# **Prima A1-U Specifications – Theatre Seating**

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#### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this section

### 1.2 SUMMARY

- A. This section includes the following:
  - 1. Common standard floor mounted chairs as detailed in Part 2 of these specifications.

### 1.3 SUBMITTALS

- A. Product data for each type of product specified. Include installation methods.
- B. Shop drawings, prepared for architectural drawings and from field dimensions, showing the seating layout, seat numbering sequence, chair sizes, and aisle widths. Also show a section view with profile dimensions of the seating and back-to-back dimensions.
- C. Samples for initial selection purposes in the form of manufacturer's color charts or samples of materials showing the full range of standard colors, finishes, and patterns.
  - 1. Fabric
  - 2. Metal Finishes
  - 3. Wood Finishes
- D. Statement signed by the theater seating manufacturer confirming that the products submitted comply with the specified requirements.

#### 1.4 QUALITY ASSURANCE

- A. Provide installer's qualifications confirming the installer is qualified to install the manufacturer's chairs
- B. Provide seating that complies with California Technical Bulletin 117.
- C. Obtain each type of seating, including accessories and mounting components, from a single manufacturer.
- D. Design and install seating with end standards aligning from first to last row and with backs and seats varied in width to optimize sightlines. Comply with ADA rules and regulations.

## 1.5 PROJECT CONDITIONS

A. Environmental Conditions: Do not install seating until space is enclosed and weatherproof, wet work in space is complete and dry, installation of finishes including painting is complete, and ceilings are complete. Do not install seating until ambient temperature and humidity conditions are continuously maintained at final occupancy values.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver seating in manufacturer's unopened cartons clearly labeled with manufacturer's name and contents.
- B. Handle seating in manner to prevent damage.

# 1.7 EXTRA MATERIALS

- A. Furnish from the same production run as the materials installed. Package materials with protective covering and identify with labels describing contents.
  - Seat and back covers to be furnished in a quantity equal to 5 percent of the amount of chairs installed.

## PART 2 - PRODUCTS

## 2.1 SEATING

- A. Provide from Theatre Solutions, Inc., 121 Park Avenue, Quakertown, PA 18951, the **Prima "A1-U"** model as follows:
  - 1. Basic floor mounted chair.
  - 2. Inner upholstered seat and back.

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- 3. Outer wood veneer seat and back with stained edges.
- 4. Upholstered leg panels with integrated upholstered armrest
- B. Model noted is based on the Theatre Solutions, Inc. Prima "A1-U" model with the intent of establishing the high level of quality required for the project. Other brands submitted for approval will be given consideration provided that a full seating mock-up, along with a complete list of specification discrepancies between the proposed substitution and the product specified is received at least 10 working days prior to the bid date.
  - 1. By offering a quote for this project, the bidder assumes full responsibility for complying with the specifications for this project and shall be totally responsible for any expenses incurred if the product quoted does not comply with the specifications.
- C. Failure to comply with the warranty described in Part 4 of these specifications will be cause for disqualification.

#### 2.2 MATERIALS

- A. Padding material shall be flexible polyurethane foam which conforms to the standards of the California Bureau of Home Furnishings 117-75. The back shall be 2" thick. The seat shall be 3" thick.
- B. Seating fabric shall be \_\_\_\_\_\_ with the color to be selected from the standard choice of colors. All upholstery shall be first quality without creases, stretch lines, or wrinkles.
- C. Exposed wood on the outer back and seat panels shall be veneer. The panel edges shall be stained to match the veneer faces. All wood shall be stained to match the architect's sample.

#### 2.3 FABRICATION, GENERAL

A. Fabricate the theater seating in contoured form for maximum comfort using materials that are carefully selected to be free from defects, objectionable projections, or irregularities. Smooth round corners and edges to present the least possible snagging and pinching hazards.

#### 2.4 MOUNTING

A. Fabricate seating units for floor attachment, using leg panels that have been manufactured to conform to the slope of the floor while maintaining seat and back in same angular relationship to leg panels throughout.

## 2.5 UPHOLSTERED LEG PANELS

- A. All leg panels shall be constructed of two layers of 1" thick 45-50 lb. density particleboard which are glued and machined to form one integral 2" thick panel. Center leg panels shall include two mounting plates of 11 gauge cold-rolled steel containing four 1/4-20 rivet nuts. These mounting plates will be embedded between the two layers of particleboard and attached with four #10 x 5/8" pan head sheet metal screws. End leg panels shall contain one interior mounting plate. These mounting plates provide the structure for the hinge assemblies.
- B. Center leg panels shall include two hinge assemblies consisting of a 5/16" x 3" x 3" hot-rolled pickled-in-oil steel plate with one 1/2" diameter 12L14 steel stop pin and one 3/4" machined hinge pin of 12L14 steel. The pin bar weldment is finished with a black epoxy powder coating and assembled to the leg panel with four 1/4-20 flat head machine screws. End leg panels shall contain one hinge assembly.
- C. Upholstered leg panels shall be profile shaped to include an integrated armrest surface and shall be encapsulated in 1/4" thick urethane foam padding. The top and vertical edge shall be covered in 1/2" thick urethane foam padding. All foam shall be compliant with the California Bureau of Home Furnishings Technical Bulletin 117.
- D. All leg panels shall include a plinth base of seasoned maple hardwood fitted with 1/4-20 threaded inserts for assembly of floor attachment hardware.

## 2.6 UPHOLSTERED SEATS/BACKS

A. General: Fabricate theater seating with padding and fabric covering. Equip each seat with a gravity selfrising mechanism so that unoccupied seats return to an upright position perpendicular to the base line of floor of auditorium. Spring compensating mechanism will not be acceptable. Chair profile with the seat in the upright position cannot exceed 20-13/16".

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- B. Seat Construction: Solid seat bottom construction comprised of a plywood veneer outer panel fastened solidly and without voids to an inner structural plywood panel. The outer panel shall be 15mm thick, faced one side with Grade A veneer centered across the width of the panel, and exposed plywood laminations along all edges. The inner panel shall be 3/4" thick. Both shall be electronically glued hardwood plywood and shall be fastened together with bayonet hanging brackets at the top and two steel angles at the bottom, resulting in a rigid connection with no visible fasteners. The veneer face and edges of the outer panel shall be stained to match the architect's sample. The polyurethane foam padding material shall be two-ply and shall consist of 2" thick 55 lb. ILD and 1" thick 45 lb. ILD, shall be glued to the inner panel, and shall conform to the California Bureau of Home Furnishings Technical Bulletin 117. The complete seat assembly shall be supported by two 7 gauge formed steel mounting brackets which will attach the seat assembly to the hinges on the leg panels. The seat shall have a built-in counterweight to insure automatic self-rising without the aid of springs. Arch-spring seat construction will not be acceptable.
- C. Back Construction: Solid back construction comprised of a plywood veneer outer panel, one inner lumbar plywood panel, and one inner shoulder plywood panel. The outer panel shall be 15mm thick, faced one side with Grade A veneer centered across the width of the panel, and exposed plywood laminations along all edges. The inner panels shall be 1/2" thick. Plywood panels shall be electronically glued hardwood plywood. Inner panels shall be fastened to the outer panel with four bayonet hanging brackets at the top and four 16 gauge flat steel brackets using four #8 x 1/2" pan head sheet metal screws at the bottom, resulting in a rigid connection with no visible fasteners. The veneer face and edges of the outer panel shall be stained to match the architect's sample. The padding material on the shoulder cushion shall be 1-1/2" thick polyurethane foam; the padding material on the lumbar cushion shall be 2" thick. All padding shall be glued to the inner panel, and shall conform to the California Bureau of Home Furnishings Technical Bulletin 117. The outer panel shall contain six 1/4-20 threaded inserts and shall be assembled to the leg panels with two 11 gauge steel angle brackets.
- D. Hinge: The seat hinge shall be a weldment consisting of a 7 gauge hot-rolled pickled-in-oil steel component and shall be formed and punched to receive a 0.56" id x 0.75" od x 0.5" long steel bushing. A self-lubricating nylon sleeve shall be fitted between the seat hinge and the standard seat hinge pin. The hinge shall be machined to provide a positive stop location for the seat in both occupied and unoccupied positions. The hinge shall be fitted with a plastic cover to eliminate all pinch points and shall include a 3/16" thick urethane rubber pad to dampen noise upon the seat return to the vertical position.

#### **PART 3 – OPTIONS**

## 3.1 AISLE LIGHT

A. Aisle lights shall be provided in accordance to the locations shown on the architectural drawings. The units shall be of low voltage (24v) type and the light shall be attached to the upholstered leg panel. The leg panel shall be prepared to accept the power wire. The necessary access holes and blank cover plates shall be provided. The chair manufacturer shall also provide the necessary transformers. All wiring and electrical connections shall be conducted at the job site and shall be the responsibility of others.

## 3.2 HARDWOOD EDGES, OUTER SEAT AND BACK

A. Outer plywood seat and back panels shall be trimmed in 1/8" thick hardwood on the top and vertical edges. The hardwood shall match the face veneer species and be stained to match.

### 3.3 INSET UPHOLSTERY, BACK

A. Back upholstery shall be inset to expose the veneer face on the inside of the outer back panel. The veneer on the inside face on the back panel shall match the veneer species on the outside face and be stained to match.

## 3.4 SEAT AND ROW IDENTIFICATION TAGS

A. Provide manufacturer's standard shape brass number and letter plates. Font shall be Times Roman. The size of the font on the seat number plates shall be 27pt; the size of the font on the row letter plates shall be 42pt. The number plates shall fit into a recessed area at the top edge of the seat. The row letter plates shall be attached to the back of the integrated armrest with spiral shank nails.

## 3.5 BOOKRACKS

A. The bookrack shall be constructed of hardwoods and hardwood plywood. Bookrack shall be assembled with tongue and groove construction and finished with a catalyzed lacquer. The bookrack shall be attached to the outer surface of the chair back. An optional attachment configuration shall consist of a steel weldment attached to the chair leg. This configuration allows the bookrack to be located between chair

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3.6 COMPLIANCE WITH CALIFORNIA TECHNICAL BULLETIN 133

### **PART 4 – WARRANTY**

- 4.1 The theater seating manufacturer must provide a Lifetime Warranty to the original purchaser of the seating as follows:
  - A. The seating manufacturer shall warrant it's products against failures and manufacturing defects for the life of the product. This warranty applies to the original purchaser and is non-transferable. The seating manufacturer will provide parts and labor to replace defective parts for the first two years after the installation. Thereafter, the manufacturer will provide replacement parts for the life of the product.
  - B. This warranty shall not cover damage from abuse, misuse, neglect, or act of God. Damage caused by modifications to the product by anyone other than a TSI authorized seating installation technician will void this warranty. This warranty does not apply to fabrics or products not installed by authorized TSI seating installation technicians.

## **PART 5 - EXECUTION**

#### 5.1 EXAMINATION

- A. Examine site conditions, with installer present, for compliance with requirements for construction tolerances as they affect anchors and fasteners, and location of junction boxes.
- B. Do not proceed until unsatisfactory conditions have been corrected.

## 5.2 GENERAL

- A. Comply with seating manufacturer's printed installation instructions applicable to products.
- B. Locate seating in locations indicated on approved shop drawings, with required clearances.
- C. Install leg panels in locations conforming to seating layout, with each leg panel attached to substrate by no less than two anchoring devices of size and type required to insure that chairs are stable under conditions of actual use.
- D. Install chairs using manufacturer's recommended hardware and fasteners. Insure that chairs in curved rows are installed on proper radius and are oriented toward the center point of the radius. Verify that moving components operate smoothly and quietly.

## 5.3 ADJUSTING

- A. Adjust as required to assure that the seats in each row are aligned when in the upright position.
- B. Touch-up minor abrasions and imperfections in painted finishes with coating that matches factory-applied finish
- C. Replace any upholstery that has been damaged during installation.

**END OF SPECIFICATION**