

**SSC Service Solutions
TEXAS A&M UNIVERSITY-
CORPUS CHRISTI**

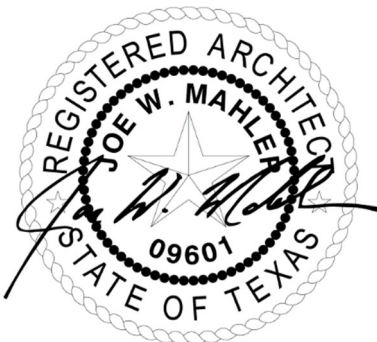
CORPUS CHRISTI, TEXAS

SPECIFICATIONS FOR:

**Performing Arts Center #152
Interior Renovations
Project Number: 1520051**



Date: July 15, 2022



7/15/2022



**PREPARED BY:
PDG Architects
10000 Richmond Ave., #100
Houston, Texas 77042
713-629-6100 / Fax 713-629-6123**

**For:
Southeast Service Corporation
Service solutions**

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SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Procedures for demolition and removal of existing building elements.
 - 2. Removal of designated building equipment and fixtures.
 - 3. Salvaged items.
 - 4. Salvaged material.
 - 5. Salvaged items for re-use.
- B. Related Documents: The Contract Documents, as defined in Section 011000- Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other documents.

1.2 SYSTEM DESCRIPTION

- A. The extent of Selective Demolition Work is that Work necessary, and required to facilitate the new construction indicated.
- B. Demolition shall be such that all construction, new and existing, can be performed, and completed in accordance with the construction documents.
- C. The contractor shall visit the project site and familiarize himself with the existing conditions and project requirements.
- D. Verify the scope of the Work under this Section including salvage material. Texas A&M University will be responsible for removing all materials and equipment which Texas A&M University wishes to salvage prior to the beginning of this Work.
- E. The existing fire protection sprinkler system shall remain in place.

1.3 QUALITY ASSURANCE

- A. Engage only personnel who can demonstrate not less than five years successful experience in Work of similar character.
- B. Performance Criteria:
 - 1. Requirements of Structural Work: Do not cut structural work in a manner resulting in a reduction of load-carrying capacity of load/deflection ratio.
 - 2. Operational and Safety Limitations: Do not cut operational elements and safety-related components in a manner resulting in a reduction of capacities to perform in a manner intended or resulting in a decreased operational life, increased maintenance or decreased safety.

3. Visual Requirements: Do not cut work which is exposed on the exterior or exposed in occupied spaces of the building in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of the demolition work judged by the Architect to be cut and patched in a visually unsatisfactory manner.
4. Loading: Do not superimpose loads at any point upon existing structure beyond design capacity including loads attributable to materials, construction equipment, demolition operations and shoring and bracing.
5. Vibration: Do not use means, methods, techniques or procedures which would induce vibration into any element of the structure.
6. Fire: Do not use means, methods, techniques or procedures which would produce any fire hazard unless otherwise approved by Contracting Officer.
7. Water: Do not use means, methods, techniques or procedures which would produce excessive water run-off, and water pollution.
8. Air Pollution: Do not use means, methods, techniques or procedures which would produce uncontrolled dust, fumes or other damaging air pollution.

1.4 PROJECT SITE

- A. Indicated "Existing Construction" was obtained from existing drawings or other information which may not reflect actual conditions. The Contractor shall verify all existing conditions and notify the Contracting Officer of discrepancies before proceeding with the Work.
- B. Perform the removal, cutting, drilling, etc., of existing work with extreme care, and using small tools in order not to jeopardize the structural integrity of the building.
- C. Occupancy: Contractor shall not have full use of the facility during construction.
- D. Condition of Structure: The Texas A&M University Corpus Christi assumes no responsibility for the actual condition of portions of the structure to be demolished.
- E. Partial removal: Items of salvageable value to the Contractor may be removed from the structure as the work progresses if not claimed by the Texas A&M University Corpus Christi. Salvaged items must be transported from the site as they are removed.
- F. Protection: Make sure that the safe passage of persons around the area of demolition is maintained during the demolition operation. Conduct operations to prevent injury to adjacent buildings, structures, other facilities, and persons.

1.5 PROTECTION OF EXISTING CONSTRUCTION

- A. Provide temporary protection of existing construction (floors, roof, and walls) when adjoining new work and in traffic areas.
- B. Provide temporary construction, constructed of framing and plywood, to protect existing construction and surrounding surfaces from damage by movement of materials and personnel.
- C. The contractor is responsible for all damage to existing structure and shall replace or repair all areas of damage.

- D. Repair, replace, or rebuild existing construction as required or as directed which has been removed, altered or disrupted to allow for new construction. Existing construction shall be corrected to match adjacent construction, new or existing.
- E. Perform cutting of existing concrete and masonry construction with saws and core drills. Do not use jack-hammers or explosives.

1.6 SHORING AND BRACING

- A. Provide temporary shoring of existing construction to allow removal of existing structural elements. Maintain shoring until new structural elements are in place and accepted.

PART 2 - PRODUCTS

2.1 SALVAGED ITEMS

- A. The Contract Documents indicate the existing materials that are to be reinstalled in the new construction. The Contractor shall remove, protect and reinstall these items as indicated.
 - 1. Items for "Reinstallation" will be indicated as such within the Contract Documents.
- B. Materials scheduled for reinstallation which are damaged by the Contractor to the extent that they cannot be reinstalled shall be replaced by the Contractor with equal quality material at no additional cost to the Texas A&M University Corpus Christi.
- C. Coordinate with the Contracting Officer on disposition of salvage items note scheduled for reinstallation, demolished materials, and equipment. Salvaged materials, not reinstalled, shall be delivered, as directed, to Texas A&M University Corpus Christi.

2.2 SALVAGED MATERIALS

- A. Removed and salvaged materials of value not designated for reinstallation, unless claimed as salvage by Texas A&M University Corpus Christi, shall become the property of the Contractor and shall be removed from the premises by the Contractor and recycled, reused or disposed of as specified in Section 013543- Environmental Procedures.
- B. Texas A&M University Corpus Christi will remove or, under separate contract, have all materials and equipment which Texas A&M University Corpus Christi requires removed prior to Work under this Section begins.

2.3 SALVAGED ITEMS FOR RE-USE

- A. Materials and items scheduled for re-use which are damaged by the contractor to the extent which they cannot be re-used shall be replaced by the Contractor at no additional cost to Texas A&M University Corpus Christi.

- B. Contractor shall remove and salvage the existing roof hatch and access ladder for re-use. Store on site in protected area for reinstallation as indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 017300 - Execution: Verification of existing conditions before starting work.
- B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
- C. Report in writing to Contracting Officer prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.
- D. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to Texas A&M University Corpus Christi.

3.2 PREPARATION

- A. Temporary Support: Provide adequate temporary support for work to be cut to prevent failure. Do not endanger other work.
- B. Provide adequate protection of other work during selective demolition to prevent damage and provide protection of the work from adverse weather exposure.

3.3 PROCEDURE

- A. Employ only skilled tradesmen to perform selective demolition.
- B. Cut work by methods least likely to damage work to the retained and work adjoining.
- C. In general, where physical cutting action is required, cut work with sawing and grinding tools, not with hammering and chopping tools. Core drill openings through concrete and masonry work.
- D. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.
- E. Where selective demolition terminates at a surface or finish to remain, completely remove all traces of material selectively demolished, including mortar beds. Provide smooth, even, substrate transition.

3.4 POLLUTION CONTROLS

- A. Use temporary enclosures and other suitable methods to limit the amount of dust and dirt rising and scattering in the air to the lowest practical level.
- B. Clean adjacent portion of the structure and improvement of dust, dirt and debris caused by demolition operations, as directed by Contracting Officer and governing authorities. Return adjacent areas to conditions existing prior to the start of the work.

3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. Collect, recycle, reuse, and dispose of demolished materials as specified in Section 013543 - Environmental Procedures and as approved by Texas A&M University Corpus Christi in the Solid Waste Management and Environmental Protection Plan.

3.6 SCHEDULE OF SELECTIVE DEMOLITION

- A. Interior Floor Finishes:
 - 1. Remove all fixed seating and loose seating as indicated.
 - 2. Remove all interior floor carpet, tile, and finish material.
- B. Provide additional selective demolition as indicated and required by the Contract Documents and as required for indicated new construction.

END OF SECTION

SECTION 090190 – REFINISHING WOOD FLOORS AND TRIM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes patching and refinishing the following wood surfaces:
 - 1. Patching and refinishing existing stage floor and extensions.

1.3 DEFINITIONS

- A. Design Reference Sample: A Sample that represents the work to be matched; it is the existing work at the Project.

1.4 PRECONSTRUCTION VERIFICATION

- A. Prior to beginning any patching of the wood floors the Contractor shall carefully inspect the existing wood floors and document the results. Provide the following minimum report information to the Contracting Officer's Representative:
 - 1. Floor wood species.
 - 2. Existing floor finish material.
 - 3. Estimated quantities that need repair.

1.5 SUBMITTALS

- A. Product Data: For each finish system and type of product indicated. Include recommendations for application and use. Include test data substantiating that products comply with requirements.
- B. Samples: For each type of stain system and each wood species type, color, and gloss; minimum 6 inches long in width dimension of plank.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver wood flooring materials in protected bundles.
- B. Protect wood flooring from exposure to moisture. Do not deliver wood flooring until after concrete, masonry, plaster, ceramic tile, and similar wet work is complete and dry.

- C. Store wood flooring materials in a dry, warm, ventilated, weather tight location.

PART 2 - PRODUCTS

2.1 WOOD FLOORING PATCHING MATERIAL

- A. Exactly match existing wood flooring. The Contractor is responsible for matching the species, grain, plank size, and thickness of the existing wood floor materials. There is currently one type of wood flooring as follows:
 - 1. Solid-Wood, Strip Flooring: White Oak.
 - a. Species and Grade: White Oak, to be verified by Contractor.
 - b. Cut: Plain sawn.
 - c. Thickness: 3/4 inch, to be verified by Contractor.
 - d. Lengths: Random-length strips complying with applicable grading rules.

2.2 FINISH MATERIALS

- A. Urethane Finish System: Complete solvent-based, oil-modified system of compatible components that is recommended by finish manufacturer for application indicated.
 - 1. VOC Content: When calculated according to 40 CFR 59, Subpart D (EPA Method 24), as follows:
 - a. Finish Coats and Floor Sealers: Not more than 350 g/L.
 - b. Stains: Not more than 250 g/L.
 - 2. Finish Coats: Formulated for multicoat application on wood flooring.
 - 3. Stain: Penetrating and nonfading type.
 - a. Color: Match existing.
 - 4. Floor Sealer: Pliable, penetrating type.

2.3 PATCHING MATERIALS

- A. Wood Patching Compound: Two-part, epoxy-resin patching system; knife-grade formulation as recommended by manufacturer for type of wood repair indicated, tooling time required for the detail of work, and site conditions. Compound shall be designed for filling voids in damaged wood materials that have deteriorated due to damage and decay. Compound shall be capable of filling deep holes and spreading to feather edge.
 - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Abatron, Inc.; LiquidWood with WoodEpoxy.
 - b. Advanced Repair Technology, Inc.; Primatrate with Flex-Tec HV.

- c. ConServ Epoxy LLC; Flexible Epoxy Consolidant 100 with Flexible Epoxy Patch 200.
- d. Polymeric Systems, Inc.; QuickWood.
- e. West System Inc.; West System.
- f. Wood Care Systems; ROTFIX with SCULPWOOD.

PART 3 - EXECUTION

3.1 WOOD FLOOR PATCHING

- A. The Contractor shall inspect the wood floors and sound them for damage due to termites or rot. Based on these inspections the Contractor shall prepare a patching plan indicating the amount of patching required and a plan on how the patching will be executed.

3.2 EXAMINATION

- A. Examine substrates and conditions, for compliance with requirements for maximum moisture content and other conditions affecting performance of the work. Comply with manufacturer's written instructions for inspection.
- B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
 - 1. If existing surfaces cannot be prepared to an acceptable condition for proper finishing by using specified surface-preparation methods, notify Architect in writing.
- C. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
 - 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.3 WOOD FLOORING REPAIRS

- A. For damaged planks and substates remove flooring in a manner to minimize damage to removed planks and adjacent planks.
 - 1. Flooring plank removal.
 - a. Planks shall be removed in their entirety wherever possible.
 - b. If planks are partially removed, take care to make end cut straight so that the new plank will butt directly to the remaining plank with gap no greater than 1/64 inch.
 - c. Do not over cut and damage adjacent planks.
 - d. Undamaged portions of removed planks may be re-used.
 - 2. Inspect sleepers or other substrates and make repairs as needed.
 - 3. Install new planks.

- a. Match existing plank wood type, width, and thickness.
 - b. Install using blind nailing wherever possible.
 - c. Stagger joints.
 - d. Glue in members that cannot be blind nailed.
4. Comply with applicable recommendations in NWFA's "Installation Guidelines: Wood Flooring."
- B. Install new, or reclaimed, flooring planks that match existing where required to complete the floor.
- C. Fill and repair wood flooring seams and defects greater than 1/16 inch but less than 1/4 inch wide, for gaps or cracks greater than 1/4 inch replace plank.

3.4 SUBSTRATE REPAIR

- A. General: Repair substrate surface defects that are inconsistent with the surface appearance of adjacent materials and finishes.
- B. Wood Substrate:
1. Repair wood defects including dents and gouges more than 1/8 inch in size and all holes and cracks by filling with wood patching compound and sanding smooth. Reset or remove protruding fasteners.

3.5 CLEANUP AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. Protect work of other trades against damage from finish or stripper application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced surfaces.

3.6 REFINISHING WOOD FLOORS

- A. Machine-sand flooring to remove existing finish, offsets, ridges, cups, and sanding-machine marks that would be noticeable after finishing. Vacuum and tack with a clean cloth immediately before applying finish.
1. Comply with applicable recommendations in NWFA's "Installation Guidelines: Wood Flooring."
- B. Apply floor-finish materials in number of coats recommended by finish manufacturer for application indicated, but not less than one coat of floor sealer and three finish coats.
1. Apply stains to achieve an even color distribution matching approved Samples.

2. For water-based finishes, use finishing methods recommended by finish manufacturer to minimize grain raise.
- C. Do not cover wood flooring after finishing until finish reaches full cure, and not before seven days after applying last finish coat.

END OF SECTION 090190

SECTION 09 65 13 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Resilient base.
2. Resilient molding accessories.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified, not less than 12 inches long.

1.3 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Furnish not less than 25 linear feet for every 500 linear feet or fraction thereof, of each type, color, pattern, and size of resilient product installed.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F.

1.5 FIELD CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive resilient products during the following time periods:
1. 48 hours before installation.
 2. During installation.
 3. 48 hours after installation.
- B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.
- C. Install resilient products after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 THERMOSET-RUBBER BASE

- A. Product Standard: ASTM F 1861, Type TS (rubber, vulcanized thermoset), Group I (solid, homogeneous) as manufactured by Roppe (Basis of Design).
 - 1. Style: Standard 6" toe base.
 - 2. Location: Throughout the space unless noted otherwise on the drawings.
- B. Thickness: 0.125 inch.
- C. Height: 6 inches.
- D. Lengths: Cut lengths 48 inches long or coils in manufacturer's standard length.
- E. Outside Corners: Preformed.
- F. Inside Corners: Preformed.
- G. Colors: 194 Burnt Umber.

2.2 RUBBER MOLDING ACCESSORY

- A. Description: Accessories
 - 1. Rolling Traffic Transition (Roppe #75), transition strips.
 - 2. Commercial Stair Nosing (Roppe #1), Nosing
- B. Colors and Patterns: 194 Burnt Umber

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by resilient-product manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by resilient-product manufacturer for resilient products and substrate conditions indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.
 - 1. Installation of resilient products indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- C. Do not install resilient products until they are the same temperature as the space where they are to be installed.
 - 1. At least 48 hours in advance of installation, move resilient products and installation materials into spaces where they will be installed.
- D. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient products.

3.3 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
- C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- G. Preformed Corners: Install preformed corners before installing straight pieces.

3.4 RESILIENT ACCESSORY INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient accessories.
- B. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of floor covering that would otherwise be exposed.

3.5 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting resilient products.
- B. Perform the following operations immediately after completing resilient-product installation:
 - 1. Remove adhesive and other blemishes from exposed surfaces.
 - 2. Sweep and vacuum horizontal surfaces thoroughly.
 - 3. Damp-mop horizontal surfaces to remove marks and soil.
- C. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
- D. Cover resilient products subject to wear and foot traffic until Substantial Completion.

END OF SECTION 096513

SECTION 096516 – VINYL SHEET FLOORING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Resilient Homogeneous Vinyl Sheet Flooring.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. LEED Submittals:
 - 1. Product Data for Credit EQ 4.1: For adhesives, include printed statement of VOC content and chemical components.
- C. Samples for Initial Selection: For each type of product indicated.
- D. Samples for Verification: For each type of product indicated, in manufacturer's standard-size samples of each resilient product color, texture, and pattern required.
- E. Product Schedule: For resilient products. Use same designations indicated on Drawings.

1.4 QUALITY ASSURANCE

- A. Installation Qualification: Contractors for floor covering installation should be experienced in managing commercial flooring projects and provide professional installers, qualified to install the various flooring materials specified. An installer is "qualified" if trained, or a certified by Tarkett or a certified INSTALL (International Standards & Training Alliance) resilient floor covering installer.
- B. Mockups: Provide resilient products with mockups specified in other Sections.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by Tarkett, but not less than 55 deg F (13 deg C) or more than 85 deg F (29 deg C).

1.6 PROJECT CONDITIONS

- A. Install resilient products after other finishing operations, including painting, have been completed.
- B. Maintain ambient temperatures within range recommended by Tarkett, but not less than 65 deg F (18 deg C) or more than 85 deg F (29 deg C) in spaces to receive resilient products during the following time periods:
 - 1. 48 hours before installation.
 - 2. During installation.
 - 3. 48 hours after installation.
- C. Maintain the ambient relative humidity between 40% and 60% during installation.
- D. Until Substantial Completion, maintain ambient temperatures within range recommended by Tarkett, but not less than 55 deg F (13 deg C) or more than 85 deg F (29 deg C).

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions: Permitted.
- B. Requests for substitutions will be considered in accordance with provisions of Division 01.

2.2 RESILIENT SHEET FLOORING

Manufacturer:

Tarkett North America
30000 Aurora Rd.
Solon, Ohio 44139

Phone: (800) 899- 8916
(440) 543-8916

Web: www.tarkettna.com

2.3 IQ HOMOGENOUS VINYL SHEET FLOORING WITH PUR

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Tarkett; iQ Optima.
- B. Sheet Standard: ASTM F1913, Standard Specification for Vinyl Sheet Floor Covering Without Backing.
- C. Thickness/Wearlayer: 0.080 inch (2.0 mm).
- D. For size specify: 6 ft. 6 inches (2 m)
- E. Colors and Patterns: Color: Chimney Sweep 0201, Pattern: Optima
- F. Test data:
 - 1. Flexibility (ASTM F137): Passes
 - 2. Chemical Resistance (ASTM F925): Passes

3. Static Load Limit (ASTM F 970): Passes 250 psi
4. Resistance to Heat (ASTM F1514): $\Delta E \leq 8$
5. Resistance to Light (ASTM F1515): $\Delta E \leq 8$
6. Residual Indentation (ASTM F1914): Passes
7. Static Coefficient of Friction (ASTM D 2047): ≥ 0.5 SCOF
8. Flamability (ASTM E648, Critical Radiant Flux): Class 1 (≥ 0.45 W/cm²)
9. Limited Commercial Warranty: 20 years

2.4 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, Portland cement based or blended hydraulic-cement-based formulation.
- B. Adhesives: As recommended by Tarkett to meet site conditions
 1. Tarkett 906 Conductive Adhesive (For use with iQ Granit SD and Toro SC)
 2. Tarkett 925 Resilient Flooring Adhesive
 3. Tarkett 975 Two-Part Urethane Adhesive
 4. Tarkett 901 SpraySmart Adhesive
 5. Tarkett RollSmart Adhesive
 6. Cold Weld Liquid

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the work.
- B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to Tarkett written instructions to ensure proper adhesion of Resilient Flooring.
 1. Prepare concrete substrates in accordance with ASTM F 710.
 - a. Concrete floors must be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, film-forming curing compounds, silicate penetrating curing compounds, sealing, hardening or parting compounds, alkaline salts, excessive carbonation or laitence, mold, mildew, and other foreign materials that may affect dissipation rate of moisture from the concrete, discoloration or adhesive bonding.
 - b. Mechanically remove contamination on the substrate that may cause damage to the resilient flooring material. Permanent and non-permanent markers, pens, crayons, paint, etc., must not be used to write on the back of the flooring material or used to mark the substrate as they could bleed through and stain the flooring material.
 - c. Perform moisture testing as recommended by manufacturer. Proceed with installation only after substrates have been tested and meet the minimum

requirements from the manufacturer in accordance with ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride or ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.

- d. A pH test for alkalinity must be conducted on the concrete floor prior to installation with results between 7 and 9. If the test results are not within the acceptable range, then installation must not proceed until the problem has been corrected.
- 2. Wood subfloors must have a minimum 18" (45.7 cm) of cross-ventilated space beneath the bottom of the joist.
 - a. The floor must be rigid, free of movement.
 - b. Single wood and tongue and groove subfloors should be covered with ¼" (6.4 mm) or ½" (12.7 mm) APA approved underlayment plywood.
 - 1) Use ¼" (6.4 mm) thick underlayment panels for boards with a face width of 3" (76 mm) or less.
 - 2) Use ½" (12.7 mm) thick underlayment panels for boards with a face width wider than 3" (76 mm).
 - c. Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan or composite type underlayments.
- B. Fill cracks, holes, depressions and irregularities in the substrate with good quality Portland cement based underlayment leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
- C. Floor covering shall not be installed over expansion joints.
- D. Do not install resilient products until they are same temperature as the space where they are to be installed.
 - 1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
- E. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

3.3 RESILIENT SHEET FLOORING INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient sheet flooring.
- B. Resilient Sheet Flooring:
 - 1. Install with Tarkett adhesive specified for the site conditions and follow adhesive label for proper use.
 - 2. Install rolls in sequential order following roll numbers on the labels.
 - 3. Reverse non-pattern sheets as referenced in the Tarket Installation Instructions.
 - 4. Roll the flooring in both directions using a 100 pound three-section roller.
 - 5. Vinyl sheet flooring must be welded.
Note: It is recommended to heat weld seams to provide a more sterile and water tight seam.
 - 6. Tarkett Resilient Sheet Flooring may be flash coved.
 - a. Use Johnsonite CFS-00-A Cove Filler Strip.
 - b. Net fit flooring material into the appropriate Johnsonite cove cap.

3.4 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- B. Perform the following operations immediately after completing resilient product installation:
 - 1. Remove adhesive and other blemishes from exposed surfaces.
 - 2. Sweep and vacuum surfaces thoroughly.
 - 3. Damp-mop surfaces to remove marks and soil.
- C. Protect resilient products from marks, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
 - 1. No traffic for 24 hours after installation.
 - 2. No heavy traffic, rolling loads, or furniture placement for 72 hours after installation.
- D. Wait 72 hours after installation before performing initial cleaning.
- E. A regular maintenance program must be started after the initial cleaning.

END OF SECTION 09.65.16

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on interior substrates.
 - 1. Gypsum board.
- B. Related Requirements:
 - 1. Division 05 Sections for shop priming of metal substrates with primers specified in this Section.
 - 2. Division 06 Sections for shop priming carpentry with primers specified in this Section.
 - 3. Division 08 Sections for factory priming windows and doors with primers specified in this Section.
 - 4. Division 09 painting Sections for high-performance and special-use coatings.
 - 5. Division 09 Section "Exterior Painting" for surface preparation and the application of paint systems on exterior substrates.
 - 6. Division 09 Section "Staining and Transparent Finishing" for surface preparation and the application of wood stains and transparent finishes on interior wood substrates.

1.3 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- E. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- G. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples for Initial Selection: For each type of topcoat product.
- C. Product List: For each product indicated, include the following:
 - 1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
 - 2. Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.
 - 3. VOC content.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint: 5 percent, but not less than 1 gal. (3.8 L) of each material and color applied.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.7 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Benjamin Moore & Co.
 - 2. ICI Paints.

3. Pratt & Lambert.
4. Sherwin-Williams Company (The).

- B. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in other Part 2 articles for the paint category indicated.

2.2 PAINT, GENERAL

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."

- B. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

- C. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior paints and coatings applied at Project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

1. Flat Paints and Coatings: 50 g/L.
2. Nonflat Paints and Coatings: 150 g/L.
3. Dry-Fog Coatings: 400 g/L.
4. Primers, Sealers, and Undercoaters: 200 g/L.
5. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
6. Zinc-Rich Industrial Maintenance Primers: 340 g/L.
7. Pretreatment Wash Primers: 420 g/L.
8. Floor Coatings: 100 g/L.
9. Shellacs, Clear: 730 g/L.
10. Shellacs, Pigmented: 550 g/L.

- D. Colors: As indicated in a color schedule.

1. 10 percent of surface area will be painted with deep tones.

2.3 PRIMERS/SEALERS

- A. Primers and Undercoaters: Manufactured by same manufacturer as finish coat materials.

- B. Paint Accessory Materials: Linseed oil, shellac, turpentine and other materials not specifically indicated herein but required to achieve the finishes specified of high quality and approved manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Masonry (Clay and CMU): 12 percent.
 - 3. Wood: 15 percent.
 - 4. Gypsum Board: 12 percent.
 - 5. Plaster: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Plaster Substrates: Verify that plaster is fully cured.
- E. Spray-Textured Ceiling Substrates: Verify that surfaces are dry.
- F. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- G. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceed that permitted in manufacturer's written instructions.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
 - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINTING SCHEDULE

- A. Substrates: Refer Finish Plan and Schedule

END OF SECTION 099123

SECTION 12610 FIXED AUDITORIUM SEATING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Section, apply to work of this section.
- B. Refer to Contract Drawings "A" Series for plans, graphic representations, schedules, and notations showing Fixed Auditorium Seating work. Also, refer to "E" Series drawings for related work.
- C. As installed drawings - "SP" Series, provided for general reference only. No guarantee is made as to their accuracy.

1.2 GENERAL CONDITIONS

- A. For the sake of brevity these specifications omit phrases such as "(Sub)Contractor shall furnish and install," "unless otherwise indicated or specified," etc., but these phrases are nevertheless implied. Mention of materials and operations requires the (Sub)Contractor to furnish and install such materials and perform such operations complete to the satisfaction of the Architect/Engineer. Exceptions are noted herein or shown on the drawings.
- B. No representative of the Owner shall have power to waive the obligations of this contract for the furnishing of good materials or of performing good work, as herein described, in full accordance with the contract documents. The failure of any representative of the Owner to condemn any defective work or materials shall not release the obligation to at once tear out, remove, and properly replace the same at any time prior to final acceptance upon discovery of said defective work or material. When requested, however, the Owner's representative shall observe and accept or reject any material furnished. In the event the material has been accepted once by the Owner's representative, such acceptance shall be binding on the Owner unless it can be clearly shown that such material does not meet the specifications for this work.

1.3 SCOPE

- A. The work under this contract shall include the furnishing of all labor, materials, tools, equipment, transportation, services, etc., and supervision necessary to complete the demolition of the existing audience seating and installation of new seating, as indicated. Extent of all work shall be furnished as described in these specifications, as illustrated on the accompanying drawings, or as directed by the Architect/Consultant.
- B. Provide and install fixed auditorium chairs with upholstered seats and backs, and aisle and center standards, all as specified, floor mounted, with self-lifting seats that raise automatically to a uniform full fold position.
- C. Varying lateral sizes of backs shall be used in accordance with approved seating shop drawings, with standards in each row spaced laterally so that the end standards shall be in alignment from first to last row whether aisles are of constant or converging width. Chairs are an exact like for like replacement.
- D. All equipment specified herein, or shown on related drawings, including all hardware, fittings and components necessary for full and complete installation, including:
 - 1. Samples and preparation and submission of complete, detailed shop drawings and diagrams for review prior to fabrication.
 - 2. Verification of dimensions and conditions at job site. Field dimensions are required.
 - 3. Transportation to job site, unloading and initial setup.

4. Coordination with associated trades and installation in accordance with these specifications, pertinent drawings, established trade criteria and applicable code requirements.
5. Services required for inspection, demonstration, and necessary adjustment of completed installations.
6. Training of Owner's staff personnel, half-day session, minimum.
7. Submission of required record drawings, service and operational data and certificates.

1.4 AMERICANS WITH DISABILITIES ACT

- A. Comply with ADA Rules and Regulations.

1.5 FIRE PERFORMANCE CHARACTERISTICS OF UPHOLSTERED SEATING

- A. Chairs provided shall have been tested and certified as complying with BIFMA Voluntary Upholstered Furniture Flammability Standard BIFMA X5.7-1991 sponsored by the Business and Institutional Furniture Manufacturer's Association.

1.6 QUALITY ASSURANCE

- A. All equipment and installation to be the responsibility of a single Manufacturer.
- B. Provide all new materials of types specified.
- C. A qualified and experienced supervisor of the Manufacturer shall be at the site during the installation and shall actively direct and supervise the work.
- D. Turn over all work to the owner in undamaged condition.
- E. For purposes of establishing the quality and performance desired, the following company is approved as manufacturer for the herein specified equipment:

1. Series Seating

Approval indicates approval of the manufacturer only and not approval of specific products. The Contractor shall be required to provide equipment, which will meet or exceed the intent of these specifications. To assure high and satisfactory quality, design, color and operation of products, reference has been made to brand names; however, it is not intended to limit competition and items of brands that are equal will be given full consideration. This specification is based on Series Seating Company's Academy 34" Reveal BW-SW – Stained Edge ¾" with TivoTape SRSVLTP99DW12L 12v 9 LED under arm aisle light fixtures.

- F. Manufacturer shall have provided and installed five (5) seating projects of similar size and shall have been in service for 5 years or longer. Projects submitted as evidence of experience shall incorporate chairs with seats, backs and standards consistent with those offered on this project.

1.7 SUBMITTALS

- A. Submit with or prior to bid a sample chair with features and components similar to those specified. Sample chairs from the successful bidders shall be retained by Owner until fabrication and installation is substantially complete and shall be used as a quality sample in reviewing final installation for acceptance. Sample chairs from unsuccessful bidders shall be retained by Owner for 30 days after bids are submitted. Manufacturer shall arrange for delivery and pick-up.
- B. Within 45 days of Notice of Award, submit complete and at one time the following for review prior to fabrication:
 1. Schedule for drawing preparation, fabrication and installation, conforming to time limits set for this project.
 2. A complete bill of materials with manufacturer's names, model and type numbers and catalog data sheets with clear notation where products vary from this specification.
 3. The following samples:

- a. Manufacturer's standard fabric cards
- b. Manufacturer's standard plastic samples
- c. Powder coat color and finish samples
- d. Wood armrest materials and finish samples
- e. Number and letter plates
- f. Exposed fasteners, if any
- g. End standard aisle light

4. Other items as may be required in Division 1 or as requested. Such items and/or samples shall be provided within ten (10) days of written request.

C. Submit the following for review prior to fabrication and installation:

1. A complete two-chair sample mounted on a moveable base.
2. Complete, fully-dimensioned shop drawings for layout and all components with indication by arrow and boxed caption of all variations from contract drawings and specifications. Layout drawings shall be based on field dimensions.
3. Samples shall become quality and finish standards for all similar items provided to the project.

D. Review of Submissions

1. Review of shop drawings and samples is for quality and design.
2. Such review does not change requirements of contract drawings or specifications, or reduce quality or quantity of items to be supplied, unless so stated in writing.
3. Such review does not relieve Manufacturer of responsibilities re site conditions as specified unless so stated in writing.

1.8 WARRANTIES AND GUARANTEES

- A. Manufacturer shall guarantee parts replacement and system repair and site visits by factory representative, including time and travel expenses, for a period of two (2) years from the date of substantial completion. All guarantee work shall be coordinated with Using Agency's requirements for facility use. All guarantee work shall be performed within thirty (30) days of notification.
- B. Ordinary wear and defects due to improper usage are excepted.
- C. Three signed copies of the above are required as a condition for final approval of the work.

1.9 SITE CONDITIONS

- A. Manufacturer shall coordinate preparation of chair layout drawings and chair installation with the contractors for electrical service to aisle lights.
- B. Manufacturer shall immediately notify in writing the Architect/Engineer of any conditions, measurements, quantities, or other data, as required for proper execution, fit and completion of all work, and for safe and proper operating clearances.
- C. Manufacturer shall immediately notify the Architect/Engineer of any site conditions or variations that affect installation or completion of work, and where appropriate, shall indicate suggested remedial procedures by drawings and/or descriptions.
- D. Contractor shall take care not to damage any equipment, which will be reused, or to disconnect any wiring other than as required to interface new system.

1.10 PERMITS

- A. Obtain all permits necessary for the execution of any work pertaining to the demolition and conform in all trades with all applicable local codes.

1.11 APPROVAL

- A. The following conditions must be met before acceptance.

1. Approval of final tests and inspections.
2. Submittal of three signed copies of the warranty.
3. Submittal of record drawings, and data.
4. Instruction for staff.

PART 2 - PRODUCTS

2.1 STEEL

- A. Steel shall be the primary structural material for chair support systems, including aisle and center standards, and back component attachment. Steel structural components shall be die-formed according to modern manufacturing methods and assembled by means of state-of-the-art MIG welding processes.
- B. All steel shall have smooth surfaces and be of sufficient gauge thickness and designed to withstand strains of normal use and abuse.

2.2 WOOD

- A. Plywood, exposed or concealed, shall be hardwood.
- B. All plywood shall be hot press laminated using high frequency process.
- C. Interior plies shall be Class 3 or better. Exposed exterior plys shall be Class 1, continuous, and selected as to color.
- D. Solid hardwood shall be clear and shall be selected as to color. Particle core shall be 55 pound density.

2.3 PADDING MATERIAL

- A. Seat and back padding material shall be of new (prime manufacture) polyurethane foam. Padding material shall comply with the flammability requirements outlined in the California Technical Information Bulletin #117, Resilient Cellular Materials, Section A & D, dated February 1975, when tested in accordance with Federal Test Method Standard 191, Method 5903.2.
- B. Foams shall be anti-allergen, odorless, and resistant to mold.

2.4 FABRIC

- A. Fabric shall exhibit superior color fastness, light fastness, tear strength, and break strength and shall be exceptionally resistant to staining, chemicals, and abrasion. Fabric shall meet Class 1 flammability requirements of the U.S. Department of Commerce Commercial Standard 191-53 per Bulletin #117 (California Code).
- B. Fabrics shall be: Culp Contract – Morticia – Blue Lagoon

2.5 FINISH

- A. Metal Parts: All exposed metal parts shall be powder coated with a hybrid thermosetting powder coat finish. The powder coat finish shall be applied by electrostatic means to a thickness of 2 - 2.5 mils, and shall provide a durable coating having a 2H Pencil hardness. Prior to powder coating, metal parts shall be treated with a five-stage bonderization process for superior finish adhesion, and after coating shall be oven baked to cause proper flow of the epoxy powder to result in a smooth, durable finish. Manufacturer's standard color range shall be used.
- B. Wood Parts: All exposed surfaces shall be stained to color selected and coated with lacquer of sufficient film depth to afford wear resistance of institutional quality and oven baked.
- C. Plastic Parts: Color of plastic shall be selected from manufacturer's standard color range.
- D. Hardware: All assembly hardware shall be rust resistant, black plated.

2.6 UPHOLSTERED BACKS:

- A. The back components shall be upholstered and padded on their face, with a wood reveal above the upholstery panel and a solid wood back extending to a nominal 32" above the floor, the height necessary to allow proper shoulder support for the chair occupant. The back shall be compound-contoured to conform to the proper posture of a seated individual, giving special attention to supporting the lumbar region of the back.
- B. The upholstery panels shall be 3/4" 5-ply plywood formed with compound curves for proper body support, and shall be padded with a 3/4" thick polyurethane foam pad, and covered over its full face with the specified fabric. The polyfoam pad shall be securely cemented to the plywood inner panel, and the upholstery fabric shall be secured to the padding and upholstery panel and the fabric fastened to the hardwood inner panel by means of concealed fasteners. The wings for the attachment of the complete back to the standards shall be not less than 14 gauge (.0747") steel, firmly bolted to the back using concealed threaded washers. Back wings shall have provision for three pitches, providing a selection of mean back angle of 18, 22, or 26 degrees.
- C. The rear of the back shall be plywood. Seat back shall extend below the seat level to protect the seat cushion from the rear. There shall be no exposed fasteners above the armrests. The plywood outer-back shall be contoured to conform to the shape of the inner plywood panel and shall, by its contours, set the tone of the entire chair design, suggesting comfort by its appearance.

2.7 UPHOLSTERED SELF-LIFTING SEAT

- A. Seats shall be upholstered on their face with 2" foam cushions supported by a structural foundation. Seats shall quietly and automatically self-lifting to a full fold position when unoccupied. Seats shall be ISO 9001 certified through routine testing during manufacturing to pass seat cycle oscillation, ASTM Designation F851-87 Test Method for Self-Rising Seat Mechanism, and 600 lb. static load to front of seat.
- B. The seat cushion shall have a base structure of 7/16" thick 5-ply contour molded plywood. The seat cushion shall have an extended front, high resilient polyurethane foam pad, molded to the contour of the springs on the bottom and providing a flat surface on the top of the cushion with a crisp, waterfall leading edge. Height of the cushion at the front edge shall be consistent at approximately 3-1/2" above the foundation. The specified fabric, carefully tailored, shall be of panel-side construction, secured around the perimeter of the cushion frame. The seat cushion assembly shall be securely locked to the seat foundation, preventing unauthorized removal; but facilitating convenient removal by trained maintenance personnel.
- C. Seat foundation shall be 25% glass-filled, injection molded polypropylene, strengthened by deep internal ribs and gussets, completely enclosing the self-lifting hinge mechanism, and providing an attractive, decorative flat bottom surface for the seat. Attachment of the seat component to the chair structure shall be concealed by a color-coordinated plastic cap to present a finished, refined appearance with no possible pinching points.
- D. When unoccupied, the seat shall quietly and automatically rise to a full fold position. The seat shall rotate on two, structural hinge rods in internally molded channels with integral down-stops for exceptional strength. Seat-lift shall be accomplished by a noiseless counterweight tilting mechanism and friction-free nylon bearings, providing quiet gentle seat uplift. Down-stops and up-stops shall be non-metallic, eliminating plangent noise and providing quiet operation.

2.8 STANDARDS

- A. Aisle Standards: shall provide a rectangular support structure shall be formed of 16 gauge (.0598") steel with the sides formed into "C" channels. The top of the column shall be provided with two formed steel dovetail lugs for secure attachment of the armrest. Brackets for seat attachment shall be 7 gauge (.1875") buttressed steel welded on the

inside of the standard. Standards shall be machined to the appropriate floor incline to maintain proper seat and back height and angle. Heavy 12 gauge (.1046) attaching feet shall be securely welded to the standard to provide for attachment to the floor. The steel foot shall allow for severe tightening and shock without fracture.

- B. Aisle standard shall accommodate electrical wiring to the end panel aisle light. Electrical wiring shall be fully concealed within the standard and shall enter at the base of the tube.
- C. A 14 gauge (.0747) steel formed foot shall be welded to the bottom of the rectangular column. This weldment shall be at all critical stress areas 360 degrees around the column, and concealed on the inside so as not to detract from the clean appearance. The foot dimension shall be 8" x 2-3/4" to provide maximum bearing surface to the floor to withstand severe tightening and shock without fracture. The standard shall be fabricated to be compatible with the floor incline, and to maintain proper seat and back height and angle. All weldments shall be gas shielded, arc weld.

2.9 ARMRESTS

- A. Armrests shall be solid 1" thick hardwood with all edges well rounded. The top of the armrest shall overall have a flat shape.
- B. Armrests shall be furnished with two (2) keyhole slots in the bottom and shall lock securely to dovetail lugs provided on aisle and center standards. Further, one (1) security screw shall be utilized.
- C. 20% of installed arm rests shall have donor plates.
- D. Armrests shall withstand a horizontal load of 200lb and a vertical load of 300lb without failure.

2.10 ACCESSIBLE TRANSFER AISLE STANDARDS

- A. Aisle standards shall be arranged for easy access by handicapped individuals and shall be designed to allow the individual to transfer easily from a wheelchair to the theatre chair. The aisle standard support column shall be inclined to the rear at the top by 16 degrees, and shall be equipped with an armrest capable of lifting to a position parallel with the chair back, opening sideways access to the seat. Aisle standards so equipped shall be provided with a label, displaying an easily recognizable "handicapped" symbol.

2.11 AISLE LIGHTS

- A. Aisle lights shall be TivoTape product SRSVLTP99DW12L 12v 9 LED fixtures. Fixtures shall be dimmable.
- B. Virtually all end standards are equipped with aisle lights. Refer to E sheets for aisle light locations.
- C. Aisle lights shall be dimmable low voltage, non-hazardous 12 volt, A.C. system, utilizing a minimum of nine LEDs per standard, and providing adequate illumination for floor and/or steps adjacent to aisle standards. The light assembly shall be recessed under the aisle standard armrest, concealed from sight, and protected from damage. The standard shall be completely pre-wired with 18" of wiring extending beyond the standard. The standard shall be provided with a flex-steel conduit connector thru which the wiring extension shall pass. Provide drivers for aisle lights in required quantities. Seating supplier shall furnish as part of the aisle light package a voltage reduction device, suitably housed in a steel safety enclosure and shall be equipped with primary and secondary fuses, terminal blocks, and safety disconnect; all components Underwriters' Laboratories listed, and assembled by licensed electricians to N.E.C. specifications, to facilitate safe connection to the building electrical system.

2.12 NUMBER AND LETTER PLATES

A. A numbering system shall be provided for identification of all chairs. Number and letter plates shall be furnished as shown on the approved seating layout.

B. Seat Identification Number Plates

1. Number Plates shall be 5/8" x 1-5/8" with black Helvetica Medium letters and numerals.
2. Mount into vandal-resistant recess at front edge of seat pan, clearly viewable from above when seat pan is in folded position and secure with two (2) pop rivets or escutcheon pins. Attachment hardware shall have no sharp edges that may catch fabric or cause scrapes/cuts.

C. Row Identification Letter Plates

1. Row Letter Plates shall be circular. Text size and font shall be complementary to Number Plates.
2. Letter plates shall be mounted on each aisle end panel underneath the aisle light. Locate letter to ensure visibility from aisle and so that aisle lighting system illuminates the identification.
3. Attaching hardware shall have a finish compatible to plates. All components shall have a non-snagging finish.

D. Donor Plates

1. Armrests shall have 1" x 3" oval shaped routed recessed areas with markers for donor plates.
2. Donor plates shall be ovals with complementary text font and size.
3. Donor plates shall be installed with strong adhesive at owner's discretion.
4. All components shall have a non-snagging finish.

2.13 COLOR, FINISH, AND FABRIC SELECTIONS:

- A. Back: Wood - Maple
- B. Seat: Wood - Maple
- C. Fabric: Culp Contract – Morticia – Blue Lagoon
- D. Aisle and center standards: Wood - Maple
- E. End Panel: Wood - Maple
- F. Armrests: Wood - Maple
- G. Number Plates: Brushed Brass
- H. Letter Plates: Brushed Brass
- I. Donor Plates: Brushed Brass

2.14 MAINTANENCE MATERIALS

- A. A quantity of fully constructed seat backs, seat pans, and end standards shall be provided as attic stock. Each component shall match those of the installed components in quality, material, and finish. Provide 10% of each type of component in each installed size.
- B. Provide 8% additional armrests, completely finished and ready for installation on center standard without donor plates.
- C. Provide 2% additional armrests, completely finished and ready for installation on center standard with donor plates.
- D. Provide 10% additional aisle light fixture modules.
- E. Provide 10% additional aisle light fixture drivers.
- F. Provide 2 – 40-yard bolts of additional upholstery fabric from the same dye lot as the installed seats. Extra fabric shall be wrapped, labeled, and turned over to owner as soon as possible for use on loose audience seating. Loose audience seating reupholstering work will be provided by others.
- G. Label all spare components with size (if applicable), venue, and component type.

H. Deliver maintenance materials to owner.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for construction tolerances, material properties as they affect anchors and fasteners.
- B. Do not proceed until unsatisfactory conditions have been corrected.

3.2 DELIVERY AND STORAGE

- A. The fixed audience seating contractor will be held responsible for the unloading, storage and placement/installation of all items comprising the contract. The contractor shall be responsible for receiving and storing fixed audience seating offsite prior to installation. If storage is required off site, the owner will require a certificate of insurance showing their products additionally insured at the contractor's expense.

3.3 INSTALLATION

- A. Coordinate installation of chairs with other trades, noting especially the under seat air diffusers.
- B. Follow manufacturer's printed instructions for installation.
- C. Standards shall be anchored with not less than two anchoring devices in color to match standard.
- D. Install chairs using manufacturer's recommended hardware and fasteners. Chairs in curved rows shall be installed at smooth radius.
- E. Verify moving components operate smoothly and quietly.

3.4 ADJUSTING

- A. Adjust self-rising seat mechanisms to ensure seats in each row are aligned when in upright position.
- B. Repair minor abrasions and imperfections in finishes with materials that match the factory-applied finish in color and sheen and are compatible for field application.
- C. Replace upholstery fabric damaged during installation.

3.5 PROTECTION

- A. Protect seating against damage during remainder of construction period, complying with manufacturer's direction.
- B. Provide additional protection as needed to ensure that seating will not be damaged or deteriorated at time of Substantial Completion.

3.6 CLEANING OF THE SITE

- A. Remove from the site all rubbish, trash, discarded packing materials, cartons, and other debris caused by daily operations. Upon completion of work, the entire area of work by this Contractor shall be left in broom clean condition.

3.7 TESTS AND INSPECTIONS

- A. Tests and inspections during progress of the work, and for final approval, shall include visual examination, uncovering and disassembly of components and/or such other tests, inspections and operations as the Architect/Engineer or local authorities having jurisdiction may find necessary.

- B. Upon completion of all work, the Manufacturer shall certify in writing that work is complete and ready for inspection for substantial completion. Inspection shall be scheduled by the Architect/Engineer at their convenience.
- C. Should deficiencies due to faulty equipment or installation require re-inspection after final inspection, all expenses of such re-inspection, including time and travel of the Architect/Engineer shall be the responsibility of the Manufacturer without cost to the Owner.

3.8 STAFF INSTRUCTION

- A. The Manufacturer's supervisor shall instruct designated representatives of the Owner in the care and maintenance of all items.
- B. The Architect/Engineer and other representatives may be present or represented.
- C. Instruction shall be scheduled in conformance with test and instruction schedules, and availability of the Architect/Engineer and their representatives.
- D. Confirmation of completed instruction must be obtained in writing from appropriate Owner's Representative, with copies provided to the Architect and Theatre Consultant.

END OF SECTION 12610