SECTION 11 66 53
GYMNASIUM DIVIDERS

PART 1 GENERAL
1.1 RELATED DOCUMENTS
   A. The General Conditions, Supplemental Conditions and Division 1, General Requirements are part of this section.

1.2 SUMMARY
   A. Section includes electrically operated roll-up fabric gymnasium divider.
   B. Related sections:
      1. Section 05 12 00 Structural steel framing to support gymnasium divider
      2. Section 05 50 00 Miscellaneous steel framing supports
      3. Division 26 Electrical conduit, wiring and circuitry for electric motors

1.3 SUBMITTALS
   A. Submit in accordance with Section 01 33 00 - Submittals Procedures:
      1. Provide a list of proposed products and product data.
      2. Provide a list loads transmitted to building structural members and requirements for supplementary bracing and structural support members.
      3. Shop drawings showing layout, elevations, dimensions, fabrication details, method of attachment and point-to-point electrical wiring diagrams.
      5. Provide the Manufacturer's installation and maintenance instructions.

1.4 QUALITY ASSURANCE
   A. Source limitation: All components including curtain, suspension system, electric winches, and controls for divider shall be products of a single manufacturer.

1.5 DELIVERY, STORAGE, AND HANDLING
   A. Do not deliver divider until building is enclosed and other construction within gymnasium is substantially complete.
   B. Do not install divider until all gymnasium lighting, the sound system, flooring, and seating installation is complete.

PART 2 PRODUCTS
2.1 ACCEPTABLE MANUFACTURERS
   A. Draper, Inc., Spiceland, Indiana
   B. Manufacturers of equivalent products submitted and approved in accordance with Section 01 60 00 - Material Equipment and approved equals.

2.2 GYMNASIUM DIVIDER
   A. Type: Electrically operated, roll-up gymnasium divider including motor, belts, controls, clamps for attachment to building structure, threaded rod supports, and other components required for complete functional installation; Roll-Up Gym Divider as manufactured by Draper, Inc.
   B. Operation: Curtain rolled up and down by belts wound onto overhead rotating drive pipe operated by electrical motor.
   C. Configuration: Rectangular shape with straight bottom and extending across room as indicated on Drawings.
      1. Maximum dimension of stored divider: 2' from bottom of structural support to bottom of rolled curtain.
2. Minimum required clearance between vertical curtain edges and adjacent fixed objects: 6".
3. Provide 44" clear space between curtain ends and walls or fixed objects to allow passage space around divider.
D. Operating mechanism: Provide a drive pipe winch powered with ¾-hp, 110-VAC, 60-cycle, single phase, reversible capacitor, C-Face motor with thermal overload protection.
   1. Provide with load holding worm gear reducer and integral limit switches to control curtain travel.
   2. Drive pipe shall rotate in pipe support assemblies spaced at approximately 9'.
E. Attachment: Attach to structural support with beam clamps, hanger brackets, and ½" diameter threaded rods.
F. Hoist belts: 5" wide white polyester webbing attached to drive pipe, passing under bottom batten, and terminating at top batten. Space belts at approximately 15'.
G. Bottom roller: Provide a 3½" diameter steel pipe with aluminum strip for attachment of curtain.

2.3 CURTAIN
A. Bottom 12': Opaque solid vinyl coated polyester fabric:
   1. Weight: 22 ounces per SY
   2. Resistant to rot, mildew, and ultraviolet light
   3. Flammability: Rated self-extinguishing in accordance with UL label
B. Upper curtain section: Vinyl coated polyester mesh.
   1. Weight: 9 ounces per SY
   2. Resistant to rot, mildew, and ultraviolet light
   3. Flammability: Rated self-extinguishing in accordance with UL label
C. Seams: Horizontal and electronically welded with 1 inch full contact weld.
D. Top edge: Solid fabric in triple thickness and double welded to curtain fabric to form 6-inches
E. Bottom edge: Provide a padded pocket to house bottom pipe batten.

2.4 CONTROLS
A. Provide key lock, 3-position, momentary contact wall control switch to lower, raise, and stop gymnasium divider.
   1. Provide with switch box and plastic cover plate.
B. Safety delay: Provide safety delay for motor such that when key is turned in the opposite direction of curtain travel, motor shuts off momentarily and then reverses to opposite direction.

PART 3 EXECUTION
3.1 PREPARATION
A. Coordinate support of gymnasium divider with roof structure to ensure proper distribution of loads and adequacy of attachment points.
   1. Design the building structure for loads of specific gymnasium divider provided.
   2. Provide additional structural framing members as required.
B. Coordinate configuration, size, and installation of gymnasium divider with height, slope, and type of building structure and lighting fixtures, mechanical equipment, ductwork, fire-suppression system, bleachers, athletic equipment, and other potential obstructions.
C. Field verify the dimensions prior to fabrication.
D. Coordinate electrical requirements for motorized operating mechanism to ensure proper power source, conduit, wiring, and boxes for keyed switches.
   1. Prior to installation, verify type and location of power supply.
E. For installations made after installation of wood gymnasium flooring, provide protection and exercise care not damage flooring.

3.2 INSTALLATION
3.3 Install in accordance with manufacturer’s written instructions and shop drawings.
   A. Install even and level with curtain hanging 4” above floor in down position.
   B. Install control switch such that operator has view of complete gymnasium divider during lowering and rising.
   C. Adjust limit switches of electric winch to ensure accurate position in both stored and lowered positions.

3.4 TESTING AND DEMONSTRATION
   A. Operate divider curtains to ensure proper lifting and lowering. Adjust as required to ensure smooth operation and accurate positioning.
   B. Demonstrate to Owner's designated representatives the complete operation and required maintenance.

END OF SECTION