

DIVISION 11 EQUIPMENT**SECTION 11480 BASKETBALL BACKSTOPS AND GOALS****PART I GENERAL****1.1 SECTION INCLUDES:**

- A. Forward folding front braced manual operated indoor basketball backboards and goals.

1.2 GUARANTEE

- A. The supplier must guarantee the backstops against defects in material and workmanship for 25 years after the completion of the installation.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.Product Data: Provide data for decorative, pre-faced masonry units and fabricated wire reinforcement.

PART 2 PRODUCTS**2.1 MANUFACTURERS**

- A. Draper, Inc.
411 South Pearl Street
Spiceland, IN 47385
Toll-Free: (800) 238-7999
Fax: (800) 323-0522
Web site: <http://www.draperinc.com>
E-mail: draper@draperinc.com
- B. Note that all model numbers in this specification are those of Draper, Inc.
- C. Manufacturers desiring to bid as equal must submit technical data for prior approval by the architect at least ten days before bid date

2.2 FOLDING BACKSTOPS

- A. Draper model # TF-20-B. Ceiling-suspended, forward folding, front braced basketball backstop. Backstop shall be of a rigid tetrahedral T-design of back-to-back right triangles. The main frame shall consist of a main stem (center-strut) of 6" (15.24cm) OD 11-gauge (3.05mm) steel mechanical tubing with diagonal side braces of 2-1/4" (5.72cm) OD 14-gauge (2.12mm) steel mechanical tubing. Side braces must join the main stem no higher than 4'6" (1.37m) above the goal. Horizontal Top-of-T support shall be 4" (10.16cm) OD 11-gauge (3.05mm) steel mechanical tubing. For attachment heights exceeding 28'8.53m, the main frame shall be bolted together and shipped knocked down, and additional webbing braces provided.
- B. The folding brace shall be jackknife type, self-locking in the down (playing) position and constructed of 2-1/2" (6.35cm) OD 13-gauge (2.41mm) outer steel mechanical tubing and 2-1/4" (5.72cm) OD 14-gauge (2.11mm) inner steel mechanical tubing. Brace shall be fully adjustable to precisely plumb face of bank during installation.

- C. The main backstop frame shall be suspended by 1/2" (1.27cm) minimum steel plate hangers and shall pivot on 1-1/4" (3.18cm) minimum solid steel shaft securely welded in Top-of-T for precise positioning of bank. (All adjustments for plumbing and leveling purposes shall be made in backstop superstructure, and not by use of adjustable type main frame hangers. Backstop designs using one bolt type main frame hangers are not acceptable.) Backstop shall weight lock in playing position.
- D. Backstop shall be rigidly suspended from building structure as shown on the drawings. Pivot point or pin height shall not exceed 15" (38.1cm) from roof structure except when required for coordination with other trades. Backstop designs using parallelogram drop frames (cradles) are not acceptable.
- E. Backstop shall be supported from 4" (10.16cm) OD 11-gauge (3.05mm) steel mechanical tubing anchored to structure by means of heavy duty, full surface clamps. When distance between supports exceeds 8' (2.46m), superstructure shall be reinforced with bridging and/or bracing. Backstop shall be constructed to allow $\pm 6"$ (15.24cm) height adjustment of bank.
- F. Provide for goal attachment directly through backboard into a heavy structural steel weldment, which shall be clamped to the vertical 6" (15.24cm) OD center support to eliminate any strain on backboard and to absorb pressure occurring while dunking the ball. Provide lifetime guarantee for the backboard.
- G. The entire backstop structure shall conform to all FIBA, NCAA, NFSHSA rules and regulations governing basketball in force at the time of installation.
- H. All metal parts shall be factory painted one (1) coat of flat black enamel. The painting subcontractor shall paint any parts a final color as selected by the architect.

2.3 OPERATION MANUAL WINCH

- A. Provide manual winch for lowering and raising each folding basketball backstop; manual winch model 503086 as manufactured by Draper, Inc.
- B. Type: Sealed-bearing, self-locking, worm-gear type. Winch shall be capable of holding backstop in any position raising and lowering.
 - 1. Provide winch with removable handle.
 - 2. Spool: Designed to lay cable uniformly without stacking.
 - 3. Hoist cable: 1/4 inch diameter, 7 by 9, galvanized aircraft cable with 7,000 pounds ultimate breaking strength.
 - 4. Provide 2 by 8 southern yellow pine pad with chamfered edges and clear lacquer finish for wall mounting winch.

2.4 ACCESSORIES

- A. Full Cycle Safety Belt A0549. Provide each ceiling-suspended folding backstop with a full cycle safety belt that stops the free fall of the backstop within 1' of vertical travel from any position of storage or operation in the event of failure of the main hoist cable or associated operating components. The device shall employ a 6000 lb. (2721kg)-nylon safety belt stored on a ratchet wheel with teeth. The device shall not rely on "gripping" the safety belt itself to achieve stopping. Safety hooks that only hold the backstop in the folded position are not acceptable. 8'-10' (2.44-3.05m) Height Adjustable Feature, four required.

2.5 FINISHES

- A. **Painting:** Backstop and parts shall be factory painted one coat of flat black. The painting subcontractor shall paint all backstops (except bank and goal) a final color as selected by the architect.

2.6 BACKSTOPS INDOOR

- A. Backstops shall be provided with backboard model # A0149 - FIBA Rectangular Wood 72" x 42" (with black markings). Wood backboard shall be 55 pcf (881 kg/m³) density solid laminated wood core with eggshell white polyurethane face to resist abrasion. Inner panels shall be thermally fused. Official border and target markings shall be part of laminate to prevent wear.

2.7 GOALS INDOOR

- A. Goal model #A0572 - Heavy Duty Front Mount Goal - 48" Boards. A heavy-duty competition front mounting goal constructed of high tensile strength steel with 5/8" (15.88mm) diameter diagonal support braces. Designed for either indoors or out use with a quality enamel finish, complete with mounting hardware and net. Goal shall be designed to withstand up to 800 lb. (363.6 kg) load.

PART 3 EXECUTION**3.1 INSTALATION**

- A. Install basketball backboard and goals in accordance with manufacturers instructions and as required to meet state high school athletic association requirements.

END OF SECTION



SECTION 11486 WALL MOUNTED PROTECTION PADS**PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Wall mounted protection pads suitable for gymnasium installations.

1.2 SUBMITTALS

- A. Submit in accordance with Section 01330 - Submittal Procedures: product data; shop drawings showing elevations, dimensions, fabrication details, and method of attachment; Samples of protection pad cover fabrics for selection by Architect; Manufacturer's installation and maintenance instructions.

PART 2 PRODUCTS**2.1 MANUFACTURERS**

- A. Draper, Inc., 411 South Pearl Street, Spiceland, Indiana 47385-0425; 765-987-7999.
- B. Manufacturers of equivalent products submitted and approved in accordance with Section 01630 - Product Substitution Procedures.

2.2 WALL PROTECTION PADS

- A. Type: Fabric covered foam wall protection pads; Wall Pads as manufactured by Draper Shade and Screen Company, Inc. or equal.
- B. Pad shape and size: Flat, rectangular pads: 24 by 72 inches. Provide 60 linear feet of modular panel sections for location as determined by Architect or as shown on drawings.
- C. Cushioning material: 2 inches thick polyurethane filler with 3.5 pounds density.
- D. Backer: 3/8 inch Class 1 fire rated plywood. Pads that wrap around columns or are curved shall be provided without solid backer.
- E. Cover: Solid vinyl coated polyester fabric with embossed pattern:
 - 1. Weight: 14 ounces per SY.
 - 2. Breaking strength: 350 PSI
 - 3. Tear resistance: 65 pounds.
 - 4. Resistant to rot, mildew, and ultraviolet light.
 - 5. Color: Selected by Architect from manufacturer's standard range.
- F. Ignition resistant liner: Liner with chemical additives that absorb and react to heat by liberating moisture and chemical flame retardants; Dupont Vonar as provided by Draper, Inc.
- G. Construction: Cushioning material adhered to backer [with liner positioned on top of foam] and panel fully wrapped with fabric which is stapled to backer such that backer is not exposed on front or sides.
- H. Provide 1-inch wide fabric flanges at panel bottom and top for wall mounting panels.
- I. Attachment: Provide pads without solid backing with hook and loop strips at top of pad.

PART 3 EXECUTION

3.1 PREPARATION

- A. Field verify dimensions prior to fabrication.
- B. Coordinate fabrication of wall protection pads with size and location of switches, electrical outlets, and other wall mounted items; structural framing and bracing projecting from wall surface; and door and other wall openings.
- C. For pads placed around structural columns coordinate required shapes and sizes with actual dimensions of structural members.
- D. Coordinate installation of scoreboard protector with size and placement of scoreboard.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's written instructions and shop drawings.
- B. Mount protection pads 4 inches above finished floor.
- C. Secure to wall with fasteners along top and bottom. Type, size and spacing of fasteners as recommended by manufacturer.
- D. Neatly make cutouts for switches, electrical outlets, and other items on wall and seal with matching vinyl fabric.

END OF SECTION