DIVISION 11 - EQUIPMENT

11 06 20 - THEATRICAL CURTAIN AND TRACK

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Fabrication and installation of theatrical curtains indicated on the drawings, including tracks, all hardware and accessories.
- B. Referenced Standards/Minimum Criteria:
 - None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
- D. Restrictions/Critical Criteria:
 - 1. Curtain fabric must meet flame spread requirements.

- A. Acceptable Fabricators:
 - 1. Automatic Devices Corp. www.adctracks.com.
 - 2. Dincler Stage Equipment Division, Pueblo, CO.
 - 3. Theatrix, Inc., Denver, CO.
 - 4. Stagecraft Industries, Inc. <u>www.stagecraftindustries.com</u>.
 - 5. Barbizon: <u>www.barbizon.com</u>.
 - 6. Norcostco, Inc. www.norcostco.com.
 - 7. Approved substitute.
- B. Curtain Track and Related Hardware:
 - Main Drape: Automatic Devices Corporation "170 Track", complete with all necessary accessories. Provide manual rope and pulley assembly at one end with all required hardware. Eliminate track hangers and provide surface mounting, supported as required.
 - Cyclorama Curtain: Automatic Devices Corporation "173 Track", complete with all necessary accessories for walk-along curtain. Curtain must have 360-degree track for performances either north or south side of stage. Provide all required hangers for support.
 - 3. Side Curtains: Provide two (2) Automatic Devices Corporation "172 Track", complete with all necessary accessories for walk-along curtain. Provide any necessary hangers for support.



- 4. Upper Valance Curtains: Suspend three, 4-feet high by (width required) curtains on pipe battens from structure above.
- 5. Hang from carriers with No. 43 S hooks at each grommet. Dead tie the off-stage end of the curtain within 2-inches of the track end pulleys.

C. Curtain Fabric:

- 1. Main Drape: KM Fabrics, Marvel, 21 oz. cotton velour, or approved substitute, color as selected by Architect from minimum of 20 colors. Curtain width and height per design.
- 2. Rear, Valance, and Side Leg Curtains: Atlas, 100% cotton, black, or approved substitute.

11 31 00 - RESIDENTIAL APPLIANCES

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Contractor installation of Owner furnished equipment.
 - 2. Vent hoods over ranges furnished and installed by Contractor.
- B. Referenced Standards/Minimum Criteria:
 - 1. ANSI A117.1 Standard for Accessible and Usable Buildings and Facilities
 - 2. None
- C. Submittals Required:
 - Coordinate installation and opening dimensions with the appliances to be installed within or adjacent to built-in casework and wall construction. Coordinate plumbing, mechanical, and electrical hook-ups to appliances.
 - 2. Product data for vent hood.
- D. Restrictions/Critical Criteria:
 - 1. Contractor to obtain confirmation from School District of appliances and model numbers prior to casework shop drawings submittals. Owner will furnish cut sheets of actual appliances to be furnished.
 - 2. Contract shall receive, uncrate, place in proper location, assemble, and connect appliances according to manufacturer's instructions. Connections to mechanical and electrical services by mechanical and electrical contractors.

PART 2 - PRODUCTS

A. Acceptable Manufacturers: NA



11 40 00 - FOOD SERVICE EQUIPMENT

- A. Summary Section includes:
 - 1. Food storage equipment.
 - 2. Food preparation equipment.
 - 3. Food delivery carts.
 - 4. Food cooking equipment.
 - 5. Hood and ventilating equipment including fire suppression.
 - 6. Food dispensing equipment.
 - 7. Ice machines.
 - 8. Cleaning and disposal equipment.
- B. Referenced Standards/Minimum Criteria: Work and materials must be in full accord and when applicable, must be listed as acceptable with the following agencies:
 - 1. U.S. Public Health Service.
 - 2. Local Health Department.
 - 3. National Board of Fire Underwriters.
 - 4. O.S.H.A.
 - 5. National Sanitation Foundation (N.S.F.).
 - 6. Underwriter Laboratories (U.L.).
 - 7. A.S.M.E.
 - 8. A.G.A.
 - 9. N.F.P.A. 96 for exhaust system.
 - 10. A.S.T.M.
 - Fabrication methods shall conform to all generally accepted conventions and requirements of the food service industry and shall meet or exceed the latest National Sanitation Foundation standards including all revisions.
- C. Submittals Required:
 - 1. Shop drawings/rough-in drawings.
 - 2. Product data/cut sheet book specification/data for each piece of equipment.
- D. Restrictions/Critical Criteria:
 - Architect shall employ a food service consultant who shall work with representative of the School District to design food service facilities and determine appropriate equipment to either be fabricated or purchased through the Contractor.
 - 2. Food service consultant shall attempt to reduce energy costs, where possible, by specifying gas fired equipment as opposed to electric equipment.
 - 3. Architect shall review shop drawings for fabricated and freestanding equipment with School District prior to release for fabrication.

- A. Acceptable Manufacturers and Equipment:
 - 1. To be determined.

11 51 16 - BOOK DEPOSITORY

PART 1 - GENERAL

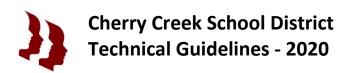
- A. Summary Section includes:
 - 1. Book drop-in media center of high schools.
- B. Referenced Standards/Minimum Criteria:
 - None.
- C. Submittals Required:
 - 1. Product data.
- D. Restrictions/Critical Criteria:
 - 1. Verify that wall to receive book drop is not required to be fire rated or if fire rating is required provide rated enclosure with access door behind book drop.

PART 2 - PRODUCTS

- A. Acceptable Manufacturers/Products:
 - Book Drop: Fully assembled book depository with clear satin anodized aluminum front frame and hopper door with pull handle. Housing shall be constructed of primed steel welded at seams. Provide standard stainless steel chute and "slow down". Add keylock for controlled access. Provide three (3) keys. Frame shall be marked "Book Depository" in engraved black filled letters.

11 52 13 - PROJECTION SCREENS

- A. Summary Section includes:
 - Projection screens.
- B. Referenced Standards/Minimum Criteria:
 - None.
- C. Submittals Required:
 - 1. Product data.



- D. Restrictions/Critical Criteria:
 - 1. Install screens according to manufacturer's instructions. Electrical Contractor to connect screens to power source and install switch/relay equipment.

- A. Acceptable Manufacturers:
 - 1. Da-Lite Screen Company, Inc. www.da-lite.com.
 - 2. Draper Shade and Screen Co., Inc. <u>www.draperinc.com</u>.
 - 3. Stewart Filmscreen Corporation: www.stewartfilmscreen.com.
 - 4. Approved substitute
- B. Acceptable Manufacturer and Type (for High School stage and/or Commons): Da-Lite "Senior Electrol" automatic projection screen or equal product of other acceptable manufacturer. Provide key operated recessed three position control switch in box with cover plate. Screens shall be flame retardant, mildew resistant, glass beaded with black border. Aspect Ratio: 16:10. Sizes (width): 9-feet or 18-feet (per design) with 3'-6" black extension.
- C. Acceptable Manufacturer and Type (for Elementary Schools): Da-Lite "Cosmopolitan" or equal of other acceptable manufacturer. Provide key operated recessed three position control switch. Screen shall be flame retardant, mildew resistant, glass beaded with black border. Picture surface shall be directed towards gym. Aspect Ratio: 16:10. Sizes (width): 9-feet

11 53 00 - LABORATORY EQUIPMENT

- A. Summary Section includes:
 - 1. Flammable storage cabinet.
 - 2. Vented acid storage cabinet.
 - Goggle sanitizer cases.
- B. Referenced Standards/Minimum Criteria:
 - Regulatory Requirements: Cabinets must be in compliance with OSHA, NFPA, and IFC requirements for storage of flammable liquids.
- C. Submittals Required:
 - 1. Shop drawings.
 - 2. Product data.
- D. Restrictions/Critical Criteria:
 - Laboratory equipment must interface closely with casework or other equipment which
 may be installed. Contractor shall coordinate and schedule work to assure that
 casework and laboratory equipment are installed in an expeditious manner, fit properly
 together, and tightly fits in the space provided.



2. Deliver, uncrate, place in proper location, and assemble equipment covered by this Section. Set equipment accurately in place, level, scribe and secure. Provide connecting and attaching devices, closures and trim members as required. Install items complete and adjust moving parts to operate smoothly.

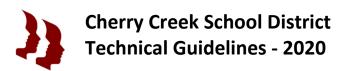
- A. Flammable Storage Cabinets:
 - 1. Acceptable Manufacturers:
 - a. Flinn Scientific: www.flinnsci.com.
 - b. Lab Safety Supply Co. Distributed through Grainger: www.grainger.com.
 - c. JustRite: www.justrite.com.
 - d. Protectoseal: <u>www.protectoseal.com</u>.
 - e. Terra Universal: www.terrauniversal.com.
 - f. Approved substitute
 - 2. Acceptable Model: Single door, self-closing or approved substitute of other acceptable manufacturer.
- B. Vented Acid Storage Cabinet:
 - 1. Acceptable Manufacturers:
 - a. Flinn Scientific: www.flinnsci.com.
 - b. Lab Safety Supply Co., distributed through Grainger: www.grainger.com.
 - c. JustRite: www.justrite.com.
 - d. Protectoseal: <u>www.protectoseal.com</u>.
 - e. Terra Universal: www.terrauniversal.com.
 - f. Approved substitute
 - 2. Acceptable Model: Lab Safety Model 9A-2151-2, including self-closing door feature or approved substitute of other acceptable manufacturer
- C. Goggle Sanitizer Cases with UV Lamp:
 - 1. Acceptable Manufacturer:
 - a. Ker-Kau Manufacturing Company: www.kerkau.com.

11 53 13 - FUME HOODS

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Bench-top laboratory fume hoods in science area.
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Color options.
- D. Restrictions/Critical Criteria:
 - Deliver, uncrate, place in proper location, and assemble fume hoods, bases, and equipment covered under this Section. Set fume hoods accurately in place, level, scribe and secure to base. Provide connecting and attaching devices, mechanical/electrical connections, closures and trim members as required. Install items complete and adjust moving parts to operate smoothly.
 - 2. Provide fume hoods of baffle design to provide a 100 fpm exhaust air volume through the hood when sash is in full open position. Do not provide exhaust fan in fume hood (exhaust performed by roof mounted exhaust fan).
 - 3. Provide wood panels with acid resistant coating in a streamlined section ensuring a consistent flow of air into the hood. Design the hood interior and end panels flush with the entrance shape to prevent eddy currents and backflow of air.
 - 4. Pre-pipe and pre-wire all hoods to a single location on the back of the unit.
 - 5. Vertical Sliding Sash: Provide 0.125-inch clear polycarbonate.
 - 6. Hood Working Surface: Provide a 1.25-inch thick chemical resistant plastic laminate work surface.
 - 7. Fabricate base cabinets from wood matching hood exterior with swinging doors and one adjustable shelf. Provide manufacturer's standard cabinet lock. Furnish two keys.
 - 8. Include factory finished sides, base and filler panels.

- A. Acceptable Manufacturers Fume Hoods:
 - 1. Fisher Scientific, Inc. <u>www.fischersci.com</u>.
 - 2. Hamilton Laboratory Solutions: www.hamiltonlab.com.
 - 3. Kewaunee Scientific Equipment Corp. www.kewaunee.com.
 - 4. Labconco: www.labconco.com.
 - 5. Air Master Systems Corp. www.airmastersystems.com.
 - 6. Approved substitute.



- B. Fume Hood Types:
 - 1. Fume Hood Type 1: Thermo Scientific Hamilton, "SafeAire II Constant Volume Bypass Fume Hood". Size: 48 inch.
 - 2. Fume Hood Type 2: Labconco, "Protector ClassMate HOPEC IV Laboratory Hood". Size: 48 inch.
- C. Fume hoods shall be complete with epoxy resin work surface, blower switch, gas, water, electric receptacles, cup sink, and vapor-proof fluorescent light fixture with external light switch.

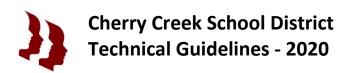
11 57 00 - CERAMIC KILNS

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Coordination, set up, hook up, and final connections to Owner furnished:
 - a. Electric kiln and optional accessories.
 - b. Gas kiln and optional accessories (high school).
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. None.
- D. Restrictions/Critical Criteria:
 - Owner will furnish catalog cuts and product data for manufactured items specified under this Section. Product data will include equipment rough-in requirements indicating exact locations of electrical and mechanical rough-in penetrations through the floor or walls. Review electrical and mechanical rough-in show on drawings.
 - 2. Receive, deliver, uncrate, place in proper location, and assemble all equipment covered by this Section. Set equipment accurately in place, level and secure as directed. Provide connecting and attaching devices as required. Install items complete and adjust moving parts to operate smoothly.

PART 2 - PRODUCTS FURNISHED BY SCHOOL DISTRICT

- A. Ceramic Kiln Electric:
 - 1. Manufacturer and Type: "Model KMT-1018" as manufactured by Skutt Kilns: www.skutt.com.
 - 2. Operation System: Electric (architect to verify voltage requirements)
 - 3. Firing Capacity: 4.6 cu. ft.
 - Accessories:
 - a. Limit timer.
 - b. 4-1/2-inch blank ring.



- c. 6 half shelves.
- d. Stak-up post assortment.
- e. Environment exhaust system.
- B. Ceramic Kiln Gas:
 - 1. Manufacturer and Type: "Model CW-16F" as manufactured by Cooperworks Company
 - 2. Operation System: Two (2) each high efficiency forced air burners. 170,000 BTU/burner.
 - 3. Firing Capacity: 4.6 cu. ft.
 - 4. Accessories:
 - a. Electronic ignition.
 - b. Collection hood.

11 61 23 - ORCHESTRA PIT COVER

- A. Summary Section includes:
 - 1. Removable orchestra pit cover at High Schools.
- B. Referenced Standards/Minimum Criteria:
 - 1. All work, materials, equipment, and installation shall conform to applicable local and national trade codes and standards.
 - 2. Manufacture and installation of the orchestra pit cover and storage truck shall be such quality as guided by professional staging practices. Lack of such quality shall be grounds for rejection.
 - 3. Welding processes and operators for fabrication of structural steel components shall be qualified in accordance with AWS Standard Qualification Procedure. Installer shall certify that welders to be employed for this fabrication have satisfactorily passed AWS qualification tests within the previous twelve (12) months.
- C. Submittals Required:
 - 1. Shop drawings.
 - 2. Product data.
 - 3. Submit independent, third-party, test data from registered professional engineer licensed in the State of Colorado indicating conformance with the live and static loading performance requirements.
- D. Restrictions/Critical Criteria:
 - 1. Performance Specification
 - a. The pit cover shall be capable of supporting, without failure, a uniform load of 125 pounds per square foot. The pit cover shall consist of lift-out sections.
 - b. Storage trucks for pit cover sections shall be provided. Overall width of storage trucks shall not exceed 32 inches to allow easy passage through a 3'-0" doorway. Each truck shall have four (4) ball bearing hub casters with minimum 5-inch diameter, hard rubber wheels with load rating of 500 lbs. Each. Two (2) casters shall be fixed and two (2) casters shall be of the swivel type.



- A. Acceptable Manufacturers of Pit Cover/Storage Trucks:
 - 1. SECOA Inc. <u>www.secoa.com</u>.
 - 2. Wenger Corporation: www.wengercorp.com.
 - 3. Norcostco: www.norcostco.com.
 - 4. Approved substitute.

11 63 23 - BACKSTOPS

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Main court backstops.
 - 2. Practice court backstops.
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
- D. Restrictions/Critical Criteria:
 - 1. Support System: Backstop supplier shall provide all required steel support structure and anchoring devices necessary to securely attach each backstop to steel roof members

- A. Acceptable Manufacturers Backstops:
 - 1. Porter Athletic: www.gillporter.com.
 - 2. Aalco Manufacturing Company: www.aalcomfg.com.
 - 3. Draper, Inc. <u>www.draperinc.com</u>.
 - 4. Approved substitute.
- B. Acceptable Backstops (high schools and middle schools):
 - 1. Forward Fold Rear Braced Main Court Backstops in main gym and auxiliary gym: Porter Model No. 90950-000 "Center Strut", ceiling suspended, or equal of other acceptable manufacturer. Provide Porter Model No. 00224-300 rectangular glass bank with Porter Model No. 00224-900 Pro-Strut adapter; No. 00227-000 bottom padding; and No. 00245-500 Power-Flex goal with net.
 - 2. Forward Fold Rear Braced Practice Court Backstops: Porter No. 90950-W00 "Center Strut", ceiling suspended, or equal of other acceptable manufacturer. Provide Porter Model No. 00228-300 rectangular Duralam bank; No. 00229-000 bottom padding; and No. 00245-500 Power-Flex goal with net.



Cherry Creek School District Technical Guidelines - 2020

- C. Acceptable Backstops (elementary schools):
 - 1. Folding Backstop: Porter Model No. 90617-000 Motorized Forward Fold or equal of other acceptable manufacturer; adjustable height goal, Model No. 00228-300 rectangular wood bank, No. 229-000 bottom padding and No. 00225-000 goal with net.
 - 2. Fixed Backstop: Porter Model No. 90918-000 or equal of other acceptable manufacturer; stationary ceiling suspended rear braced with goal height adjustable from 8-feet to 10-feet; Model No. 00228-300 rectangular wood bank, No. 00229-000 bottom padding, No. 00225-000 goal with net.
 - 3. Practice Backstops: Porter Model No. 312 Standard Stationary Wall Mount or equal of other acceptable manufacturer. Rectangular wood bank No. 00228-300 and No. 00225-000 goal with net. Flush mount to wall.

D. Accessories - All Schools:

- 1. Accessories: The following shall be provided for each backstop.
 - a. Provide and install remote electric winches incorporating emergency provisions for manual operation in case of power failure. Winch design shall incorporate integral up and down limit switches. Safety disconnects shall be provided by backstop manufacturer. Winch motors shall be sized as required, 115V, single phase.
- 2. Provide Porter Model No. 10798-000 "Safety Strap and Hoist Cable Retractor" to prevent accidental dropping of backstop in case of winch failure and to retract the hoist cable from area of play.
- 3. Provide recessed type, three-position key selection switches with covers. Key switches shall have "spring return" to center off-position.

11 63 53 - GYM DIVIDER

- A. Summary Section includes:
 - 1. Roll-fold divider curtain in main gymnasium (high schools and middle schools).
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
- D. Restrictions/Critical Criteria:
 - 1. Support System: Gym divider supplier shall provide all required and necessary support system for divider to be secured to roof structure.



- A. Acceptable Manufacturers Gym Divider Curtain:
 - 1. Porter Athletic: <u>www.gillporter.com</u>.
 - 2. NGE, Inc. www.nge-inc.com.
 - 3. Aalco: www.aalcomfg.com.
 - 4. Approve substitute.
- B. Manufacturer and Type: Porter No. 90675-100 "Roll-Fold Divider Curtain" or equal of other acceptable manufacturer. Entire curtain fabric to be anti-bacterial treated, fungi-resistant, and flame retardant. Curtain shall have wire polyester open mesh with PVC coating upper section and solid 8'-0" high vinyl polyester reinforced fabric lower section. Provide continuous bottom batten.
- C. Provide and install remote, single phase electric winch and integral limit switches to automatically control upper and lower limits of travel. Safety disconnect shall be provided by gym divider installer. Winch motor shall be sized as required. Provide recessed three position key switch and cover plate. Key switch shall have "spring return" to center

11 66 00 - MAT MOVERS

- A. Summary Section includes:
 - 1. Motorized wrestling mat mover and storage system at gymnasium.
 - 2. Necessary framing and support system to attach to roof and wall structure.
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
- D. Restrictions/Critical Criteria:
 - Verification of Conditions: Prior to beginning the installation of hoist equipment,
 Contractor shall examine the following to verify that no irregularities exist that would affect the quality of execution or work as specified:
 - a. Location and soundness of structural members.
 - b. Completion of work of other trades adjacent to hoist installation.
 - 2. Acceptance: Beginning of installation by Contractor means acceptance of existing conditions.
 - 3. Running Test: In the presence of the Architect, make a running speed test with full maximum load on the hoist equipment to determine whether the equipment as installed meets the speed, capacity and other requirements of the Specifications.
 - 4. Manufacturer shall provide two (2) year written warranty for material and installation.



- A. Acceptable Manufacturers Mat Mover System:
 - 1. Aalco Mfg. www.aalcomfg.com.
 - 2. NGE Inc. www.nge-inc.com.
 - 3. Porter Athletic: www.gillporter.com.
 - 4. Approved substitute
- B. Mat Movers: Porter #91101-200 (high school) or #91101-100 (middle school) overhead supported mat mover or equal. Mat mover system shall consist of fully welded steel carriage structure with rails and fully assembled drive and lifting mechanism, standard of manufacturer. System shall include suspension trolleys, travel beam, load bar with sling, control panel, electric motors for hoist and tractor, drive tractor, key switches with covers, cables and pulleys, and other standard components of manufacturer required for fully operational system.
 - 1. Controls: Two (2) key switches at control station, located as directed by the Architect.
 - 2. Load Bar and Sling: Designed to support two (2) 42' x 42' mat for high schools, and (1) 42' x 42' mat for middle schools.
 - 3. Support Framing, and Anchoring System: As designed and provided by mat mover manufacturer.

11 66 43 - SCOREBOARDS

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Scoreboards in gymnasiums (high schools and middle schools).
 - 2. Scoreboard in swimming pools.
- B. Referenced Standards/Minimum Criteria:
 - None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
- D. Restrictions/Critical Criteria:
 - 1. Architect to verify with School District type and number of scoreboards.

- A. Acceptable Manufacturers Gymnasium Scoreboards:
 - 1. Fair-Play Scoreboards: www.fair-play.com.
 - 2. Daktronics: <u>www.daktronics.com</u>.
 - 3. Nevco Scoreboard Co. www.nevco.com.
 - 4. Approved substitute.



- B. Acceptable Manufacturers Swimming Pool Scoreboards:
 - 1. Colorado Time Systems: <u>www.coloradotime.com</u>.
 - 2. Daktronics: www.daktronics.com.
 - 3. Fair-Play: www.fair-play.com.
 - 4. Nevco Scoreboard Co. www.nevco.com.
 - 5. Approved substitute.

C. Scoreboards:

- 1. Gymnasium Scoreboards: Fair-Play "Model BB-1620 Basketball/Wrestling/Volleyball Scoreboard" or equal of other acceptable manufacturer
- 2. Swimming Pool Scoreboards: Colorado Time Systems "Model #4009S8-MS".
- D. Control Console: Provide one (1) control console in Main Gymnasium capable of controlling both scoreboard panels in Main Gym from console on Scorer's table. Provide one duplicate control console with cord and carrying case to operate second scoreboard in Main Gymnasium (verify second scoreboard in middle schools) or both scoreboards in Auxiliary Gymnasium. Provide sufficient control cable to reach from scorer's tables in Main and Auxiliary Gymnasium bleachers to junction boxes on walls. Provide (1) control console in timer room to control scoreboard in pool areas. Verify if controls can be wireless.
- E. Control Cable: Provide control cable of sufficient length to reach from boxes on walls behind scorer's table in both Gymnasiums.
- F. Provide 2 rear illuminated top mounted personalization signs for scoreboards in main gym.

11 66 63 - GYMNASIUM EQUIPMENT

- A. Summary Section includes:
 - 1. Floor sleeves.
 - 2. Wall padding.
 - 3. Climbing ropes and pipe beams.
 - 4. Climbing rope hoists.
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings for equipment layout.
 - 3. Color options for wall padding.



D. Restrictions/Critical Criteria:

- 1. Securely attach wall padding and anchoring strip to substrate according to manufacturer's instructions. Install floor sleeves and ropes/pipe beams as detailed and in accordance with manufacturer's recommendations.
- 2. Supplier to provide and install all required steel supports for rope pipe beams to structural joists above.

- A. Acceptable Manufacturers Gymnasium Equipment:
 - 1. Porter Athletic: www.gillporter.com.
 - 2. Sportsfield Specialties: www.sportsfield.com.
 - 3. Aalco Mfg. www.aalcomfg.com.
 - 4. Jaypro: www.jayprosports.com.
 - 5. Performance Sports Systems: www.perfsports.com.
 - 6. American Athletic, Inc. <u>www.americanathletic.com</u>.
 - 7. Senoh: <u>www.sportsimports.com</u>.
 - 8. Approved substitute
- B. Acceptable Equipment (high schools/middle schools):
 - 1. Floor Sleeves: Grout type floor sleeve (Porter #00870-200) with attached hinged cover, coordinate diameter of sleeve with Owner furnished volleyball standards. Cover shall conceal anchor screws and hinge shall be flush with top of wood Gym floor surface.
 - 2. Removable Wall Padding: Porter No. 00348-300 mats, 2-inch thickness, removable tumbling mats or equal of other acceptable manufacturer. Padding shall be constructed of foam filler covered with flame retardant, vinyl-coated polyester fabric with nap or loop pile "Velcro" attachment strips on back. Color as selected from manufacturer's standard colors.
- C. Acceptable Equipment (elementary schools):
 - 1. Volleyball Sleeves and Standards: Total of two (2) standards required. Porter No. 00941-000 with No. 870 floor sleeves or equal of other acceptable manufacturer. Location as directed by Architect.
 - 2. Climbing Ropes: Total of four (4) required. Porter No. 00113 hemp rope. Type I attachment or equal of other acceptable manufacturer. Provide No. 90320 pipe beam. Provide No. 10970 pipe attachment and No. 00110 safety guard for each rope.
 - 3. Climbing Rope Hoists: Total of one (1) required. Porter No. 00104 or equal of other acceptable manufacturer.

11 68 00 - PLAYGROUND EQUIPMENT AND STRUCTURES

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Exterior Basketball Backstops, Goals, and Nets.
 - 2. Tetherball Posts.
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
- D. Restrictions/Critical Criteria:
 - 1. None.

- A. Acceptable Manufacturers:
 - 1. Porter Athletic: www.gillporter.com.
 - 2. Jaypro: <u>www.jayprosports.com</u>.
 - 3. Aalco Mfg. <u>www.aalcomfg.com</u>.
 - 4. Performance Sports Systems: <u>www.perfsports.com</u>.
 - 5. Approved substitute.
- B. Acceptable Products:
 - 1. Basketball Goals: Porter "Model No. 00164-000" or acceptable equivalent products of other manufacturer:
 - a. 4-foot extended backstop with 4-1/2-inch diameter galvanized steel post.
 - b. No. 00234-000 fan shaped aluminum backboard.
 - c. No. 00201-H00 goal with 00161-000 plated chain net.
 - 2. Tetherball Posts: Porter "Model No. 007630-200" or acceptable equivalent products of other manufacturer:
 - a. 2-3/8-inch galvanized steel post with cord anchor and tetherball.
 - b. No. 00402-000 outdoor ground sleeves to fit posts.

11 79 00 - THERAPY EQUIPMENT

PART 1 - GENERAL

- A. Summary Section includes:
 - 1. Installation and connections of Owner furnished items:
 - a. Whirlpools in training room (high school).
 - b. Ice makers in therapy and nurse's area.
- B. Referenced Standards/Minimum Criteria:
 - 1. None.
- C. Submittals Required:
 - 1. None.
- D. Restrictions/Critical Criteria:
 - Owner will furnish product data and rough-in catalog cuts for all items under this Section.
 Review electrical and mechanical rough-in shown on drawings. Coordinate exact locations of mechanical and electrical rough-in penetrations through the floor or walls.
 - 2. Receive, uncrate, place in proper location, and assemble all equipment covered by this Section. Set equipment accurately in place, level, and secure to floor. Provide connecting and attaching devices as required. Install items complete and adjust moving parts to operate smoothly.

PART 2 - PRODUCTS

- A. Whirlpools and Ice Makers: Furnished by School District for installation by Contractor:
 - 1. Whirlpools: "Logan All Star Series" as manufactured by Logan, Inc.
 - 2. Ice Makers: "Ross/Temp Self-contained" #RF-151 SC as manufactured by Ross/Temp, Inc.

END OF SECTION