

# CONTRACT PROPOSAL

## *Bareman and Associates, Inc.*

*Architectural Building Specialties*

SUITE 100 \* 2197 PINE RIDGE DRIVE, JENISON, MI 49428

PHONE: (616) 669-9761 \* FAX: (616) 669-1696

TO: Phillip M. Francis, Asst. Supt. of Dist. Svcs.

DATE: November 1, 2024

PROJECT: Livonia Public Schools

DESCRIPTION	PRICE
<b><u>Churchill High School – Fieldhouse</u></b>	
<b><u>Scope of Work:</u> Replacement Portable Basketball Hoops – Schelde Brand</b>	
<u>Includes:</u>	
(6) Schelde, Super SAM Model #245 – includes board, goal and hardware	
(6) Schelde, Super SAM Model #245 – 5 Piece pad sets, including custom graphics (school mascot or logo)	
(6) Schelde, Bolt-On-Backboard Padding – Color: TBD	
Delivery and Installation	
<u>Not included:</u>	
Removal / Disposal / Recycling of Existing Hoops – by others	
<b>PROJECT TOTAL:</b>	<b>\$94,500.00</b>

This Quotation will remain firm for a period of 30 days.

All material is guaranteed to be as specified above. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra

costs, will be executed only upon written orders, and will become

an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

TERMS: Net 30 days. PAST DUE balances are subject to late fee of 1-1/2% per month.

**BAREMAN AND ASSOCIATES, INC.**

BY Gary Ells  
Gary Ells

ACCEPTED BY \_\_\_\_\_

DATE \_\_\_\_\_

# SUPER SAM 245

## BASKETBALL UNIT PRODUCT BREAKDOWN



LEVEL 3



**STORAGE**



**FULL PROJECTION**

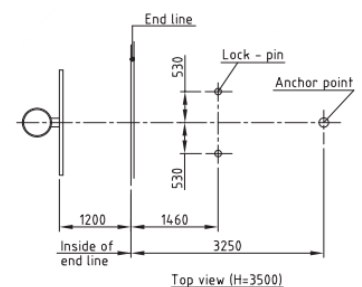
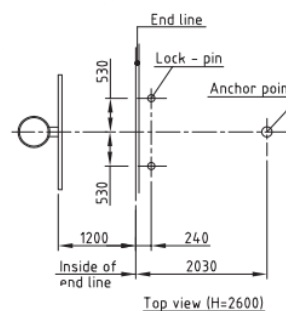
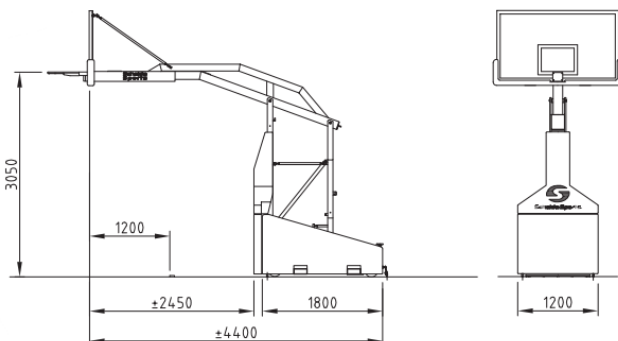
### SUPER SAM 245 (1612010)

Setting the world standard for excellence. Designed and manufactured by the inventors of the original SAM (Spring Assisted Mechanism) and DSF (Dynamic Sub Frame).

### FEATURES

- Complete portable backstop unit.
- 8' projection.
- One step easy set-up system, within 5 seconds 1 person can set the basketball backstop into the right game position
- FIBA Level 3 approved.
- Strong and stable backstop, white coated high-tensile strength steel frame. Lifetime maintenance free pivot bearings, 100% enclosed counterweights.
- 2 wheels in the front and 2 triple fixed wheels in the rear for optimal weight distribution.
- Tempered glass backboard.
- 180° multidirectional breakaway ring.
- Sturdy nylon Anti-Whip basketball net.
- Safety padding for the front, sides, backboard and neck. Come in a variety of color and can be customized.
- Floor hook at the rear of the frame. 2 positioning pins for quick and precise installation on the court. Floor connector set included: for both PU floors and suspended floors.

FOR WORLD-CLASS VENUES AND HIGHEST LEVEL OF COMPETITION



### CONTACT US:

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DESCRIPTION	PRICE
<b><u>Churchill High School – Fieldhouse</u></b>	
<b><u>Scope of Work:</u> Replacement Portable Basketball Hoops – Draper Brand</b>	
<u>Includes:</u>	
(6) Draper, Sharpshooter 96 – includes #503136 backboard, #503040 breakaway goal and #5032XX bolt-on edge padding (color: TBD); vinyl covered base and upright padding – See attached submittal	
Delivery and Installation	
<u>Not included:</u>	
Removal / Disposal / Recycling of Existing Hoops – by others	
<b>PROJECT TOTAL:</b>	<b>\$94,150.00</b>

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TERMS: Net 30 days. PAST DUE balances are subject to late fee of 1-1/2% per month.

**BAREMAN AND ASSOCIATES, INC.**

BY Gary Ells  
Gary Ells

ACCEPTED BY \_\_\_\_\_

DATE \_\_\_\_\_

# EZ-Sharpshooter 96 Portable Basketball System - 503019

## SUBMITTAL

### TECHNICAL SPECIFICATIONS

#### Specifications

##### Product Description

Portable backstop system shall be 503019 by Draper, Inc., Spiceland, IN.

**EZ-Sharpshooter 96 Portable Basketball System** shall provide a competition size 42" x 72" glass backboard and competition breakaway goal on a fully padded portable base when rim was set at 10'. Face of backboard shall be a minimum of 96" from the front of the padded base. Backboard shall be ½" tempered glass with official white border and shooter's square and extruded aluminum frame. Backboard shall be designed so that the basketball rim mounts through the glass into the horizontal extension of the base to reduce stress on the glass during play.

**Breakaway rim** shall be designed to flex with equal pressure in any direction around the front 180° circumference of the ring and have a tubular net attachment system.

**Backboard padding** shall be bolt-on molded urethane with steel inserts molded into the padding. Padding shall be available in choice of 12 colors.

**Entire system shall meet all rules for high school and collegiate play.**

**Backboard and goal** shall be suspended by means of a pivoting, welded steel structure that uses extension spring technology to counterbalance the weight of the backboard and goal to raise and lower the goal for play and storage. Primary structural steel components shall be a minimum of 4" x 4" and 4" x 2" tubing with a minimum ¼" wall thickness. Horizontal extension arm shall be reinforced by no less than two ¼" thick steel members for no less than 7' of the arm length. All pivot points to facilitate lowering for storage shall be 1¼" steel pivot pins riding on self lubricating bronze bearings. Welded base shall provide a fully enclosed ballast compartment that is properly loaded with steel ballast at the factory.

**Goal shall be raised and lowered** by one person and locked at the desired rim height or storage position by means of a telescoping height adjustment mechanism that has permanent rim height markings. Rim shall be capable of height settings from 7' to 10' in 6" increments.

**All steel components shall have a textured white polyester powder coated finish.**

**Entire basketball system shall rest on the floor** when in the storage position on six (6), 8" diameter, 2" wide urethane casters. When rolled into playing position, front of system shall be lifted from the front wheels onto two 4" diameter urethane stabilizer pads.

**Stabilizer pads** shall be lowered by means of a threaded lead screw located at the top front corners of the base.

**Padding:** Entire front and sides of the base and front of the structural upright shall be padded a minimum of 2" thick in choice of 12 colors. Lower surface of horizontal extension arm shall be padded to a distance of 60" from the rear of the backboard.

Front locator pins and floor locator bushings and rear hold-downs shall be standard with the system. **System weight** shall be approximately 2,350 lbs.

**The padded base** shall be approximately 40" wide x 74" long. **The total stored dimension** shall be approximately 76" wide x 165" long x 78" high.

**Components shall carry the following minimum warranties.**

**Backboard, limited lifetime; Structure, 10-year limited;**

**Backboard Edge Padding, 10-year and Breakaway Goal, 5-year.**



Please Mark Appropriate Selections

##### Select Padding Color

Select Color:

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> 01 White       | <input type="checkbox"/> 02 Marine Blue | <input type="checkbox"/> 04 Red          |
| <input type="checkbox"/> 05 Beige       | <input type="checkbox"/> 06 Orange      | <input type="checkbox"/> 07 Yellow       |
| <input type="checkbox"/> 08 Grey        | <input type="checkbox"/> 09 Maroon      | <input type="checkbox"/> 10 Royal Blue   |
| <input type="checkbox"/> 11 Black       | <input type="checkbox"/> 12 Purple      | <input type="checkbox"/> 13 Forest Green |
| <input type="checkbox"/> 14 Kelly Green | <input type="checkbox"/> 15 Navy Blue   |  |

\* These colors may require longer lead time. Contact Draper, Inc. for details



Draper, Inc. | 411 S. Pearl St. Spiceland, IN 47385  
draperinc.com | 765.987.7999 | 800.238.7999

© 2024 All Rights Reserved | FORM: 503019\_PortableBackstop\_Sub24

PROJECT: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

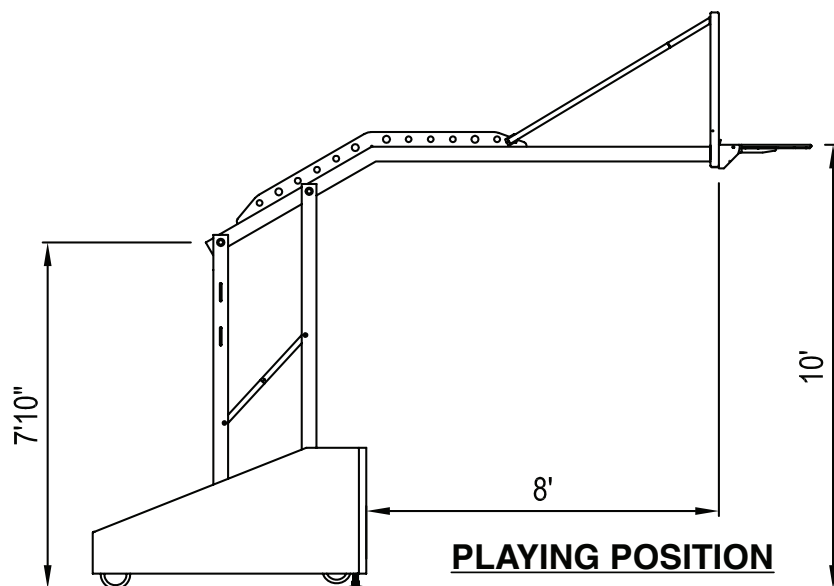
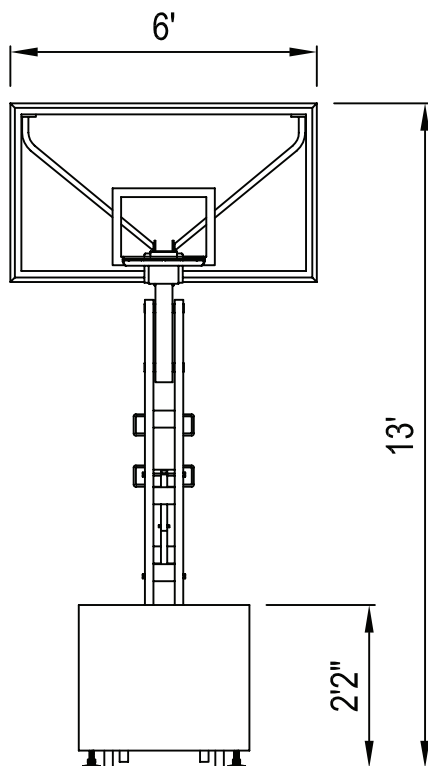
SUPPLIER: \_\_\_\_\_

DATE: \_\_\_\_\_ REVISED: \_\_\_\_\_

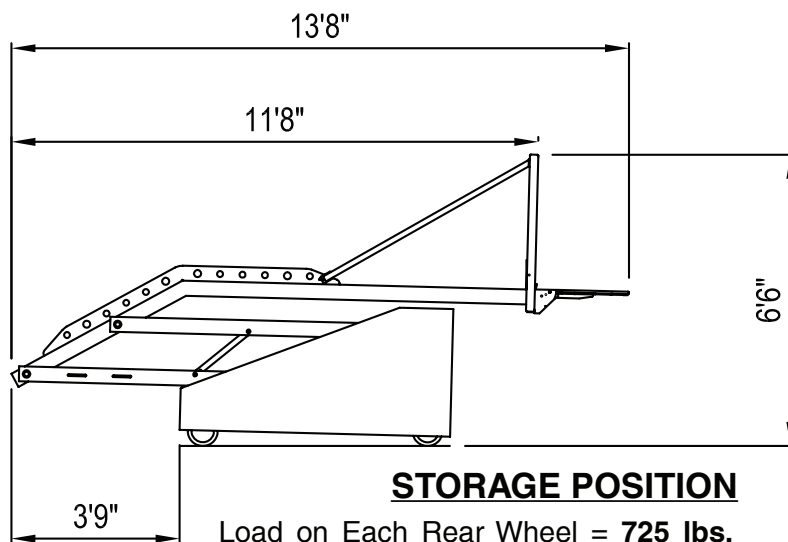
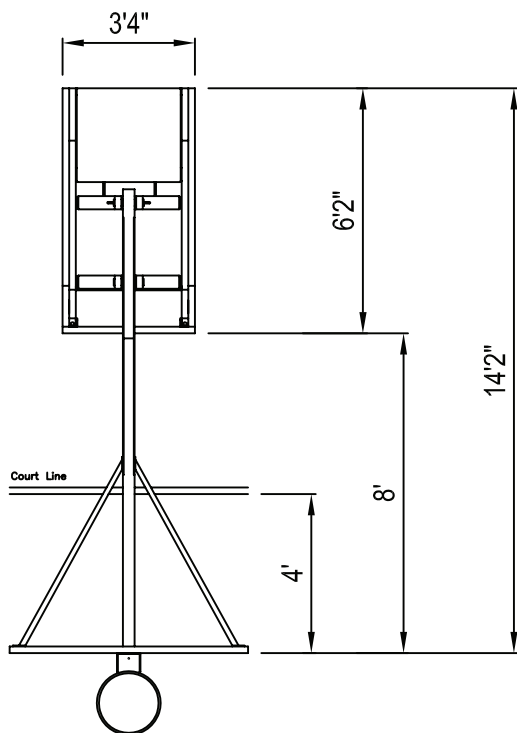
# EZ-Sharpshooter 96 Portable Basketball System - 503019

SUBMITTAL

TECHNICAL SPECIFICATIONS



Load on Each Rear Wheel = 465 lbs.  
Load on Each Front Pad = 690 lbs.



Load on Each Rear Wheel = 725 lbs.  
Load on Each Front Pad = 430 lbs.



PROJECT: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SUPPLIER: \_\_\_\_\_

DATE: \_\_\_\_\_ REVISED: \_\_\_\_\_



PO Box 841393  
Dallas, TX 75284-1393  
Phone: 800-527-7510 Fax: 800-899-0149  
Visit us at www.bsnsports.com

Contact Your Rep  
Aaron Wick Email:awick@bsnsports.com | Phone:

Sold to  
1442510  
FRANKLIN HIGH SCHOOL  
3100 JOY RD  
LIVONIA MI 48150-3916  
USA

Ship To  
1442510  
FRANKLIN HIGH SCHOOL  
Dusty Hall  
3100 JOY RD  
LIVONIA MI 48150-3916  
USA

Payer  
1442510  
FRANKLIN HIGH SCHOOL  
3100 JOY RD  
LIVONIA MI 48150-3916  
USA

Quote

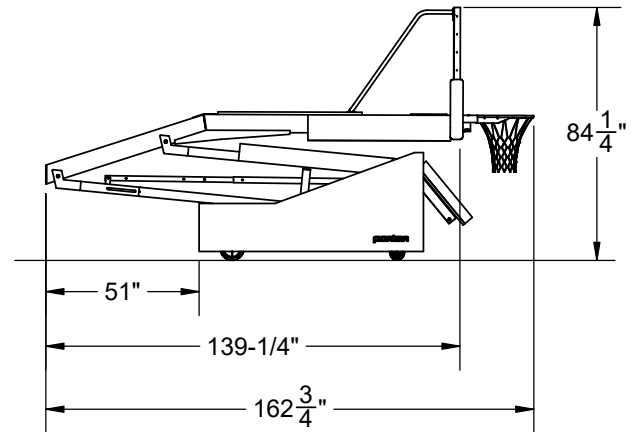
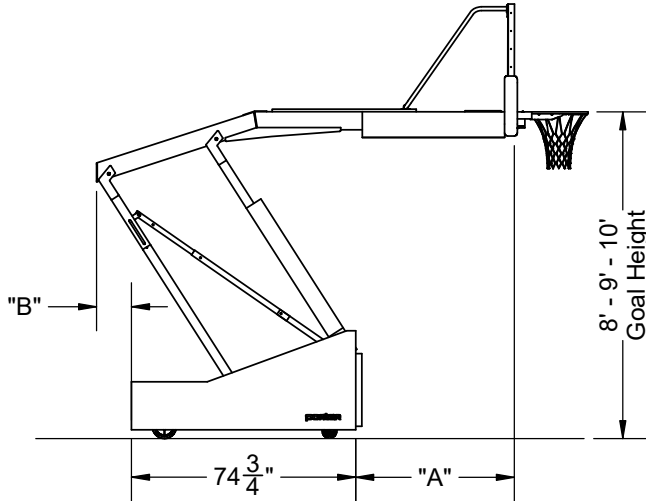
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Purchase Order #: Portable Basketball Syste  
Cart Name: Porter Basketball Systems  
Quote Date: 10/24/2024  
Quote Valid-to: 11/22/2024  
Payment Terms: NT30  
Ship Via:  
Ordered By: Dusty Hall

Item Description	Qty	Unit Price	Total
Black/Red-1135 PORTABLE PAD COLOR FRME COLOR GFX Item # - PR1135080CSP 6	6 EA	\$ 16,999.99	\$ 101,999.94

Subtotal:	\$101,999.94
Other:	\$0.00
Freight:	\$1,200.00
Sales Tax:	\$0.00
Order Total:	\$103,199.94
Payment/Credit Applied:	\$0.00
Order Total:	\$103,199.94

# 1135080 - PORTABLE BACKSTOP

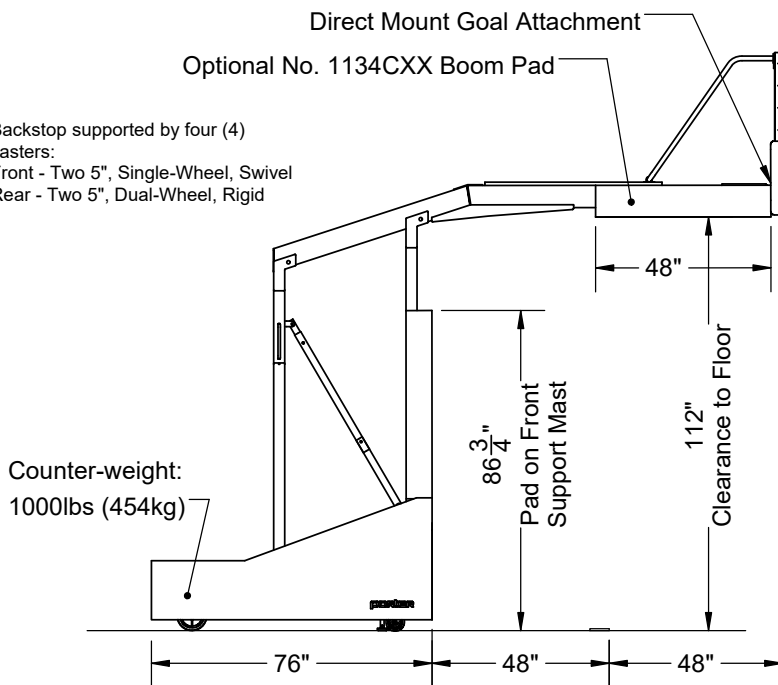
## HEIGHT-ADJUSTABLE PORTABLE BACKSTOP WITH 8'-0" EXTENSION



GOAL HEIGHT SETTING

	10'	9'	8'
A	8'	4'-3 1/2"	3'-11 1/2"
B	N/A	11'-3/4"	2'-3 1/2"

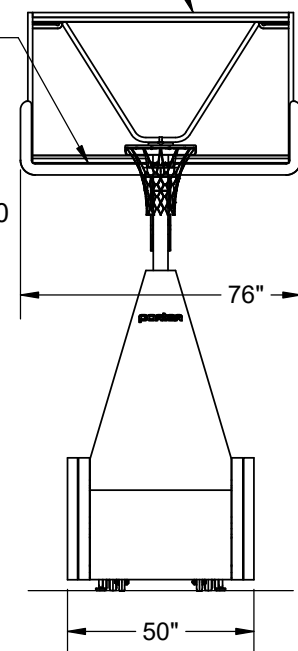
Backstop supported by four (4)  
casters:  
Front - Two 5", Single-Wheel, Swivel  
Rear - Two 5", Dual-Wheel, Rigid



No. 208 Glass Backboard

No. 00326000  
Backboard Pad

No. 240180  
Goal



Color Selection		
01 - Light Blue	06 - Yellow Gold	11 - Purple
02 - Royal Blue	07 - Silver *	12 - Black (Gloss)
03 - Red	08 - Tan/ Old Gold	13 - Navy Blue
04 - White	09 - Gray	14 - Kelly Green
05 - Orange	10 - Maroon	15 - Dark Green

### NOTE

XX - Pad Set Color

YY - Frame Color

\* Silver available for frame color only, not pad set color

\*\* Backboard pad to match vinyl color (white and tan padding receive gray backboard padding)

2.75" (70mm) thick protective front pads

2.75" (70mm) thick protective side pads

- 1135080CXXYY - 1135 PORTABLE; 8' EXTENSION

- 1135080CXXYYSP - 1135 PORTABLE; 8' EXTENSION;  
WITH GRAPHIC PADS

# 1135080 - PORTABLE BACKSTOP

## HEIGHT-ADJUSTABLE PORTABLE BACKSTOP WITH 8'-0" EXTENSION

### SPECIFICATIONS

#### PORTER No. 1135080 HEIGHT ADJUSTABLE PORTABLE BACKSTOP WITH 6'-0" x 3'-6" RECTANGULAR GLASS BACKBOARD

Backstop shall be designed for use at official goal height setting of 10'-0" (3.05m) with an integral height adjustment locking mechanism which also allows the unit to be used and locked into position at 8'-0" (2.44m) and 9'-0" (2.75m) goal heights. Unit shall be positioned on the floor by means of two (2) hand operated, retractable, positioning floor locks.

Base of unit shall be 4'-2" (1.27m) in width x 6' 2-3/4" (1.90m) in length (including padding). Base shall be constructed of heavy-wall, 3" x 2" (7.6cm x 5cm) structural steel tubing. Base shall be furnished complete with compact, solid steel ballast (1000lbs – 454kg) weights concealed and nested inside frame of the unit. Base frame shall incorporate four (4) non-marking, rubber tread caster wheels equipped with roller bearings for ease of operation. Front two casters shall be 5" (12.7cm) diameter, single-wheel swivel-type and rear two casters shall be 8" (20.3cm) diameter, dual-wheel rigid-type.

Front and rear vertical support assemblies shall be fabricated of heavy-wall 4" x 3" (10.2cm x 7.6cm) steel sections, diagonally braced by 3" x 2" (7.6cm x 5cm) structural steel tubing sections for maximum rigidity. Upper and lower ends of vertical supports shall pivot in adjustable, oil impregnated bronze bushings for maintenance free operation.

Center horizontal backboard support (Center-Strut®) shall be of a 6" x 4" (15.2cm x 10.2cm) heavy-wall steel section extending to a heavy steel mounting plate behind the backboard. Goal shall bolt through sleeves in the glass backboard into said mounting plate to eliminate any strain on the glass backboard during slam- dunk type maneuvers. Two additional backboard mounting bolts are provided to hold backboard in position, should the four goal mounting bolts be removed for replacement of the goal. This direct goal mount feature conforms to NCAA rule (BR-36-14) for basket-ring mounting. Extension assembly shall provide a full 8'-0" (2.44m) from the face of the backboard to the front padding, and 9'-7" (2.92m) vertical dimension from the playing floor with the goal located at the 10'-0" (3.05m) competition height. Upper backboard support arms shall extend diagonally from the horizontal extension assembly for proper backboard support.

A counterbalanced-type multiple tension spring operating system concealed within the backstop shall allow the backboard to be easily raised or lowered within a five second cycle time without the use of additional tools or power mechanisms. Counterbalance system shall be completely enclosed and out of sight. Goal shall be locked in playing position (8', 9', or 10') by means of an integral, telescoping diagonal brace system equipped with a positive thru pin and pressure lock arrangement to provide stability in all positions. The thru pin mechanism is designed to accept a padlock provided with each unit to lock the backstop at any playing height or storage position to eliminate use or operation by unauthorized individuals.

**SPECIFICATIONS CONTINUED ON Page 2 of 2**



# 1135080 - PORTABLE BACKSTOP

## HEIGHT-ADJUSTABLE PORTABLE BACKSTOP WITH 8'-0" EXTENSION

### SPECIFICATIONS

Backstop shall be furnished with durable protective padding on front vertical support and on front and sides of base. Padding shall consist of a minimum 2" thick shock absorbing foam, covered with a 19oz. (per square yard) vinyl coated polyester scrim material for superior rip and tear resistance. Padding shall be provided with a rigid, solid-core plywood backing for securing to the backstop frame. Entire top of base section shall be enclosed by a matching vinyl covered enclosure.

Overall dimension of backstop in folded, storage position: Height of 6'-8 3/4" (2.05m), Width of 4'-2" (1.27m), Backboard Width of 6'-4" (1.93m), Length of 13'-6 3/4" (4.14m).

Total weight of backstop: 2,400 lbs

All metal parts of backstop shall be furnished with a durable powder coat finish. Specify powder coat color.

BACKBOARD – No. 208 Fully Welded Steel Frame Regulation Glass Backboard – See Page No. B-208 for specifications.

BACKBOARD SAFETY PADDING – No. 00326000 Pro-Pad®– See Page No. B-326 for specifications.  
\*Backboard pad color will match pad vinyl color selected (white and tan padding receive gray backboard padding).

GOAL – No. 240180 Torq-Flex® Competition Adjustable Goal – See Page No. B-240180 for specifications.

### OPTIONS

No. 1134CXX – HORIZONTAL SUPPORT ARM PROTECTIVE PAD (EACH)

NOTE: It is the responsibility of the customer and floor manufacturer to ensure the floor can properly accommodate the weight of a portable backstop. Backstop's game location on the court as well as path of transport on court should be taken into consideration during the design process.

NOTE: Refer to page 5 of the product instruction manual for all applicable product warnings and safety information.

NOTE: Additional springs are needed if a shot clock will be installed on this portable backstop; refer to table below for spring information and see page No. B-113130 and B-113150 for shot clock support specifications.

Additional Springs Required for Shot Clocks	
Shot Clock Weight (lbs)	# of Additional Springs
0-20	1
30-90	2
100-130	3
140-150	4
160+	Not Recommended

# CONTRACT PROPOSAL

*Bareman and Associates, Inc.*

## Architectural Building Specialties

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DATE: November 1, 2024

PROJECT: Livonia Public Schools

DESCRIPTION	PRICE
<p><b><u>Churchill High School – Fieldhouse</u></b></p> <p><b><u>Scope of Work:</u></b></p> <p>Remove (1) existing ceiling hung volleyball system (TBD)  Furnish and install (1) <b>Side Lifting</b> Multi-Sport Practice Cage  Specifications: 10'(h) x 12'(w) x 70'(l) - Direct Attachment - 3/4 HP, 115 Volt Single Phase Motor – see attached submittal</p> <p><u>NOTE:</u> If batting cage is to be located between truss bays – additional steel must be introduced – at additional cost – field measurement required to confirm attachment method and location.</p> <p><u>Not Included:</u>  Electrical – by others  Dumpster/Disposal – by others</p> <p style="text-align: right;"><b>PROJECT TOTAL:</b></p>	<p style="text-align: right;"><b>\$16,600.00</b></p>

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BY Gary Ells  
Gary Ells

ACCEPTED BY

DATE \_\_\_\_\_

# Side Lifting Multi-Sport Practice Cage

by

DRAPER

## Specifications—Side Lifting Multi-Sport Practice Cage

**GENERAL:** Cage shall be \_\_\_\_\_ H x \_\_\_\_\_ W x \_\_\_\_\_ L (standard: 10'0" high x 12'0" wide x 70'0" long), complete with frame, net, cables, and electric winch for lowering to floor when in use and raising to underside of roof structure for storage.

### I. FRAME

- Frame of cage to be constructed of 1 $\frac{5}{8}$ " x .109 wall tubing.
- Fittings to be malleable iron galvanized with case hardened set screws.

### II. OPERATION

- Winch to rotate drive pipe shall consist of a  $\frac{3}{4}$  H.P., 110-120 volt, 60 cycle, single-phase reversible capacitor motor with built-in thermal overload protection. Remote control winch operation includes integral limit switch for upper and lower limit of the cage travel. Key lock, three-position, momentary contact wall switch included. Switch unit shall include a polished wall plate.
- Netting and support frame shall be lifted by  $\frac{1}{8}$ " diameter (7 x 19) galvanized aircraft cable with a breaking strength of 2,100 lbs.
- 2 $\frac{3}{8}$ " Drive pipe to be located above one side of cage and there shall be swivel pulley assemblies to guide lifting cables along other side of cage.

### III. NETTING

- Four sides and top of cage shall be  $\frac{3}{4}$ " square, knotless nylon mesh in choice of white (standard) or black.
- $\frac{3}{8}$ " polypropylene rope shall be sewn into the perimeter of each section of netting.
- Two corners of cage shall be sewn together; two shall be secured using zippers, allowing one long side wall to be raised individually.
- Netting shall be of sufficient length to allow approximately 12' to rest on floor to prevent balls from going under net.
- Netting shall be suitable for use with baseball, softball and golf.

## Please Fill In Following Measurements: (See back page)

Height from Bottom of Beam to Top of Finished Floor: \_\_\_\_\_

Distance Between Beams: \_\_\_\_\_

Slope: \_\_\_\_\_

Width of Beams: \_\_\_\_\_

### Practice Cage Placement:

- ☐ Parallel to Roof Beams
- ☐ Centered Between Two Beams
- ☐ Centered Directly Beneath Beams
- ☐ Perpendicular to Roof Beams

### Netting Color:

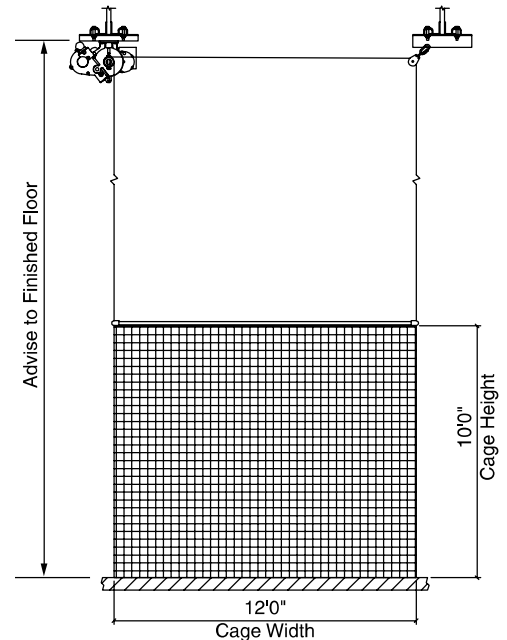
- ☐ White (standard)
- ☐ Black

### Options

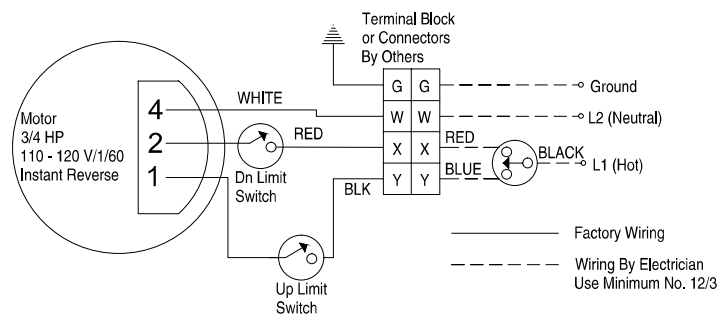
- ☐ Wireless Remote Control (see separate sheet)
- ☐ EZ Pad Group Control System (see separate sheet)
- ☐ Smart Gym Wall Touch Pad Control (see separate sheet)

## Section Drawing

Shown Directly under continuous beam



## Wiring Diagram



Circuit breaker rated amp. 20 amp.
Fused circuit rated amp. 20 amp.
Minimum Wire Size
90' maximum run. .... 12 ga.
90' to 140' run. .... 10 ga.
Over 140'. .... 8 ga.
Sizes of wall masonry boxes required for single and ganged key switches-- All boxes 2" (w) x 3 $\frac{3}{4}$ " (h) x 2 $\frac{1}{2}$ " (d).

DRAPER

411 S. Pearl St., Spiceland, IN 47385 USA ■ 765-987-7999 ■ fax 866-637-5611  
e-mail drapercontract@draperinc.com ■ www.draperinc.com

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PROJECT: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SUPPLIER: \_\_\_\_\_

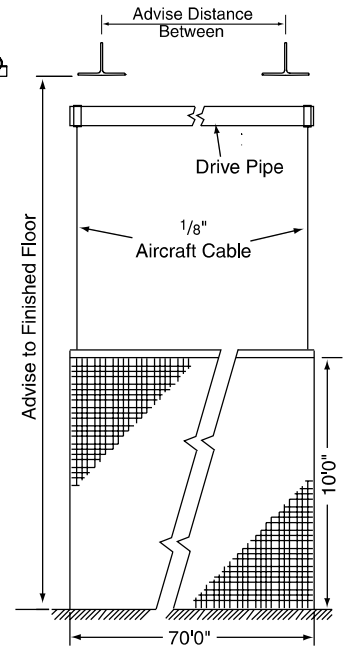
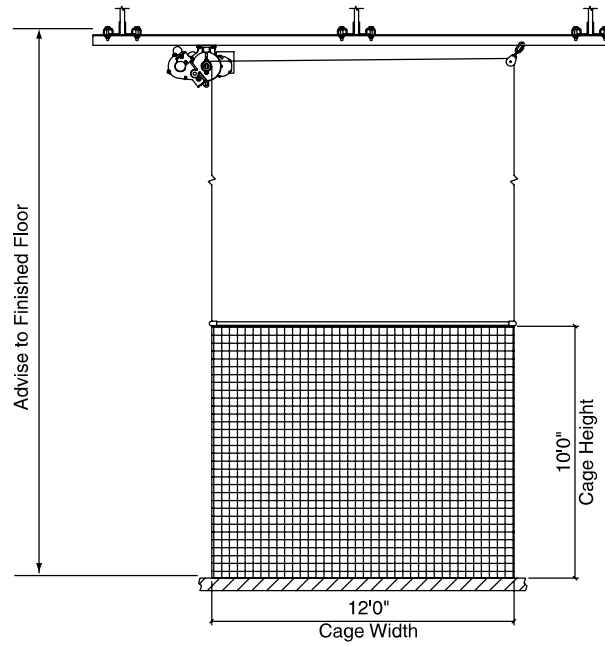
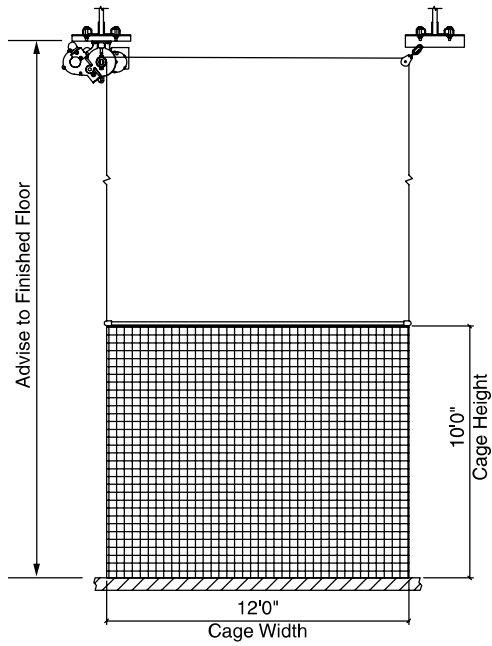
DATE: \_\_\_\_\_ REVISED: \_\_\_\_\_

## Side Lifting Practice Cage by Draper

*Parallel Installation  
(Directly Beneath Beam) (Typ.)*

### Parallel Installation (Between Beams)

### Perpendicular Installation



NOTES:

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SKETCH:

[illegible]

# CONTRACT PROPOSAL

*Bareman and Associates, Inc.*

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<p><b><u>Churchill High School – Fieldhouse</u></b></p> <p><b><u>Scope of Work:</u></b></p> <p>Remove (1) existing ceiling hung volleyball system (TBD)  Furnish and install (1) <b>Center Lifting</b> Multi-Sport Practice Cage  Specifications: 10'(h) x 12'(w) x 70'(l) - Direct Attachment - 3/4 HP, 115 Volt Single Phase Motor – see attached submittal</p> <p><u>NOTE:</u> If batting cage is to be located between truss bays – additional steel must be introduced – at additional cost – field measurement required to confirm attachment method and location.</p> <p><u>Not Included:</u>  Electrical – by others  Dumpster/Disposal – by others</p> <p style="text-align: right;"><b>PROJECT TOTAL:</b></p>	<p style="text-align: right;"><b>\$17,200.00</b></p>

This Quotation will remain firm for a period of 30 days.

All material is guaranteed to be as specified above. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra

costs, will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

TERMS: Net 30 days. PAST DUE balances are subject to late fee of 1-1/2% per month.

**BAREMAN AND ASSOCIATES, INC.**

BY Gary Ells  
Gary Ells

ACCEPTED BY

DATE \_\_\_\_\_

# Center Lifting Multi-Sport Practice Cage

by **DRAPER**

## Specifications—Center Lifting Multi-Sport Practice Cage

**GENERAL:** Cage shall be \_\_\_\_\_ H x \_\_\_\_\_ W x \_\_\_\_\_ L (standard: 10'0" high x 12'0" wide x 70'0" long), complete with frame, net, cables, and electric winch for lowering to floor when in use and raising to underside of roof structure for storage. Net sides may be folded onto top of cage for maximum clearance during storage.

### I. FRAME

- Frame of cage to be constructed of 1 5/8" x .109 wall tubing.
- Fittings to be malleable iron galvanized with case hardened set screws.
- Frame is supported with 1/8" galvanized aircraft cable termination onto a rotating drive pipe.

### II. WINCH and Lift System

- Drive pipe power mechanism shall consist of a 3/4 H.P., 110-120 volt, 60 cycle, single phase reversible capacitor motor with built-in thermal overload protection. The motor and load holding worm gear reducer shall provide speed reduction in the winch. Remote control operation to include integral limit switch to control the upper and lower limit of the curtain travel. Key lock, three position, momentary contact wall switch with safety delay included. Switch unit shall include a general purpose switch box wall plate.
- Netting and support frame shall be lifted by 1/8" diameter (7 x 19) galvanized aircraft cable with a breaking strength of 2,100 lbs.
- 2 3/8" Drive Pipe to be centered in Practice Cage.

### III. NETTING

- Four sides and top of cage shall be 3/4" square, knotless nylon mesh netting in choice of white (standard) and black.
- 3/8" polypropylene rope shall be sewn into the perimeter of each section of netting.
- Two corners of the cage shall be sewn together; two shall be secured using zippers, allowing one long sidewall to be raised.
- Netting shall be of sufficient length to allow approximately 12" to rest on floor to prevent balls from going under net.
- Netting shall be suitable for use with baseball, softball and golf.

## Please Fill In Following Measurements: (See back page)

Height from Bottom of Beam to Top of Finished Floor: \_\_\_\_\_

Distance Between Beams: \_\_\_\_\_

Slope: \_\_\_\_\_

Width of Beams: \_\_\_\_\_

### Practice Cage Placement:

- ☐ Parallel to Roof Beams
- ☐ Centered Between Two Beams
- ☐ Centered Directly Beneath Beam
- ☐ Perpendicular to Roof Beams

### Netting Color:

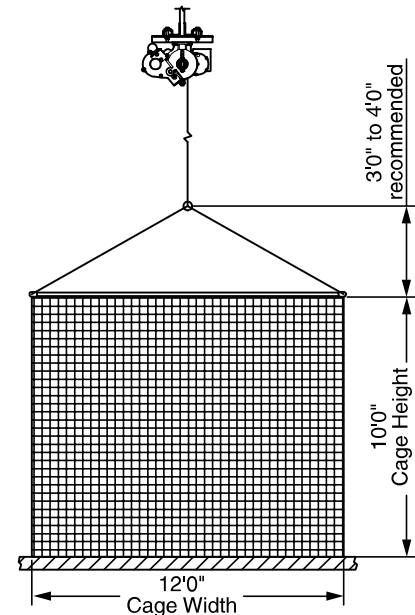
- ☐ White (standard)
- ☐ Black

### Options

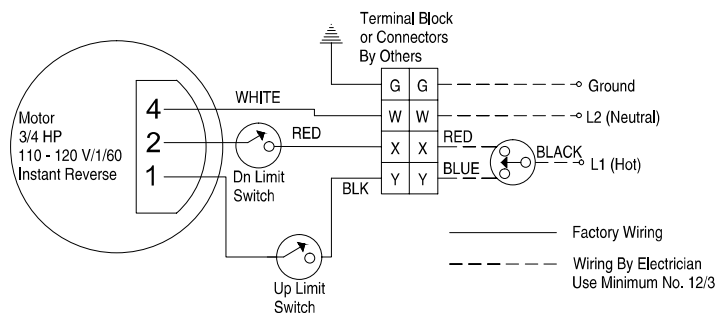
- ☐ Wireless Remote Control (see separate sheet)
- ☐ EZ Pad Group Control System (see separate sheet)
- ☐ Smart Gym Wall Touch Pad Control (see separate sheet)

## Section Drawing

Shown Directly under continuous beam



## Wiring Diagram



Circuit breaker rated amp. 20 amp.  
Fused circuit rated amp. 20 amp.

Minimum Wire Size  
90' maximum run. .... 12 ga.  
90' to 140' run. .... 10 ga.  
Over 140'. .... 8 ga.

Sizes of wall masonry boxes required  
for single and ganged key switches--  
All boxes 2" (w) x 3 3/4" (h) x 2 1/2" (d).

PROJECT:	_____
ARCHITECT:	_____
CONTRACTOR:	_____
SUPPLIER:	_____
DATE:	_____
REVISED:	_____

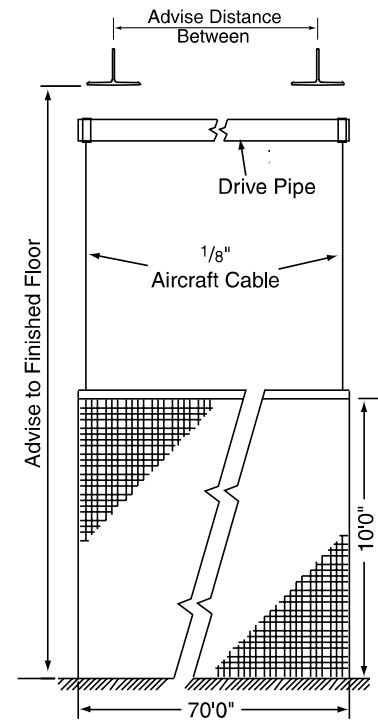
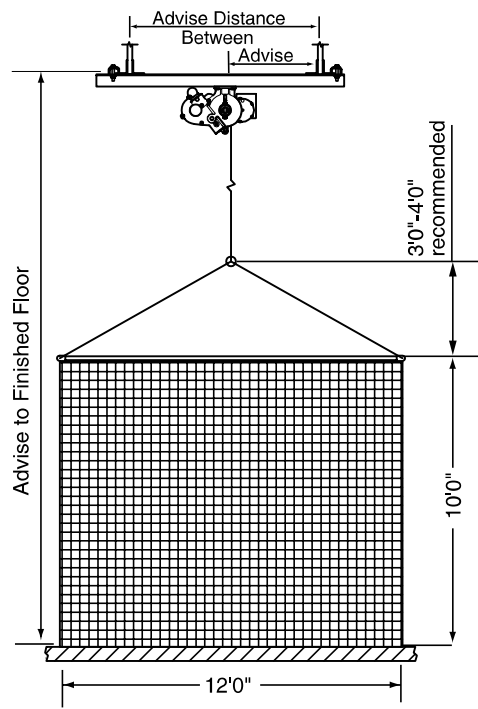
**DRAPER**

411 S. Pearl St., Spiceland, IN 47385 USA ■ 765-987-7999 ■ fax 866-637-5611  
e-mail drapercontract@draperinc.com ■ www.draperinc.com

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### Parallel Installation (Between Beams)

Diagram illustrating a recommended installation for a beam with a mesh enclosure. The beam is mounted to a ceiling structure, labeled "Advise" with a double-headed arrow indicating the mounting area. The beam is connected to a vertical support structure. The vertical distance from the beam to the top of the mesh enclosure is labeled "3'0\"-4'0\" recommended". The mesh enclosure is a rectangular structure with a grid pattern, labeled "10'0\"". The horizontal distance from the left side of the mesh enclosure to the right side is labeled "12'0\"". The entire structure is mounted on a base labeled "Advise to Finished Floor".



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This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin black lines. There are no margins, text, or other markings on the page.

# CONTRACT PROPOSAL

*Bareman and Associates, Inc.*

## Architectural Building Specialties

SUITE 100 \* 2197 PINE RIDGE DRIVE, JENISON, MI 49428

**PHONE:** (616) 669-9761 \* **FAX:** (616) 669-1696

TO: Phillip M. Francis, Asst. Supt. of Dist. Svcs.

DATE: November 1, 2024

PROJECT: Livonia Public Schools

DESCRIPTION	PRICE
<p><b><u>Churchill High School – Fieldhouse</u></b></p> <p><b><u>Scope of Work:</u></b></p> <p>Remove (1) existing ceiling hung volleyball system (TBD)  Furnish and install (1) <b>Bottom Lifting</b> Multi-Sport Practice Cage  Specifications: 10'(h) x 12'(w) x 70'(l) - Direct Attachment - 3/4 HP, 115 Volt Single Phase Motor – see attached submittal</p> <p><u>NOTE:</u> If batting cage is to be located between truss bays – additional steel must be introduced – at additional cost – field measurement required to confirm attachment method and location.</p> <p><u>Not Included:</u>  Electrical – by others  Dumpster/Disposal – by others</p> <p style="text-align: right;"><b>PROJECT TOTAL:</b></p>	<p style="text-align: right;"><b>\$18,900.00</b></p>

This Quotation will remain firm for a period of 30 days.

All material is guaranteed to be as specified above. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra

costs, will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

TERMS: Net 30 days. PAST DUE balances are subject to late fee of 1-1/2% per month.

**BAREMAN AND ASSOCIATES, INC.**

BY Gary Ells  
Gary Ells

ACCEPTED BY

DATE \_\_\_\_\_



# Bottom Lifting Multi-Sport Practice Cage

by

DRAPER

## Specifications—Bottom Folding Multi-Sport Practice Cage

**GENERAL:** Cage shall be \_\_\_\_\_ H x \_\_\_\_\_ W x \_\_\_\_\_ L (standard: 10'0" high x 12'0" wide x 70'0" long), complete with frame, net, belts, cables, and electric winch for lowering to floor when in use and raising to underside of roof structure for storage. Net sides shall be automatically lifted near support structure for compact storage and eliminating the need to manually fold netting material to onto top of frame.

### I. FRAME

- Frame of cage to be constructed of 1 $\frac{5}{8}$ " x .109 wall tubing.
- Fittings to be malleable iron galvanized with case hardened set screws.
- Frame is supported by sixteen 2" wide nylon belts with D-rings spaced 18" on center.

### II. OPERATION

- Winch to rotate drive pipe shall consist of a  $\frac{3}{4}$  H.P., 110-120 volt, 60 cycle, single-phase reversible capacitor motor with built-in thermal overload protection. Remote control winch operation includes integral limit switch for upper and lower limit of the cage travel. Standard key lock, three-position, momentary contact wall switch included. Switch unit shall include a polished wall plate.
- Netting and support frame shall be lifted by  $\frac{1}{8}$ " diameter (7 x 19) galvanized aircraft cable with a breaking strength of 2,100 lbs. Lift cable shall pass through d-rings in nylon belts allowing belts to accordion fold. Lift cables shall also pass through links attached to the netting material on 12" centers causing the netting to lift to the support frame as the cage is folded to the support structure.

### III. NETTING

- Four sides and top of cage shall be  $\frac{3}{4}$ " square, knotless nylon mesh in choice of white (standard) or black.
- $\frac{3}{8}$ " polypropylene rope shall be sewn into the perimeter of each section of netting.
- Netting shall be of sufficient length to allow approximately 12' to rest on floor to prevent balls from going under net.
- Netting shall be suitable for use with baseball, softball and golf.

## Please Fill In Following Measurements: (See back page)

Height from Bottom of Beam to Top of Finished Floor: \_\_\_\_\_

Distance Between Beams: \_\_\_\_\_

Slope: \_\_\_\_\_

Width of Beams: \_\_\_\_\_

### Practice Cage Placement:

- ☐ Parallel to Roof Beams
- ☐ Centered Between Two Beams
- ☐ Centered Directly Beneath Beams
- ☐ Perpendicular to Roof Beams

### Netting Color:

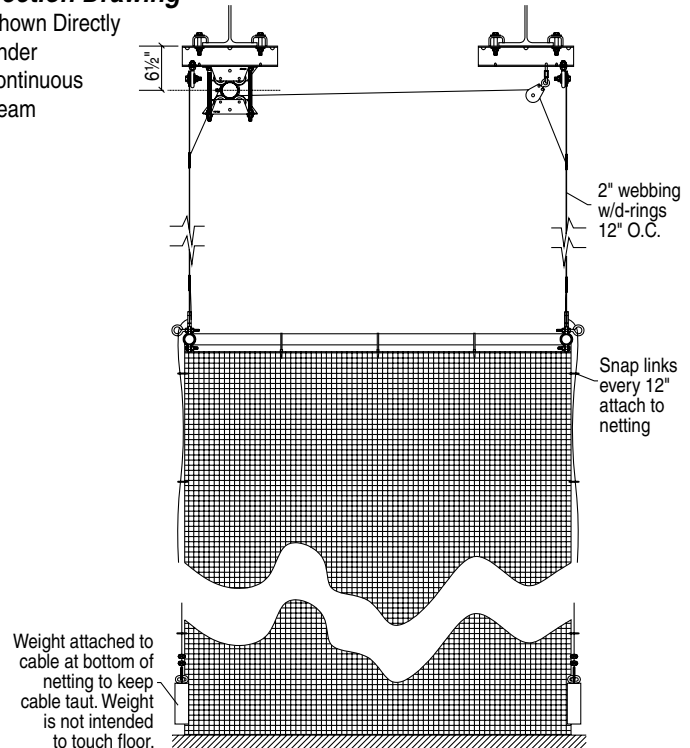
- ☐ White (standard)
- ☐ Black

### Options

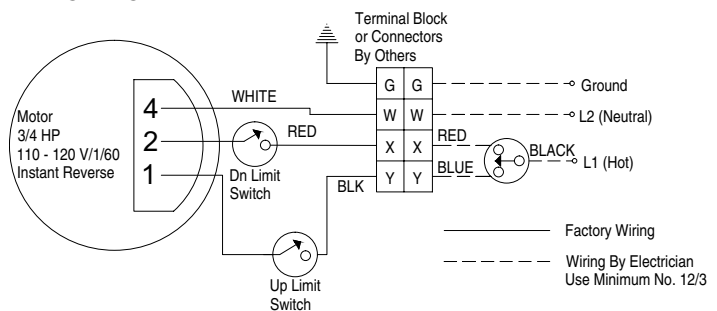
- ☐ Wireless Remote Control (see separate sheet)
- ☐ EZ Pad Group Control System (see separate sheet)
- ☐ Smart Gym Wall Touch Pad Control (see separate sheet)

## Section Drawing

Shown Directly  
under  
continuous  
beam



## Wiring Diagram



Circuit breaker rated amp. 20 amp.
Fused circuit rated amp. 20 amp.
Minimum Wire Size
90' maximum run. .... 12 ga.
90' to 140' run. .... 10 ga.
Over 140'. .... 8 ga.
Sizes of wall masonry boxes required for single and ganged key switches-- All boxes 2" (w) x 3 $\frac{3}{4}$ " (h) x 2 $\frac{1}{2}$ " (d).

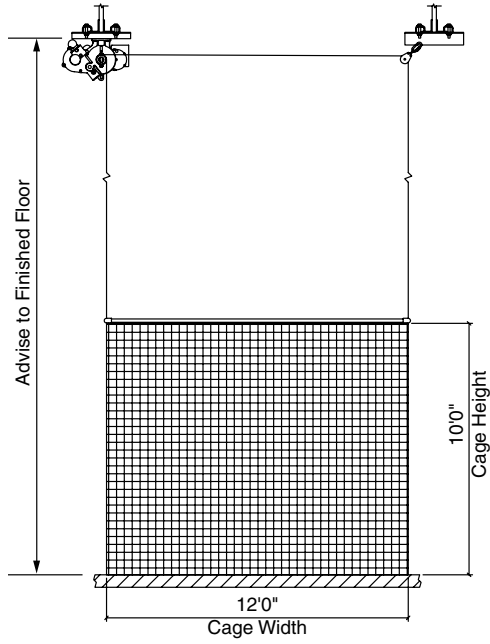
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e-mail drapercontract@draperinc.com ■ www.draperinc.com

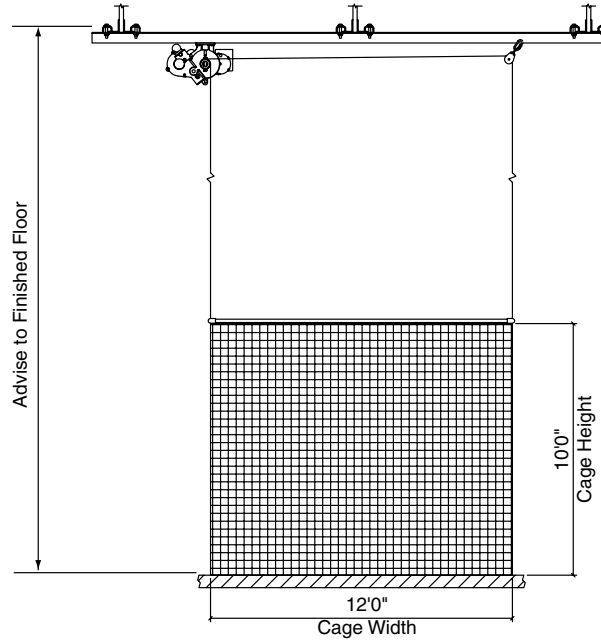
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PROJECT:	_____
ARCHITECT:	_____
CONTRACTOR:	_____
SUPPLIER:	_____
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REVISED:	_____

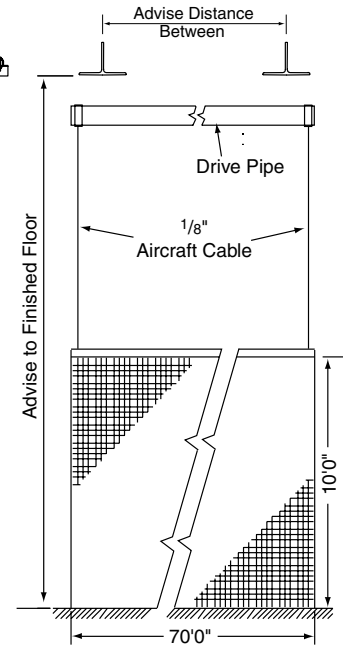
*Parallel Installation  
(Directly Beneath Beam) (Typ.)*



### Parallel Installation (Between Beams)



### Perpendicular Installation



NOTES:

SKETCH:

