

## SECTION 10850

### BUILDING SPECIALTIES

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

##### 1.02 SUMMARY

- A. This Section includes the following:
  - 1. Science classroom fixed table/seats.
  - 2. Corner guards.

##### 1.03 SUBMITTALS

- A. General: Submit in accordance with Section 01300.
- B. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, finishes, and method of attachment for each product indicated.
- C. Shop Drawings: Show fabrication and installation details not included in product data for each product specified. Shop Drawings shall indicate materials, gauges, dimensions and method of attachment.
  - 1. Show seating layout, chair sizes and aisle widths.
- D. Samples: For each product involving a color selection, submit the manufacturer's color charts showing the full range of colors and patterns available.
- E. Maintenance Data: For all items to include in Operating and Maintenance Manuals specified in Division 1 Section "Contract Closeout."
  - 1. Include methods for maintaining installed products and precautions against cleaning material and methods detrimental to finish.
- F. Warranties: Special warranties specified in this Section.

##### 1.04 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: Provide corner guards with the following surface-burning characteristics as determined by testing identical products per ASTM E 84 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Flame-Spread Index: 25 or less.
  - 2. Smoke-Developed Index: 450 or less.

##### 1.05 WORKMANSHIP

- A. Materials, devices, equipment and apparatus of a patented or of a special nature of manufacture shall be prepared, applied, or installed in strict accordance with the manufacturer's directions.
- B. Work of this Section shall be executed in strict accordance with Drawings, approved Shop Drawings and approved samples.
- C. Insofar as possible, fitting, construction and fabrication of the work shall be executed at shops, ready for delivery and erection at buildings.

- D. Provide all holes, connections, and fastenings for and to work of other trades abutting, adjoining, or intersecting work of this Section.
- E. All items, which do not have a special finish or are not otherwise specified, shall receive one shop coat of metal primer before leaving shop.

#### 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials in manufacturers original, unopened undamaged containers with identification labels intact.
- B. Storage and Protection: Store materials protected from exposure to harmful conditions as recommended by manufacturer.

#### 1.07 WARRANTY

- A. General Warranty: Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of Contract Documents.
- B. Fixed Table/Seat Warranty: Submit a written warranty, executed by the manufacturer, agreeing to repair or replace components that fail in materials or workmanship within the specified warranty period as follows:
  - 1. Warranty Period: Ten years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. In other Part 2 articles where subparagraph titles below introduce lists, the following requirements apply for manufacturer and product selection:
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
  - 2. Product: Subject to compliance with requirements, provide one of the products specified.

#### 2.02 FIXED TABLE AND SEAT SYSTEMS

- A. System Description: Provide modular seating which allows two independently movable chairs to mount to a single pedestal along with a section of table. Each seat shall swivel and pivot on a horizontal plane, returning to a uniform position at table edge when unoccupied.
  - 1. Product: Fixed Seat/Table System, 9700 Series; Clarin, Division of Greenwich Industries, L.P.; (847) 295-2200.
- B. Table Top Construction: Shall be continuous straight surface, 18 inches wide, not less than 1-1/4 inch finished thickness with 2 inch radius corners. Table top shall be constructed of the following products:
  - 1. Core shall be OSB having the following minimum characteristics:
    - a. Density: 45.0 lb./cu.ft.:
    - b. Modulus of rupture: 3000 p.s.i.:
    - c. Modulus of elasticity: .45 X106 p.s.i. screw holding 325 lb. (face) and 300 lb. (edge).
  - 2. Top surface shall be high-pressure melamine plastic, minimum 0.050 inch thick, meeting NEMA Specifications with a laminate backing, 0.002 inch thick phenolic, and a 1-1/4" X 1-1/4" inch oak bullnose edge. Table top shall be secured to each pedestal with four machine bolts, two mechanical fasteners equal to Knape & Vogt No.516 and a spline secure four threaded inserts within the table top core.

- C. Seat Construction: Shall be two-piece injection molded thermoplastic seat. Provide backrest assembly with a maintenance free hinge with integral steel spring mechanism covered with plastic bellows matching frame color.
- D. Pedestal/ Base Plate Structure: Main support pedestals shall be installed at a minimum of 54 inches o.c. Each pedestal shall be constructed of 1-1/2- x 3-inch heavy gauge carbon-steel tubing. The lower portion of the pedestal, where the arm assemblies attach, shall be 90 degrees to the floor. The upper portion of the pedestal shall be set a 45-degree angle allowing for proper distance of tabletop attachment. Pedestal shall have a full perimeter electric arc weld to a base plate; weld bead shall be not less than 1/4-inch thick. Steel base plate, 5- x 6-1/2 inches, shall have four countersunk holes which accept flush mounting anchor bolts and covered by a PVC escutcheon cover. Base plate shall be secured to concrete surface by four 3/8-inch -16NC X 1-inch flat socket head cap screws and four SAE 1110M carbon steel drop-in anchors. Assembled understructure shall withstand a 200-lb. rigid load dropped two inches without permanent deformation.
- E. Seat Support arm Assembly: Each pedestal will receive two seat support arms, except odd numbered rows where a single seat is supported by one pedestal. Seat support arms, constructed of 1- x 2-inch heavy gauge steel tubing, shall be supported at the pedestal and work independently of each other. Each support arm shall be secured to an independent 1-3/4- x 2- x 1-inch cold rolled steel top bracket. Top brackets, along with two lower brackets, shall be attached to the pedestal with a full perimeter electric arc weld with a bead not less than 1/4-inch. Attachment of arm to pedestal brackets shall be accomplished by utilizing a 1/2-inch diameter x 4-5/8 inch long hardened steel axle pin riding on a 5/8-inch long oil impregnated bearing for self-lubricating at the top. A flange bearing at bottom of axel pin assembly shall provide for adjustment of the torsion spring tension, allowing arm to return to its unoccupied position. Flange bearing shall ride on a self-lubricating bronze thrust bearing impregnated with high-grade mineral oil of no less than SAE 30 viscosity. Return spring system should be fully enclosed and field adjustable without removal of arm assembly. Spring mechanisms not adjustable in field will not be approved. Arm to pedestal assembly shall be designed without cover plates to eliminate pinching hazards.
- F. Table Top Support Plates for Pedestal Assembly: Shall be made of 11 gauge carbon steel with baked enamel finish. Design shall allow for height adjustment and leveling without the use of shims due to uneven floors; systems using shims will not be accepted. Top plates shall be secured to pedestal with two 3/8-inch -16NC X 2-1/4 inch long hex bolts passing through sleeves within the pedestal. Support plates shall fasten to table top with four machine screws plus one outboard screw.
- G. Seat Mechanism: Seat undercarriage bracket utilizes a solid steel support post, which is inserted through top of support arm and through a flanged nylon sleeve. Bottom of post shall have a 1/4-inch pin in which a cam rides on when no weight is applied to the chair. A 2-point cam shall allow chair to automatically return to desired, unoccupied position. When weight is applied to seat, a compression spring shall release pin from cam allowing 90-degree turns of chair in either direction from center. Cam shall be field adjustable for proper alignment with tabletop.
- H. Baked Enamel Finish: All metal parts shall be degreased, phosphatized, and coated with enamel; baked at 425 degrees F. for at least 15 minutes; color selected by Architect.
- I. Modesty Panels: Shall be 12 inches wide by not less than 5/8-inches thick with bottom corners radiused 2 inches; attach to table supports with steel brackets. Panel shall be constructed of 9/16-inch OSB with high-pressure melamine plastic top surface, minimum 0.050 inch thick and meeting NEMA Specifications, and 5/8-inch wide by 5/32-inch thick extruded standard black vinyl "T" molding.

## 2.03 CORNER GUARDS

- A. Stainless Steel Corner Guards: Surface mounted, one-piece with formed edges; stainless steel, Type 304 with satin finish; not less than **0.0625 inch (1.6 mm); 3-1/2 by 3-1/2 inches (90 by 90 mm) by 4'-0" high.** Mount with flat-head, countersunk screws through factory-drilled mounting holes.

## 2.04 FABRICATION

- A. General: Materials shall be free from defects impairing strength, durability or appearance.
- B. Sections and shapes shall be rolled, formed, drawn or extruded as required for respective functions.
- C. Molded work shall have sharply defined profile and shall be clean and straight. Plain work shall be leveled, straight and surfaces true and smooth. Edges, angles, and corners shall be square, clean and sharp, unless otherwise detailed.
- D. Fastenings, exposed metal fastenings, and accessories, unless Underwriters' prohibit for safety, shall be of same materials, texture, color and finish as the base metal to which applied.
- E. Molds, trim, frames and other metalwork shall be proper dimensions to receive masonry block and tile, plaster, ceramic tile, etc.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installers present, for compliance with requirements for installation tolerances, and other conditions affecting performance of work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. All items specified under this Section shall be installed in strict accordance with manufacturer's recommendations and approved Shop Drawings.

### 3.03 CLEANING AND PROTECTION

- A. Clean building specialties in accordance with manufacturer's instructions. Touch up factory-applied finishes to restore damaged or soiled areas.
- B. Provide final protection and maintain conditions that ensure building specialties are without damage or deterioration at the time of Substantial Completion.

END OF SECTION