



Gym Divider Curtains

Note: These specifications were current at the time of publication but are subject to change without notice. Please confirm the accuracy of these specifications with the manufacturer and / or distributor prior to use.

SECTION 11 66 53 GYMNASIUM DIVIDER CURTAINS

SPECIFIER NOTE: This product guide specification is written according to the Construction Specifications Institute (CSI) Format, including MasterFormat, SectionFormat, and PageFormat, as contained in the CSI Manual of Practice.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building codes. Coordinate this section with other specification sections and the drawings.

Notes for review by specifier begin with "SPECIFIER NOTE." Optional text requiring a selection is enclosed within square brackets, e.g., "Color shall be [white] [black]." Items requiring specifier input are indicated by a blank line enclosed within square brackets, e.g., "Color: [_____]." Delete all italicized "Specifier Notes" and non-applicable optional text in final specification.

This section is based on systems manufactured by IPI by Bison, 603 "L" Street, Lincoln, NE, 68508. Toll Free 1-800-637-7968 Fax 1-800-638-0698 Web: <http://ipibybison.com> Email: sales@IPIbyBison.com. Contact the manufacturer for additional information and for assistance in editing this section for your specific application.

PART 1: GENERAL

1.1 Section Includes

SPECIFIER NOTE: Coordinate this list with the equipment specified in Part 2 Products.

- A. Supply and install [walk-draw] [fold-up] [top-roll] [roll-up] gym divider curtains.
- B. Supply and install multi-sport practice cage.

1.2 Related Sections

SPECIFIER NOTE: List sections dealing with work directly related to this section such as the following. Delete those notes not required.

- A. Section 03 30 00 - Cast-in-Place Concrete: Partition support members.
- B. Section 05 21 00 - Steel Joist Framing: Partition support members.
- C. Section 09 90 00- Finishes Section: Finish painting of factory-primed surfaces.
- D. Section 26 [____] - Electrical supply, conduit, and wiring for motor operators, controls and other powered devices for motorized gymnasium divider curtains.

1.3 Submittals

- A. Comply with Section 01 33 00 - Submittal Procedures.
- B. Product Data: Submit manufacturer's published product data, including installation instructions.
- C. Shop Drawings: Submit manufacturer's shop drawings showing plans, elevations, sections, details and attachments to other work.
- D. Warranty: Submit manufacturer's standard warranty.

1.4 Quality Assurance

- A. All gymnasium divider components and accessories shall be products of a single manufacturer.

1.5 Delivery, Storage and Handling

- A. Comply with manufacturer's recommendations for delivery, storage and handling.
- B. Deliver materials to site in manufacturer's original, unopened packaging, with labels clearly identifying product name, manufacturer, and location of installation. Upon delivery, materials shall be inspected for damage. Deficient materials shall not be used.
- C. Storage: Store materials in a clean, dry area indoors in accordance with manufacturer's instructions. Keep temporary protective coverings in place to protect product from damage due to moisture and construction activities.
- D. Handling: Protect materials and finish from damage to surface and edges during handling and installation.

PART 2: PRODUCTS

2.1 Manufacturer

- A. IPI by Bison, 603 "L" Street, Lincoln, NE, 68508. Toll Free 1-800-637-7968 Fax 1-800-638-0698
Web: <http://ipibybison.com> Email: sales@IPIbyBison.com.

SPECIFIER NOTE: *Delete one of the following two paragraphs; coordinate with requirements of Division 1 on product options and substitutions.*

- A. Substitutions: Not permitted.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

2.2 Gymnasium Divider Curtains

SPECIFIER NOTE: *Include the following article for IPI by Bison Model No. IP810 Walk-Draw Gym Divider Curtain. Delete article if not required.*

- A. Gymnasium Divider Curtains: Model No. IP810 Walk-Draw Gym Divider Curtain.
 - 1. Size: Walk-draw type divider curtain, _____ wide by _____ high.
 - 2. All curtain materials shall be fire-rated as self-extinguished and registered as approved by the California State Fire Marshall. Test methods shall be comparable to standards of UL-214 and NFPA-701.

3. Lower Curtain: Lower [8'-0" standard] [] of curtain is made of flame retardant polyester reinforced solid vinyl fabric [18 oz.] [22 oz.] per square yard and contains anti-bacterial and fungi-resistant treatment to prevent mildew and rot. All seams, outer edge hems and bottom pocket containing 2/0 coil proof chain shall be electronically welded with a 1", full contact weld.
 - a) Colors: [red] [white] [dark blue] [light blue] [yellow] [green] [gray] [black] [maroon] [beige]

SPECIFIER NOTE: *22 oz vinyl is only available in red, dark blue and gray*

4. Upper Curtain: Upper section of curtain shall be VCP mesh; woven vinyl encapsulated polyester yarns with a 50% plus open grid weave for air circulation. A double thickness of solid vinyl fabric, double welded to the mesh, shall form the 3" wide top and side edge hems of the curtain. Rolled rim spur type grommets shall be located 12" on center across top edge of the curtain for attachment of supporting carriers.
 - a) Colors: [white] [yellow] [red] [dark blue] [gray] [black]
5. Curtain Track: Track shall be heavy-duty 14 ga. galvanized steel, 1-3/4" wide x 2" high. Suspension spacing, from building structure with beam clamps and hanger brackets, shall not exceed 8'-0" on center.
6. Carriers: Carriers shall be bumper type with 1" diameter nylon tire ball bearing wheels. Attachment to curtain shall be made with trim chain and S-hook to grommets spaced 12" on center.
7. Curtain Fullness: Curtains shall be supplied with sufficient fullness (1/2" per foot of opening width) to easily extend the desired distance without excessive stretching. Stack space for curtain shall not exceed 1-1/4" per foot of curtain width. Tie-back strap shall be provided to secure curtain against wall when not in use.

SPECIFIER NOTE: *Include the following article for Bison Model No. IP850 Fold-Up Gym Divider Curtain. Delete article if not required.*

A. Gymnasium Divider Curtains: Model No. IP850 Fold-Up Gym Divider Curtain.

1. Size: Fold-up type divider curtain, _____ wide by _____ high.
2. All curtain materials shall be fire-rated as self-extinguished and registered as approved by the California State Fire Marshall. Test methods shall be comparable to standards of UL-214 and NFPA-701.
3. Lower Curtain: Lower [8'-0" standard] [] of curtain is made of flame retardant polyester reinforced solid [18 oz.] [22 oz] per square yard VCN fabric and contains antibacterial and fungi-resistant treatment to prevent mildew and rot. All seams, outer edge hems and bottom pocket hem are electronically welded with 1" full contact weld.
 - a) Colors: [red] [white] [dark blue] [light blue] [yellow] [green] [gray] [black] [maroon] [beige]

SPECIFIER NOTE: *22 oz vinyl is only available in red, dark blue and gray.*

4. Upper Curtain: Upper section of curtain shall be VCP mesh; woven vinyl encapsulated polyester yarns with a 50% plus open grid weave for air circulation. Solid vinyl fabric strips 6" wide shall be welded to the VCP mesh at hoist line locations. Solid vinyl fabric

shall be welded to the top edge of the VCP mesh to form a pocket hem to accommodate a 1-5/8" diameter galvanized tube batten for curtain support.

- a) Colors: [white] [yellow] [red] [dark blue] [gray] [black]
5. Top Tube Batten supporting curtain shall be suspended from each drive pipe support assembly with adjustable 2/0 chain.
6. Folding Action: Curtain shall be hoisted by 1/8" diameter steel aircraft cable. Spacing shall not exceed 10'-0" on center. Each hoist line shall be attached to the 1-5/8" diameter steel tube batten in the bottom hem of curtain, run through grommets vertically spaced 18" on center to top of the curtain and terminate at the individual drum formed on the 2-3/8" diameter drive pipe shaft above the curtain. Suspension of curtain in stored position shall not rely on one cable for support.
7. Electrical Operation: Electrical operation of the drive shaft shall consist of a compensating type power unit with a [3/4 H.P.] [1 H.P.], 115 Volt, single phase reversible motor with built-in thermal overload protection. Speed reduction to be through load holding worm and worm gears. Remote control operation shall include integral limit switch to control the upper and lower limit of curtain travel.

SPECIFIER NOTE: *Include the following article for IPI by Bison Model No. IP870 Top-Roll Gym Divider Curtain.*

A. Gymnasium Divider Curtains: Model No. IP870 Top-Roll Gym Divider Curtain.

1. Size: Top-Roll type divider curtain, _____ wide by _____ high.
2. All curtain materials shall be fire-rated as self-extinguished and registered as approved by the California State Fire Marshall. Test methods shall be comparable to standards of UL-214 and NFPA-701.
3. Lower Curtain: Lower [8'-0" standard] [_____] of curtain is made of flame retardant polyester reinforced solid [18 oz.] [22 oz] per square yard VCN fabric and contains antibacterial and fungi-resistant treatment to prevent mildew and rot. All seams, outer edge hems and bottom pocket hem are electronically welded with 1" full contact weld.

SPECIFIER NOTE: *22 oz vinyl is only available in red, dark blue and gray.*

- a) Colors: [red] [white] [dark blue] [light blue] [yellow] [green] [gray] [black] [maroon] [beige]
4. Upper Curtain: The upper section is constructed of VCP mesh, woven vinyl encapsulated polyester yarns with a 50% plus open grid weave for air circulation.
 - a) Colors: [white] [yellow] [red] [dark blue] [gray] [black]
5. Electrical Operation: Curtain is electrically operated by a [3/4 H.P.] [1 H.P.], 115 volt single phase electric hoist with built-in thermal overload protection with speed reduction through a load holding worm gear. Hoist includes integral limit switch to control the upper and lower limit of curtain travel.
6. Not Applicable.
7. Not Applicable.

SPECIFIER NOTE: *Include the following article for IPI by Bison Model No. IP880 Roll-Up Gym Divider Curtain. Delete article if not required.*

A. Gymnasium Divider Curtains: Model No. IP880 Roll-Up Gym Divider Curtain.

1. Size: Roll-up type divider curtain, _____ wide by _____ high.
2. All curtain materials shall be fire-rated as self-extinguished and registered as approved by the California State Fire Marshall. Test methods utilized are comparable to standards of UL-214 and NFPA-701.
3. Lower Curtain: Lower [8'-0" standard] [_____] of curtain shall be polyester reinforced solid vinyl fabric [18 oz.] [22 oz] per square yard and contains anti-bacterial and fungi-resistant treatment to prevent mildew and rot. All seams, outer edge hems, and bottom pocket hem shall be electronically welded with 1" full contact weld.

SPECIFIER NOTE: *22 oz vinyl is only available in red, dark blue and gray.*

- a) Colors: [red] [white] [dark blue] [light blue] [yellow] [green] [gray] [black] [maroon] [beige]
4. Upper Curtain: Upper section of curtain shall be VCP mesh; woven vinyl encapsulated polyester yarns with a 50% plus open grid weave for air circulation. Solid vinyl fabric shall be welded to the top edge of the VCP mesh to form a pocket hem to accommodate a 1-5/8" diameter tube batten for curtain support.
 - a) Colors: [white] [yellow] [red] [dark blue] [gray] [black]
5. Top Tube Batten supporting curtain shall be suspended from each drive pipe support assembly with adjustable 2/0 chain.
6. Rolling Action: Curtain shall be hoisted by a 3" wide nylon belt. Spacing of belts shall not exceed 16'-0" on center. Each hoist belt shall be attached to the top batten pipe; run down the face of the curtain; below the 3-1/2" diameter steel pipe; up the back side of the curtain and terminate at the individual drum formed on the 2-3/8" diameter drive pipe shaft above the curtain.
7. Electrical Operation: Electrical operation of the drive shaft shall consist of a compensating type power unit with a [3/4 H.P.], [1 H.P.], 115 Volt, single phase reversible motor with built-in thermal overload protection. Speed reduction to be through load holding worm gears. Remote control operation shall include integral limit switch to control the upper and lower limit of curtain travel.

SPECIFIER NOTE: *Include only one of the following articles to specify the method to control the operation of electrically operated divider curtains. Delete all paragraphs not required.*

SPECIFIER NOTE: *Standard control for electric hoist is 3 position key switch. Optional control options include remote wireless system or keyless programmable operating system. Use the following paragraph to specify 3 position key switch. Delete if not specified.*

8. Controls: Shall provide key lock, 3 position, momentary contact wall control switch to lower, raise, and stop backstop.

- a) Provide two keys.
- b) Provide stainless steel cover plate with up/down markings.
- c) Key switches operating basketball backstops, rim height adjusters and gymnasium dividers shall be furnished from a single source.

SPECIFIER NOTE: *Use the following paragraph to specify IPI Gym Command Plus Programmable Touch Screen Operating System for Gymnasiums Model IPGCPLUS. Delete if not specified.*

- 8. Controls: Shall provide Gym Command Plus Programmable Touch Screen Operating System for Gymnasiums as manufactured for IPI by Bison.
 - a) Flush wall mounted 7" diagonal touch screen.
 - b) UL listed 12" x 16" x 4" steel relay box(es) each capable of controlling up to 8 devices. Requires 120-volt, 30-amp single phase power source.
 - c) Use multiple relay boxes for operating additional devices.
 - d) Control system allows for operation of single or multiple groups of devices at the same time.
 - e) Easily programmable in the field.
 - f) Touch screens are password protected.
 - g) Allows installation of multiple touch screens.

SPECIFIER NOTE: *Use the following paragraph to specify IPI Gym Command 7 Control System Model IPGCS7. Delete if not specified.*

- 8. Controls: Shall provide IPI Model IPGCS7 Gym Command 7 Control System.
 - a) Wall mounted, 115 volt, UL Listed, 7" high resolution color touch screen.
 - b) 115 volt hardwire foam control panel to each device.
 - c) Factory programmed but field reprogrammable.
 - d) [8], [16], [24], [32] device capacity.

SPECIFIER NOTE: *Use the following to specify IPI Goal Tender II Wireless Remote Control System for Gymnasium Device Operation. One Model IPGTS99LR controls up to 99 devices. One Model IPGTS1LR Wireless Receiver required for each device. Delete if not specified.*

- 8. Controls: Shall provide Goal Tender II Wireless Remote Transmitter and Receiver Systems manufactured for IPI by Bison by LynRus.
 - a) Transmitter: Handheld 9-volt battery operated IPI Model IPGTS99LR operates up to 99 separate devices.
 - b) Receiver: Specify one IPGTS1LR for each electric device.

2.3 Multi-Sport Practice Cage

SPECIFIER NOTE: *Include the following article for IPI by Bison Model No. IP860 Multi-Sport Practice Cage. Delete article if not required.*

- A. Multi-Sport Practice Cage: Model No. IP860 Multi-Sport Practice Cage.

SPECIFIER NOTE: *Standard size is 10' h x 10' w x 70' l. Custom sizes are available. Contact IPI by Bison for details.*

- 1. Size: Multi-Sport practice cage [10'] [] wide by [10'] [] high by [70'] [] long.

2. Multi-Sport cage net shall be constructed of 7/8" square mesh black golf netting. Two velcro corners allow one long side wall to be raised for multiple player activities. Netting can be stored on top of frame for more compact storage.
3. Multi-Sport cage frame shall be constructed of 1-5/16" O.D. galvanized steel pipe with malleable cast iron tee and corner fittings, for easy assembly. Cage shall be hoisted by 1/8" diameter steel aircraft cable, spacing shall not exceed 10'-0" on center. Each hoist line shall be attached to the pipe frame below and terminate at the individual drum formed on the 2-3/8" diameter drive pipe shaft above the cage.
4. Electrical Operation: Electrical operation of the drive shaft shall consist of a compensating type power unit with a [3/4 H.P.] [1 H.P.], 115 Volt, single phase reversible motor with built-in thermal overload protection. Speed reduction to be through load holding worm and worm gears. Remote control operation shall include integral limit switch to control the upper and lower limit of practice cage travel.

SPECIFIER NOTE: Include only one of the following controls to specify the method to control the operation of multisport practice cage. Delete all paragraphs not required.

SPECIFIER NOTE: Standard control for electric hoist is 3 position key switch. Optional control options include remote wireless system or keyless programmable operating system. Use the following paragraph to specify 3 position key switch. Delete if not specified.

5. Controls: Shall provide key lock, 3 position, momentary contact wall control switch to lower, raise, and stop backstop.
 - a) Provide two keys.
 - b) Provide stainless steel cover plate with up/down markings.
 - c) Key switches operating basketball backstops, rim height adjusters and gymnasium dividers shall be furnished from a single source.

SPECIFIER NOTE: Use the following paragraph to specify IPI Gym Command Plus Programmable Touch Screen Operating System for Gymsnasiums Model IPGCPLUS. Delete if not specified.

9. Controls: Shall provide Gym Command Plus Programmable Touch Screen Operating System for Gymsnasiums as manufactured for IPI by Bison.
 - h) Flush wall mounted 7" diagonal touch screen.
 - i) UL listed 12" x 16" x 4" steel relay box(es) each capable of controlling up to 8 devices. Requires 120-volt, 30-amp single phase power source.
 - j) Use multiple relay boxes for operating additional devices.
 - k) Control system allows for operation of single or multiple groups of devices at the same time.
 - l) Easily programmable in the field.
 - m) Touch screens are password protected.
 - n) Allows installation of multiple touch screens.

SPECIFIER NOTE: Use the following paragraph to specify IPI Gym Command 7 Control System Model IPGCS7. Delete if not specified.

5. Controls: Shall provide IPI Model IPGCS7 Gym Command 7 Control System.
 - a) Wall mounted, 115 volt, UL Listed, 7" high resolution color touch screen.

- b) 115 volt hardwire foam control panel to each device.
- c) Factory programmed but field reprogrammable.
- d) [8], [16], [24], [32] device capacity.

SPECIFIER NOTE: *Use the following to specify IPI Goal Tender II Wireless Remote Control System for Gymnasium Device Operation. One Model IPGTS99LR controls up to 99 devices. One Model IPGTS1LR Wireless Receiver required for each device. Delete if not specified.*

5.Controls: Shall provide Goal Tender II Wireless Remote Transmitter and Receiver Systems manufactured for IPI by Bison by LynRus.

- a) Transmitter: Handheld 9-volt battery operated IPI Model IPGTS99LR operates up to 99 separate devices.
- b) Receiver: Specify one IPGTS1LR for each electric device.

PART 3: EXECUTION

3.1 Installation

- A. Install gym divider curtains in accordance with approved shop drawings and manufacturer's instructions at locations indicated on drawings.

3.2 Cleaning

- A. Remove construction debris from project site in accordance with provisions outlined in Division 1.
- B. Remove protective wrappings and labels and wash surfaces.
- C. Do not use harsh cleaning materials or methods that would damage finish.
- D. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- E. Remove and replace damaged components that cannot be successfully repaired, as determined by Architect.

3.3 Demonstration

- A. Demonstrate to Owner's designated representative complete operation and required maintenance of installed gym divider curtains.

END OF SECTION