATION:

Prior to the execution of this Contract, Contractor has been advised by County, and Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence to this Contract, that County shall have available only those funds specifically allocated in this Contract to fully discharge any and all liabilities which may be incurred by County in bringing this Project to an absolute conclusion, resulting in a complete, fully furnished, fully equipped and fully usable facility, and that the total of any and all basic construction costs, costs of providing the required furnishing and equipment, all fees and compensation of any sort to the Contractor, and any and all costs for any and all things or purposes enuring under or out of this Contract,

Initials of Bidder: 

irrespective of the nature thereof, shall not exceed said specifically allocated sum, notwithstanding any word, statement or thing contained in or inferred from the preceding provision of this Contract which might in any light by any person be interpreted to the contrary.

7.0 RIGHT TO ASSURANCE:

Whenever Fort Bend County in good faith has reason to question the Contractor's intent to perform, Fort Bend County may demand that the Contractor give written assurance of its intent to perform. In the event that a demand is made and no assurance is given within five (5) days, Fort Bend County may treat this failure as an anticipatory repudiation of the Contract.

8.0 PERFORMANCE AND PAYMENT BONDS:

In the event the total accepted bid price exceeds \$25,000 the Contractor must provide to the Office of the County Purchasing Agent, a performance bond and a payment bond, each in the amount of 100% of the total contract sum within ten (10) calendar days after receipt of notification of bid award. Such bonds shall be executed by a corporate surety duly authorized and admitted to do business in the State of Texas and licensed in the State of Texas to issue surety bonds with a Best Rating of "A" or better. Fort Bend County reserves the right to accept or reject any surety company proposed by the Contractor. In the event Fort Bend County rejects the proposed surety company, the Contractor will be afforded five (5) additional days to submit the required bonds issued by a surety company acceptable to Fort Bend County.

9.0 POWER OF ATTORNEY:

An attorney-in-fact who signs a bid bond, performance bond or payment bond must file with each bond a certified and effectively dated copy of his or her power of attorney.

10.0 INSURANCE:

10.1 All respondents must submit, **with Bid**, a certificate of insurance indicating coverage in the amounts stated below. In lieu of submitting a certificate of insurance, respondents may submit, with Bid, a notarized statement from an Insurance company, authorized to conduct business in the State of Texas, and acceptable to Fort Bend County, guaranteeing the issuance of an insurance policy, with the coverage stated below, to the contractor named therein, if successful, upon award of this Contract. Failure to provide insurance certificate or notarized statement will result in disqualification of submittal.

10.2 The certificates of insurance to be satisfactory to Fort Bend County, naming the Contractor and its employees as insured:

10.2.1 Workers Compensation in accordance with the laws of the State of Texas. Substitutes to genuine Workers' Compensation Insurance will not be allowed.

10.2.2 Employers' Liability insurance with limits of not less than \$1,000,000 per

Initials of Bidder

injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.

10.2.3 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

10.2.4 Business Automobile Liability coverage applying to owned, non-owned and hired automobiles with limits not less than \$1,000,000 each occurrence combined single limit for Bodily Injury and Property Damage combined.

10.3 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability (if required). In compliance with SB 425 vendor must provide a copy of the insurance endorsement or policy wording for additional insured.

10.4 If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the Contract and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time the work under this Contract is completed.

10.5 Contractor shall not commence any portion of the work under this Contract until it has obtained the insurance required herein and certificates of such insurance have been filed with and approved by Fort Bend County.

10.6 No cancellation of or changes to the certificates, or the policies, may be made without sixty (60) days prior, written notification to Fort Bend County.

10.7 Approval of the insurance by Fort Bend County shall not relieve or decrease the liability of the Contractor.

11.0 INDEMNIFICATION:

RESPONDENT SHALL SAVE HARMLESS COUNTY FROM AND AGAINST ALL CLAIMS, LIABILITY, AND EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, ARISING FROM ACTIVITIES OF RESPONDENT, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, ERROR, OR OMISSION OF RESPONDENT OR ANY OF RESPONDENT'S AGENTS, SERVANTS OR EMPLOYEES.



- 11.1 Respondent shall timely report all such matters to Fort Bend County and shall, upon the receipt of any such claim, demand, suit, action, proceeding, lien or judgment, not later than the fifteenth day of each month; provide Fort Bend County with a written report on each such matter, setting forth the status of each matter, the schedule or planned proceedings with respect to each matter and the cooperation or assistance, if any, of Fort Bend County required by Respondent in the defense of each matter.
- 11.2 Respondent's duty to defend indemnify and hold Fort Bend County harmless shall be absolute. It shall not abate or end by reason of the expiration or termination of any contract unless otherwise agreed by Fort Bend County in writing. The provisions of this section shall survive the termination of the contract and shall remain in full force and effect with respect to all such matters no matter when they arise.
- 11.3 In the event of any dispute between the parties as to whether a claim, demand, suit, action, proceeding, lien or judgment appears to have been caused by or appears to have arisen out of or in connection with acts or omissions of Respondent, Respondent shall never-the-less fully defend such claim, demand, suit, action, proceeding, lien or judgment until and unless there is a determination by a court of competent jurisdiction that the acts and omissions of Respondent are not at issue in the matter.
- 11.4 Respondent's indemnification shall cover, and Respondent agrees to indemnify Fort Bend County, in the event Fort Bend County is found to have been negligent for having selected Respondent to perform the work described in this request.
- 11.5 The provision by Respondent of insurance shall not limit the liability of Respondent under an agreement.
- 11.6 Respondent shall cause all trade contractors and any other contractor who may have a contract to perform construction or installation work in the area where work will be performed under this request, to agree to indemnify Fort Bend County and to hold it harmless from all claims for bodily injury and property damage that arise may from said Respondent's operations. Such provisions shall be in form satisfactory to Fort Bend County.
- 11.7 Loss Deduction Clause - Fort Bend County shall be exempt from, and in no way liable for, any sums of money which may represent a deductible in any insurance policy. The payment of deductibles shall be the sole responsibility of Respondent and/or trade contractor providing such insurance.

12.0 PREVAILING WAGES:

Does not apply to this project.



13.0 PERMITS:

It shall be the sole responsibility of the successful bidder to obtain all required permits in the name of Fort Bend County.

14.0 CONTRACTOR'S RESPONSIBILITY FOR WORK:

14.1 Preconstruction Work. Contractor shall do (or cause to be done) the following as preconstruction work:

14.1.1 On an as needed basis as determined by Fort Bend County, cause the Contractor's personnel to meet with Fort Bend County to discuss the status of the Project.

14.1.2 Review drawings and specifications with the Parks Department to permit the Contractor and Fort Bend County to determine the compliance of the proposed facility with applicable building codes.

14.2 Construction Work. Contractor shall do (or cause to be done) the following as construction work:

14.2.1 Perform (or cause to be performed) all preparatory work at the construction site required herein, including (without limitation) soil and concrete testing and demolition of improvements existing at the construction site and all actions necessary for compliance with all laws and regulations as to actions to be taken by owners or contractors before construction begins, including without limitation those in regard to archaeological and environmental requirements.

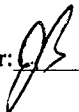
14.2.2 Construct and install (or cause to be constructed and installed) the Project on the construction site in accordance with this Contract and the drawings and specifications approved by Fort Bend County.

14.2.3 Furnish (or cause to be furnished) all materials, supplies, equipment, tools, labor, supervision, utilities, transportation, and other materials and services necessary to complete the Project described herein.

14.2.4 Materials testing necessary for the Project and required by laws and regulations, construction industry standards as approved by Fort Bend County and this Contract; the frequency of testing shall be approved by Fort Bend County.

14.3 Standards for Review and Approval.

14.3.1 Fort Bend County acknowledges that in order to meet the deadlines for the completion of the Project, and in order to accomplish the efficient

Initials of Bidder: 

completion of the Project, the Contractor may submit matters to Fort Bend County in stages for approval or consent. Upon receipt of any matter submitted by the Contractor for review and approval, Fort Bend County shall review the same and shall diligently and promptly (but in any event within 14 calendar days for any such matter, other than a proposed change order, and within 28 calendar days for a proposed change order) give the Contractor notice of Fort Bend County's approval or disapproval, setting forth in detail all reasons for any disapproval. Fort Bend County's right to disapprove any such matter submitted (other than a proposed change order) shall be limited to the elements thereof (a) which do not conform substantially to matters previously approved, (b) which are new elements not previously presented and approved and the Contractor is unable to demonstrate that such new element is reasonably necessary for completion of the Project, or (c) which depict matters that are violations of this Contract or applicable laws and regulations.

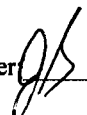
14.3.2 If Fort Bend County disapproves of a particular matter or Proposed Change Order, the Contractor shall have the right to resubmit such matter or Proposed Change Order to Fort Bend County, altered to satisfy Fort Bend County's basis for disapproval. Any resubmission shall be subject to review and approval by Fort Bend County.

14.3.3 Fort Bend County and the Contractor shall attempt in good faith to resolve any disputes concerning the approval of any aspect of the Project expeditiously, so as not to delay the completion of the Project in accordance with this Contract.

14.3.5 Expedited Approvals. Fort Bend County recognizes the importance of expeditious action upon all matters submitted to Fort Bend County for review and approval and of expeditious response to those aspects of the Project requiring approval by governmental authorities having jurisdiction there over. Fort Bend County agrees to exercise its rights of review and approval hereunder with due diligence, reasonableness, and good faith. Fort Bend County shall use its reasonable efforts to expedite any required review of the Project or other matters by any governmental authority.

14.4 Changes.

14.4.1 General. Fort Bend County may make changes to the Project by altering, adding to, or deducting from the Project. All changes in the Project which (a) require an adjustment in the contract sum or an adjustment in the final completion date or (b) involve a material change in the overall scope or function of the Project shall be requested and authorized before commencing such changes by use of written change order notices, Proposed Change Orders and Change Orders, which change order procedure shall be the exclusive means to effect such changes in the Project.



14.4.2 Change Order Procedure. If at any time Fort Bend County desires to make any change in the Project requiring the issuance of a Change Order, Fort Bend County shall so advise the Contractor in writing by delivery to the Contractor of a written notice describing the change. Upon receipt of such notice initiated by Fort Bend County, the Contractor shall within a reasonable period of time advise Fort Bend County of the Contractor's proposal for the adjustments, if any, in the contract sum, the schedule of values, and the final completion date attributable to such change by delivering a written notice thereof (the "Proposed Change Order") to Fort Bend County. Such Proposed Change Order shall contain a description of the proposed change and shall set forth the Contractor's estimate of the increase or decrease, if any, in the contract sum and the change, if any, in the schedule of values and the final completion date attributable to such change. If the Contractor desires to make a change in the Project requiring the issuance of a change order, the Contractor shall deliver to Fort Bend County a Proposed Change Order. Upon execution by Fort Bend County, a Proposed Change Order shall constitute (and be defined herein as) a "Change Order" for purposes of this Contract. The Contractor shall forthwith perform the work as changed in accordance with such Change Order. All work performed pursuant to a Change Order shall be performed in accordance with the terms of this Contract. All Proposed Change Orders shall be submitted for approval by Fort Bend County. No action, acquiescence or inaction by Fort Bend County or any representative of Fort Bend County shall be construed to be a waiver of requirements set forth in this Contract in regard to Change Orders or ratification of a violation of such requirements, and all acts in violation of this provision shall be considered void.

14.4.3 Change Order Authorization. Each Change Order shall be signed by Fort Bend County and an authorized representative of the Contractor.

14.4.4 Contract Sum Adjustments. The contract sum and the schedule of values shall be adjusted only as a result of a Change Order requiring such adjustment. Any extra work performed without a proper Change Order shall be considered voluntary and not subject to additional compensation. The Contractor shall not be entitled to an adjustment in the contract sum (or a Change Order permitting such adjustment) or to damages as a result of any delays in the Project caused by the acts or omissions of Fort Bend County, provided that this sentence is not applicable to delays that constitute more than 90 days in any 365-day period or cause the Project to be interrupted for a continuous period of 45 days through no fault of the Contractor.

14.4.5 When Fort Bend County and the Contractor agree upon the adjustments in the contract sum, the schedule of values, and the final completion date attributable to such adjustment, such agreement will be documented by

Initials of Bidder:



preparation and if approved by the Fort Bend County Commissioners Court, execution of an appropriate Change Order.

- 14.5 Site Access. Prior to the transfer date, Fort Bend County and the Contractor shall have uninterrupted access to the construction site. Subsequent to the transfer date, Fort Bend County will permit the Contractor and their representatives and subcontractors to enter upon the Project at times reasonably necessary to complete the punch list items.
- 14.6 Applicable Laws and Regulations. Contractor shall in its performance of the Project comply with all applicable laws and regulations. Any delays in the prosecution of the Project caused by any changes in the laws and regulations or the application or enforcement of the laws and regulations may entitle the Contractor to an extension of time.
- 14.7 Familiarity with Project. The Contractor represents and accepts that it has: (a) visited the property(ies), (b) taken such other steps as may be necessary to ascertain the nature and location of the Project and the general and local conditions which affect the Project or the cost thereof, (c) investigated the labor situation as regards to the Project, (d) examined the property(ies), the obstacles which may be encountered and all other observable conditions having a bearing upon the performance of the Project, the superintendence of the Project, the time of completion and all other relevant matters, and (e) reported to Fort Bend County the results of all of the foregoing. The Contractor represents that it is familiar with all phases of the Project and the matters that may affect the Project or its prosecution under this Contract.
- 14.8 Standard of Performance. The Contractor shall prosecute (or cause to be prosecuted) the Project in accordance with the best efforts for the construction and development of projects similar to the Project in the State of Texas, using qualified, careful, and efficient contractors and workers and in conformity with the provisions of this Contract. The Contractor shall perform the work in a good and workmanlike manner.
- 14.9 Warranty of Contractor. The Contractor warrants to Fort Bend County that: (i) the Contractor possesses the skill and knowledge ordinarily possessed by well-informed members of its trade or profession and the Contractor will use its best efforts to ensure that the services provided under this Contract will be performed, delivered, and conducted in accordance with the best professional standards and in accordance with industry standards, and (ii) the Contractor is fully experienced and properly qualified to perform the class of work provided for herein, and that it is properly equipped, organized and financed to perform such work, and (iii) following the date of acceptance of this Contract, the services provided by the Contractor to Fort Bend County will conform to the representations contained in this Contract, including all attachments, schedules and exhibits. All warranties provided by the Contractor in this Contract shall be cumulative, shall be deemed

consistent and not in conflict, are intended to be given full force and effect and to be interpreted expansively to give the broadest warranty protection to Fort Bend County.

- 14.10 Contractor's Personnel. Contractor shall employ only competent, skilled personnel for the Project. Prior to the final completion date, the Contractor shall maintain a superintendent who shall be authorized to act on behalf of the Contractor and with whom Fort Bend County may consult at all reasonable times. The superintendent shall not be transferred from the Project without Fort Bend County's consent (which shall not be unreasonably withheld or delayed); provided, however, the superintendent shall not be assigned solely to the Project and shall be entitled to spend reasonable time working on matters unrelated to the Project so long as such work on other matters does not render the superintendent unavailable to the Project or unavailable to Fort Bend County. However, such obligation to furnish the superintendent and such staff personnel shall not be construed (a) to preclude the promotion within the Contractor's organization of any person assigned to the Project or (b) to give rise to any liability of the Contractor if any person assigned to the Project (including, without limitation, the superintendent) leaves the Contractor's employment. If the superintendent is transferred from the Project, Fort Bend County shall have the right to approve the replacement superintendent (which approval will not be unreasonably withheld or delayed). The Contractor, the Architect, and the other subcontractors shall comply with all applicable health, safety, and loss prevention rules of applicable governmental authorities. The Contractor shall, at its own expense, remove from the Project any person who fails to comply with such rules and instructions. The Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the Project any unfit person or anyone not skilled in the work assigned to him. Fort Bend County may, upon written notice to the Contractor, require the Contractor to remove an individual immediately from providing services for the following reasons: violation of the terms and conditions of this Contract; violation of Fort Bend County's or the Contractor's work rules and regulations; criminal activity; or violation of state, federal, or municipal statutes. Fort Bend County may, upon thirty (30) days written notice to the Contractor, require the removal of any individual from providing services without cause.
- 14.11 Inspection. The Project and all parts thereof shall be subject to inspection from time to time by inspectors designated by Fort Bend County. No such inspections shall relieve The Contractor of any of its obligations hereunder. Neither failure to inspect nor failure to discover or reject any of the work as not in accordance with the drawings and specifications or any provision of this Contract shall be construed to imply an acceptance of such work or to relieve the Contractor of any of its obligations hereunder. Fort Bend County agrees that its right of inspection shall be used reasonably and in a timely manner so as not to delay orderly completion of the Project.

- 14.12 Protection Against Risks. The Contractor shall take all precautions which are necessary and adequate, against conditions created during the progress of the Project which involve a risk of bodily harm to persons or a risk of damage or loss to any property. The Contractor shall regularly inspect all work, materials and equipment to discover and determine any such conditions and shall be responsible for discovery, determination, and correction of any such conditions. The Contractor shall comply with all federal, state, and local occupational hazard and safety standards, codes and regulations applicable in the jurisdiction where the Project is being performed. The Contractor shall include the substance of this clause in its entirety in all subcontracts for any work to be performed at the construction site.
- 14.13 Equipment. Except as expressly provided herein to the contrary, the Contractor shall furnish (or cause to be furnished) all construction, transportation, installation, tools, and other equipment and facilities required for the performance of the Project within the times specified herein. Such equipment and facilities shall be serviceable and kept fit for the uses intended. Defective items shall be removed from the construction site promptly and at the Contractor's cost. The Contractor shall schedule (or cause to be scheduled) its other operations so as to not interfere with its duty to timely furnish the necessary equipment and facilities and personnel to operate the same at the times necessary for the orderly completion of the Project.
- 14.14 Materials. Except as may be specifically provided otherwise in the Contract or approved in advance by Fort Bend County, the Contractor shall provide Fort Bend County with copies of material testing reports and to cause all materials, equipment, and fabricated items incorporated in the Project to be new and of a suitable grade of their respective kinds for their intended use.

15.0 TERMINATION:

- 15.1 Fort Bend County may terminate the Contract if the Contractor:
- 15.1.1 Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials.
 - 15.1.2 Fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractor.
 - 15.1.3 Persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction.
 - 15.1.4 Otherwise is guilty of substantial breach of a provision of the Contract Documents.



15.2 When any of the above reasons exists, Fort Bend County may, without prejudice to any other rights or remedies of Fort Bend County and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

15.2.1 Take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor.

15.2.2 Finish the Project by whatever reasonable method Fort Bend County may deem expedient.

15.3 Either party may terminate this Contract at any time by providing thirty (30) days written notice.

15.4 When Fort Bend County terminates the Contract for one of the reasons stated in this section, the Contractor shall not be entitled to receive further payment until the Project is finished. Therefore, the Contractor shall be promptly paid for all work actually and satisfactorily completed.

16.0 COMPLETION, TRANSFER, AND ACCEPTANCE:

16.1 Final Completion. Upon the occurrence of the final completion date, the punch list items shall be promptly commenced and thereafter completed within thirty (30) days after final completion.

16.2 Transfer and Acceptance. Upon the occurrence of final completion, care, custody and control of the Project shall pass to Fort Bend County. As referenced herein, the "Transfer Date" shall mean the date on which the care, custody and control of the Project passes to Fort Bend County. Subsequent to the Transfer Date all risk of loss with respect to the Project shall be by Fort Bend County and the Contractor shall be thereafter obligated to cover the Project with their Insurance.

17.0 SUSPENSION BY FORT BEND COUNTY FOR CONVENIENCE:

17.1 Fort Bend County may, without cause, order the Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as Fort Bend County may determine.

17.2 An adjustment shall be made for increase in the cost of performance, caused by suspension, delay or interruption. No adjustment shall be made to the extent:

17.2.1 That performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible.

17.2.2 That an equitable adjustment is made or denied under another provision of this Contract.

17.3 Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

18.0 INDEPENDENT CONTRACTOR:

The Contractor shall be an independent contractor and any provisions of this Contract that may appear to give Fort Bend County the right to direct the Contractor as to the details of the manner of doing the Project shall be deemed to mean that the Contractor shall follow the desires of Fort Bend County in the results of the Project only and not in the means whereby the Project is to be accomplished. The Contractor shall be responsible as to the details of completing the Project. Neither the agents, representatives, nor employees of the Contractor, shall be deemed to be the agents, representatives, or employees of Fort Bend County. The Contractor further represents that it accepts a fiduciary role and responsibility with respect to Fort Bend County and will, to its best abilities, act in the best interests of Fort Bend County and the timely completion of the Project. The Contractor agrees and understands that neither it nor any of its agents or employees may act in the name of Fort Bend County except and unless specifically authorized in writing by Fort Bend County to do so. The Contractor shall furnish construction administration and management services and use the Contractor's best efforts to complete the Project in an expeditious and economical manner consistent with the interests of Fort Bend County.

19.0 NOTICE

19.1 All written notices, demands, and other papers or documents to be delivered to Fort Bend County under this Contract shall be delivered to the Parks Department, 301 Jackson, Richmond, Texas 77469, or at such other place or places as Fort Bend County may from time to time designate by written notice delivered to the Contractor. For purposes of notice under this Contract, a copy of any notice or communication hereunder shall also be forwarded to the following address: Fort Bend County, 301 Jackson Street, Richmond, Texas 77469, Attention: County Judge.

19.2 All written notices, demands, and other papers or documents to be delivered to the Contractor under this Contract shall be delivered to the Authorized Representative identified in the Contract documents or such other place or places as the Contractor may designate by written notice delivered to Fort Bend County.

20.0 RECORDS:

20.1 Fort Bend County shall be the absolute and unqualified owner of all drawings, preliminary layouts, record drawings, sketches and other documents prepared pursuant to the Contract by Contractor.



- 20.2 The Contractor agrees to maintain and preserve for a period of at least five years after the earlier of the expiration of the defects period or termination of this Contract, accurate and complete records relating to the performance of the Project. The Contractor agrees to, upon request, provide Fort Bend County with such records.

21.0 SUCCESSORS AND ASSIGNS:

- 21.1 Fort Bend County and the Contractor bind themselves and their successors, executors, administrators and assigns to the other party of this Contract and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of this Contract.
- 21.2 Neither Fort Bend County nor the Contractor shall assign, sublet or transfer its interest in this Contract without the prior written consent of the other.
- 21.3 Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public and/or governmental body that may be a party hereto.

22.0 PUBLIC CONTACT:

Contact with the news media, citizens of Fort Bend County or governmental agencies shall be the sole responsibility of Fort Bend County. Under no circumstances, whatsoever, shall Contractor release any material or information developed in the performance of its services hereunder without the express written permission of Fort Bend County, except where required to do so by law.

23.0 MODIFICATIONS:

This instrument contains the entire Contract between the parties relating to the rights herein granted and obligations herein assumed. Any oral or written representations or modifications concerning this instrument shall be of no force and effect excepting a subsequent written modification signed by both parties hereto.

24.0 SILENCE OF SPECIFICATIONS:

The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement. The items furnished under this contract shall be new, unused of the latest product in production to commercial trade and shall be of the highest quality as to materials used and workmanship. Manufacturer furnishing these items shall be experienced in design and construction of such items and shall be an established supplier of the item bid.

Initials of Bidder:



25.0 SEVERABILITY:

In the event one or more of the provisions contained in these requirements or the specifications shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof and these requirements or the specifications shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

26.0 GOVERNING FORMS:

In the event of any conflict between the terms and provisions of these requirements and the specifications, the specifications shall govern. In the event of any conflict of interpretation of any part of this overall document, Fort Bend County's interpretation shall govern.

27.0 TAX EXEMPT:

Fort Bend County is exempt from state and local sales and use taxes under Section 151.309 of the Texas Tax Code. This Contract is deemed to be a separate contract for Texas tax purposes, and as such, Fort Bend County hereby issues its Texas Exemption for the purchase of any items qualifying for exemption under this Contract. Contractor is to issue its Texas Resale Certificate to vendors and subcontractors for such items qualifying for this exemption, and further, contractor should state these items at cost.

28.0 ENTIRE AGREEMENT:

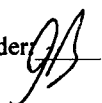
The Parties agree that this Contract contains all of the terms and conditions of the understanding of the parties relating to the subject matter hereof. All prior negotiations, discussions, correspondence and preliminary understandings between the parties and others relating hereto are superseded by this Contract. By entering into this Contract, the parties do not intend to create any obligations, express or implied, other than those specifically set out in this Contract.

29.0 APPLICABLE LAW AND VENUE


This Contract shall be construed under and in accord with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Fort Bend County, Texas, and that venue for any litigation arising out of or related to this Contract shall lie solely in the court of appropriate jurisdiction located in Fort Bend County, Texas.

30.0 SPECIFICATIONS AND PRICING:

Fort Bend County intends to purchase five (5) complete sets of the playground equipment listed below. Game Time manufacturer listed is for reference only, bidders may bid an equal. (See Name Brand Section 1.17 above)



<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Price</u>
ES19601	1	Cascade Tower	\$ <u>23,962⁰⁰</u>
<u>Miracle Kids Choice Equal or Better Drawing # 88-41802505150</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
27059	1	Magnetic	\$ <u>17,883⁰⁰</u>
<u>Miracle Kids Choice Physics Nexus Drawing # CD208007-CD208008</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
95028	1	Water Spout	\$ <u>18,689⁰⁰</u>
<u>Miracle TCX Equal or Better Drawing # 88-41802571192</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
19546	1	Velocity	\$ <u>21,000⁰⁰</u>
<u>Miracle KC Equal or Better Drawing # 88-41802550440</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
95082	1	Magnolia	\$ <u>13,877⁰⁰</u>
<u>Miracle KC Equal or Better Drawing # 88-41802630938</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
161290		Geo Textile (enough for all 5 playgrounds)	\$ <u>1,100⁰⁰</u>
<u>Fiber Geotextile Ground Cloth</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
4850		8" Playcurb Pkg (enough for all 5 playgrounds)	\$ <u>4,283⁰⁰</u>
<u>Miracle # 44012R</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
		Kiddie Cushion Natural Surfacing	\$ <u>6,265⁰⁰</u>
<u>Fiber Engineered Wood Fiber</u> (state make and model bid) (if bidding an equal, attach printed literature from manufacturer)			
Installation	1	Installation to include freight	\$ <u>37,519⁰⁰</u>

Initials of Bidder: 

GRAND TOTAL:

\$ 144,578⁰⁰

31.0 PROJECT DURATION:

Bidder agrees, if awarded the contract, to complete all work required by the contract documents **within 90 calendar days** after issuance of a purchase order by the County Purchasing Agent and notice to proceed by the Parks Department.

32.0 ADDITIONAL REQUIRED FORMS:

All vendors submitting are required to complete the attached and return with submission:

32.1 Vendor Form

32.2 W9 Form

32.3 Tax Form/Debt/Residence Certification

**Contract Sheet
Bid 14-059**

**THE STATE OF TEXAS
COUNTY OF FORT BEND**

This memorandum of agreement made and entered into on the 1st day of July, 2014, by and between Fort Bend County in the State of Texas (hereinafter designated County), acting herein by County Judge Robert Hebert, by virtue of an order of Fort Bend County Commissioners Court, and Miracle Recreation Equipment Co. (hereinafter designated Contractor).

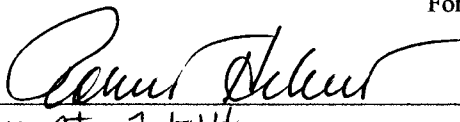
WITNESSETH:

The Contractor and the County agree that the bid and specifications for the **Playground Equipment** which are hereto attached and made a part hereof, together with this instrument and the bond (when required) shall constitute the full agreement and contract between parties and for furnishing the items set out and described; the County agrees to pay the prices stipulated in the accepted bid.

It is further agreed that this contract shall not become binding or effective until signed by the parties hereto and a purchase order authorizing the items desired has been issued.

Executed at Richmond, Texas this 7th day of October, 2014.

Fort Bend County, Texas

By: 
Comm. Ct. 7-1-14 County Judge

By: 
Signature of Contractor

By: Jeffrey Bratten District Sales Manager
Printed Name and Title



COUNTY PURCHASING AGENT
Fort Bend County, Texas

Gilbert D. Jalomo, Jr., CPPB
County Purchasing Agent

(281) 341-8640
Fax (281) 341-8642 or 341-8645

Vendor Information

Federal ID # or S.S #	Dun and Bradstreet #											
Type of Business	<input checked="" type="checkbox"/> Corporation/LLC <input type="checkbox"/> Sole Proprietor/Individual <input type="checkbox"/> Partnership <input type="checkbox"/> Tax Exempt Organization											
Legal Company Name	Year Business was Established <u>1927</u>											
Remittance Address	<u>Miracle Recreation Equipment Co</u>											
City/State/Zip	<u>8445 Solution Center</u>											
Physical Address	<u>Chicago, IL 60677-8004</u>											
City/State/Zip	<u>3 Sunspree Place</u>											
County	<u>Woodlands, TX 77382</u>											
Phone/Fax Number	<u>Fort Bend County</u> Other: <u>Montgomery</u>											
Contact Person	Phone: <u>(281) 288-1412</u> Fax: <u>(281) 288-0043</u>											
E-mail	<u>Jeff Bratton</u>											
Special Notes	<u>jeff@mayrecreation.com</u>											
The Company listed above is a (check all that apply and attached certificate).	<table><tr><td><input type="checkbox"/> DBE-Disadvantaged Business Enterprise</td><td>Certification # _____</td></tr><tr><td><input type="checkbox"/> SBE-Small Business Enterprise</td><td>Certification # _____</td></tr><tr><td><input type="checkbox"/> HUB-Texas Historically Underutilized Business</td><td>Certification # _____</td></tr><tr><td><input type="checkbox"/> WBE-Women's Business Enterprise</td><td>Certification # _____</td></tr><tr><td><input type="checkbox"/> MBE-Minority Business Enterprise</td><td>Certification # _____</td></tr></table>		<input type="checkbox"/> DBE-Disadvantaged Business Enterprise	Certification # _____	<input type="checkbox"/> SBE-Small Business Enterprise	Certification # _____	<input type="checkbox"/> HUB-Texas Historically Underutilized Business	Certification # _____	<input type="checkbox"/> WBE-Women's Business Enterprise	Certification # _____	<input type="checkbox"/> MBE-Minority Business Enterprise	Certification # _____
<input type="checkbox"/> DBE-Disadvantaged Business Enterprise	Certification # _____											
<input type="checkbox"/> SBE-Small Business Enterprise	Certification # _____											
<input type="checkbox"/> HUB-Texas Historically Underutilized Business	Certification # _____											
<input type="checkbox"/> WBE-Women's Business Enterprise	Certification # _____											
<input type="checkbox"/> MBE-Minority Business Enterprise	Certification # _____											
Company's gross annual receipts:	<table><tr><td><input type="checkbox"/> < \$500,000</td><td><input type="checkbox"/> \$500,000-\$4,999,999</td><td><input type="checkbox"/> \$5,000,000-\$16,999,999</td></tr><tr><td><input type="checkbox"/> \$17,000,000-\$22,399,999</td><td><input checked="" type="checkbox"/> > \$22,400,000</td><td></td></tr></table>		<input type="checkbox"/> < \$500,000	<input type="checkbox"/> \$500,000-\$4,999,999	<input type="checkbox"/> \$5,000,000-\$16,999,999	<input type="checkbox"/> \$17,000,000-\$22,399,999	<input checked="" type="checkbox"/> > \$22,400,000					
<input type="checkbox"/> < \$500,000	<input type="checkbox"/> \$500,000-\$4,999,999	<input type="checkbox"/> \$5,000,000-\$16,999,999										
<input type="checkbox"/> \$17,000,000-\$22,399,999	<input checked="" type="checkbox"/> > \$22,400,000											
NAICs codes (Please enter all that apply).												

PLEASE NOTE: W-9 needs to be attached in order to be entered into our system

**Request for Taxpayer
Identification Number and Certification**

Give Form to the
requester. Do not
send to the IRS.

Print or type
See Specific instructions on page 2.

Name (as shown on your income tax return)

MIRACLE RECREATION EQUIPMENT COMPANY, INC.

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:

- ☐ Individual/sole proprietor ☒ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate
- ☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____
- ☐ Other (see instructions) ▶ _____

☐ Exempt payee

Address (number, street, and apt. or suite no.)

878 HIGHWAY 60

REMIT TO: 8445 SOLUTION CENTER

City, state, and ZIP code

MONETT, MO 65708

CHICAGO, IL 60677-8004

Requester's name and address (optional)

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

--	--	--	--	--	--	--	--	--	--

Employer identification number

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign
Here

Signature of
U.S. person ▶

Brenda McCall

Date ▶

1-31-14

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

Job No.: _____

TAX FORM/DEBT/RESIDENCE CERTIFICATION
(for Advertised Projects)

Taxpayer Identification Number (T.I.N.): 6 _____

Company Name submitting Bid/Proposal: Miracle Recreation Equipment Co.

Mailing Address: 3 Sanspree Place, Woodlands, TX 77382

Are you registered to do business in the State of Texas? ☒ Yes ☐ No

If you are an individual, list the names and addresses of any partnership of which you are a general partner or any assumed name(s) under which you operate your business

May Recreation Equipment & Design, 3 Sanspree Place, Woodlands, TX 77382

I. **Property:** List all taxable property in Fort Bend County owned by you or above partnerships as well as any d/b/a names. Include real and personal property as well as mineral interest accounts. (Use a second sheet of paper if necessary.)

Fort Bend County Tax Acct. No.*

Property address or location**

* This is the property account identification number assigned by the Fort Bend County Appraisal District.

** For real property, specify the property address or legal description. For business personal property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored at a warehouse or other location.

II. **Fort Bend County Debt** - Do you owe any debts to Fort Bend County (taxes on properties listed in I above, tickets, fines, tolls, court judgments, etc.)?

☐ Yes ☒ No

If yes, attach a separate page explaining the debt.

III. **Residence Certification** - Pursuant to Texas Government Code §2252.001 *et seq.*, as amended, Fort Bend County requests Residence Certification. §2252.001 *et seq.* of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

(3) "Nonresident bidder" refers to a person who is not a resident.

(4) "Resident bidder" refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

☒ I certify that Miracle Recreation Equip Co. is a Resident Bidder of Texas as defined in Government Code §2252.001.
[Company Name]

☐ I certify that _____ is a Nonresident Bidder as defined in Government Code §2252.001 and our principal place of business is _____.
[Company Name] [City and State]

AIA® Document A310™ – 2010

Bid Bond

CONTRACTOR:

(Name, legal status and address)

MIRACLE RECREATION EQUIPMENT CO.
878 E. US Highway 60
Monett, MO 65708

SURETY:

(Name, legal status and principal place
of business)

RLI INSURANCE COMPANY
9025 North Lindbergh Drive
Peoria, IL 61615

OWNER:

(Name, legal status and address)

FORT BEND COUNTY

301 Jackson, Suite 201, Richmond, TX 77469

BOND AMOUNT: Five percent of amount bid.
(5% of Amount Bid)

PROJECT:

(Name, location or address, and Project number, if any)

Bid 14-059 Gordon Ranch Park
7714 FM 359
Richmond, Texas 77406

Project Number, if any:

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

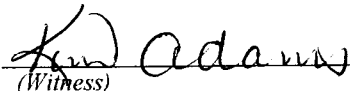
Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

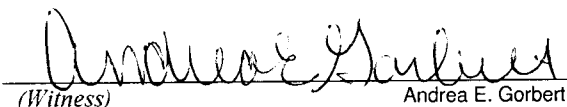
The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.


When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 13th day of June, 2014


(Witness)


(Witness) Andrea E. Gorbett

MIRACLE RECREATION EQUIPMENT CO.
(Principal)  (Seal)
(Title)

RLI INSURANCE COMPANY
(Surety)  (Seal)
(Title) Anne Potter, Attorney in Fact



RLI Surety
P.O. Box 3967 | Peoria, IL 61612-3967
Phone: (800)645-2402 | Fax: (309)689-2036
www.rlicorp.com

POWER OF ATTORNEY

RLI Insurance Company

Know All Men by These Presents:

That this Power of Attorney is not valid or in effect unless attached to the bond which it authorizes executed, but may be detached by the approving officer if desired.

That **RLI Insurance Company**, a(n) Illinois corporation, does hereby make, constitute and appoint:

Nancy B. Schnee, David W. Rosehill, James E. Marran, Jr., Andrea E. Gorbett, Annette Leuschner, Valorie Spates, Beverly A. Woolford, Anne Potter, jointly or severally.

in the City of Jericho, State of New York its true and lawful Agent and Attorney in Fact, with full power and authority hereby conferred, to sign, execute, acknowledge and deliver for and on its behalf as Surety, the following described bond.

Any and all bonds, undertakings, and recognizances in an amount not to exceed Ten Million Dollars (\$10,000,000) for any single obligation.

The acknowledgment and execution of such bond by the said Attorney in Fact shall be as binding upon this Company as if such bond had been executed and acknowledged by the regularly elected officers of this Company.

The **RLI Insurance Company** further certifies that the following is a true and exact copy of the Resolution adopted by the Board of Directors of **RLI Insurance Company**, and now in force to-wit:

"All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or Agents who shall have authority to issue bonds, policies or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

IN WITNESS WHEREOF, the **RLI Insurance Company** has caused these presents to be executed by its Vice President with its corporate seal affixed this 10th day of May, 2013.

State of Illinois
County of Peoria

} SS



RLI Insurance Company

Roy C. Die

Vice President

On this 10th day of May, 2013, before me, a Notary Public, personally appeared Roy C. Die, who being by me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of the **RLI Insurance Company** and acknowledged said instrument to be the voluntary act and deed of said corporation.

CERTIFICATE

I, the undersigned officer of **RLI Insurance Company**, a stock corporation of the State of Illinois, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable; and furthermore, that the Resolution of the Company as set forth in the Power of Attorney, is now in force. In testimony whereof, I have hereunto set my hand and the seal of the **RLI Insurance Company** this _____ day of _____, _____.

Jacqueline M. Bockler
Jacqueline M. Bockler Notary Public



RLI Insurance Company

JUN 13 2014

Roy C. Die

Vice President



RLI Insurance Company
P.O. Box 3967 Peoria IL 61612-3967
Phone: 309-692-1000 Fax: 309-683-1610

RLI Insurance Company

December 31, 2013

Admitted Assets

Investments:	
Fixed maturities	\$ 565,275,057
Equity securities	936,244,320
Short-term investments	2,488,289
Real estate	22,332,965
Properties held to produce income	0
Cash on hand and on deposit	27,278,945
Other invested assets	750,000
Receivables for securities	0
Agents' balances	108,168,054
Investment income due and accrued	6,186,935
Funds held	4,000
Reinsurance recoverable on paid losses	4,352,755
Federal income taxes receivable	0
Net deferred tax asset	0
Guarantee funds receivable or on deposit	64,220
Electronic data processing equipment, net of depreciation	438,158
Receivable from affiliates	4,298,475
Other admitted assets	1,555,812
Total Admitted Assets	<u>\$ 1,679,437,985</u>

State of Illinois }

County of Peoria }

Liabilities and Surplus

Liabilities:	
Reserve for unpaid losses and loss adjustment expenses	\$ 444,285,643
Unearned premiums	201,229,816
Accrued expenses	52,704,394
Funds held	5,326,928
Advance premiums	4,990,302
Amounts withheld	61,410,396
Ceded reinsurance premium payable	33,163,471
Payable for securities	0
Statutory penalties	443,200
Current federal & foreign income taxes	2,507,679
Federal income tax payable	13,100,904
Borrowed money and accrued interest	1,288
Drafts outstanding	0
Payable to affiliate	0
Other liabilities	1,052,639
Total Liabilities	<u>\$ 820,216,660</u>
Surplus:	
Common stock	\$ 10,000,375
Additional paid-in capital	242,451,084
Unassigned surplus	606,769,866
Total Surplus	<u>\$ 859,221,325</u>
Total Liabilities and Surplus	<u>\$ 1,679,437,985</u>

The undersigned, being duly sworn, says: That he is the President of **RLI Insurance Company**; that said Company is a corporation duly organized, in the State of Illinois, and licensed and engaged in business in the State of _____ and has duly complied with all the requirements of the laws of said State applicable of said Company and is duly qualified to act as Surety under such laws; that said Company has also complied with and is duly qualified to act as Surety under the Act of Congress approved July 1947, 6U.S.C sec. 6-13; and that to the best of his knowledge and belief the above statement is a full, true, and correct statement of the financial condition of the said Company on the 31st day of December 2013.

Attest:



{ Corporate
Seal
Affixed }

Michael J. Stone

President

Cynthia S. Dohm

Assistant Secretary

Sworn to before me this 4th day of March, 2014.



{ Notarial
Seal
Affixed }

Jacqueline M. Bockler
Notary Public, State of Illinois

M0058314

State of Texas

Claims Filing Address

The address and phone number for filing surety claims notices to RLI Insurance Company is:

**RLI Insurance Company
9025 N. Lindbergh Drive
PO Box 3967
Peoria, IL 61615**

Phone Number 309 692-1000



Miracle Recreation Equipment Co.
Park and Playground Design, Supply and Installation
"We Speak Playground"
The Woodlands, Texas
Toll Free: 800-964-6301

PLAYGROUND EQUIPMENT

WATER PLAY

SITE FURNISHINGS

SPORTS EQUIPMENT

Fort Bend County

Gordon Ranch Play Equipment

References for Miracle

1. Harris County Precinct 3
Henry Joe – 832-630-8811
2. Lamar CISD
Ross Kelly - 832-473-1266
3. Houston Community Management
Greatwood HOA
Nikkole Luna – 281-545-1134
4. Galveston ISD
Cay Surman 409-766-8841





CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
09/05/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services Central, Inc. St. Louis MO Office 8182 Maryland Avenue St Louis MO 63105 USA	CONTACT NAME:	
	PHONE (A/C. No. Ext): (866) 283-7122	FAX (A/C. No.): (800) 363-0105
INSURED PlayPower, Inc. Attn: Malinda Owens 878 East Highway 60 Monett MO 65708 USA	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	NAIC #	
	INSURER A: Commerce & Industry Ins Co	19410
	INSURER B: Liberty Mutual Fire Ins Co	23035
	INSURER C: Liberty Insurance Corporation	42404
	INSURER D:	
INSURER E:		
INSURER F:		

Holder Identifier :

COVERAGES **CERTIFICATE NUMBER:** 570051175053 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. **Limits shown are as requested**

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC			EB2641004540023 SIR applies per policy terms & conditions	09/01/2013	09/01/2014	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$5,000,000 PRODUCTS - COMP/OP AGG \$5,000,000 SIR/Deductible \$500,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			AS2-641-004540-053	09/01/2013	09/01/2014	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Comprehensive Deduct \$1,000
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$10,000			BE015628728 Umbrella	09/01/2013	09/01/2014	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WA764D004540123	09/01/2013	09/01/2014	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE-EA EMPLOYEE \$1,000,000 E.L. DISEASE-POLICY LIMIT \$1,000,000

Certificate No : 570051175053

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Evidence of Insurance only.

CERTIFICATE HOLDER**CANCELLATION**

PlayPower, Inc. 878 E. US Highway 60 Monett MO 65708 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Aon Risk Services Central, Inc.</i>

©1988-2010 ACORD CORPORATION. All rights reserved.





ADDITIONAL REMARKS SCHEDULE

Page _ of _

AGENCY Aon Risk Services Central, Inc.		NAMED INSURED PlayPower, Inc.	
POLICY NUMBER See Certificate Number: 570051175053			
CARRIER See Certificate Number: 570051175053	NAIC CODE	EFFECTIVE DATE:	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 **FORM TITLE:** Certificate of Liability Insurance

Named Insured Schedule

PlayPower Inc. (First named insured)

Additional Named Insureds

PlayPower Holdings, Inc.

PlayPower Finance, Inc.

Miracle Recreation Equipment Company

E-Z Dock, Inc.

Kid Play, Inc.

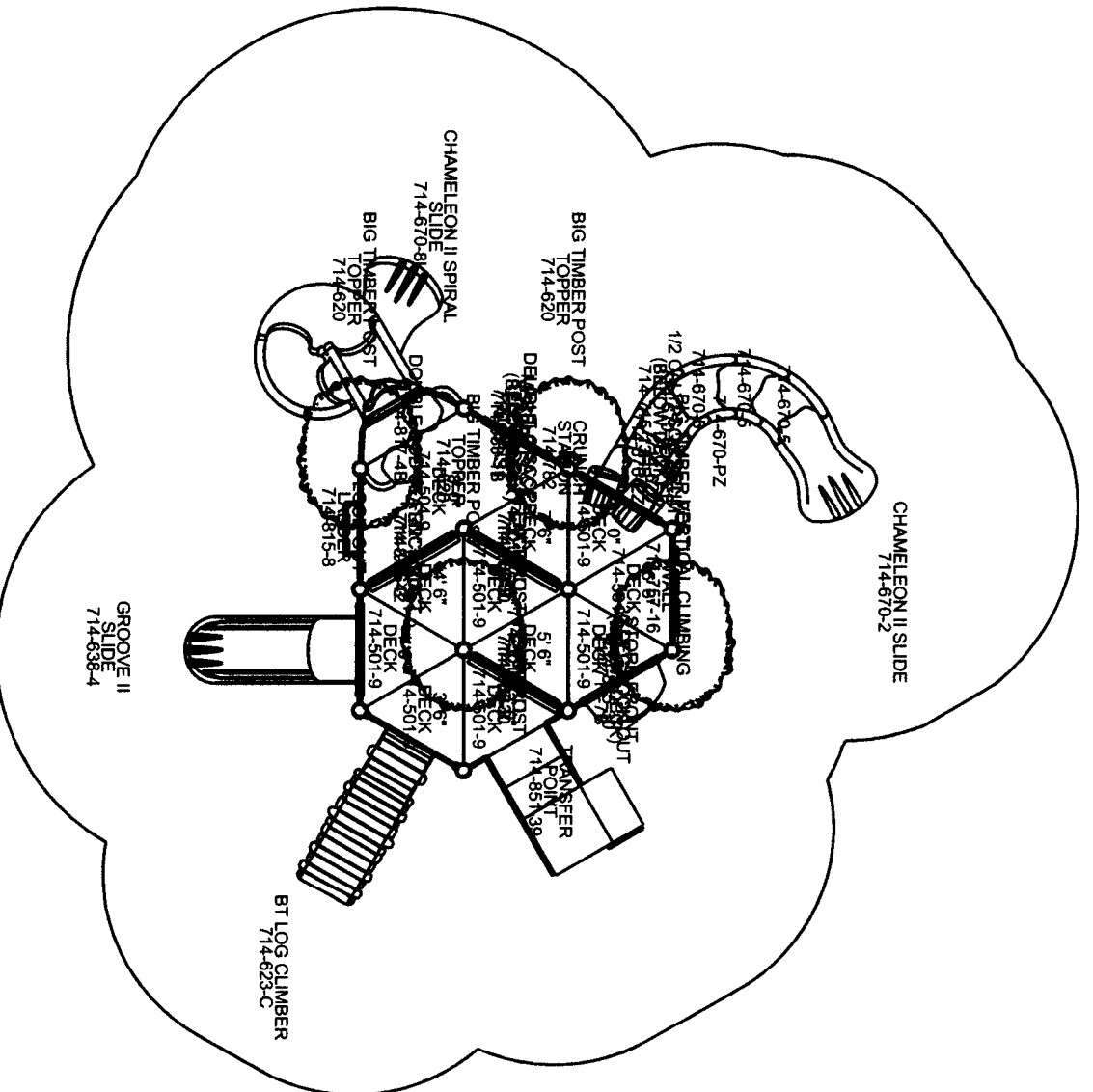
Soft Play, L.L.C.

Sprectra Turf, Inc.

PlayPower LT Farmington, Inc.

Oval (1747) Ltd. And its subsidiary companies: Staines Metal Products (Group) Limited

But only while the first named insured directly or indirectly owns, during the policy period, an interest therein of more than 50%.



May Recreation Equipment & Design

3 Sunspree Place
The Woodlands, TX, 77384

PHONE NO: (281)288-1412
FAX NO: (281)288-0043

GROUND SPACE: 22' X 23'

PROTECTIVE AREA: 37' X 36'

DRAWN BY: Miracle May

SCALE: 1"=6'

DATE: June 18, 2014

88_41802505150

COMPLIES TO ASTM/CPS

TYPE:

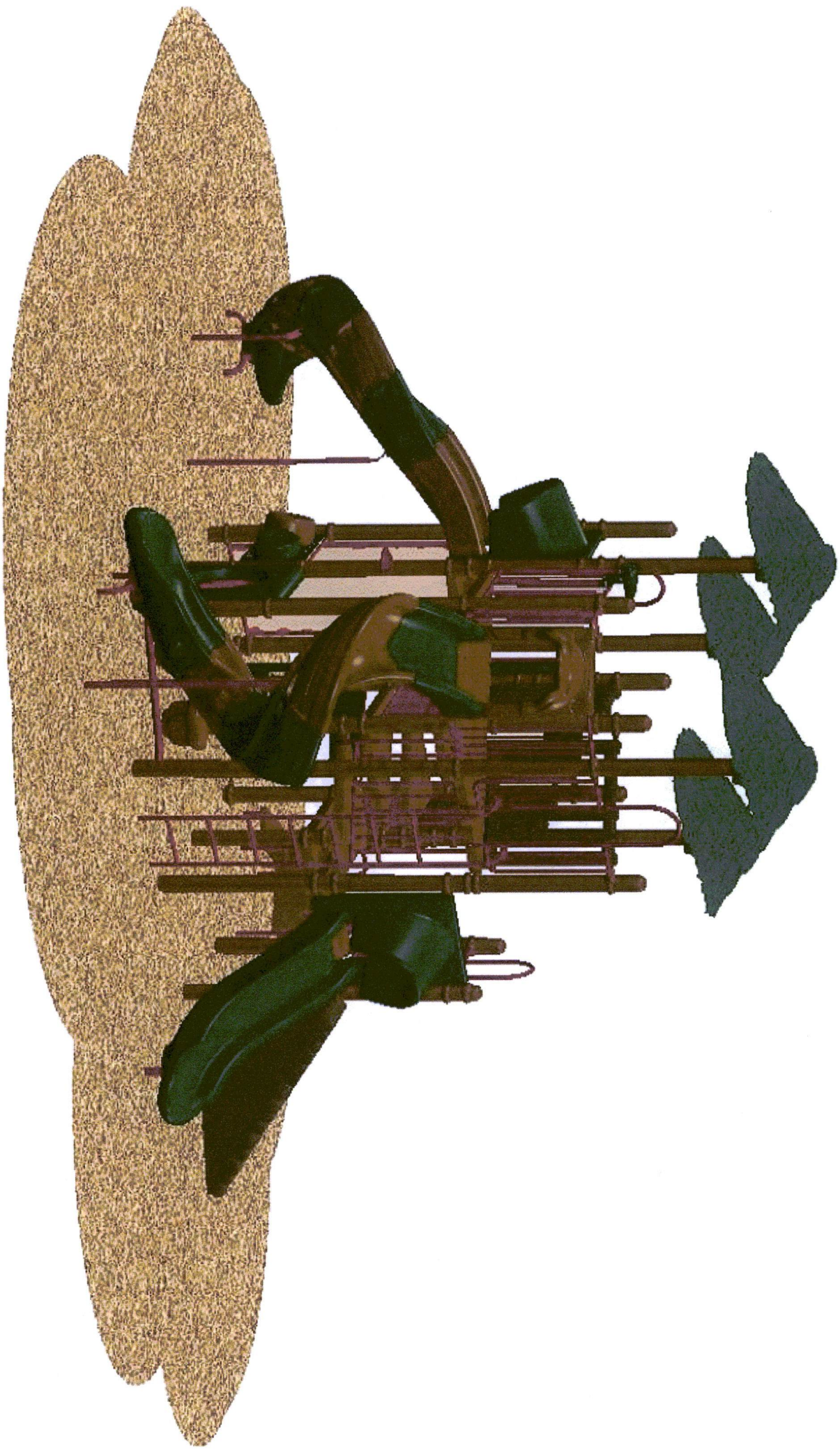
QUANTITY:

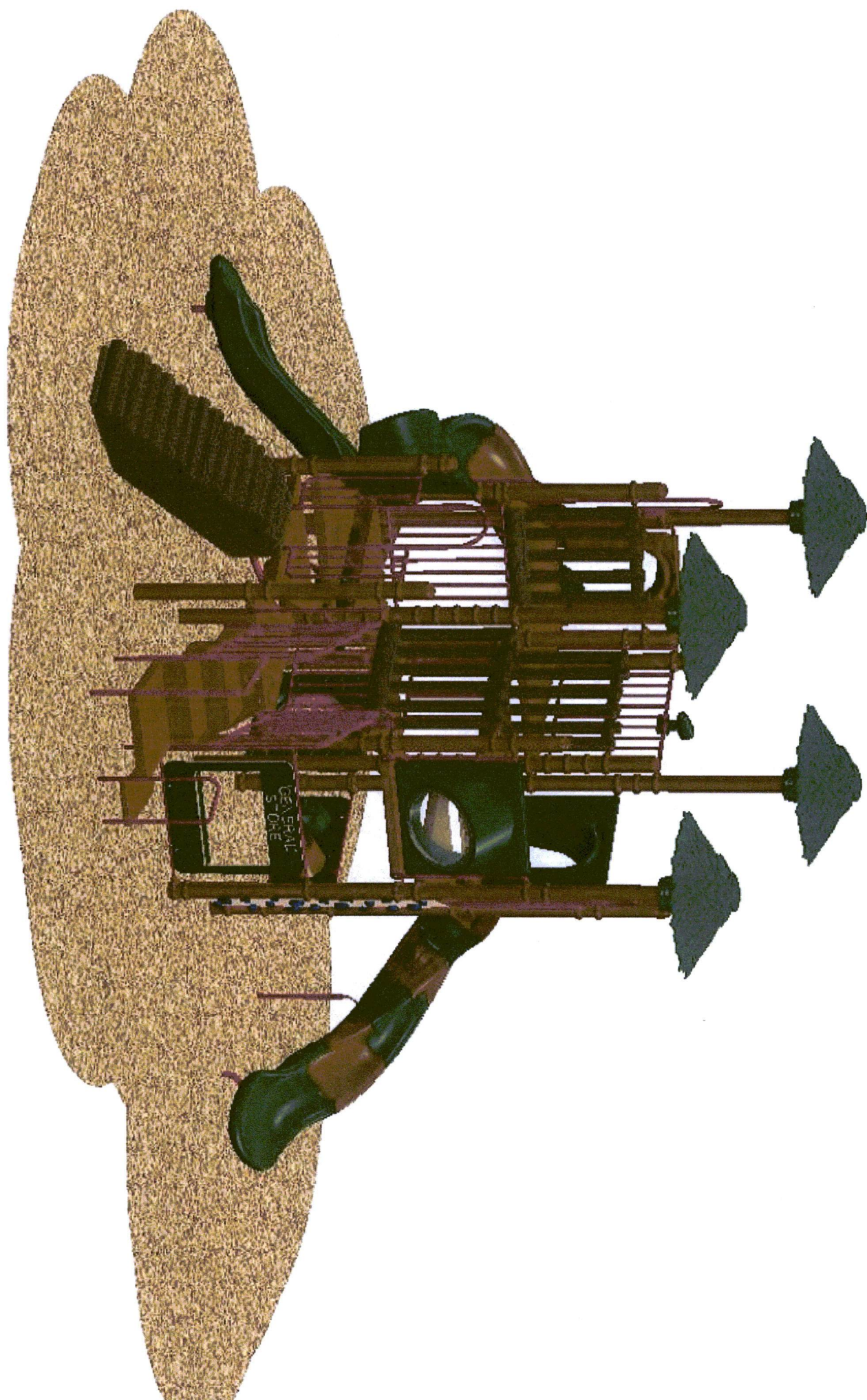
To promote safe and proper equipment use by children, Miracle recommends the installation of either a Miracle safety sign or other appropriate safety signage near each play system's main entry point(s) to inform parents and supervisors of the age appropriateness of the play system and general rules for safe play.

THE PLAY COMPONENTS IDENTIFIED IN THIS PLAN ARE IPEMA CERTIFIED. THE USE AND LAYOUT OF THESE COMPONENTS CONFORM TO THE REQUIREMENTS OF ASTM F1487.

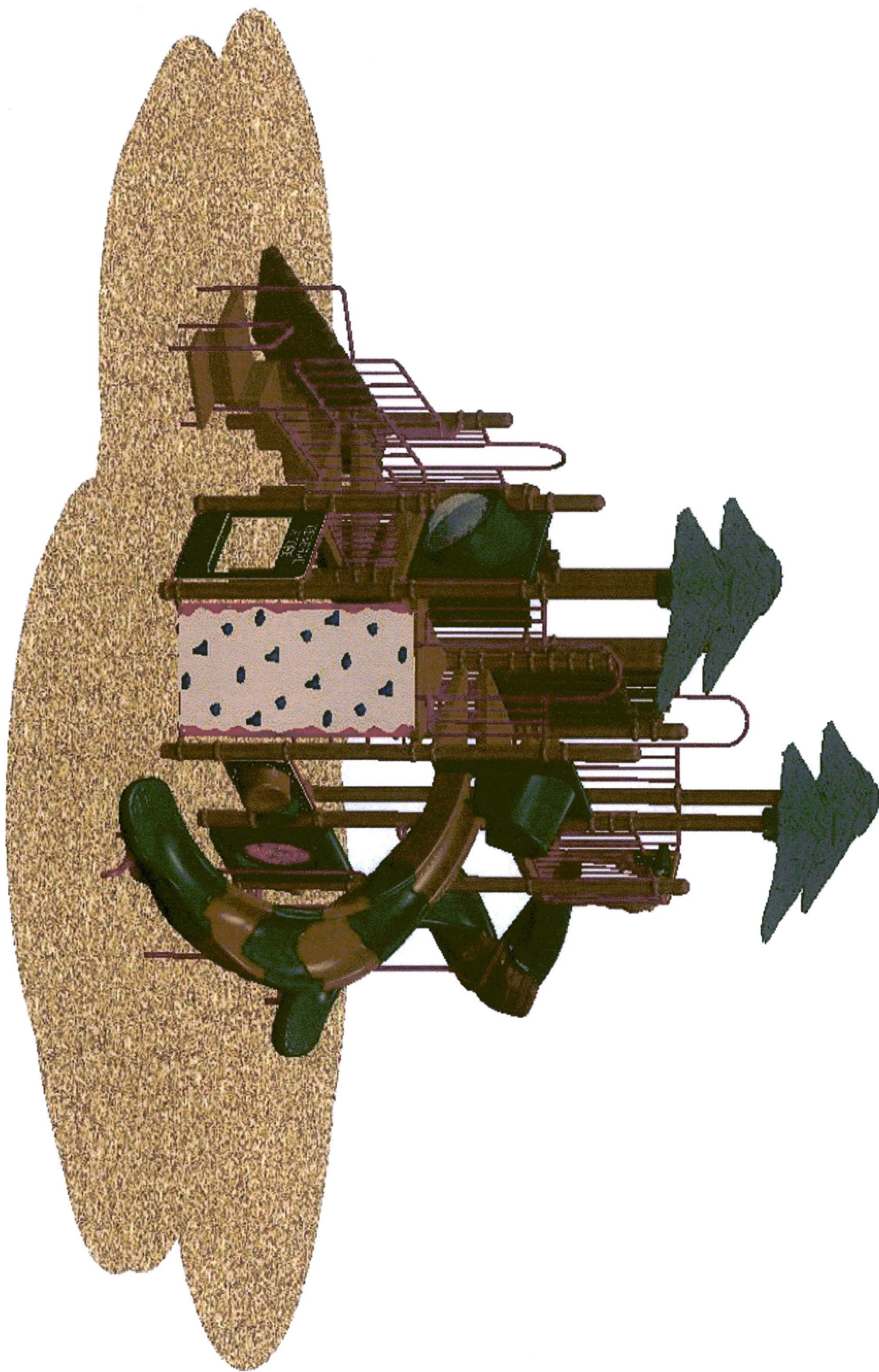
AN ENERGY ABSORBING PROTECTIVE SURFACE IS REQUIRED UNDER & AROUND ALL PLAY SYSTEMS

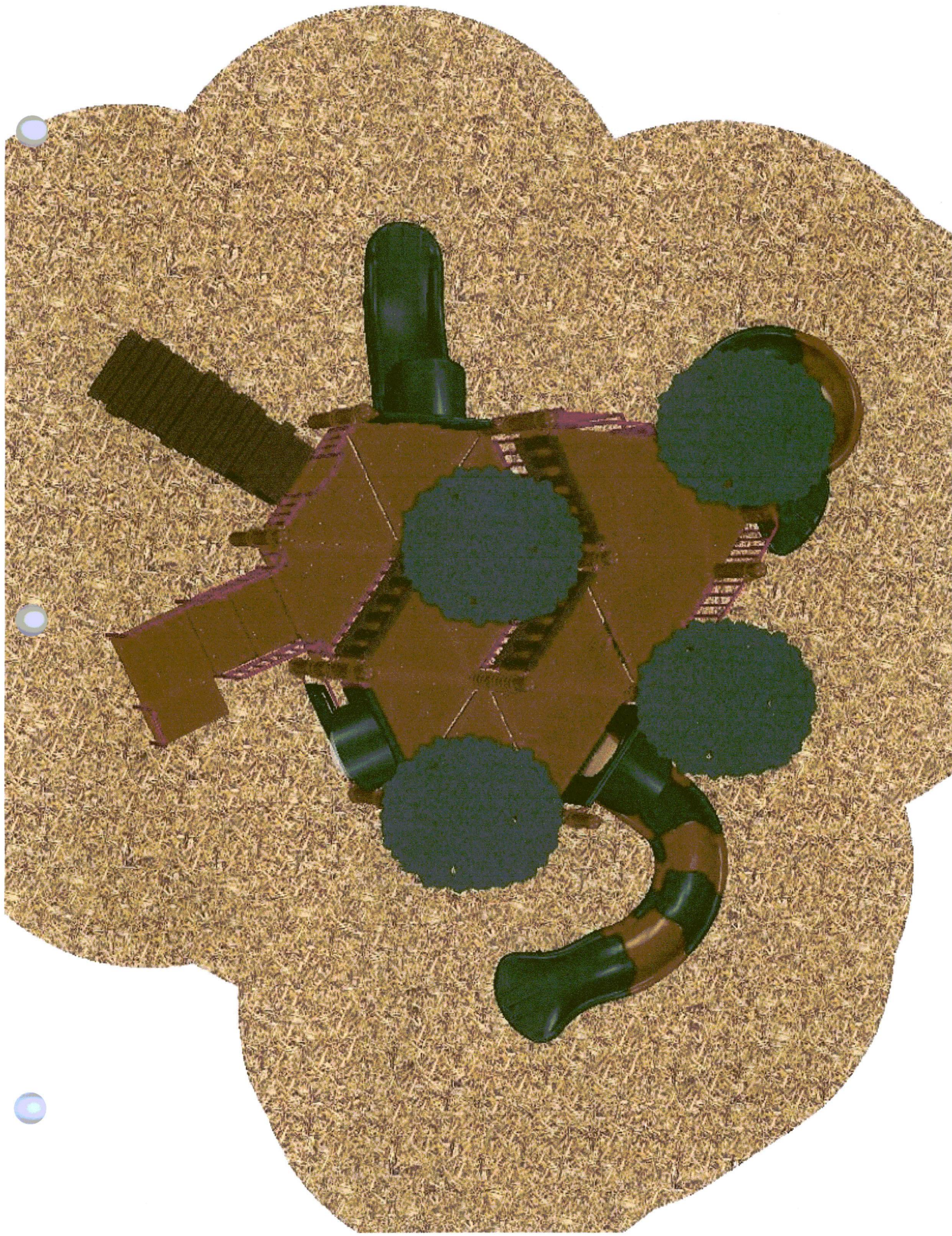












• GENERAL SPECIFICATIONS

SAFETY STANDARDS & GUIDELINES All public playground equipment supplied shall meet all applicable provisions of the current "Handbook for Public Playground Safety" published by the Consumer Product Safety Commission (CPSC), and of ASTM F1487-01 "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," published by the American Society for Testing and Materials (ASTM). Products bearing the certification seal of the International Play Equipment Manufacturers Association (IPEMA) have received written validation of compliance with ASTM F1487-01.

TRADEMARKS Aquarius (R), Big Kahuna (R), Big Timber (R), Bongo (TM), Boulder Ridge (R), Bug Bites (R), Camel Back (TM), Center Stage (R), Chameleon (TM), Coil Curler (TM), Connexion (R), Dupli-Gator (R), Flex Jet (R), Flippo (TM), Flippopotamus (R), Fun Fone (TM), Fun Tunnel (R), Funnel Tunnel (TM), Funshades (TM), Gator Grip (R), Gemini (TM), Gravity (TM), Grizz-Lee Bear (R), Groove (TM), Groove II (R) Slide, Hang-A-Round (R), Interaxion (TM), JAX (R), Kidrox (R), Kids' Choice (R), Kids' Perch (TM), Legacy Cantilever (R), Legacy Contempo (R), Legacy Heritage (R), Libra (R), Linkz (TM), Loopz (TM), Mega Tower (R), Miracle (R), Miracle Recreation (R), MiracleTech (R), Mira-Cote (R), Mira-Lam (TM), Mira-Lene (TM), Mira-Therm2 (TM), Mogul (TM), Mountain Trail (R), N-Dure Cycle (R), Nexus (R), Observation Deck (R), Offspring (TM), OrbX (R), ParkWatch (TM), Pegasus (R), Perma-Guard (TM), Perseus (TM), Physics (R), Play Cover (R), Play Terrain (R), Power Pedaler (TM), Pull Up!Lift (R), Rainbow Bend (TM), Reflex (R), Relay Racer (R), Rock-ite (R), Rodeo Rocky (TM), Schnozz Womp (TM), Serpent Trek (TM), SiteBrite (TM), Sneak-A-View (TM), SonicScreen (R), Spray Stations (R), Sun Sparkle (TM), Surfer (R), Tensile Tough (TM), Tensile Tower (TM), Thunder Tunnel (TM), Timber Topper (TM), Toboggan (TM), Toddlers' Choice (R), Tots' Choice (R), Tots' Choice (R) Expansion, Tots' Choice (TM) for Toddlers, Trim Timber (R), Triple Play (TM), Typhoon (TM), Versalok (R), View Groove (TM), Wavy Waffle Wall Walker (TM), Webscapes (R), Whirlwind (TM), Xcalator (R), and X-Cavator (TM) are trademarks of Miracle Recreation Equipment Company. Tornado (TM), Multi-Pondo (TM), and Pirouette (TM) are trademarks of HAGS (TM). Miracle and HAGS are divisions of PlayPower, Inc. PlayPower (R) is a trademark of PlayPower, Inc.

QUALITY SYSTEM CERTIFICATION The manufacturer's quality system is certified to ISO 9001 since December 1998.

PRODUCT CHANGES At Miracle Recreation Equipment Company, we strive for the utmost in quality and safety in our entire product line. Therefore, in order to honor this commitment to you, our customers, we reserve the right to make changes on any product released and/or published in our annual catalog and other promotional or technical literature.

WARRANTY

Buyer agrees that products sold by Miracle Recreation Equipment Company carry only the following warranties:

- 1. LIMITED WARRANTY FOR AS LONG AS YOU OWN THE PRODUCT** against structural failure due to corrosion or defects in materials and workmanship on aluminum deck posts, steel deck posts, the VersaLok (R) fastening system and associated fastening hardware.
- 2. LIMITED FIFTEEN (15) YEAR WARRANTY** against structural failure due to corrosion or defects in materials and workmanship on steel support legs and Mira-Therm2 (TM) 2 on MEGA TOWER (R), TOTS' CHOICE (R), KIDS' CHOICE (R), CENTER STAGE (R), NEXUS (R) and Boulder Ridge (R) Rock Wall; on playsystem steel components including railings, rungs, and rigid climbers; and Rockite (R).
- 3. LIMITED FIFTEEN (15) YEAR WARRANTY** against structural failure due to corrosion or defects in materials and workmanship on all Play Cover (R) steel frames.

4. **LIMITED TEN (10) YEAR WARRANTY** on Play Terrain (R) Rubber Mulch safety surfacing against total color loss and attenuation performance. Please contact your local representative for more information.

5. **LIMITED EIGHT (8) YEAR WARRANTY** on Play Terrain (R) Synthetic Turf safety surfacing for attenuation performance and appearance. Please contact your local representative for more information.

6. **LIMITED EIGHT (8) YEAR WARRANTY** against rot, UV deterioration and defects in materials and workmanship on all Play Cover (R) fabric (NOTE EXCEPTION - shades of red carry LIMITED THREE (3) YEAR WARRANTY).

7. **LIMITED FIVE (5) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Kidrox (R) Climbing Rocks.

8. **LIMITED FIVE (5) YEAR WARRANTY** against degradation of design loading capabilities on all Webscapes (R) Net Climbers and Nexus (R) Nets (NOTE EXCEPTION - Webscapes (R) Net Climbers and Nexus (R) Nets carry a LIMITED ONE (1) YEAR WARRANTY against defects in materials and workmanship).

9. **LIMITED THREE (3) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Trim Timbers (TM).

10. **LIMITED ONE (1) YEAR WARRANTY** against failure due to defects in materials or workmanship on Slashproof Swing Seats and 360 degree Bucket Tot Seats for Swings.

11. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on the following products and components: TODDLERS' CHOICE (R) main support materials and decks; pool slide support structures, stairways, landings and railings; and bleachers.

12. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on all MiracleTech (R) Security products, including ParkWatch (TM), SonicScreen (R) and SiteBrite (TM).

13. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship for all products and components that are not specifically listed above, including, without limitation, all moving parts, such as swing hangers, swivels, chains, whirls, trolleys and flexible climbers.

BUYER'S REMEDY: If any products prove defective or non-conforming under normal use and within the above-prescribed warranty periods, Buyer must promptly notify Miracle in writing at 878 E. Hwy 60, Monett, MO 65708 USA. Miracle will within a reasonable time and in its sole discretion repair or replace such defective or non-conforming product by providing replacement products or part(s) free of charge to the site. Miracle's limited warranties do not cover the cost of labor to remove defective or non-conforming part(s) or to install repaired or replacement part(s).

All warranty periods begin on the date of Miracle's invoice. Repaired and/or replacement part(s) are warranted only for the balance of the original limited warranty. All warranties extend only to the original Buyer/end user of products from Miracle or Miracle's authorized reseller and are not transferable.

These limited warranties apply only to Miracle products that are erected and installed in conformance with Miracle's installation instructions, and that are maintained and inspected in conformance with Miracle's maintenance and operational instructions. These limited warranties specifically do not cover Miracle products: that have been modified, altered, or misused; that have not been used as designed or intended; to which non-Miracle parts have been added or substituted; or that have been damaged due to excessive wear and tear, vandalism, abnormal use, abuse, negligence, extraordinary weather or acts of God. MiracleTech Security (R) systems limited warranties do not cover products serviced or repaired by unauthorized service providers. These limited warranties do not protect against color fade, except for PlayCover (R) as noted above. Buyer, by acceptance and use of these limited warranties, waives any rights it would otherwise have to claim or assert that this limited warranty fails of its essential purpose. Buyer agrees that venue for any court action to enforce these limited warranties shall be in Barry or Greene Counties in the State of Missouri.

EXCEPT AS EXPRESSLY WARRANTED HEREIN, MIRACLE EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THOSE ARISING BY STATUTE OR OTHERWISE IN LAW OR FROM COURSE OF DEALING OR USAGE OF TRADE. IN NO EVENT SHALL MIRACLE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION, LOSS OF INFORMATION, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES OR OTHER PECUNIARY LOSS).

Consult Miracle's "Glossary of Technical Data for Materials, Processes and Finishes" for specifications of items listed in bold type.

- **KIDS' CHOICE MIRA-THERM2 DECKS:** The deck models in the 714-50X-9 series shall consist of a (3) sided equilateral triangle deck: Model # 714-501-9, with a *deck top surface area of 7 sq. ft. (1008 sq. in.)*; a (4) sided square deck: Model # 714-502-9, with a *deck top surface area of 16 sq. ft. (2304 sq. in.)*; (4) sided (3) opening half hex decks: Model #s 714-503-9 and 714-504-9, with a *deck top surface area of 21 sq. ft. (3024 sq. in.)*; (4) sided (6) opening rectangular decks: Model #s 714-508-9, 714-509-9 and 714-510-9, with a *deck top surface area of 32 sq. ft. (4608 sq. in.)*; a (5) sided pentagon deck: Model # 714-512-9, with a *deck top surface area of 23.8 sq. ft. (3427 sq. in.)*; an (8) sided octagon deck: Model # 714-519-9, with a *deck top surface area of 60 sq. ft. (8640 sq. in.)*; (4) sided (6) opening parallelogram decks: Model #s 714-505-9, 714-506-9 and 714-507-9, with a *deck top surface area of 28 sq. ft. (4032 sq. in.)*; and a (7) sided heptagon deck: Model # 714-517-9, with a *deck top surface area of 55 sq. ft. (7,920 sq. in.)*.

Model # 714-511-9 shall be an isosceles triangle split deck (single section) designed to serve as a step platform for lower deck heights: 18" or lower for 2-5 year olds, and 30" or lower for 5-12 year olds. All other Model # 714-511-X9 split decks shall feature two triangular deck sections which shall be mounted between four posts at different heights so that a 6", 12", 18", or 24" (X) rise shall be formed along the hypotenuse between two posts. Models which rise greater than 6" shall contain a riser plate; models which rise greater than 12" shall also contain an arched enclosure assembly. *The deck top surface area of split deck models shall be 8 sq. ft. each for both sections, or total 16 sq. ft.* Riser plates shall be constructed of 11 ga. **A-60 Galvannealed** sheet; risers for 18" and 24" rises shall contain a rung and vertical supports of 1" **tube**, solid **welded**, all finished in **Mira-Cote**. The arch enclosure assembly accompanying models which rise 18" and 24" shall comprise top and bottom supports and an arched upright constructed of 1" **pipe**, drilled, formed and mashed, all solid **welded**, and vertical rungs of 1" **tube**, with **plastic pipe plugs** inserted in open ends, and finished in **Mira-Cote**. Decks shall be designed for maximum flexibility in height of deck surface, from 0" to 6'-6" (in 6" increments,) though 3', 5' and 6'-6" shall be considered standard heights. Decks shall be designed on a 48" center-to-center spacing on 5" deck posts, at equal or varied heights. All deck-to-post connections shall be made with a deck support clamp. All deck connections shall be made beneath deck with no exposed fasteners on deck perimeter. Decks with 8' wide open side shall be designed to attach to another deck with 8' wide open side at same deck height, or to a Model # 714-770-6 Flippopotamus Slide/Climber. All decks shall be constructed with folded 11 ga. steel sheet forming 3" tall sides. Decking sheets shall be perforated with a staggered pattern of 3/8" diameter holes (5/16" after dipping) at 5/8" apart center-to-center. The decking shall have 7 ga. by 2" flat steel braces and corner braces of 7 ga. steel. The entire assembly shall be solid **welded** prior to polyvinyl coating. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. All deck surfaces shall be coated in **Mira-Therm2** or **Mira-Therm2 PE**.

- **KIDS' CHOICE POSTS: STEEL POSTS:** The steel posts each shall be constructed of 5" **tube**, 11 ga. with a 5" **round end cap** pressed into its top end. Post and end cap shall have a **Mira-Cote** finish.

- **KIDS' CHOICE STEEL POSTS** each shall be constructed of **5" tube** with a **5" round end cap** pressed into its top end. Post and end cap shall have a **Mira-Cote** finish.

- **BIG TIMBER MOUNTAIN TRAIL CLIMBERS** shall be ground-to-deck climbing components that attach to a 4' deck only. Climbers are available in Log Climber/Bear Paw Climber only, Log Climber/Bear Paw Climber with one or two Rock Climbers, Steps with Transfer Points to deck in left, right or inline configurations only, or Steps with Transfer Points and one Rock Climber in left, right or inline configurations. Rock climber shall be constructed of **Rockite** and shall have a sculpted rock pattern. Rock climber shall measure 46-5/8" in height, 52-1 1/4" in length and 4-1/4" in width. Underside of rock climber shall have access holes 5" in diameter for stair and Log/Bear Paw climber attachments. The transfer platform shall be constructed of **Rockite** with a sculpted wood pattern. Transfer platform shall measure 41" in length, 29-1/2" in width and 15-9/16" in height at tallest point. Bottom step shall be 7-11/16" in height. Transfer platforms shall have pre-drilled attachment holes in varying configurations dependent upon transfer being inline, right, or left. Transfer Steps shall be constructed of **Rockite** with a sculpted wood pattern. Transfer steps shall be 51-1/2" in length, 29-1/4" in width and 39-13/16" in height. Steps shall measure 8" apart in height. Log Climber and Bear Paw Climber shall be constructed of **Rockite** with a sculpted log and wood pattern. Bear Paw Climber shall have staggered paw prints along its length. Log Climber and Bear Paw Climber shall measure 47" in length, 21-5/8" in width and 15-9/16" in height. Hand supports shall comprise leg brackets, a leg, pipe plugs, formed hand support and cross pieces. Leg brackets shall be constructed of 7 ga sheet and shall measure 14" in length and 7-7/16" in height. Leg shall be constructed of **1" pipe**, 14 ga. Pipe plugs shall be constructed of gray plastic. Formed hand support shall be constructed of **1" pipe**, 14 ga. and shall measure 69-11/16" in length. Cross piece shall be constructed of **1" pipe**, 14 ga. and shall measure 29-1/4" in length. Entire hand support will be solid **welded**. Transfer leg shall comprise an upright and a leg bracket. Upright shall be constructed of **1-1/2" pipe** and shall measure 29-13/16" in height, solid **welded** to a 6-9/16" x 6-9/16" triangular bracket constructed of 7 ga. sheet. Climber leg shall comprise an upright and angle bracket. Upright shall be constructed of **1-1/2" pipe** and shall measure 29-13/16" in height, solid **welded** to a 20" x 2-1/2" angle bracket constructed of 11 ga. sheet. Rock Climber leg shall comprise an upright and leg bracket. Upright shall be constructed of **1-1/2" pipe** and shall measure 29-13/16" in height, solid **welded** to a 5-1/2" x 4" leg bracket constructed of 7 ga. sheet. Handrails shall be constructed of **1" pipe**, 14 ga. Handrails shall measure 49-11/16". Enclosure for Steps and Transfer models shall comprise a handhold and spoke. Handhold shall be constructed of **Gator Grip** and spoke shall be constructed of 1" O.D. x 15 ga. fluted A-60. Enclosure assembly shall measure 41-1/8" in length. Enclosure shall have mashed ends for installation to deck face. Enclosure for all other models shall comprise top rails, L rails and arch of **1" pipe**, **Gator Grip** and spokes of **3/4" x 1" oval tube**. Enclosure shall have a 7 ga. galvanized sheet constructed hand support bracket solid **welded** to inside uprights. Enclosure shall measure 62-3/8" in length and 41-1/2" in width. Hand Supports, legs and enclosures shall have a **Mira-Cote** finish. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware.

- **CLIMBING WALLS, VERTICAL AND SLOPED (KIDS' CHOICE & TCX ONLY)** shall consist of an arch entry deck enclosure and panel sections with climbing holds fastened to a steel frame. The rails and archway of the enclosure assembly shall be constructed of **1" pipe**, with vertical rungs of **1" tube**, solid **welded**. The panels shall be constructed of high density polyethylene sheets. The climbing holds shall be constructed of molded sand and polyester resin mixture. The frame shall comprise vertical outer rails (which serve as legs) constructed of **2" square tube**, solid **welded** to horizontal support rails of **1-1/2" square tube** and 11 ga. galvanized 1-1/2" x 3" rectangular tube. The fill block shall be folded 11 ga. steel sheet, perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart, center-to-center, solid **welded** with 7 ga. by 2" flat steel braces. TCX Model # 704-757-25, Model # 704-757-26, and Model # 704-757-28 shall be solid **welded** with 11 ga. x 2" flat steel braces. TCX Model # 704-757-34 shall be solid **welded** with 11 ga. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The enclosure, frame, and clamps shall have a **Mira-Cote** finish. The fill block shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**.

- **VERTICAL LADDER/LOOK-OUT LADDER** shall be designed for use as an entrance and exit for decks of various heights. Each assembly shall consist of side rails and rungs constructed of **1" pipe**, all solid **welded**. Models shall have threaded inserts in the ends of the side rails and an arch enclosure. The Kids' Choice enclosure assembly shall consist of top supports, a bottom support, and an arched upright constructed of **1" pipe**, formed, mashed and punched, and vertical infill of **3/4" x 1" oval tube** with mounting tabs of 7 ga. sheet, all solid **welded**. The Tots' Choice enclosure assembly shall comprise top supports and an arch upright of **1" pipe**, spoked infill of **1" tube** with mounting tabs of 7 ga. sheet, all solid **welded**. The ladders and enclosure assemblies shall have a **Mira-Cote** finish.

- **BIG TIMBER PANELS** shall resemble natural wood in color, form and texture, and shall contain molded-in graphics to enhance imaginative play. The panels shall be constructed of **Rockite** with all corners rounded. The Sit N' See Panel shall measure 38-7/8" wide by 54-1/4" high by 5" thick, with a seat on one side measuring 11 high (installed height, from deck surface) by 14" wide by 9-5/8" deep. The Fence Post Panel shall measure 38-13/16" wide by 42-7/8" high by 2-7/8" thick, and shall have view slots of 3" width maximum. The rung shall be constructed of **1" pipe**. Below deck models shall contain a bottom support to be constructed of **1" pipe** with a solid **welded** 11 ga. sheet steel mounting plate. Each assembly shall

contain **Versalok Fasteners** and **Fastener Style A** hardware. The panels shall have molded-in color. The rung, bottom support, and clamps shall be finished in **Mira-Cote**.

- **HALF-PANELS** for below deck or freestanding installation shall feature two-color schemes, routed designs, and steering wheels, and when mounted at suggested heights, will permit wheelchair access. The Roller Racer models shall also feature an interactive ball game which users operate by turning a knob to raise and release enclosed balls into routed pathways (the balls then re-enter the lift mechanism). Half-panels shall be constructed of **Mira-Lene** with all corners rounded, measuring 36-1/2" x 15-1/2", except Calypso 2-Drum panel, which shall measure 36-1/2" x 20". Calypso 2-Drum panel shall also contain 2 rotational molded drums of low density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized sheet steel with a **Mira-Cote** finish. Rung brackets shall be constructed of 1" pipe (except *Tots' Choice models which shall be 1" tube*) with tabs of 11 ga. **A-60 Galvannealed** sheet, solid **welded**. The Roller Racer models shall be constructed as above and shall also have a clear polycarbonate cover fastened to enclose various contents. A black high density polyethylene gear handle mounted outside the cover shall turn on a bronze bushing to drive a 1/4" thick polyethylene gear behind the cover, which shall carry 1/2" steel balls and release them in routed channels. The steering wheel shall be constructed of a high density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693 (b), D-638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance, and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. Each assembly shall contain **Fastener Style A** hardware and **Versalok Fasteners**. Half-panels and steering wheels shall have molded-in color. Rung brackets and clamps shall have a **Mira-Cote** finish.

- **IMAGINATION PANELS** and Activity Panels shall be constructed of **Mira-Lene** and shall measure 36-1/2" x 40" with all corners rounded. The panels shall have routed designs, including themes of a space ship panel, general store counter, a barn wall panel, a barn door panel, a barn window panel, a bank teller window, a television front, a puppet stage, a window, a computer screen, a door, a park ranger, a fire truck, a police car, a train engine, a taxi cab, two airplanes (both containing two steering wheel assemblies, one also containing a clear polycarbonate window mechanically fastened to panel), a race car, an alphabet finger maze, an abstract finger maze, a calculator, a bus stop/bench, a rest stop/bench, jump height measurements for a 3' and 5' deck, a sign language alphabet, a Spanish-English translation, a Chinese-English translation, Braille alphabet with riddles, a drum panel, welcome and age appropriate messages, interconnected gears, gear-driven pistons, and sliding tiles. Rung brackets shall be constructed of 1" pipe and 11 ga. **A-60 Galvannealed** tabs solid **welded** (except *Tots' Choice models which shall have brackets constructed of 1" tube and 11 ga. A-60 Galvannealed tabs solid welded*). The star brackets for the space ship panel shall be constructed of 11 ga. HRPO steel and powder coat painted. The steering wheel(s) on vehicle themed panels shall be constructed of a high-density blow molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D-638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. The Piston panel and Gear panel each shall contain a clear polycarbonate cover mechanically fastened over sets of 1/4" thick gears (drive gears not covered by window). The gears shall be constructed of high-density polyethylene, which shall turn on nylon bushings, except for the black nylon handles and drive gears which shall turn on bronze bushings. The piston panel shall also contain connecting rod and piston shapes of 1/4" thick high-density polyethylene. The reverse side of both panels shall contain routed text and/or designs. The Sliding Tile panel shall contain 15 moveable, tongue-and-groove tiles with routed numerals to be constructed of 1/4" thick high-density polyethylene. The panels and steering wheel shall have molded in color with each panel assembly having a laminated, two-color scheme. Calypso drum panel shall contain 3 rotational molded drums of low density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized steel sheet with a **Mira-Cote** finish. Each assembly shall include **Fastener Style A** hardware and **Versalok Fasteners**. Panels and steering wheels shall have color molded in, and rung brackets and clamps shall be finished in **Mira-Cote**.

- **MARBLE RACES PANEL/MOTOR SKILLS PANEL** shall be constructed of **Rockite** with all corners rounded. Kids' Choice models of the Marble Race Panel shall measure 36" x 38" x 6", and the Kids' Choice models of the Motor Skills Panel shall measure 36" x 38" x 2-1/2". The *Tots' Choice* models all shall measure 36" x 38" x 2-1/2". The Kids' Choice support enclosures shall be constructed of 1" pipe uprights and stubs, solid **welded**. The *Tots' Choice* support enclosure shall be constructed of 1" tube with tabs of 11 ga. **A-60 Galvannealed** sheet, solid **welded**, and brackets of 11 ga. **A-60 Galvannealed** sheet, which shall be attached to the panel assembly at the factory using tamper resistant hardware. The routed inserts shall be constructed of **Mira-Lam** measuring 24" in diameter and shall be attached at the factory using tamper resistant screws and flat washers. The covers shall be constructed of clear polycarbonate. The support enclosures and brackets shall have a **Mira-Cote** finish. Panels shall have molded in color.

- **ROCKITE BUBBLE PANEL/ROCKITE PANEL WITH HOLE/VIEW GROOVE PANEL/30 DEGREE LOOK-OUT PANEL** shall be constructed of **Rockite** with all corners rounded. The 30 degree Look-Out panel shall have a molded in 30 degree extension. The enclosure shall consist of uprights and support bars, all constructed of **1" pipe**, drilled and formed (*except Tots' Choice models which shall have an enclosure consisting of a top rail of 1" tube with two tabs and two brackets of 11 ga. galvanized sheet, solid welded*). The bubble shall be vacuum formed from clear polycarbonate sheet. The spherical bubble shall measure 24" in diameter and shall be attached to the panel in the factory using tamper proof screws and flat washers. The view groove panel shall have six 2" view slots evenly spaced at 5-1/4" with slant of 20 degrees from vertical. Horizontal rungs shall have a **Mira-Cote** finish. **Rockite** panels shall have color molded in.

- **WALL ENCLOSURE/WALL WITH STEERING WHEEL/CLOSURES/HANDHOLD FOR TRANSFER POINT/TREEHOUSE SEAT** shall be barrier assemblies. The handhold for transfer point shall be used as a support rail to assist wheelchair user access on a 1'-6" transfer point deck. The wall enclosure and transfer point handhold supports shall consist of a **welded** assembly handrail system with a top and bottom rail constructed of **1" pipe** (*except Tots' Choice models which shall be 1" tube*) and uprights constructed of **3/4" x 1" oval tube** (*except Tots' Choice models which shall be 1" tube*), solid **welded**. The mounting bracket shall be 11 ga. **A-60 Galvannealed** sheet steel, **welded** to the wall enclosure. The steering wheel on vehicle-themed panels shall be constructed of a high-density blow molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. The Treehouse Wall with Seat shall comprise a top and bottom rail and end uprights constructed of **1" pipe** and spoked infill of **3/4" x 1" oval tube** and a seat assembly, all solid **welded**. The seat assembly shall comprise a frame of **1" pipe** with bolting brackets of 3/16" x 1-1/4" HR flat and a factory-assembled 19" wide seat constructed of 11 ga. sheet, perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. The seat surface shall be approximately 14" from the deck, if applicable. The enclosure rungs, uprights, handhold for transfer point, enclosure with seat assembly, steering wheel, and steering wheel mounting bracket shall have a **Mira-Cote** finish. The seat shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The steering wheel shall have molded in color.

- **MIRA-THERM2 SQUARE TRANSFER POINTS** shall be designed to assist disabled users gain access to and egress from a deck system. The stair assembly shall be constructed of 11 ga. steel stringers solid **welded** to 11 ga. steel sheet decking that is perforated in a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Approximate dimensions of stair assembly shall be 26" overall width, 14" deep step tread and 8" high step rise. The 26" square (approximate) transfer point shall be constructed of 11 ga. steel sheet folded to form approximately 3" high sidewalls. The decking shall be perforated as described above. It shall be reinforced with cross braces of 3/16" x 2" HR flat solid **welded**. The bottom step shall be constructed of 11 ga. steel sheet (with folded edges) perforated as described above. The step shall be approximately 26" wide by 14" deep by 6-1/2" high. Kids' Choice deck enclosures shall be constructed of formed **1" pipe**, including a **welded** upright of the same material. Tots' Choice deck enclosures shall be constructed of **1" pipe** and a formed and **welded** upright of **1" tube**. Each deck enclosure assembly shall be drilled for field assembly of a stair handrail, and shall have its bottom end mashed and punched for field assembly to deck. Stair handrail assemblies shall be **welded** upper and lower handrails of formed **1" pipe**. Closed handrails shall contain vertical uprights of **3/4" x 1" oval tube welded** within. Swaged handrail extensions for field assembly to handrails shall be constructed of **1" pipe**. A transfer deck handrail constructed of formed **1" pipe** shall be field assembled to one handrail newel upright and transfer point deck edge. Models designed for assembly to 5' and 6' or 6'-6" decks shall contain handrail sleeve supports constructed of **1-1/4" pipe, 10 ga.** The "U"-shaped transfer step handrail shall be formed **1" pipe**, drilled for field assembly to transfer point deck and bottom step. Its apex shall be 36-1/8" from finished grade. The rung leg shall be **1" pipe** with ends mashed and punched for field assembly to bottom step. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The stairs, bottom step, and transfer point deck shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The deck enclosures, handrails, extensions, sleeves, leg and clamps shall be finished in **Mira-Cote**.

- **BIG TIMBER POST TOPPER** is designed to tie natural-look Big Timber components together. Post topper shall act as an attractive 'roof' to provide shade to your system. Post Topper is also available with glow in the dark resin. Post topper shall be constructed of **Rockite** and shall measure 50" in width, 60" in length and 24" in height. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware.

- **CHAMELEON II SLIDE SYSTEM** shall be feature an interchangeable bedway sections to present maximum versatility in design configuration. The componentized, open bedway slide assembly may be attached to 2'-6" - 8' decks. The bedway sections, entry panel and exit section shall be constructed of double wall **Rockite** with a 18" bedway and 13-3/4" high sidewalls. The entry panel shall be supported by a rung of **1" pipe**. The "T" front leg shall be constructed of 1.5" X 16 ga. square tube and a bracket of 7 ga. galvanized sheet steel. Support legs shall be constructed of 1.66

OD x 13 ga. tube and a mounting bracket of 7 ga. sheet, solid **welded**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rung, front leg, support legs and leg brackets shall have a **Mira-Cote** finish. The **Rockite** slide sections shall have color molded in.

- **GROOVE II SLIDES** shall feature a hooded canopy and a streamline slide design. Groove II is designed to exit from 4', 5', 6'-6" or 8' decks. The canopy panel and one-piece slide shall be constructed of double wall **Rockite**. The slide shall have 6" high side rails, an overall width of 25" and 18" wide sliding surface and approximate 7' (4' decks) bedway length, 9' (5' decks) bedway length, 12' (6'-6" decks) bedway length and 15' (8' decks) bedway length. The canopy panel shall be field mounted to deck and post clamps via a 41-1/2" long rung constructed of 1" **pipe**. The leg shall be 2" **pipe**, **welded** to an 11 ga. **A-60 Galvannealed** mounting bracket. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rung, legs and clamps shall have a **Mira-Cote** finish. The **Rockite** slide and canopy shall have molded-in color.

- **CRUNCH STATION** shall be a semi-circular horizontal rung assembly designed for mounting on a 5" steel deck post with the rung set 50" - 80" from finished grade. The Crunch Station shall enable the user to perform leg lifts and crunches in a standing position. It shall be constructed of a cut and formed 1" **pipe** segment solid **welded** to support and bolt plates of 7 ga. galvanized steel. All hardware shall be **Fastener Style A**. The assembly shall have a **Mira-Cote** finish.

- **DELIGHT-O-SCOPE TELESCOPE AND BINOCULARS (BARRIER MOUNTING)** shall stimulate creative play and provide visual experiences for users and shall be designed for mounting on various types of barrier. The telescope features reflective facets set within the tube to offer a kaleidoscopic view, while the binocular model contains parallel tubes that constrain the user's field of vision to simulate a "search" effect, though neither model contains magnifying elements. They rotate 360 degrees horizontally and vertically between -45 and 45 degrees. Model # 714-961-R1, # 714-961-R2, # 718-961-R1, and # 718-961-R2 shall require a deck mounting or freestanding **Rockite** Panel, 2-1/2" thick, with side enclosures (no top rail.) Model # 714-961-S1, # 714-961-S2, # 718-961-S1, and # 718-961-S2 shall require a steel wall enclosure. Model # 714-961-L1 and # 714-961-L2 shall require a Model # 714-992-2 Lookout Tower assembly. The factory-assembled telescope and binocular models shall comprise a **Rockite** form fastened to a support bracket of 11 ga. zinc-plated connected via bronze bushing to an angular mounting bracket assembly constructed of 7 ga. zinc-plated. The telescope form shall contain angular segments of mirror acrylic sheet mounted within, a clear acrylic cover at the viewpiece, and a transparent (tinted) cover of polycarbonate sheet connected at the large end. The binocular form shall contain acrylic tubes with a clear acrylic end at the eye piece and a color tinted end on the large mount end. A clear polycarbonate protective cover shall be fastened on the mount side with 1/4-20 fasteners. Each assembly shall contain **Fastener Style A** and **Fastener Style B** hardware. The **Rockite** form shall have color molded in. The bracket assembly shall be finished in **Mira-Cote**.

- **POD SEATS** shall be designed to attach to existing Kids' Choice deck posts, creating a resting seat. Pods shall be constructed of **Rockite** and shall contain a hex-shaped top surface measuring approximately 14-1/2" in diameter. Pods shall measure 12" without frame. Frame shall be constructed of a horizontal bar constructed of 2" **pipe**; a 5" diameter bolting plate of 5" **Sch 40 pipe** solid **welded** to the frame's horizontal bar; seat support post(s) measuring 11" constructed of 1-1/2" **pipe** solid **welded** to the frame's horizontal bar; post mount plate(s) measuring 5-7/8" x 5-7/8", constructed of 11 ga. galvanized solid **welded** to the seat support post(s). Frame length for Model # 714-817-3B shall be 11-1/4" before field assembly to pod seat. Frame length for Model # 714-817-4B shall be 43" before field assembly to pod seats. All fasteners shall be **Fastener Style A**. The **Rockite** pod seats shall have color molded in. The frames shall be finished in **Mira-Cote**.

Technical Data for Processes and Finishes

of the Highlighted Items

- **aluminum alloy** conforms to the following: ASTM 356, ANSI 322, Chrysler MS 2417 and General Motors GM 4323-M. Parts or components constructed of aluminum alloy are either *sand cast* or *die cast*. *Sand cast aluminum alloy* is 319 with tensile strength of 27,000 p.s.i. and yield strength of 18,000 p.s.i. *Die cast aluminum alloy* is 383.1 with tensile strength of 45,000 p.s.i. and yield strength of 22,000 p.s.i.

- **Mira-Therm2 coated chain** is a **welded chain** with links sufficiently wide to allow them to pass one another freely, eliminating the tendency to kink. The links are low carbon zinc plated steel with a polyvinyl chloride coating.

- **Versalok Fasteners (R)** are cast **aluminum alloy**. Each fastener consists of two die cast **aluminum alloy** "half ring" pieces, which were designed to fasten onto the round posts by use of a male/female interlock. For 3-1/2" post, outside dimension of the completed fastener (joined "half-rings") is 5". For 5" post, outside dimension of the completed fastener is 6-1/2". *Rungs and components* connect to clamps on posts by means of die cast **aluminum alloy**, two-piece socket receptors which may be assembled to a previously-installed clamp ring and secured to the clamp and component by set screws (and tek screws in some cases). *Decks* connect to clamps on posts by means of die cast **aluminum alloy**, one-piece deck support castings. The clamp assembly and socket receptor have a **Mira-Cote** finish. Kids' Choice components with **2" pipe** mounting points attach to 5" posts using **aluminum alloy** sand cast header supports.

- **5" round end cap** is die cast **aluminum alloy**.

- **Fastener Style A** is a corrosion resistant, 18-8, stainless steel, vandal resistant fastener.

- **Fastener Style B** is an all aluminum blind rivet or aluminum drive rivet with stainless steel pin. Both are corrosion resistant and vandal resistant fasteners.

- **Flo-Coat (R)** is a patented triple coat corrosion protection process of Allied Tube and Conduit's Mechanical Tube Division, wherein steel pipe or tube first receives a hot-dipped uniform zinc galvanized coating followed by a conversion coating followed by a clear, high performance organic polymer coating. The interior of the tube has an 81% minimum zinc rich primer applied, capable of providing excellent rust protection and fabrication characteristics. All coatings are applied inside and out after welding. Flo-Coat processed tube exceeds the test results of galvanized Sch 40 pipe in salt spray tests conducted in accordance with ASTM B-117. The term "Flo-Coat" is a registered trademark of Allied Tube and Conduit, used with permission.

- **GATOR GRIP (TM)** is a three dimensional textured pattern exclusive to Miracle, embossed in steel to a depth of .014" to .017".

- **A-60 Galvannealed** indicates that a coating of .60 ounces of zinc per square foot alloyed with substrate steel has been applied on each surface side.

- **Mira-Cote (TM)** is a Super Durable formulation of a polyester powder coating finish that is applied to a thickness of 3-5 mil. This finish gives metal parts long term protection from chipping, fading and peeling. Miracle's finishing system washes the metal parts with detergent and etches the metal for optimum adhesion. The part is then rinsed clean with water. Next the part is coated with a non-chromic sealer and dried. The Mira-Cote powder is then applied electrostatically to the metal part. The metal parts are then baked at a high temperature to fuse a hard, smooth durable finish to the metal. Mira-Cote has an impact value of 160 in. lbs., flexibility value of 180 degree-1/4" mandrel, shore hardness value H and a crosshatch adhesion of 100%. Mira-Cote is tested in accordance with ASTM D-792, D-523, D-2794, D-1737, D-3363, D-3359 (b), B117 and D-2247. Mira-Cote will withstand over a 1,500 hours of salt spray exposure and 1,500 hours of weatherometer testing with minimal loss of gloss and color.

- **Mira-Lene (TM)** is compression-molded, 3/4" thick, high density polyethylene that has been specifically formulated for optimum U.V. stability and color retention. Compression-molded products have a density of .952 g/cm³ per ASTM D1505 and tensile strength of 3900 PSI per ASTM D638.

- **Mira-Lam (TM)** is a laminated panel system of 1/8", 1/4", 1/2", 3/4", 1" or 1-1/4" thick polycarbonate and polyethylene sheet materials. Sheets are clear, tinted or color impregnated with U.V. stabilizers. All graphics are protected from vandalism, scratching and weather by a transparent, overlaid, laminated layer.

- **Mira-Therm2 PE** is a non-toxic copolymer polyethylene coating applied to a thickness of 1/16". Mira-Therm2 PE contains U.V. light stabilizers, anti-microbial additives and color pigments. Mira-Therm2 PE contains no orthophthalates or other banned substances. Mira-Therm2 PE is a proprietary brand of PE coating. Materials are tested in accordance with ASTM D-638, ASTM D-412, ASTM D-2240 and ASTM D-1004. Mira-Therm2 PE meets the FMVS 302 flammability rating, the requirements of California State Law and the 2008 CPSI Act.

- **pipe sized tube** is 1010 hot rolled, **Flo-Coat**, galvanized pipe manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8.

- **schedule 40 galvanized** pipe consists of a hot dip process of coating the pipe inside and out with not less than 1.6 ounces per square foot with an average of 1.8 ounces per square foot. Schedule 40 pipe conforms to ASTM standards A-53.

- **1" pipe** is **GATOR GRIP** embossed 14 ga., **1" pipe sized tube** (1.315" OD; approx. 1-5/16" OD.)

- **1-1/4" pipe, 10 ga.** is 10 ga., **1-1/4" pipe sized tube** (1.660" OD; approx. 1-11/16" OD.)

- **1-1/2" pipe** is 13 ga., **1-1/2" pipe sized tube** (1.900" OD; approx. 1-7/8" OD.)

- **2" pipe** is 12 ga., **2" pipe sized tube** (2.375" OD; approx. 2-3/8" OD.)

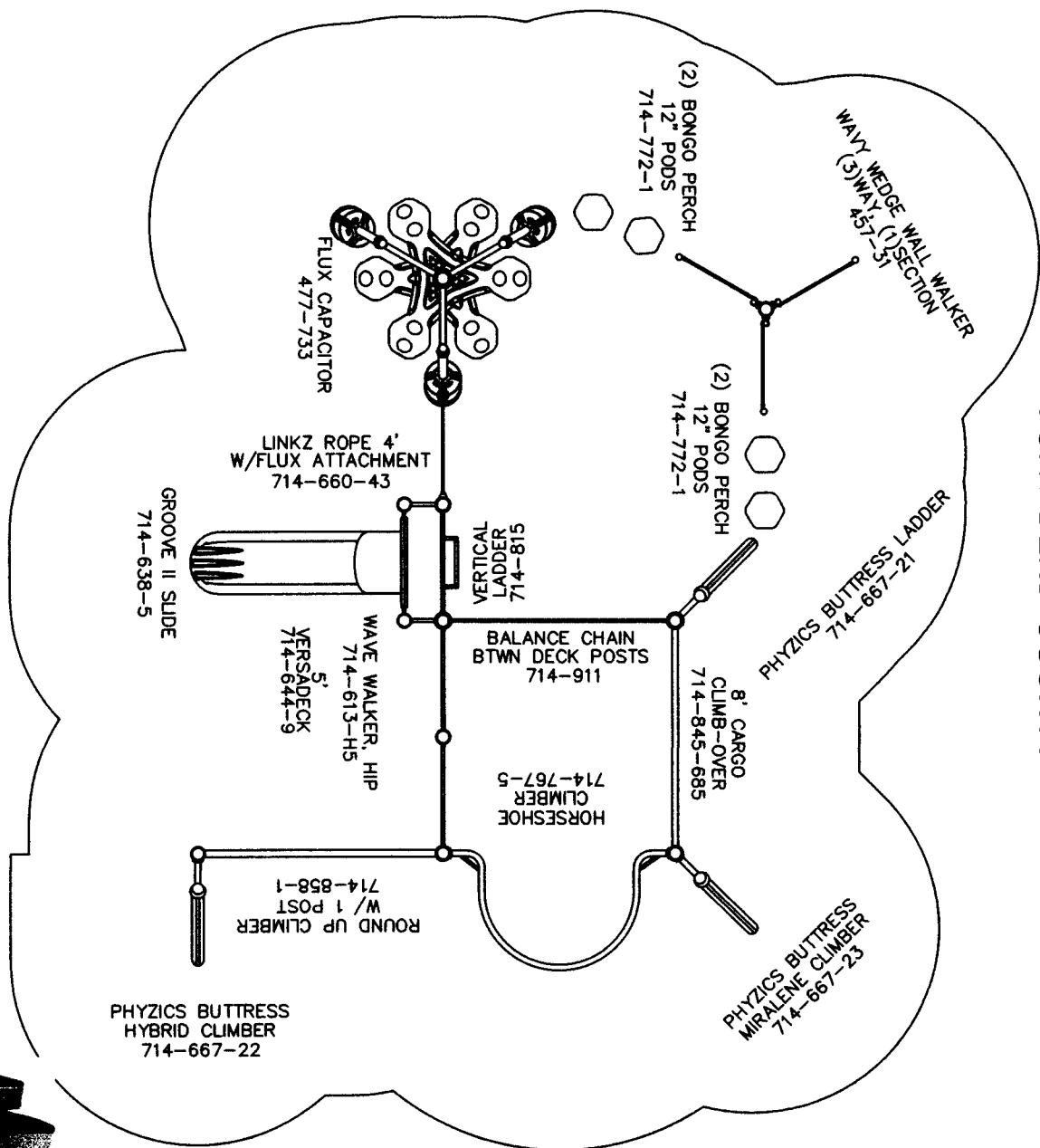
- **5" Sch 40 pipe** is 5" **schedule 40 galvanized** pipe (5.563" OD; approx. 5-9/16" OD.)

- **plastic pipe plugs** are injection molded polypropylene containing U.V. light stabilizers.

- **Rockite (R)** (Rotational Molded Polyethylene) is a low density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins are tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D-638, D-790 and D-746. Resin's properties exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness of molded components is 3/16" to 1/4".

- **round tube** is fabricated of 1010 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **square tube** is fabricated of 1010 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **3/4" x 1" oval tube** is 15 ga. wall. It is fabricated of 1008 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **1-1/2" square tube** is 16 ga., **1-1/2" square tube**.
- **1" tube** is 1" OD, 15 ga. fluted **round tube**. It conforms to ASTM A-500.
- **5" tube** is 5" OD, 13 ga. **round tube**. It conforms to ASTM A-500.
- **5" tube, 11 ga.** is 5" OD, 11 ga. **round tube**. It conforms to ASTM A-500.
- **welded** refers to welds that are made by certified welders, tested in accordance with AWS D1.1-94, structural welding code specifications for steel. Welds conform to AWS A5.17 ASME SFA-5.17 EML3K and AWS A-5.18ER70S-3 ASME SFA-5.18 ER70s-3 LE332- C and LE-559-L.
- **Specification Policy:** Specifications were current at the time of publication. Miracle Recreation Equipment Company has a policy of ongoing product improvement and therefore reserves the right to modify specifications or discontinue products without notice.

GORDON RANCH FORT BEND COUNTY



Play Area Capacity: 75-85



To verify product certification, visit: www.ipema.org

To promote safe and proper equipment use by children, Miracle recommends the installation of either a Miracle safety sign or other appropriate safety signage near each play system's main entry point(s) to inform parents and supervisors of the age appropriateness of the play system and general rules for safe play.

THE PLAY COMPONENTS IDENTIFIED IN THIS PLAN ARE IPEMA CERTIFIED. THE USE AND LAYOUT OF THESE COMPONENTS CONFORM TO THE REQUIREMENTS OF ASTM F1487.

AN ENERGY ABSORBING PROTECTIVE SURFACE IS REQUIRED UNDE

CD208007-CD208008

GROUND SPACE: 27' X 23'
PROTECTIVE AREA: 40' X 36'

✓ COMPLIES TO CPSC

✓ COMPLIES TO ASTM

✓ COMPLIES TO ADA

DESIGNED FOR AGES 5-12

5-12

ADDITIONAL GROUND LEVEL ACCESSIBLE ITEMS NEEDED FOR ADA COMPLIANCE

TYPE: 0 QUANTITY: 0

SCALE: 1"=6'-0"

DATE: 6/19/2014

NDI

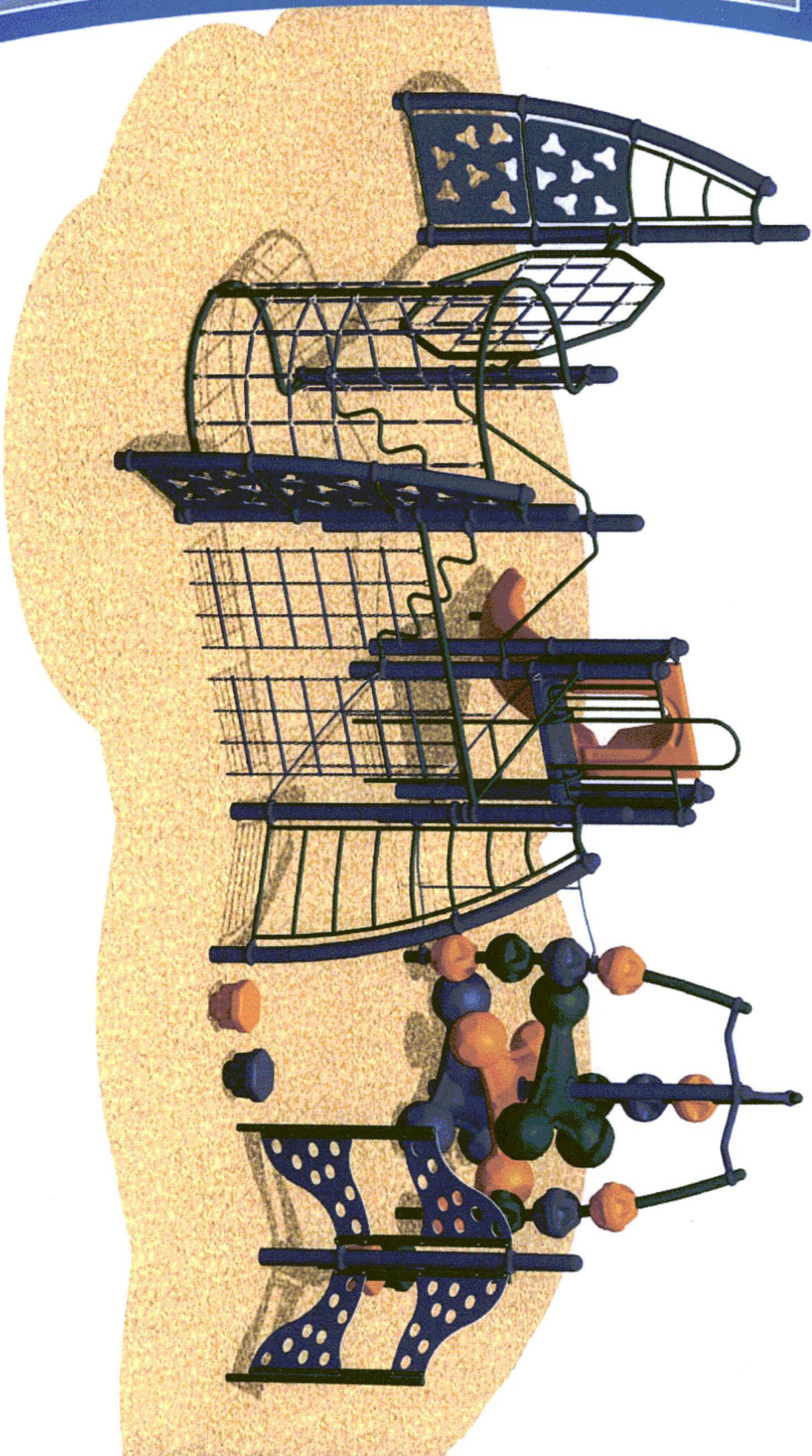
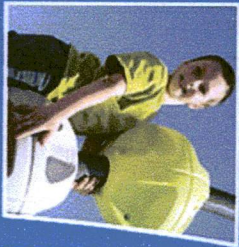




CD208008

 **Miracle**

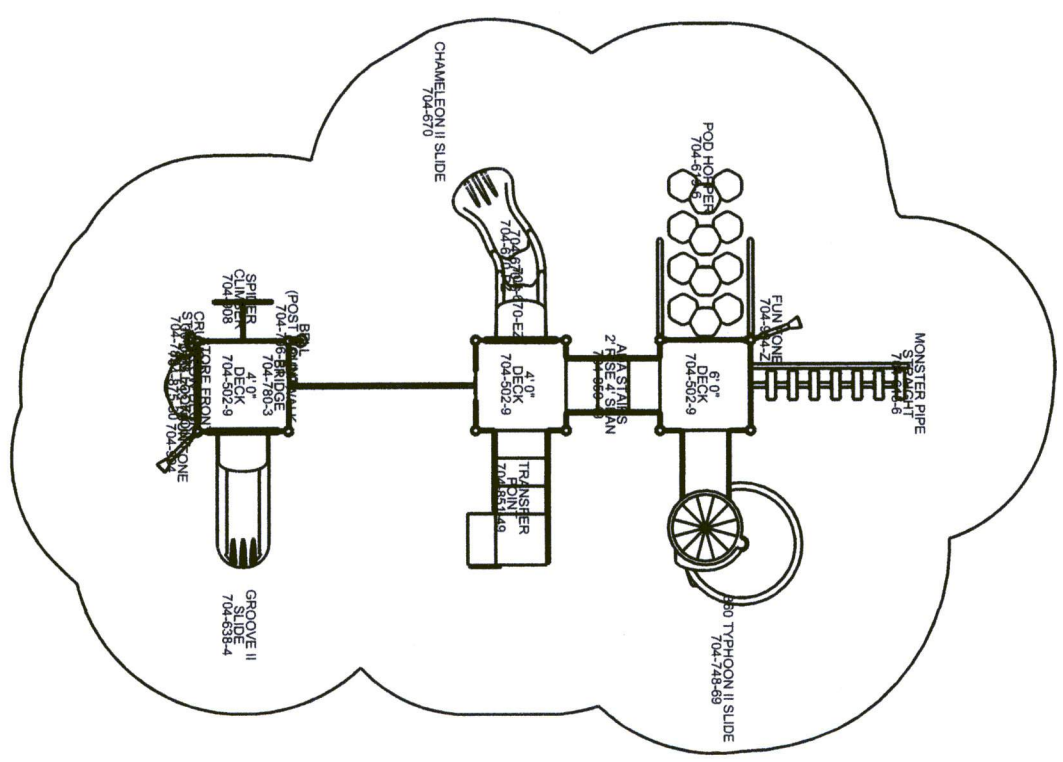
www.miracle-recreation.com



CD208007

 **Miracle**

www.miracle-rec-ion.com



Miracle

May Recreation Equipment & Design

3 Sunspree Place
The Woodlands, TX, 77384
PHONE NO: (281)288-1412
FAX NO: (281)288-0043

GROUND SPACE: 19' X 33'
PROTECTIVE AREA: 32' X 45'
DRAWN BY: Miracle May

88_41802571192

☒ **COMPLIES TO ASTM/CPS**

TYPE:

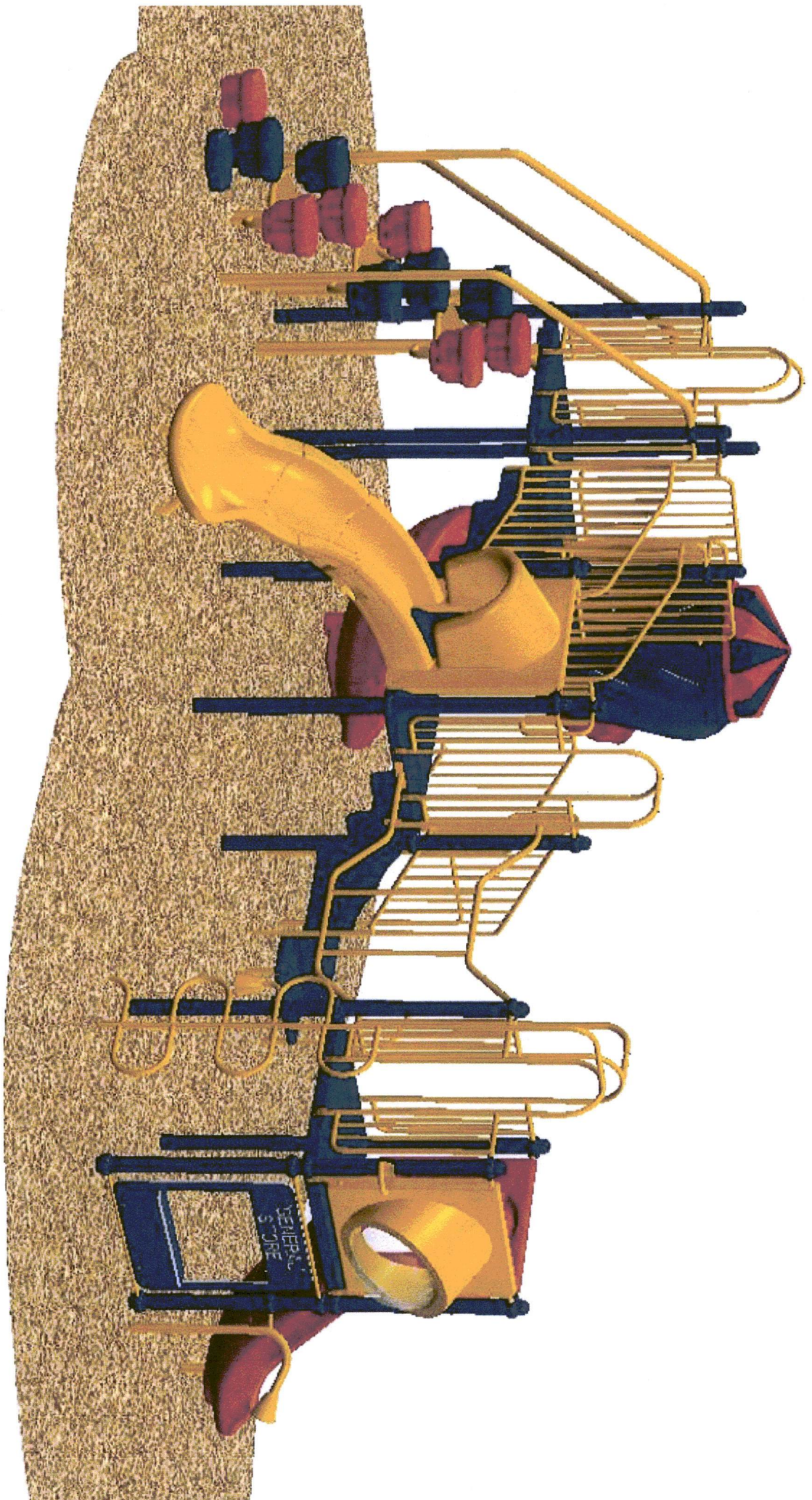
QUANTITY:

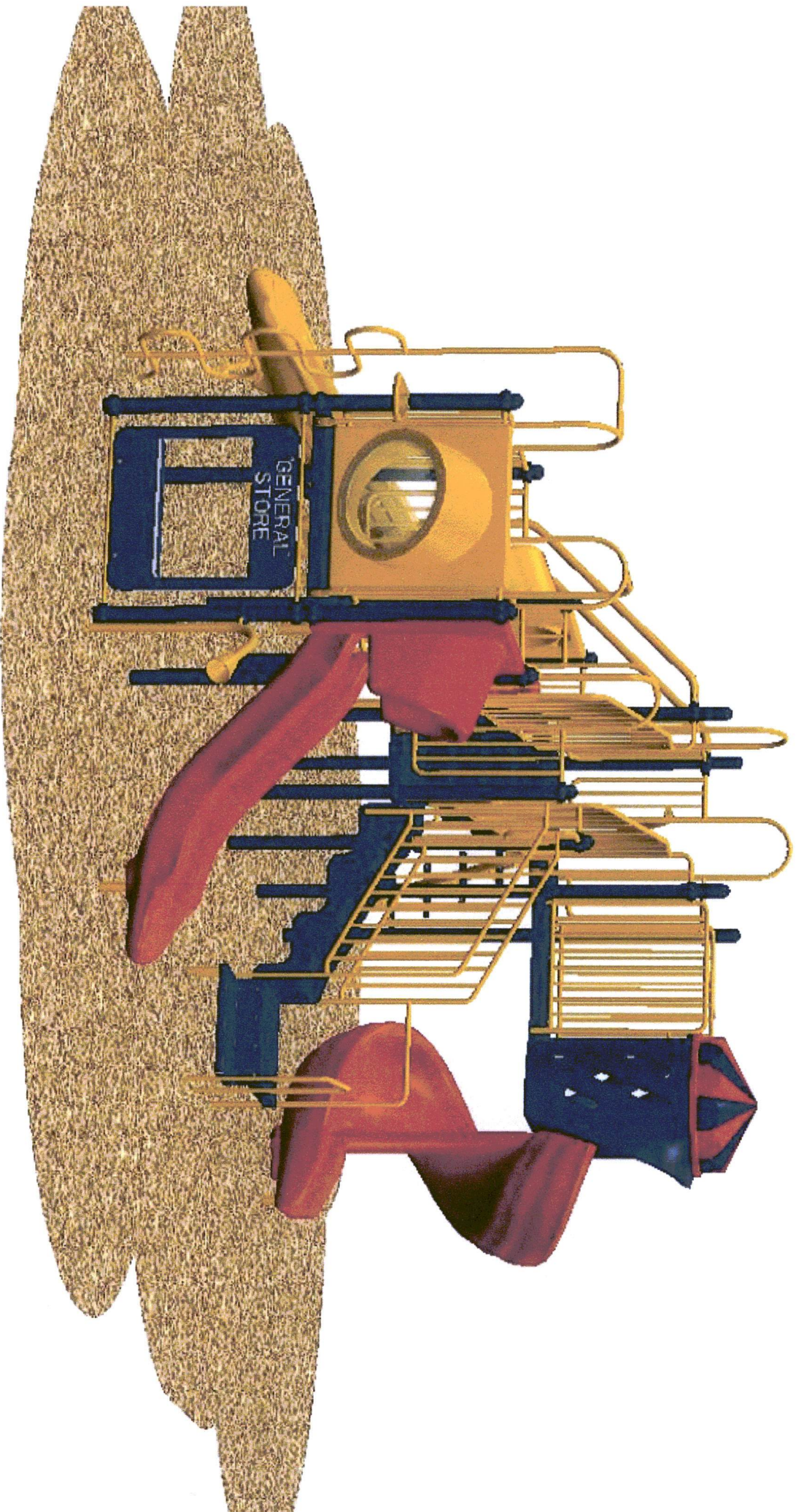
To promote safe and proper equipment use by children, Miracle recommends the installation of either a Miracle safety sign or other appropriate safety signage near each play system's main entry point(s) to inform parents and supervisors of the age appropriateness of the play system and general rules for safe play.

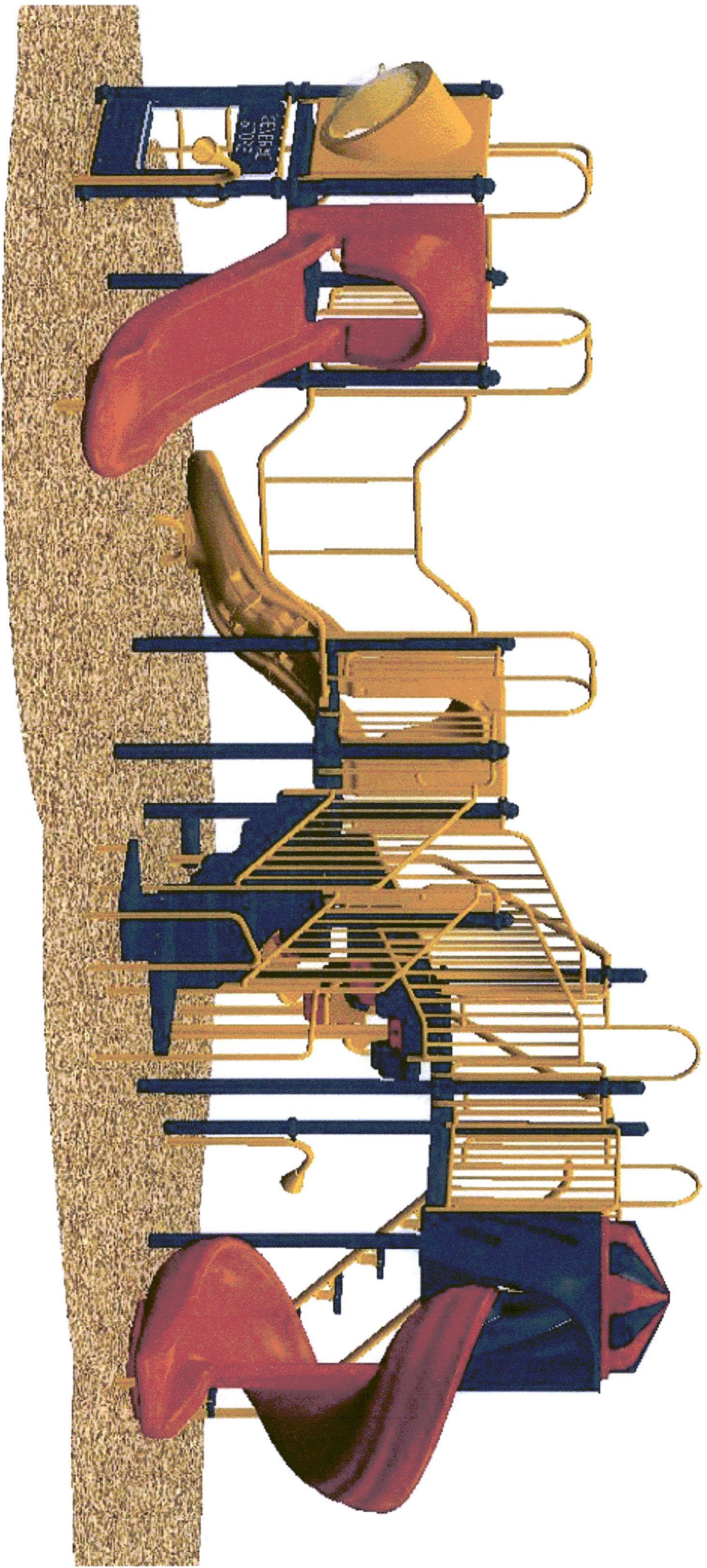
THE PLAY COMPONENTS IDENTIFIED IN THIS PLAN ARE IPEMA CERTIFIED. THE USE AND LAYOUT OF THESE COMPONENTS CONFORM TO THE REQUIREMENTS OF ASTM F1487.

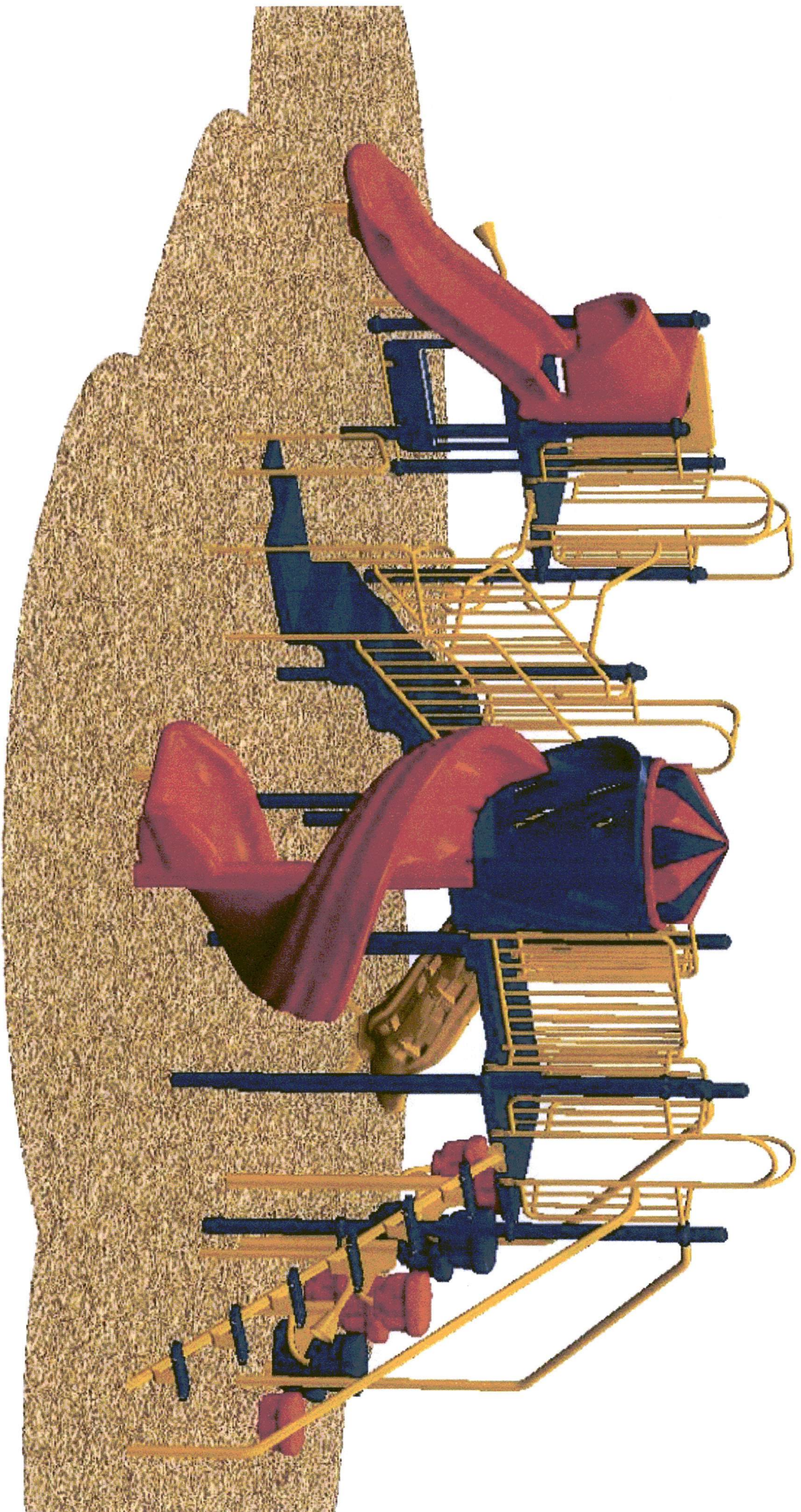
AN ENERGY ABSORBING PROTECTIVE SURFACE IS REQUIRED UNDER & AROUND ALL PLAY SYSTEMS

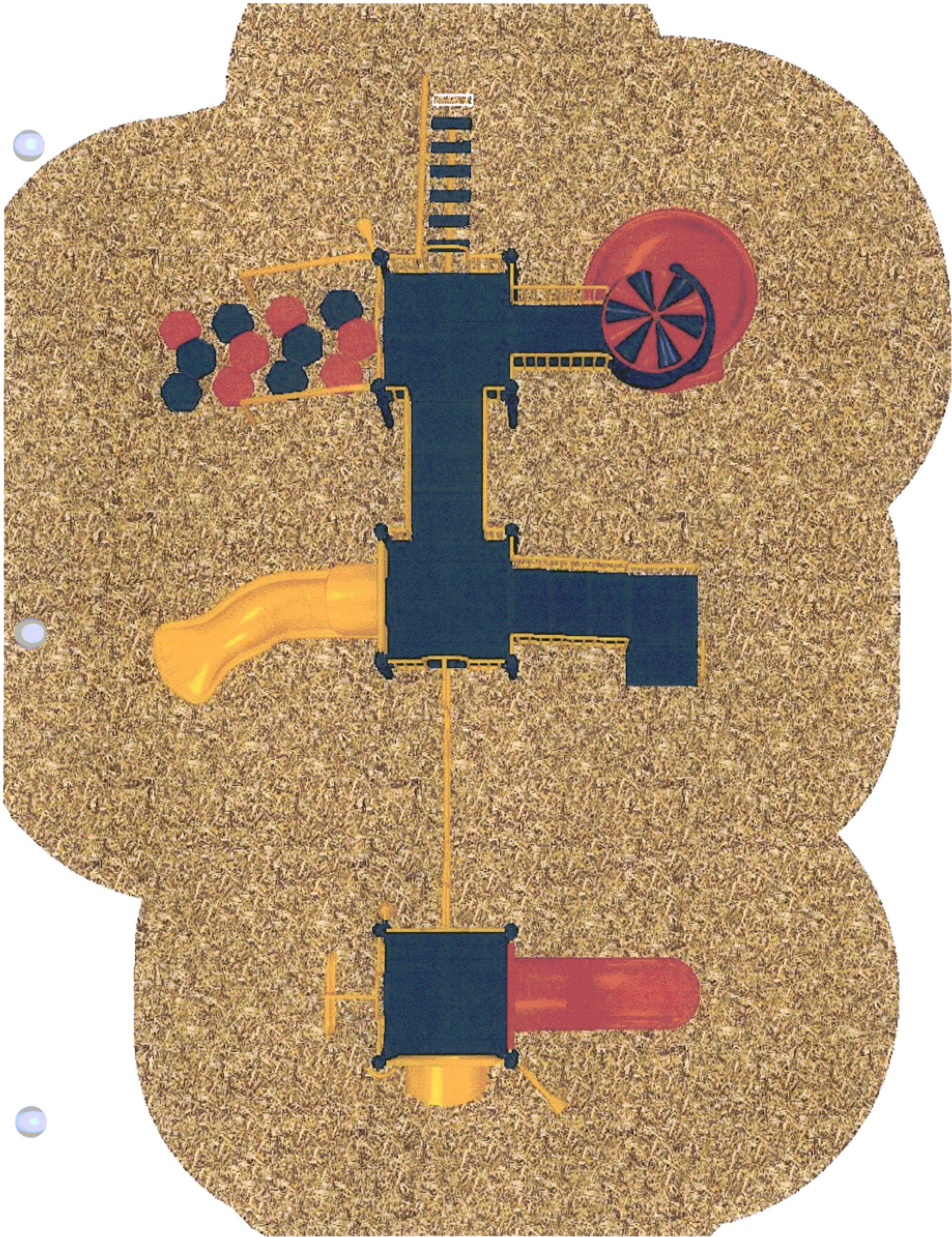












• GENERAL SPECIFICATIONS

SAFETY STANDARDS & GUIDELINES All public playground equipment supplied shall meet all applicable provisions of the current "Handbook for Public Playground Safety" published by the Consumer Product Safety Commission (CPSC), and of ASTM F1487-01 "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," published by the American Society for Testing and Materials (ASTM). Products bearing the certification seal of the International Play Equipment Manufacturers Association (IPEMA) have received written validation of compliance with ASTM F1487-01.

TRADEMARKS Aquarius (R), Big Kahuna (R), Big Timber (R), Bongo (TM), Boulder Ridge (R), Bug Bites (R), Camel Back (TM), Center Stage (R), Chameleon (TM), Coil Curler (TM), Connexion (R), Dupli-Gator (R), Flex Jet (R), Flippo (TM), Flippopotamus (R), Fun Fone (TM), Fun Tunnel (R), Funnel Tunnel (TM), Funshades (TM), Gator Grip (R), Gemini (TM), Gravity (TM), Grizz-Lee Bear (R), Groove (TM), Groove II (R) Slide, Hang-A-Round (R), Interaxion (TM), JAX (R), Kidrox (R), Kids' Choice (R), Kids' Perch (TM), Legacy Cantilever (R), Legacy Contempo (R), Legacy Heritage (R), Libra (R), Linkz (TM), Loopz (TM), Mega Tower (R), Miracle (R), Miracle Recreation (R), MiracleTech (R), Mira-Cote (R), Mira-Lam (TM), Mira-Lene (TM), Mira-Therm2 (TM), Mogul (TM), Mountain Trail (R), N-Dure Cycle (R), Nexus (R), Observation Deck (R), Offspring (TM), OrbX (R), ParkWatch (TM), Pegasus (R), Perma-Guard (TM), Perseus (TM), Physics (R), Play Cover (R), Play Terrain (R), Power Pedaler (TM), Pull Up!Lift (R), Rainbow Bend (TM), Reflex (R), Relay Racer (R), Rock-ite (R), Rodeo Rocky (TM), Schnozz Womp (TM), Serpent Trek (TM), SiteBrite (TM), Sneak-A-View (TM), SonicScreen (R), Spray Stations (R), Sun Sparkle (TM), Surfer (R), Tensile Tough (TM), Tensile Tower (TM), Thunder Tunnel (TM), Timber Topper (TM), Toboggan (TM), Toddlers' Choice (R), Tots' Choice (R), Tots' Choice (R) Expansion, Tots' Choice (TM) for Toddlers, Trim Timber (R), Triple Play (TM), Typhoon (TM), Versalok (R), View Groove (TM), Wavy Waffle Wall Walker (TM), Webscapes (R), Whirlwind (TM), Xcalator (R), and X-Cavator (TM) are trademarks of Miracle Recreation Equipment Company. Tornado (TM), Multi-Pondo (TM), and Pirouette (TM) are trademarks of HAGS (TM). Miracle and HAGS are divisions of PlayPower, Inc. PlayPower (R) is a trademark of PlayPower, Inc.

QUALITY SYSTEM CERTIFICATION The manufacturer's quality system is certified to ISO 9001 since December 1998.

PRODUCT CHANGES At Miracle Recreation Equipment Company, we strive for the utmost in quality and safety in our entire product line. Therefore, in order to honor this commitment to you, our customers, we reserve the right to make changes on any product released and/or published in our annual catalog and other promotional or technical literature.

WARRANTY

Buyer agrees that products sold by Miracle Recreation Equipment Company carry only the following warranties:

1. **LIMITED WARRANTY FOR AS LONG AS YOU OWN THE PRODUCT** against structural failure due to corrosion or defects in materials and workmanship on aluminum deck posts, steel deck posts, the VersaLok (R) fastening system and associated fastening hardware.
2. **LIMITED FIFTEEN (15) YEAR WARRANTY** against structural failure due to corrosion or defects in materials and workmanship on steel support legs and Mira-Therm2 (TM) 2 on MEGA TOWER (R), TOTS' CHOICE (R), KIDS' CHOICE (R), CENTER STAGE (R), NEXUS (R) and Boulder Ridge (R) Rock Wall; on playsystem steel components including railings, rungs, and rigid climbers; and Rockite (R).
3. **LIMITED FIFTEEN (15) YEAR WARRANTY** against structural failure due to corrosion or defects in materials and workmanship on all Play Cover (R) steel frames.

4. **LIMITED TEN (10) YEAR WARRANTY** on Play Terrain (R) Rubber Mulch safety surfacing against total color loss and attenuation performance. Please contact your local representative for more information.

5. **LIMITED EIGHT (8) YEAR WARRANTY** on Play Terrain (R) Synthetic Turf safety surfacing for attenuation performance and appearance. Please contact your local representative for more information.

6. **LIMITED EIGHT (8) YEAR WARRANTY** against rot, UV deterioration and defects in materials and workmanship on all Play Cover (R) fabric (NOTE EXCEPTION - shades of red carry LIMITED THREE (3) YEAR WARRANTY).

7. **LIMITED FIVE (5) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Kidrox (R) Climbing Rocks.

8. **LIMITED FIVE (5) YEAR WARRANTY** against degradation of design loading capabilities on all Webscapes (R) Net Climbers and Nexus (R) Nets (NOTE EXCEPTION - Webscapes (R) Net Climbers and Nexus (R) Nets carry a LIMITED ONE (1) YEAR WARRANTY against defects in materials and workmanship).

9. **LIMITED THREE (3) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Trim Timbers (TM).

10. **LIMITED ONE (1) YEAR WARRANTY** against failure due to defects in materials or workmanship on Slashproof Swing Seats and 360 degree Bucket Tot Seats for Swings.

11. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on the following products and components: TODDLERS' CHOICE (R) main support materials and decks; pool slide support structures, stairways, landings and railings; and bleachers.

12. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on all MiracleTech (R) Security products, including ParkWatch (TM), SonicScreen (R) and SiteBrite (TM).

13. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship for all products and components that are not specifically listed above, including, without limitation, all moving parts, such as swing hangers, swivels, chains, whirls, trolleys and flexible climbers.

BUYER'S REMEDY: If any products prove defective or non-conforming under normal use and within the above-prescribed warranty periods, Buyer must promptly notify Miracle in writing at 878 E. Hwy 60, Monett, MO 65708 USA. Miracle will within a reasonable time and in its sole discretion repair or replace such defective or non-conforming product by providing replacement products or part(s) free of charge to the site. Miracle's limited warranties do not cover the cost of labor to remove defective or non-conforming part(s) or to install repaired or replacement part(s).

All warranty periods begin on the date of Miracle's invoice. Repaired and/or replacement part(s) are warranted only for the balance of the original limited warranty. All warranties extend only to the original Buyer/end user of products from Miracle or Miracle's authorized reseller and are not transferable.

These limited warranties apply only to Miracle products that are erected and installed in conformance with Miracle's installation instructions, and that are maintained and inspected in conformance with Miracle's maintenance and operational instructions. These limited warranties specifically do not cover Miracle products: that have been modified, altered, or misused; that have not been used as designed or intended; to which non-Miracle parts have been added or substituted; or that have been damaged due to excessive wear and tear, vandalism, abnormal use, abuse, negligence, extraordinary weather or acts of God. MiracleTech Security (R) systems limited warranties do not cover products serviced or repaired by unauthorized service providers. These limited warranties do not protect against color fade, except for PlayCover (R) as noted above. Buyer, by acceptance and use of these limited warranties, waives any rights it would otherwise have to claim or assert that this limited warranty fails of its essential purpose. Buyer agrees that venue for any court action to enforce these limited warranties shall be in Barry or Greene Counties in the State of Missouri.

EXCEPT AS EXPRESSLY WARRANTED HEREIN, MIRACLE EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THOSE ARISING BY STATUTE OR OTHERWISE IN LAW OR FROM COURSE OF DEALING OR USAGE OF TRADE. IN NO EVENT SHALL MIRACLE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION, LOSS OF INFORMATION, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES OR OTHER PECUNIARY LOSS).

*Consult Miracle's "Glossary of Technical Data for Materials, Processes and Finishes"
for specifications of items listed in bold type.*

- **TOTS' CHOICE EXPANSION (TCX) DECKS** shall be Mira-Therm2 deck models designed for use with Tots' Choice 3-1/2" deck posts, which shall feature an inside dimension of 43" (like standard Kids' Choice decks) to accommodate Kids' Choice type (TCX) components instead of Tots' Choice components. The TCX Triangle Split Deck is an isosceles triangle play surface designed to be used as a Step Platform at 18" and lower for 2-5 year old users or 30" and lower for 5-12 year old users. The deck shall be constructed of folded 11 ga. steel sheet forming 3" tall sides with 3/16" x 1-1/2" flat steel braces solid **welded**. The decking shall be perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center and primer coated prior to polyvinyl coating. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. All deck surfaces shall have a **Mira-Therm2** or **Mira-Therm2 PE** finish. Clamps shall have a **Mira-Cote** finish. The TCX/TC Transition Deck (Model # 704-512-9) shall be an adaptor platform with one side designed for attachment to a standard Tots' Choice deck or component (i.e. one side shall have an inside dimension of 38-1/2") while its remaining sides shall accommodate TCX components or decks (i.e. three sides shall have inside dimensions of 43"). The TCX/KC Transition Deck (Model # 704-514-9) shall be an adaptor platform with one side designed for attachment to a Tots' Choice Expansion deck (i.e. one side shall have two corners for 3-1/2" O.D. posts) while its opposite side shall be designed for attachment to a Kids' Choice deck (i.e. it has two corners for 5" O.D. posts). The two sides in between shall accommodate TCX components. (All sides shall have inside dimensions of 43".) The TCX Triangle Deck (Model # 704-501-9) shall require 3 posts and shall have a deck top surface area of 6.47 sq. ft. The TCX Square Deck (Model # 704-502-9) shall require 4 posts and shall have a deck top surface area of 14.82 sq. ft. The TCX Half Hex Deck (Full) (Model # 704-503-9) shall require 4 posts and shall have a deck top surface area of 19.44 sq. ft. The TCX Half Hex Deck (Open) (Model # 704-504-9) shall require 5 posts and shall have a deck top surface area of 19.40 sq. ft. The TCX Rectangle Deck (Open) (Model # 704-510-9) shall require 6 posts and shall have a deck top surface area of 29.43 sq. ft. The TCX/TC Transition Deck shall require 4 posts and shall have a deck top surface area of 13.99 sq. ft. The TCX/KC Transition Deck shall require two 3-1/2" O.D. posts and two 5" O.D. posts and shall have a deck top surface area of 14.74 sq. ft. The TCX Flippo Deck (Model # 704-515-9) shall require 4 posts and shall have a deck top surface of 18.95 sq. ft. TCX Flippo Deck shall only be used with Model # 704-770-9. With the exception of the TCX/KC Transition Deck, the TCX decks shall be designed on a 46-1/2" center-to-center spacing on 3-1/2" deck posts, at equal or varied heights. All deck-to-post connections shall be made with a deck support casting and clamp. All deck connections shall be made beneath the deck with no exposed fasteners on deck perimeter. All decks shall be constructed with folded 11 ga. steel sheet forming 3" tall sides. Decking sheets shall be perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. The decking shall have 7 ga. by 2" flat steel braces and corner braces of 7 ga. steel. The entire assembly shall be solid **welded** prior to polyvinyl coating. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. All deck surfaces shall be coated in **Mira-Therm2**. Clamps and castings shall have a **Mira-Cote** finish.

- **TOTS' CHOICE STEEL POSTS:** The steel posts shall be constructed of 3-1/2" tube with 3-1/2" round end caps mechanically fastened to the top end. Posts for roof attachment shall not receive end caps. After fabrication, all posts and end caps shall have a **Mira-Cote** finish.

- **DIPWALK BRIDGE** assemblies (spanning 8' and 12') shall be horizontal climbing bridges between 2', 2'-6", 3', 3'-6", or 4' decks of equal height. The top and bottom rails and uprights shall be **1-1/4" pipe**. The bridge shall be fastened between decks in the field using 1/4" plate with 2-1/2" bolts. The climbing bridge shall be fastened to arched entry enclosures in the field using 3/8" bolts. The bridge assembly shall be solid **welded**. Arched entry enclosures shall comprise top and bottom supports, sleeve support, arched upright and vertical rungs. The sleeve support shall be **1-1/4" pipe, 10 ga.**, solid **welded** to the arch. The top and bottom supports and upright shall be **1" pipe**, formed, mashed and punched, solid **welded** to vertical rungs of **3/4" x 1" oval tube**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A**. The climbing bridge assembly, arched entry enclosures, and clamps shall be finished in **Mira-Cote**.

- **CLIMBING POLE/SPIDER CLIMBER/BUMPER LADDER/SPIRAL CLIMBER/CLIFF CLIMBER/TRAP DOOR CLIMBER** shall each be used as an entry to or an exit from a deck. The *cliff climber* side rails and rungs shall be constructed of **1" pipe**, formed, drilled and all solid **welded** construction, with an extension tube constructed of **1-1/4" pipe, 10 ga.** The *trap door climber* pole shall be formed **1-1/4" pipe**. The "U" shaped rungs shall be formed **1" pipe**. The extension shall have a 3/8" aluminum insert. The climber shall be a **welded** assembly. The *climbing pole* shall be constructed of **1" pipe, 12 ga.** The *spider climber* pole and "U" shaped rungs shall be formed **1" pipe**, solid **welded**. The *spiral climber* shall be constructed of **1" pipe**, formed, drilled and all solid **welded** construction with **plastic pipe plugs** inserted in open ends. For the Tots' Choice system, the *spiral climber* center pole shall be constructed of **1" pipe**, formed, drilled and all solid **welded** construction with **plastic pipe plugs** inserted in open ends and the spiral shall be constructed of **1" tube** and shall be attached to the center pole by means of six spacers, also constructed of **1" tube**. The assembly shall be solid **welded**. The *bumper ladder* shall be constructed of **Rockite** bumpers supported internally by a pole constructed of **1" pipe, 10 ga.** Each bumper shall measure 18" high x 19" wide. The Kids' Choice arch enclosure assembly shall consist of top supports, a bottom support, and an arched upright, which shall be constructed of **1" pipe**, formed, mashed, and punched, with vertical infill of **3/4" x 1" oval tube**. The Tots' Choice arch enclosure shall comprise two top supports and infill of **1" tube** and a climbing pole support and arch support of **1" pipe**, all solid **welded**. Kids' Choice arch enclosure for split decks shall consist of top rails, a receiver tube, an arched upright and outer upright, which shall be constructed of **1" pipe**, drilled, formed and mashed, and vertical spokes which shall be constructed of **3/4" x 1" oval tube**. The enclosure assembly shall be solid **welded**. Enclosure shall measure 55" in width and 62" in height. All enclosure assemblies shall have an extension tube of **1" pipe, 10 ga.** Enclosure assemblies shall be solid **welded**. The cliff climber, trap door climber, climbing pole, spiral climber, bumper ladder pole, and enclosure assembly shall have a **Mira-Cote** finish. The **Rockite** bumpers shall have color molded in.

- **MONSTER PIPE CLIMBER** shall be a ground-to-deck component featuring foot step gussets welded to a single **2" pipe** leading to 4' through 6'-6" decks. The climber shall comprise a climber mounting bracket, tall foot step gussets and short foot step gussets, all solid **welded** to a tube support. Tube support shall be constructed of **2" pipe**. Climber mounting bracket and gussets shall be comprised of 7 ga. sheet. Hand support shall be constructed of **2" pipe**. Model # 704-615-5, 714-615-5 and 718-615-5 shall measure 62-1/16" in length and 120-13/16" in height. Model # 704-615-6, 714-615-6 and 718-615-6 shall measure 80-1/2" in length and 138-13/16" in height. Foot step covers shall be constructed of 11 ga. sheet perforated with a staggered pattern of .375" diameter holes at 5/8" apart center to center. Foot step covers shall be 15" in length. Enclosure for KC and TCX shall comprise top rails, L rail and arch of **1" pipe, Gator Grip**, spokes of **3/4" x 1" oval tube** and a 7 ga. sheet bracket. Enclosure for TC shall comprise an arch upright of **1" pipe, Gator Grip**, top rails, L rails and spokes of **1" tube**, and a 7 ga. bracket. Enclosure shall measure 62-3/8" in length and 41-1/2" in width for KC and TCX and 62-3/8" in length and 36-15/16" in width for TC. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The climber, hand support and enclosure shall have a **Mira-Cote** finish. Steps shall have a **Mira-Therm2** or **Mira-Therm2 PE** finish.

- **POD HOPPERS** shall comprise a post assembly with 3 attached hex-shaped pods ascending to 3', 4', 5' or 6'-6" deck systems, with an entry enclosure and formed hand supports on both sides. Each post assembly shall comprise a center tube of **3-1/2" tube**, supporting arm bracket of 7 ga. galvanized steel sheet, pod supporting arms of **1-1/4" pipe**, pod mounting plate of 11 ga. galvanized steel sheet, pod support tube of **1-1/4" pipe**, support tube brace plate of 11 ga. galvanized steel sheet, and base plate of 7 ga. galvanized steel sheet. All post assemblies shall measure 22-13/16" in length center to center and 6-5/8" in width center to center. Post assemblies for 3' deck shall measure 60-5/16" and 44-5/16" in height. Post assemblies for 4' deck shall measure 72-5/16", 60-5/16" and 44-5/16" in height. Post assemblies for 5' deck shall measure 84-5/16", 66-5/16" and 48-5/16" in height. Post assemblies for 6' deck shall measure 102-5/16", 84-5/16", 66-5/16" and 48-5/16" in height. Post assemblies shall be solid **welded**. Each pod shall be constructed of **Rockite** containing a textured, hex-shaped top surface measuring approximately 16" diameter. Pod shall measure 12" in height. Arch enclosure assemblies for KC and TCX shall consist of top supports, a bottom support, and an arched upright constructed of **1" pipe**, formed, mashed and punched, and vertical run infill constructed of **1" tube**, all solid **welded**. Loop enclosure assembly for TC shall consist of balusters, a support rail and arched upright constructed of **1" pipe**, formed, mashed, punched and solid **welded**. Hand supports shall be constructed of **2" pipe**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The **Rockite** pods shall have color molded in. The post assemblies, hand supports, enclosure and clamps shall be finished in **Mira-Cote**.

- **IMAGINATION PANELS** and Activity Panels shall be constructed of **Mira-Lene** and shall measure 36-1/2" x 40" with all corners rounded. The panels shall have routed designs, including themes of a space ship panel, general store counter, a barn wall panel, a barn door panel, a barn window panel, a bank teller window, a television front, a puppet stage, a window, a computer screen, a door, a park ranger, a fire truck, a police car, a train engine, a taxi cab, two airplanes (both containing two steering wheel assemblies, one also containing a clear polycarbonate window mechanically fastened to panel), a race car, an alphabet finger maze, an abstract finger maze, a calculator, a bus stop/bench, a rest stop/bench, jump height measurements for a 3' and 5' deck, a sign language alphabet, a Spanish-English translation, a Chinese-English translation, Braille alphabet with riddles, a drum panel, welcome and age appropriate messages, interconnected gears, gear-driven pistons, and sliding tiles. Rung brackets shall be constructed of **1" pipe** and 11 ga. **A-60 Galvannealed** tabs solid **welded** (except *Tots' Choice models which shall have brackets constructed of 1" tube and 11 ga. A-60 Galvannealed tabs solid welded.*) The star brackets for the space ship panel shall be constructed of 11 ga. HRPO steel and powder coat painted. The steering wheel(s) on vehicle themed panels shall be constructed of a high-density blow molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. The Piston panel and Gear panel each shall contain a clear polycarbonate cover mechanically fastened over sets of 1/4" thick gears (drive gears not covered by window). The gears shall be constructed of high-density polyethylene, which shall turn on nylon bushings, except for the black nylon handles and drive gears which shall turn on bronze bushings. The piston panel shall also contain connecting rod and piston shapes of 1/4" thick high-density polyethylene. The reverse side of both panels shall contain routed text and/or designs. The Sliding Tile panel shall contain 15 moveable, tongue-and-groove tiles with routed numerals to be constructed of 1/4" thick high-density polyethylene. The panels and steering wheel shall have molded in color with each panel assembly having a laminated, two-color scheme. Calypso drum panel shall contain 3 rotational molded drums of low density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized steel sheet with a **Mira-Cote** finish. Each assembly shall include **Fastener Style A** hardware and **Versalok Fasteners**. Panels and steering wheels shall have color molded in, and rung brackets and clamps shall be finished in **Mira-Cote**.

- **ROCKITE BUBBLE PANEL/ROCKITE PANEL WITH HOLE/VIEW GROOVE PANEL/30 DEGREE LOOK-OUT PANEL** shall be constructed of **Rockite** with all corners rounded. The 30 degree Look-Out panel shall have a molded in 30 degree extension. The enclosure shall consist of uprights and support bars, all constructed of **1" pipe**, drilled and formed (except *Tots' Choice models which shall have an enclosure consisting of a top rail of 1" tube with two tabs and two brackets of 11 ga. galvanized sheet, solid welded*). The bubble shall be vacuum formed from clear polycarbonate sheet. The spherical bubble shall measure 24" in diameter and shall be attached to the panel in the factory using tamper proof screws and flat washers. The view groove panel shall have six 2" view slots evenly spaced at 5-1/4" with slant of 20 degrees from vertical. Horizontal rungs shall have a **Mira-Cote** finish. **Rockite** panels shall have color molded in.

- **MIRA-THERM2 SQUARE TRANSFER POINTS** shall be designed to assist disabled users gain access to and egress from a deck system. The stair assembly shall be constructed of 11 ga. steel stringers solid **welded** to 11 ga. steel sheet decking that is perforated in a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Approximate dimensions of stair assembly shall be 26" overall width, 14" deep step tread and 8" high step rise. The 26" square (approximate) transfer point shall be constructed of 11 ga. steel sheet folded to form approximately 3" high sidewalls. The decking shall be perforated as described above. It shall be reinforced with cross braces of 3/16" x 2" HR flat solid **welded**. The bottom step shall be constructed of 11 ga. steel sheet (with folded edges) perforated as described above. The step shall be approximately 26" wide by 14" deep by 6-1/2" high. Kids' Choice deck enclosures shall be constructed of formed **1" pipe**, including a **welded** upright of the same material. Tots' Choice deck enclosures shall be constructed of **1" pipe** and a formed and **welded** upright of **1" tube**. Each deck enclosure assembly shall be drilled for field assembly of a stair handrail, and shall have its bottom end mashed and punched for field assembly to deck. Stair handrail assemblies shall be **welded** upper and lower handrails of formed **1" pipe**. Closed handrails shall contain vertical uprights of 3/4" x 1" oval tube **welded** within. Swaged handrail extensions for field assembly to handrails shall be constructed of **1" pipe**. A transfer deck handrail constructed of formed **1" pipe** shall be field assembled to one handrail newel upright and transfer point deck edge. Models designed for assembly to 5' and 6' or 6'-6" decks shall contain handrail sleeve supports constructed of **1-1/4" pipe, 10 ga.** The "U"-shaped transfer step handrail shall be formed **1" pipe**, drilled for field assembly to transfer point deck and bottom step. Its apex shall be 36-1/8" from finished grade. The rung leg shall be **1" pipe** with ends mashed and punched for field assembly to bottom step. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The stairs, bottom step, and transfer point deck shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The deck enclosures, handrails, extensions, sleeves, leg and clamps shall be finished in **Mira-Cote**.

- **CHAMELEON II SLIDE SYSTEM** shall be feature an interchangeable bedway sections to present maximum versatility in design configuration. The componentized, open bedway slide assembly may be attached to 2'-6" - 8' decks. The bedway sections, entry panel and exit section shall be constructed of double wall **Rockite** with a 18" bedway and 13-3/4" high sidewalls. The entry panel shall be supported by a rung of **1" pipe**. The "T" front leg shall be constructed of 1.5" X 16 ga. square tube and a bracket of 7 ga. galvanized sheet steel. Support legs shall be constructed of 1.66

OD x 13 ga. tube and a mounting bracket of 7 ga. sheet, solid **welded**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rung, front leg, support legs and leg brackets shall have a **Mira-Cote** finish. The **Rockite** slide sections shall have color molded in.

- **GROOVE II SLIDES** shall feature a hooded canopy and a streamline slide design. Groove II is designed to exit from 4', 5', 6'-6" or 8' decks. The canopy panel and one-piece slide shall be constructed of double wall **Rockite**. The slide shall have 6" high side rails, an overall width of 25" and 18" wide sliding surface and approximate 7' (4' decks) bedway length, 9' (5' decks) bedway length, 12' (6'-6" decks) bedway length and 15' (8' decks) bedway length. The canopy panel shall be field mounted to deck and post clamps via a 41-1/2" long rung constructed of **1" pipe**. The leg shall be **2" pipe, welded** to an 11 ga. **A-60 Galvannealed** mounting bracket. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rung, legs and clamps shall have a **Mira-Cote** finish. The **Rockite** slide and canopy shall have molded-in color.

- **MIRA-THERM2 TYPHOON II SPIRAL SLIDES** shall be 360 degree, one-piece, open bedway spiral slides with two-color barrel canopy and step or ramp assembly, designed for attachment to 4', 5', 6' and 6'-6" decks. The slide bedway shall be constructed of 1/4" to 5/16" wall **Rockite**. The slide bedway shall be 30" wide with a 15" high side wall. The center post shall be constructed of **4-1/2" tube**. The step assembly shall be constructed of 11 ga. steel sheet folded and perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center, solid **welded** to stringers of 7 ga. black steel. The handrail assembly shall consist of a top and bottom rail and newel post, formed, constructed of **1" pipe with infill of 3/4" x 1" oval tube**. The step enclosure assembly shall be solid **welded** and **plastic pipe plugs** shall close open ends. The deck enclosures shall consist of a vertical rail, and top and bottom rail, formed, constructed of **1" pipe with an upright of 3/4" x 1" oval tube**, and 3/8" aluminum inserts in the rail ends for attachment to the step enclosures. The deck enclosure assemblies shall be solid **welded**. The 35" platform barrel shall be **Rockite**, with a canopy painted alternating colors with polyurethane paint. The barrel shall have molded-in view grooves for viewing children. The back-up plate used to connect the step assembly and the barrel shall be constructed of 1/4" x 1" x 6" flat steel. The front leg shall be constructed of **2" pipe** and shall be attached to the slide using a channel constructed of 7 ga. sheet. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The **Rockite** slide and platform canopy shall have color molded in. The step shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The handrail assemblies, deck enclosures, front leg, and clamps shall have a **Mira-Cote** finish. The back-up plate shall have a zinc plate finish.

- **MIRA-THERM2 ATA STAIRS BETWEEN DECKS** shall be stair assemblies, with spoked or open handrails, designed to connect decks of different heights. The steps shall be constructed of 7 ga. steel stringers with treads constructed of 11 ga. steel sheet perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center, solid **welded**, with polyvinyl coating. The braces shall be constructed of 11 ga. black. The spoked handrails shall consist of a top and bottom rail and newel post, all of **1" pipe**, and uprights constructed of **3/4" x 1" oval tube**, all solid **welded**, with **plastic pipe plugs** inserted in open ends. Top rails shall have 3/8" aluminum inserts. The open handrails shall consist of a top and bottom rail and newel post of **1" pipe**, all solid **welded**, with **plastic pipe plugs** inserted in open ends. Top rails shall have 3/8" aluminum inserts. The top deck enclosure shall consist of enclosure rails and an upright, both to be constructed of **1" pipe**, drilled and solid **welded**, with one end of upright mashed for field attachment to deck. The bottom deck enclosure shall consist of horizontal rails and an upright of **1" pipe**, drilled and solid **welded**, and a spoke upright of **3/4" x 1" oval tube**. The upright shall be mashed on one end for field attachment to deck. Inserted in open ends will be **plastic pipe plugs**. The assembly shall include **Fastener Style A** hardware and **Versalok Fasteners**. The step assemblies shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The deck enclosures, handrails, and clamps shall be finished in **Mira-Cote**.

- **CRUNCH STATION** shall be a semi-circular horizontal rung assembly designed for mounting on a 5" steel deck post with the rung set 50" - 80" from finished grade. The Crunch Station shall enable the user to perform leg lifts and crunches in a standing position. It shall be constructed of a cut and formed **1" pipe** segment solid **welded** to support and bolt plates of 7 ga. galvanized steel. All hardware shall be **Fastener Style A**. The assembly shall have a **Mira-Cote** finish.

- **FUN FONE** shall consist of a simple tube and mouthpiece system designed to allow children to talk to each other from a given distance. The mouthpiece support tube assembly shall be constructed of **2" Sch 40 pipe**. The mouthpiece shall be made of 16 ga. galvanized steel sheet. The connecting stub shall be made of **1" pipe**. The tube assemblies shall be solid **welded**. The 1" I.D. tube shall be 50' long and constructed of polyethylene. The steel post for Model # 714-994-1 shall be constructed of **5" tube, 11 ga.** The aluminum post for Model # 714-994-12 shall be constructed of **5" aluminum tube**. The steel post for Model # 714-994-13 shall be constructed of **5" tube**. Each shall have a **5" round end cap** pressed into its top end. The post shall measure 76" long before the end cap. Some Tots' Choice models shall contain a 70" post (before endcap) of **3-1/2" tube or 3-1/2" aluminum tube with 3-1/2" round end cap** for field attachment of Fun Fones. The posts and Fun Fone tube assembly shall have a **Mira-Cote** finish.

- **BELL, POST MOUNT** shall be designed to provide noisy, imaginative play to any pre-existing deck post. The Bell Assembly shall consist of a Bell, A Bell Support, a 6-link Chain, and eyebolt, and **Fastener Style A** hardware. The Bell shall be constructed of **A-60 Galvannealed**. The Bell Support shall be constructed of **1" pipe, Gator Grip**. The Bell Chain shall be constructed of **4/0 straight link coil chain**. The Bell shall have a **Mira-Cote** finish.

Technical Data for Processes and Finishes of the Highlighted Items

- **aluminum alloy** conforms to the following: ASTM 356, ANSI 322, Chrysler MS 2417 and General Motors GM 4323-M. Parts or components constructed of aluminum alloy are either *sand cast* or *die cast*. *Sand cast aluminum alloy* is 319 with tensile strength of 27,000 p.s.i. and yield strength of 18,000 p.s.i. *Die cast aluminum alloy* is 383.1 with tensile strength of 45,000 p.s.i. and yield strength of 22,000 p.s.i.
- **4/0 straight link coil chain** is hot dipped galvanized with a 670 pound working load limit. All chain shall be manufactured to ASTM A467-86A Class CS specifications.
- **Mira-Therm2 coated chain** is a **welded** chain with links sufficiently wide to allow them to pass one another freely, eliminating the tendency to kink. The links are **low carbon zinc plated steel** with a polyvinyl chloride coating.
- **Versalok Fasteners (R)** are cast **aluminum alloy**. Each fastener consists of two die cast **aluminum alloy** "half ring" pieces, which were designed to fasten onto the round posts by use of a male/female interlock. For 3-1/2" post, outside dimension of the completed fastener (joined "half-rings") is 5". For 5" post, outside dimension of the completed fastener is 6-1/2". *Rungs and components* connect to clamps on posts by means of die cast **aluminum alloy**, two-piece socket receptors which may be assembled to a previously-installed clamp ring and secured to the clamp and component by set screws (and tek screws in some cases). *Decks* connect to clamps on posts by means of die cast **aluminum alloy**, one-piece deck support castings. The clamp assembly and socket receptor have a **Mira-Cote** finish. Kids' Choice components with **2" pipe** mounting points attach to 5" posts using **aluminum alloy** sand cast header supports.
- **3-1/2" round end cap** is die cast **aluminum alloy**.
- **5" round end cap** is die cast **aluminum alloy**.
- **Fastener Style A** is a corrosion resistant, 18-8, stainless steel, vandal resistant fastener.
- **Flo-Coat (R)** is a patented triple coat corrosion protection process of Allied Tube and Conduit's Mechanical Tube Division, wherein steel pipe or tube first receives a hot-dipped uniform zinc galvanized coating followed by a conversion coating followed by a clear, high performance organic polymer coating. The interior of the tube has an 81% minimum zinc rich primer applied, capable of providing excellent rust protection and fabrication

characteristics. All coatings are applied inside and out after welding. Flo-Coat processed tube exceeds the test results of galvanized Sch 40 pipe in salt spray tests conducted in accordance with ASTM B-117. The term "Flo-Coat" is a registered trademark of Allied Tube and Conduit, used with permission.

- **GATOR GRIP (TM)** is a three dimensional textured pattern exclusive to Miracle, embossed in steel to a depth of .014" to .017".
- **A-60 Galvannealed** indicates that a coating of .60 ounces of zinc per square foot alloyed with substrate steel has been applied on each surface side.
- **Mira-Cote (TM)** is a Super Durable formulation of a polyester powder coating finish that is applied to a thickness of 3-5 mil. This finish gives metal parts long term protection from chipping, fading and peeling. Miracle's finishing system washes the metal parts with detergent and etches the metal for optimum adhesion. The part is then rinsed clean with water. Next the part is coated with a non-chromic sealer and dried. The Mira-Cote powder is then applied electrostatically to the metal part. The metal parts are then baked at a high temperature to fuse a hard, smooth durable finish to the metal. Mira-Cote has an impact value of 160 in. lbs., flexibility value of 180 degree-1/4" mandrel, shore hardness value H and a crosshatch adhesion of 100%. Mira-Cote is tested in accordance with ASTM D-792, D-523, D-2794, D-1737, D-3363, D-3359 (b), B117 and D-2247. Mira-Cote will withstand over a 1,500 hours of salt spray exposure and 1,500 hours of weatherometer testing with minimal loss of gloss and color.
- **Mira-Lene (TM)** is compression-molded, 3/4" thick, high density polyethylene that has been specifically formulated for optimum U.V. stability and color retention. Compression-molded products have a density of .952 g/cm3 per ASTM D1505 and tensile strength of 3900 PSI per ASTM D638.
- **Mira-Therm2 PE** is a non-toxic copolymer polyethylene coating applied to a thickness of 1/16". Mira-Therm2 PE contains U.V. light stabilizers, anti-microbial additives and color pigments. Mira-Therm2 PE contains no orthophthalates or other banned substances. Mira-Therm2 PE is a proprietary brand of PE coating. Materials are tested in accordance with ASTM D-638, ASTM D-412, ASTM D-2240 and ASTM D-1004. Mira-Therm2 PE meets the FMVS 302 flammability rating, the requirements of California State Law and the 2008 CPSI Act.
- **pipe sized tube** is 1010 hot rolled, **Flo-Coat**, galvanized pipe manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8.
- **schedule 40 galvanized** pipe consists of a hot dip process of coating the pipe inside and out with not less than 1.6 ounces per square foot with an average of 1.8 ounces per square foot. Schedule 40 pipe conforms to ASTM standards A-53.
- **1" pipe** is **GATOR GRIP** embossed 14 ga., **1" pipe sized tube** (1.315" OD; approx. 1-5/16" OD.)
- **1" pipe, 10 ga.** is 10 ga., **1" pipe sized tube** (1.315" OD; approx. 1-5/16" OD.)
- **1" pipe, 12 ga.** is 12 ga., **1" pipe sized tube** (1.315" OD; approx. 1-5/16" OD.)

- **1-1/4" pipe** is 13 ga., **1-1/4" pipe sized tube** (1.660" OD; approx. 1-11/16" OD.)
- **1-1/4" pipe, 10 ga.** is 10 ga., **1-1/4" pipe sized tube** (1.660" OD; approx. 1-11/16" OD.)
- **2" pipe** is 12 ga., **2" pipe sized tube** (2.375" OD; approx. 2-3/8" OD.)
- **2" Sch 40 pipe** is **2" schedule 40 galvanized pipe** (2.375" OD; approx. 2-3/8" OD.)
- **plastic pipe plugs** are injection molded polypropylene containing U.V. light stabilizers.
- **Rockite (R)** (Rotational Molded Polyethylene) is a low density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins are tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D-638, D-790 and D-746. Resin's properties exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness of molded components is 3/16" to 1/4".
- **round tube** is fabricated of 1010 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **3-1/2" aluminum tube** is a 3.5" O.D. (.125 wall) aluminum post that receives a five stage oxidation wash prior to painting. This 6005-T5 alloy and temper extruded aluminum tube conforms to ASTM-B-221 and QQ-A-200/8 with yield strength of 35,000 p.s.i. and tensile strength of 38,000 p.s.i.
- **5" aluminum tube** is a 5" O.D. (.125 wall) aluminum post that receives a five stage oxidation wash prior to painting. This 6005-T5 alloy and temper extruded aluminum tube conforms to ASTM-B-221 and QQ-A-200/8 with yield strength of 35,000 p.s.i. and tensile strength of 38,000 p.s.i.
- **3/4" x 1" oval tube** is 15 ga. wall. It is fabricated of 1008 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **1" tube** is 1" OD, 15 ga. fluted **round tube**. It conforms to ASTM A-500.

- **3-1/2" tube** is 3-1/2" OD, 13 ga. **round tube**. It conforms to ASTM A-500.

- **4-1/2" tube** is 4-1/2" OD, 7 ga. **round tube**. It conforms to ASTM A-500.

- **5" tube** is 5" OD, 13 ga. **round tube**. It conforms to ASTM A-500.

- **5" tube, 11 ga.** is 5" OD, 11 ga. **round tube**. It conforms to ASTM A-500.

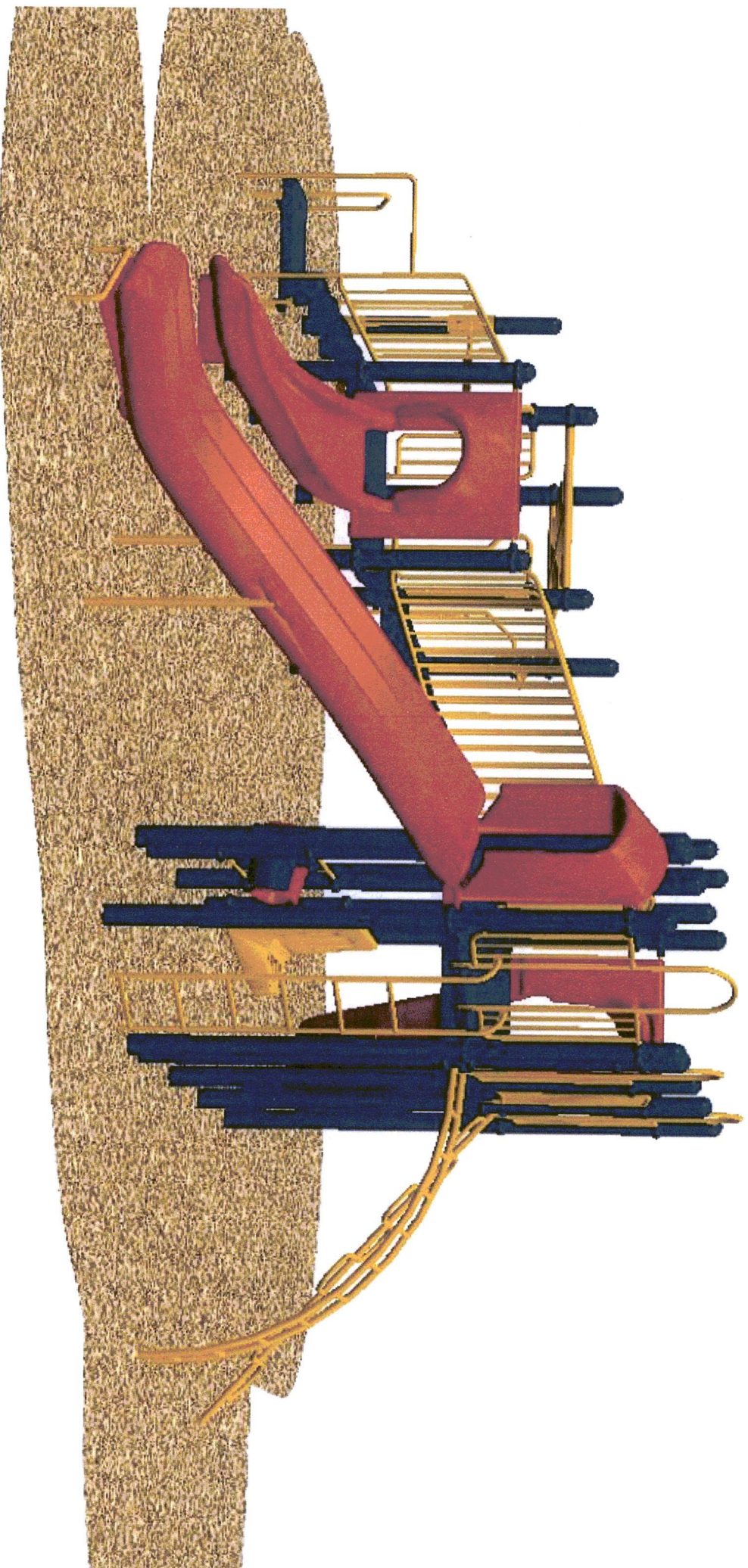
- **welded** refers to welds that are made by certified welders, tested in accordance with AWS D1.1-94, structural welding code specifications for steel. Welds conform to AWS A5.17 ASME SFA-5.17 EML3K and AWS A-5.18ER70S-3 ASME SFA-5.18 ER70s-3 LE332- C and LE-559-L.

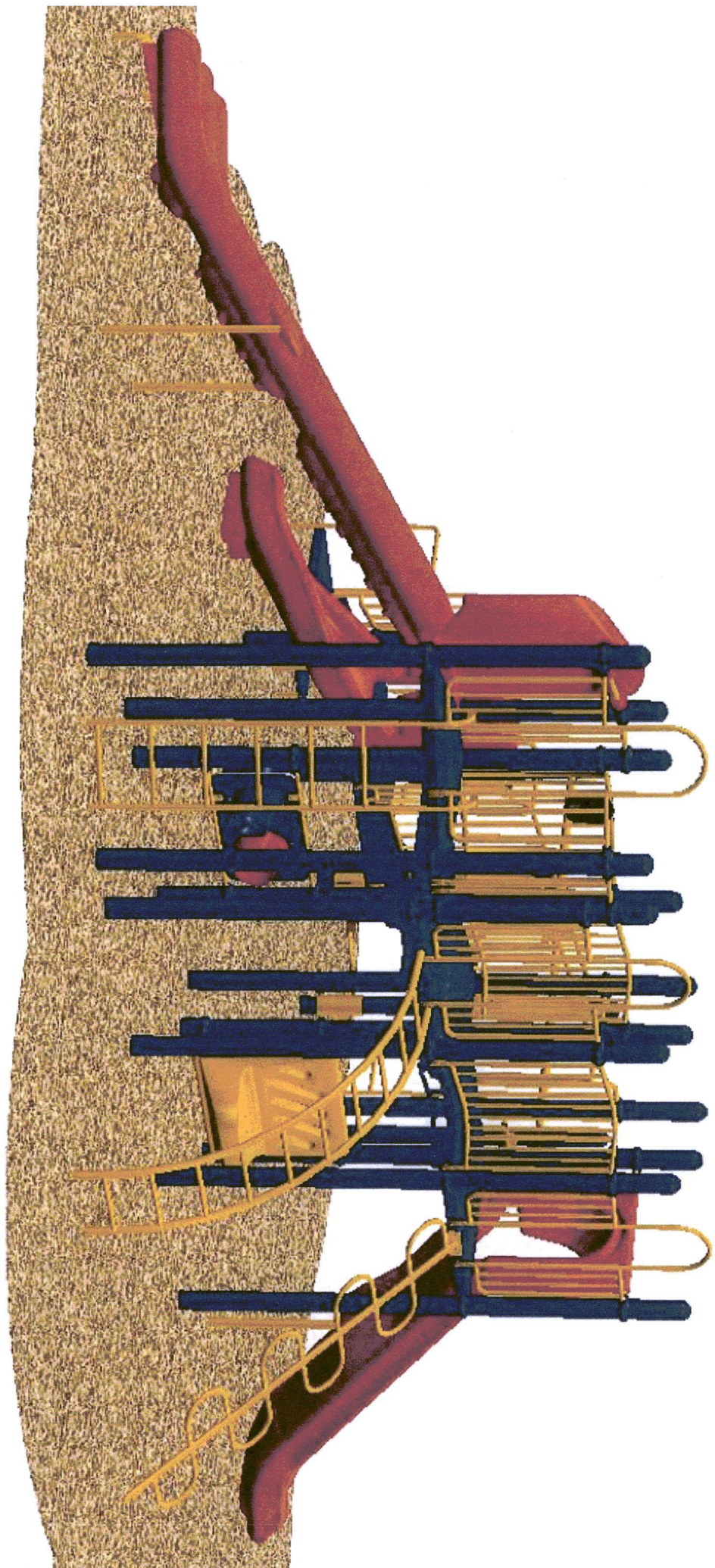
- **Specification Policy:** Specifications were current at the time of publication. Miracle Recreation Equipment Company has a policy of ongoing product improvement and therefore reserves the right to modify specifications or discontinue products without notice.

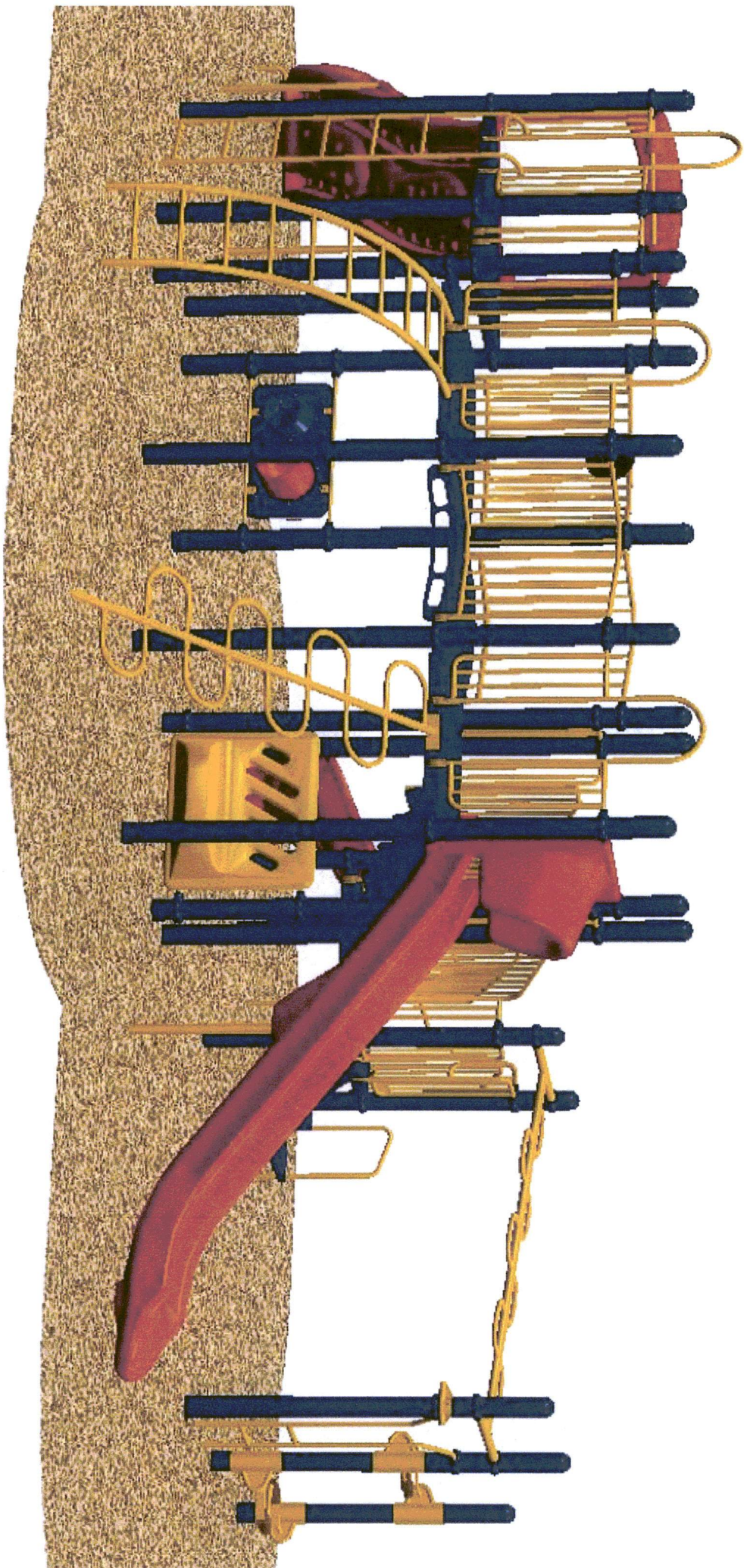


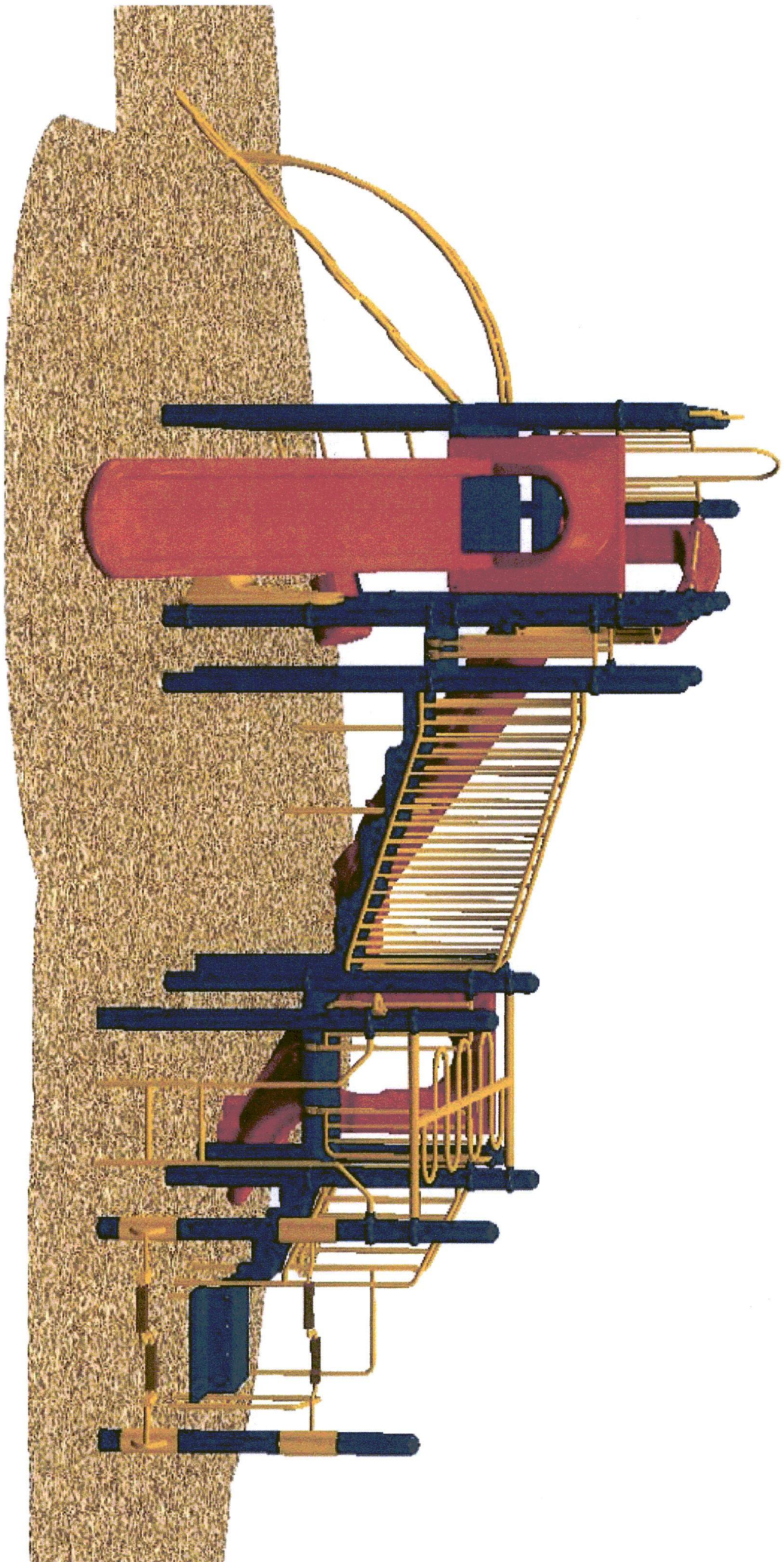
AN ENERGY ABSORBING PROTECTIVE SURFACE IS REQUIRED UNDER & AROUND ALL PLAY SYSTEMS

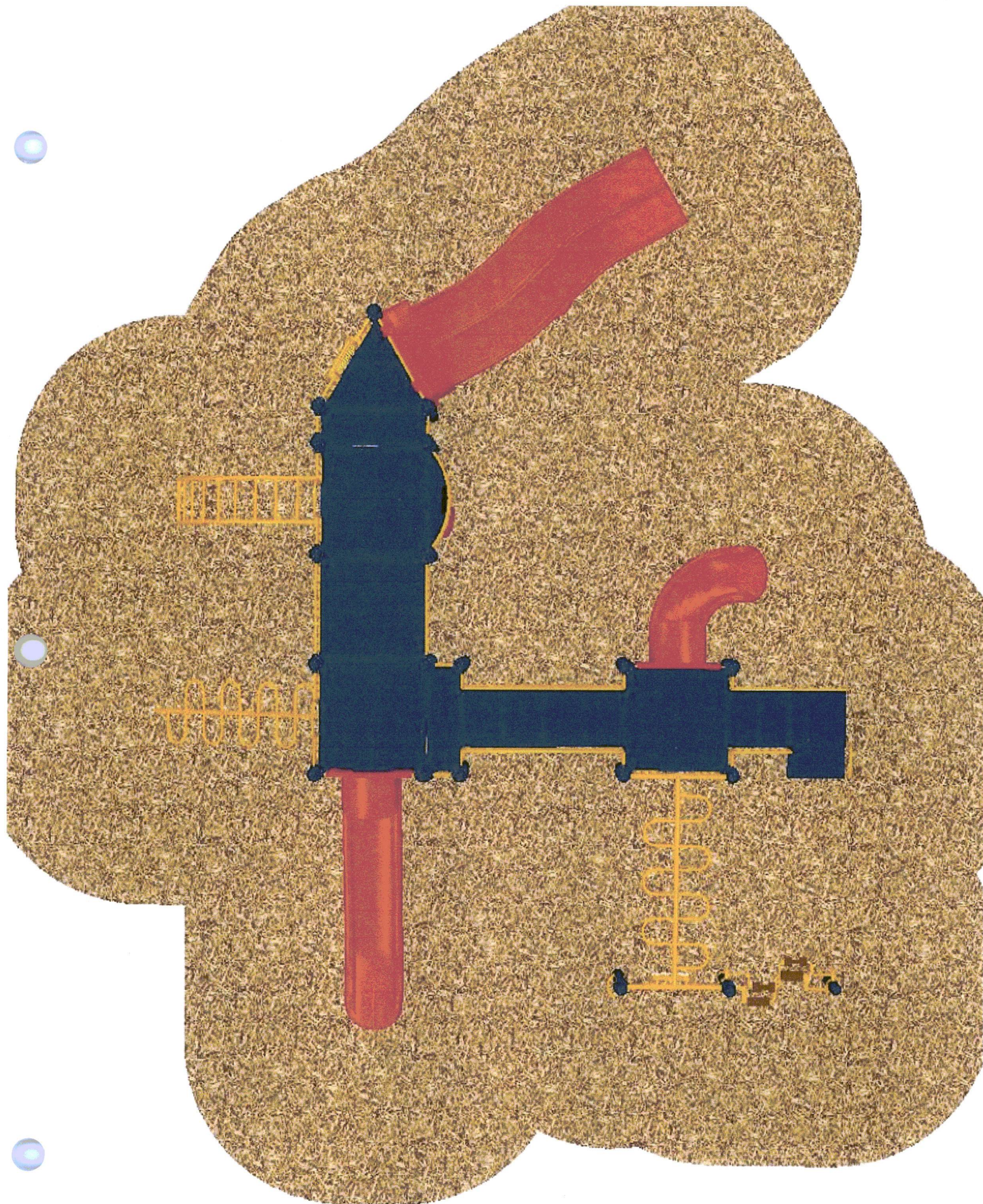












• GENERAL SPECIFICATIONS

SAFETY STANDARDS & GUIDELINES All public playground equipment supplied shall meet all applicable provisions of the current "Handbook for Public Playground Safety" published by the Consumer Product Safety Commission (CPSC), and of ASTM F1487-01 "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," published by the American Society for Testing and Materials (ASTM). Products bearing the certification seal of the International Play Equipment Manufacturers Association (IPEMA) have received written validation of compliance with ASTM F1487-01.

TRADEMARKS Aquarius (R), Big Kahuna (R), Big Timber (R), Bongo (TM), Boulder Ridge (R), Bug Bites (R), Camel Back (TM), Center Stage (R), Chameleon (TM), Coil Curler (TM), Connexion (R), Dupli-Gator (R), Flex Jet (R), Flippo (TM), Flippopotamus (R), Fun Fone (TM), Fun Tunnel (R), Funnel Tunnel (TM), Funshades (TM), Gator Grip (R), Gemini (TM), Gravity (TM), Grizz-Lee Bear (R), Groove (TM), Groove II (R) Slide, Hang-A-Round (R), Interaxion (TM), JAX (R), Kidrox (R), Kids' Choice (R), Kids' Perch (TM), Legacy Cantilever (R), Legacy Contempo (R), Legacy Heritage (R), Libra (R), Linkz (TM), Loopz (TM), Mega Tower (R), Miracle (R), Miracle Recreation (R), MiracleTech (R), Mira-Cote (R), Mira-Lam (TM), Mira-Lene (TM), Mira-Therm2 (TM), Mogul (TM), Mountain Trail (R), N-Dure Cycle (R), Nexus (R), Observation Deck (R), Offspring (TM), OrbX (R), ParkWatch (TM), Pegasus (R), Perma-Guard (TM), Perseus (TM), Physics (R), Play Cover (R), Play Terrain (R), Power Pedaler (TM), Pull Up!Lift (R), Rainbow Bend (TM), Reflex (R), Relay Racer (R), Rock-ite (R), Rodeo Rocky (TM), Schnozz Womp (TM), Serpent Trek (TM), SiteBrite (TM), Sneak-A-View (TM), SonicScreen (R), Spray Stations (R), Sun Sparkle (TM), Surfer (R), Tensile Tough (TM), Tensile Tower (TM), Thunder Tunnel (TM), Timber Topper (TM), Toboggan (TM), Toddlers' Choice (R), Tots' Choice (R), Tots' Choice (R) Expansion, Tots' Choice (TM) for Toddlers, Trim Timber (R), Triple Play (TM), Typhoon (TM), Versalok (R), View Groove (TM), Wavy Waffle Wall Walker (TM), Webscapes (R), Whirlwind (TM), Xcalator (R), and X-Cavator (TM) are trademarks of Miracle Recreation Equipment Company. Tornado (TM), Multi-Pondo (TM), and Pirouette (TM) are trademarks of HAGS (TM). Miracle and HAGS are divisions of PlayPower, Inc. PlayPower (R) is a trademark of PlayPower, Inc.

QUALITY SYSTEM CERTIFICATION The manufacturer's quality system is certified to ISO 9001 since December 1998.

PRODUCT CHANGES At Miracle Recreation Equipment Company, we strive for the utmost in quality and safety in our entire product line. Therefore, in order to honor this commitment to you, our customers, we reserve the right to make changes on any product released and/or published in our annual catalog and other promotional or technical literature.

WARRANTY

Buyer agrees that products sold by Miracle Recreation Equipment Company carry only the following warranties:

1. LIMITED WARRANTY FOR AS LONG AS YOU OWN THE PRODUCT against structural failure due to corrosion or defects in materials and workmanship on aluminum deck posts, steel deck posts, the VersaLok (R) fastening system and associated fastening hardware.

2. LIMITED FIFTEEN (15) YEAR WARRANTY against structural failure due to corrosion or defects in materials and workmanship on steel support legs and Mira-Therm2 (TM) 2 on MEGA TOWER (R), TOTS' CHOICE (R), KIDS' CHOICE (R), CENTER STAGE (R), NEXUS (R) and Boulder Ridge (R) Rock Wall; on playsystem steel components including railings, rungs, and rigid climbers; and Rockite (R).

3. LIMITED FIFTEEN (15) YEAR WARRANTY against structural failure due to corrosion or defects in materials and workmanship on all Play Cover (R) steel frames.

4. **LIMITED TEN (10) YEAR WARRANTY** on Play Terrain (R) Rubber Mulch safety surfacing against total color loss and attenuation performance. Please contact your local representative for more information.

5. **LIMITED EIGHT (8) YEAR WARRANTY** on Play Terrain (R) Synthetic Turf safety surfacing for attenuation performance and appearance. Please contact your local representative for more information.

6. **LIMITED EIGHT (8) YEAR WARRANTY** against rot, UV deterioration and defects in materials and workmanship on all Play Cover (R) fabric (NOTE EXCEPTION - shades of red carry LIMITED THREE (3) YEAR WARRANTY).

7. **LIMITED FIVE (5) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Kidrox (R) Climbing Rocks.

8. **LIMITED FIVE (5) YEAR WARRANTY** against degradation of design loading capabilities on all Webscapes (R) Net Climbers and Nexus (R) Nets (NOTE EXCEPTION - Webscapes (R) Net Climbers and Nexus (R) Nets carry a LIMITED ONE (1) YEAR WARRANTY against defects in materials and workmanship).

9. **LIMITED THREE (3) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Trim Timbers (TM).

10. **LIMITED ONE (1) YEAR WARRANTY** against failure due to defects in materials or workmanship on Slashproof Swing Seats and 360 degree Bucket Tot Seats for Swings.

11. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on the following products and components: TODDLERS' CHOICE (R) main support materials and decks; pool slide support structures, stairways, landings and railings; and bleachers.

12. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on all MiracleTech (R) Security products, including ParkWatch (TM), SonicScreen (R) and SiteBrite (TM).

13. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship for all products and components that are not specifically listed above, including, without limitation, all moving parts, such as swing hangers, swivels, chains, whirls, trolleys and flexible climbers.

BUYER'S REMEDY: If any products prove defective or non-conforming under normal use and within the above-prescribed warranty periods, Buyer must promptly notify Miracle in writing at 878 E. Hwy 60, Monett, MO 65708 USA. Miracle will within a reasonable time and in its sole discretion repair or replace such defective or non-conforming product by providing replacement products or part(s) free of charge to the site. Miracle's limited warranties do not cover the cost of labor to remove defective or non-conforming part(s) or to install repaired or replacement part(s).

All warranty periods begin on the date of Miracle's invoice. Repaired and/or replacement part(s) are warranted only for the balance of the original limited warranty. All warranties extend only to the original Buyer/end user of products from Miracle or Miracle's authorized reseller and are not transferable.

These limited warranties apply only to Miracle products that are erected and installed in conformance with Miracle's installation instructions, and that are maintained and inspected in conformance with Miracle's maintenance and operational instructions. These limited warranties specifically do not cover Miracle products: that have been modified, altered, or misused; that have not been used as designed or intended; to which non-Miracle parts have been added or substituted; or that have been damaged due to excessive wear and tear, vandalism, abnormal use, abuse, negligence, extraordinary weather or acts of God. MiracleTech Security (R) systems limited warranties do not cover products serviced or repaired by unauthorized service providers. These limited warranties do not protect against color fade, except for PlayCover (R) as noted above. Buyer, by acceptance and use of these limited warranties, waives any rights it would otherwise have to claim or assert that this limited warranty fails of its essential purpose. Buyer agrees that venue for any court action to enforce these limited warranties shall be in Barry or Greene Counties in the State of Missouri.

EXCEPT AS EXPRESSLY WARRANTED HEREIN, MIRACLE EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THOSE ARISING BY STATUTE OR OTHERWISE IN LAW OR FROM COURSE OF DEALING OR USAGE OF TRADE. IN NO EVENT SHALL MIRACLE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION, LOSS OF INFORMATION, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES OR OTHER PECUNIARY LOSS).

Consult Miracle's "Glossary of Technical Data for Materials, Processes and Finishes" for specifications of items listed in bold type.

- **KIDS' CHOICE MIRA-THERM2 DECKS:** The deck models in the 714-50X-9 series shall consist of a (3) sided equilateral triangle deck: Model # 714-501-9, with a deck top surface area of 7 sq. ft. (1008 sq. in.); a (4) sided square deck: Model # 714-502-9, with a deck top surface area of 16 sq. ft. (2304 sq. in.); (4) sided (3) opening half hex decks: Model #s 714-503-9 and 714-504-9, with a deck top surface area of 21 sq. ft. (3024 sq. in.); (4) sided (6) opening rectangular decks: Model #s 714-508-9, 714-509-9 and 714-510-9, with a deck top surface area of 32 sq. ft. (4608 sq. in.); a (5) sided pentagon deck: Model # 714-512-9, with a deck top surface area of 23.8 sq. ft. (3427 sq. in.); an (8) sided octagon deck: Model # 714-519-9, with a deck top surface area of 60 sq. ft. (8640 sq. in.); (4) sided (6) opening parallelogram decks: Model #s 714-505-9, 714-506-9 and 714-507-9, with a deck top surface area of 28 sq. ft. (4032 sq. in.); and a (7) sided heptagon deck: Model # 714-517-9, with a deck top surface area of 55 sq. ft. (7,920 sq. in.).

Model # 714-511-9 shall be an isosceles triangle split deck (single section) designed to serve as a step platform for lower deck heights: 18" or lower for 2-5 year olds, and 30" or lower for 5-12 year olds. All other Model # 714-511-X9 split decks shall feature two triangular deck sections which shall be mounted between four posts at different heights so that a 6", 12", 18", or 24" (X) rise shall be formed along the hypotenuse between two posts. Models which rise greater than 6" shall contain a riser plate; models which rise greater than 12" shall also contain an arched enclosure assembly. The deck top surface area of split deck models shall be 8 sq. ft. each for both sections, or total 16 sq. ft. Riser plates shall be constructed of 11 ga. **A-60 Galvannealed** sheet; risers for 18" and 24" rises shall contain a rung and vertical supports of 1" **tube**, solid **welded**, all finished in **Mira-Cote**. The arch enclosure assembly accompanying models which rise 18" and 24" shall comprise top and bottom supports and an arched upright constructed of 1" **pipe**, drilled, formed and mashed, all solid **welded**, and vertical rungs of 1" **tube**, with **plastic pipe plugs** inserted in open ends, and finished in **Mira-Cote**. Decks shall be designed for maximum flexibility in height of deck surface, from 0" to 6'-6" (in 6" increments,) though 3', 5' and 6'-6" shall be considered standard heights. Decks shall be designed on a 48" center-to-center spacing on 5" deck posts, at equal or varied heights. All deck-to-post connections shall be made with a deck support clamp. All deck connections shall be made beneath deck with no exposed fasteners on deck perimeter. Decks with 8' wide open side shall be designed to attach to another deck with 8' wide open side at same deck height, or to a Model # 714-770-6 Flippopotamus Slide/Climber. All decks shall be constructed with folded 11 ga. steel sheet forming 3" tall sides. Decking sheets shall be perforated with a staggered pattern of 3/8" diameter holes (5/16" after dipping) at 5/8" apart center-to-center. The decking shall have 7 ga. by 2" flat steel braces and corner braces of 7 ga. steel. The entire assembly shall be solid **welded** prior to polyvinyl coating. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. All deck surfaces shall be coated in **Mira-Therm2** or **Mira-Therm2 PE**.

- **VERSADECK** shall be a 16" wide deck with enclosures. Versadeck may be in used in a variety of deck and/or transfer applications. Deck section shall be constructed with folded 11 ga. steel sheet forming 3" tall sides with 3/16" x 1-1/2" flat steel braces, all solid **welded**. Decking sheet shall be perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Deck shall measure 48" in length at 16" in width. Enclosure shall comprise two outer uprights and a top rail, all solid **welded**. Uprights and top rail shall be constructed of 1" **pipe**, **Gator Grip** and uprights shall have mashed ends for deck attachment. Enclosure shall measure 40" in length and 9-1/2" in width. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. Deck shall be finished in **Mira-Therm2**. Enclosure shall be finished in **Mira-Cote**.

- **KIDS' CHOICE POSTS: STEEL POSTS:** The steel posts each shall be constructed of **5" tube, 11 ga.** with a **5" round end cap** pressed into its top end. Post and end cap shall have a **Mira-Cote** finish.

- **MIRA-THERM2 RAMPS AND ARCHED BRIDGES** shall include level and inclined ramps and arched bridges between decks with open and spoked handrails and shall be designed as a means for traveling from one deck to another. The ramps shall be constructed of 11 ga. steel sheet perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center, with edges folded to form 3" tall walls, and braces of 1/4" x 1-1/2" flat, all solid **welded**. The arched bridge frame shall be 11 ga. steel sheet perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center, with edges folded to form 3" tall walls. Flat braces of 7 ga. steel shall measure 1/4" x 1-1/2". The entire assembly shall be solid **welded**. Each spoked handrail assembly shall consist of a top and bottom rail and uprights. The top and bottom rails and stubs shall be constructed of **1" pipe**. The uprights shall be constructed of **3/4" x 1" oval tube**. Handrail assemblies for Model # 714-704-9 and # 714-856-9 shall have bolting tabs on the bottom rail constructed of 7 ga. **G-90 galvanized** sheet. The entire assembly shall be solid **welded**. The assembly shall measure approximately 94-1/4" in length. Each open handrail assembly shall consist of a top, bottom, and middle rail constructed of **1" pipe**. The top and bottom rails shall be joined at the ends by sleeves constructed of **1" tube**. The middle rail shall be **welded** to the top rail. Handrail assemblies for Model # 714-704-59 and # 714-856-59 shall have bolting tabs on the bottom rail constructed 7 ga. **G-90 galvanized** sheet. The entire assembly shall be solid **welded**. The assembly shall measure approximately 94-1/4" in length. The stubs to be placed in the **Versalok Fasteners'** sockets shall be constructed of **1" pipe** and shall contain 3/8" aluminum inserts. TCX stubs shall be constructed of 1.315" pipe and contain 3/8" aluminum inserts. All hardware shall be **Fastener Style A**. All **Versalok Fasteners** for deck and component attachment shall be **aluminum alloy**. The enclosures, posts, bolting plate, and clamps shall have a **Mira-Cote** finish. The ramps and bridge shall have a **Mira-Therm2** or **Mira-Therm2 PE** finish.

- **ENCLOSURE ASSEMBLY** shall consist of enclosure rails and uprights. The enclosure rails shall be constructed of **1" pipe (except Tots' Choice models which shall be 1" tube)**, drilled, with **plastic pipe plugs** inserted in the open ends. The uprights shall be constructed of **3/4" x 1" oval tube (except Tots' Choice models which shall be 1" tube)**, mashed on both ends. The enclosure assemblies shall be solid **welded**. The enclosure assemblies shall have a **Mira-Cote** finish.

- **END LADDER** shall comprise two uprights with horizontal rungs solid **welded** between. Models with no footings shall also have a 41-1/2" (KC and TCX) or 37" (TC) long bottom rung comprised of **1" pipe**, solid **welded** to uprights. The rungs and uprights shall be constructed of **1" pipe**, formed. End ladder shall measure 104-1/4" x 37-1/4"; end ladder with 1' top rung shall measure 39-1/4" x 37-1/4"; end ladder with 2' top rung shall measure 51-1/4" x 37-1/4"; end ladder with 3' top rung shall measure 63-1/4" x 37-1/4". All **Versalok Fasteners** for deck and component attachment shall be **aluminum alloy**. All hardware shall be **Fastener Style A**. The **Versalok Fasteners** and ladders shall have a **Mira-Cote** finish.

- **CURVED CLIMBERS** shall be ground-to-deck climbers. The side rails shall be curved **1-1/2" pipe (except Tots' Choice models which shall be 1" pipe)** with blind fasteners inside top end with rungs constructed of **1" tube**, 18-1/2" long, mashed on ends and all **welded** construction. Dimensions shall be 22" wide with the span for Model # 714-942 and # 718-942 being 6'-7" and the span for Model # 714-967 and # 718-967 being 3'-6". The handhold assembly shall be die-formed and **welded 1" pipe**. Curved climber and handholds shall have a **Mira-Cote** finish.

- **INCLINED SPIDER CLIMBER** shall be designed for use as an entrance and exit from deck systems of various heights. The middle rail shall be bent **1-1/2" pipe** with rungs of **1" pipe**, mashed on ends and all **welded** construction. A 1/4" thick steel plate with two bolt holes shall be **welded** on end of climber. Dimensions shall be 30" wide with the span for Model # 714-778-4 being 5' and the span for Model # 714-778-6 being 7'-1". The enclosure assembly shall consist of top supports, a bottom support, and an arched upright, constructed of **1" pipe**, formed, mashed and punched, and vertical rungs constructed of **3/4" x 1" oval tube**. The enclosure assembly shall be solid **welded**. Open ends shall be closed by **plastic pipe plugs**. The assembly shall include **Versalok Fasteners** and **Fastener Style A** hardware. The climber, enclosures, and clamps shall have a **Mira-Cote** finish.

- **VERTICAL LADDER/LOOK-OUT LADDER** shall be designed for use as an entrance and exit for decks of various heights. Each assembly shall consist of side rails and rungs constructed of **1" pipe**, all solid **welded**. Models shall have threaded inserts in the ends of the side rails and an arch enclosure. The Kids' Choice enclosure assembly shall consist of top supports, a bottom support, and an arched upright constructed of **1" pipe**, formed, mashed and punched, and vertical infill of **3/4" x 1" oval tube** with mounting tabs of 7 ga. sheet, all solid **welded**. The Tots' Choice enclosure assembly shall comprise top supports and an arch upright of **1" pipe**, spoked infill of **1" tube** with mounting tabs of 7 ga. sheet, all solid **welded**. The ladders and enclosure assemblies shall have a **Mira-Cote** finish.
- **HORIZONTAL SPIDER LADDER** shall be available in horizontal and inclined configurations. The inclined spider ladder shall have a 1' incline. The center support rail shall be constructed of **2" pipe** (except Tots' Choice models which shall be **1" pipe**) and a series of alternating "U" loops shall be constructed of **1" pipe**. The spider ladder assembly shall be solid **welded**. The posts shall be constructed and finished in the same manner as deck posts (*The Kids' Choice system also offers an option of aluminum posts for this component.*) For models with optional end climbers, the end climber assembly shall be constructed of **1" pipe** (except Tots' Choice models which shall be **1" tube**), formed. The assembly shall be solid **welded**. For models with optional deck enclosures, the enclosure assemblies shall consist of enclosure rails and uprights. The enclosure rails shall be constructed of **1" pipe** (except Tots' Choice models which shall be **1" tube**), formed, mashed and punched. The uprights shall be constructed of **3/4" x 1" oval tube** (except Tots' Choice models which shall be **1" tube**), mashed on both ends. The enclosure assemblies shall be solid **welded**. Opening space to go from the deck to the climber shall be less than 14". Each assembly shall include **Versalok Fasteners** and **Fastener Style A** and **Fastener Style B** hardware. The ladder, end climber, and enclosure assemblies shall have a **Mira-Cote** finish.
- **HALF-PANELS** for below deck or freestanding installation shall feature two-color schemes, routed designs, and steering wheels, and when mounted at suggested heights, will permit wheelchair access. The Roller Racer models shall also feature an interactive ball game which users operate by turning a knob to raise and release enclosed balls into routed pathways (the balls then re-enter the lift mechanism). Half-panels shall be constructed of **Mira-Lene** with all corners rounded, measuring 36-1/2" x 15-1/2", except Calypso 2-Drum panel, which shall measure 36-1/2" x 20". Calypso 2-Drum panel shall also contain 2 rotational molded drums of low density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized sheet steel with a **Mira-Cote**. Rung brackets shall be constructed of **1" pipe** (except Tots' Choice models which shall be **1" tube**) with tabs of 11 ga. **A-60 Galvannealed** sheet, solid **welded**. The Roller Racer models shall be constructed as above and shall also have a clear polycarbonate cover fastened to enclose various contents. A black high density polyethylene gear handle mounted outside the cover shall turn on a bronze bushing to drive a 1/4" thick polyethylene gear behind the cover, which shall carry 1/2" steel balls and release them in routed channels. The steering wheel shall be constructed of a high density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693 (b), D-638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance, and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. Each assembly shall contain **Fastener Style A** hardware and **Versalok Fasteners**. Half-panels and steering wheels shall have molded-in color. Rung brackets and clamps shall have a **Mira-Cote** finish.
- **MIRA-THERM2 KID'S PERCH/KID'S PERCH WITH WHEEL** shall each consist of a curved deck extension/overhang and an enclosure which provide for imaginative play. Model # 714-992-69 shall feature a steering wheel attached to the enclosure. Model # 714-992-69A shall feature a steering wheel attached to enclosure crossbars to be more easily grasped by wheelchair-bound users. The platform shall be constructed with 11 ga. steel sheet perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. The frame shall be constructed by folding edges to form 3" tall walls and shall be supported by solid **welded** supports of 1/4" x 1-1/2" flat steel. The platform shall be approximately 40" long with a radius of 9-7/16". The enclosure shall consist of enclosure rails, uprights, and a center stub which shall support the bottom rail. The enclosure rails and center stub shall be constructed of **1" pipe**. The uprights shall be constructed of **3/4" x 1" oval tube**. The crossbars for Model # 714-992-69A shall be constructed of **1" tube**. The entire assembly shall be solid **welded**. The steering wheel mounting bracket (if applicable) shall be 11 ga. **A-60 Galvannealed** sheet steel **welded** to the wall enclosure. The steering wheel (if applicable) shall be constructed of a high-density blow-molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection-molded polypropylene which shall contain U.V. light stabilizers. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The platform shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The enclosure and clamps shall have a **Mira-Cote** finish.

- **ROCKITE BENCH PANEL** shall permit users to sit for rest, play, or group activities. Models may be installed so that the bench seat will face either the area beneath the deck or the area outside the deck system, as well as in freestanding individual or clustered arrangements. The panel shall contain view grooves for watching children at play. The bench panel shall be constructed of **Rockite** measuring 36" high by 40" wide by 2-1/2" thick (approximately 20" to peak) with all corners rounded, containing rotomolded flanges for field attachment of support rungs. One side of panel shall contain a 14" deep seat. Rungs shall be 1" **pipe** approximately 41" long. All **Versalok Fasteners** for deck and component attachment shall be **aluminum alloy**. All hardware shall be **Fastener Style A**. The rungs and clamps shall have a **Mira-Cote** finish. The panel shall have color molded in.

- **MIRA-THERM2 SQUARE TRANSFER POINTS** shall be designed to assist disabled users gain access to and egress from a deck system. The stair assembly shall be constructed of 11 ga. steel stringers solid **welded** to 11 ga. steel sheet decking that is perforated in a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Approximate dimensions of stair assembly shall be 26" overall width, 14" deep step tread and 8" high step rise. The 26" square (approximate) transfer point shall be constructed of 11 ga. steel sheet folded to form approximately 3" high sidewalls. The decking shall be perforated as described above. It shall be reinforced with cross braces of 3/16" x 2" HR flat solid **welded**. The bottom step shall be constructed of 11 ga. steel sheet (with folded edges) perforated as described above. The step shall be approximately 26" wide by 14" deep by 6-1/2" high. Kids' Choice deck enclosures shall be constructed of formed 1" **pipe**, including a **welded** upright of the same material. Tots' Choice deck enclosures shall be constructed of 1" **pipe** and a formed and **welded** upright of 1" **tube**. Each deck enclosure assembly shall be drilled for field assembly of a stair handrail, and shall have its bottom end mashed and punched for field assembly to deck. Stair handrail assemblies shall be **welded** upper and lower handrails of formed 1" **pipe**. Closed handrails shall contain vertical uprights of 3/4" x 1" **oval tube welded** within. Swaged handrail extensions for field assembly to handrails shall be constructed of 1" **pipe**. A transfer deck handrail constructed of formed 1" **pipe** shall be field assembled to one handrail newel upright and transfer point deck edge. Models designed for assembly to 5' and 6' or 6'-6" decks shall contain handrail sleeve supports constructed of 1-1/4" **pipe**, 10 ga. The "U"-shaped transfer step handrail shall be formed 1" **pipe**, drilled for field assembly to transfer point deck and bottom step. Its apex shall be 36-1/8" from finished grade. The rung leg shall be 1" **pipe** with ends mashed and punched for field assembly to bottom step. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The stairs, bottom step, and transfer point deck shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The deck enclosures, handrails, extensions, sleeves, leg and clamps shall be finished in **Mira-Cote**.

- **DUPLI-GATOR SLIDE/CLIMBER** may be utilized in either of two ways: as a curving, two-bedway side-by-side slide or as a challenging climber shaped like a partially submerged alligator. The climber model shall contain an arched enclosure and the slide model shall include a sit-down canopy for added safety. The one-piece slide/climber shall be constructed of double-wall **Rockite** with each wall being 1/4" to 3/8" thick. The body shall measure approximately 11' long by 3'-4" wide with a 15-1/2" offset at opposite end. Total thickness of the body shall be approximately 14-1/2". Both mogul slide bedways with smooth curves shall measure approximately 16-5/8" wide by 6" deep by 11' long. The canopy for slide models shall be constructed of double-wall **Rockite** with threaded fasteners incorporated for assembly. The canopy shall have an inside width of 39" and an outside width of 44" and shall be slanted at 37 degree. It shall be field assembled to posts via clamps and a rung of 1" **pipe**. The arch enclosure for Kids' Choice climber model shall consist of top and bottom supports and an arched upright of 1" **pipe**, formed, mashed and punched, and vertical rungs of 3/4" x 1" **oval tube**, all solid **welded**. The arch enclosure for Tots' Choice climber model shall consist of two top supports, an arched upright, and infill to be constructed of 1" **tube**, formed, mashed, punched and solid **welded**. The Tots' Choice climber model shall also employ a fill block, constructed of 11 ga. sheet formed and solid **welded**, measuring 3-1/2" x 42" x 3", to field assemble the climber to the deck. The front leg shall be constructed of 1" **pipe**, drilled and formed. The front leg bracket shall be drilled flat 1/2" x 1-1/2" and 3/8" HR round, solid **welded**. The middle legs shall be constructed of formed and punched 1-1/2" **pipe**, mashed at top end for field assembly to castings and slide/climber. Leg castings shall be constructed of SAE 355 **aluminum alloy** measuring approximately 5" x 14" x 2". The assembly shall contain **Versalok Fasteners** and hardware shall be **Fastener Style A**. The slide/climber and canopy shall have color molded in. The enclosures, canopy rung, legs, front leg, leg castings, bracket and clamps shall have a **Mira-Cote** finish. The fill block shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**.

- **GROOVE II SLIDES** shall feature a hooded canopy and a streamline slide design. Groove II is designed to exit from 4', 5', 6'-6" or 8' decks. The canopy panel and one-piece slide shall be constructed of double wall **Rockite**. The slide shall have 6" high side rails, an overall width of 25" an 18" wide sliding surface and approximate 7' (4' decks) bedway length, 9' (5' decks) bedway length, 12' (6'-6" decks) bedway length and 15' (8' decks) bedway length. The canopy panel shall be field mounted to deck and post clamps via a 41-1/2" long rung constructed of 1" **pipe**. The leg shall be 2" **pipe**, **welded** to an 11 ga. **A-60 Galvannealed** mounting bracket. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rung, legs and clamps shall have a **Mira-Cote** finish. The **Rockite** slide and canopy shall have molded-in color.

- **ROCKITE "L" SLIDE** shall be an open bedway slide which shall exit to the right from a 3' deck and shall include a canopy panel. The one-piece slide and the canopy panel shall be constructed of double wall **Rockite**. The slide shall have 6-1/4" high side rails, an overall width of 25-5/8", and an 18" wide sliding surface. The front leg shall be constructed of 1-1/2" **tube**, solid **welded** to a 7 ga. **A-60 Galvannealed** mounting bracket. A top rail used for mounting the canopy between deck posts shall be 1" **pipe**. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The top rail, front leg, and clamps shall be finished in **Mira-Cote**. The **Rockite** slide and canopy shall have color molded in.

- **MIRA-THERM2 ATA STAIRS BETWEEN DECKS** shall be stair assemblies, with spoked or open handrails, designed to connect decks of different heights. The steps shall be constructed of 7 ga. steel stringers with treads constructed of 11 ga. steel sheet perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center, solid **welded**, with polyvinyl coating. The braces shall be constructed of 11 ga. black. The spoked handrails shall consist of a top and bottom rail and newel post, all of 1" **pipe**, and uprights constructed of 3/4" x 1" **oval tube**, all solid **welded**, with **plastic pipe plugs** inserted in open ends. Top rails shall have 3/8" aluminum inserts. The open handrails shall consist of a top and bottom rail and newel post of 1" **pipe**, all solid **welded**, with **plastic pipe plugs** inserted in open ends. Top rails shall have 3/8" aluminum inserts. The top deck enclosure shall consist of enclosure rails and an upright, both to be constructed of 1" **pipe**, drilled and solid **welded**, with one end of upright mashed for field attachment to deck. The bottom deck enclosure shall consist of horizontal rails and an upright of 1" **pipe**, drilled and solid **welded**, and a spoke upright of 3/4" x 1" **oval tube**. The upright shall be mashed on one end for field attachment to deck. Inserted in open ends will be **plastic pipe plugs**. The assembly shall include **Fastener Style A** hardware and **Versalok Fasteners**. The step assemblies shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The deck enclosures, handrails, and clamps shall be finished in **Mira-Cote**.

- **CRUNCH STATION** shall be a semi-circular horizontal rung assembly designed for mounting on a 5" steel deck post with the rung set 50" - 80" from finished grade. The Crunch Station shall enable the user to perform leg lifts and crunches in a standing position. It shall be constructed of a cut and formed 1" **pipe** segment solid **welded** to support and bolt plates of 7 ga. galvanized steel. All hardware shall be **Fastener Style A**. The assembly shall have a **Mira-Cote** finish.

- **POWER PEDALER (KIDS' CHOICE)** models shall be dynamic levers, mounted between the post of a deck assembly and a freestanding post, which users operate with arms, legs or both. Model # 714-823 may be mounted to any Kids' Choice deck height 5' or greater. Model # 714-823-1 may be mounted to any Kids' Choice deck height 4' or greater. The arms-operated lever shall be constructed of 1" **tube** and the legs-operated lever shall be constructed of 1" **pipe** solid **welded** with 2" **square tube** and 12 ga. end caps. Both levers shall contain two hand or foot grips constructed of high density polyethylene mechanically fastened to each. The support weldment sleeves shall be constructed of 5" **Sch 40 pipe** with U-shaped rails of 1" **pipe**, 12 ga. and mounting plate of 7 ga. galvanized sheet, all solid **welded**. The post for Model # 714-823 and # 714-823-1 shall be constructed of 5" **tube**, 11 ga. The post for Model # 714-823-3 and # 714-823-13 shall be constructed of 5" **tube**. The post shall have a 5" **round end cap** pressed into its top end. Post length shall be 106" before cap. The assembly shall contain **Fastener Style A** hardware. The levers, post, and support weldments shall be finished in **Mira-Cote**. The hand or foot grips shall have color molded in.

Technical Data for Processes and Finishes of the Highlighted Items

- **aluminum alloy** conforms to the following: ASTM 356, ANSI 322, Chrysler MS 2417 and General Motors GM 4323-M. Parts or components constructed of aluminum alloy are either *sand cast* or *die cast*. *Sand cast aluminum alloy* is 319 with tensile strength of 27,000 p.s.i. and yield strength of 18,000 p.s.i. *Die cast aluminum alloy* is 383.1 with tensile strength of 45,000 p.s.i. and yield strength of 22,000 p.s.i.

- **Mira-Therm2 coated chain** is a **welded** chain with links sufficiently wide to allow them to pass one another freely, eliminating the tendency to kink. The links are low carbon zinc plated steel with a polyvinyl chloride coating.

- **Versalok Fasteners (R)** are cast **aluminum alloy**. Each fastener consists of two die cast **aluminum alloy** "half ring" pieces, which were designed to fasten onto the round posts by use of a male/female interlock. For 3-1/2" post, outside dimension of the completed fastener (joined "half-rings") is 5". For 5" post, outside dimension of the completed fastener is 6-1/2". *Rungs and components* connect to clamps on posts by means of die cast **aluminum alloy**, two-piece socket receptors which may be assembled to a previously-installed clamp ring and secured to the clamp and component by set screws (and tek screws in some cases). *Decks* connect to clamps on posts by means of die cast **aluminum alloy**, one-piece deck support castings. The clamp assembly and socket receptor have a **Mira-Cote** finish. Kids' Choice components with **2" pipe** mounting points attach to 5" posts using **aluminum alloy** sand cast header supports.

- **5" round end cap** is die cast **aluminum alloy**.

- **Fastener Style A** is a corrosion resistant, 18-8, *stainless steel*, vandal resistant fastener.

- **Fastener Style B** is an all aluminum blind rivet or aluminum drive rivet with *stainless steel* pin. Both are corrosion resistant and vandal resistant fasteners.

- **Flo-Coat (R)** is a patented triple coat corrosion protection process of Allied Tube and Conduit's Mechanical Tube Division, wherein steel pipe or tube first receives a hot-dipped uniform zinc galvanized coating followed by a conversion coating followed by a clear, high performance organic polymer coating. The interior of the tube has an 81% minimum zinc rich primer applied, capable of providing excellent rust protection and fabrication characteristics. All coatings are applied inside and out after welding. Flo-Coat processed tube exceeds the test results of galvanized Sch 40 pipe in salt spray tests conducted in accordance with ASTM B-117. The term "Flo-Coat" is a registered trademark of Allied Tube and Conduit, used with permission.

- **GATOR GRIP (TM)** is a three dimensional textured pattern exclusive to Miracle, embossed in steel to a depth of .014" to .017".

- **G-90 galvanized** indicates that a coating of .90 ounces of zinc per square foot has been applied on each surface side.

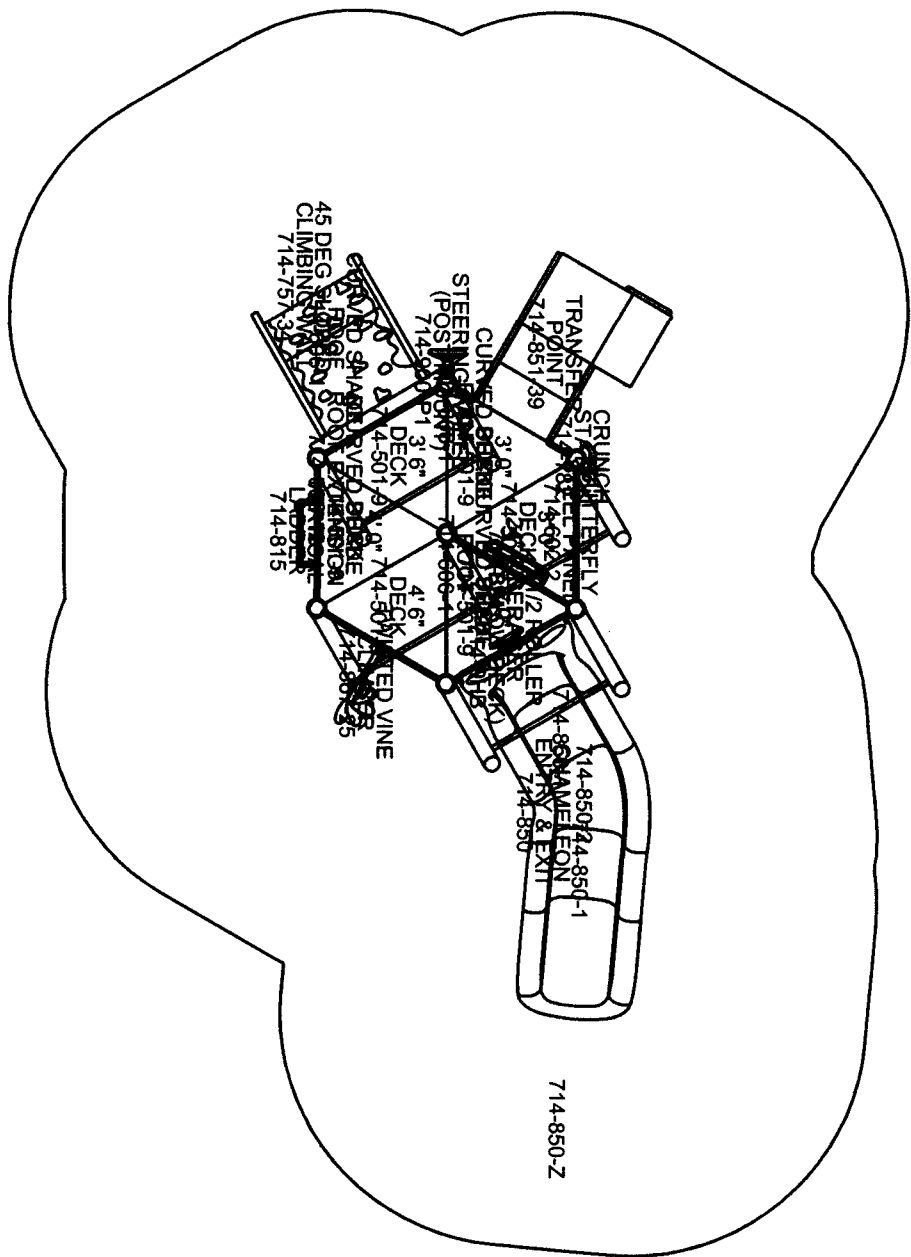
- **A-60 Galvannealed** indicates that a coating of .60 ounces of zinc per square foot alloyed with substrate steel has been applied on each surface side.

- **Mira-Cote (TM)** is a Super Durable formulation of a polyester powder coating finish that is applied to a thickness of 3-5 mil. This finish gives metal parts long term protection from chipping, fading and peeling. Miracle's finishing system washes the metal parts with detergent and etches the metal for optimum adhesion. The part is then rinsed clean with water. Next the part is coated with a non-chromic sealer and dried. The Mira-Cote powder is then applied electrostatically to the metal part. The metal parts are then baked at a high temperature to fuse a hard, smooth durable finish to the metal. Mira-Cote has an impact value of 160 in. lbs., flexibility value of 180 degree-1/4" mandrel, shore hardness value H and a crosshatch adhesion of 100%. Mira-Cote is tested in accordance with ASTM D-792, D-523, D-2794, D-1737, D-3363, D-3359 (b), B117 and D-2247. Mira-Cote will withstand over a 1,500 hours of salt spray exposure and 1,500 hours of weatherometer testing with minimal loss of gloss and color.

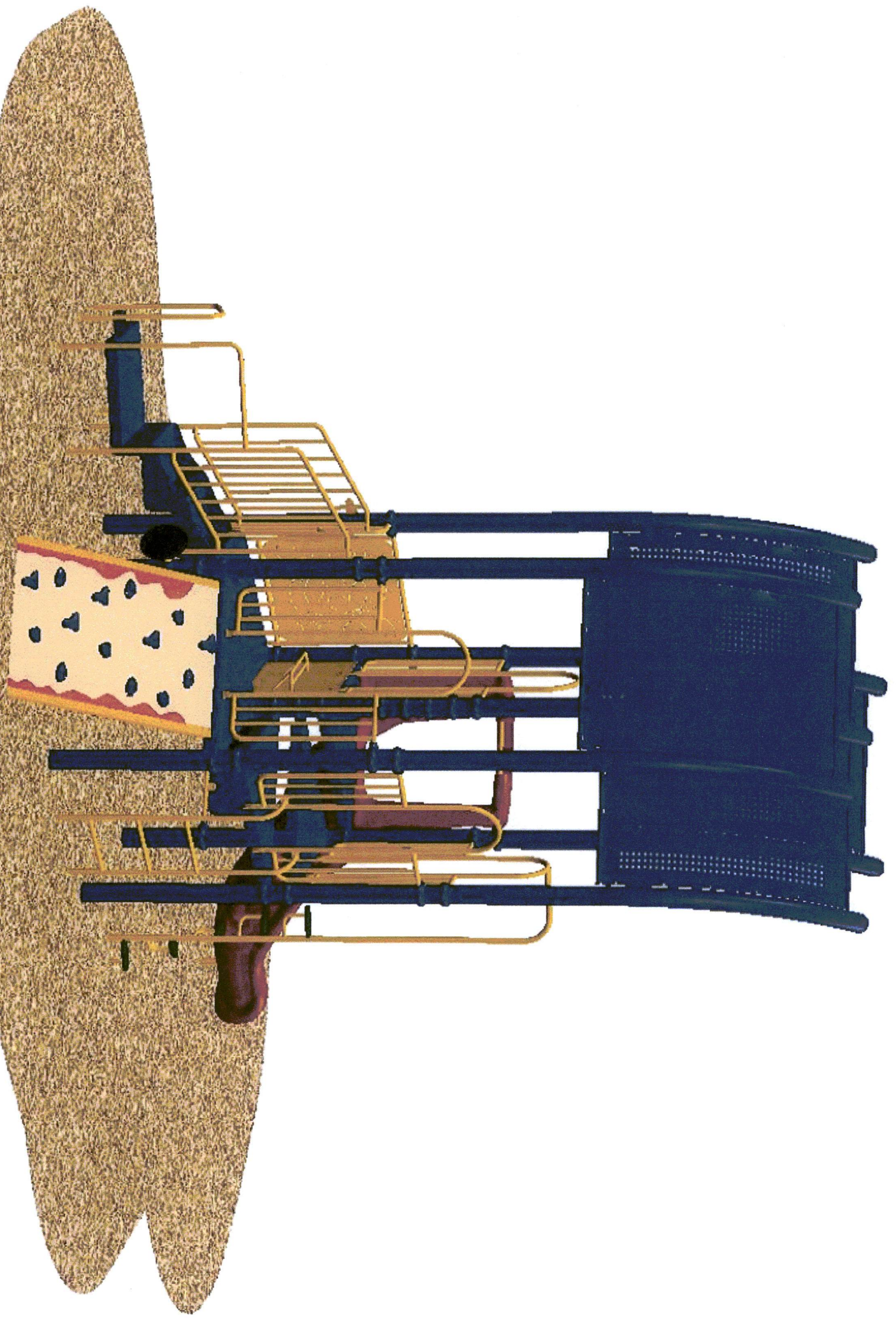
- **Mira-Lene (TM)** is compression-molded, 3/4" thick, high density polyethylene that has been specifically formulated for optimum U.V. stability and color retention. Compression-molded products have a density of .952 g/cm3 per ASTM D1505 and tensile strength of 3900 PSI per ASTM D638.

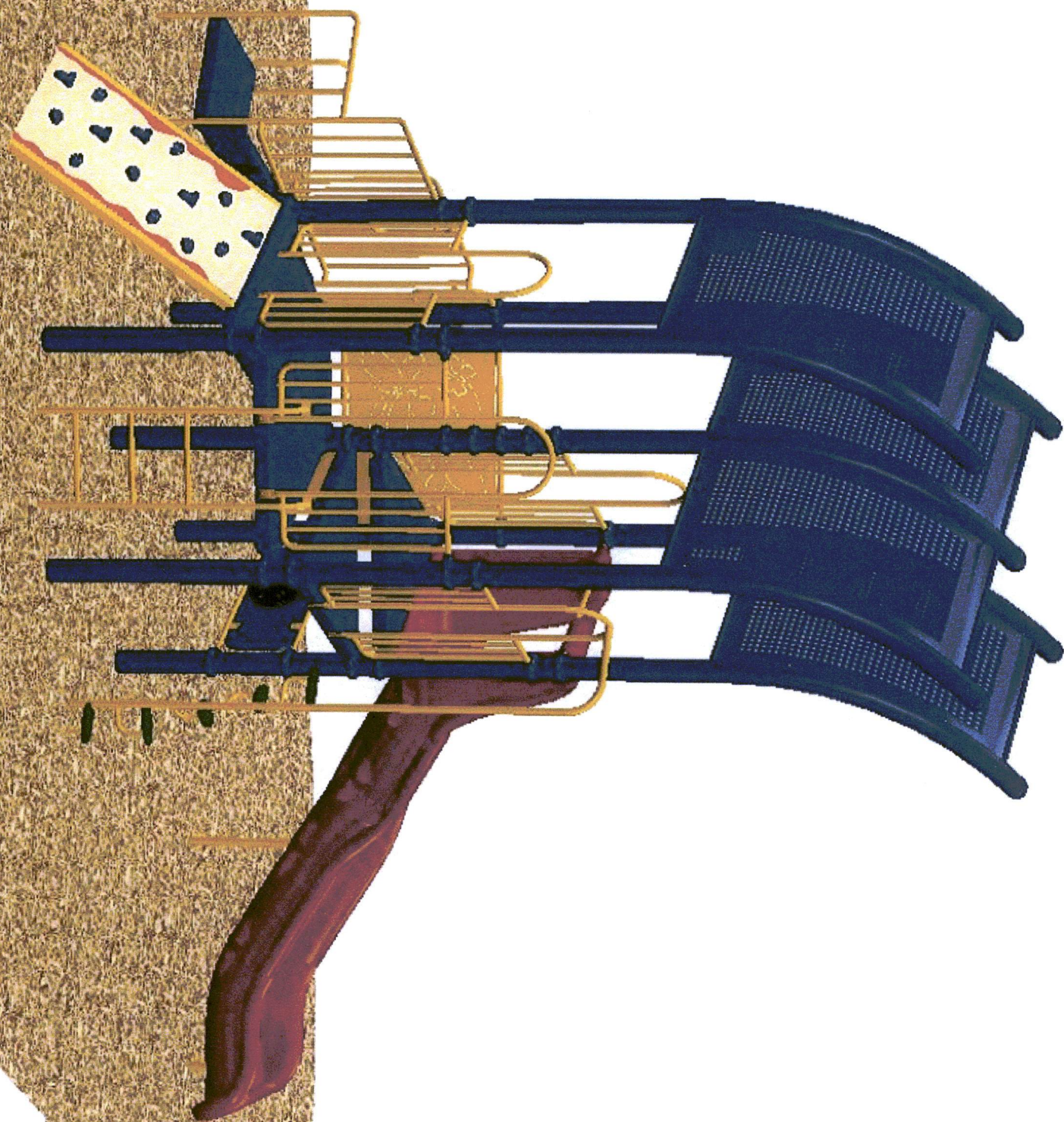
- **Mira-Therm2 PE** is a non-toxic copolymer polyethylene coating applied to a thickness of 1/16". Mira-Therm2 PE contains U.V. light stabilizers, anti-microbial additives and color pigments. Mira-Therm2 PE contains no orthophthalates or other banned substances. Mira-Therm2 PE is a proprietary brand of PE coating. Materials are tested in accordance with ASTM D-638, ASTM D-412, ASTM D-2240 and ASTM D-1004. Mira-Therm2 PE meets the FMVS 302 flammability rating, the requirements of California State Law and the 2008 CPSI Act.
- **pipe sized tube** is 1010 hot rolled, **Flo-Coat**, galvanized pipe manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8.
- **schedule 40 galvanized** pipe consists of a hot dip process of coating the pipe inside and out with not less than 1.6 ounces per square foot with an average of 1.8 ounces per square foot. Schedule 40 pipe conforms to ASTM standards A-53.
- **1" pipe** is GATOR GRIP embossed 14 ga., **1" pipe sized tube** (1.315" OD; approx. 1-5/16" OD.)
- **1" pipe, 12 ga.** is 12 ga., **1" pipe sized tube** (1.315" OD; approx. 1-5/16" OD.)
- **1-1/4" pipe, 10 ga.** is 10 ga., **1-1/4" pipe sized tube** (1.660" OD; approx. 1-11/16" OD.)
- **1-1/2" pipe** is 13 ga., **1-1/2" pipe sized tube** (1.900" OD; approx. 1-7/8" OD.)
- **2" pipe** is 12 ga., **2" pipe sized tube** (2.375" OD; approx. 2-3/8" OD.)
- **5" Sch 40 pipe** is 5" **schedule 40 galvanized** pipe (5.563" OD; approx. 5-9/16" OD.)
- **plastic pipe plugs** are injection molded polypropylene containing U.V. light stabilizers.
- **Rockite (R)** (Rotational Molded Polyethylene) is a low density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins are tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D-638, D-790 and D-746. Resin's properties exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness of molded components is 3/16" to 1/4".

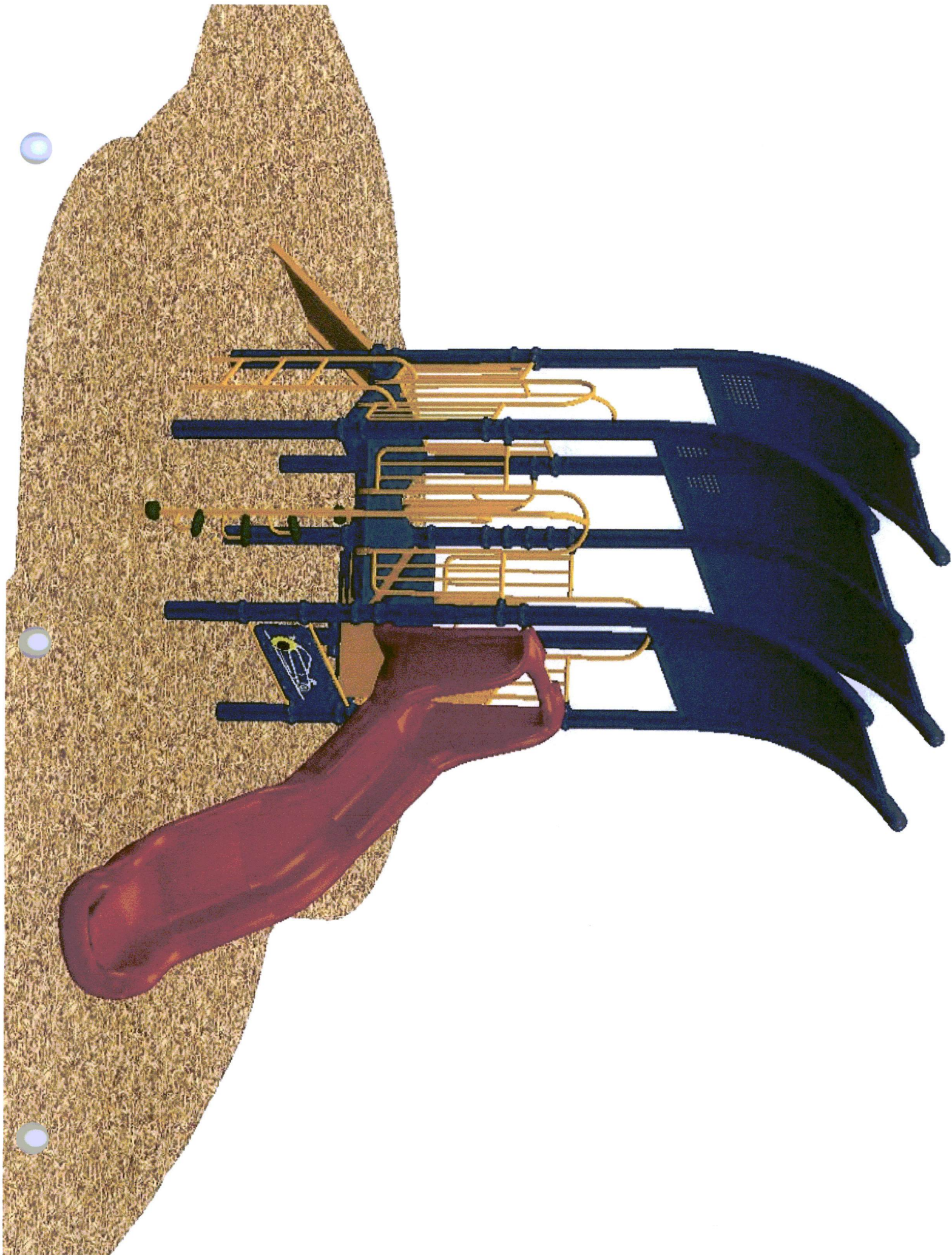
- **round tube** is fabricated of 1010 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **square tube** is fabricated of 1010 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **3/4" x 1" oval tube** is 15 ga. wall. It is fabricated of 1008 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **2" square tube** is 12 ga., **2" square tube**.
- **1" tube** is 1" OD, 15 ga. fluted **round tube**. It conforms to ASTM A-500.
- **1-1/2" tube** is 1-1/2" OD, 16 ga. **round tube**. It conforms to ASTM A-500.
- **5" tube** is 5" OD, 13 ga. **round tube**. It conforms to ASTM A-500.
- **5" tube, 11 ga.** is 5" OD, 11 ga. **round tube**. It conforms to ASTM A-500.
- **welded** refers to welds that are made by certified welders, tested in accordance with AWS D1.1-94, structural welding code specifications for steel. Welds conform to AWS A5.17 ASME SFA-5.17 EML3K and AWS A-5.18ER70S-3 ASME SFA-5.18 ER70s-3 LE332- C and LE-559-L.
- **Specification Policy:** Specifications were current at the time of publication. Miracle Recreation Equipment Company has a policy of ongoing product improvement and therefore reserves the right to modify specifications or discontinue products without notice.

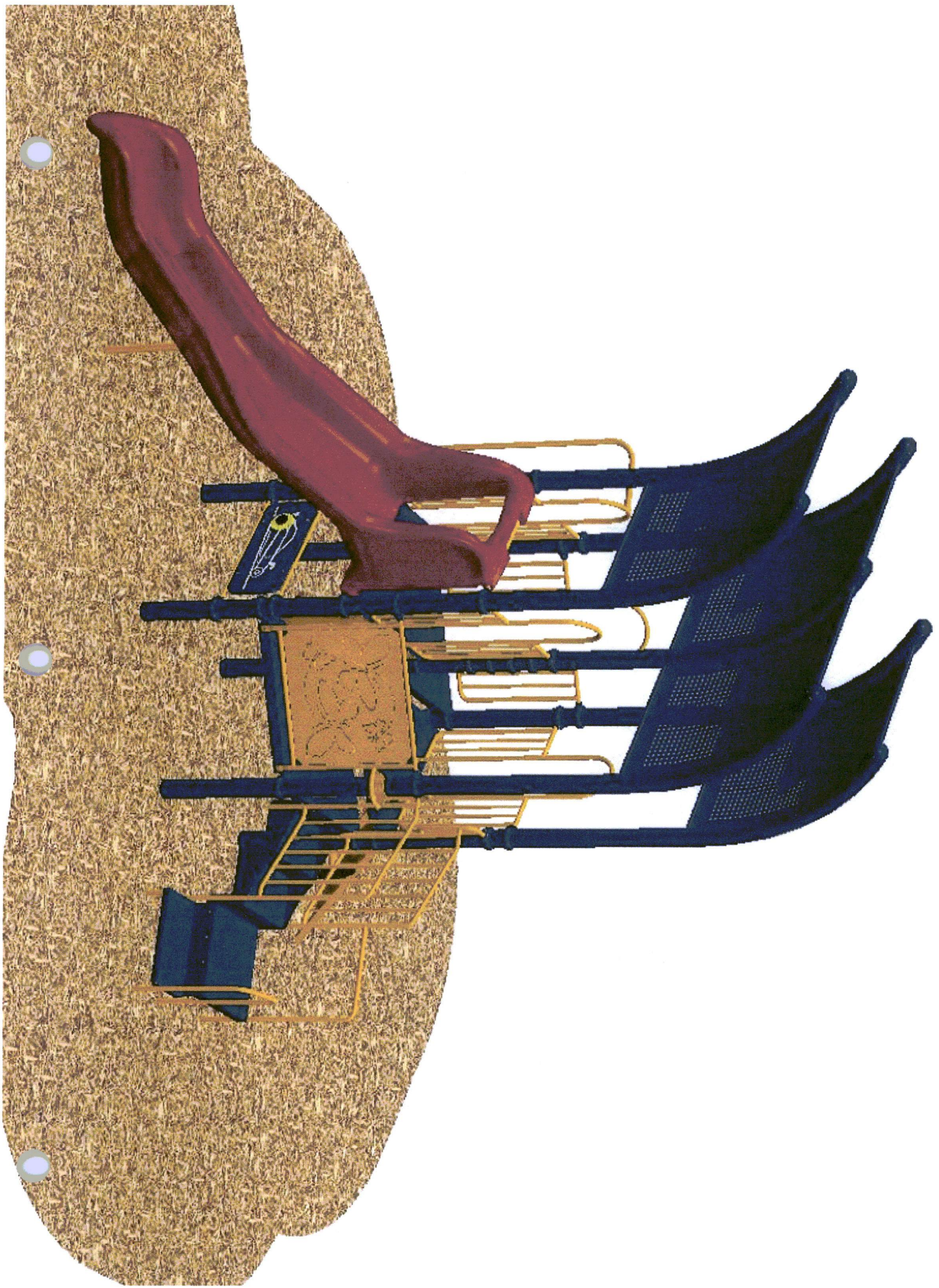


May Recreation Equipment & Design 3 Sunspree Place The Woodlands, TX, 77384 PHONE NO: (281)288-1412 FAX NO: (281)288-0043		88_41802630938 COMPLIES TO ASTM/CPS		TYPE: QUANTITY:		To promote safe and proper equipment use by children, Miracle recommends the installation of either a Miracle safety sign or other appropriate safety signage near each play system's main entry point(s) to inform parents and support staff of the age appropriateness of the play system and general rules for safe play.		THE PLAY COMPONENTS IDENTIFIED IN THIS PLAN ARE IPEMA CERTIFIED. THE USE AND LAYOUT OF THESE COMPONENTS CONFORM TO THE REQUIREMENTS OF ASTM F1487.	
GROUND SPACE: 21' X 12' PROTECTIVE AREA: 34' X 24' DRAWN BY: Miracle M		SCALE: 1"=5' DATE: June 18, 2014						AN ENERGY ABSORBING PROTECTIVE SURFACE IS REQUIRED UNDER & AROUND ALL PLAY SYSTEMS	









• GENERAL SPECIFICATIONS

SAFETY STANDARDS & GUIDELINES All public playground equipment supplied shall meet all applicable provisions of the current "Handbook for Public Playground Safety" published by the Consumer Product Safety Commission (CPSC), and of ASTM F1487-01 "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," published by the American Society for Testing and Materials (ASTM). Products bearing the certification seal of the International Play Equipment Manufacturers Association (IPEMA) have received written validation of compliance with ASTM F1487-01.

TRADEMARKS Aquarius (R), Big Kahuna (R), Big Timber (R), Bongo (TM), Boulder Ridge (R), Bug Bites (R), Camel Back (TM), Center Stage (R), Chameleon (TM), Coil Curler (TM), Connexion (R), Dupli-Gator (R), Flex Jet (R), Flippo (TM), Flippopotamus (R), Fun Fone (TM), Fun Tunnel (R), Funnel Tunnel (TM), Funshades (TM), Gator Grip (R), Gemini (TM), Gravity (TM), Grizz-Lee Bear (R), Groove (TM), Groove II (R) Slide, Hang-A-Round (R), Interaxion (TM), JAX (R), Kidrox (R), Kids' Choice (R), Kids' Perch (TM), Legacy Cantilever (R), Legacy Contempo (R), Legacy Heritage (R), Libra (R), Linkz (TM), Loopz (TM), Mega Tower (R), Miracle (R), Miracle Recreation (R), MiracleTech (R), Mira-Cote (R), Mira-Lam (TM), Mira-Lene (TM), Mira-Therm2 (TM), Mogul (TM), Mountain Trail (R), N-Dure Cycle (R), Nexus (R), Observation Deck (R), Offspring (TM), OrbX (R), ParkWatch (TM), Pegasus (R), Perma-Guard (TM), Perseus (TM), Physics (R), Play Cover (R), Play Terrain (R), Power Pedaler (TM), Pull Up!Lift (R), Rainbow Bend (TM), Reflex (R), Relay Racer (R), Rock-ite (R), Rodeo Rocky (TM), Schnozz Womp (TM), Serpent Trek (TM), SiteBrite (TM), Sneak-A-View (TM), SonicScreen (R), Spray Stations (R), Sun Sparkle (TM), Surfer (R), Tensile Tough (TM), Tensile Tower (TM), Thunder Tunnel (TM), Timber Topper (TM), Toboggan (TM), Toddlers' Choice (R), Tots' Choice (R), Tots' Choice (R) Expansion, Tots' Choice (TM) for Toddlers, Trim Timber (R), Triple Play (TM), Typhoon (TM), Versalok (R), View Groove (TM), Wavy Waffle Wall Walker (TM), Webscapes (R), Whirlwind (TM), Xcalator (R), and X-Cavator (TM) are trademarks of Miracle Recreation Equipment Company. Tornado (TM), Multi-Pondo (TM), and Pirouette (TM) are trademarks of HAGS (TM). Miracle and HAGS are divisions of PlayPower, Inc. PlayPower (R) is a trademark of PlayPower, Inc.

QUALITY SYSTEM CERTIFICATION The manufacturer's quality system is certified to ISO 9001 since December 1998.

PRODUCT CHANGES At Miracle Recreation Equipment Company, we strive for the utmost in quality and safety in our entire product line. Therefore, in order to honor this commitment to you, our customers, we reserve the right to make changes on any product released and/or published in our annual catalog and other promotional or technical literature.

WARRANTY

Buyer agrees that products sold by Miracle Recreation Equipment Company carry only the following warranties:

- 1. LIMITED WARRANTY FOR AS LONG AS YOU OWN THE PRODUCT** against structural failure due to corrosion or defects in materials and workmanship on aluminum deck posts, steel deck posts, the VersaLok (R) fastening system and associated fastening hardware.
- 2. LIMITED FIFTEEN (15) YEAR WARRANTY** against structural failure due to corrosion or defects in materials and workmanship on steel support legs and Mira-Therm2 (TM) 2 on MEGA TOWER (R), TOTS' CHOICE (R), KIDS' CHOICE (R), CENTER STAGE (R), NEXUS (R) and Boulder Ridge (R) Rock Wall; on playsystem steel components including railings, rungs, and rigid climbers; and Rockite (R).
- 3. LIMITED FIFTEEN (15) YEAR WARRANTY** against structural failure due to corrosion or defects in materials and workmanship on all Play Cover (R) steel frames.

4. **LIMITED TEN (10) YEAR WARRANTY** on Play Terrain (R) Rubber Mulch safety surfacing against total color loss and attenuation performance. Please contact your local representative for more information.

5. **LIMITED EIGHT (8) YEAR WARRANTY** on Play Terrain (R) Synthetic Turf safety surfacing for attenuation performance and appearance. Please contact your local representative for more information.

6. **LIMITED EIGHT (8) YEAR WARRANTY** against rot, UV deterioration and defects in materials and workmanship on all Play Cover (R) fabric (NOTE EXCEPTION - shades of red carry LIMITED THREE (3) YEAR WARRANTY).

7. **LIMITED FIVE (5) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Kidrox (R) Climbing Rocks.

8. **LIMITED FIVE (5) YEAR WARRANTY** against degradation of design loading capabilities on all Webscapes (R) Net Climbers and Nexus (R) Nets (NOTE EXCEPTION - Webscapes (R) Net Climbers and Nexus (R) Nets carry a LIMITED ONE (1) YEAR WARRANTY against defects in materials and workmanship).

9. **LIMITED THREE (3) YEAR WARRANTY** against structural failure due to defects in materials or workmanship on Trim Timbers (TM).

10. **LIMITED ONE (1) YEAR WARRANTY** against failure due to defects in materials or workmanship on Slashproof Swing Seats and 360 degree Bucket Tot Seats for Swings.

11. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on the following products and components: TODDLERS' CHOICE (R) main support materials and decks; pool slide support structures, stairways, landings and railings; and bleachers.

12. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship on all MiracleTech (R) Security products, including ParkWatch (TM), SonicScreen (R) and SiteBrite (TM).

13. **LIMITED ONE (1) YEAR WARRANTY** against structural failure due to defects in materials and workmanship for all products and components that are not specifically listed above, including, without limitation, all moving parts, such as swing hangers, swivels, chains, whirls, trolleys and flexible climbers.

BUYER'S REMEDY: If any products prove defective or non-conforming under normal use and within the above-prescribed warranty periods, Buyer must promptly notify Miracle in writing at 878 E. Hwy 60, Monett, MO 65708 USA. Miracle will within a reasonable time and in its sole discretion repair or replace such defective or non-conforming product by providing replacement products or part(s) free of charge to the site. Miracle's limited warranties do not cover the cost of labor to remove defective or non-conforming part(s) or to install repaired or replacement part(s).

All warranty periods begin on the date of Miracle's invoice. Repaired and/or replacement part(s) are warranted only for the balance of the original limited warranty. All warranties extend only to the original Buyer/end user of products from Miracle or Miracle's authorized reseller and are not transferable.

These limited warranties apply only to Miracle products that are erected and installed in conformance with Miracle's installation instructions, and that are maintained and inspected in conformance with Miracle's maintenance and operational instructions. These limited warranties specifically do not cover Miracle products: that have been modified, altered, or misused; that have not been used as designed or intended; to which non-Miracle parts have been added or substituted; or that have been damaged due to excessive wear and tear, vandalism, abnormal use, abuse, negligence, extraordinary weather or acts of God. MiracleTech Security (R) systems limited warranties do not cover products serviced or repaired by unauthorized service providers. These limited warranties do not protect against color fade, except for PlayCover (R) as noted above. Buyer, by acceptance and use of these limited warranties, waives any rights it would otherwise have to claim or assert that this limited warranty fails of its essential purpose. Buyer agrees that venue for any court action to enforce these limited warranties shall be in Barry or Greene Counties in the State of Missouri.

EXCEPT AS EXPRESSLY WARRANTED HEREIN, MIRACLE EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THOSE ARISING BY STATUTE OR OTHERWISE IN LAW OR FROM COURSE OF DEALING OR USAGE OF TRADE. IN NO EVENT SHALL MIRACLE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION, LOSS OF INFORMATION, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES OR OTHER PECUNIARY LOSS).

*Consult Miracle's "Glossary of Technical Data for Materials, Processes and Finishes"
for specifications of items listed in bold type.*

- **KIDS' CHOICE MIRA-THERM2 DECKS:** The deck models in the 714-50X-9 series shall consist of a (3) sided equilateral triangle deck: Model # 714-501-9, with a *deck top surface area* of 7 sq. ft. (1008 sq. in.); a (4) sided square deck: Model # 714-502-9, with a *deck top surface area* of 16 sq. ft. (2304 sq. in.); (4) sided (3) opening half hex decks: Model #s 714-503-9 and 714-504-9, with a *deck top surface area* of 21 sq. ft. (3024 sq. in.); (4) sided (6) opening rectangular decks: Model #s 714-508-9, 714-509-9 and 714-510-9, with a *deck top surface area* of 32 sq. ft. (4608 sq. in.); a (5) sided pentagon deck: Model # 714-512-9, with a *deck top surface area* of 23.8 sq. ft. (3427 sq. in.); an (8) sided octagon deck: Model # 714-519-9, with a *deck top surface area* of 60 sq. ft. (8640 sq. in.); (4) sided (6) opening parallelogram decks: Model #s 714-505-9, 714-506-9 and 714-507-9, with a *deck top surface area* of 28 sq. ft. (4032 sq. in.); and a (7) sided heptagon deck: Model # 714-517-9, with a *deck top surface area* of 55 sq. ft. (7,920 sq. in.).

Model # 714-511-9 shall be an isosceles triangle split deck (single section) designed to serve as a step platform for lower deck heights: 18" or lower for 2-5 year olds, and 30" or lower for 5-12 year olds. All other Model # 714-511-X9 split decks shall feature two triangular deck sections which shall be mounted between four posts at different heights so that a 6", 12", 18", or 24" (X) rise shall be formed along the hypotenuse between two posts. Models which rise greater than 6" shall contain a riser plate; models which rise greater than 12" shall also contain an arched enclosure assembly. *The deck top surface area of split deck models shall be 8 sq. ft. each for both sections, or total 16 sq. ft.* Riser plates shall be constructed of 11 ga. **A-60 Galvanized** sheet; risers for 18" and 24" rises shall contain a rung and vertical supports of 1" tube, solid **welded**, all finished in **Mira-Cote**. The arch enclosure assembly accompanying models which rise 18" and 24" shall comprise top and bottom supports and an arched upright constructed of 1" pipe, drilled, formed and mashed, all solid **welded**, and vertical rungs of 1" tube, with **plastic pipe plugs** inserted in open ends, and finished in **Mira-Cote**. Decks shall be designed for maximum flexibility in height of deck surface, from 0" to 6'-6" (in 6" increments,) though 3', 5' and 6'-6" shall be considered standard heights. Decks shall be designed on a 48" center-to-center spacing on 5" deck posts, at equal or varied heights. All deck-to-post connections shall be made with a deck support clamp. All deck connections shall be made beneath deck with no exposed fasteners on deck perimeter. Decks with 8' wide open side shall be designed to attach to another deck with 8' wide open side at same deck height, or to a Model # 714-770-6 Flippopotamus Slide/Climber. All decks shall be constructed with folded 11 ga. steel sheet forming 3" tall sides. Decking sheets shall be perforated with a staggered pattern of 3/8" diameter holes (5/16" after dipping) at 5/8" apart center-to-center. The decking shall have 7 ga. by 2" flat steel braces and corner braces of 7 ga. steel. The entire assembly shall be solid **welded** prior to polyvinyl coating. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. All deck surfaces shall be coated in **Mira-Therm2** or **Mira-Therm2 PE**.

- **KIDS' CHOICE POSTS: STEEL POSTS:** The steel posts each shall be constructed of 5" tube, 11 ga. with a 5" round end cap pressed into its top end. Post and end cap shall have a **Mira-Cote** finish.

- **45 DEGREE SLOPED CLIMBING WALL** challenges users to ascend or descend by grasping and stepping upon stubs, and shall be designed for mounting to 3' and 4' decks. The panel sections shall be constructed of sheets of **Mira-Lene**. The climbing holds shall be constructed of molded sand and polyester resin mixture. The frame shall comprise vertical outer rails constructed of 11 ga., 2" **square tube**, solid **welded** to horizontal support rails of 1-1/2" **square tube** and 11 ga. galvanized, 1-1/2" x 3" rectangular tube. Leg extensions measuring 24" shall be constructed of 14 ga. galvanized, 1-3/4" **square tube**. The fill block shall be folded 11 ga. steel sheet, perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart, center-to-center, solid **welded** with 7 ga. x 2" flat steel braces. The Kids' Choice model shall contain an arch entry enclosure, and the Tots' Choice model shall contain a loop enclosure, each consisting of a frame (top and inside support rails), an arched upright, and vertical rails within the frame. The rails shall be constructed of 1" **pipe** and the archway and vertical rungs shall be constructed of 3/4" x 1" **oval tube** (except for Tots' Choice which shall be 1" **tube**), all solid **welded**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The panel sections and holds shall have color molded in. The frame, enclosure, and clamps shall be finished in **Mira-Cote**. The fill block shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The legs shall have a galvanized finish.

- **VERTICAL LADDER/LOOK-OUT LADDER** shall be designed for use as an entrance and exit for decks of various heights. Each assembly shall consist of side rails and rungs constructed of 1" **pipe**, all solid **welded**. Models shall have threaded inserts in the ends of the side rails and an arch enclosure. The Kids' Choice enclosure assembly shall consist of top supports, a bottom support, and an arched upright constructed of 1" **pipe**, formed, mashed and punched, and vertical infill of 3/4" x 1" **oval tube** with mounting tabs of 7 ga. sheet, all solid **welded**. The Tots' Choice enclosure assembly shall comprise top supports and an arch upright of 1" **pipe**, spoked infill of 1" **tube** with mounting tabs of 7 ga. sheet, all solid **welded**. The ladders and enclosure assemblies shall have a **Mira-Cote** finish.

- **VINE CLIMBERS AND TWISTED VINE CLIMBERS** shall feature horizontal rungs on a vertical rail field-assembled to an arched entry deck enclosure. The rungs shall contain a routed leaf design and shall ascend the climber on opposite sides of the rail for Vine Climbers, or slightly offset to wind upward around the rail for Twisted Vine Climbers. The climber rail shall be constructed of 1-1/4" **pipe**, 10 ga. with mounting plate support tubes of 1" **tube** solid **welded**, and mounting plates of 7 ga. galvanized also solid **welded**. Closing support stub ends shall be **plastic pipe plugs**. The rail's top end shall be swaged and shall have a threaded aluminum insert factory-installed. Leaf pads shall be constructed of **Mira-Lene** and routed with an oak leaf design. The arch enclosure assembly shall comprise top supports, an arched upright, and extension tube sleeve, all constructed of 1" **pipe**, drilled, formed and mashed, and vertical rungs constructed of 3/4" x 1" **oval tube**, all solid **welded**. Kids' Choice arch enclosure for split decks shall consist of top rails, a receiver tube, an arched upright and outer upright, which shall be constructed of 1" **pipe**, drilled, formed and mashed, and vertical spokes which shall be constructed of 3/4" x 1" **oval tube**. Tots' Choice enclosure shall comprise an arched upright constructed 1" **pipe**, drilled, formed and mashed, receiver tube constructed of 1-1/4" **pipe** and vertical and horizontal rungs constructed of 1" **tube**, all solid **welded**. The enclosure assembly shall be solid **welded**. Enclosure shall measure 55" in width and 62" in height. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The climber rail with support tubes and mounting plates and arched entry enclosure shall be finished in **Mira-Cote**. The leaf pads shall have color molded in.

- **HALF-PANELS** for below deck or freestanding installation shall feature two-color schemes, routed designs, and steering wheels, and when mounted at suggested heights, will permit wheelchair access. The Roller Racer models shall also feature an interactive ball game which users operate by turning a knob to raise and release enclosed balls into routed pathways (the balls then re-enter the lift mechanism). Half-panels shall be constructed of **Mira-Lene** with all corners rounded, measuring 36-1/2" x 15-1/2", except Calypso 2-Drum panel, which shall measure 36-1/2" x 20". Calypso 2-Drum panel shall also contain 2 rotational molded drums of low density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized sheet steel with a **Mira-Cote**. Rung brackets shall be constructed of 1" **pipe** (except Tots' Choice models which shall be 1" **tube**) with tabs of 11 ga. **A-60 Galvannealed** sheet, solid **welded**. The Roller Racer models shall be constructed as above and shall also have a clear polycarbonate cover fastened to enclose various contents. A black high density polyethylene gear handle mounted outside the cover shall turn on a bronze bushing to drive a 1/4" thick polyethylene gear behind the cover, which shall carry 1/2" steel balls and release them in routed channels. The steering wheel shall be constructed of a high density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693 (b), D-638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance, and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. Each assembly shall contain **Fastener Style A** hardware and **Versalok Fasteners**. Half-panels and steering wheels shall have molded-in color. Rung brackets and clamps shall have a **Mira-Cote** finish.

- **STEEL PANELS** shall be durable above or below deck components designed to enhance imaginative play. All assemblies shall comprise 1" **pipe**, **Gator Grip** rungs and panels composed of 11 ga. sheet, laser cut. Above deck Ocean Play, Butterfly, Moon, Eagle Family, and Wilderness

Flock shall measure 33-5/8" x 36". Above deck Window panel, Steel Steering Wheel panel and KC and TCX Tic Tac Toe Panel shall measure 41-1/6" x 41-1/2". Above Deck TC Tic Tac Toe Panel shall measure 40-11/16" in height and 37" in width. Below deck Window panel and Steel Steering Wheel panel shall measure 41-1/2" in width and 36-1/4" in length. Below deck Door panel shall measure 41-1/2" x 36-1/4" for KC and TCX, and 37" x 37-1/2" for TC and Tots' Choice for Toddlers. Below deck Counter panel shall measure 41-1/2" x 18-1/16" for KC and TCX, and 37" x 18-1/16" for TC and Tots' Choice for Toddlers. Below deck Valance shall measure 41-1/2" x 12-1/16" for KC and TCX, and 37" x 12-1/16" for TC. Below deck Tic Tac Toe Panel shall measure 37-5/16" in width and 36-1/4" in height for KC and TCX. Below deck Tic Tac Toe Panel for TC shall measure 37" in width and 37-1/2" in height. Steering wheel and knob for Steel Steering Wheel panel shall be constructed of aluminum. Tic Tac Toe Cylinders shall be constructed of cast aluminum with etched "x's" and "o's". Cylinders will attach to panel via an axle constructed of 1" OD x 14 ga. tube, A-60 with stainless steel hardware and plastic spacers. The assemblies shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rungs and panels shall have a **Mira-Cote** finish.

- **RISER PLATES** shall be used between adjacent decks of 12" rise or greater. Riser plates shall be constructed of 11 ga. **A-60 Galvannealed**. The step rung and supports (on 24" models and certain 18" models) shall be constructed of 1" tube, solid **welded**. The risers shall bolt to the edge of the upper and lower decks. Kids' Choice 18" and 24" riser assemblies shall feature an arch enclosure assembly comprising top supports, a bottom support, and an arched upright constructed of 1" pipe, formed, mashed, and punched, with infill vertical rungs of 3/4" x 1" oval tube. Tots' Choice 18" and 24" riser assemblies shall feature a loop enclosure comprising two top supports, an arched upright and infill vertical rungs of 1" tube. Kids' Choice, Tots' Choice and Tots' Choice Expansion 6" risers shall be used in conjunction with a 90 degree L-Ramp. Each enclosure assembly shall be solid **welded**. Models with enclosures shall contain **Versalok Fasteners**. All models shall contain **Fastener Style A** hardware. Riser plates, enclosures and clamps shall have a **Mira-Cote** finish.

- **MIRA-THERM2 SQUARE TRANSFER POINTS** shall be designed to assist disabled users gain access to and egress from a deck system. The stair assembly shall be constructed of 11 ga. steel stringers solid **welded** to 11 ga. steel sheet decking that is perforated in a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Approximate dimensions of stair assembly shall be 26" overall width, 14" deep step tread and 8" high step rise. The 26" square (approximate) transfer point shall be constructed of 11 ga. steel sheet folded to form approximately 3" high sidewalls. The decking shall be perforated as described above. It shall be reinforced with cross braces of 3/16" x 2" HR flat solid **welded**. The bottom step shall be constructed of 11 ga. steel sheet (with folded edges) perforated as described above. The step shall be approximately 26" wide by 14" deep by 6-1/2" high. Kids' Choice deck enclosures shall be constructed of formed 1" pipe, including a **welded** upright of the same material. Tots' Choice deck enclosures shall be constructed of 1" pipe and a formed and **welded** upright of 1" tube. Each deck enclosure assembly shall be drilled for field assembly of a stair handrail, and shall have its bottom end mashed and punched for field assembly to deck. Stair handrail assemblies shall be **welded** upper and lower handrails of formed 1" pipe. Closed handrails shall contain vertical uprights of 3/4" x 1" oval tube **welded** within. Swaged handrail extensions for field assembly to handrails shall be constructed of 1" pipe. A transfer deck handrail constructed of formed 1" pipe shall be field assembled to one handrail newel upright and transfer point deck edge. Models designed for assembly to 5' and 6' or 6'-6" decks shall contain handrail sleeve supports constructed of 1-1/4" pipe, 10 ga. The "U"-shaped transfer step handrail shall be formed 1" pipe, drilled for field assembly to transfer point deck and bottom step. Its apex shall be 36-1/8" from finished grade. The rung leg shall be 1" pipe with ends mashed and punched for field assembly to bottom step. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The stairs, bottom step, and transfer point deck shall be finished in **Mira-Therm2** or **Mira-Therm2 PE**. The deck enclosures, handrails, extensions, sleeves, leg and clamps shall be finished in **Mira-Cote**.

- **CURVED SHADE ROOF** casts shade-providing shadows for Kids' Choice deck systems. 714-606-3 and 714-606-32 Curved Shade Roof with Skull and Cross Bones can be used with other Ship themed components to create a swashbuckling adventure. Shade Roof Extensions can be used to extend a deck systems' roofline. Panel shall be constructed of 16 ga. galvanized sheet and shall measure 65-3/16" in height and 42-1/2" in width. Skull and Cross bones shall be constructed of 16 ga. Galvannealed and factory cut into skull/cross bones motif. Trusses shall comprise a left and right post with post caps, and panel connector brackets. Steel post shall be 5" tube with a 5" round end cap pressed into its top end. Brackets shall be constructed of 7 ga. sheet, all solid **welded**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The panel, skull and cross bones and trusses shall have a **Mira-Cote** finish.

- **CHAMELEON SLIDE SYSTEM** shall be a componentized, modular slide assembly system designed to provide maximum configuration versatility. The slides, which can be configured from left, right, or straight sections, shall be constructed of double wall **Rockite** that shall have a 23" bedway width and 11-1/2" high sidewalls. These slides shall be designed to attach to 3' 4", 5', 6', 6'-6", and 8' decks. The entry and exit sections also shall be **Rockite**. The Kids' Choice entry panel shall be supported by a rung of 1" pipe. The Tots' Choice entry panel shall be supported by a two-piece rung assembly of 1" pipe. The Tots' Choice 42" x 3-3/8" fill block shall be constructed of 11 ga. black sheet steel, formed and solid

welded. The "T" front leg shall be constructed of a vertical **2" pipe** and a horizontal 1/4" x 3" flat steel plate, solid **welded**. Support legs shall be constructed of **2" pipe** with a mounting bracket of 7 ga. sheet, solid **welded**. The support rung, front leg, and support legs shall have a **Mira-Cote** finish. The fill block shall have a **Mira-Therm2** or **Mira-Therm2 PE** finish. The **Rockite** slide sections shall have color molded in.

- **CRUNCH STATION** shall be a semi-circular horizontal rung assembly designed for mounting on a 5" steel deck post with the rung set 50" - 80" from finished grade. The Crunch Station shall enable the user to perform leg lifts and crunches in a standing position. It shall be constructed of a cut and formed **1" pipe** segment solid **welded** to support and bolt plates of 7 ga. galvanized steel. All hardware shall be **Fastener Style A**. The assembly shall have a **Mira-Cote** finish.

- **STEERING WHEEL, POST MOUNT** shall be designed to provide driving stimulation on any pre-existing deck post. The steering wheel shall be constructed of a high-density blow-molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection-molded polypropylene which shall contain U.V. light stabilizers. The Steering Column shall be constructed of **2" pipe**. The assembly shall contain **Fastener Style A** hardware. The Steering Column shall have a **Mira-Cote** finish.

Technical Data for Processes and Finishes of the Highlighted Items

- **aluminum alloy** conforms to the following: ASTM 356, ANSI 322, Chrysler MS 2417 and General Motors GM 4323-M. Parts or components constructed of aluminum alloy are either *sand cast* or *die cast*. *Sand cast aluminum alloy* is 319 with tensile strength of 27,000 p.s.i. and yield strength of 18,000 p.s.i. *Die cast aluminum alloy* is 383.1 with tensile strength of 45,000 p.s.i. and yield strength of 22,000 p.s.i.

- **Mira-Therm2 coated chain** is a **welded** chain with links sufficiently wide to allow them to pass one another freely, eliminating the tendency to kink. The links are low carbon zinc plated steel with a polyvinyl chloride coating.

- **Versalok Fasteners (R)** are cast **aluminum alloy**. Each fastener consists of two die cast **aluminum alloy** "half ring" pieces, which were designed to fasten onto the round posts by use of a male/female interlock. For 3-1/2" post, outside dimension of the completed fastener (joined "half-rings") is 5". For 5" post, outside dimension of the completed fastener is 6-1/2". *Rungs and components* connect to clamps on posts by means of die cast **aluminum alloy**, two-piece socket receptors which may be assembled to a previously-installed clamp ring and secured to the clamp and component by set screws (and tek screws in some cases). *Decks* connect to clamps on posts by means of die cast **aluminum alloy**, one-piece deck support castings. The clamp assembly and socket receptor have a **Mira-Cote** finish. Kids' Choice components with **2" pipe** mounting points attach to 5" posts using **aluminum alloy** sand cast header supports.

- **5" round end cap** is die cast **aluminum alloy**.

- **Fastener Style A** is a corrosion resistant, 18-8, stainless steel, vandal resistant fastener.

- **Flo-Coat (R)** is a patented triple coat corrosion protection process of Allied Tube and Conduit's Mechanical Tube Division, wherein steel pipe or tube first receives a hot-dipped uniform zinc galvanized coating followed by a conversion coating followed by a clear, high performance organic polymer coating. The interior of the tube has an 81% minimum zinc rich primer applied, capable of providing excellent rust protection and fabrication characteristics. All coatings are applied inside and out after welding. Flo-Coat processed tube exceeds the test results of galvanized Sch 40 pipe in salt spray tests conducted in accordance with ASTM B-117. The term "Flo-Coat" is a registered trademark of Allied Tube and Conduit, used with permission.

- **GATOR GRIP (TM)** is a three dimensional textured pattern exclusive to Miracle, embossed in steel to a depth of .014" to .017".

- **A-60 Galvannealed** indicates that a coating of .60 ounces of zinc per square foot alloyed with substrate steel has been applied on each surface side.

- **Mira-Cote (TM)** is a Super Durable formulation of a polyester powder coating finish that is applied to a thickness of 3-5 mil. This finish gives metal parts long term protection from chipping, fading and peeling. Miracle's finishing system washes the metal parts with detergent and etches the metal for optimum adhesion. The part is then rinsed clean with water. Next the part is coated with a non-chromic sealer and dried. The Mira-Cote powder is then applied electrostatically to the metal part. The metal parts are then baked at a high temperature to fuse a hard, smooth durable finish to the metal. Mira-Cote has an impact value of 160 in. lbs., flexibility value of 180 degree-1/4" mandrel, shore hardness value H and a crosshatch adhesion of 100%. Mira-Cote is tested in accordance with ASTM D-792, D-523, D-2794, D-1737, D-3363, D-3359 (b), B117 and D-2247. Mira-Cote will withstand over a 1,500 hours of salt spray exposure and 1,500 hours of weatherometer testing with minimal loss of gloss and color.

- **Mira-Lene (TM)** is compression-molded, 3/4" thick, high density polyethylene that has been specifically formulated for optimum U.V. stability and color retention. Compression-molded products have a density of .952 g/cm3 per ASTM D1505 and tensile strength of 3900 PSI per ASTM D638.

- **Mira-Therm2 PE** is a non-toxic copolymer polyethylene coating applied to a thickness of 1/16". Mira-Therm2 PE contains U.V. light stabilizers, anti-microbial additives and color pigments. Mira-Therm2 PE contains no orthophthalates or other banned substances. Mira-Therm2 PE is a proprietary brand of PE coating. Materials are tested in accordance with ASTM D-638, ASTM D-412, ASTM D-2240 and ASTM D-1004. Mira-Therm2 PE meets the FMVS 302 flammability rating, the requirements of California State Law and the 2008 CPSI Act.

- **pipe sized tube** is 1010 hot rolled, **Flo-Coat**, galvanized pipe manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8.

- **1" pipe** is GATOR GRIP embossed 14 ga., **1" pipe sized tube** (1.315" OD; approx. 1-5/16" OD.)

- **1-1/4" pipe, 10 ga.** is 10 ga., **1-1/4" pipe sized tube** (1.660" OD; approx. 1-11/16" OD.)

- **2" pipe** is 12 ga., **2" pipe sized tube** (2.375" OD; approx. 2-3/8" OD.)

- **plastic pipe plugs** are injection molded polypropylene containing U.V. light stabilizers.
- **Rockite (R)** (Rotational Molded Polyethylene) is a low density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins are tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D-638, D-790 and D-746. Resin's properties exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness of molded components is 3/16" to 1/4".
- **round tube** is fabricated of 1010 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **square tube** is fabricated of 1010 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **3/4" x 1" oval tube** is 15 ga. wall. It is fabricated of 1008 hot rolled, **Flo-Coat**, galvanized tube manufactured from steel, cold formed and high frequency induction **welded** continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.
- **1-1/2" square tube** is 16 ga., **1-1/2" square tube**.
- **1" tube** is 1" OD, 15 ga. fluted **round tube**. It conforms to ASTM A-500.
- **5" tube** is 5" OD, 13 ga. **round tube**. It conforms to ASTM A-500.
- **5" tube, 11 ga.** is 5" OD, 11 ga. **round tube**. It conforms to ASTM A-500.
- **welded** refers to welds that are made by certified welders, tested in accordance with AWS D1.1-94, structural welding code specifications for steel. Welds conform to AWS A5.17 ASME SFA-5.17 EML3K and AWS A-5.18ER70S-3 ASME SFA-5.18 ER70s-3 LE332- C and LE-559-L.
- **Specification Policy:** Specifications were current at the time of publication. Miracle Recreation Equipment Company has a policy of ongoing product improvement and therefore reserves the right to modify specifications or discontinue products without notice.



Product Specifications

January 27, 2006

Rev. C

MIRACLE
RECREATION EQUIPMENT COMPANY

Miracle Timbers

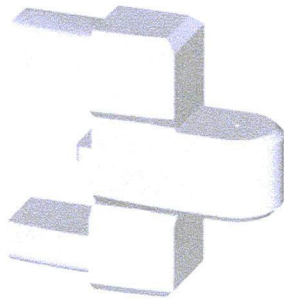
Male & Female Length Adapters, Single & Double Stacked Sections, Timber Opening Kit

IMPORTANT NOTE: *Miracle Timbers are not structural components. They are intended only to contain engineered surfacing for fall zones around playground equipment. They are not intended for retention of soil or heavy backfill.*

440 & 440R* and 440-1 & 440-1R*

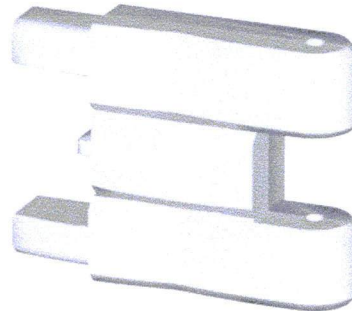
Male Length Adapter

* Model # 440R Male Length Adapter (Recycled)
differs in material only.



Female Length Adapter

* Model # 440-1R Female Length Adapter (Recycled)
differs in material only.



Models used to reduce length of Timber Section(s) when needed to fit closure.

440-12 & 440-12R*

Single Timber Section

* Model # 440-12R Single Timber Section (Recycled)
differs in material only.



Two (2) Single Timber Sections shown for position.

Miracle Timbers

440, 440R, 440-1, 440-1R, 440-12, 440-12R, 440-24, 440-24R, 440-3, 440-3R

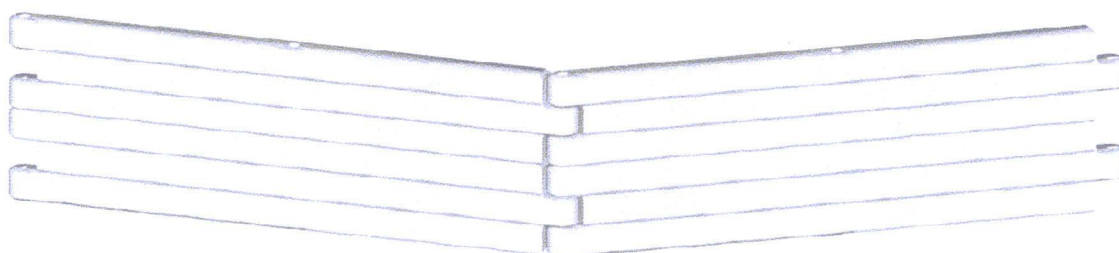


Miracle Timbers

440-24 & 440-24R*

Double Stacked Timber Section

* Model # 440-24R Double Stacked Timber Section (Recycled)
differs in material only.

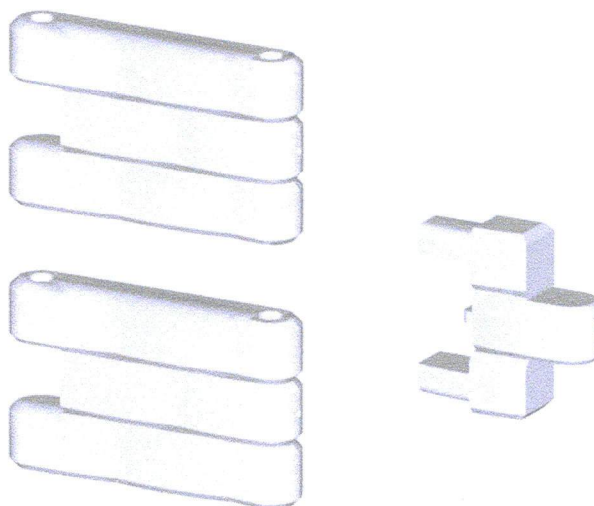


Two (2) Double Stacked Sections shown for position.

440-3 & 440-3R*

Timber Opening Kit

* Model # 440-3R Timber Opening Kit (Recycled)
differs in material only.



Model includes two (2) Rounded End Caps and one (1) Male Length Adapter.

Miracle Timbers

440, 440R, 440-1, 440-1R, 440-12, 440-12R, 440-24, 440-24R, 440-3, 440-3R



Miracle Timbers

<u>MODEL #</u>	<u>PRODUCT</u>	<u>MODEL #</u>	<u>PRODUCT</u>
440	Male Length Adapter	440-12R	Single Timber Section, Recycled
440R	Male Length Adapter, Recycled	440-24	Double-Stacked Timber Section
440-1	Female Length Adapter	440-24R	Double-Stacked Timber Section, Recycled
440-1R	Female Length Adapter, Recycled	440-3	Timber Opening Kit
440-12	Single Timber Section	440-3R	Timber Opening Kit, Recycled

Concrete is not generally required as timbers are staked directly into compacted soil, but if theft or vandalism is possible, Miracle recommends one 8" dia x 18" deep footing at each Timber joint, or **0.02 cu. yd. per Timber**.

DESCRIPTION

Model # 440, # 440R, # 440-1, and # 440-1R Male and Female Length Adapters permit installers to shorten Timber sections to achieve closure of Timber framework. Model # 440-12 and # 440-12R are barriers molded to resemble a brick wall section 12" high. Model # 440-24 and # 440-24R comprise two (2) single sections stacked to resemble a brick wall 24" high. Model # 440-3 and # 440-3R Timber Opening Kits comprise two (2) Rounded End Caps to form opening, and one (1) Male Length Adapter used to give Timber two male ends rather than one. Miracle recommends an opening of 36" minimum. All barrier sections are supplied with stakes which hold the timbers together and in place.

MATERIALS:

Miracle Timbers and End Caps (Opening Kit):

The Miracle Timbers shall be constructed of Rockite or recycled Rockite and shall measure 4" thick x 12" high x approximately 76" long. Each of two End Adapters shall have a female end and a rounded end to create an opening in the timber framework. End Caps shall be constructed of Rockite or recycled Rockite and shall measure 4" thick x 12" high x approx. 20" long. Recycled Rockite is produced from resins obtained from finished Rockite trim which has been cut, ground, and pulverized into a powdered state.

Length Adapters (Individual & in Opening Kit):

Male and Female Length Adapters shall contain stubs for staking to the final timber and two stubs to be inserted and fastened (in the field) into the end of a cut timber. Male Length Adapter used in Timber Opening Kit is used to fix one timber for mating a Rounded End Cap. Both models shall be constructed of Rockite or recycled Rockite measuring 4" thick x 12" high x 12" long.

Stakes:

The stakes shall be constructed of 3/4" hot dipped galvanized steel bar either 30" (for single timbers) or 42" (for double-stacked.) Three stakes are required per timber section, 36" on center. Stakes positioned at timber section ends shall be shared by other sections.

Fasteners:

All hardware shall be Fastener Style A.

Finishes:

Timbers, End Caps and Adapters shall have color molded in. Recycled Rockite component shall be available only in black. The stakes shall have a galvanized finish.

Consult Miracle's "Glossary of Technical Data for Materials, Processes and Finishes" for specifications of underlined items.



Specifications

1. Surfacing shall be **IPEMA-CERTIFIED** Engineered Wood Fiber. Standard wood chips or bark mulch will not be acceptable.
2. Supplier must provide test results for Engineered Wood Fiber for impact attenuation in accordance with **ASTM F 1292** *Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment*. Results must be provided for new and for 12-year-old Engineered Wood Fiber Material.
3. Testing of Engineered Wood Fiber in accordance with **ASTM F 1292** must show G-max values of less than 155G for the 8" thick system or 120G for the 12" system at 12' drop heights or 100G for the 12" system at 14' drop heights, and HIC values of less than 1,000 for both new and 12-year-old material.
4. Supplier must provide test results for quality and purity of the Engineered Wood Fiber in accordance with **ASTM F 2075** *Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment*.
5. Supplier must provide test results for accessibility in accordance with **ASTM F 1951** *Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment*.
6. Supplier must certify that the surface meets the intent of the Americans with Disabilities Act (ADA).
7. Supplier must provide written manufacturer's 25-year (300 System), 20-year (200 System), or 15-year (100 System) warranty against loss of resiliency; lifetime warranty on FibarFelt fabric and FibarDrain drainage matrix.
8. Supplier must provide \$10,000,000 Product Liability Insurance Certificate with project owner named as certificate holder, prior to delivery.
9. In Canada, Supplier must meet CSA guidelines.
10. The species of woods that are used are comprised of, but are not limited to; White Oak, Red Oak, Maple, Ash, Douglas Fir, Lodge Pole Pine, Cedar, Yellow Pine, or Poplar.
11. The particles generally are ten (10) times longer than they are wide and frequently have whiskery strands on all faces of the fiber. Hardly any two fibers are identical in all dimensions and appearance.
12. Engineered Wood Fiber color and particle size may vary.
13. Supplier shall certify that no chemical treatments or additives are present and that the material is non-toxic.
14. Engineered Wood Fiber shall have less than 5% twigs, bark, leaf debris or other organic material incorporated within.

The Fibar Group, LLC
80 Business Park Drive, Suite 300, Armonk, NY 10504-1705
800-342-2721 · (914) 273-8770 · (914) 273-8659
fibar@fibar.com · www.fibar.com



Fibar System 100®
Specifications, Installation and Maintenance Instructions

These specifications were current at the time of publication but are subject to change at any time without notice. Please confirm the accuracy of these specifications with the manufacturer and/or distributor prior to installation.

Fibar Systems® are unique playground surface products, the creation and origination of which are covered by one or more patents owned by The Fibar Group LLC. Award contractors must obtain a license from The Fibar Group LLC prior to construction.

Fibar System 100 comes with a 15-year warranty.

SPECIFICATIONS

SYSTEM	DESCRIPTION	CRITICAL HT.	USE
112	12" Fibar®, FibarFelt®, FibarMat	12'	Playground
110	10" Fibar, FibarFelt®, FibarMat®	12'	Playground
108	8" Fibar, FibarFelt®, FibarMat®	10'	Playground
106	6" Fibar, FibarFelt	NA	Jogging Track

Depth measurements are approximate after compaction.

PART 1: GENERAL

A license to construct a Fibar System according to these specifications must first be obtained from The Fibar Group LLC, as licensor of the patent rights reflected in U.S. Patent numbers 4,679,963; 5,026,207; 5,076,726 and other patents pending.

Note: To preserve warranty, FibarMat wear mats must be installed under all swings, tire swings, and slide exits. They should also be installed at other excessive wear areas, including sliding poles.

- 1.1 Provide Fibar System Playground Safety Surface in areas indicated on plans.
- 1.2 Provide safety surface immediately after installing playground equipment.
- 1.3 Fibar Systems and FibarMats are available from Local Representative:

Name: _____
Phone: _____

Or directly from The Fibar Group LLC, Suite 300, 80 Business Park Dr., Armonk, NY 10504-1705.
You can call 1-800-342-2721 or (914) 273-8770, or email Fibar@fibar.com.

PART 2: MATERIALS

- 2.1 Provide Fibar System No. _____ (choose system), Engineered Wood Fibre to a compacted depth of approximately ____ inches over FibarFelt® (100% polyester, non-woven geotextile fabric) (minimum

flow rate of 10 gpm/ft).

- 2.2 The amount of Fibar Engineered Wood Fibre necessary to provide the approximate depth after compaction is as follows:

Depth Quantity

8"	38 cubic yards per 1,000 sq. ft. of playground area
9"	42 cubic yards per 1,000 sq. ft. of playground area
10"	46 cubic yards per 1,000 sq. ft. of playground area
11"	48 cubic yards per 1,000 sq. ft. of playground area
12"	50 cubic yards per 1,000 sq. ft. of playground area

- 2.3 Provide one (1) FibarMat[®] (minimum size: 36" x 36" x 1.5" with a 2" beveled edge on all sides) under each swing seat, tire swing, slide exit, and sliding pole. Double and triple slides may require multiple FibarMats. Total quantity required is _____.

PART 3: QUALITY CONTROL

- 3.1 Surfacing shall be IPEMA-certified Engineered Wood Fibre. Standard wood chips or bark mulch **will not be acceptable.**
- 3.2 Supplier must provide test results for Engineered Wood Fibre and FibarMats[®] for impact attenuation in accordance with ASTM F 1292 *Standard Specification for Impact Attenuation for Surface Systems Under and Around Playground Equipment*. Results must be provided for new material and for 12-year old Engineered Wood Fibre material.
- 3.3 Testing of Engineered Wood Fibre in accordance with ASTM F 1292 must show G-max values of less than 155G for the 8" thick system, or 120G for the 12" system at 12' drop heights, and HIC values of less than 1,000 for both new and 12-year-old Engineered Wood Fibre.
- 3.4 Testing of FibarMats[®] in accordance with ASTM F 1292 must show G-max values of less than 200G, and HIC values of less than 1,000 for a 4' drop height.
- 3.4.5 Supplier must provide test results for the Engineered Wood Fibre in accordance with ASTM F 2075 *Specification for Engineered Wood Fiber for Use as Playground Safety Surface Under and Around Playground Equipment*.
- 3.5 Supplier must provide test results in accordance with ASTM F 1951 *Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment*.
- 3.6 Supplier must certify that the surface meets the intent of the *Americans with Disabilities Act* (ADA).
- 3.7 Supplier must provide written manufacturer's 15-year warranty against loss of resiliency of Engineered Wood Fibre, and lifetime warranty on FibarFelt[®] fabric material.
- 3.8 Supplier must provide product liability insurance certificate with project owner named as certificate holder, prior to delivery.
- 3.9 In Canada, supplier must meet CSA guidelines.

PART 4: INSTALLATION

- 4.1 Install the FibarFelt[®], FibarMats[®], and the Fibar material in accordance with manufacturer's instructions.
- 4.2 Avoid contamination of the Fibar material with sand, gravel, mud, or native soil.

END OF SECTION

INSTALLATION INSTRUCTIONS

PLEASE NOTE: In accordance with standard design and construction practices, The Fibar Group LLC and its Representatives recommend using the services of a certified engineer, architect, or landscape architect who is familiar with local soil and climate conditions to evaluate and interpret any information provided by The Fibar Group LLC and its Representatives.

The Fibar Group LLC assumes no responsibility for determining the size of the playground or the safety zone between the equipment and the border. Installer must thoroughly examine the site and specifications, carefully checking the dimensions before starting work.

All instructions are subject to equipment manufacturer's installation specifications.

Read Fibar System 100 Specifications, Installation and Maintenance Instructions, all available from The Fibar Group LLC, 1-800-342-2721 or (914) 273-8770 or your local Representative.

ABOVE-GROUND INSTALLATION ONLY

1. The area should be well compacted and accurately graded, especially in areas where additional fill has been brought in. It is not recommended that a Fibar System be installed on a grade greater than 10%. All roots, stones, and vegetation must be removed.
2. Layout should allow for water to flow to a storm drain or similar device to take water collected from playground away from site.
3. Install playground equipment.
4. Cover sub-grade with FibarFelt material. Overlap all seams a minimum of 3". It will be necessary to slit the FibarFelt to fit around the footings of the equipment. Where possible, overlap all slits with next piece of FibarFelt.
5. Install FibarMat wear mats on top or in the middle of Fibar wood fibre or under the Fibar (on top of FibarFelt material). **To preserve your warranty, FibarMat wear mats must be installed under all swings, tire swings, and slide exits.** They should also be installed at other excessive wear areas, including sliding poles. FibarMat wear mats are available through your local Fibar Representative.
6. Install retaining border.
7. **IMPORTANT:** With an indelible marker, **mark off all the legs of the equipment** with the compacted System depth.
8. Spread Fibar wood fibre using a Bobcat or a small front end loader. Operator should be careful not to travel on the FibarFelt or turn sharply on the Fibar. It will also be necessary to use hand labor to spread. To allow for natural compaction, we supply additional material. Important: **Install all the material delivered.** The Fibar may be several inches above grade at finished edge of border. Feather the edges to make a smooth transition to existing grade or border.
9. Hand rake for a perfectly smooth, finished surface.
10. After two weeks of active use, surface should be raked again.
11. CPSC and ASTM Recommended Use Zones.
A use zone of at least 6 feet must surround all equipment with the exception of:
 - a. Swings. A use zone equal to 4 times the height of the top rail is needed in front of and behind swings (2 times in front and 2 times behind).
 - b. Slides. A use zone equal to the height of the slide plus 4 feet, extending a minimum of 6 feet, is needed in front of slide exits.

For complete information on use zones, contact CPSC and ASTM or contact your local Representative.



Incorrect Installation or maintenance, failure to install all the material delivered, failure to maintain the depth of the Fibar System at the System design depth, failure to use FibarMat® wear mats at slide exits, under all swings and tire swings (except enclosed or tot swings), sliding poles, and other wear areas (a wear area is any area in the playground where the surface depth falls below the System design depth for the playground surface), use of the Fibar System and/or materials with others not provided by The Fibar Group LLC, abnormal use, lack of proper maintenance, or vandalism can result in serious injury or death. Be aware that no playground surface can prevent all accidents or injuries.



Winter Conditions. Should there be moisture retention in the Fibar System, it will freeze when the temperature drops below the freezing mark. Please check your surface frequently in winter weather. When the surface is frozen, the impact attenuation properties of Fibar are lost and for this reason, the play area should not be used.



Reread the Installation and Maintenance Instructions periodically. If at any time you are concerned about the surface and its performance, please contact us at 1-800-342-2721 or (914) 273-8770.

END OF SECTION

MAINTENANCE INSTRUCTIONS

1. **Visual Inspection.** Look for debris - especially stones, broken glass, or other foreign objects and remove them. Check to make sure that the level or depth of the Fibar® surface doesn't fall below the Fibar System® design depth. The legs of the equipment should have been marked with a bold horizontal mark showing the System depth when originally installed. If they are not, take the time to mark the legs with an indelible marker at the System design depth, measuring from the bottom of the Fibar surface. This will allow you to readily see when the Fibar needs to be redistributed or topped off to maintain proper system depth. If the equipment was not marked, or you choose not to mark it, the surface must be checked at a number of points using a long handled screwdriver marked in inches, to determine the actual depth. If the actual depth is below the System design depth, redistribution and/or top off is needed. See Paragraph 3, Raking, and top off if the depth of the Fibar is below the System design depth. Inspect the surface daily.
2. **Top-Off.** Experience has shown us that installations typically require top offs after three (3) years of use (on some playgrounds, maybe sooner). Top-offs can sometimes be scheduled with other deliveries to minimize the freight cost. See Paragraph 1, Visual Inspection, for guidelines on how to know when you need a surface top-off.
3. **Raking.** Wear areas (See Paragraph 7, Incorrect Installation or Maintenance) should be raked level and maintained at the proper System design depth of inches as measured from the bottom of the Fibar surfacing enclosure to the top of the Fibar surface. See Paragraph 2, Top-Off, if more Fibar is needed to maintain the System design depth. See Paragraph 1, Visual Inspection, regarding the use of the marks on the legs of the equipment to readily determine the relationship between the actual depth and the System design depth. When a Fibar System installation is close enough to a sandpit that sand gets tracked into the Fibar surface, this could adversely change the impact attenuation characteristics of the Fibar System. The surface should be very vigorously raked to attempt to mitigate this.
4. **Wear Mats.** To preserve your warranty, FibarMat® wear mats must be installed under all swings, tire swings, and slide exits. They should also be installed at other excessive wear areas, including sliding poles. The preferred method is to place the mats on top of the Fibar Engineered Wood Fibre. They can also be placed in the middle of the Fibar or directly under the Fibar, on top of the FibarFelt® fabric. If these wear mats were not ordered when you ordered the Fibar System, please call your local Fibar Representative or The Fibar Group LLC at 1-800-342-2721 or (914) 273-8770.

5. **Accessibility.** Depending on weather and usage, a Fibar surface will compact to provide access for wheelchairs, crutches, walkers, and wheeled vehicles within two to six weeks of installation.
6. **Weeds.** Conditions could occur that might cause weed growth. You can remedy this situation by use of an environmentally approved weed killer (call your local Cooperative Extension office for recommendation) or pull out the weeds by hand.

END OF SECTION



An Environmental Analysis

By their nature, Fibar products help to meet the goals of LEED® (Leadership in Energy and Environmental Design), which the US Green Building Council describes as “a third-party certification program and the nationally accepted benchmark for the design, construction, and operation of high performance green buildings”. There are no products that are LEED® certified. Many products can help a building project qualify under the LEED® rating system.

The following definitions may be helpful in understanding the terms used in LEED programs.

- **Pre-Consumer Recycled Content** – This refers to the recycling of scraps, trimmings, and other byproducts that were never used in the consumer market. These materials are produced by manufacturers and processors.
- **Post-Consumer Recycled Content** – This refers to the recycling of products that have completed their designed use in the consumer market and would be disposed of as waste. These products are collected in recycling programs and include such items as paper, aluminum cans, plastic bottles and tires.
- **Regional Materials** – This refers to products that are extracted, processed and manufactured regionally, within 500 miles of the project site.
- **Heat Island Effect** - This is defined by USGBC as “thermal gradient differences between developed and undeveloped areas”.
- **Volatile Organic Compound (VOC)** – All adhesives and sealants used inside a building (inside the weatherproofing system and applied on-site) must comply with South Coast Air Quality Management District (SCAQMD) Rule #1168. VOC limits listed correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005.
- **Recycled Shredded Rubber (SBR)** - is a rubber product manufactured from ground recycled tire rubber with loose fiber removed and free of foreign materials. It is comprised of a mixture of crumb rubber and rubber buffings to aid in compaction.

Fibar Engineered Wood Fiber Playground Safety Surfacing

Materials & Resources – MR2 – Construction Waste Management

Fibar Engineered Wood Fiber is a loose-fill product that is shipped in bulk so there are no package wrappings or pallets to dispose of in dumpsters or landfills.

Materials & Resources – MR4 – Recycled Content

Fibar Engineered Wood Fiber is 100% pre-consumer recycled materials. The wood fiber is obtained from the scrap of wood mills and truss plants. This material is then processed, by our patented process, to make the wood fiber. There are no added chemicals or toxins applied to the Engineered Wood Fiber.

Materials & Resources - MR5 – Regional Materials

Fibar Engineered Wood Fiber is harvested, processed and manufactured at over 65 locations throughout the United States and Canada. As such, shipment of the Engineered Wood Fiber is generally within 100 miles of most projects, but occasionally up to 500 miles for some remote projects.

Water Efficiency – WE1 – Water Efficient Landscaping

FibarDrain, when used in conjunction with FibarFelt, obviates the need for crushed stones and plastic pipes to provide drainage for playgrounds. It forms an innovative part of the FibarSystems, which were developed by Fibar and have earned an U.S. patent as a unique method of providing safety surfacing for playgrounds. The water from the FibarSystems could be stored in a cistern or underground storage tank to use for landscape irrigation.

Water Efficiency – WE2 – Innovative Wastewater Technologies

The water from the FibarSystems could be stored in a cistern or underground storage tank to use for non-potable uses inside the building.

Accessories for Engineered Wood Fiber

Materials & Resources – MR4– Recycled Content

FibarGuard Black Playground Borders are made of rugged High-Density Polyethylene that is 25% post-consumer recycled materials.

Materials & Resources - MR5 – Regional Materials

FibarGuard Black Playground Border is manufactured in southern Texas.

Materials & Resources – MR4– Recycled Content

FibarMat wear mats are manufactured of a recycled SBR rubber that is 100% post-consumer recycled materials.

Materials & Resources - MR5 – Regional Materials

FibarMat wear mats are manufactured in western Pennsylvania.

Materials & Resources – MR4– Recycled Content

FibarDrain is manufactured with 40% pre-consumer recycled materials.

Materials & Resources - MR5 – Regional Materials

FibarDrain is shipped from North Carolina.

Materials & Resources – MR4– Recycled Content

FibarFelt is manufactured with 20% pre-consumer recycled materials.

Materials & Resources - MR5 – Regional Materials

FibarFelt is shipped from South Carolina, Illinois and California.

FibarPIP Poured in Place Playground Safety Surfacing

Sustainable Sites – SS7.1 – Heat Island Effect – Non-Roof

Fibar Poured-in-Place (PIP) Playground Surfacing is available in a multitude of colors, which can be used to reduce the impact of heat islands.

Materials & Resources – MR4 – Recycled Content

Fibar Poured-in-Place (PIP) Playground Surfacing is a two layer system, consisting of a 100% post-consumer recycled material base layer, a foam layer consisting of 100% post-industrial recycled materials, in some applications, and an EPDM wearing layer whose recycled content is dependent on the amount of black/color EPDM used. The recycled content is shown in the following chart.

FibarPIP Thickness	All Black EPDM	All Color EPDM	50% Black & 50% Color
1.5"	100%	75%	85.5%
2"	100%	81%	90.5%
2.5"	100%	85%	92.5%
3"	100%	87.5%	93.5%
4"	100%	90%	95%

Materials & Resources – MR5 – Regional Materials

Fibar Poured-in-Place (PIP) Playground Surfacing is manufactured in central South Carolina. The foam is manufactured in southern Michigan and Ontario, Canada.

FibarIndoor Play Safety Surfacing

Materials & Resources – MR4 – Recycled Content

FibarIndoor Play Safety Surfacing is a two-part system consisting of a 54 mm base layer and a 6 mm top layer (carpet). The base layer is made from 100% pre-consumer (post industrial) recycled materials, a foam layer consisting of 100% post-industrial recycled materials, in some applications, while the top layer consists of 10% post consumer recycled materials.

Materials & Resources – MR5 – Regional Materials

FibarIndoor Play Safety Surfacing foam is manufactured in southern Michigan and Ontario, Canada. Carpeting is manufactured in Central Georgia.

Indoor Environmental Quality – IEQ 4.1 – Low-Emitting Materials – Adhesives & Sealants

FibarIndoor Play Safety Surfacing utilizes a polyurethane adhesive for the base layer of the systems and this has a Volatile Organic Compound (VOC) limit of ZERO (0) g/L. The adhesive used for the top layer of the systems has a Volatile Organic Compound (VOC) limit of ONE (1) g/L. This material complies with the requirements that the carpet and pad adhesives have a VOC limit of less than 50 g/L.

REDUCE, REUSE, RECYCLE

Recycled Content In Our Products

100% Recycled
Border Timbers
Rubber Mulch
Springs for Spring Riders

90%+ Recycled
Castings
Clamps

50% - 70% Recycled
Steel Posts
Climbers
Steel and Plastic
Barriers
Components

25% Recycled
Perforated Steel Decks
Steel Panels
Powder Coat

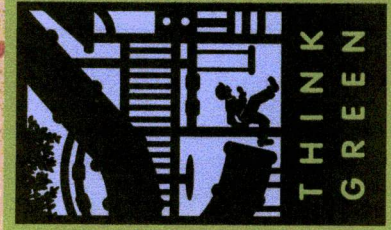
Recyclable Content In Our Products

100% Recyclable
Border Timbers
Rubber Mulch
Springs for Spring Riders
Steering Wheels
Several Small Castings
Aluminum Posts
Steel Trash Cans
Stainless Steel Slides

95% - 98% Recyclable
Steel & Plastic Panels
Posts
Decks
Plastic Slides
Spring Riders
Plastic & Steel Roofs



SHAPING THE FUTURE OF PLAY



www.miracle-recreation.com
1-888-458-2752



878 E Highway 60
Monett, Missouri, USA 65708
www.miracle-recreation.com

Toll Free 1-888-458-2752
International +1-417-235-6917
Fax +1-417-235-6816



MAY RECREATION EQUIPMENT & DESIGN, L.P.

Randy May
3 Sunspree Place
The Woodlands, TX 77382
randy@mayrecreation.com

Toll Free: (800) 964-6301
Phone: (281) 363-1908
Fax: (281) 363-2960
www.mayrecreation.com

Satellite Offices:

SPRING, TEXAS
Jeff Bratton
jeff@mayrecreation.com

TYLER, TEXAS
Jeff Bigbie
bigbie@mayrecreation.com



Right Choice, Right Now!

With an unmatched representative network,
Miracle is here to help make your next
playground project a reality.

GET IN TOUCH TODAY, and discover why
Miracle is the right choice, right now.

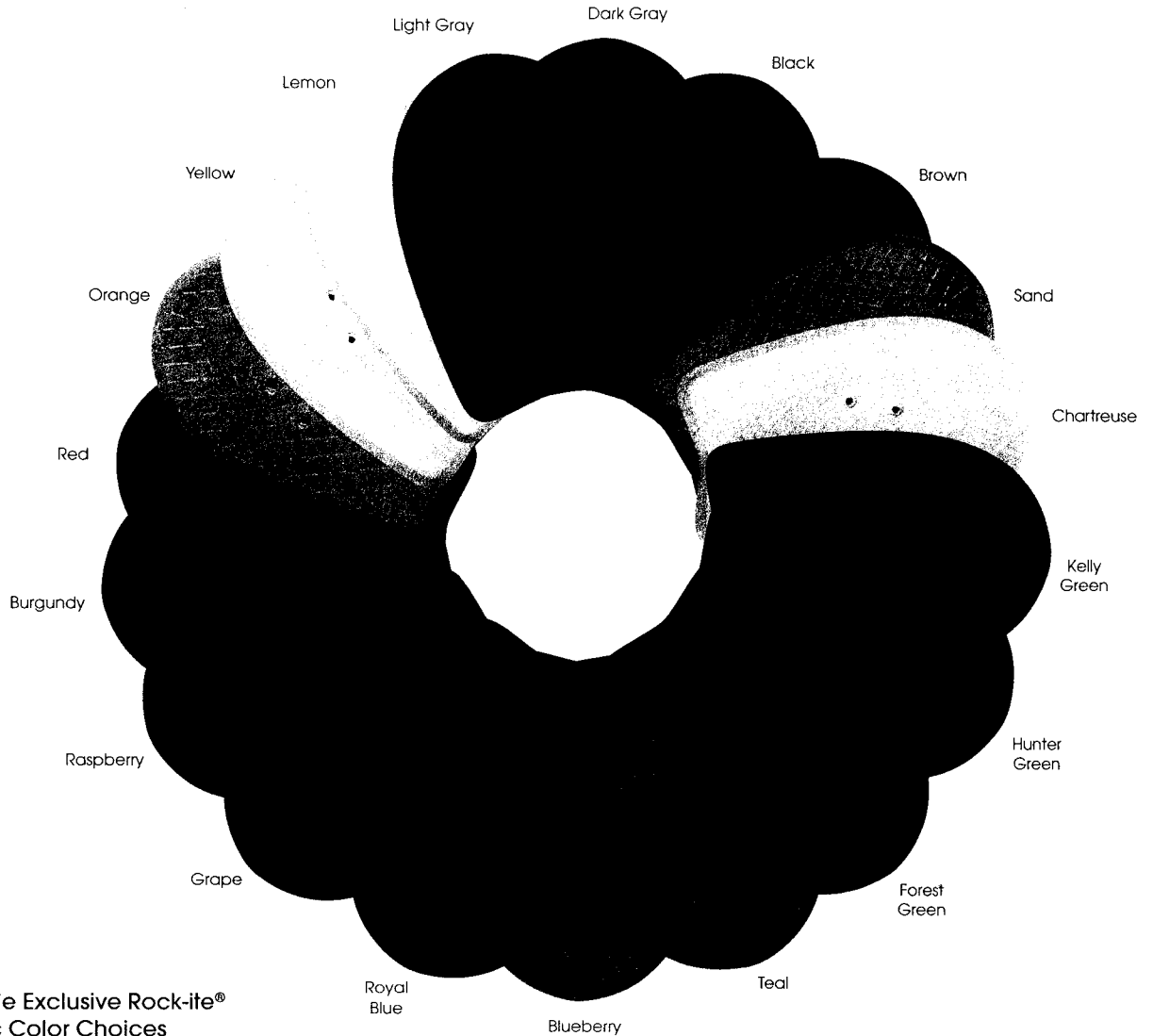
1-888-458-2752

Color Choices

CONT

Rock-ite® Plastic Color Choices

Roofs, Slides, Big Timber® Components, Crawl Tubes, Bongos™, Bumpers and Panels.

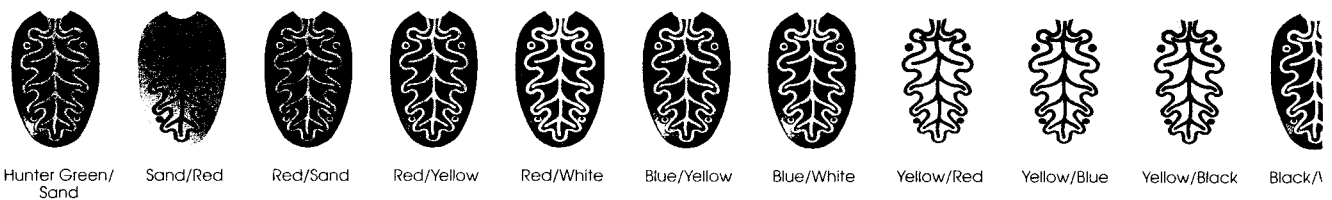


Miracle Exclusive Rock-ite® Plastic Color Choices

Please consult with your Miracle Representative concerning the availability of these exclusive Rock-ite® Colors on certain components.



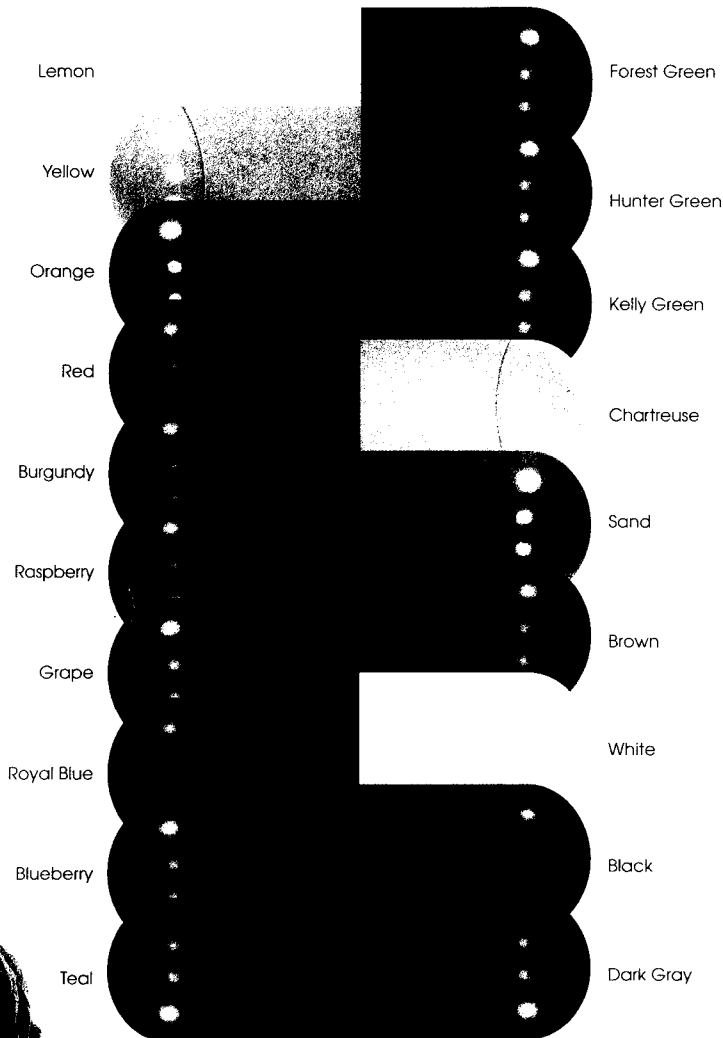
Mira-Lene™ Panel Color Choices



createi

Mira-Cote® Powder-Coated Painted Metal Color Choices

Posts, Arches, Swings and Accents (Railings & Climbers).

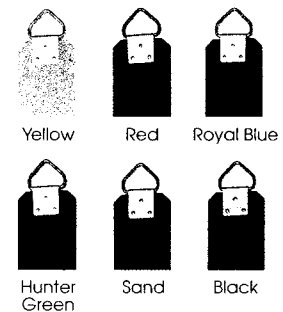


Miracle Anti-Microbial Color Choices

Fight the spread of germs with Miracle's exclusive anti-microbial treatment – now in all Miracle Series paints. This proprietary treatment helps to protect equipment from bacteria, mold, algae growth, and stains.

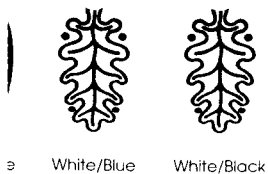
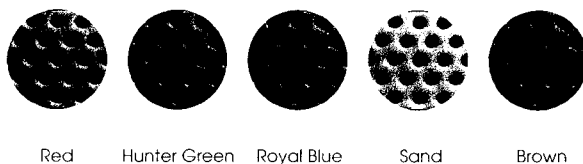


Miracle swing seat colors



Textured Mira-Therm™ Color Choices

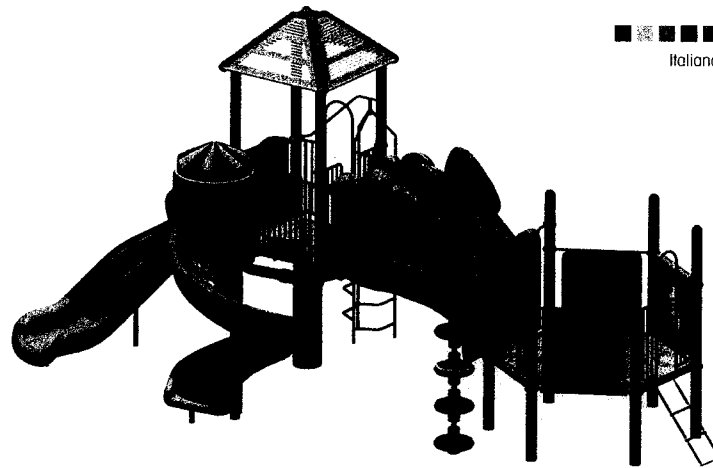
Mira-Therm™ coatings for Decks, Steps, Ramps, Bridges & Cargo Climbers are available in either orthophthalate-free Mira-Therm™ 2 (vinyl) or Mira-Therm™ PE (polyethylene) - based coatings with anti-microbial enhancements.



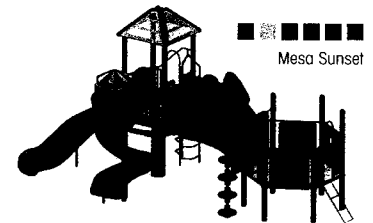
Themed Color Choices

Designer...Give your playground style!

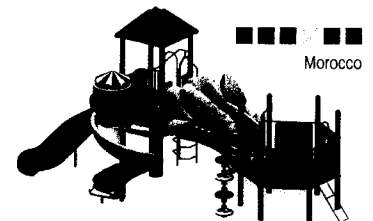
Color your playground with one of the exciting themed color combinations below, or create a custom palette with our wide selection of standard surface colors and Designer + Series paints - even match school colors! Ask your representative for information on custom color combinations.



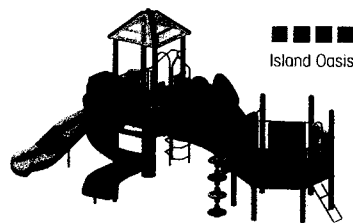
Italiano



Mesa Sunset



Morocco



Island Oasis



Big Timber



Elementary



Jewel Tone



Earth Tone



Ocean



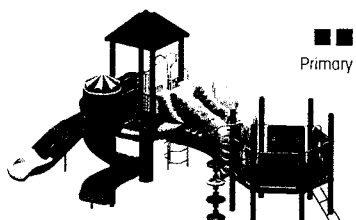
Nautical



Sahara



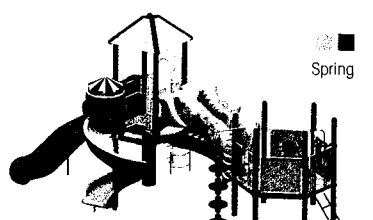
Tropical



Primary



Patriotic



Spring