

SECTION 12610
FIXED AUDIENCE SEATING

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 fixed audience seating with the following:
1. Self-rising seat mechanism.
 2. Standard mounting.
 3. Upholstered chairs.
- B. Related Sections include the following:
1. Division 16 Sections for electrical connections to aisle lighting fixtures.

1.3 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for fixed audience seating.
- B. Shop Drawings: Plans, elevations, and sections through rows showing seating layout; row-lettering and chair-numbering scheme; chair widths; accessories, including locations of left and right tablet arms; accessibility provisions; aisle widths; and attachments to other Work.
- C. Samples for Initial Selection: Manufacturer's color charts consisting of units or sections of units showing the full range of finishes, colors, textures, and patterns available for each exposed material.
- D. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below and of same thickness and material indicated for the Work. If finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.
1. Upholstery Fabric: Full-width Sample, not less than 36 inches long, with fabric treatments applied. Show complete pattern repeat. Mark top and right side.
 2. Plastic Laminate: Manufacturer's standard-size unit, not less than 3 inches square.
- E. Maintenance Data: For fixed audience seating to include in maintenance manuals specified in General and Supplementary Conditions. Include the following:
1. Methods for maintaining upholstery fabric.
 2. Precautions for cleaning materials and methods that could be detrimental to seating finishes and performance.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has specialized in installing work similar in material, design, and extent to that indicated for this Project and who is acceptable to manufacturer.
- B. Fire-Test-Response Characteristics of Upholstered Chairs: As follows:
1. Padding: Comply with California Technical Bulletin 117.
- C. Source Limitations: Obtain each type of seating required, including accessories and mounting components, through one source from a single manufacturer.
1. Upholstery Fabric: Obtain fabric of a single dye lot for each color and pattern of fabric required.

- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- E. Mockups: Before installing seating, install mockups for each type of seating required to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution. Install mockups to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Install mockups in the location and of the size indicated or, if not indicated, as directed by CM.
 - 2. Notify Construction Manager seven days in advance of dates and times when mockups will be constructed. Install mockups in the presence of CM.
 - 3. Obtain CM's approval of mockups before starting installation.
 - 4. Maintain mockups during installation in an undisturbed condition as a standard for judging the completed Work.
 - 5. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install seating until space is enclosed and weatherproof; wet work in space is complete and dry; finishes, including painting, are complete; and work above ceilings is complete. Do not install seating until ambient temperature and humidity conditions are continuously maintained at the levels anticipated for final occupancy.
- B. Field Measurements: Verify seating layout by field measurements before seating fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
 - 1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating seating without field measurements. Coordinate construction to ensure that actual dimensions correspond to established dimensions.

1.6 COORDINATION

- A. Coordination of Electrical Work: Coordinate electrical wiring with seating layout to ensure that floor junction boxes for electrical components are accurately located to allow connection without exposed conduit.

PART 2 - PRODUCTS

2.1 MATERIALS AND FINISHES

- A. Steel: ASTM A 36/A 36M plates, shapes, and bars; ASTM A 570/A 570M hot-rolled sheet and strip; or ASTM A 620/A 620M cold-rolled sheet, finished with manufacturer's standard baked-on coating.
 - 1. Color: As selected by CM.
- B. Hardwood Lumber and Veneer Faces: Northern hard maple selected to be free of visible defects.
 - 1. Stain and Finish: As selected by CM.
- C. Plastic Laminate: NEMA LD 3, HGS (General Purpose type, 0.048-inch nominal thickness).
 - 1. Color and Pattern: As selected by CM.
- D. Medium-Density Fiberboard: ANSI A208.2, Grade MD.
- E. Fabric: Manufacturer's standard 100 percent nylon.
 - 1. Weight: 18 oz./linear yd.

2. Color and Pattern: As selected by CM.

F. Upholstery Padding: Flexible, cellular, molded or slab polyurethane foam.

2.2 FIXED AUDIENCE SEATING

A. Products: Subject to compliance with requirements, provide the following:; American Seating Co.; Hussey Seating Co.; Irwin Seating Co.

B. Chair Mounting: As follows:

1. Standards: Floor attached.
 - a. Material: Steel.
2. End Panels: Steel.

C. Fabric Upholstered Chairs: As follows:

1. Backs: As follows:
 - a. Padding Thickness: 1-1/4 inches.
 - b. Rear Panel: Fabric upholstered with ¼ inch padding.
2. Seats: Two part and as follows:
 - a. Padding Thickness: Minimum 1-1/2 inches at front and rear edge.
 - b. Seat Underside: Steel seat pan.

D. Back Pitch: Fixed.

E. Self-Rising Seat Mechanism: Spring actuated, three-quarter fold.

F. Armrests: Hardwood.

G. Aisle Lighting Fixtures: Manufacturer's standard rectangular fixtures.

2.3 FABRICATION

A. Floor Attachments: Fabricate to conform to floor slope, if any, while maintaining chairs at same angular relationship to vertical throughout Project.

B. Standards: As follows:

1. Steel: Heavy-tube or reinforced sheet with welded mounting plate and welded connections for seat pivots, backs, armrests, and end panels.

C. Upholstery: Fabricate fabric-covered items with molded padding beneath fabric and with fabric covering free of welts, creases, stretch lines, and wrinkles. For each upholstered component, install pile and pattern run in a consistent direction.

D. Upholstered Chairs: As follows:

1. Two-Part Upholstered Back: In length required to protect seat in raised position, with padded cushion glued to a curved steel, plywood, or molded-plastic support panel covered with easily replaceable fabric, and with curved rear panel that fully encloses upholstery edges.
2. Two-Part Seats: Upper upholstered cushion with molded padding over not less than five serpentine springs attached to reinforced steel frame; with weight-distributing and abrasion-resistant sheeting separating padding from springs; and removable for reupholstering without removing seat from chair. Lower steel pan reinforced at stress points and completely enclosing hinges and self-rising mechanism.

E. Chair Seat Hinges: Self-lubricating, compensating type with noiseless self-rising seat mechanism passing ASTM F 851 and with positive internal stops cushioned with rubber or neoprene.

F. Armrests: Fabricated for concealed mounting and with rounded edges.

G. Foldaway Tablet Arms: With cast-iron or steel hinge and swivel mechanism that gives positive support in open position and semiautomatic return to stored position below arm block and parallel to chair.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements, accurate locations of electrical connections, and other conditions affecting fixed audience seating. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install seating in locations indicated and fastened securely to substrates according to manufacturer's written installation instructions.
 - 1. Use installation methods and fasteners that produce fixed audience seating assemblies with individual chairs capable of supporting an evenly distributed 600-lb static load without failure or other conditions that might impair the chair's usefulness.
- B. Install seating with chair ends aligned from first to last row and with backs and seats varied in width to optimize sightlines.
- C. Install chairs in curved rows at a smooth radius.
- D. Install seating so moving components operate smoothly and quietly.

3.3 ADJUSTING

- A. Adjust self-rising seat mechanisms so seats in each row are aligned when in upright position.
- B. Repair minor abrasions and imperfections in finishes with coating that matches factory-applied finish.
- C. Replace upholstery fabric damaged during installation.

END OF SECTION 12610