

## **DIVISION 11    EQUIPMENT**

### **Section 11 00 00    Equipment - General**

1 To DC350, PART 1, Section 2, Division 11, unless otherwise specified.

### **Section 11 31 00    Residential Equipment**

#### **1 Domestic Washing Machine**

1.1 Provide at the following locations:

1.1.1 Clothing & Textile Area, and Learning Support Area. See Room Data Sheets.

1.1.2 Front console / loading

1.1.3 Stackable

1.2 Acceptable Product

1.2.1 GE model WCXH208AWW or Maytag model MAH2400A

#### **2 Domestic Clothes Dryers**

2.1 Provide at the following locations:

2.1.1 Clothing & Textile Area, and Learning Support Area. See Room Data Sheets.

2.1.2 Front console

2.1.3 Stackable

2.2 Acceptable Product

2.2.1 GE model PSXH43ECWW or Maytag model MDE2400A

#### **3 Microwave Ovens**

3.1 Provide for Nutrition Area (Family Studies), Learning Support and Staff Kitchen, see Room Data Sheets

3.2 1.2 cu.ft. Capacity, 1250-1300 watts, auto cook menu, defrost.

3.3 Acceptable Product

3.3.1 Panasonic NN-T665SF

#### **4 Convection Countertop Microwave Oven**

4.1 Provide for Nutrition Area (Family Studies), see Room Data Sheets

4.2 1.5 cu.ft., 1100 watts, defrost, two level cooking

4.3 Acceptable Product

4.3.1 Panasonic NN-C980W

#### **5 Self Cleaning Ceran Top Range**

5.1 Provide for Learning Support and Nutrition Area (Family Studies).

5.2 Upswept Ceramic Glass Cooktop.

5.3 Hot surface indicator.

5.4 Front or side controls

- 5.5 Acceptable Product
  - 5.5.1 GE model JCBP65WKWW or Maytag model PERL451A
- 6 Built-in Dishwasher
  - 6.1 Provide for Nutrition Area ( Family Studies) and Laboratory Storage / Preparation Room, see Room Data Sheets
  - 6.2 6 push button, 2-6 hour delay start, temperature boost
  - 6.3 Acceptable Product
    - 6.3.1 Maytag model PDBL290A
- 7 Refrigerator
  - 7.1 Provide for learning Support and Nutrition Area (Family Studies). See Room DataSheets.
    - 7.1.1 18 cubic foot, top freezer, with reversible doors,
    - 7.1.2 Acceptable product:
      - 7.1.2.1 Maytag model MTB 1891A or GE model GTH18JBRWW
- 8 Upright Freezer
  - 8.1 Provide for Nutrition Area (Family Studies).
  - 8.2 Acceptable Product
    - 8.2.1 GE model FUM17DRRWH or Amana model AFU1705B

## **Section 11 40 00      Food Service Equipment**

- 1 Food Service Equipment for Kitchen (Assembly Area)
  - 1.1 Materials and Components
    - 1.1.1 Stainless Steel: to CSA ASTM A167, Type 304 with No. 4 finish unless otherwise indicated.
    - 1.1.2 Stainless Steel Tubing: to ASTM A269, Type 302 commercial grade, seamless welded with No. 4 finish.
    - 1.1.3 Fastenings: for securing corrosion resistant or plated metal parts to be as corrosion resistant as, and colour matched to materials being fastened. Fastenings used for securing unplated ferrous metal or wood parts are to have a minimum protective coating of cadmium or zinc. Where possibility of food or food acid contact, plating to bechromium; cadmium, zinc. Toxic coatings not accepted.
    - 1.1.4 Chrome and Nickel Plating: to ASTM B456 Service Condition Number SC 3, polished finish.
    - 1.1.5 Sealant: aluminum coloured sealing compound such as Dow Corning Silastic 732 RTV silicone adhesive sealant, to meet requirements of the National Sanitation Foundation (NSF) for direct contact with food, and stay flexible during long term exposure to temperatures ranging from - 73.3 deg. C. to 232.0 deg. C. Seal all back-splashes to walls.
    - 1.1.6 Where amounts and sizes of units are provided for work tables, work tables with

sinks and bakers Tables these shall be considered typical and are provided for information. It remains the responsibility of the Design Build team to design to the requirements of the Part 2 General and Detailed Requirements, Room Data Sheets and ASK -11 Drawing Equipment legend, and to suit the individual room layout

## 1.2 Fabrication

1.2.1 Fabricate work square, true, straight, to fit conditions and as indicated. Design is to afford maximum sanitary conditions and is not to have any areas where disease-causing bacteria may accumulate.

1.2.2 Fabricate equipment from stainless steel, except as otherwise indicated.

1.2.3 Fit and shop-assemble equipment ready for erection where possible.

1.2.4 Carefully deburr and smooth all edges.

1.2.5 Straight Lengths:

1.2.5.1 Counter tops, table tops, drain boards, tray rails, shelving and the like to be one continuous piece if 10' or less in length. If over 10', stainless steel sections to be welded, including field joints, unless otherwise indicated.

1.2.6 Welding: to be sound, non-porous, and free from imperfections. Weld metal to be colour matched to, and as corrosion resistant as the parent metal. All other welds to be ground smooth. The welding or finishing is not to impair the corrosion resistance of the finished article. All welds, except spot welds, are to be continuous unless otherwise indicated.

## 1.3 Dish Tabling

1.3.1 Custom built or Diamond Metal, or MKE Industries 30" wide x 36" high.

1.3.2 All stainless steel construction 16 ga.

1.3.3 Include sinks as per plans.

1.3.4 Stainless steel tops with stainless steel legs and under shelving indicated. Reinforced, front up and rolled, ends turned down into dishwasher and sink drain board. Raised splash back.

## 1.4 Dish Rack

1.4.1 Overshelf

1.4.1.1 Stainless steel sloped suited to hold 2 standard dish racks

1.4.1.2 Acceptable manufacturer: Diamond Metal, or MKE Industries

## 1.5 Dishwasher

1.5.1 Undercounter type, 2 or more programable cycles, digital display, built-in/integrated booster, c/w 2 racks for dish, cup, bowl and silverware. Consider 70<sup>0</sup> booster where design for supply water may not be consistently delivering water above 140 F.

1.5.2 Construction

1.5.2.1 Stainless steel tank, frame, top and side panels, with welded steel base and stainless steel adjustable legs.

- 1.5.3 Acceptable Manufacturer / Product:
  - 1.5.3.1 Swissh 25PCL
  - 1.5.3.2 Jackson Tempstar JPX-300H
  - 1.5.3.3 Hobart
  - 1.5.3.4 Blakeslee
  - 1.5.3.5 Champion/Moyer Diebel
  - 1.5.3.6 Fagor FI -64W
  
- 1.6 Clean Dish Tabling and Pot Sinks:
  - 1.6.1 Three Compartment Pot Sink: 16 ga. stainless steel all-welded construction on galvanized legs/ overflow, drains and guards.
  - 1.6.2 Pot sink to be continuous with adjacent counter top. Sink to be integral with counter top. Pot sink to be complete with stainless steel slats to accommodate 20" x 20" tray and basket inserts.
  - 1.6.3 Sanitizing sink to be equipped with an indication thermometer.
  - 1.6.4 Acceptable Product:
    - 1.6.4.1 Custom
    - 1.6.4.2 Royal Food equipment Model PVS
    - 1.6.4.3 MKE
  
- 1.7 Freezer
  - 1.7.1 Reach-in freezer type
  - 1.7.2 45 cubic feet capacity; two section c/w
    - 1.7.2.1 full door and six vinyl coated shelves
    - 1.7.2.2 6" adjustable legs
    - 1.7.2.3 digital thermometer
    - 1.7.2.4 defrost indication and door activation light
    - 1.7.2.5 condensation pan.
  - 1.7.3 Finish
    - 1.7.3.1 stainless steel exterior
    - 1.7.3.2 white interior
  - 1.7.4 Electrical Characteristics
    - 1.7.4.1 120 volt, single phase.
    - 1.7.4.2 Quantity: one only.
  - 1.7.5 Acceptable Product
    - 1.7.5.1 Delfield 6100 XL
    - 1.7.5.2 Curtis RF-2-TM
    - 1.7.5.3 Master -Bult BSD -52DFA
    - 1.7.5.4 True 49 series
  
- 1.8 Shelving
  - 1.8.1 Wire shelves, five tier high on 72" posts with "s" hooks at corners to permit unobstructed access.

- 1.8.2 One side and back 24" wide; other side 18" wide. Lengths to fit room as per plan, confirmed by site dimensions.
- 1.8.3 Finish: Chrome.
- 1.8.4 Quantity: one lot.
- 1.8.5 Acceptable Product
  - 1.8.5.1 Cari-All
  - 1.8.5.2 Tarrison
  - 1.8.5.3 Johnson-Rose
  
- 1.9 Refrigerator
  - 1.9.1 Reach-in Refrigerator Type, minimum 48" width.
  - 1.9.2 49/50 cubic feet capacity; two sections c/w
    - 1.9.2.1 full doors and six vinyl coated shelves
    - 1.9.2.2 adjustable legs or casters
    - 1.9.2.3 Digital thermometer, power-on indicator and door activation light.
    - 1.9.2.4 condensation pan
  - 1.9.3 Finish
    - 1.9.3.1 stainless steel exterior
    - 1.9.3.2 ABS liner interior
  - 1.9.4 Electrical Characteristics
    - 1.9.4.1 120 volt, single phase, cord and plug
  - 1.9.5 Acceptable Product
    - 1.9.5.1 Delfield Model 6000XL
    - 1.9.5.2 Curtis, RR-2-TM
    - 1.9.5.3 True - 49 series
    - 1.9.5.4 Master-Bilt BSD-52DRA
  
- 1.10 Work Table
  - 1.10.1 Stainless steel utility unit/work table complete with stainless steel top, overshef, and solid undershef. At least one unit shall be sized for provision of two ingredient bins.
  - 1.10.2 Size: 60" long x 32" deep x 35" high.
  - 1.10.3 Acceptable Manufacturers
    - 1.10.3.1 Diamond Metal
    - 1.10.3.2 Royal Food
    - 1.10.3.3 Custom
    - 1.10.3.4 MKE Industries CT-6032 c/w HS-S
  
- 1.11 Heavy Duty Range
  - 1.11.1 Heavy-duty ranges c/w oven base; adjustable sanitary legs.
    - 1.11.1.1 One with 24 x 24 combination top with two heat zones and two 8 ½" dia. tubular elements.
    - 1.11.1.2 One with hot top and oven base, for second range where student population exceeds 800.

- 1.11.2 Finish
  - 1.11.2.1 Stainless steel front and back guard
  - 1.11.2.2 baked enamel sides.
- 1.11.3 Electrical Characteristics
  - 1.11.3.1 208 volt, three phase.
- 1.11.4 Quantity-student populations in excess of 800, two ranges required.
- 1.11.5 Acceptable Product
  - 1.11.5.1 Garland Model 36ER32-3
  - 1.11.5.2 Vulcan
  - 1.11.5.3 MKE Industries 836-2
- 1.11.6 This item requires an exhaust hood, provided by Mechanical. Ensure the two components are co-ordinated.
  
- 1.12 Microwave Oven
  - 1.12.1 Commercial stainless steel in and out heavy duty, 0.6 cu.ft. interior 1000 or 1200 watts, programmable.
  - 1.12.2 Ensure Microwave Oven has a dedicated 20 amp circuit associated to it.
  - 1.12.3 Acceptable Product
    - 1.12.3.1 Panasonic NE-1064
    - 1.12.3.2 Amana
  
- 1.13 Convection Oven
  - 1.13.1 Single deck electric convection oven, as per program.
  - 1.13.2 29W" x 24"H x 24"D
  - 1.13.3 Five (5) oven racks with ten (10) position rack guides)
  - 1.13.4 Six (6) oven racks with thirteen (13) position rack guides where student population exceeds 800.
  - 1.13.5 Two speed fan motor ½ hp, 60,000 btu cavity.
  - 1.13.6 Acceptable product
    - 1.13.6.1 Garland MC0 ES-10/20-S
    - 1.13.6.2 Vulcan VCE series with Electronic Controls
    - 1.13.6.3 Imperial ICVE -1
  
- 1.14 Overshelf for Hot Food Table
  - 1.14.1 All stainless steel construction.
  - 1.14.2 Provide one infrared heat lamp.
  - 1.14.3 Complete with sneeze guard.
  - 1.14.4 Acceptable Product
    - 1.14.4.1 Diamond Metal
    - 1.14.4.2 Royal Food Equipment.
    - 1.14.4.3 MKE Industries HS-SBP

- 1.15 Hot Food Table
  - 1.15.1 All stainless steel water pan electric steam table with open base, c/w
    - 1.15.1.1 stainless steel pans and covers
    - 1.15.1.2 ½" drains
    - 1.15.1.3 10" wide maple cutting board
    - 1.15.1.4 sneeze guards
  - 1.15.2 Provide one section 2-1/2 size pans 6" deep; one section full size pan 4" deep; one section 3-1/3 size pans 2" deep; 2 full size pans 2" deep complete with covers.
  - 1.15.3 Acceptable Product
    - 1.15.3.1 MKE HFTS-48AW-3-AR
    - 1.15.3.2 Diamond Metal.
    - 1.15.3.3 Custom HFT48W31W
- 1.16 Pass Through Shelf
  - 1.16.1 All stainless steel construction by general contractor. See details on drawings.
- 1.17 Tray Rail
  - 1.17.1 Stainless steel tray rail as per drawings.
- 1.18 Work Table with Sink
  - 1.18.1 Stainless steel utility unit/work table complete with stainless steel top with integral sink and backsplash, overshef and solid undershef.
  - 1.18.2 Size 72" long x 32" deep x 35" high.
  - 1.18.3 Faucet by Mechanical. Ensure the components are co-ordinated.
  - 1.18.4 Acceptable Manufacturers
    - 1.18.4.1 Diamond Metal
    - 1.18.4.2 Royal Food, Model
    - 1.18.4.3 Custom
    - 1.18.4.4 MKE Industries CT-7232 c/w HS-S
- 1.19 Pot Rack
  - 1.19.1 All stainless steel construction.
  - 1.19.2 Table mounted to lower shelf.
  - 1.19.3 Complete with "S" hooks @ 6" o.c.
  - 1.19.4 Size: 66" long x 18" wide.
- 1.20 Bakers Table
  - 1.20.1 Stainless steel utility unit/work table complete with hardwood table top, 2" nominal thickness, and stainless steel over shelf. Stainless steel legs complete with cross bracing at sides and rear.
  - 1.20.2 Size: 48" long x 32" deep x 35" high.
  - 1.20.3 Acceptable Manufacturers
    - 1.20.3.1 Diamond Metal Royal Food.

- 1.20.3.2 Custom
- 1.20.3.3 MKE Industries BT-4832 c/w HS-S

1.21 Ingredient Bins

- 1.21.1 Heavy-duty plastic bins for bakers table.
- 1.21.2 Acceptable Product
  - 1.21.2.1 Diamond Metal Rubbermaid 3600
  - 1.21.2.2 Cambro BS20

1.22 Vegetable Sink

- 1.22.1 Two compartment vegetable sink, one compartment to be an integral left drain board c/w overflow, drain and perforated guard.
- 1.22.2 Construction
  - 1.22.2.1 16 ga. stainless steel all-welded construction on galvanized legs.
- 1.22.3 Acceptable Product
  - 1.22.3.1 Diamond Metal
  - 1.22.3.2 Royal Food Equipment Model PVS-24-16 sink with DO-24 left hand drain board.
  - 1.22.3.3 MKE Industries PS-48-24LD

1.23 Glass Front Fridge

- 1.23.1 Reach in refrigerated storage cabinet c/w
  - 1.23.1.1 2 glass doors
  - 1.23.1.2 fluorescent lighting
  - 1.23.1.3 6 heavy duty shelves.
- 1.23.2 Colour
  - 1.23.2.1 White inside and out.
- 1.23.3 Electrical characteristics
  - 1.23.3.1 1/3 hp, single phase, 115V.
- 1.23.4 Digital thermometer
- 1.23.5 Acceptable Product
  - 1.23.5.1 Coldmatic RSL-40-GC
  - 1.23.5.2 True T-49.
  - 1.23.5.3 Master-Bilt MBGR48S

1.24 Sandwich Table

- 1.24.1 Refrigerated sandwich preparation table
- 1.24.2 Acceptable Product
  - 1.24.2.1 Delfield, 4427N-6
  - 1.24.2.2 True, TSSU-27-8
  - 1.24.2.3 Master-Bilt MBSP27-8

1.25 Cueing bar

- 1.25.1 Stainless steel construction with recessed anchors to full depth of slab, designed to



meet horizontal loading requirements and to run the full length of the server.

- 1.26 Server and dish return window
- 2 Kitchen Storage Shelving
  - 2.1 Cari-all ,Tarrison, Johnson-Rose.
- 3 Where electrical equipment is in a barrier free cabinet, ensure controls are front or side mounted.

### **Section 11 52 00 Audio-Visual Equipment**

- 1 Projection Screen
  - 1.1 Motorized, Electrically Operated Projection Screens:
    - 1.1.1 Screen: Mildew resistant, Fiberglass matte white viewing surface, glass beaded and fire resistant.
    - 1.1.2 Case: Warp-resistant composition wood case complete with universal mounting brackets for side or suspend mounting.
    - 1.1.3 Location: Stage
      - 1.1.3.1 Minimum size: 12' x 16'
    - 1.1.4 Location: Gymnasium and Cafeteria:
      - 1.1.4.1 Minimum size: 12' x 12'
    - 1.1.5 Standard of Acceptance: Draper Rolleramic or approved equal.
  - 2 Wall Mounted Spring Roller Projection Screens:
  - 3 Front Projection Screens:
    - 3.1 Screen: Mildew resistant, Fiberglass matte white viewing surface, glass beaded and flame resistant.
      - 3.1.1 Case: 22 Ga. Steel case, flat back design with matching 12 Ga. End caps complete with universal mounting brackets.
    - 3.2 Locations:
      - 3.2.1 Typical Classroom
      - 3.2.2 Primary Classroom
      - 3.2.3 Grade One Classroom
      - 3.2.4 Language Classroom
      - 3.2.5 Learning Support. 3.3 Size: 72" x 96".
      - 3.2.6 Standard of Acceptance: Draper Luma 2 or approved equal.
  - 4 Ceiling Mounted Screens:
    - 4.1 As per Item 11130.1.2 with universal mounting brackets equipped for ceiling mounting.
    - 4.2 Locations: Where required by Department of Education, or as noted in Project Specific Design Briefs.

### **Section 11 53 00      Laboratory Equipment**

- 1 Fume hood:
  - 1.1 Provide for Chemistry Laboratory and/or Laboratory Storage/Preparation Room. Refer to Room Data Sheets
  - 1.2 Design to meet all applicable SEFA, ULC, and CSA standards, and provincial barrier-free requirements on the classroom side; and as follows:
    - 1.2.1 Laboratory exhaust ductwork (serving chemical fume hoods and chemical storage cabinets) shall be minimum 18 gauge type 316 stainless steel with welded joints.
    - 1.2.2 With water
    - 1.2.3 Exhausted directly outdoors.
    - 1.2.4 Lockable from classroom side.
    - 1.2.5 Standard air fume hood.
    - 1.2.6 Integral light complete with switch.
    - 1.2.7 Full view laminated safety glass.
    - 1.2.8 Complete with base cabinetry, sink, and pre-wired electrical outlet.
    - 1.2.9 Stainless steel surface.
    - 1.2.10 Stainless steel liner panels
    - 1.2.11 100 FPM average face velocity.
  - 1.3 Consultant shall provide complete cabinet and hood design details with construction tender documents.
  - 1.4 Standard of Acceptance: MottLab

### **Section 11 57 00      Vocational Shop Equipment**

- 1 See Technology Production Area Room Data Sheet.
- 2 All built in equipment including Technology Production equipment supply and installation shall be coordinated and provided by the Contractor including, unload, placement, wiring, and dust collection systems.

### **Section 11 61 00      Theater and Stage Equipment**

- 1 Stage Curtain Track
  - 1.1 Provide fireproof, electric drawn drapery track.
  - 1.2 Provide ½ hp. electric draw curtain machine and 3/16" galvanized aircraft cable, c/w disconnect switch, overload protection breakers and motor thermal overload.
  - 1.3 Acceptable Material:
    - 1.3.1 Model #916, by Quality Stage Drapery.
    - 1.3.2 GC Stage Equipment.

- 2 Stage Curtain
  - 2.1 Provide flameproof, 20 oz. quality velour curtain c/w valence, to match curtain
  - 2.2 height of valence to be 36".
  - 2.3 Fullness of curtain and valence shall both be 80%.
  - 2.4 Colour as selected by Consultant.
  - 2.5 Acceptable Material
    - 2.5.1 Camrose by Quality Stage.
    - 2.5.2 GC Stage Equipment/JB Martin Fabrics.
- 3 Proscenium arch curtains(s), mechanically operated
- 4 Cyclorama Track (backdrop) curtains.
  - 4.1 Provide Cyclorama track and curtain at stage as indicated on drawing.
  - 4.2 Track: I Beam track constructed of 11 gauge extruded mill finished aluminum, with top, intermediate and bottom flanges. Track complete with carriers @ 8" o.c., curtain hooks, and all necessary ceiling clamps. Acceptable Product: #403 Track by Quality Stage.
  - 4.3 Curtain: 16 oz. stage velvet, flame resistant backdrop curtain, 35% fullness. Curtain to be grommeted at 8" o.c. with brass grommets and be attached to the center of a trim chain on the track carrier with "S" hooks. Provide curtains in three pieces: one 35' long, two 25' long. Colour: Black. Acceptable Product: Provost backdrop curtain by Quality Textiles. Alternate: GC Stage Equipment, to match.
  - 4.4 Quantity: as required to suit design.
- 5 Under stage chair storage dollies.
  - 5.1 Assembly complete with angle floor guide system and swivel ball bearing casters; minimum quantity.
  - 5.2 10' x 8' match to capacity of seating area long units and 10' x 6' long units ganged together in pairs to form 10' x 14' long units number to accommodate maximum seating capacity of related assembly areas.

## **Section 11 66 23      Gymnasium Equipment**

- 1 Refer to Gymnasium Room Data Sheet for quantities.
- 2 Backstop Specifications
  - 2.1.1 Glass backboards - ceiling suspended swing up basketball backstops c/w official glass rectangular backboard, regulation 18" diameter reflex breakaway goal, electric winch, foam safety edging, backstop safety belts and all mounting accessories. Frame width to accommodate rectangular board (approx.63"). Adjustable H.D.net (8'-0" X 10'-0" AFF)
    - 2.1.1.1 Standard of acceptance: Kodiak industries, RS 110-U, painted white.
    - 2.1.1.2 Acceptable alternate manufacturer: Madsen Sheridan, Laurentian:

Gymnasium and Health equipment.

- 2.1.2 Steel backboards - ceiling suspended swing up basketball backstops complete with regulation fan shaped steel backboard, regulation 18" dia. Goal, backstop safety belts, electric winch and all mounting accessories.
    - 2.1.2.1 Standard of acceptance: Laurentian Gymnastic Industries, Model LG-50BB
    - 2.1.2.2 Acceptable Alternate manufacturer: Madsen-Sheridan, Royal Steward, Kodiak.
  - 2.1.3 Steel backboard wall mounted - c/w rectangular shaped steel backboard, regulation 18" dia. Goal and all mounting accessories.
    - 2.1.3.1 Standard of acceptance: Kodiak RS - 119 HD, painted white adjustable height (8'-0" and 10'-0")
    - 2.1.3.2 Acceptable alternate manufacturer: Madsen-Sheridan, Laurentian: gymnasium & Health Equipment.
- 3 Volleyball Posts and Net
- 3.1 Provide competition volleyball posts and nets to the following standards. Posts are to be self-supporting requiring no guy wires.
    - 3.1.1 Spieth Anderson #226EW/EH "Sport Plus" end posts complete with ratchets.
    - 3.1.2 Spieth Anderson #219 post padding
    - 3.1.3 Spieth Anderson #221 judge's stand
    - 3.1.4 Spieth Anderson #207 judge's stand padding
    - 3.1.5 Spieth Anderson #214 VB floor sockets
    - 3.1.6 Court -1 - VBN-500 Championship volleyball net
    - 3.1.7 Court -1 - VNA-100 net antenna
  - 3.2 Provide sets cross court volleyball posts and nets to the following standards:
    - 3.2.1 End posts: Laurentian 500202/Centaur @158E
    - 3.2.2 Centre posts: Laurentian 500201/Centaur C158C
    - 3.2.3 Nets: Court - 1, VBN 300
    - 3.2.4 Alternate Manufacturers: Madsen, Sheridan, Gymnasium and Health Equipment to meet specified requirements.
  - 3.3 Floor sockets as required. Ensure floor sockets and posts are compatible before installation of sockets.
- 4 Badminton Posts and Nets
- 4.1 Provide sets of badminton posts and nets toto the following standards:
    - 4.1.1 PV posts: Laurentian 500111/Centaur C160B complete with ratchets.
    - 4.1.2 Floor sockets: Centaur C164. Ensure floor sockets and posts are compatible before installation of sockets.
    - 4.1.3 Nets: 20', G & HE, BN-250, Badminton nets shall fit the specified court design size.
    - 4.1.4 Alternate Manufacturers: Spieth Anderson, Madsen, Sheridan, Gymnasium and Health Equipment to meet specified requirements.
- 5 Gymnasium Divider Curtain
- 5.1 Provide fold-up divider curtain; material: vinyl coated, double wall for high schools

and single wall for elementary and middle schools, polyester rated as flame retardant by ULC. The curtain shall be vinyl for the first 10 ft. from the floor and the balance shall be 1 1/4" vinylized netting. Curtain c/w electric winch, key switch, track and hardware and all mounting accessories. Colour selected by architect, including the following additional features:

- 5.1.1 Extra heavy duty chain supports
- 5.1.2 Heavy duty "S" hooks
- 5.1.3 Stainless steel pulleys
- 5.2 Acceptable Manufacturer:
  - 5.2.1 Gym Fold
  - 5.2.2 Qued
  - 5.2.3 Hamilton Gymnasium Equipment
- 6 Telescopic Bleachers
  - 6.1 Provide banks of bleachers at standard modular lengths, synthetic bench seating, continuously roll-formed nose beam and rear risers, and plywood decking, self-storing (non-demountable) guard rails. Size and weight to be consistent with the loading capacity of the floor finish design and compatible with operation requirements.
  - 6.2 Each section to have 7 rows spaced at 24". Rise: 12".
  - 6.3 Bleachers to have the following accessories: 42" high folding end rails; 36" wide seat level aisles and front step; 96" x 15" scorer's table complete with steel sockets for legs mounted to bleacher, and end panels. Color to be selected by architect.
  - 6.4 Acceptable Product: Hussey-Maxam Other manufacturer will be accepted if they meet the requirements and are in compliance with the specifications of the acceptable product.

## **Section 11 68 00      Play Field Equipment and Structures**

- 1 Play Systems
  - 1.1 Provide one adventure play system and base material for every 350, or part thereof, elementary students.
  - 1.2 Coordinate play system with design and construction of play area safety surface, (see Section 02911).
  - 1.3 Play Systems shall be all steel, polyester powder coated and colour coordinated, to meet the following:
    - 1.3.1 posts shall be pre-drilled 89 mm square, 12 gauge pre-galvanized steel.
    - 1.3.2 platforms shall be steel, 11 gauge, coated with textured PVC.
    - 1.3.3 all bolts and fasteners shall be tamper-proof stainless steel
    - 1.3.4 provide all necessary safety rails and safety panels.
  - 1.4 Safety certification on installation . Installation to be done by qualified installers.
  - 1.5 Play Systems to include:
    - 1.5.1 6 steel platforms, one covered with a roof
    - 1.5.2 2 chinning / turning bars
    - 1.5.3 1 - 2.4 m wavy challenge ladder

- 1.5.4 1 chain net climber, coated
  - 1.5.5 1 arch climber
  - 1.5.6 1 rung ladder
  - 1.5.7 2 ladder panels
  - 1.5.8 1 spiral slide
  - 1.5.9 1 double wide poly slide
  - 1.5.101 sliding pole
  - 1.5.111 safety panel with wheel
  - 1.5.121 bubble safety panel
  - 1.5.135 stepping stones
- 2 Outdoor Basketball Equipment
- 2.1 Outdoor basketball goal shall meet the following and as detailed in ASK 20:
    - 2.1.1 114 mm O.D. galvanized cantilever post, 1.22 m extension
    - 2.1.2 steel fan shaped backboard, powder coated white
    - 2.1.3 rear mount super goal (double rim)
    - 2.1.4 steel chain net

**END**