



**236 High Street
Hamilton, Ohio 45011**

Bidding Requirements for
The Lane Libraries
Technology Center
The Historic Journal News Building
228 Court Street
Hamilton, Ohio 4501

December 2019

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SECTION 01 10 00

SUMMARY

PART 1 GENERAL

1.1 SUMMARY

- A. Project Identification: Lane Library Technology Center
Historic Journal News Building
228 Court Street
Hamilton, Ohio 45011

- B. Project Summary: The project consists of interior demolition and renovation to the first floor of the Historic Journal News Building, including the removal of an existing restroom into a new Common Area Lobby entrance for the building. The project will also consist of an Exterior Concrete ADA compliant ramp, on the East side of the building, updated electrical circuiting with new lighting and acoustical ceiling panels in designated areas. New flooring in designated areas. All existing and new walls to be painted.

- C. Project Requirements:
 - 1. Completion date 90 days from execution of contract for construction
 - 2. Furniture provided under a separate contract with the tenant.
 - 3. There area HVAC requirements for rework and balancing of existing system via miscellaneous ductwork adjustments
 - 4. There is electrical scope for new power and lighting.

- D. Permits and Fees: Building owner will apply for, obtain and pay for general building permits. Trade contractors required to pay for relevant inspection fees and licensing fees require to perform work in the City of Hamilton.

- E. Codes: Comply with applicable codes and regulations of authorities having jurisdiction. Submit copies of inspection reports, notices and similar communications to the Architect.

- F. Dimensions: Verify dimensions indicated on drawings with field dimensions before fabrication or ordering of materials. Do not scale drawings.

- G. Existing Conditions: Notify Architect of existing conditions differing from those indicated on the drawings. Do not remove or alter structural components without prior written approval.

- H. Coordination:
 - 1. Coordinate the work of all trades
 - 2. Prepare coordinate

- I. Installation Requirements, General:
 - 1. Inspect substrates and report unsatisfactory conditions in writing.
 - 2. Do not proceed until unsatisfactory conditions have been corrected.

3. Take field measurements prior to fabrication where practical. Form to required shapes and sizes with true edges, lines and angles. Provide inserts and templates as needed for work of other trades.
 4. Install materials in exact accordance with manufacturer's instructions and approved submittals.
 5. Install materials in proper relation with adjacent construction and with proper appearance.
 6. Restore units damaged during installation. Replace units which cannot be restored at no additional expense to the Owner.
 7. Refer to additional installation requirements and tolerances specified under individual specification sections.
- J. Limit of Use: Limit use of work indicated. Keep driveways and entrances clear.
- K. Existing Construction: Maintain existing building in a weathertight condition. Repair damage caused by construction operations. Protect building and its occupants.
- L. Definitions:
1. Provide: Furnish and install, complete with all necessary accessories, ready for intended use. Pay for all related costs.
 2. Approved: Acceptance of item submitted for approval. Not a limitation or release for compliance with the Contract Documents or regulatory requirements. Refer to limitations of 'Approved' in General and Supplementary Conditions.
 3. Match Existing: Match existing as acceptable to the Owner.
- M. Intent: Drawings and specifications are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth, but which is reasonable implied or necessary for proper performance of the project shall be included.
- N. Writing Style: Specifications are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is the Contractor. For Example, 'Provide tile' means 'Contractor shall provide tile'.

PART 2 PRODUCTS – NOT APPLICABLE TO THIS SECTION

PART 3 EXECUTION – NOT APPLICABLE TO THIS SECTION

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

GENERAL

SUMMARY

Administration of Contract: Provide administrative requirements for the proper coordination and completion of work including the following:

- Supervisory personnel.
- Preconstruction conference.
- Project meetings, minimum of one per week; prepare and distribute minutes.

Reports: Submit daily and special reports.

Work Schedule: Submit progress schedule, updated monthly.

Submittal Schedule: Prepare submittal schedule; coordinate with progress schedule.

Schedule of Values: Submit schedule of values.

Schedule of Tests: Submit schedule of required tests including payment and responsibility.

Perform Surveys: Lay out the work and verifying locations during construction. Perform final site survey.

Emergency Contacts: Submit and post a list of emergency telephone numbers and address for individuals to be contacted in case of emergency.

Record Documents: Submit record drawings and specifications; to be maintained and annotated by Contractor as work progresses.

SUBMITTALS

Types of Submittals: Provide types of submittals listed in individual sections and number of copies required below.

Shop drawings, reviewed and annotated by the Contractor - 2 copies.

Product data - 2 copies.

Samples - 2, plus extra samples as required to indicate range of color, finish, and texture to be expected.

Inspection and test reports - 2 copies.

Warranties - 2 copies.

Closeout submittals - 2 copies.

Project photographs - 12 digital images each for each week submitted on CD. Submit cumulative CD at end of project. Label each image with date.

Submittal Procedures: Comply with project format for submittals. Comply with submittal procedures established by Architect including Architect's submittal and shop drawing stamp. Provide required resubmittals if original submittals are not approved. Provide distribution of approved copies including modifications after submittals have been approved.

Samples and Shop Drawings: Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and related work. Note special coordination required. Note any deviations from requirements of the Contract Documents.

Lane Library Technology Center
Hamilton, Ohio

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Community Design Alliance

Warranties: Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Contractor, supplier or installer responsible for performance of warranty shall sign warranties.

PRODUCTS - NOT APPLICABLE TO THIS SECTION

EXECUTION - NOT APPLICABLE TO THIS SECTION

END OF SECTION

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Quality Monitoring: Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality. Perform quality control procedures and inspections during installation.
- B. Standards: Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- C. Tolerances: Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate. Comply with manufacturers' tolerances.
- D. Reference Standards: For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- E. Manufacturer's Field Services: When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to perform the following as applicable, and to initiate instructions when necessary.
 - 1. Observe site conditions.
 - 2. Conditions of surfaces and installation.
 - 3. Quality of workmanship.
 - 4. Start-up of equipment.
 - 5. Test, adjust and balance of equipment.

PART 2 PRODUCTS - NOT APPLICABLE TO THIS SECTION

PART 3 EXECUTION - NOT APPLICABLE TO THIS SECTION

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 4 GENERAL

4.1 SUMMARY

- A. Security and Protection: Provide security and protection requirements including the following.
 - 1. Fire extinguishers.
 - 2. Maintain building enclosure and lock-up.
- B. Personnel Support: Provide personnel support facilities including the following.
 - 1. Cleaning.

PART 5 PRODUCTS - NOT APPLICABLE TO THIS SECTION

PART 6 EXECUTION - NOT APPLICABLE TO THIS SECTION

END OF SECTION

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 7 GENERAL

7.1 SUMMARY

- A. Manufacturers: Provide products from one manufacturer for each type or kind as applicable. Provide secondary materials as acceptable to manufacturers of primary materials.
- B. Product Selection: Provide products selected or equal approved by Architect. Products submitted for substitution shall be submitted with complete documentation, and include construction costs of substitution including related work.
- C. Substitutions: Request for substitution must be in writing. Conditions for substitution include:
 - 1. An "or equal" phrase in the specifications.
 - 2. Specified material cannot be coordinated with other work.
 - 3. Specified material is not acceptable to authorities having jurisdiction.
 - 4. Substantial advantage is offered to the Owner in terms of cost, time, or other valuable consideration.
- D. Substitution Requests: Substitutions shall be submitted prior to award of contract, unless otherwise acceptable. Approval of shop drawings, product data, or samples containing substitutions is not an approval of a substitution unless an item is clearly presented as a substitution at the time of submittal.

PART 8 PRODUCTS - NOT APPLICABLE TO THIS SECTION

PART 9 EXECUTION - NOT APPLICABLE TO THIS SECTION

END OF SECTION

SECTION 01 70 00

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 10 GENERAL

10.1 SUMMARY

- A. Substantial Completion: The following are prerequisites to substantial completion. Provide the following:
 - 1. Punch list prepared by Contractor and subcontractors as applicable.
 - 2. Supporting documentation.
 - 3. Warranties.
 - 4. Certifications.
 - 5. Occupancy permit.
 - 6. Start-up and testing of building systems.
 - 7. Change over of locks.
- B. Final Acceptance: Provide the following prerequisites to final acceptance:
 - 1. Final payment request with supporting affidavits.
 - 2. Completed punch list.
- C. As-Built Drawings: Provide a marked-up set of drawings including changes, which occurred during construction.
- D. Project Closeout: Provide the following during project closeout:
 - 1. Submission of record documents.
 - 2. Submission of maintenance manuals.
 - 3. Final cleaning and touch-up.

PART 11 PRODUCTS - NOT APPLICABLE TO THIS SECTION

PART 12 EXECUTION

12.1 CUTTING AND PATCHING

- A. Cutting and Patching: Provide cutting and patching work to properly complete the work of the project, complying with project requirements for:
 - 1. Structural work.
 - 2. Mechanical/electrical systems.
 - 3. Visual requirements, including detailing and tolerances.
 - 4. Operational and safety limitations.
 - 5. Fire resistance ratings.
 - 6. Inspection, preparation, and performance.
 - 7. Cleaning.
- B. Means and Methods: Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decrease energy performance, increase maintenance, decrease operational life, or decrease safety performance.
- C. Inspection: Inspect conditions prior to work to identify scope and type of work required. Protect adjacent work. Notify Owner of work requiring interruption to building services or Owner's operations.

- D. Performance of Operations: Perform work with workmen skilled in the trades involved. Prepare sample area of each type of work for approval.
- E. Cutting: Use cutting tools, not chopping tools. Make neat holes. Minimize damage to adjacent work. Inspect for concealed utilities and structure before cutting.
- F. Patching: Make patches, seams, and joints durable and inconspicuous. Comply with tolerances for new work.
- G. Cleaning: Clean work area and areas affected by cutting and patching operations.

END OF SECTION

SECTION 02 41 00

DEMOLITION

PART 13 GENERAL

13.1 SUMMARY

- A. Provide demolition activities.

13.2 SUBMITTALS

- A. Schedule: Submit for approval selective demolition schedule, including schedule and methods for capping utilities to be abandoned and maintaining existing utility service.

13.3 QUALITY ASSURANCE

- A. Codes and Regulations: Comply with governing codes and regulations. Use experienced workers.

13.4 PROJECT CONDITIONS

- A. Occupancy: Owner and building tenants will occupy areas adjacent to Work limit. Coordinate demolition schedule with Owner activities.

PART 14 PRODUCTS

14.1 DEMOLITION APPLICATIONS

- A. Selective Building Demolition:
 1. Application: Selective demolition of interior partitions, systems, and building components designated to be removed.
 2. Application: Protection of portions of building adjacent to or affected by selective demolition.
 3. Application: Removal of abandoned utilities and wiring systems.
 4. Application: Notification to Owner of schedule of shut-off of utilities which serve occupied spaces.
 5. Application: Pollution control during selective demolition, including noise control.
 6. Application: Removal and legal disposal of materials.
 7. Utilities: Interruption, capping or removal as applicable.
 8. Hazardous Materials: Not believed to be present, but make Owner aware of any discovered or suspected materials. Any hazardous materials confirmed will be removed under separate contract.

PART 15 EXECUTION

15.1 SELECTIVE DEMOLITION

- A. Demolition Operations: Do not damage building elements and improvements indicated to remain. Items of salvage value, not included on schedule of salvage items to be returned to Owner, shall be removed from structure. Storage or sale of items at project site is prohibited.
- B. Utilities: Locate, identify, disconnect, and seal or cap off utilities in buildings to be demolished.
- C. Shoring and Bracing: Provide and maintain interior and exterior shoring and bracing.
- D. Occupied Spaces: Do not close or obstruct streets, walks, drives or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner

and authorities having jurisdiction. If necessary, provide temporary utilities.

- E. Operations: Cease operations if public safety or remaining structures are endangered. Perform temporary corrective measures until operations can be continued properly.
- F. Security: Provide adequate protection against accidental trespassing. Secure project after work hours.
- G. Restoration: Restore finishes of patched areas.

END OF SECTION

SECTION 06 10 00
ROUGH CARPENTRY

PART 16 GENERAL

16.1 SUMMARY

- A. Provide rough carpentry.

16.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.

16.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Lumber Standards and Grade Stamps: DOC PS 20, American Softwood Lumber Standard and inspection agency grade stamps.
- C. Construction Panel Standards: DOC PS 1, U.S. Product Standard for Construction and Industrial Plywood; APA PRP-108.

PART 17 PRODUCTS

17.1 MATERIALS

- A. Rough Carpentry Applications:
 - 1. Manufacturers, Dimensional Lumber: CertainTeed Corp., Boardwalk Composite Decking & Railing; or approved equal.
 - 2. Manufacturers, Structural Panels: Temple-Inland Forest Products Corp. - Engineered Wood Products; or approved equal.
 - 3. Manufacturers, Sheathing: FLAMEDXX, LLC; LP Corporation; or approved equal.
 - 4. Application: Wood grounds, nailers, and blocking.
 - 5. Application: Wood furring.
 - 6. Application: Subflooring.
 - 7. Dimension Lumber:
 - a. Light Framing: Stud, No. 3 or Standard grade.
 - b. Species: Any species of grade indicated.
 - c. Exposed Framing: Appearance grade.
 - 8. Miscellaneous Lumber:
 - a. Moisture Content: 19 percent.
 - b. Grade: Standard grade light framing.
 - 9. Particleboard:
 - a. Underlayment: ANSI A 208.1, Grade PBU, grade marked.
 - 10. Gypsum Sheathing:
 - a. Manufacturers: Georgia-Pacific, National Gypsum Co., United States Gypsum, or approved equal.
 - b. Gypsum sheathing board with water-resistant core: Regular ASTM C 79.
 - c. Glass-Mat Gypsum Wall Sheathing: ASTM C 1177.
 - d. Manufacturers: Dens-Glass Gold by G-P Gypsum Corp.

11. Framing Anchors and Fasteners:
 - a. Material: Non-corrosive, suitable for load and exposure. Drywall screws are not acceptable.

PART 18 EXECUTION

18.1 INSTALLATION

- A. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated.
- B. Plywood: Comply with applicable recommendations contained in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial."
- C. Provide nailers, blocking and grounds where required. Set work plumb, level and accurately cut.
- D. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with other work.
- E. Comply with manufacturer's requirements for cutting, handling, fastening and working treated materials.
- F. Restore damaged components. Protect work from damage.

END OF SECTION

SECTION 06 40 23

INTERIOR ARCHITECTURAL CASEWORK

PART 19 GENERAL

19.1 SUMMARY

- A. Provide interior finish carpentry.

19.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.
- C. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish. Include range samples if variation of finish is anticipated.

19.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Standards: Architectural Woodwork Institute (AWI) "Architectural Woodwork Quality Standards."
- C. Standards: Woodwork Institute (WI) "Manual of Millwork."
- D. Wood Products: Comply with the following:
 - 1. Hardboard: AHA A135.4.
 - 2. Medium-Density Fiberboard: ANSI A208.2, Grade MD-Exterior Glue.
 - 3. Particleboard: ANSI A208.1, Grade M-2-Exterior Glue.
 - 4. Softwood Plywood: DOC PS 1, Medium Density Overlay.
 - 5. Hardwood Plywood and Face Veneers: HPVA HP-1.

PART 20 PRODUCTS

20.1 MATERIALS

- A. Interior Casework Hardware and Auxiliary Materials:
 - 1. Manufacturers: Accuride International, Inc.; Blum, Inc.; Grass America, Inc.; Hafele America Co.; Knape & Vogt Mfg. Co.; or approved equal.
 - 2. Hardware Standard: ANSI/BHMA A156.9.
 - 3. Hardware Finish and Base Metal: Satin stainless steel.
- B. Interior Plastic Laminate Clad Countertops:
 - 1. Manufacturers: Manufacturers: Wilsonart International Div. of Premark International, Inc.; Nevamar Company, LLC, Decorative Products Div.; Formica Corporation, or approved equal.
 - 2. Laminate: High pressure decorative laminate, NEMA LD-3.
 - 3. Grade: Custom.
 - 4. Core: As allowed by grade.
 - 5. Edge: Laminate.

6. Adhesives: Low VOC contact adhesive (less than 80 g/L).

C. Interior Auxiliary Materials:

1. Screws: FS FF-S-111.
2. Nails: FS FF-N-105.
3. Anchors: Type required for secure anchorage.
4. Adhesives: Low VOC types.

PART 21 EXECUTION

21.1 INSTALLATION

- A. Provide work to sizes, shapes, and profiles indicated. Install work to comply with quality standards referenced. Back prime work and install plumb, level and straight with tight joints; scribe work to fit.
- B. Quality Standard: Install woodwork to comply with [AWI Section 1700] [WI Manual of Millwork] for the same grade specified for type of woodwork involved.
- C. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Use non-corrosive fasteners for exterior work. Coordinate with work of other sections.
- D. Comply with manufacturer's requirements for cutting, handling, fastening and working treated materials.
- E. Repair minor damage, clean and protect.

END OF SECTION

SECTION 07 92 00

JOINT SEALANTS

PART 22 GENERAL

22.1 SUMMARY

- A. Provide joint sealers and fillers.

22.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish. Include range samples if variation of finish is anticipated.
 - 1. Include manufacturer's full range of color and finish options if additional selection is required.

22.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 23 PRODUCTS

23.1 MATERIALS

- A. Interior Joints, Limited Movement, Acrylic:
 - 1. Manufacturers: Bostik; Pecora Corporation; Polymeric Systems, Inc.; Sonneborn Building Products; Tremco; or approved equal.
 - 2. Materials: Acrylic-emulsion, ASTM C 834.
 - 3. VOC Content: Less than 50 g/L.
- B. Interior Joints, Sanitary Silicone:
 - 1. Manufacturers: Dow Corning; GE Advanced Materials; Tremco; or approved equal.
 - 2. Materials: One-part mildew-resistant silicone sealant, ASTM C 920.
 - 3. VOC Content: Less than 50 g/L.

PART 24 EXECUTION

24.1 INSTALLATION

- A. Examine substrate; report unsatisfactory conditions in writing. Beginning work means acceptance of substrates.
- B. Provide sealants in colors as selected from manufacturer's standards.
- C. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections. Clean and prime joints, and install bond breakers, backer rods and sealant as recommended by manufacturers.
- D. Depth shall equal width up to 1/2 inch wide; depth shall equal 1/2 width for joints more than 1/2 inch wide.

- E. Cure and protect sealants as directed by manufacturers. Replace or restore damaged sealants. Clean adjacent surfaces to remove spillage.

END OF SECTION

SECTION 08 11 13

HOLLOW METAL DOORS AND FRAMES

PART 25 GENERAL

25.1 SUMMARY

- A. Provide steel doors and frames.

25.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.

25.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Standards: ANSI/SDI-100, Recommended Specifications for Standard Steel Doors and Frames.
- C. Performance Standards:
 - 1. Fire-Rated Assemblies: NFPA 80, and acceptable testing agency listing.
 - 2. Sound-Rated Assemblies at Mechanical Rooms: ASTM E 1408, and ASTM E 413.

PART 26 PRODUCTS

26.1 MATERIALS

- A. Interior Steel Doors:
 - 1. Manufacturers: Amweld Building Products; Ceco Door Products; Curries Co.; Mesker Door; Steelcraft Manufacturing; or approved equal.
 - 2. Material: Minimum 18-gauge steel sheet.
 - 3. Thickness: 1-3/4 inches.
 - 4. Finish: Factory primed and field painted.
 - 5. Accessories:
 - a. Silencers.
- B. Interior Steel Frames:
 - 1. Manufacturers: Amweld Building Products; Ceco Door Products; Curries Co.; Mesker Door; Steelcraft Manufacturing; or approved equal.
 - 2. Material: Minimum 16-gauge steel sheet.
 - 3. Corners: Mitered or coped.
 - 4. Type: Drywall slip-on.
 - 5. Finish: Factory primed and field painted.

PART 27 EXECUTION

27.1 INSTALLATION

- A. Fabricate work to be rigid, neat and free from seams, defects, dents, warp, buckle, and exposed

fasteners. Install doors and frames in compliance with SDI-100, NFPA 80, and requirements of authorities having jurisdiction.

- B. Provide thermally improved doors with maximum U-value of 0.24 BTU/hr./square foot degree F (ASTM C 236) for all exterior doors and elsewhere as noted.
- C. Provide acoustically improved doors with minimum STC of 33 (ASTM E 90 and ASTM E 413) where indicated.
- D. Hardware: Prepare doors and frames to receive hardware on final schedule. Provide for 3 silencers on single doorframes; 2 on double doorframes.
- E. Shop Finish: Clean, treat and prime paint all work with rust-inhibiting primer comparable with finish paint specified in Division 9 section. Provide asphalt emulsion sound deadening coating on concealed frame interiors.
- F. Touch up damaged coatings ready to receive finish painting.

END OF SECTION

SECTION 08 31 00
ACCESS DOOR AND PANELS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Access doors and frames for tongue and groove wall surfaces.

- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

- C. Underwriters Laboratories (UL) 10B - Standard for Fire Tests of Door Assemblies.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Provide sizes, types, finishes, scheduled locations, and details of adjoining work.
 - 2. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections and relationship with adjacent construction.

1.3 QUALITY ASSURANCE

- G. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

- H. Standards: Architectural Woodwork Institute (AWI) "Architectural Woodwork Quality Standards."

- I. Standards: Woodwork Institute (WI) "Manual of Millwork."

- J. Wood Products: Comply with the following:
 - 1. Hardboard: AHA A135.4.
 - 2. Medium-Density Fiberboard: ANSI A208.2, Grade MD-Exterior Glue.
 - 3. Particleboard: ANSI A208.1, Grade M-2-Exterior Glue.
 - 4. Softwood Plywood: DOC PS 1, Medium Density Overlay.
 - 5. Hardwood Plywood and Face Veneers: HPVA HP-1.

PART 2 PRODUCTS

2.1 MATERIALS

A. Interior Tongue and Groove Panels:

1. Species for Semi-Transparent Finish: Maple
2. Grade: Custom.
3. Site Finish: Semi-Transparent finish to match existing.

2.2 FABRICATION

A. Fabricate door frame of steel sheet:

1. Doors 16 x 16 inches and smaller: Minimum 18 gage.
2. Doors over 16 x 16 inches: Minimum 16 gage.
3. Fabricate frames with flange type to suit installation conditions.

B. Fabricate non-rated door panels of minimum 14 gage steel sheet.

C. Fabricate fire rated door panels of two sheets of minimum 20 gage steel sheet. Fill core with noncombustible insulation.

D. Platform access door and modesty panel to be finished in tongue and groove panels to match existing.

E. Weld, fill, and grind joints to flush and square appearance.

F. Hardware:

1. Continuous steel hinges, 175 degree opening.

2.3 FINISHES

A. Semi-Transparent Finish to match existing

PART 3 EXECUTION

3.1 INSTALLATION

A. Install units in accordance with manufacturer's instructions.

B. Install plumb and level in openings. Secure rigidly in place.

C. Position units where indicated or where required to provide convenient access to concealed work requiring maintenance.

END OF SECTION

SECTION 08 41 26
ALL-GLASS ENTRANCES

PART 28 GENERAL

28.1 SUMMARY

- A. Provide all-glass entrances and storefront

28.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.
- C. Warranty: Submit manufacturer's standard warranty. Include labor and materials to repair or replace defective materials.
 - 1. Warranty Period: 5 years.
- D. Operation and Maintenance Data: Submit manufacturer's operation and maintenance data, including operating instructions, list of spare parts and maintenance schedule.

28.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 29 PRODUCTS

29.1 MATERIALS

- A. All-Glass Entrances:
 - 1. Manufacturers: Blumcraft of Pittsburgh; Brite Vue Glass Systems; Guardian Industries Corp.; Virginia Glass Products Corp.; or approved equal.
 - 2. Glass Color: Clear, 1/2" thick minimum.
 - 3. Door Fittings: Stainless steel, brushed.
 - a. Standard: Stainless steel cladding, ASTM A 666, alloy 304 laminated to aluminum extrusions.

PART 30 EXECUTION

30.1 INSTALLATION

- A. Comply with door manufacturer's instructions and recommendations. Provide concealed reinforcing as necessary.
- B. Install framing and trim units level, plumb and true to line.
- C. Install glass to avoid direct metal-to-glass contact.
- D. Adjust operating hardware for smooth, proper operation.
- E. Protect and clean work.

END OF SECTION

FIRST SECTION 08 71 00

DOOR HARDWARE

PART 31 GENERAL

31.1 SUMMARY

- A. Provide door hardware.

31.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish. Include range samples if variation of finish is anticipated.
- C. Submit for approval hardware schedule proposed for use based on Owner's requirements.

31.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Hardware for Fire-Rated Openings: NFPA 80, and local requirements.
- C. Materials and Application: ANSI A156 series standards.

PART 32 PRODUCTS

32.1 MATERIALS

- A. Door Hardware:
 - 1. Manufacturers: ASSA ABLOY Door Security Solutions; Corbin Russwin Architectural Hardware; Dorma Architectural Hardware; FSB USA; Jackson Corp.; Omnia Industries, Inc.; Onity (formerly TESA ESI); PBB, Inc.; Sargent Manufacturing; Schlage Lock Co.; Yale Locks and Hardware; or approved equal.
 - 2. Quality Level: Commercial.
 - 3. Locksets and Latchsets: Bored cylindrical type.
 - 4. Lock Cylinders: Integral.
 - 5. Keying: Owner's requirements.
 - 6. Hinges and Butts: Full-mortise type at interior, with nonremovable pins at exterior doors.
 - 7. Closers, Door Control, and Exit Devices: Low frequency.
 - 8. Pivots: Offset or center-hung type.
 - 9. Push/Pull Units: Through-bolted type.
 - 10. Hardware Finishes: Satin stainless finish on exposed surfaces.
 - 11. Auxiliary Materials:
 - a. Door Trim Units: Kickplates, edge trim, viewers, knockers, and mail drop, and related trim.
 - b. Stops and overhead door holders.
 - c. Soundstripping.

PART 33 EXECUTION

33.1 INSTALLATION

- A. Follow guidelines of DHI "Recommended Locations for Builder's Hardware" and hardware manufacturers' instructions.
- B. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections.
- C. Adjust operation, clean and protect.

END OF SECTION

SECTION 09 21 16

GYP SUM BOARD ASSEMBLIES

PART 34 GENERAL

34.1 SUMMARY

- A. Provide gypsum board assemblies.

34.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.

34.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Tolerances: Not more than 1/16-inch difference in true plane at joints between adjacent boards before finishing. After finishing, joints shall be not be visible. Not more than 1/8 inch in 10 feet deviation from true plane, plumb, level and proper relation to adjacent surfaces in finished work.
- C. Fire Resistance for Fire-Rated Assemblies: ASTM E 119.
- D. Performance: Fire, structural, and seismic performance meeting requirements of building code and local authorities.

PART 35 PRODUCTS

35.1 MATERIALS

- A. Gypsum Board:
 - 1. Manufacturers: Georgia Pacific; National Gypsum Co.; Lafarge North America; United States Gypsum Company, or approved equal.
 - 2. Application: Interior walls, partitions, and ceilings with tape and joint compound finish.
 - 3. Application: Abuse-resistant board at corridors.
 - 4. Application: Steel framing systems to receive gypsum board.
 - 5. Application: Remodeling at existing gypsum board construction.
 - 6. Type: Board for tape and joint compound finish.
 - a. Type: Regular, moisture-resistant and fire-rated types as required.
 - b. Typical Thickness: 1/2 inch.
 - 7. Type: Abuse-resistant board.
 - a. Typical Thickness: 1/2 inch.
 - 8. Auxiliary Materials:
 - a. Corner bead, edge trim and control joints.
 - b. Extruded aluminum reveals and channels.
 - c. Gypsum board screws, ASTM C 1002.
 - d. Gypsum board nails, ASTM C 514.
 - e. Fastening adhesive.
 - f. Fastening adhesive, low VOC type.
 - g. Mineral fiber thermal insulation.
- B. Steel Framing for Walls and Partitions:

1. Manufacturers: JN Linrose; Dietrich Metal Framing, Inc.; MARINO; or approved equal.
2. Material Standard: ASTM C645.
3. Stud Thickness: 22 gauge (.0276 inch).
4. Stud Depth, Typical: 3-5/8 inches.
5. Auxiliary Framing Components: Furring brackets, resilient furring channels, Z-furring members, and non-corrosive fasteners.

PART 36 EXECUTION

36.1 INSTALLATION

- A. Steel Framing: Install steel framing in compliance with ASTM C 754. Install with tolerances necessary to produce substrate for gypsum board assemblies with tolerances specified. Include blocking for items such as railings, grab bars, casework, toilet accessories, window treatment and similar items.
- B. Wood Framing: Install wood framing in compliance with Section 06100 - Rough Carpentry. Install with tolerances necessary to produce substrate for gypsum board assemblies with tolerances specified. Include blocking for items such as railings, grab bars, casework, toilet accessories, window treatment and similar items.
- C. Tape and Joint Compound: Install gypsum board for tape and 3-coat joint compound finish in compliance with ASTM C 840 and GA 216, Level 4 finish. Install gypsum board assemblies true, plumb, level and in proper relation to adjacent surfaces.
- D. Veneer Plaster: Install gypsum board for veneer plaster finish in compliance with ASTM C 844. Install gypsum board assemblies true, plumb, level and in proper relation to adjacent surfaces.
- E. Provide continuous vapor retarder at exterior walls.
- F. Provide fire-rated systems where indicated and where required by authorities having jurisdiction.
- G. Install boards vertically. Do not allow butt-to-butt joints and joints that do not fall over framing members.
- H. Where new partitions meet existing construction, remove existing corner beads to provide a smooth transition.
- I. Provide insulation full height and thickness in partitions at conference rooms, toilet rooms, between different occupancies, and where required.
- J. Provide acoustical sealant at both faces at top and bottom runner tracks, wall perimeters, openings, expansion and control joints.
- K. Install trim in strict compliance with manufacturer's instructions and recommendations.
- L. Repair surface defects. Leave ready for finish painting or wall treatment.

END OF SECTION

SECTION 09 50 00

09 54 46 FELTWORKS™ Blades Acoustical Panels

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions-1 Specification sections apply to work of this section.

1.2 SUMMARY

a) Section Includes:

1. Non-Woven layered and formed Polyester felt fiber ceiling panels
2. Wire hangers, fasteners, main runners, cross tees, wall angle moldings and accessories.

b) Related Sections:

1. Section 09 53 00 - Acoustical Ceiling Suspension Assembly
2. Section 09 20 00 - Plaster and Gypsum Board
3. Section 09 22 16 - Non-Structural Metal Framing
4. Section 01 81 13 - Sustainable Design Requirements
5. Section 01 81 19 - Indoor Air Quality Requirements
6. Divisions 23 (15) - HVAC
7. Division 26 (16) Sections - Electrical Work

c) Alternates

1. Prior Approval: Unless otherwise provided for in the Contract documents, submit proposed product substitutions no later than TEN (10) working days prior to the date established for receipt of bids. Acceptability of a proposed substitution is contingent upon the Architect's review and acceptance. Approved products will be set forth by the Addenda. If a substitution is included in a Bid and is not approved by an Addendum, the specified products shall be provided as in place of the substitute without additional compensation.
2. Submittals, which do not provide adequate data for the product evaluation, will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to, the following: Single source materials suppliers (if specified in Section 1.5); panel design, size, composition, color, and finish; suspension system component profiles and sizes; compliance with the referenced standards.

1.3 REFERENCES

- a) American Society for Testing and Materials (ASTM):
1. ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber
 2. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 3. ASTM E580 Application of Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels in Areas Requiring Seismic Restraint.
 4. ASTM C423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
 5. ASTM E795 Standard Practices for Mounting Test Specimens During Sound Absorption Tests
 6. International Building Code
 7. ASHRAE Standard 62.1-2004 Ventilation for Acceptable Indoor Air Quality
 8. California Department of Public Health CDPH/EHLB Emission Standard Method Version 1.2 2017
 9. California Green Building Standards Code Cal Green Title 24
 10. NFPA 70 National Electrical Code
 11. ASCE 7 American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures
 12. International Code Council-Evaluation Services - AC 156 Acceptance Criteria for Seismic Qualification Testing of Non-structural Components
 13. LEED - Leadership in Energy and Environmental Design is a set of rating systems for the design, construction, operation, and maintenance of green buildings
 14. Underwriters Laboratories Green Guard
 15. International Living Building Challenge

1.4 SUBMITTALS

- a) **Shop Drawings:** Provide layout including panel type and components used in the assembly of the ceiling. Show locations of items that are to be coordinated with the ceiling.
- b) **Installation Instructions:** Submit manufacturer's installation instructions as referenced in Part three, Installation.
- c) **Samples:** Minimum 6 inch x 6 inch sample of the colors selected in the ceiling design, include manufacturer sample of suspension components.
- d) **Product Data:** Submit manufacturer's technical data for each type of ceiling unit and suspension system required.

- e) **Certifications:** Manufacturer's certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards.
- f) **Non-Conformance:** All products not conforming to the requirements of this specification and or the manufacturer's published values are to be disposed. The Contractor performing the work will replace with approved product at their expense.

1.5 QUALITY ASSURANCE

- a) Single-Source Responsibility: Provide ceiling panel units and suspension components by a single manufacturer.
- b) Fire Performance Characteristics: Identify ceiling components with appropriate markings of applicable testing and inspecting organization.
 - 1. Surface Burning Characteristics: As follows, tested per ASTM E 84 and complying with Class A products.
 - i. Flame Spread: 25 or less
 - ii. Smoke Developed: 450 or less
- c) Fire Sprinklers: Ceiling systems may obstruct or Skew the planned water distribution pattern of fire sprinkler. In addition to creating a possible delaying or accelerating the activation of the sprinkler of fire detection system. Consult with a fire protection engineer for guidance.
- d) Coordination of Work: Coordinate ceiling work with installers of related work including, but not limited to building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

1.6 DELIVERY, STORAGE, AND HANDLING

- a) Deliver acoustical ceiling units to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.
- b) Before installing acoustical ceiling units, permit them to reach room temperature and a stabilized moisture content.
- c) White gloves recommended for handling to avoid marring, especially on light color panels.

1.7 PROJECT CONDITIONS

- a) Space Enclosure:
 - I. HumiGuard Plus Ceilings: Building areas to receive ceilings shall be free of construction dust and debris. Products with HumiGuard Plus performance and hot dipped galvanized steel suspension systems can be installed up to 120°F (49°C) and in spaces before the building is enclosed, where HVAC systems are cycled or not operating. Cannot be used in exterior applications where standing water is present or where moisture will come in direct contact with the ceiling.

1.8 WARRANTY

- a) Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace panels that fail within the warranty period.
- b) Warranty Period:
 - I. Acoustical panels and Suspension: One (1) year from date of substantial completion
- c) The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.9 SUSTAINABLE MATERIALS

- a) The GREENGUARD Certification Program gives assurance that products designed for use in indoor spaces meet strict chemical emissions limits, which contribute to the creation of healthier interiors. GREENGUARD Certified products meet stringent chemical emissions requirements, such as being screened for more than 10,000 volatile organic compounds (VOCs).
- b) Health Product Declaration. The end use product has a published, complete Health Product Declaration with disclosure at a minimum of 1000ppm of known hazards in compliance with the Health Product Declaration open Standard.
- c) Declare Label. The end use product has a published Declare label by the International Living Future Institute with disclosure of 100 ppm with a designation of Red List Free or Compliant (less than 1% proprietary ingredients).
- d) Low Emitting products with VOC emissions data. Preference will also be given to manufacturers that can provide emissions data showing their products meet CDHP Standard Method v1.2 (Section 01350).
- e) Life cycle analysis. Products that have communicated lifecycle data through Environmental Product Declarations (EPDs) will be preferred.
- f) Products meeting LEED V4 requirements.

1.10 MAINTENANCE

- a) Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.
 - 1. Ceiling Units: Furnish quality of full-size units equal to 2.0 percent of amount installed.
 - 2. Exposed Suspension System Components: Furnish quantity of each exposed suspension component equal to 1.0 percent of amount installed.

Attention Design Professional please edit Part 2 based on your project needs. Select product attributes and acceptable product item(s) that fit with the requirements of the FELTWORKS Blades selected for your project. Delete all items from the specification that do not relate to your project needs. Please refer to the Armstrong website ([Click here to link to the Armstrong Ceilings website](#)).

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- a) Basis of Design FELTWORKS Blades:
 - 1. Armstrong World Industries, Inc.
- b) Suspension Systems:
 - 1. Armstrong World Industries, Inc.

2.2.0 CEILING UNITS

- a) Ceiling Panel:
 - 1. Surface Texture: Soft
 - 2. Composition: Non-woven layered and formed Polyester felt (PET) fiber
 - 3. Color: Natural
 - 4. Edge Profile: Square
 - 5. Light Reflectance (LR) Cotton Panel: ASTM E 1477; 0.80
 - 6. Material Ingredient Transparency: Health Product Declaration (HPD); Declare Label
 - 7. Green Guard Gold Certified
 - 8. Sizes:
 - i. Item 6533KEF002 - Varies x 48" X 3/8" – 48" Ebb & Flows
 - 9. Acoustical Performance is tested per ASTM C423 and mounted in accordance with ASTM E795. Sound absorption of up to 0.70 Sabins/SF.
 - 10. Flame Spread: Class A
 - 11. Dimensional Stability: HumiGuard Plus.
 - 12. Acceptable Product: FELTWORKS as manufactured by Armstrong World Industries.

For information regarding the FELTWORKS product line, contact *Armstrong Sales Representative Joshua Eden*, contact number: 717.396.5972, email: joeden@armstrongceilings.com

2.2.1 SUSPENSION SYSTEMS

- a) **Armstrong Aluminum Suspension System:**
 - 1. Acceptable Product: Listed Below as manufactured by Armstrong World Industries, Inc. Items are available in custom colors; contact ASQuote@armstrongceilings.com.

- i. Item 8230 – 96” Suspension Bar for 3/8” FeltWorks Blades connector holes on both ends
- ii. Item 6651AB - 96” Suspension Bar End-to-End Connectors
- iii. Item 6655 – Blades Hanging Kit – Each kit includes 4 hanging assemblies, use on kit for each suspension

PART 3 - EXECUTION

3.1 EXAMINATION

- a) Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out.
- b) Proper designs for both supply air and return air, maintenance of the HVAC filters and building interior space are essential to minimize soiling. Before starting the HVAC system, make sure supply air is properly filtered and the building interior is free of construction dust.

3.2 PREPARATION

- a) Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less than half width units at borders, and comply with reflected ceiling plans. Coordinate panel layout with mechanical and electrical fixtures.

3.3 INSTALLATION

- a) Install suspension system and blades in compliance with the approval of the authorities having jurisdiction, and in accordance with the manufacturer’s FELTWORKS Blades Installation Instructions.

3.4 ADJUSTING AND CLEANING

- a) Replace damaged and broken panels.
- b) Clean exposed surfaces of ceilings panels, including trim, edge moldings, and suspension members. Comply with manufacturer’s instructions for cleaning and touch up of minor finish damage.

END OF SECTION

SECTION 09 51 00
SUSPENDED ACOUSTICAL CEILINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Acoustical panels.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. A641 - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
 - 2. C635 - Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
 - 3. C636 - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels.
 - 4. E1264 - Standard Classification of Acoustical Ceiling Products.
- B. Ceiling and Interior Systems Construction Association (CISCA) - Ceiling Systems Handbook.
- C. Underwriters Laboratories, Inc. (UL) - Fire Resistance Directory.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples:
 - a. 12 x 12 inch ceiling panel samples.
 - b. Min. 6 inch long suspension system samples showing each profile.
- B. Quality Control Submittals:
 - 1. Certificates of Compliance: Certification from an independent testing laboratory that acoustical panels meet fire hazard classification requirements.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Installed System: Conform to UL where rated systems are required.
- C. Fire Hazard Classification: tested to ASTM E1264.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Install in approximately same conditions of temperature and humidity as will prevail after installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers -
 - 1. Design Basis: Contract Documents are based on products by USG.
 - 2. Equivalent products by following manufacturers are acceptable:
 - a. Armstrong World Industries, Inc. (www.armstrong.com)
 - b. Chicago Metallic Corporation. (www.chicago-metallic.com)
- B. Acceptable Manufacturers - Suspension System:
 - 1. Armstrong World Industries, Inc. (www.armstrong.com)
 - 2. Certainteed Corporation (www.certainteed.com)

2.2 MATERIALS

- A. Suspension Grid System:
 - 1. ASTM C635, die cut, interlocking ends.
 - 2. Grid type: Exposed T.
 - 3. Material: Extruded aluminum.
 - 4. Runners: 1-1/2 inches high, 15/16 inch exposed width, flush profile.
 - 5. Perimeter molding: Channel shape.
 - 6. Finish: Factory applied enamel paint, sprayed and baked color to match panels.
 - 7. Accessories: Stabilizer bars, clips, splices

2.3 ACCESSORIES

- A. Support Channels:
 - 1. Prime painted steel; size and type to suit application.
- B. Hanger Wire:
 - 1. ASTM A641, minimum 12 gage galvanized steel. – Paint Black in rooms where hanger wire will be exposed to view.
- C. Hold Down Clips: Minimum 24 gage spring steel, manufacturer's standard profile.
- D. Impact Clips: Minimum 24 gage spring steel, manufacturer's standard profile.
- E. Touch-Up Paint: Color to match acoustical panels and suspension grid.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install ceilings in accordance with ASTM C636 and CISCA Handbook.
- B. Minimize panels less than one half size.
- C. Install molding around perimeters and abutting surfaces. Miter molding at exterior corners; cut flanges and bend web to form interior corners.
- D. Space hanger wires maximum 48 inches on center. Install additional hangers where required to support light fixtures and ceiling supported equipment.
- E. Do not suspend hangers directly from metal deck. Attach steel channel horizontally to adjacent framing members; place hanger at regular spacing.

- F. Hang suspension system independent of walls, columns, ducts, pipes, and conduit.
- G. Where ducts or other equipment prevent regular spacing of hangers:
 - 1. Reinforce nearest related hangers to span extra distance, or:
 - 2. Suspend steel channel horizontally beneath duct or equipment; place hanger at regular spacing.
- H. Install main tees at maximum 48 inches on center.
- I. Install cross tees to form as shown on plans. Lock cross tees to main tees.
- J. Support ends of tees on flange of perimeter molding.
- K. Place acoustical panels with edges resting flat on suspension grid.
- L. Cutting Acoustic Units:
 - 1. Cut to fit irregular grid and perimeter edge trim and around penetrations.
 - 2. Locate cuts to be concealed.
 - 3. Cut and field paint exposed edges of reveal edge units to match factory edge.
- M. Place hold down clips over cross tees at mid point of each module.
- N. Place impact clips over cross tees at mid point of each module.
- O. Lighting Fixture Protection: Form trapezoidal, five sided box of acoustical panels cut to size over each light fixture; conform to UL requirements.
- P. Installation Tolerances: Ceilings level to 1/8 inch in 12 feet measured in any direction.

3.2 ADJUSTING

- A. Touch up minor scratches and abrasions to match factory finish.

END OF SECTION

SECTION 09 65 13

RESILIENT BASE AND ACCESSORIES

PART 37 GENERAL

37.1 SUMMARY

- A. Provide resilient wall base and accessories.

37.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish. Include range samples if variation of finish is anticipated.
- C. Submit extra stock equal to 2 percent of total used.

37.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Performance: Fire performance meeting requirements of building code and local authorities.

PART 38 PRODUCTS

38.1 MATERIALS – SEE ROOM FINISH SCHEDULE ON DRAWINGS

- A. Resilient Wall Base:
 - 1. Manufacturers: AFCO Rubber Corp., Johnsonite, Roppe, VPI Floor Products, or approved equal.
 - 2. Standard: ASTM F 1861.
 - 3. Type: TS (rubber, vulcanized thermoset).
 - 4. Group: I (solid, homogeneous)
 - 5. Style: Straight.
 - 6. Thickness: 0.125 inch
 - 7. Height: 4 inches.
 - 8. Auxiliary Materials:
 - a. Low VOC adhesives (less than 50 g/L).

PART 39 EXECUTION

39.1 INSTALLATION

- A. Comply with manufacturer's instructions and recommendations. Install in proper relation to adjacent work.
- B. Install base and accessories to minimize joints. Install base with joints as far from corners as practical.
- C. Clean, polish, and protect.

END OF SECTION

SECTION 09 68 13

TILE CARPETING

PART 40 GENERAL

40.1 SUMMARY

- A. Provide carpet tile and floor preparation.

40.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish. Include range samples if variation of finish is anticipated.
- C. Extra Stock: Submit extra stock equal to 5 percent of total used.

40.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Performance: Fire performance meeting requirements of building code and local authorities.

PART 41 PRODUCTS

41.1 MATERIALS – SEE ROOM FINISH SCHEDULE ON DRAWINGS

- A. Carpet Tile:
 - 1. Manufacturers: Interface per Architect selection
 - 2. Installation Method: Free-lay, tactile adhesion system
 - 3. Auxiliary Materials:
 - a. Edge guards.
 - b. Leveling compound.

PART 42 EXECUTION

42.1 INSTALLATION

- A. Comply with recommendations of Carpet and Rug Institute (CRI 104) Standard for Installation Specification of Commercial Carpet.
- B. Prepare surfaces and install materials in accordance with manufacturer's instructions and approved submittals. Clean, patch, and level substrate. Install materials in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections.
- C. Install edge guards and reducer strips as required; clean and protect.

END OF SECTION

SECTION 09 91 00

PAINTING

PART 43 GENERAL

43.1 SUMMARY

- A. Provide painting and surface preparation.

43.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish. Include range samples if variation of finish is anticipated.
 - 1. Include manufacturer's full range of color and finish options if additional selection is required.
- C. Extra Stock: Submit 1 unopened gallon of each paint and color used in the project.

43.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Regulations: Compliance with VOC and environmental regulations.

PART 44 PRODUCTS

44.1 MATERIALS

- A. Painting:
 - 1. Manufacturer: basis design (color selection): Sherwin-Williams
 - 2. Other Manufacturers allowed per color match: Benjamin Moore; Duron Paints & Wallcoverings; ICI Devco Coatings; Kelly-Moore Paints; Miller Paint Co. / Devine Color; PPG Architectural Finishes, Inc. - Pittsburgh Paints; Pratt & Lambert Paints; Rodda Paint; Sherwin-Williams; United Gilsonite Laboratories; or approved equal.
 - 3. Application: Interior unfinished surfaces.
 - 4. Application: Exposed mechanical and electrical items.
 - 5. Application: Repainting of existing surfaces.
 - 6. Primary Coating Type: Latex based paints.
 - 7. Primary Paint Systems: Primer plus two finish coats.

PART 45 EXECUTION

45.1 INSTALLATION

- A. Inspect surfaces, report unsatisfactory conditions in writing; beginning work means acceptance of substrate.
- B. Comply with manufacturer's instructions and recommendations for preparation, priming and coating work. Coordinate with work of other sections.
- C. At existing areas to be repainted, remove blistered or peeling paint to sound substrates. Remove chalk deposits and mildew and wash all surfaces with mild detergent. Perform related minor

preparation including caulk and glazing compounds. Spot prime bare areas before priming and painting as specified.

- D. Match approved mock-ups for color, texture, and pattern. Re-coat or remove and replace work which does not match or shows loss of adhesion. Clean up, touch up and protect work.

45.2 PAINT SCHEDULE – SEE ROOM FINISH SCHEDULE ON DRAWINGS

- A. Gypsum Drywall Walls & existing walls & misc trim items, including plaster:

- 1. Gloss:
 - a. Eggshell
- 2. System:
 - a. 1 coat latex primer.
 - b. 2 coats latex finish.

- B. Gypsum Drywall Ceilings & existing ceilings including plaster:

- 1. Gloss:
 - a. Flat.
- 2. System:
 - a. 1 coat latex primer.
 - b. 2 coats latex finish.

- C. Interior Wood for Painted Finish:

- 1. Gloss:
 - a. Semi.
- 2. System:
 - a. 2 coats latex enamel.

- D. Interior Wood for Stain Finish:

- 1. Gloss:
 - a. Satin.
- 2. System:
 - a. 1 coat water base wood stain.
 - b. 1 coat water base sealer.

END OF SECTION

SECTION 10 44 13

FIRE EXTINGUISHERS AND CABINETS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Portable fire extinguishers.

B. Related Sections:

1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM) E814 - Standard Test Method for Fire Tests of Through-Penetration Firestops.

- B. National Fire Protection Association (NFPA) 10 - Portable Fire Extinguishers.

C. Underwriters Laboratories (UL):

1. 154 - Carbon Dioxide Fire Extinguishers.
2. 299 - Dry Chemical Fire Extinguishers.
3. 626 - 2-1/2 Gallon Stored Pressure, Water Type Fire Extinguishers.
4. 711 - Rating and Fire Testing of Fire Extinguishers.
5. 2129 - Halocarbon Clean Agent Fire Extinguishers.

1.3 SUBMITTALS

A. Submittals for Review:

1. Shop Drawings: Indicate cabinet & bracket locations and mounting heights.
2. Product Data: Include data on extinguishers and cabinets, brackets, cabinet dimensions, operational features, materials, finishes, and anchorage.

B. Closeout Submittals:

1. Maintenance Data: Include test, refill, or recharge schedules and re-certification requirements.

1.4 QUALITY ASSURANCE

- A. Provide fire extinguishers complying with UL 711 and applicable code

- B. Cabinets in Fire Rated Partitions: Tested in accordance with ASTM E814 with fire resistance rating equivalent to adjacent construction.

- C. Conform to applicable accessibility code for locating extinguishers.

1.5 PROJECT CONDITIONS

- A. Do not install extinguishers when ambient temperature may cause freezing of extinguisher ingredients.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Provide products by one of the following manufacturers:

1. Ansul Incorporated. (www.ansul.com)
2. JL Industries. (www.jlindustries.com)
3. Larsen's Mfg. Co. (www.larsensmfg.com)
4. Potter Roemer. (www.potterroemer.com)

B. Substitutions: Under provisions of Division 01.

2.2 COMPONENTS

A. Extinguishers:

1. Multi-purpose dry chemical type, UL 299, cast steel, Class ABC 10 pound nominal capacity.

B. Cabinets:

1. Formed aluminum sheet.
2. Configuration: Recessed & Surface mounted, sized to accommodate extinguishers.
3. Trim: Flat trim.
4. Door:
 - a. Vertical glass style, equipped with pull handle and latch.
 - b. Hinge doors for 180 degree opening with continuous piano hinge.
 - c. Glazing: Clear tempered glass.
 - d. Graphics: Letter FIRE EXTINGUISHER vertically on door in black die-cut vinyl pressure sensitive letters.

C. Brackets: Formed steel, sized to accommodate extinguisher.

2.3 ACCESSORIES

A. Mounting Hardware: Type best suited to application.

2.4 FINISHES

A. Brackets: Baked enamel.

B. Extinguishers: Baked enamel, red color.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install cabinets and brackets in accordance with manufacturer's instructions.

B. Set plumb, level, and rigid.

C. Place an extinguisher in each cabinet & on each bracket.

END OF SECTION

SECTION 22 00 00

PLUMBING

PART 46 GENERAL

46.1 SUMMARY

- A. Provide plumbing systems including supply, waste, and vent systems.

46.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.
 - 1. Shop drawings shall be prepared and stamped by a qualified engineer licensed in the jurisdiction of the project.

46.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Coordinate location of systems to avoid interference with location of structure and other building systems. Notify Owner prior to construction of conflicts which cannot be resolved.

PART 47 EXECUTION

47.1 INSTALLATION

- A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials in proper relation with adjacent construction and with uniform appearance for exposed work. Coordinate with work of other sections. Comply with applicable regulations and code requirements. Provide proper clearances for servicing.
- B. Support piping properly. Pitch to drain points. Install with pipe expansion loops, mechanical expansion joints, and anchors.
- C. Install shutoff valves on each piece of equipment on both hot and cold water supply.
- D. Clearly label and tag all valves and components.
- E. Sterilize water distribution system. Flush and test all systems for proper operation. Adjust system to prevent water hammer.
- F. Test and balance all systems for proper operation.
- G. Restore damaged finishes. Clean and protect work from damage.
- H. Instruct Owner's personnel in proper operation of systems.

END OF SECTION

SECTION 23 00 00

HEATING, VENTILATING AND AIR CONDITIONING

PART 48 GENERAL

48.1 SUMMARY

- A. Provide adjustments and ductwork alterations to existing HVAC systems.

48.2 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Coordinate location of systems to avoid interference with location of structure and other building systems. Notify Owner prior to construction of conflicts which cannot be resolved.

PART 49 EXECUTION

49.1 INSTALLATION

- A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials in proper relation with adjacent construction and with uniform appearance for exposed work. Coordinate with work of other sections. Comply with applicable regulations and code requirements. Provide proper clearances for servicing.
- B. Install ductwork in accordance with SMACNA recommendations. Seal duct seams with sealer. Provide splitters and balancing dampers. Provide fire dampers and automatic smoke and fire dampers where required. Provide flexible connectors and inlet and discharge connections. Clean before testing and balancing.
- C. Test and balance all systems for proper operation.
- D. Restore damaged finishes. Clean and protect work from damage.

END OF SECTION

SECTION 26 00 00
ELECTRICAL & DATA

PART 50 GENERAL

50.1 SUMMARY

- A. Provide electrical systems.

50.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.
- C. Operation and Maintenance Data: Submit manufacturer's operation and maintenance data, including operating instructions, list of spare parts and maintenance schedule.

50.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Coordinate location of systems to avoid interference with location of structure and other building systems. Notify Owner prior to construction of conflicts which cannot be resolved.
- C. Compliance: National Electrical Code.

PART 51 EXECUTION

51.1 INSTALLATION

- A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials in proper relation with adjacent construction and with uniform appearance for exposed work. Coordinate with work of other sections. Comply with applicable regulations and code requirements. Provide proper clearances for servicing.
- B. Comply with National Electrical Code and building code requirements. Maintain continuity of circuits required to supply new or existing equipment in service.
- C. Conceal conduit to the greatest extent practical.
- D. Install switches, thermostats and similar items at uniform height above finished floor. Locate switches within rooms at strike side of door unless noted otherwise.
- E. Gang-mount multiple control and outlet locations. Mount multiple types of controls and outlets as close together as practical and in-line with each other. Avoid back-to-back box locations.
- F. Clearly label and tag all components.
- G. Test all systems for proper operation.
- H. Restore damaged finishes. Clean and protect work from damage.
- I. Instruct Owner's personnel in proper operation of systems.

END OF SECTION