

Section 11480 Athletic Equipment

Part 1 – General

1.01 Work Included

- A. Ceiling Suspended Basketball Backstops
- B. Volleyball Floor Sleeves and Cover Plates
- C. Wall Padding

1.02 Related Sections

- A. Division 5 Section “Structural Steel” for structural supports not provided by gymnasium equipment manufacturer for supporting athletic equipment to building structures.
- B. Division 16 Sections for electrical service and connections for motor operators, controls, limit switches, and other powered devices for system disconnect switches for motorized athletic equipment.

1.03 Quality Assurance

A. Qualifications

1. Manufacturer: A firm engaged in the manufacture of the products described hereinafter whose products have been in satisfactory use in similar service for a minimum of five years. Specifications are based on products by American Athletic Inc. Other approved manufacturers include:
 - a. Porter Athletic Company
 - b. Jaypro Sports
2. Installer: A firm that has a minimum of five years of successful installation experience with projects utilizing the products of this Section similar in type and scope to that required for this project.

1.04 Submittals

- A. General: Make submittals in accordance with Section 01300.
- B. Shop Drawings: Fully dimensioned, showing actual field measurements and showing method of installation and anchorage.
- C. Manufacturer’s detailed materials and fabrication specifications and installation recommendations; include catalog cuts of all hardware, anchors and accessories.

1.05 Product Handling

- A. Delivery: Deliver product in original, unopened protective packaging with labels intact and legible.
- B. Storage and Protection: Storage products in a housed dry area and protect from damage as per their manufacturer's instructions.

Part 2 – Products

2.01 Basketball Backstops

- A. Design: Basketball Backstops, Backboards, Goals and Accessories are as follows:
 - 1. Backstops: Model 1017 Ceiling Suspended Forward Folding Rear Braced. Vertical "main mast" shall be of a braced "T" design consisting of 6-5/8" O.D. schedule 10 structural steel pipe with Die Cut saddle welded diagonal side braces of 2" heavy wall square tubing. Top horizontal hinge support to be of 6" x 8.2# structural steel channel (ASTM A 36) welded to 6 5/8" O.D. pipe and diagonal bracing to form a rigid triangular design. Additional bracing shall be provided on selected backstops with attachment heights of 25' to 28' and above (T series). A lower bank extension of structural steel clamped to the vertical mast allows the goal to mount directly through the backboard to the bank extension eliminating any strain on the backboard. This direct mount feature shall conform to the NCAA recommendations. The upper bank extension assembly adjusts to comply with official NCAA and NFSHSA regulations of 6" from the front of the mast to the face of the backboard.
 - 2. Special adjustable backstop hinge hangers allow precise frame placement, leveling and alignment during installation. Hangers are offset 2" from the center line of the main mast (except on T series) which allows the weight of the backstop to lock the unit in playing position without the use of latching mechanism, ropes, cables or springs.
 - 3. Overhead support for the backstop shall consist of 3-1/2" O.D. schedule 10 pipe anchored to building structural members by heavy steel fittings and clamps. Pipes within the superstructure may be reinforced with extra bridging or bracing when the distance between structural members exceeds 10' if necessary. Backstops shall have an electrostatically applied powder coat finish with custom colors available.

4. Rear brace shall consist of 2-3/8" O.D. outer telescopic pipe with 2" O.D. zinc plated inner telescoping tubing. Adjustable brace lock feature allows precise mast placement during installation ensuring that the backboard will always be plumb.
5. Backboards: Main Court Units shall be furnished with Model BB1SB Rectangular Glass Backboard, 42"x72". Board shall be constructed of 1/2" tempered glass and shall have a 5/16" Anodized Aluminum frame that is fitted with a shock absorbing material to the glass. The frame will be predrilled for Bolt-on Safe Edge Padding. The 2" border and target are fired into the glass for a longer lasting finish. The goal mounting pattern shall be 5"x4". Rim restrainers shall be 1/8" x 1" flat bar attached directly to the frame using high allow flat head screws. All frame bolts shall be countersunk to allow for maximum surface area strength.
6. Model EB97 Bolt-on Safe Edge Padding shall be supplied on all boards. Padding shall be provided to protect 15" up either side of the backboard to meet all professional, college, high school and FIBA specifications. The padding shall be injected molded urethane providing a super tough outer skin to ensure durability while also providing a soft cushion for player protection. The padding shall provide a full 2" thickness from the bottom and sides of the backboard frame. A one inch thick lip extending 3/4" from the bottom and sides of the backboard shall further protect the front and back surfaces of the backboard frame. The molded tongue and groove design locks the pads together beneath the rim with bolts provided to attach the padding to the backboard at the reinforced mounting hole locations.
7. Model 402745 Electric Winch shall be a instantly reversing 3/4 HP motor governed to stall at 14 amps to prevent overload. Unit shall develop over 1000 lbs of line pull at a speed of 9 feet per minute. A large grooved drum, with a 4-1/2" diameter, assures long cable life and proper coiling. A tension roller assures correct cable tracking. Al high speed worm gear is supported for both radial and thrust loads. Positive locking double reduction worm gear drive provides a 200:1 reduction ratio that creates a strong cable hold under load. This eliminates the need for special brakes that can overload the motor, causing it to generate excessive heat and shorten its life. A sealed gear case provides a lifetime of maintenance free operation. Mounting can be done in any position to provide flexibility during installation. The winch contains a 6' 14/4 power cord with a strain relief at the box and a 4-prong twist lock plug as per NEMA L14-20P.

There will also be a 4 prong twist lock receptacle per NEMA L14-20R and 812 cover for a 4" square electrical box for use with the receptacle during installation. Each unit shall be accompanied with a key switch and electrical cover box.

8. Model SD8 Slam Dunk Goal shall be designed to absorb shock loads due to dunking or hanging on the goal. Goal shall incorporate a field adjustable positive lock system to automatically release and pivot downward when excessive loads are put on the ring. Goal shall be spring loaded to return to its original position instantly. The goal design shall allow tension to be tightened to compensate for wear. Goal shall be FIBA approved and be equipped with a field adjustable mechanism to maintain NCAA and professional recommendations for rebound elasticity. Rim shall be an 18" inside diameter replaceable ring. Goal shall have a wrap around brace over 50% of the ring circumference for maximum strength. Goal shall be electrostatically powder coated orange and shall include a anti-whip net and mounting hardware.
9. Model AL Auto Lock Safety Strap shall attach to basketball backstop to guard against accidentally falling. The lock has a fully automatic rest and a positive locking mechanism that sets by inertial and/or centrifugal force and shall be tested to 1500 lbs. of free fall load. The housing uses integrally cast components for high strength and attractive appearance. A 35' 2" wide belt stores automatically inside the housing. The belt is rated at 6000 lbs. The universal mounting bracket allows for attachment to 3" pipe parallel or 90 degrees. All components are factory sealed to eliminate tampering.
10. Model 1810S Single Mast Height Adjuster shall allow the backboard to be lowered to the positive stop 8' height and back up to 10' easily to encourage play at all levels. The large coupling nut provides maximum stability and durability and comes standard with grease fitting to extend the thread life to its maximum. Adjuster shall be flush with the bottom of the backboard. The unit shall be operated from the floor with a hand crank, which fits onto the end of the threaded rod drive assembly.

2.02 Volleyball Floor Sleeves

- A. Volleyball floor sleeves shall be constructed of heavy duty steel tubing with a 3-1/16" inner diameter. This allows easy installation of the uprights with minimal movement of the uprights after installation. The floor sleeves are 9-3/32" deep and have a baked blue powder coat finish.

- B. The cover shall be 4-3/4" in diameter and .1046" thick and shall be hinged to the outer ring. The cover shall seat in the outer ring so that it is flush with the floor surface when closed. A locking bar shall be attached to the bottom cover plate with a hex head screw. The screw can be used to tighten the locking bar against the underside of the retaining ring so that the cover is locked into place. The cover plate shall have a chrome plated finish.

2.03 Wall Padding

- A. Safety wainscoting panel is 2' wide x 6' high and is 1-3/4" thick. Panels shall be constructed using 3/8" structure wood backing, 1-3/8" polyurethane foam and 14 oz. vinyl cover. There shall be a 1" nailing margin top and bottom for eaching the panel to the wall. Backside of the panels hall be 3/8" thick structure wood panel 2' x 6'. The foam shall be 100 ILD polyurethane. The cover fabric shall meet the NFPA 701 Standard.

Part 3 – Execution

3.01 Preliminary Requirements

- A. Verification of Conditions
 - 1. Contractor shall examine the areas and conditions under which the work is to be installed; notify the Architect in writing of conditions detrimental to the installation and completion of the work; do not proceed with the work until unsatisfactory conditions have been corrected.
 - 2. Beginning of the work indicates acceptance of the areas and conditions as satisfactory to the Contractor.

3.02 Installation

- A. General: Install backstops, backboards, goals, wall pads and nets level, plumb and turn to line and in compliance with manufacturer's instructions and final shop drawings. Provide all accessories, anchors, inserts and other items required for installation of units and attachment to adjoining construction.
- B. Volleyball Floor Sleeves shall be turned over to the general contractor for installation by the flooring subcontractor.

3.03 Field Quality Control

- A. Protection: Provide final protection and maintain conditions in a manner to insure that the products of the Section shall be without damage at date of Architect's Final Certificate.
- B. Cleaning: Not more than ten days prior to final inspection, remove all maskings and temporary labels and clean all exposed to view items as recommended by their manufacturer