# 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.
  - 4. Provide samples of fabric for selection by Architect.
  - 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
  - 4. Color: Selected by Architect from manufacturer's standard range.
- 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
  - 4. Color: Selected by Architect from manufacturer's standard range.
- 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.

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- 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**