# PART 1 – GENERAL

* 1. RELATED DOCUMENTS
		1. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this section.
	2. SUMMARY
		1. This section includes the following:
			1. Common standard floor mounted chairs as detailed in Part 2 of these specifications.
	3. SUBMITTALS
		1. Product data for each type of product specified. Include installation methods.
		2. 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.
		3. 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
		4. Statement signed by the theater seating manufacturer confirming that the products submitted comply with the specified requirements.
	4. QUALITY ASSURANCE
		1. Provide installer’s qualifications confirming the installer is qualified to install the manufacturer’s chairs
		2. Provide seating that complies with California Technical Bulletin 117.
		3. Obtain each type of seating, including accessories and mounting components, from a single manufacturer.
		4. 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.
	5. PROJECT CONDITIONS
		1. 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.
	6. DELIVERY, STORAGE, AND HANDLING
		1. Deliver seating in manufacturer’s unopened cartons clearly labeled with manufacturer’s name and contents.
		2. Handle seating in manner to prevent damage.
	7. EXTRA MATERIALS
		1. Furnish from the same production run as the materials installed. Package materials with protective covering and identify with labels describing contents.
			1. Seat and back covers to be furnished in a quantity equal to 5 percent of the amount of chairs installed.

# PART 2 – PRODUCTS

* 1. SEATING
		1. Provide from Navetta division of Shuttlesystem LLC, corporate headquarters 7697 Innovation Way, Suite 400 Mason, OH 45040, manufacturing plant 1330 Potts Ave, High Point, NC 27260, the **Acclaim “C1”** model as follows:
			1. Basic floor mounted chair.
			2. Fully-upholstered seat.
			3. Inner upholstered back.
			4. Outer wood veneer back with stained edges.
			5. Wood armrests.
			6. Aisle lights where indicated on the drawings.
		2. Model noted is based on the Navetta Acclaim “C1” 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.
		3. Failure to comply with the warranty described in Part 4 of these specifications will be cause for disqualification.
	2. MATERIALS
		1. 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.
		2. Seating fabric shall be manufactures standard colors unless selected by architect or customer the color to be selected from the standard choice of colors. The inner back and seat shall be upholstered by attaching the fabric to the inside wood back and seat panels. All upholstery shall be first quality without creases, stretch lines, or wrinkles.
		3. Exposed wood on the outer back panel shall be veneer. The panel edges shall be stained to match the veneer faces. The arms shall be solid wood. All wood shall be stained to match the architect’s sample.
	3. FABRICATION, GENERAL
		1. 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.
	4. MOUNTING
		1. Fabricate seating units for floor attachment, using standards that have been manufactured to conform to the slope of the floor while maintaining seat and back in same angular relationship to standards throughout.
	5. METAL STANDARDS
		1. Frame shall be 3/4” x 2” x 16 gauge cold-rolled welded steel tubing, and 5/16” x 2” hot-rolled pickled-in-oil steel strip, de-scaled and fully welded into one integral freestanding structure upon which the seat, back, and arms are assembled. Pivot and stop pins shall be machined from cold-finished steel to tolerances of

+0.000 -0.005. Floor mount plate shall be 5/16” thick cold-rolled steel plate with two countersunk holes for 1/4-20 mounting screws.

* 1. UPHOLSTERED CHAIRS
		1. General: Fabricate theater seating with padding and fabric covering. Equip each seat with a gravity self- rising 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 and without a tablet arm, cannot exceed 15-1/2”. The chair profile with the seat in the upright position and with a tablet arm, cannot exceed 21”.
		2. Seat Construction: The seat panel shall be 3/4” thick, electronically glued hardwood plywood with four

1/4-20 threaded steel inserts for attachment of hinges. The padding material shall be 3” thick polyurethane foam, shall be glued to the inner surface of the seat panel, and shall conform to the California Bureau of Home Furnishings Technical Bulletin 117. The outside surface of the seat panel shall be encapsulated in 1/4” thick slab polyurethane foam. 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.

* + 1. Back Construction: Solid back construction comprised of a curved 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 1/2” 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 on the outer wood panel. The veneer face and edges of the outer panel shall be stained to match the architect’s sample. The padding material shall be 2” thick polyurethane foam, shall be glued to the inner panel, and shall conform to the California Bureau of Home Furnishings Technical Bulletin 117. The complete back assembly shall be supported by four 11 gauge formed steel brackets.
		2. Armrests: Shall be kiln-dried solid hardwood, nominally 3/4” thick x 2-1/4” wide x 12” long, stained to match the outer back panels. The armrest will be fastened to the steel frame with two #8 x 3/4” pan head sheet metal screws. Chairs equipped with tablet arms shall have armrests nominally 3/4” thick x 2-1/4” wide x

17-1/2” long and shall be attached to the steel frame arm support with three #8 x 3/4” pan head sheet metal screws.

* + 1. Hinge: The seat hinge shall be a weldment consisting of two stamped and formed 14 gauge plates. Hinges shall include two recessed slots to accept 1/4-20 fillister head screws and one pierced, extruded and reamed hole for assembly to the chair frame. Each hinge shall include a rubber bumper to dampen noise upon the seat return to the vertical position. Compensating type hinges will not be acceptable.

# PART 3 – OPTIONS

* 1. UPHOLSTERED END PANEL
		1. Provide manufacturer’s standard upholstered end panel at the end of the row. The configuration of the panel shall conform to the shape of the end standard frame, shall reside fully within the frame width and shall present fabric surfaces to both the inside and outside of the chair. The end panel assembly shall consist of one inside and one outside panel that are machined of 1/2” thick fiberboard and have all edges eased to insure suitability for upholstery. The outside panel is to contain four 10-24 threaded steel inserts to facilitate assembly to inner panel with four 10-24 x 2” flat head machine screws.
	2. VENEER END PANEL
		1. Provide manufacturer’s standard veneer end panel at the end of the row. The configuration of the panel shall conform to the shape of the end standard frame, shall reside fully within the frame width and shall present finished veneer surfaces to both the inside and outside of the chair. Veneer species and finish to match hardwood armrests. The end panel assembly shall consist of one inside panel machined of 1/2” thick birch plywood and one outside panel machined of 3/4” thick birch plywood. The outside panel is to contain four 10-24 threaded steel inserts to facilitate assembly to the inner panel with four 10-24 x 2” flat head machine screws.
	3. EXTERNAL END PANEL
		1. Provide manufacturer’s standard external veneer end panel at the end of the row. The configuration of the panel shall follow the angle of the frame at the rear, and shall be vertical at the front end. The panel shall be constructed of 3/4” thick plywood with veneer on both sides and 1/8” thick solid wood on the vertical edges. The end panel shall be stained to match the armrests.
	4. AISLE LIGHT
		1. 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 tube shall fit into a routed area on the underside of the armrest. The chair frame 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.
	5. SEAT AND ROW IDENTIFICATION TAGS
		1. Provide manufacturer’s standard shape aluminum number and letter plates. Font shall be Helvetica and the font size shall be 36pt. The number plates shall be attached to the top edge of the seat with spiral shank nails. The row letter plates shall be attached to the top of the armrest with straight shank nails.
	6. REMOVABLE CHAIR
		1. Provide the manufacturer’s standard one, two or three chair removable units which shall include an

integrated steel sled-base that is engineered to conform to the row radii and includes two through holes per chair for floor mounting.

* 1. FREESTANDING REMOVABLE CHAIR
		1. Provide manufacturer’s standard freestanding removable chair which shall include an integrated steel sled- base that is engineered to conform to the row radii and includes extended length floor plates to allow the chairs to remain stable with no physical attachment to the floor.
	2. TABLET ARMS
		1. Tablet arm shall be two-motion fold-away style, constructed of 1/2” medium density fiberboard, faced two sides with matte black high-pressure laminate. The edges shall be finished with a vinyl T-molding trimmed flush with both top and bottom surfaces.
	3. POWER/DATA
		1. Where indicated on the drawings, chair frames shall be equipped with a 115v/15amp power outlet and a RJ-45 Category 6 data port located on the front of the frame. Wire raceways shall be provided for routing of the wires from chair to chair. All wiring and electrical connections shall be conducted at the job site and shall be the responsibility of others.
	4. BOOKRACK
		1. 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 backs.
	5. COMPLIANCE WITH CALIFORNIA TECHNICAL BULLETIN 133

# PART 4 – WARRANTY

* 1. The theater seating manufacturer must provide a Lifetime Warranty to the original purchaser of the seating as follows:
		1. 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.
		2. 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 Navetta authorized seating installation technician will void this warranty. This warranty does not apply to fabrics or products not installed by Navetta authorized seating installation technicians.

# PART 5 - EXECUTION

* 1. EXAMINATION
		1. Examine site conditions, with installer present, for compliance with requirements for construction tolerances as they affect anchors and fasteners, and location of junction boxes.
		2. Do not proceed until unsatisfactory conditions have been corrected.
	2. GENERAL
		1. Comply with seating manufacturer’s printed installation instructions applicable to products.
		2. Locate seating in locations indicated on approved shop drawings, with required clearances.
		3. Install standards in locations conforming to seating layout, with each standard 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.
		4. 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.
	3. ADJUSTING
		1. Adjust as required to assure that the seats in each row are aligned when in the upright position.
		2. Touch-up minor abrasions and imperfections in painted finishes with coating that matches factory-applied finish.
		3. Replace any upholstery that has been damaged during installation.