

SECTION 32 31 32 PLAYGROUND EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes relocation, supply and installation of integrated, playground equipment.
- B. Related Work:
 - 1. Division 1 “General Requirements”.
 - 2. Section 32 18 25 - Playground Surfacing System
 - 3. Section 03 30 00 – Cast in Place Concrete

1.2 PRODUCT DESCRIPTION

- A. Quality: Playground equipment to be a high - quality, safe, and attractive product, manufactured and designed by the same company. Assemblages or combinations of products from two or more manufacturers will not be accepted. Playground equipment shall contain the components and be designed according to the layout shown on the Drawings.
- B. Standards: Playground equipment shall be designed to meet all current and relevant standards.

1.3 REFERENCES

- A. US Consumer Product Safety Commission (CPSC) Handbook for Playground Safety.

1.4 QUALITY ASSURANCE

- A. Structural Integrity Requirements for Playground Equipment: Playground equipment shall comply with structural integrity requirements for playground equipment, as tested under ASTM F1487.
- B. American Standards for Testing and Materials (ASTM): Playground equipment shall comply with relevant ASTM standards for playground equipment, components, and materials.
- C. Americans with Disabilities Act (ADA): Playground equipment shall comply with the requirements of the Americans with Disabilities Act (ADA), as understood by most recent administrative and judicial rulings and clarification(s) at the time of this specification.
- D. Consumer Products Safety Commission (CPSC): Playground equipment shall comply with the requirements of the Consumer Products Safety Commission (CPSC), latest version.
- E. Manufacturer’s Experience: Playground equipment shall be furnished by a manufacturer with a minimum of ten (10) years’ experience in the design, fabrication, and assembly of integrated playground equipment.

- F. Installer's Experience: Playground equipment shall be installed by a contractor with a minimum of five (5) years' experience in the assembly and installation of the specified brand of integrated playground equipment.

1.5 WARRANTY

- A. Product Warranty: Relocated playground equipment shall continue the existing replacement warranty against defects in materials with the following minimum time periods:
 - 1. 100-Year Limited Warranty for all aluminum posts, clamps, beams and caps, against structural failure due to corrosion/natural deterioration or manufacturing defects. This warranty does not include any cosmetic issues or wear and tear from normal use.
 - 2. 15-Year Limited Warranty for all plastic and steel components, including TuffTimbers, against structural failure due to corrosion/natural deterioration or manufacturing defects. This warranty does not include any cosmetic issues or wear and tear from normal use.
 - 3. 15-Year Limited Warranty for TenderTuff coating against structural failure due to natural deterioration or manufacturing defects. This warranty does not include any cosmetic issues or wear and tear from normal use.
 - 4. 15-Year Limited Warranty for TuffTurf against material or manufacturing defects when properly installed. This warranty does not include any cosmetic issues or wear and tear from normal use.
 - 5. 3-Year Limited Warranty for all other parts, including CableCore Products, Swing seats and hangers; Trackride trolleys and bumpers; all rocking equipment, etc. against failure due to corrosion/natural deterioration or manufacturing defects. This warranty does not include any cosmetic issues or wear and tear from normal use.
- B. Product Warranty: New playground equipment shall have a replacement warranty against defects in materials with the following minimum time periods:
 - 1. 100-Year Limited Warranty for all aluminum posts, clamps, beams and caps, against structural failure due to corrosion/natural deterioration or manufacturing defects. This warranty does not include any cosmetic issues or wear and tear from normal use.

1.6 LIABILITY INSURANCE

- A. The manufacturer shall carry "products" liability insurance from an acceptable commercial insurance company covering the play apparatus. The limits shall be no less than \$10,000,000.00 for Personal Injury and Property Damage. A Certificate of Insurance shall be submitted as part of the bid proposal. Manufacturer's equipment that does not carry such insurance will not be considered.

1.7 SUBMITTALS

- A. General: Submit in compliance with Division 1 Section "Submittals."
- B. Test Results: Test results shall be certified and submitted on independent testing laboratory letterhead indicating compliance with the tests noted above, as follows:
 - 1. ASTM "Structural Integrity Requirements for Playground Equipment"
- C. Certification: Certification shall be submitted indicating compliance with:
 - 1. Requirements of the Americans with Disabilities Act (ADA).
 - 2. Consumer Products Safety Commission (CPSC) guidelines.

- D. Notice of Defects: Copies of any public notices or private correspondence to purchasers informing same of any defects or potential defects within the past five (5) years.
- E. Shop Drawings of the following:
 - 1. Manufacturer shall submit Shop Drawings for all playground equipment and shall be in accordance with all applicable standards for playgrounds. Include foundation layouts.
- F. Inventory:
 - 1. Submit a list of all existing play equipment pieces on site to be relocated.
- G. Samples:
 - 1. Submit three samples for each type of finish indicated.

1.8 MANUFACTURER'S REVIEW

- A. Punch List Review: A manufacturer's representative shall be present at the punch list review of the playground equipment. Others present at the punch list review will be the Owner, the Owner's Representative, the Contractor, and, if applicable, the playground installer subcontractor. Manufacturer's representative shall not review the equipment without these other parties present.
 - 1. Manufacturer's representative shall note any items which are not in conformance with the playground equipment's specifications or instructions for installation, and which must be corrected before the playground equipment can be safely used, or which must be corrected in order for the manufacturer's warranties to be in effect.

PART 2 - PRODUCTS

2.1 BASE PLAYEQUIPMENT

- A. ACCEPTABLE MANUFACTURER
 - 1. Manufacturers:
 - a. Landscape Structures, 6017th Street South, P.O. Box 198, Delano, Minnesota 55328-0198, 888-4FUNLSI tel; distributed locally by NuToys Leisure Products, Box 2121, LaGrange, Illinois 60525, 708-579-9055 tel, Ms. Moira Staggs.
 - b. Or approved equal.
- B. COMPONENTS

<u>QTY.</u>	<u>NO.</u>	<u>DESCRIPTION</u>
New Posts and Hardware for Existing Structure		
1	127400	MAINTENANCE BINDER
1	693469-01	T80193 - Hardware for Structure
4	107537-00-001	POST W/CAP PB 148i STL DB, blue
7	107520-00-001	POST W/CAP PB 116i STL DB, blue
1	107531-00-001	POST W/CAP PB 140i STL DB, blue
7	107527-00-001	POST W/CAP PB 132i STL DB, blue
6	107525-00-001	POST W/CAP PB 124i STL DB, blue
4	107517-00-001	POST W/CAP PB 108i STL DB, blue
1	107509-00-001	POST W/CAP PB 92i STL DB, blue
1	107507-00-001	POST FLSH 89-3/8i STL DB, blue
1	107501-00-001	POST FLSH 81-3/8i STL DB, blue

Also:

3	111404V	76" Steel Post DB, blue
1	152911C	Curved Transfer Module DB, red

New Posts and Hardware for Escalator

1	160843-00-001	Blue Post w/ Cap 164i Stl 42i PB
2	140619-00-001	Blue Post w/ Cap 108i Stl 42i DB
1	160745	Hdw. Dbl Escalator Climber
4	100610	1/4 x 5/8 Drv Rivet
2	100611	1/4 x 3/8 Drv Rivet
1	160860-00	Install for Dbl Escalator Climber

C. COLORS

1. Playground equipments colors shall match Architect's rendering and as follows:
 - a. Posts: match existing

D. PLAYGROUND EQUIPMENT LAYOUT:

1. Layout: Playground equipment layout shall be per the Drawings.

E. PLAYGROUND EQUIPMENT COMPONENTS:

1. "Landscape Structures" equipment, based on those manufactured by Landscape Structures, shall include the following components and all components indicated on the Drawings to form a complete, fully-integrated piece of playground equipment.
2. Ancillary Components and Hardware: Playground equipment shall also include any necessary or implied ancillary components and hardware.

F. PLAYGROUND EQUIPMENT LAYOUT

1. Layout: Playground equipment layout shall be per the Drawings.

PART 3 - INSTALLATION

3.1 UNDERGROUND UTILITIES

- A. Contractor shall contact the appropriate utility locating service(s) for the City of Chicago, and shall request that all underground utilities be marked on the ground prior to commencing work.

3.2 LOCATION

- A. Location: Playground location is shown on the Drawings.

3.3 INVENTORY

- A. Inventory playground equipment prior to assembly, in order to ensure that all components and parts are available. Notify in writing the Owner, Owner's Representative, and Manufacturer's Representative of any missing components or parts. Do not proceed with assembly or installation until all components and parts are available.

3.4 LAYOUT

- A. Layout playground equipment within play area, indicating locations for footings and other components which are supported by concrete footings.

3.5 FOOTINGS

- A. Landscape Structures Equipment
 1. Depth of supporting posts / uprights below grade shall be thirty-four (34) inches below ground.
 2. Size and Depth of Footings for Supporting Posts / Uprights: Supporting posts / uprights shall be cast into a concrete footing, minimum 3,500 psi, minimum fourteen (14) inches diameter, forty-two (42) inches below grade, installed on compacted or undisturbed subgrade.

3.6 ASSEMBLY

- A. Playground equipment shall be disassembled and reassembled strictly per the manufacturer's specifications, drawings, instructions, and recommendations. Assemble all components and parts, with parts loosely fastened, in order to ensure that playground equipment can be completely assembled.
- B. Place loosely assembled playground equipment in excavated holes for footings, in order to ensure that layout matches playground equipment dimensions.
- C. Level and align playground equipment per the manufacturer's specifications, drawings, instructions, and recommendations. Brace, shim, and otherwise stabilize playground equipment such that it is not displaced from its correct horizontal and vertical alignment when concrete is poured in the footings around the supporting posts / uprights.

3.7 INSTALLATION

- A. Pour concrete in footings around supporting posts / uprights and other components supported by concrete footings.
- B. Verify that playground equipment has maintained correct horizontal and vertical alignment.

- C. Tighten clamps and all fastening hardware while concrete is setting, to ensure that the playground equipment is maintained in its correct horizontal and vertical alignment by the hardened concrete.
- D. Maintain constant supervision of playground equipment until concrete is sufficiently hardened and movement of supporting posts / uprights and other components is no longer possible.

3.8 SUPERVISION

- A. Maintain constant supervision of playground equipment until concrete is sufficiently hardened and movement of supporting posts / uprights and other components is no longer possible.

END OF SECTION