

**SPECIFICATION
FOR
CHAIRS, DINING, HOSPITALITY, GENERAL PURPOSE,
(WOOD, UPHOLSTERED TYPE)**

(This specification is released for procurement purposes until revised or rescinded.)

SCOPE

This specification covers upholstered Chairs as defined herein, of traditional, transitional, and contemporary design.

Upholstered wood office side chairs and upholstered wood non-ergonomic swivel-tilt desk chairs, ganged and sectional multiple seating, high abuse and other types of seating are covered by separate specifications.

IMPORTANT: All seating shall be the manufacturer's current standard production model, and shall be represented as such in the manufacturer's current published literature and current price book. For purposes of the QPL, the State at its sole discretion may accept or reject models, which are priced in a published document other than the manufacturer's current price book (e.g. models which are listed in a published price book supplement rather than the current price book itself). Any item, which does not comply with these requirements, shall not be acceptable. Consistent with the State's intent to solicit seating lines which provide users a maximum choice of styles, it is necessary that the manufacturer submit a different series or model for each of the classes specified herein for the QPL. The manufacturer can submit more than one (1) series or model in a given classification.

I. CLASSIFICATION

The furniture covered by this specification is intended to be used in offices, conference rooms, dining rooms, reception or waiting areas, and can be of traditional, transitional, and contemporary design. It is a commercial application, where furniture designed for residential use is not acceptable. It is not intended for use in a high abuse institutional environment. These chairs are defined or named differently by different manufacturers. They are called General-purpose chairs, or hospitality chairs, or dining chairs, or side chairs.



The chairs shall be classified as:

Type I Non-stacking

Type II stacking

II. APPLICABLE SPECIFICATIONS AND STANDARDS

Referenced specifications and standards shall be the latest issue in effect of the date of the Invitation For Bids. Copies of referenced materials may be obtained from the issuing organizations at the addresses shown. The documents below form a part of this specification. All **chairs** shall comply with all applicable provisions of each such document, including but not limited to particular provisions therein which may be called out elsewhere in this specification.

<p><i>ASTM D3574-05 Standard Test Methods for Flexible Cellular Materials--Slab, Bonded, and Molded Urethane Foams</i> American Society for Testing and Materials (ASTM) 1916 Race Street Philadelphia, PA 19103-1187</p>
<p><i>Federal Test Method Standard No. 191A, Method 5903.1, Flame Resistance of Cloth; Vertical</i> Superintendent of Documents U.S. Government Printing Office Washington, DC 20402</p>
<p><i>Technical Bulletin 117. Requirements, Test Procedure and Apparatus for Testing the Flame Retardance of Resilient Filling Materials Used in Upholstered Furniture</i> State of California, Department of Consumer Affairs Bureau of Home Furnishings and Thermal Insulation 3485 Orange Grove Avenue North Highlands, CA 95660-5595</p>
<p><i>ANSI Z34.2-1987. American National Standard for Certification. Self-Certification by Producer or Supplier</i> <i>ANSI/BIFMA X5.1-2002. American National Standard for Office Furnishings ---_General-Purpose Office Chairs_---</i> <i>Tests</i> American National Standards Institute, Inc.; 1430 Broadway, New York, NY 10018 ANSI A208.1- Particleboard ANSI A208.2- Medium Density Fiberboard (MDF) ANSI/HPVA HP-1 Hardwood and Decorative Plywood</p>
<p><i>ASTM D 3597-02 Standard Specifications for Woven Upholstery. Fabrics - Plain, Tufted, or Flocked</i> <i>ASTM D 4157-02 Standard Test Method for Abrasion Resistance of Textile Fabrics (Oscillatory Cylinder Method)</i> American Society of Testing and Materials (ASTM) 1916 Race Street, Philadelphia, PA 19103-1187 ASTM D905 Standard Test Method for Strength Properties of Adhesive Bonds in Shear by Compression Loading</p>

III. REQUIREMENTS

A. WOOD PARTS

All woods used in the construction of seating under this specification shall be of a suitable hardwood species. All woods used shall be kiln dried to a moisture content of 6-10 percent before machining.

1. Exposed Wood Parts

All exposed wood parts shall be clear cutting and free of knots, splits, or checks. Unless otherwise called for in the Invitation For Bids, species shall be as specified on the purchase order, and will be selected from any species listed as available in the manufacturer's published literature for model offered.

2. Interior Wood Parts

Interior wood parts shall be of suitable hardwoods free of any defects that may affect the structural integrity of the chair.

3. Steam Bent Wood Parts

Steam bent wood parts shall be of specie suitable for bending and if exposed shall have grain and finishing characteristics similar to other exposed wood parts.

B. CASTERS

Casters if required shall be black dual-wheel non-metallic, non-abrasive, non-marking type, minimum 2" diameter, unless otherwise specified on the purchase order. Manufacturer's standard casters may be used for BIFMA tests.

C. GLIDES

The seating shall be equipped with either manufacturer's standard polymer or metal glides.

D. GLUE

Glue shall be of good commercial quality, and gluing processes shall be according to best industry practice to assure joints of maximum strength per ASTM D905.

E. UPHOLSTERY

All fabrics used in upholstering the chairs shall comply with all applicable requirements in ASTM D 3597-02. When tested by Method 5903.1, in Federal Test Method Standard No. 191A, fabric shall not exceed two seconds after-flame time nor exceed a char length of 3".

If a 100% nylon fabric is specified on the purchase order, then unless otherwise allowed or called for, such fabric is to be minimum 14 oz. per lin. yd. (54" width) and is to meet the surface abrasion requirement for heavy-duty fabric (i.e. 40,000 double-rub cycles) in ASTM D 3597-02 when tested in accordance with ASTM D 4157-02.

All upholstery tailoring shall be performed in accordance with accepted best industry practice. Appearance shall likewise be typical of results obtained by such tailoring techniques. Patterns, where used, should be in proper alignment between the various upholstered surfaces of the seating. Seams should not be placed on a heavy-wear location of the chair (such as on the centerline of the upper surface of the arm). Any double needle seam stitching should be tape re-enforced.

F. JOININGS

All joints and joining of chairs shall be done in a secure and rigid manner in accordance with best industry practice. Dry joints, poorly fitted joints, or joints where glue appears on a finished surface are not acceptable. All exposed screws and bolts that are not decorative shall be countersunk and plugged for finished appearance except where established as part of the design and shown acceptable by customer usage. Dowels, tenons, chocking and boring with adequate glue applied shall be used where applicable, with appropriate mechanical reinforcements used where necessary and practical. Reinforcing cleats and/or corner blocks, glued and screwed, shall be used where necessary for secure fastening.

G. SEATS

1. Polyurethane foam, slab or molded, which may be contained in the chair seat, must meet the following requirements:

Seat Cushion Foam requirements:

<u>IFD</u>	<u>Density</u>	<u>Category</u>
26	2.7	Soft
31	2.7	Medium
41	2.8	Firm (Default Standard)

The urethane foam shall be a flexible, high resiliency, polyurethane material suitable for use as furniture cushioning. It shall be manufactured from pure polyether type polyurethane without the addition of fillers. Pigments may be used to designate grades etc. The foam shall be open cell structure, 100% new material, and shall be such that odors and absorbed materials from alcohol, body fluids, and other substances shall be readily removed by washing with soap and mild detergents without damage to the urethane foam. Minimum seat thickness is 0.75 inches. Density value tolerance is +/- 0.1.

Urethane shall be tested in accordance with ASTM-3574, and shall conform to the following minimum standards (Section numbers refer to the D3574-05 issue):

- a) Density - The procedure as outlined in Sections 9-14 shall be followed to determine the density
- b) Compression Set - Constant Deflection-Sections 37-44 shall be used to determine the compression set. The maximum set shall be 10% of the original thickness of the specimen when compressed to 90%. Report this value as C_t.
- c) Load Deflection - Indentation Force Deflection Test- Specified Deflection Test B1. Sections 16-21 shall be used to determine the Indentation Force Deflection (IFD). The specimen size shall be 15"x 15" x 4" consisting of a single piece of material. The IFD ranges at 25% deflection, shall be as follows:

Firm	30 – 38
Medium	24 – 29
Soft	18 – 23

- d) Fatigue Test - Static Force Loss Test at Constant Deflection Test I1. Sections 77-84 shall be used. After testing, the specimen shall show no breakdown in physical structure. Permanent set (loss in thickness) shall not be more than 5% of the original thickness. The loss in IFD shall not be more than 30%. Use the same size sample as used in (c) above.
3. All polyurethane foam, webbing, and other padding used in the construction of the seat shall comply with all applicable requirements of State of California Technical Bulletin 117.

H. BACKS

Back Cushion Foam requirements:

<u>IFD</u>	<u>Density</u>	<u>Category</u>
12	2.4	Extra Soft
18	2.4	Comfort Soft (Default Standard)

Upholstered backs shall be padded with adequate quantity, quality, and composition of padding materials in accordance with best industry practice to maintain proper shape and comfort in continued daily use.

All upholstery materials including polyurethane foam and other padding used in the construction of the back (and in miscellaneous components) shall comply with all applicable requirements of State of California Technical Bulletin 117. Minimum back thickness is 0.5 inches. Density value tolerance is +/- 0.1.

I. FINISH

Unless otherwise called for in the Invitation For Bids, finish shall be as specified on the purchase order, selected from any finish listed as available in the manufacturer's published literature for model offered, and shall be of top quality materials from a reputable furniture finish supplier. It shall be applied in accordance with recommendations of supplier to provide a finish that is durable and uniform in appearance.

IV. WARRANTY

The contractor warrants to the owner that all furniture furnished under this specification and on the resulting contract will be new and of fully acceptable material and workmanship in accordance with the manufacturer's standard warranty, except that in no event shall such coverage be for less than five (5) years after date of acceptance, except for the covering material itself (fabric, leather, etc.), which if supplied by the furniture manufacturer (vs. by customer) shall be warranted against visible and latent defects in materials and workmanship.

The contractor agrees to replace promptly any components, which by means of defective material or workmanship shall fail under normal use, free of negligence or accident, for the respective periods specified above. Such replacement shall include all parts (or entire items), labor, freight, and roundtrip travel (if required) to user's site, and shall be free of any charge to the owner or his

representative. Contractor shall likewise warrant repairs made under this warranty for the above-specified respective periods after completion of the repair.

VI. ACCEPTANCE EVALUATION AND QUALITY ASSURANCE

1. In addition to samples required for the QPL, samples may be required after bids are opened and during the life of the contract at any time the State deems this necessary and appropriate.

On sample chairs, the State reserves the right to disassemble chairs and remove upholstery and/or cambric to inspect the chairs as necessary with no obligation to repair or replace the sample chair or to reimburse the supplier for any loss of value of the sample.

2. Each chair shall comply with all tests of ANSI/BIFMA X5.1-2002, which are applicable to its particular configuration. Any chair, which does not comply, is not acceptable. At the State's option, bidder shall be required to furnish evidence satisfactory to the State that the chair(s) offered or sold under the contract fully complies with these tests. Such evidence may be required at any time during the bid solicitation process or during the life of the contract, and is due within seven (7) consecutive days after request unless otherwise stated in the Invitation For Bids.

3. All foam and other filling materials shall comply with State of California Technical Bulletin 117. All fabric upholstery shall comply with Federal Test Method Standard 191A, Method 5903.1, Flame Resistance of Cloth, Vertical, as particularly specified in paragraph III.G, Upholstery, herein. Each item, within the matched set, sold under the contract, which is provided in compliance with these requirements, shall have affixed to the cambric or other appropriate component a "law label" or equivalent tag-type notification specifically attesting to such compliance.

Bidder is to furnish, with seven (7) consecutive days of request or otherwise within the time period specified in the IFB, proof, in a form satisfactory to the State, that the foam, other filling material as applicable, and upholstery used in the seating fully comply with the applicable documents above.

4. Bidder is to furnish, within seven (7) consecutive days of request or otherwise within the time period specified in the IFB, a "Master Specification Sheet" (detailed drawing and parts list) for any seating unit for which such is requested.
5. Upon delivery of furniture purchased under this specification, the owner or his representative may call for an acceptance inspection for compliance with this specification and the contract.

VII. DELIVERY AND PAYMENT

Delivery of and payment for chairs under this specification shall be in accordance with the contract. The contractor shall be responsible for any packing, packaging, or protection required to insure delivery in an undamaged and clean condition.

All furniture delivered under the resulting contract is to be delivered fully assembled and ready for use.

VIII. ORDERING DATA (For Purchase & Contract Use Only)

Purchasers should exercise any desired option offered herein and should specify the following in the requisition and/or Invitation For Bids, as applicable:

1. Title, number, and date of this specification.
2. The class/type of seating required. (See CLASSIFICATION)
3. Species of exposed wood parts, if other than as called for herein.
4. Finish, if other than as called for herein.
5. Seat and back category, see charts above. Default is: Comfort Soft for the back and Medium for the seat unless otherwise specified.
6. Fabric, if other than as called for herein.
7. If samples are required, and if so whether before bidding or after bid opening.
8. Time period for receipt of various compliance and certification documents and drawings by Purchase and Contract, if other than the respective default periods specified herein.

*******End of Document*******