

Section 116623 - GYMNASIUM RETRACTABLE SPORTS CAGE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Gymnasium *GSS BC101* bottom lift retractable sports cage

1.2 RELATED REQUIREMENTS

- A. Section 055000 - Metal Fabrications: Secondary structural members supporting gymnasium equipment.
- B. Section 260583 - Wiring Connections.

1.3 REFERENCE STANDARDS

- A. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- B. NFPA 101 - Life Safety Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and supplements.
- C. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Large Components: Ensure the large components can be moved into final position without damage to other construction.
- B. Electrically Operated Equipment: Coordinate location and electrical characteristics of service connection.

1.5 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's data showing configuration, sizes, materials, finishes, hardware, and accessories; include:
 - 1. Electrical characteristics and connection locations.
 - 2. Fire rating certifications.
 - 3. Manufacturer's installation instructions.
- C. Shop Drawings: For custom fabricated equipment indicate, in large scale detail, construction methods; method of attachment or installation; type and gage of metal, hardware, and fittings; plan front elevation; elevations and dimensions; minimum one cross section; utility requirements as to types, sizes, and locations.
- D. Erection Drawings: Detailed dimensional requirements for proper location of equipment.
- E. Samples: Submit samples of curtain materials in manufacturer's available range of colors.

- F. Operating and maintenance data, for each operating equipment item.
- G. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified with minimum two years of experience.

1.7 WORK BY OTHERS

- A. Electric conduits, wiring, and disconnect. Boxes to connect to power supply and remote mount key switches at hand height within unobstructed line of site to curtain. Permanent connections from disconnect to control box and from control box to motor.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to the project site in manufacturer's original packaging with factory original labels attached.
- B. Store products indoors and elevated above the floor; prevent warping, twisting, or sagging.
- C. Store products in accordance with manufacturer's instructions; protect from extremes of weather, temperature, moisture, and other damage.

1.7 WARRANTY

- A. Gymnasium retractable sports cage netting shall be warranted free of defects in material and workmanship for a period of one (1) year.
- B. Gymnasium retractable sports cage motor and hardware shall be warranted for a period of three (3) years against all defects of material and workmanship.

PART 2 - PRODUCTS

2.1 GYMNASIUM RETRACTABLE SPORTS CAGE

- A. Supply and install one electrically operated **GSS BC101** bottom lift retractable sports cage as manufactured by **Grand Slam Safety, LLC.** or an approved equal to be complete in all respects with operating motor and controls.
- B. Other suppliers or manufacturers wishing to bid products other than product specified herein shall submit to the Architect 7 days prior to the bidding a list of 3 past installations similar to the proposal, complete catalogue data along with deviations from the product specified. The manufacturer guarantees the proposed

substitute product to comply with the product specified and as detailed on the drawings unless the deviations are so noted in the submittal for approval.

2.2 MATERIAL AND FABRICATION

- A. The cage shall be formed of 4 walls and a ceiling panel. All edges to be rope bound with a continuous bottom pocket on 4 sides to be sewn with hook and loop end closures and spur grommets for take up locations. Fullness in the netting is added for height and width to accommodate the size and allow for natural stretch of the netting.
- B. The top of the cage has rope bound edges to attach to support the frame via straps, and the bottom pocket to accommodate 1-1/4" diameter pipe. There are to be grommet tabs on 10'-0" centers spaced not greater than 48" apart vertically to allow routing of lifting cables. The manufacturer may decide to alter these dimensions to best suit cage size.
- C. The bottom pipe shall be flexible to allow the cage to form to the shape of the building structure.

2.3 DESIGN CRITERIA

- A. The cage shall have the following material options and characteristics: White or black in color
 - i. #42 Knotted nylon netting with NFPA 701 FR rating 1-3/4" mesh or #36 Knotted nylon netting with NFPA 701 FR rating 1-3/4" mesh or #21 Knotted nylon netting with NFPA 701 FR rating 7/8" mesh or Custom netting options are available.
 - ii. Rope edges to be 1/4" twisted sash cord.
 - iii. Vinyl pockets to be 18oz vinyl coated nylon with NFPA 701 FR rating. Additional color options are available for the vinyl. See manufacturer's color options.
- B. Access doors will be 4' wide flap (overlap) style doors. 2 doors will be supplied at opposite corners with flaps extending along the side walls.
- C. Grommet tabs will be installed on the ceiling netting panel to reduce pillowing of the netting and also to eliminate direct contact between metal surfaces and the netting.
- D. Grommet tabs will be used in lieu of d-ring or o-rings for the take up cables to eliminate the direct contact between metal components and the netting and to maintain the cable lift points outside the netting system away from harm.
- E. The cage shall be bottom lift, i.e., the lifting cables shall be attached to the bottom frame. As the batting cage system is raised the netting shall stack between the bottom and top frames. This relieves added time, hassle, tears, and catch points from draping the netting over the top frame required for storing most vertical lift or retractable batting cages.

2.4 RAISING AND LOWERING MECHANISM

- A. The 2HP-208v-3 phase, centrally located motor drive unit shall be equipped with magnetic contactors and overload that can stop, start and reverse from any position and electric brake and travel limit switches. The manufacturer may substitute alternative HP to suit cage size. Other voltages and phase motors available, contact manufacturer.
- B. Drive shaft shall measure 1" equipped with individual pulleys for each take up line. The pulleys range from 25 times the cable diameter and increase according to accommodate the desired stacked profile.
- C. Operating control shall be spring loaded type key switch mounted within eyesight of the cage system.
- D. Lifting cables to be 1/8" 7x19 aircraft cable.
- E. All exposed hardware is to be zinc plated, powder coated, or painted to color match as required by the Architect.

2.5 MANUFACTURERS:

- A. Grand Slam Safety, LLC: www.grandslamsafety.com

PART 3 - EXECUTION

3.2 EXAMINATION AND MEASUREMENT

- A. When the job is sufficiently advanced to permit the installation of the gymnasium sports cage, visit the site and check the actual conditions where the partition is to be installed, to ascertain whether the preparation work by the preceding trades is acceptable.
- B. Check and record all dimensions that affect the manufacture and installation of the units. Incorporate these dimensions into the Shop Drawings.
- C. Delivery to the job site shall be coordinated by the Contractor. Proper storage of the cage before installation and continued protection during and after installation shall be the responsibility of the Contractor.

3.3 INSTALLATION

- A. Install bottom lift retractable sports cage straight and level and adjust movable parts for smooth operation. Follow manufacturer's drawings for sloped, peaked, or arched installations.
- B. Clean soiled surfaces with cleaners compatible with finished surfaces.
- C. A **Grand Slam Safety, LLC**. factory trained installer shall carry out this installation.
- D. Electrical Contractor will provide electrical connections and power.

3.3 OPERATION

- A. The bottom lift retractable sports cage shall be capable of being stacked at the top of the opening between joists or under joists as required.
- B. A single person shall easily operate the bottom lift retractable sports cage system.