SHERIDAN SEATING INC.

SD650 DOUBLE WALL
ELECTRAFOLD DIVIDER CURTAIN

PART 1 GENERAL

1.1 Description

A. Scope

1. Where bleachers, a stage or other conditions do not allow for storage of a traverse curtain at a side wall position or where unobstructive storage is desirable, curtain dividers may be electrically raised to the ceiling by fold up operation.

B. Manufacturer's Design Criteria

1. The gym divider curtain shall consist of an accordion folding system for ceiling storage. The double curtain shall be manufactured from a 50 oz. sq. yd. armor-shell vinyl/nylon with solid fabric. The 50 oz. armor-shell vinyl/nylon material is dielectrically weldable, antibacterial treated, fungi-resistant, and flame retardant and is listed by the California Fire Marshal. Test results show a minimum of 110 (w) x 72 (f) tear strength (lb.) and 338 (w) x 279 (f) tensile strength (lb./inch). Hoisting 3/16" aircraft cable and clamped to the 1.9" diameter steel tube in the bottom pocket of the curtain.

2. Continuous winch system shall be driven by a 1 H.P., 208V, 3 phase motor with automatic overload protection and bolted to double output, 80 to 1 ratio worm gear reducer with rotary limit switches and 2 key switches. Winch/hoist assembly shall be center mounted to direct drive with 1 ½'' diameter Sched. 40 pipe drive shaft. Each twenty–one foot frame assembly shall bolt together with four ½'' set screws. Upper Sched. 40 pipe shaft must be sleeved with Schedule 80 couplers and thru-bolted. Take up drums will be totally separate from the 1 ½'' diameter Sched. 40 shaft so that they can slide to adjust and secured with four ½'' set screws. Entire continuous winch/hoist frame assembly shall be ceiling supported, a maximum interval spacing of ten foot by unit clamps, all threaded rod and truss clamps.

3. Level frame assembly and adjust bottom of curtain to 1'' off floor. Set rotary limits to control end of lift/lower cycle. 3/16'' vertical lift cables shall be clamped at bottom lifting pipe and adjusted at drum clamp.

4. Auto-Loc safety device shall be installed to prevent the free fall of the curtain and stopping the descending speed. Auto-Loc safety device shall be directly connected to the overhead structure.

1.2 Quality Assurance

A. Acceptable Manufacturer

Approved manufacturer - Sheridan Gymnasium Equipment Ltd.

B. Acceptable Installer

Installers to be recognized trained and certified by the manufacturer.

1.3 Submittals

A. Submit six copies of each of the following:
1. Manufacturer's shop drawings
2. Manufacturer's standard warranty.
3. Manufacturer's Operation and Maintenance instructions

B. Submit colour samples, as required.

1.4 Related Work Specified Elsewhere

A. Electrical – Division 16

1.5 Work by others

A. Electrical conduit, wiring and boxes to connect to power supply and keyswitches at hand height.

All support steel for curtain to be done by others. Refer to structural drawings for steel. Note that support steel is to be fastened to top chord and make adjustments for sloping top chord. Curtain to fold up between joists.

1.6 Warranty

A. Submit manufacturers standard warranty form for Electrafold Curtain

1. The manufacturer shall guarantee all work performed under these specifications to be free from defects for a period of one (1) year.
2. The warranty does not cover, vandalism, catastrophes, mis-use, damage caused by alterations as well as activities other than its intended use.
3. The warranty is void unless the project is paid in full.

PART 2 PRODUCT

2.1 Manufacturers

1. Curtain shall be of 50 oz. polyester reinforced vinyl, formed of one panel and shall be formed horizontally in 5'-0'' wide strips in sufficient quantity and of sufficient length to cover the entire opening. Each strip shall be joined together by means of heat sealing.

2. Curtain shall be installed between and within joist space of gym roof and shall be two parallel panels, 450 mm between panels, extending full width of opening, made of 1270 mm wide polyester-supported vinyl strips.

3. Curtain to have the following characteristics:
   a) Weight: 50 oz. /yd.
   b) Adhesion (lb. /inch): 26 lb.
   c) Cold Crack (1/8 mandrel): 35C
   d) Tear (lb): 110 (w) X 72 (f)
   e) Tensile (lb. /inch): 338 (w) X 279 (f)
   f) Anti-fungal, anti-bacterial, flame retardant for life of fabric, U.V. resistant, cleans with mild soap and water.

4. Curtain colour to be Consultant's choice from standard available range.

5. Optional Valances – Top stacking space can be hidden between two valances made of the same vinyl as the curtain, one on each side of the stacking space.

Raising/Lowering Mechanism

1. Curtain shall be raised and lowered by means of drive unit able to lift 900 kg at a speed of 10 meters per minute, operated by 1HP electric motor, 208V 3 phase. Motor shall be controlled by key-operated, spring-loaded switch which stops movement when key is released. Coordinate with division 16 who shall supply and install disconnect at motor, conduit/wiring to motor starter and conduit/wiring to key switch including box.
2. Lifting drum diameter shall be at least 30 times the cable diameter to prevent any premature wear. Drums shall be attached to the structure and spaced at 10' – 0'' along the entire width of the opening. Steel angles used to hold the lifting pullies and curtain shall have minimum dimensions of 3'' X 2'' X ¼'' and shall be attached to the existing structure with threaded rods of ½'' in diameter. Steel angles shall not be welded to existing structure.
3. Lifting cables shall be 3/16" diameter made of steel strands and attached to traction bar anchored at base of curtain. Raising shaft shall be full length, minimum 32 mm diameter, equipped with grooved back & forth winding drums to which lifting cables are attached. Drums shall be steel (cast aluminum not acceptable). Shaft shall be supported at maximum 3000 mm o/c from steel cross members attached to open web steel joists at top chord panel points only per Structural drawings.
4. Raising shaft shall be activated by starter equipped with magnetic contactor which can reverse movement of curtain at any point, disk brake and travel limit switches. Provide optional extra feature of Auto-Loc safety devices which will stop curtain or limit descending speed to normal operating speed in case of failure of gear box.
5. Transmission shafts of the rising mechanism shall measure 1 ½'' in diameter and be equipped with 8'' wide flange drums. Each drum shall have continuous machined grooves to allow a single and uniform winding. Motor drive unit with a single shaft the total length of the gymnasium. All lifting cables of 3/16'' aircraft cable must wind on drums fixed to the motor drive unit located in the centre of the opening. There shall be 3 complete turns left empty on the drum when the curtain will be in the lowered position. Steel cables winding on drums attached to a single shaft. Motor unit will be suspended from the existing structure by threaded rods of 13mm (1/2'') in diameter.
6. Operating control shall be spring-loaded type switch and operated by a key in a flush wall mounted outlet box and cylinder.

PART 3 EXECUTION

3.1 Examination and Measurement

1. When the job is sufficiently advanced to permit the installation of gymnasium curtain, visit the site and check the actual conditions where the partition is to be installed, to ascertain whether or not the preparation work by the preceding trades is acceptable.

2. Check and record all dimensions which affect the manufacture and installation of units. Incorporate these dimensions into shop drawings.

3.2 Installation

1. Install curtains straight at level and adjust movable parts for smooth operation.

2. Clean soiled surfaces with cleaners compatible with finished surfaces.

3. Installation to be carried out by authorized factory installer.

4. Electrical connections and power to be provided by electrical contractor.

3.3 Operation

1. The gymnasium curtain shall be capable of being stacked at the top of the opening between joists.

2. The gymnasium curtain shall be easily operated by a single key switch.