

**SPECIFICATION
PREFERRED SEATING
HORIZON AUDITORIUM CHAIR
WITH WOOD, PLASTIC LAMINATE OR
FABRIC COVERED BACK**

SECTION 1: GENERAL SPECIFICATIONS

1.1 SCOPE OF WORK: Deliver and install specified floor mounted auditorium chairs with center and aisle standards, upholstered back and seat, armrests, decorative end panels, with seat lifting to a full ¾ upright uniform position when not occupied. Provide wheelchair spaces provided in compliance with ADA requirements.

1.2 ACCEPTANCE AND STUDY OF WORK ON SITE: A seating layout plan of the site is required. Defects in the floor which may influence the satisfactory completion and performance of the seating work will be corrected prior to the beginning of seating work. Seating shall not be installed until space is enclosed and weatherproofed.

1.3 FIELD MEASURE TO VERIFY: Take field measurements to verify finished dimensions and make necessary adjustments to shop drawings to reflect the actual field conditions.

1.4 SEATING LAYOUT: The complete seating plan developed from the contract drawings shall show the location of all chairs, sizes, wheelchair locations, aisle locations and alignment, and installation details. Assume complete responsibility for accuracy of all chair measurements shown on the seating plan.

1.5 QUALITY REQUESTS: Fully operational for strength, comfort and design, ergonomically confluent back seat contour for proper posture alignment.

BASE SPECIFICATION:

SPECIFIED
Preferred Seating

FIXED CHAIR
Horizon Auditorium Chair

1.6 APPROVALS

Any manufacturer that has prior approval must meet the specifications as written, no deviations.

1.7 BIDDERS RESPONSIBILITIES: The bidder shall provide the following with his bid:
Minimal requirement:

- a. A complete set of descriptive literature showing the model of chair proposed, including dimensional details.
- b. A complete set of specifications.
- c. Complete seating layout.

1.8 DELIVERY: Deliver the seating at jobsite for timely installation with the other trades in the building.

1.9 WORKMANSHIP AND MATERIALS:

- a. All new materials of colors and designs as specified.
- b. Sign off completed work to the owner in undamaged condition.
- c. Provide highest quality to the owners of workmanship in skilled labor and materials to complete job.

2.0 WARRANTY:

- a. Preferred Seating warrants the Horizon Seat for a period of five years from the date of shipment against manufacturing defects at the time of completion and signoff of job.
- b. Replacements or repairs of the Horizon Seat due to defects in manufacturing or materials are fully covered in this warranty. Normal deterioration of products due to weather, wear and tear, or other causes that do not affect functional use are not covered by Preferred Seating. Improper installation, assemblage, accidental incidents, abuse and vandalism are not covered in this warranty.
- c. All warrantee problems must be arranged through Preferred Seating and have a warrantee authorization number before Preferred Seating sends a crew out to replace/repair any problem that may occur.

SECTION 2: MATERIAL SPECIFICATIONS

2.1 PLASTIC COMPONENTS:

- a. High density injection molded plastic shall be one-piece, high impact, linear polypropylene with built-in ultra-violet light inhibitors to retard fading, and anti-static compounds to retard dirt attraction.
- b. Plastic shall have a maximum burn rate of 1” per minute when tested in accordance with ASTM D635, or Department of Transportation Motor Vehicle Safety Standard No. 302.
- c. The component materials for this chair meet the requirements specified in this table: Plastic has impact resistant automotive grade application.

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| 1. Tensile Strength: | 4600 psi on no break poly aisle standards
11,500 psi on protective hinge casing |
| 2. Flexural Strength: no break IZOD factor of 15 on no break poly aisle standards | 15,000 psi on protective hinge casing |
| 3. Melting Temperature: | 320 degrees F on no break poly aisle standards
550 degrees F on protective hinge casing |
| 4. Flammability Rating: | No flash point, no combustion on no break poly aisle standards
No flash point, no combustion on protective hinge casing |

- d. Color as selected by the Architect

2.2 PADDING MATERIAL: BASF chemical company tested resin-585 grams, 255 isocyanate foam meets the flammability requirements of California Bulletin #117 in accordance with Federal Test Method Standard 191, Method 5903.2. Molded resilient polyurethane foam padding material. Foam is flame retardant.

2.3 HARDWARE: All hardware used for assembling the seat will be rust resistant and stainless steel.

2.4 WOOD: Exposed plywood shall be hardwood. All plywood shall be hot press laminated, using high frequency process. Exposed exterior will be Class 1. Interior plies will be Class 3 or better. Solid hardwood shall be clear and be selected as to color.

2.5 FINISH:

- a. Plastic Parts: Color of plastic shall be selected from manufacturer's standard color range. Custom colors available.
- b. Wood Materials: All surfaces that are exposed will be color stained and coated with lacquer of sufficient film depth to afford wear resistance of institutional quality.
- c. Fabric: Fabric and fabric color shall be selected from manufacturer's standard fabric selection.

2.6 STANDARDS: Available in steel, cast iron and or automotive grade no break polypropylene.

SECTION 3: CONSTRUCTION

3.1 UPHOLSTERED, WOOD OR PLASTIC LAMINATE CHAIR BACKS.

The outer back is composed of wood, plastic laminate or fabric covered, with an upholstered front. 2 panels; a rear panel and an upholstered inner panel. The upholstered inner panel is made of a polyurethane pad 2" thick glued and stapled to the inner panel and covered with the specified fabric. The upholstered panel is made of hardwood plywood, not less than 5-ply and not less than 1/2" in thickness. The outer exposed wood back panel is not less than 7-ply, about 5/8" thick and has the same contoured radius as the upholstered panel. Other option is plastic laminate and or fabric covered back. The upholstered panel is attached to the outer back panel with hidden fasteners. A decorative bead, fabric covered solid nylon, surrounds the perimeter of the wood outer and inner back panels. All fasteners and hardware are concealed. The overall back height can range from 32" to 35". The back goes 4" below the back of seat cushion to protect the pad from any rear damage. The back is available in 21" (533mm) and 22" (559mm) widths center armrest to center armrest.

3.2 UPHOLSTERED SELF-LIFTING SEAT:

a. Gravity assisted system with lifting seat hinge. The seat self lifts automatically to the 3/4 - fold position, 100% if preferred, when unoccupied and rotates on two 5/16ths" high strength steel hinge rods. The seat shall be a torsion spring gravity assisted operation utilizing a 2 heavy teflon coated 8 gauge torsion spring system for quiet operation. See Material Specifications. Our outer enclosed automotive grade no break super tough nylon protective casing never wears out. The seat is available in 21" (533mm) and 22" (559mm) widths, center armrest to center armrest. Seat will pass a 800 pound static test load at edge of seat. Seat is formed to fit the contour of the body when in the sitting position. The multiple curves give the spectator long time support. The waterfall at the front of the cushion reduces pressure points. The seat bottom and seat-lifting mechanism is totally enclosed by an injection molded polypropylene plastic seat pan. The seat pan is designed to complement the contour of the back with matching colors and texture.

b. The seat shall also be certified to pass seat cycle oscillation testing, ASTM Designation F851-87 Test Method for Self-Rising Seat Mechanism, and sand bag testing.

3.3 STANDARDS: Available in steel and or cast iron.

a. Steel standards shall be pedestal design. Center and end standards are fabricated of 12 gauge, meg welded tubular steel, 3" by 1" rectangular column. Standards are fixed to the floor with 2 bolts.

Armrest is securely adjoined to top of column by threaded steel dovetail bolt attachment. A formed 12 gauge, 1/4" thick, steel foot plate shall be welded to the bottom of the rectangular column.

Automotive powder coat finish that is run with the Toyota automotive line. Part shall be cleaned and pre-treated in a multi-stage high temperature system consisting of a minimum of alkaline cleaning and phosphate conversion coating. The topcoat shall consist of polyester or polyester hybrid pigmented resins baked on to a cured thickness of 2-3 mils. Color to be provided by specifier.

All end standards have a decorative end panel, fabric covered, plastic laminate, wood or cast iron.

3.4 ARMRESTS:

Armrests shall be constructed of plastic, solid hardwood stained to the finish selected, upholstered or cupholder. Plastic armrests shall be high impact injection molded polypropylene plastic to compliment the seat design. Option: Armless intermediate standards.

3.5 NUMBER AND LETTER PLATES: Number and letter plates, 5/8" by 1 5/8", shall be provided as shown on the approved seating layout. The number plates shall be secured to the seat pan by 2 rivets. Letter plates will be secured to the aisle standard armrest by two pins. Attaching hardware will match the plate finish.

3.6 MOVABLE CHAIR BASES: Provide movable bases as shown on the drawings for singles, double or triple chair groupings. The bases shall be of the skid base design and attached to the floor with removable hardware to allow for quick and easy removal of the chair grouping.

3.7 MAINTENANCE MATERIALS: Back and seat upholstery covers to be supplied. Using the same fabric as materials for chair construction, covers shall be supplied and given to the owner upon completion of the seating installation. Quantity of covers shall be adequate to re-cover xxx of chairs.

SECTION 4: EXECUTION

4.1 SCOPE OF WORK: Installation work to be performed by factory trained professional personnel engaged in installation of seating for minimum of 5 years under the direction of a capable installation superintendent, in a manner satisfactory to the Architect, and the job turned over to the owner with all chairs complete and ready to use.

4.2 METHOD OF INSTALLATION: The seating layout shall be reproduced on the risers or floor and all dimensions checked against the approved seating plan with necessary adjustments made in the layout for all discrepancies

Chairs shall be attached to the floor/risers by means of an approved lead shield expansion bolts. Floor mount seats shall be attached with 1/4" expansion bolts not less than 2" long. Riser mount chairs shall be attached with 3/8" double lead expansion bolts not less than 3" long. Two (2) bolts per standard acceptable.

4.3 SEATING LAYOUT: The seating layout shall be reproduced on the risers or floor and all dimensions checked against the approved seating plan with necessary adjustments made in the layout for all discrepancies

4.4 CLEANING: Remove all debris caused by this work from the premises.