

**SPECIFICATION  
FOR  
TABLES, GENERAL PURPOSE , METAL**

(This specification is released for procurement purposes until revised or rescinded.)

**I. SCOPE**

The intent of this specification is to define the product requirements and the subsequent procedures for obtaining a Qualified Products Listing (QPL). After the products have been approved, the model or series number will be shown on a separate document QPL-7110-12 (latest dated revision) which will be used as the sole approval source for products covered by the Invitation for Bid (IFB).

This specification establishes requirements for General purpose metal frame tables for use in school and college classrooms, and institutions. There are three basic types of table configurations covered in this section.

1. Leg Base
2. Leg base with apron and leg brace
3. Pedestal Base

Within these types there are sub-categories to include Fixed and adjustable legs.

The shape and size of the table tops when combined with the leg types shall provide the different styles required. The following list includes the most commonly used shapes of table tops; Rectangular, Round, Half round, Square, Trapezoidal, Kidney.

**II. APPLICABLE SPECIFICATIONS AND STANDARDS**

Reference to specifications, standards, test methods, and other documents shall be to the issues in effect on the date of the IFB. Copies of the referenced documents may be obtained from the issuing organizations. The following documents and / or publications form a part of this specification to the extent specified herein:

A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

1. ANSI A208.1 - Particleboard.
2. ANSI/HPMA HP - Hardwood and Decorative Plywood.
3. ANSI A208.2 – Medium Density Fiberboard (MDF)

B. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

1. ASTM D 1037 - Method for Evaluating properties of wood base Fiber and Particle panel materials.

C. FEDERAL SPECIFICATIONS.

1. L-P 5089 - Plastic sheet, laminated, decorative and non-decorative.
2. LLL-B-810 - Building board (Hardboard) Hard pressed vegetable fiber.
3. TT-C-490 - Cleaning methods for ferrous surfaces and pre treatments for organic coatings.

D. IRON AND STEEL SOCIETY (ISS).

1. Steel sheet manual.

E. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA).

1. LD-3 - High Pressure Laminate.

**III. CLASSIFICATION**

- A. General purpose tables covered by this specification shall be classified as follows:

Type I - LEG BASE, FIXED HEIGHT.

- Style A - Rectangular top.
- Style B - Round top.
- Style C - Square top.
- Style D - Trapezoidal top.
- Style E - Kidney top.

Type II - LEG BASE, ADJUSTABLE HEIGHT.

- Style A - Rectangular top.
- Style B - Round top.
- Style C - Square top.
- Style D - Trapezoidal top.
- Style E - Kidney top.

Type III - APRON, and CORNER BRACED, FIXED HEIGHT.

- Style A - Rectangular top.
- Style B - Round top.
- Style C - Square top.

Type IV - SINGLE PEDESTAL, FIXED HEIGHT.

- Style A - Rectangular top.
- Style B - Round top.
- Style C - Square top.

Type V - DOUBLE PEDESTAL, ADJUSTABLE HEIGHT.

- Style A - Rectangular top.

- B. A style may be approved, placed on the QPL, and identified by a Series Number when the basic table design and construction is the same, with the variation being the size of the top. Vendor to specify sizes of the table top available within the Series designation. If a manufacturer's Series Number includes other furniture than tables as described herein, those "other" items are not included in this listing. Approval of the tables within a series does not indicate that the other furniture is also approved or listed. If a Series number is not available each item part number shall be listed. The actual sizes required are to be specified in the IFB.
- C. The tables defined in this document are intended to cover a consolidation of movable tables for general purpose use in classrooms. The defined product requirements herein are not intended to include all varieties of the commodity as indicated by the title of this document, or which may be commercially available, but is intended to cover only those commonly used by state agencies and the public schools. Listing of a product is not intended to and does not connote endorsement of the product by the state.

**IV. GENERAL REQUIREMENTS.**

- A. Products furnished per this document shall meet or exceed the following requirements:

1. All tables shall be new, unused, and a currently standard product of an established manufacturer except for such deviations as may be required by this document or the Invitation for Bids.
2. All tables shall present a neat, well-finished appearance inside and outside and shall be free from all imperfections and/or defects which might affect appearance, normal life, safety or serviceability.
3. All metal parts shall be commercial quality and inherently corrosion resistant, or suitably treated to resist corrosion.
4. Plastic surfaces shall be free from ripples and thin spots, and have a bright color fast appearance.

## **V. PRODUCT REQUIREMENTS**

### **A. General**

This specification covers General Purpose Tables with the top surface shaped in five different styles (Styles A - E). These tops are supported by 3 types of fixed and/or adjustable height legs or leg support structures (Type I Leg base, fixed height; Type II Leg base, adjustable height; Type III Leg base with apron, fixed height; Type IV Single Pedestal, fixed height, Type V Double Pedestal, adjustable height).

The height of the table is defined as the distance from the floor to the top surface of the table measured perpendicular to the floor. For the fixed height table this measurement shall be not less than 28 inches and not greater than 30 inches. Tables with adjustable heights shall be adjustable to provide table heights ranging from 21 inches to 30 inches (nominal). Locking or Set screws (where applicable) used in the adjustable leg design should have a torquing head that enables the screw to be tightened / loosened by using a Phillips screwdriver, Allen, Star, or "Tork" wrench.

### **B. Leg base, Type I & II**

The Leg base table is defined as a table supported by legs constructed from square or round tubular steel. The leg shall be fixed, non adjustable height (Type I) or adjustable height (Type II).

The leg shall be a straight or tapered type.

The size, sectional modulus and gauge thickness of the leg structure shall be designed to provide a stable, rigid, and non-racking table under normal classroom use.

The legs shall be welded to a mounting plate. For added rigidity, two 1/4" minimum diameter rods shall be welded to the leg and mounting plate. This plate must then fit into a mating plate attached to the underside of the table. A retaining lip secures the leg assembly on two sides of the plate with mounting screws locking it in place. (This is commonly known as a "quick knock-down" bracket).

### **C. Leg base with Apron, Type III**

The Leg base with apron table is defined as a table supported by legs constructed from tubular steel with a peripheral sheet metal apron attached to the legs and the under side of the table top. The legs shall be fixed, non adjustable height (Type III).

The leg shall be a straight or tapered type.

The size, sectional modulus and gauge thickness of the leg/apron structure shall be designed to provide a stable, rigid, and non-racking table under normal classroom use.

### **D. Single Pedestal, Type IV**

The Single/Center Pedestal table is defined as a table supported by a metal center column or pedestal attached to a base consisting of 4 or more equi-spaced horizontal "feet". The Pedestal shall be fixed, non-adjustable height (Type IV). The pedestal shall be one-piece welded construction.

#### **E. Double Pedestal, Type V**

The Double Pedestal table is defined as a table supported by two pedestals coupled together with a lateral beam member. Each pedestal has its own base which has horizontal "feet". These "feet" must provide stability, and prevent the table from tipping over. The Pedestals shall provide for adjustable table top height (Type V).

The size, sectional modulus and gauge thickness of the metal used in the manufacture of the pedestals, base, feet and attaching interface structure shall be designed to provide a stable, rigid, and non-racking table under normal classroom use.

#### **F. Table Top (Applies to all table types and styles)**

The Style of the table top defines its shape (See Section III, CLASSIFICATION).

The materials & construction of the table top are defined as follows:

Table tops shall be resin core, particle board or plywood. The thickness shall be a minimum of 1 3/16 inch.

The edges shall be shaped and rounded and the corners shall be rounded.

The top surface shall resist stains, scratches, burns, and be non-porous.

Particle board (45 LB. per cu. ft.) or plywood core table tops shall have laminated construction consisting of HPL decorative plastic surface, complying with NEMA GP28 (0.028 thick). Low pressure laminate (LPL) is not acceptable. The bottom shall have a backing sheet.

A flexible, non-brittle vinyl "T" or "Bull nose" molding shall be attached by a barbed tongue, that is self locking into a groove around the edge of the laminated table top. The molding shall be pinned or secured in addition to the self locking feature to provide an extra precaution against "pull out". Vulnerable areas such as corners and peripheral joints must be provided with this extra precautionary feature.

Top deflection shall be kept to a minimum. Rectangular tables (Type I & Type II), 48 inches or greater in length shall be equipped with a metal stretcher for longitudinal support.

The table top to leg support structure attachment method shall be so designed to provide a strong solid union that will not loosen under normal classroom use. The hardware (screws) for attaching the leg or support mounting plates to a top constructed from particle board must be of the type specially designed for use with particle board (Wood screws are not permitted). Another acceptable method is threaded metal inserts imbedded into the underside of the table top.

#### **G. Glides (Applies to all Table Types & Styles)**

Glides shall be steel-cushioned, or nylon, or all steel, and or be of the "boot" (ferrule) design. There shall be a minimum of one retaining clip or heavy duty pressure ring holding the booted glide within the leg tubing. Glides shall have a self leveling swivel design. The outside diameter of the glide pad that contacts the floor shall be 3/4 inch minimum. Glides shall not be easily removed without the use of tools.

#### **H. Finish (Metal parts)**

Colors and finishes shall be the manufacturer's standard. All metal finishes shall be compatible with the table top colors.

1. Painted: All painted surfaces shall be thoroughly cleaned and free of dirt, oil, grease, moisture, or other foreign matter prior to painting.

After cleaning, the frame shall be coated with a paint- bond coating and a rust inhibitor compatible with the top or finish coat. The finish coat shall consist of a high temperature enamel applied and baked in accordance with the paint manufacturer's recommendations (or the manufacturer's standard acrylic/epoxy based enamel coating of comparable quality). The enamel shall be the non chipping type. There shall be no indication of rust, or

decay, under the coating. An equivalent thermoset epoxy resin dry powder coating, electro-statically applied, shall also be acceptable.

2. Chrome Plated: All metal which is to be chrome plated shall be treated by the manufacturer's standard electrical and chemical cleaning process. Chrome shall be plated over a Nickel base. The chrome shall be corrosion and chip resistant.

#### **I. Optional Accessories**

1. Book Boxes: Single, double or triple book boxes may be required. They must be of sturdy and rugged construction and attached to the underside of the table top with appropriate mechanical fasteners. The book box design and finishes shall be compatible with the table design and finish. This option is to be specified in the IFB.
2. Tote Trays and Runners: Tote Trays and runners may be required. They must be of sturdy and rugged construction and attached to the underside of the table top with appropriate mechanical fasteners. The Tote Tray design and finishes shall be compatible with the table design and finish. This option is to be specified in the IFB.

### **VI SAMPLING AND INSPECTION**

Products furnished under this specification may be inspected by, or at the direction of the Inspection section and/or the ordering State Agency, Institution, college or Public school either at the destination or place of manufacture. Random samples of delivered items may be selected and checked for compliance with this specification. If it is found that the product does not meet the requirements of this specification, the Division of Purchase and Contract may proceed as stipulated in the Terms and Conditions of the bid.

### **VII WARRANTY AND SERVICE**

#### **A. General**

All products shall be guaranteed against defects in materials, workmanship, and performance for a minimum of TWO YEARS. The Warranty shall begin on the date of acceptance of the product by the ordering facility. During this Warranty period, the vendor shall repair or replace defective material, components, or units at no cost to the user or his representative (this shall include round trip travel and freight to user's site).

The Vendor shall Guarantee that the product will be a standard item in the manufacturer's current product line as specified in the IFB. The basic product shall be identifiable by regular catalogue numbers in the manufacturer's published literature and price list.

#### **B. Availability of Service**

Factory authorized service shall be available statewide within the State of North Carolina. An adequate supply of parts shall be made available to the State for the expected life of the products covered by this specification. Refer to the IFB for any additional requirements.

### **VIII PACKING / PACKAGING**

#### **A. General**

Packaging for shipment shall be in accordance with the best industry practice and in a manner readily accepted by common carriers engaged in interstate commerce. Within the shipping carton, the units shall be packed in a manner designed to eliminate damage during shipment.

#### **B. Marking**

Each shipping container shall be clearly marked with the following:

1. Name of contents
2. Quantity
3. Name and Address of the Manufacturer.

Shipping documents shall include the following:

1. Customer's Purchase Order Number
2. Name and Address of the Ordering Agency.

**IX ORDERING DATA (For Purchase & Contract Use Only)**

Purchaser should specify the following in the Invitation for Bids.

1. Title, Number, Date of this specification.
2. Classification (type/style) of the unit desired.
3. Table Top sizes.
4. Optional Book Box(s).
5. Optional Tote Tray and runners.

**X QUALIFICATION**

**A. General**

The previous paragraphs have defined the requirements for the products needed by the State of North Carolina. This Qualification section details the procedures for getting a product listed on the QPL.

An application for adding or changing a product on the QPL shall be initiated by the applicant and made in writing to the Standards Section, Div. of Purchase and Contract, 116 West Jones St. Raleigh, N.C. 27603-8002. The application shall include, the description the product and model number, the applicable line item that you wish to have your product listed, illustrations and complete specifications of the product. This shall be submitted not less than 120 days prior to the original expiration date of the current Term Contract.

A review of the product sample by an advisory committee must be completed and the product approved prior to the product being listed.

Instructions for furnishing samples will be given after receipt of the application.

**B. Detail Check List for Application (QPL)**

1. Verify that the design of your product "fits" a Type & Style shown in the Classification section of this document and complies fully with the design requirements. A copy of this document can be obtained, by request, from the Standards Section at the address shown above.
2. Apply in writing stating the product that you wish to have listed in the specific Type & style classification. In addition include for each item:
  - Description of the product and Model number plus the table top sizes available.
  - Illustrations
  - Specifications

After this is reviewed by the Standards Section the request will be acknowledged in writing.

If "cosmetic" changes to the product are requested the State reserves the right to decide whether a sample evaluation is required. If no structural changes are made a sample may not be required. The requester will be informed after the technical literature has been reviewed.

3. Forward a sample of the product for physical evaluation. (if applicable) The date and address to send the sample, will be provided 4 weeks prior to the evaluation date.
4. If the product meets the requirements herein, and has been accepted by the Classroom Furniture Advisory Committee, the product will be included on the QPL.

\*\*\*\*\*End Of Document\*\*\*\*\*