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# SPECIFICATIONS MANUAL

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## JUSTICE CENTER OFFICE RENOVATIONS

For



APPLETON, WISCONSIN

MAY 16, 2025

McM. No. O0002-06-25-00110

KJC:lsm

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**SPECIFICATIONS MANUAL**

**JUSTICE CENTER OFFICE RENOVATIONS**

**For**

**OUTAGAMIE COUNTY**  
**APPLETON, WISCONSIN**

**ARCHITECT**

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***00002-06-25-00110.00***

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## SECTION 01 10 00.00

### SUMMARY

#### PART 1 - GENERAL

##### 1.1 SUMMARY

###### A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Permits.
7. Warranties.

###### B. Related Requirements:

1. Section 01 50 00.00 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

##### 1.2 PROJECT INFORMATION

###### A. See Division 0.

##### 1.3 WORK COVERED BY CONTRACT DOCUMENTS

###### A. See Division 0.

###### B. The Work of Project is defined by the Contract Documents and consists of the following:

1. This project consists of the conversion of an open area at the Outagamie County Jail into three offices on the Third Floor of the Justice Center. This will be a Level 1 Alteration. Approximately 617 square feet will be remodeled.

###### C. Type of Contract:

1. Project will be constructed under a single prime contract.

#### 1.4 ACCESS TO SITE

- A. General: Contractor shall have full use of Project building interior site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. General: Contractor shall have limited use of Project exterior site for construction operations as indicated by requirements of this Section.
- C. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  - 1. Driveways, Walkways and Entrances: Keep driveways loading areas and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- D. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations. Insert additional paragraphs specifying specific limitations on use of existing building. See Evaluations for model text.

#### 1.5 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: During the remodel, the Owner will occupy the site and existing, adjacent spaces during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
  - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
  - 2. Notify Owner not less than 5 working days in advance of activities that will affect Owner's operations.

#### 1.6 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.

2. Trailer parking, vehicular parking, and areas for staging will be severely limited. All parking, staging, loading, etc. must be approved by the Owner.
- B. All on-site employees shall be subject to a background check prior to starting work. The background check will be performed by the County at no expense to the Contractor.
- C. On-Site Work Hours: Work could be performed during the County's normal business hours for this location (Monday – Friday 7:00 a.m. to 12:00 a.m. midnight) with the exception of tasks that produce excessive noise. Tasks that cause excessive noise or vibrations to be carried to the second level courtrooms shall be done outside of the courts operating schedule. These types of tasks can include items such as hammer drilling, hammering or banging on the concrete structure and using other types of tools that cause sound vibrations throughout the building. Typical court schedules run from 8:00 a.m. to 5:00 p.m., however these schedules are sometimes extended into the evening to accommodate special trials.
1. Notify Owner not less than 5 working days in advance of proposed disruptive operations.
  2. Obtain Owner's written permission before proceeding with disruptive operations.
- D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
1. Notify Owner not less than 5 working days in advance of proposed utility interruptions.
  2. Obtain Owner's written permission before proceeding with utility interruptions.
- E. Nonsmoking Building: Smoking is not permitted within the building or on the site except in designated exterior areas.
- F. Contractors shall maintain an organized work area and clean up any items related to the project at the end of each workday. Outagamie County will provide some secure storage space for overnight storage of tools.

## 1.7 PERMITS

- A. Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded. Any certificate of inspection shall be delivered to the Owner promptly on receipt.
- B. The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

- C. If the Contractor performs Work that is contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume responsibility for correction of such Work and shall bear the costs, losses and expenses attributable to correction.

## 1.8 WARRANTIES

- A. The Contractor shall warrant to the Owner an overall minimum one-year materials and labor warranty, unless a specialized warranty is indicated in the Technical Specifications.
- B. The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements will be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alternations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, or the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. All warranties shall begin at the time of Substantial Completion.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

## **SECTION 01 23 00**

### **ALTERNATES**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Description of Alternates.
- B. Procedures for pricing Alternates.

##### **1.2 RELATED REQUIREMENTS**

- A. Document 00 43 23 - Alternates Form: List of Alternates as Supplement to Bid Form.

##### **1.3 ACCEPTANCE OF ALTERNATES**

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

##### **1.4 SCHEDULE OF ALTERNATES**

- A. Alternate No. 1 : Delete enclosing and finishing area shown on the drawings.

#### **PART 2 PRODUCTS - NOT USED**

#### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**

## SECTION 01 30 00

### ADMINISTRATIVE REQUIREMENTS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. General administrative requirements.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Submittals for review and information.
- E. Number of copies of submittals.
- F. Requests for Information (RFI) procedures.
- G. Submittal procedures.

##### 1.2 GENERAL ADMINISTRATIVE REQUIREMENTS

- A. Comply with requirements of Section 01 70 00 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
- B. Make the following types of submittals to Architect:
  - 1. Requests for Information (RFI).
  - 2. Requests for substitution.
  - 3. Shop drawings, product data, and samples.
  - 4. Applications for payment and change order requests.
  - 5. Progress schedules.
  - 6. Correction Punch List and Final Correction Punch List for Substantial Completion.

##### 1.3 PROJECT COORDINATOR

- A. Project Coordinator: General Contractor.
- B. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices, for access, traffic, and parking facilities.
- C. During construction, coordinate use of site and facilities through the Project Coordinator.

- D. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- E. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities. Responsibility for providing temporary utilities and construction facilities is identified in Section 01 10 00 - Summary.

## PART 2 PRODUCTS - NOT USED

## PART 3 EXECUTION

### 3.1 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the work at maximum bi-monthly intervals.
- B. Project Coordinator will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Agenda:
  - 1. Review of work progress.
  - 2. Field observations, problems, and decisions.
  - 3. Identification of problems that impede, or will impede, planned progress.
  - 4. Review of submittals schedule and status of submittals.
  - 5. Review of RFIs log and status of responses.
  - 6. Maintenance of progress schedule.
  - 7. Planned progress during succeeding work period.
- D. Record minutes and distribute copies within two days after meeting to participants, with copies to Architect, Owner, participants, and those affected by decisions made.

### 3.2 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.

### 3.3 REQUESTS FOR INFORMATION (RFI)

- A. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.

- B. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
  - 1. Prepare a separate RFI for each specific item.
- C. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.

### 3.4 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
  - 1. Product data.
  - 2. Shop drawings.
  - 3. Samples for selection.
  - 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below.

### 3.5 SUBMITTAL REVIEW

- A. Submittals for Review: Architect will review each submittal and take appropriate action.
- B. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.

END OF SECTION

## SECTION 01 35 16.00

### ALTERATION PROJECT PROCEDURES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Section includes special procedures for alteration work.

##### 1.2 DEFINITIONS

- A. Alteration Work: This term includes remodeling, renovation, repair, and maintenance work performed within existing spaces or on existing surfaces as part of the Project.
- B. Consolidate: To strengthen loose or deteriorated materials in place.
- C. Design Reference Sample: A sample that represents the Architect's prebid selection of work to be matched; it may be existing work or work specially produced for the Project.
- D. Replace term in "Dismantle" Paragraph below with another term such as "deconstruction" or "disassembly" to suit office practice or Project. Coordinate definition of "dismantle" with Section 024119 "Selective Demolition."
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- F. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish as approved by Architect.
- G. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- H. Repair: To correct damage and defects, retaining existing materials, features, and finishes. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- I. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- J. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- K. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.
- L. Retain: To keep existing items that are not to be removed or dismantled.
- M. Strip: To remove existing finish down to base material unless otherwise indicated.

### 1.3 PROJECT MEETINGS FOR ALTERATION WORK

- A. Preliminary Conference for Alteration Work: Before starting alteration work, conduct conference at Project site.
  - 1. Attendees: In addition to representatives of Owner, Architect, and Contractor, testing service representative, and chemical-cleaner manufacturer(s) shall be represented at the meeting.
  - 2. Agenda: Discuss items of significance that could affect progress of alteration work.
  - 3. Reporting: Record conference results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from conference.
- B. Coordination Meetings: Conduct coordination meetings at regular intervals.

### 1.4 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain Owner's property.

### 1.5 QUALITY ASSURANCE

- A. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.
- B. Alteration Work Program: Prepare a written plan for alteration work for whole Project, including each phase or process and protection of surrounding materials during operations. Show compliance with indicated methods and procedures specified in this and other Sections. Coordinate this whole-Project alteration work program with specific requirements of programs required in other alteration work Sections.
  - 1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
  - 2. Debris Hauling: Include plans clearly marked to show debris hauling routes, turning radii, and locations and details of temporary protective barriers.
- C. Fire-Prevention Plan: Prepare a written plan for preventing fires during the Work, including placement of fire extinguishers, fire blankets, rag buckets, and other fire-control devices during each phase or process. Coordinate plan with Owner's fire-protection equipment and requirements. Include fire-watch personnel's training, duties, and authority to enforce fire safety.

## 1.6 STORAGE AND HANDLING OF SALVAGED MATERIALS

### A. Salvaged Materials:

1. Clean loose dirt and debris from salvaged items unless more extensive cleaning is indicated.
2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area designated by Owner.
5. Protect items from damage during transport and storage.

### B. Salvaged Materials for Reinstallation:

1. Repair and clean items for reuse as indicated.
2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make items functional for use indicated.

### C. Existing Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Architect, items may be dismantled and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after alteration and other construction work in the vicinity is complete.

### D. Storage: Catalog and store items within a weathertight enclosure where they are protected from moisture, weather, condensation, and freezing temperatures.

1. Identify each item for reinstallation with a nonpermanent mark to document its original location. Indicate original locations on plans, elevations, sections, or photographs by annotating the identifying marks.
2. Secure stored materials to protect from theft.
3. Control humidity so that it does not exceed 85 percent. Maintain temperatures 5 deg F (3 deg C) or more above the dew point.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work.
  - 1. Use only proven protection methods, appropriate to each area and surface being protected.
  - 2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where alteration work is being performed.
  - 3. Erect temporary barriers to form and maintain fire-egress routes.
  - 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during alteration work.
  - 5. Contain dust and debris generated by alteration work, and prevent it from reaching the public or adjacent surfaces.
  - 6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
  - 7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
  - 8. Provide supplemental sound-control treatment to isolate demolition work from other areas of the building.
- B. Temporary Protection of Materials to Remain:
  - 1. Protect existing materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
  - 2. Do not attach temporary protection to existing surfaces except as indicated as part of the alteration work program.
- C. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.
- D. Utility and Communications Services:
  - 1. Notify Owner, Architect, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations.

2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for alteration work.
3. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.

### 3.2 PROTECTION FROM FIRE

#### A. General: Follow fire-prevention plan and the following:

1. Comply with NFPA 241 requirements unless otherwise indicated.
2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.
  - a. If combustible material cannot be removed, provide fire blankets to cover such materials.

#### B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or combustible materials, including welding, torch-cutting, soldering, brazing, removing paint with heat, or other operations where open flames or implements using high heat or combustible solvents and chemicals are anticipated:

1. Obtain Owner's approval for operations involving use of open-flame or welding or other high-heat equipment. Notify Owner at least 72 hours before each occurrence, indicating location of such work.
2. As far as practicable, restrict heat-generating equipment to shop areas or outside the building.
3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
4. Use fireproof baffles to prevent flames, sparks, hot gases, or other high-temperature material from reaching surrounding combustible material.
5. Prevent the spread of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
6. Fire Watch: Before working with heat-generating equipment or combustible materials, station personnel to serve as a fire watch at each location where such work is performed. Fire-watch personnel shall have the authority to enforce fire safety. Station fire watch according to NFPA 51B, NFPA 241, and as follows:
  - a. Train each fire watch in the proper operation of fire-control equipment and alarms.

- b. Prohibit fire-watch personnel from other work that would be a distraction from fire-watch duties.
  - c. Cease work with heat-generating equipment whenever fire-watch personnel are not present.
  - d. Have fire-watch personnel perform final fire-safety inspection each day beginning no sooner than 30 minutes after conclusion of work in each area to detect hidden or smoldering fires and to ensure that proper fire prevention is maintained.
  - e. Maintain fire-watch personnel at each area of Project site until 60 minutes after conclusion of daily work.
- C. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire-watch personnel are trained in fire-extinguisher and blanket use.
- D. Sprinklers: Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to sprinklers, shield them temporarily with guards.
- 1. Remove temporary guards at the end of work shifts, whenever operations are paused, and when nearby work is complete.

### 3.3 PROTECTION DURING APPLICATION OF CHEMICALS

- A. Cover adjacent surfaces with protective materials that are proven to resist chemicals selected for Project unless chemicals being used will not damage adjacent surfaces as indicated in alteration work program. Use covering materials and masking agents that are waterproof and UV resistant and that will not stain or leave residue on surfaces to which they are applied. Apply protective materials according to manufacturer's written instructions. Do not apply liquid masking agents or adhesives to painted or porous surfaces. When no longer needed, promptly remove protective materials.
- B. Neutralize alkaline and acid wastes and legally dispose of off Owner's property.
- C. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

### 3.4 GENERAL ALTERATION WORK

- A. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation photographs or video recordings.
- B. Notify Architect of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.

1. Do not proceed with the work in question until directed by Architect.

END OF SECTION

## SECTION 01 70 00

### EXECUTION AND CLOSEOUT REQUIREMENTS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition.
- C. Cutting and patching.
- D. Cleaning and protection.
- E. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.

##### 1.2 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
  - 1. Structural integrity of any element of Project.
  - 2. Integrity of weather exposed or moisture resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.
  - 4. Visual qualities of sight exposed elements.
  - 5. Work of Owner or separate Contractor.

##### 1.3 PROJECT CONDITIONS

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
  - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.

## PART 2 PRODUCTS

### 2.1 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Examine and verify specific conditions described in individual specification sections.
- C. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- D. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- E. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

### 3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

### 3.3 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

### 3.4 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
  - 1. Verify that construction and utility arrangements are as indicated.
  - 2. Report discrepancies to Architect before disturbing existing installation.
  - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
  - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 50 00 in locations indicated on drawings.
- C. Remove existing work as indicated and as required to accomplish new work.
  - 1. Remove items indicated on drawings.
  - 2. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
  - 3. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- D. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
  - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
  - 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
  - 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
    - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
    - b. Provide temporary connections as required to maintain existing systems in service.
- E. Protect existing work to remain.

1. Prevent movement of structure; provide shoring and bracing if necessary.
  2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  3. Repair adjacent construction and finishes damaged during removal work.
- F. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
- G. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- H. Refinish existing surfaces as indicated:
1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
  2. If mechanical or electrical work is exposed accidentally during the work, recover and refinish to match.
- I. Clean existing systems and equipment.
- J. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- K. Do not begin new construction in alterations areas before demolition is complete.
- L. Comply with all other applicable requirements of this section.

### 3.5 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
1. Complete the work.
  2. Fit products together to integrate with other work.
  3. Provide openings for penetration of mechanical, electrical, and other services.
  4. Match work that has been cut to adjacent work.
  5. Repair areas adjacent to cuts to required condition.
  6. Repair new work damaged by subsequent work.

7. Remove and replace defective and non-complying work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material , to full thickness of the penetrated element.
- J. Patching:
  1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  2. Match color, texture, and appearance.
  3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

### 3.6 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

### 3.7 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.

- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

### 3.8 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

### 3.9 FINAL CLEANING

- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean filters of operating equipment.
- F. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

### 3.10 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.

- E. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
- F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- G. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- H. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

END OF SECTION

**DIVISION 02 – EXISTING CONDITIONS**

SECTION 02 41 00.00

DEMOLITION

## **SECTION 02 41 00**

### **DEMOLITION**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Selective demolition of building elements for alteration purposes.

##### **1.2 REFERENCE STANDARDS**

- A. 29 CFR 1926 - Safety and Health Regulations for Construction; Current Edition.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

#### **PART 3 EXECUTION**

##### **2.1 GENERAL PROCEDURES AND PROJECT CONDITIONS**

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
  - 1. Obtain required permits.
  - 2. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
  - 3. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
  - 4. Conduct operations to minimize obstruction of public and private entrances and exits. Do not obstruct required exits at any time. Protect persons using entrances and exits from removal operations.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Minimize production of dust due to demolition operations.
- D. Hazardous Materials:
  - 1. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCBs, and mercury.

##### **2.2 SELECTIVE DEMOLITION FOR ALTERATIONS**

- A. Existing construction and utilities indicated on drawings are based on casual field observation and existing record documents only.

1. Verify construction and utility arrangements are as indicated.
  2. Report discrepancies to Architect before disturbing existing installation.
  3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from areas that remain occupied.
- C. Remove existing work as indicated and required to accomplish new work.
- D. Services (Including but not limited to HVAC, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
1. Maintain existing active systems to remain in operation, and maintain access to equipment and operational components.
  2. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings. Remove back to source of supply where possible, otherwise cap stub and tag with identification.
- E. Protect existing work to remain.
1. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
  2. Repair adjacent construction and finishes damaged during removal work.
  3. Patch to match new work.

## 2.3 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.

END OF SECTION

**DIVISION 08 – OPENINGS**

SECTION 08 11 13.00	HOLLOW METAL DOORS AND FRAMES
SECTION 08 33 23.00	OVERHEAD COILING DOORS
SECTION 08 33 44.00	OVERHEAD COILING FIRE CURTAINS
SECTION 08 71 00.00	DOOR HARDWARE

## SECTION 08 11 13

### HOLLOW METAL DOORS AND FRAMES

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Non-fire-rated hollow metal doors and frames.

##### 1.2 RELATED REQUIREMENTS

- A. Section 08 71 00 - Door Hardware.
- B. Section 09 91 23 - Interior Painting: Field painting.

##### 1.3 ABBREVIATIONS AND ACRONYMS

- A. ANSI: American National Standards Institute.
- B. HMMA: Hollow Metal Manufacturers Association.
- C. NAAMM: National Association of Architectural Metal Manufacturers.
- D. SDI: Steel Door Institute.

##### 1.4 REFERENCE STANDARDS

- A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
- B. ANSI/SDI A250.3 - Test Procedure and Acceptance Criteria for Factory Applied Finish Coatings for Steel Doors and Frames; 2019.
- C. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors; 2022.
- D. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames; 2020.
- E. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100); 2023.
- F. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 2020.
- G. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- H. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable; 2021a.

- I. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2023.
- J. BHMA A156.115 - Hardware Preparation in Steel Doors and Frames; 2016.
- K. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.
- L. ITS (DIR) - Directory of Listed Products; Current Edition.

## 1.5 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes.
- C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of experience.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Hollow Metal Doors and Frames:
  - 1. Ceco Door, an Assa Abloy Group company: [www.assaabloydss.com/#sle](http://www.assaabloydss.com/#sle).
  - 2. Curries, an Assa Abloy Group company: [www.assaabloydss.com/#sle](http://www.assaabloydss.com/#sle).
  - 3. Republic Doors, an Allegion brand: [www.republicdoor.com/#sle](http://www.republicdoor.com/#sle).
  - 4. Steelcraft, an Allegion brand: [www.allegion.com/#sle](http://www.allegion.com/#sle).
  - 5. LaForce LLC..

### 2.2 PERFORMANCE REQUIREMENTS

- A. Requirements for Hollow Metal Doors and Frames:
  - 1. Steel Sheet: Comply with one or more of the following requirements; galvanized steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.

2. Accessibility: Comply with ICC A117.1 and ADA Standards.
3. Door Edge Profile: Hinged edge square, and lock edge beveled.
4. Glazed Lights: Non-removable stops on non-secure side; sizes and configurations as indicated on drawings. Style: Flush.
5. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
6. Zinc Coating for Typical Interior and/or Exterior Locations: Provide metal components zinc-coated (galvanized) and/or zinc-iron alloy-coated (galvannealed) by the hot-dip process in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness, unless noted otherwise for specific hollow metal doors and frames.
  - a. Based on NAAMM HMMA Custom Guidelines: Provide at least A25/ZF75 (galvannealed) for interior applications, and at least A60/ZF180 (galvannealed) or G60/Z180 (galvanized) for corrosive locations.

### 2.3 HOLLOW METAL DOORS

- A. Door Finish: Factory primed and field finished.
- B. Interior Doors, Non-Fire-Rated:
  1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
    - a. Level 2 - Heavy-duty.
    - b. Physical Performance Level B, 500,000 cycles; in accordance with ANSI/SDI A250.4.
    - c. Model 1 - Full Flush.
    - d. Door Face Metal Thickness: 18 gage, 0.042 inch, minimum.
    - e. Zinc Coating: A 40 /ZF 120 galvannealed coating; ASTM A653/A653M.
  2. Door Core Material: Manufacturers standard core material/construction and in compliance with requirements.
  3. Door Thickness: 1-3/4 inches, nominal.
  4. Door Finish: Factory primed and field finished.

## 2.4 HOLLOW METAL FRAMES

- A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
- B. Frame Finish: Factory primed and field finished.
- C. Interior Door Frames, Non-Fire Rated: Full profile/continuously welded type.
  - 1. Frame Metal Thickness: 16 gage, 0.053 inch, minimum.
  - 2. Frame Finish: Factory primed and field finished.

## 2.5 FINISHES

- A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

## 2.6 ACCESSORIES

- A. Mechanical Fasteners for Concealed Metal-to-Metal Connections: Self-drilling, self-tapping, steel with electroplated zinc finish.
- B. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.
- C. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
- B. Install frames and doors with maximum 3/4-inch between door bottom and floor. Limit to 3/8-inch if threshold is used.
- C. Coordinate frame anchor placement with wall construction.
- D. Install door hardware as specified in Section 08 71 00.
  - 1. Comply with recommended practice for hardware placement of doors and frames in accordance with ANSI/SDI A250.6 or NAAMM HMMA 861.
- E. Comply with glazing installation requirements of Section 08 80 00.

### 3.2 TOLERANCES

- A. Clearances Between Door and Frame: Comply with related requirements of specified frame standards or custom guidelines indicated in accordance with SDI 117 or NAAMM HMMA 861.
- B. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

### 3.3 ADJUSTING

- A. Adjust for smooth and balanced door movement.

### 3.4 SCHEDULE

- A. Refer to Door and Frame Schedule on the drawings.

END OF SECTION

## SECTION 08 33 23

### OVERHEAD COILING DOORS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Exterior coiling doors.
- B. Interior non-fire-rated coiling doors.
- C. Fire-rated coiling doors.
- D. Electric operators and control stations.
- E. Overhead coiling doors, operating hardware, fire-rated, non-fire-rated, and exterior; manually or electrically operated.
- F. Wiring from electric circuit disconnect to operators and control stations.

##### 1.2 RELATED REQUIREMENTS

- A. Section 05 50 00: Support framing.
- B. Section 09 91 13 - Exterior Painting: Field paint finish.
- C. Section 09 91 23 - Interior Painting: Field paint finish.
- D. Division 26: Conduit from electric circuit to operator and from operator to control station.
- E. Division 26: Conduit from fire alarm system.
- F. Division 26: Power to disconnect.
- G. Division 26: Fire alarm interconnection.

##### 1.3 REFERENCE STANDARDS

- A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2019.
- B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- C. ITS (DIR) - Directory of Listed Products; Current Edition.
- D. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2020.
- E. NEMA ICS 2 - Industrial Control and Systems Controllers, Contactors and Overload Relays Rated 600 Volts; 2008 (Reaffirmed 2020).

- F. NEMA MG 1 - Motors and Generators; 2021.
- G. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- H. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.
- I. UL (DIR) - Online Certifications Directory; Current Edition.
- J. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

#### 1.4 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide product data.
- C. Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.
- D. Maintenance Data: Indicate lubrication requirements and frequency and periodic adjustments required.

#### 1.5 QUALITY ASSURANCE

- A. Products Requiring Electrical Connection: Listed and classified by ITS (DIR), UL (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for purpose specified and indicated.

#### 1.6 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer Warranty: Provide 2-year manufacturer warranty for roller shaft counterbalance assembly. Complete forms in Owner's name and register with manufacturer.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Overhead Coiling Metal Doors:
  - 1. C.H.I. Overhead Doors: [www.chiohd.com/#sle](http://www.chiohd.com/#sle).
  - 2. Clopay Building Products: [www.clopaydoor.com/#sle](http://www.clopaydoor.com/#sle).
  - 3. Cornell Iron Works, Inc: [www.cornelliron.com/#sle](http://www.cornelliron.com/#sle).
  - 4. Raynor Garage Doors: [www.raynor.com/#sle](http://www.raynor.com/#sle).

5. The Cookson Company: [www.cooksondoor.com/#sle](http://www.cooksondoor.com/#sle).
6. Wayne-Dalton, a Division of Overhead Door Corporation: [www.wayne-dalton.com/#sle](http://www.wayne-dalton.com/#sle).
7. McKeon Door Company; [www.mckeondoor.com](http://www.mckeondoor.com)

## 2.2 COILING DOORS

- A. Exterior Coiling Doors: Steel slat curtain.
  1. Capable of withstanding positive and negative wind loads of 23 psf, without undue deflection or damage to components.
  2. Sandwich Slats: Manufacturer's standard, with core of foamed-in-place polyurethane insulation; minimum R-value of 4.88.
  3. Nominal Slat Size: 2 inches wide by required length.
  4. Finish: Galvanized.
  5. Guide, Angles: Galvanized steel.
  6. Hood Enclosure: Manufacturer's standard; galvanized steel.
  7. Electric operation.
  8. Mounting: Surface mounted.
- B. Interior Non-Fire-Rated Coiling Doors: Steel slat curtain.
  1. Single Thickness Slats: Manufacturer's standard.
  2. Nominal Slat Size: 2 inches wide by required length.
  3. Finish: Primed.
  4. Guides, Angles: Primed steel.
  5. Hood Enclosure: Manufacturer's standard; primed steel.
  6. Electric operation.
  7. Mounting: Surface mounted.
- C. Fire-Rated Coiling Doors: Steel slat curtain; comply with NFPA 80.
  1. 1-1/2 hour fire rating.
  2. Provide products listed and labeled by ITS (DIR) or UL (DIR) as suitable for purpose specified and indicated on drawings.

3. Single Thickness Slats: Manufacturer's standard.
4. Nominal Slat Size: 2 inches wide by required length.
5. Finish: Primed.
6. Guides, Angles: Primed steel.
7. Fire Alarm Release Mechanism: Electric-motor operated from fire alarm system and local heat or smoke detectors.
  - a. Provide fail-secure (fail-closed) locking device upon power loss. Provide battery back up to release device.
  - b. Provide 10 second time delay for activation upon loss of power.
  - c. Provide resettable device without replacement of parts, except when release triggered by exposure to local heat.
8. Manual hand chain lift operation.
9. Mounting: Surface mounted.

## 2.3 MATERIALS AND COMPONENTS

- A. Metal Curtain Construction: Interlocking slats.
  1. Slat Ends: Each slat fitted with end locks to act as wearing surface in guides and to prevent lateral movement.
  2. Curtain Bottom for Slat Curtains: Fitted with angles to provide reinforcement and positive contact in closed position.
  3. Weatherstripping at exterior doors: Moisture and rot proof, resilient type, located at jamb edges, bottom of curtain, and where curtain enters hood enclosure of exterior doors.
  4. Steel Slats: Minimum thickness, ; ASTM A653/A653M galvanized steel sheet.
- B. Steel Slats: Minimum thickness, 22 gage, 0.0288 inch; ASTM A653/A653M galvanized steel sheet.
- C. Guide Construction: Continuous, of profile to retain door in place, mounting brackets of same metal.
- D. Guides - Angle: ASTM A36/A36M metal angles, size as required for wind loading.
  1. Prime painted.
- E. Hood Enclosure and Trim: Internally reinforced to maintain rigidity and shape.

1. Minimum thickness; 22 gage, 0.0299 inch.
  2. Prime painted.
- F. Lock Hardware:
1. For motor operated units, additional lock or latching mechanisms are not required.
  2. Latching Mechanism: Inside mounted, adjustable keeper, spring activated latch bar feature to keep in locked or retracted position.
  3. Slide Bolt: Provide one single-jamb side, extending into slot in guides.
  4. Manual Chain Lift: Provide padlockable chain keeper on guide.
- G. Roller Shaft Counterbalance: Steel pipe and helical steel spring system, capable of producing torque sufficient to ensure smooth operation of curtain from any position and capable of holding position at mid-travel; with adjustable spring tension; requiring 25 lb nominal force to operate.

## 2.4 ELECTRIC OPERATION

- A. Operator, Controls, Actuators, and Safeties: Comply with UL 325; provide products listed by ITS (DIR), UL (DIR), or testing agency acceptable to authorities having jurisdiction.
1. Provide interlock switches on motor operated units.
- B. Electric Operators:
1. Basis of Design: Cookson Door: Alarmguard Plus FSH-74EP.
  2. Mounting: Side mounted.
  3. Motor Enclosure:
    - a. Exterior Coiling Doors: NEMA MG 1, Type 4; open drip proof.
    - b. Interior Coiling Doors: NEMA MG 1, Type 1; open drip proof.
  4. Motor Rating: 3/4 HP; continuous duty.
  5. Motor Voltage: 120 volts, single phase, 60 Hz.
  6. Motor Controller: NEMA ICS 2, full voltage, reversing magnetic motor starter.
  7. Controller Enclosure: NEMA 250, Type 4.
  8. Opening Speed: 12 inches per second.

9. Brake: Manufacturer's standard type, activated by motor controller.
  10. Manual override in case of power failure. Provide Manual chain lift.
  11. See Division 26 for electrical connections.
- C. Control Station: Provide standard three button, 'Open-Close-Stop' momentary-contact control device for each operator complying with UL 325.
1. 24 volt circuit.
  2. Surface mounted, at interior door jamb.
  3. Entrapment Protection Devices: Provide sensing devices and safety mechanisms complying with UL 325.
    - a. Primary Device: Provide electric sensing edge, wireless sensing, NEMA 1 photo eye sensors, or NEMA 4X photo eye sensors as required with momentary-contact control device.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that adjacent construction is suitable for door installation.
- B. Verify that electrical services have been installed and are accessible.
- C. Verify that door opening is plumb, header is level, and dimensions are correct.
- D. Notify Architect of any unacceptable conditions or varying dimensions.
- E. Commencement of installation indicates acceptance of substrate and door opening conditions.

### 3.2 INSTALLATION

- A. Install fire-rated doors in accordance with NFPA 80. Fusible link only option is not allowed.
- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- E. Coordinate installation of electrical service with Division 26.

- F. Complete wiring from disconnect to unit components.
- G. Complete wiring from fire alarm system.
- H. Install enclosure and perimeter trim.

3.3 TOLERANCES

- A. Maintain dimensional tolerances and alignment with adjacent work.
- B. Maximum Variation from Plumb: 1/16 inch.
- C. Maximum Variation from Level: 1/16 inch.
- D. Longitudinal or Diagonal Warp: Plus or minus 1/8 inch per 10 feet straight edge.

3.4 CLEANING

- A. Clean installed components.
- B. Remove labels and visible markings.

END OF SECTION

## SECTION 08 33 44

### OVERHEAD COILING FIRE CURTAINS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Deployable fire-protective smoke and fire curtains.
- B. Operational controls.

##### 1.2 RELATED REQUIREMENTS

- A. Division 26: Conduit from electric circuit to operator and from operator to control station.
- B. Division 26: Power to disconnect.
- C. Division 28: Connections with fire alarm and smoke detectors.

##### 1.3 REFERENCE STANDARDS

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023a.
- B. ICC-ES AC77 - Acceptance Criteria for Smoke-Containment Systems Used with Fire-Resistance-Rated Elevator Hoistway Doors and Frames and at the Intersection of Elevator Lobby and Corridor; 2021.
- C. NFPA 3 - Standard For Commissioning Of Fire Protection And Life Safety Systems; 2021.
- D. NFPA 4 - Standard for Integrated Fire Protection and Life Safety System Testing; 2024.
- E. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- F. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.
- G. NFPA 105 - Standard for Smoke Door Assemblies and Other Opening Protectives; 2022.
- H. UL (DIR) - Online Certifications Directory; Current Edition.
- I. UL 10B - Standard for Fire Tests of Door Assemblies; Current Edition, Including All Revisions.
- J. UL 263 - Standard for Fire Tests of Building Construction and Materials; Current Edition, Including All Revisions.

- K. UL 864 - Control Units and Accessories for Fire Alarm Systems; Current Edition, Including All Revisions.
- L. UL 1784 - Standard for Air Leakage Tests of Door Assemblies; Current Edition, Including All Revisions.

#### 1.4 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturer's technical literature describing product components, connections, operation details, and required electrical equipment.
- C. Shop Drawings: Submit shop drawings that include elevations, sections, details and dimensions, materials, finishes, anchorage methods, and hardware locations for specified protective curtains.
- D. Certificate: Submit certificate that products of this section meet or exceed applicable requirements and regulations of authorities having jurisdiction.
- E. Manufacturer's Instructions: Indicate installation sequence, adjustment, and alignment procedures.
- F. Field Quality Control Submittals: Report of field testing for proper operation of system.
- G. Maintenance Contract: Indicate services, obligations, conditions, and terms of contract and renewal options.
- H. Operation and Maintenance Data: Submit complete set of manuals describing materials, devices, and procedures required in operation and maintenance of specified protective curtain systems.
- I. Warranty.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with at least five years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of type specified and with at least five years of documented experience and approved by manufacturer.
- C. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of type specified in this section.

#### 1.6 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. Provide one year manufacturer's warranty for curtain system and components.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Door Systems, Inc; DSI-HS10B Hose Stream Rated Smoke and Fire Curtain: [www.doorsysinc.com/#sle](http://www.doorsysinc.com/#sle)
- B. Smoke Guard Systems: Model 200 (with rails for SS frames) 400 (for steel frames)
- C. McKeon Door Company

### 2.2 MANUFACTURED UNITS

- A. Protective Curtain:
  - 1. Smoke and Draft Control: Self-closing or automatic-closing protective curtains. Compliant with NFPA 80 and NFPA 105.
    - a. Maximum Air Leakage: 3.0 cfm/sq ft of door opening at 0.10 inch of water gauge pressure, when tested in accordance with UL 1784 at both ambient and elevated temperatures.
  - 2. Compliant with UL 263.
  - 3. Fire Rating: As indicated on drawings.
  - 4. Testing Laboratory Label: Affix to assembly.
  - 5. Egress through Protective Curtain System:
    - a. Comply with ICC-ES AC77.
    - b. Provide pass-through slot by overlapping two curtain sections.
  - 6. Continuous curtain from edge to edge in closed position.

### 2.3 COMPONENTS

- A. Curtain Fabric: Woven, reinforced, coated; flame spread index less than 25 and smoke developed index less than 50 when tested in accordance with ASTM E84.
- B. Roller Assembly: Horizontal structural support with minimal deflection of protective curtain assembly and sized to incorporate motor drive unit.
- C. Hood Assembly: Totally enclosed curtain and roller assembly with UL (DIR) approved smoke seals and removable cover plates to allow access to curtain rollers.
  - 1. Enclosure: 18-gauge, 0.0478-inch thick galvanized steel with gray factory primer.
- D. Motor Drive Unit:

1. Motor and gearbox assembly within roller tube, with motor control circuiting in metal enclosure mounted on motor end of hood assembly.
  2. Inboard motor including gearbox assembly, electromechanical travel limit switches linked to electromagnetic brake in accordance with NFPA 70.
  3. Power Supply: Provide connection to building's 120 VAC power supply for drive-control system.
  4. Motor Voltage: 24 VDC.
  5. Descent Speed: 6 inches/sec, minimum; 24 inches/sec, maximum.
- E. Brake: Under normal operating conditions, motor operates at low voltage to hold curtains in retracted position.
- F. Mounting Brackets: Plates and brackets for supporting hood assembly.
1. Sheet Metal Thickness: 14-gauge, 0.0747-inch galvanized steel.
- G. Side Guide Rails: Galvanized steel, factory primed.
- H. Bottom Bar: T-bar or tubular member formed to attach with protective curtain, with necessary stiffness to limit deflection caused by building's air pressure currents and to maintain taut and level curtain when in fully extended position.

## 2.4 OPERATIONAL CONTROLS

- A. Operator, Controls, Actuators, and Safeties: Provide products listed by UL (DIR).
1. Operable curtain deploys within 10 seconds upon actuation signal from fire alarm system or local smoke detector or upon loss of electric power to unit with listed releasing device in accordance with UL 864.
  2. Upon activation of fire alarm, control panel removes supply voltage, and curtain descends under power of gravity in controlled manner. A dynamic braking system housed in motor control circuit controls the speed of descent of curtain.
  3. Electronically synchronize descent of overlapping curtains that have bottom bar.
  4. Battery Backup: Provide 24 VDC battery backup for fully functional operation of unit upon interruption of building's electrical power supply for one-hour duration.
- B. Test Feature: Provide simple, easily accessible switch feature to test and confirm correct function of curtain.
- C. Fail-Safe Release Device:
1. Curtain defaults to closed position by gravity during loss of primary or auxiliary power.

2. Alarm condition interrupts release mechanism's power, and curtain closes automatically.
3. Curtain resets to open position upon restoration of power and with cleared alarm condition.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Install system in accordance with manufacturer's written installation instructions.
- B. Install anchorage devices to securely fasten hood assembly to substrate and building framing without distortion or stress.
- C. Securely and rigidly brace components suspended from structure.
- D. Ensure that fit and alignment of assembly, including vertical guides, are level and plumb to provide smooth operation.
- E. Install conduit and wiring from disconnect to unit components; coordinate electrical service installation. See Division 26 requirements.
- F. Coordinate fire alarm system and smoke detector connection; see Division 28.

### 3.2 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements for additional requirements.
- B. Provide services of manufacturer's field representative to observe installation, conduct field testing and inspection, and submit report.
- C. Provide testing and inspection for the following:
  1. Verify deployment of protective curtain upon signal from fire alarm system and smoke detectors.
  2. Verify protective curtain deploys correctly by gravity upon loss of power.

### 3.3 CLOSEOUT ACTIVITIES

- A. See Section 01 78 00 - Closeout Submittals for closeout submittals.
- B. Demonstrate proper operation of system to Owner's designated personnel.
  1. Use operating and maintenance manual as reference during demonstration.
  2. Describe function, operation, and maintenance of each component.
- C. Training: Train Owner's designated personnel on operation and maintenance.

1. Use operating and maintenance manual as training reference, supplemented with additional training materials as required.
2. Provide minimum of two hours of training.
3. Instructor: Manufacturer's training personnel.
4. Location: At project site.

#### 3.4 MAINTENANCE

- A. Provide separate maintenance contract for periodic inspection and performance analysis of smoke and fire protective curtain assemblies in accordance with NFPA 3 and NFPA 4 for one year from Date of Substantial Completion.

END OF SECTION

**SECTION 08 71 00**  
**DOOR HARDWARE**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Hardware for hollow metal doors.

**1.2 RELATED REQUIREMENTS**

- A. Section 08 11 13 - Hollow Metal Doors and Frames.

**1.3 REFERENCE STANDARDS**

- A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
- B. DHI (KSN) - Keying Systems and Nomenclature; 2019.
- C. DHI (LOCS) - Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; 2004.
- D. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

**1.4 ADMINISTRATIVE REQUIREMENTS**

- A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
- B. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
- C. Keying Requirements Meeting:
  - 1. Schedule meeting at project site prior to ordering hardware.
  - 2. Agenda:
    - a. Establish keying requirements.
    - b. Verify locksets and locking hardware are functionally correct for project requirements.
    - c. Establish keying submittal schedule and update requirements.
  - 3. Incorporate "Keying Requirements Meeting" decisions into keying submittal upon review of door hardware keying system including, but not limited to, the following:
    - a. Access control requirements.

- b. Key control system requirements.
  - c. Schematic diagram of preliminary key system.
  - d. Flow of traffic and extent of security required.
4. Deliver established keying requirements to manufacturers.

## 1.5 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's catalog literature for each type of hardware, marked clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, dimensions and profiles of individual components.
- C. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
  - 1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
  - 2. Provide complete description for each door listed.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least three years of experience.
- B. Supplier Qualifications: Company with certified Architectural Hardware Consultant (AHC) to assist in work of this section.

## 1.7 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer's Warranty: Provide warranty against defects in material and workmanship for period indicated. Complete forms in Owner's name and register with manufacturer.
  - 1. Closers: Five years, minimum.
  - 2. Exit Devices: Three years, minimum.
  - 3. Locksets and Cylinders: Three years, minimum.

## PART 2 PRODUCTS

### 2.1 DESIGN AND PERFORMANCE CRITERIA

- A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.

- B. Provide individual items of single type, of same model, and by same manufacturer.
- C. Provide door hardware products that comply with the following requirements:
  - 1. Applicable provisions of federal, state, and local codes.
  - 2. Accessibility: ADA Standards and ICC A117.1.
- D. Fasteners:
  - 1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
    - a. Aluminum fasteners are not permitted.
    - b. Provide Phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.
  - 2. Provide machine screws for attachment to reinforced hollow metal and aluminum frames.
    - a. Self-drilling (Tek) type screws are not permitted.
  - 3. Provide spacers or sex bolts with sleeves for through bolting of hollow metal doors and frames.

## 2.2 HINGES

- A. Manufacturers:
  - 1. McKinney; an Assa Abloy Group company: [www.assaabloydss.com/#sle](http://www.assaabloydss.com/#sle).
  - 2. Bommer Industries, Inc: [www.bommer.com/#sle](http://www.bommer.com/#sle).
  - 3. C. R. Laurence Co., Inc: [www.crl-arch.com/#sle](http://www.crl-arch.com/#sle).
  - 4. Hager Companies: [www.hagerco.com/#sle](http://www.hagerco.com/#sle).
  - 5. Stanley, dormakaba Group: [www.stanleyhardwarefordoors.com/#sle](http://www.stanleyhardwarefordoors.com/#sle).
- B. Hinges:
  - 1. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
  - 2. Provide ball-bearing hinges at each door with closer.
  - 3. Provide non-removable pins on all doors.

## 2.3 MORTISE LOCKS

- A. Manufacturers:

1. Corbin Russwin, Sargent, or Yale; an Assa Abloy Group company: [www.assaabloydss.com/#sle](http://www.assaabloydss.com/#sle).
  2. Best, dormakaba Group: [www.bestaccess.com/#sle](http://www.bestaccess.com/#sle).
  3. DORMA USA, Inc; : [www.dorma.com/#sle](http://www.dorma.com/#sle).
  4. Schlage, an Allegion brand: [www.allegion.com/us/#sle](http://www.allegion.com/us/#sle).
- B. Mortise Locks: Comply with BHMA A156.13, Grade 1, Security, 1000 Series.
1. Latchbolt Throw: 3/4 inch, minimum.
  2. Deadbolt Throw: 1 inch, minimum.
  3. Backset: 2-3/4 inch unless otherwise indicated.
  4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
  5. Match owners existing keyway (Arrow) for cylinders. Master key and sub-master.

## 2.4 CLOSERS

- A. Manufacturers; Surface Mounted:
1. Corbin Russwin, Norton, Rixson, Sargent, or Yale; an Assa Abloy Group company: [www.assaabloydss.com/#sle](http://www.assaabloydss.com/#sle).
  2. DORMA USA, Inc; : [www.dorma.com/#sle](http://www.dorma.com/#sle).
  3. LCN, an Allegion brand: [www.allegion.com/us/#sle](http://www.allegion.com/us/#sle).
- B. Closers: Comply with BHMA A156.4, Grade 1.
1. At corridor entry doors, mount closer on room side of door.

## 2.5 KICK PLATES

- A. Manufacturers:
1. Rockwood; an Assa Abloy Group company: [www.assaabloydss.com/#sle](http://www.assaabloydss.com/#sle).
  2. C. R. Laurence Company, Inc: [www.crl-arch.com/#sle](http://www.crl-arch.com/#sle).
  3. Hager Companies: [www.hagerco.com/#sle](http://www.hagerco.com/#sle).
  4. Hiawatha, Inc, an Activar Construction Products Group company : [www.activarepg.com/hiawatha/#sle](http://www.activarepg.com/hiawatha/#sle).

5. Ives, an Allegion brand: [www.allegion.com/us/#sle](http://www.allegion.com/us/#sle).
  6. Trimco: [www.trimcohardware.com/#sle](http://www.trimcohardware.com/#sle).
- B. Protection Plates: Comply with BHMA A156.6.
- C. Metal Properties: Stainless steel.
1. Metal, Standard Duty: Thickness 0.050 inch, minimum.
- D. Edges: Beveled, on four sides unless otherwise indicated.
- E. Fasteners: Countersunk screw fasteners.

## 2.6 WALL STOPS

- A. Manufacturers:
1. Rockwood; an Assa Abloy Group company: [www.assaabloydss.com/#sle](http://www.assaabloydss.com/#sle).
  2. Hager Companies: [www.hagerco.com/#sle](http://www.hagerco.com/#sle).
  3. Trimco: [www.trimcohardware.com/#sle](http://www.trimcohardware.com/#sle).
- B. Wall Stops: Comply with BHMA A156.16, Grade 1, and Resilient Material Retention Test as described in this standard.
1. Provide wall stops to prevent damage to wall surface upon opening door.
  2. Type: Bumper, concave, wall stop.
  3. Material: Stainless steel housing with rubber insert.

## 2.7 SILENCERS

- A. Silencers: Provide at equal locations on door frame to mute sound of door's impact upon closing.
1. Single Door: Provide three on strike jamb of frame.
  2. Material: Rubber, gray color.

## 2.8 KEY CONTROL SYSTEMS

- A. Key Control Systems: Comply with guidelines of BHMA A156.28.
1. Provide keying information in compliance with DHI (KSN) standards.
  2. Key to existing keying system.

## 2.9 FINISHES

- A. Finishes: Provide door hardware of same finish, unless otherwise indicated.
  - 1. Primary Finish: 652; satin chromium plated over nickel, with steel base material (former US equivalent US26D); BHMA A156.18.
  - 2. Exceptions:
    - a. Door Closer Covers and Arms: Color as selected by Architect from manufacturer's standard colors unless otherwise indicated.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Use templates provided by hardware item manufacturer.
- C. Do not install surface mounted items until application of finishes to substrate are fully completed.
- D. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item.
  - 1. For Steel Doors and Frames: Install in compliance with DHI (LOCS) recommendations.
  - 2. Mounting heights in compliance with ADA Standards:

### 3.2 ADJUSTING

- A. Adjust hardware for smooth operation.

### 3.3 CLEANING

- A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.
- B. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

### 3.4 DESCRIPTION OF HARDWARE

- A. Butts
  - 1. Hagar                      BB3                      BB1279
- B. Closers

- 1. LCN CR36 4010 4020 4110 Series
- C. Mortised Lockset No. 42 knob
  - 1. Schlage MOF L9050P
- D. Kick Plates, 8" high x 2" LDW x US32D
  - 1. Rockwood KP K1050
- E. Stops x US26D
  - 1. Rockwood WS 403
- F. Silencers
  - 1. Rockwood S 608RWK
- G. Schedule: All doors receive all specified hardware.

END OF SECTION

**DIVISION 09 – FINISHES**

SECTION 09 21 16.00	GYPSUM BOARD ASSEMBLIES
SECTION 09 22 36.00	LATH
SECTION 09 23 00.00	GYPSUM PLASTERING
SECTION 09 68 13.00	TILE CARPETING
SECTION 09 91 23.00	INTERIOR PAINTING

## SECTION 09 21 16

### GYPSUM BOARD ASSEMBLIES

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Metal stud wall framing.
- B. Acoustic insulation.
- C. Gypsum wallboard.
- D. Joint treatment and accessories.

##### 1.2 REFERENCE STANDARDS

- A. AISI S220 - North American Standard for Cold-Formed Steel Nonstructural Framing; 2020.
- B. AISI S240 - North American Standard for Cold-Formed Steel Structural Framing; 2015, with Errata (2020).
- C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- D. ASTM A1003/A1003M - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members; 2015.
- E. ASTM C1007 - Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories; 2020.
- F. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2017 (Reapproved 2022).
- G. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing; 2023.
- H. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 2020.
- I. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2020.
- J. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2022.
- K. ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base; 2019.

- L. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2017.
- M. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2021.
- N. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023a.
- O. GA-216 - Application and Finishing of Gypsum Panel Products; 2021.
- P. ICC (IBC) - International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

## PART 2 PRODUCTS

### 2.1 METAL FRAMING MATERIALS

- A. Steel Sheet: ASTM A1003/A1003M, subject to the ductility limitations indicated in AISI S220 or equivalent.
  - 1. Corrosion Protection Coating Designation: G40, or equivalent in accordance with AISI S220.
- B. Manufacturers - Metal Framing, Connectors, and Accessories:
  - 1. Clarkwestern Dietrich Building Systems LLC: [www.clarkdietrich.com/#sle](http://www.clarkdietrich.com/#sle).
  - 2. Jaimes Industries: [www.jaimesind.com/#sle](http://www.jaimesind.com/#sle).
  - 3. Marino: [www.marinoware.com/#sle](http://www.marinoware.com/#sle).
  - 4. SCAFCO Corporation: [www.scafco.com/#sle](http://www.scafco.com/#sle).
  - 5. Steel Construction Systems: [www.steelconsystems.com/#sle](http://www.steelconsystems.com/#sle).
  - 6. Steeler Construction supply.
- C. Nonstructural Framing System Components: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/120 at 5 psf.
  - 1. Studs: C-shaped with knurled or embossed faces.
  - 2. Runners: U shaped, sized to match studs.
  - 3. Ceiling Channels: C-shaped.
  - 4. Furring Members: Hat-shaped sections, minimum depth of 7/8 inch.
    - a. Material: ASTM C645.

b. Sheet Thickness: 20 22 25 GA.

c. Products:

1) MBA Building Supplies; MBA Furring  
Channel: [www.mbastuds.com/#sle](http://www.mbastuds.com/#sle).

D. Non-structural Framing Accessories:

## 2.2 PRODUCTS:

A. Manufacturers:

1. American Gypsum Company: [www.americangypsum.com/#sle](http://www.americangypsum.com/#sle).
2. CertainTeed Corporation: [www.certainteed.com/#sle](http://www.certainteed.com/#sle).
3. Georgia-Pacific Gypsum: [www.gpgypsum.com/#sle](http://www.gpgypsum.com/#sle).
4. National Gypsum Company: [www.nationalgypsum.com/#sle](http://www.nationalgypsum.com/#sle).
5. USG Corporation: [www.usg.com/#sle](http://www.usg.com/#sle).

B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.

1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
2. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
3. Thickness:
  - a. Vertical Surfaces: 5/8 inch.
  - b. Ceilings: 5/8 inch.

## 2.3 GYPSUM BOARD ACCESSORIES

A. Acoustic Insulation: ASTM C 518; preformed mineral fiber, friction fit type, unfaced. Thickness: 3 inch.

1. Products:
  - a. Owens Corning: Thermafiber SAFB FF
  - b. Rockwool: AFB

B. Acoustic Insulation: ASTM C665 Type 1, Fiberglass Sound Attenuation Batts, Unfaced.

1. Products:

- a. Owens Corning: Pink Next Gen Sound Attenuation Batts.
- C. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.
  - 1. Products:
    - a. Franklin International, Inc; Titebond Acoustical Smoke & Sound Sealant: [www.titebond.com/#sle](http://www.titebond.com/#sle).
    - b. Liquid Nails, a brand of PPG Architectural Coatings: [www.liquidnails.com/#sle](http://www.liquidnails.com/#sle).
    - c. Pecora; AC - 20.
- D. Beads, Joint Accessories, and Other Trim: ASTM C1047, rigid plastic or galvanized steel, unless noted otherwise.
  - 1. Corner Beads: Low profile, for 90 degree outside corners.
  - 2. L-Trim with Tear-Away Strip: Sized to fit 5/8 inch thick gypsum wallboard.
  - 3. Expansion Joints:
    - a. Type: Accordion profile with factory-installed protective tape.
- E. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
  - 1. Paper Tape: 2 inch wide, creased paper tape for joints and corners, except as otherwise indicated.
  - 2. Joint Compound: Drying type, vinyl-based, ready-mixed.
- F. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inches in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion-resistant.
- G. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws, corrosion resistant.

## PART 3 EXECUTION

### 3.1 FRAMING INSTALLATION

- A. Metal Framing: Install in accordance with ASTM C1007/AISI S220 and manufacturer's instructions.
- B. Suspended Ceilings : Space framing and furring members as indicated.
  - 1. Level ceiling system to a tolerance of 1/1200.

2. Laterally brace entire suspension system.
- C. Studs: Space studs at 16 inches on center.
1. Extend partition framing to structure at locations noted. Extend to 8" above ceiling at other locations..
  2. Partitions Terminating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and connect studs to track using specified mechanical devices in accordance with manufacturer's instructions; verify free movement of top of stud connections; do not leave studs unattached to track.
- D. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.
- E. Standard Wall Furring: Install at concrete and masonry walls scheduled to receive gypsum board, not more than 4 inches from floor and ceiling lines and abutting walls. Secure in place on alternate channel flanges at maximum 24 inches on center.
1. Orientation: Vertical.
  2. Spacing: At 16 inches on center.
- F. Blocking: Install wood blocking for support of:
1. Framed openings.
  2. Wall-mounted door hardware.

### 3.2 ACOUSTIC ACCESSORIES INSTALLATION

- A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.
- B. Install mineral fiber or fiberglass insulation at locations shown on the drawings.
- C. Acoustic Sealant: Install in accordance with manufacturer's instructions.
1. Place one bead continuously on substrate before installation of perimeter framing members.
  2. Place continuous bead at perimeter of each layer of gypsum board.
  3. Seal around all penetrations by conduit, pipe, ducts, and rough-in boxes, except where firestopping is provided.

### 3.3 BOARD INSTALLATION

- A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
  - 1. Exception: Tapered edges to receive joint treatment at right angles to framing.
- C. Installation on Metal Framing: Use screws for attachment of gypsum board.

### 3.4 INSTALLATION OF TRIM AND ACCESSORIES

- A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
  - 1. Not more than 30 feet apart on walls and ceilings over 50 feet long.
- B. Corner Beads: Install at external corners, using longest practical lengths.
- C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.

### 3.5 JOINT TREATMENT

- A. Paper Faced Gypsum Board: Use paper joint tape, embed with drying type joint compound and finish with drying type joint compound.
- B. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
  - 1. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
- C. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
  - 1. Feather coats of joint compound so that camber is maximum 1/32 inch.
  - 2. Taping, filling, and sanding is not required at surfaces behind fixed cabinetry.

### 3.6 TOLERANCES

- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION

## SECTION 09 22 36

### LATH

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Metal lath for gypsum plaster.
- B. Furring for metal lath.
- C. Metal ceiling framing.
- D. Access panels.

##### 1.2 RELATED REQUIREMENTS

- A. Section 09 23 00 - Gypsum Plastering.

##### 1.3 REFERENCE STANDARDS

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- B. ASTM A924/A924M - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process; 2022a.
- C. ASTM C841 - Standard Specification for Installation of Interior Lathing and Furring; 2023.
- D. ASTM C847 - Standard Specification for Metal Lath; 2018.
- E. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2022.

#### PART 2 PRODUCTS

##### 2.1 MANUFACTURERS

- A. Metal Lath and Accessories:
  - 1. Clarkwestern Dietrich Building Systems LLC: [www.clarkdietrich.com/#sle](http://www.clarkdietrich.com/#sle).
  - 2. MarinoWARE: [www.marinoware.com/#sle](http://www.marinoware.com/#sle).

##### 2.2 FRAMING AND LATH ASSEMBLIES

- A. Provide completed assemblies with the following characteristics:

1. Maximum Deflection of Horizontal Assemblies: 1:240 deflection under dead loads and wind uplift.

## 2.3 FRAMING MATERIALS

- A. Furring Channels: Formed steel, minimum 0.020 inch thick, 3/8 inch deep by 7/8 inch high, splicing permitted; galvanized.
- B. Hangers: Steel wire, of size and type to suit application, to support ceiling components in place to deflection limits as indicated.

## 2.4 LATH

- A. Diamond Mesh Metal Lath: ASTM C847, galvanized; flat.
  1. Weight: To suit application and as specified in ASTM C841 or ASTM C1063 for framing spacing.
- B. Strip Mesh: Expanded metal lath, same weight as lath, 2 inch wide by 24 inch long; same finish as lath.
- C. Finishing Accessories: ASTM C841 (gypsum plaster) or ASTM C1063 (cement plaster); extruded aluminum alloy (6063 T5), galvanized steel sheet ASTM A924/A924M G90, or rolled zinc, unless noted otherwise.
  1. Types: As detailed or required for finished appearance.
  2. Special Shapes: In addition to conventional corner bead and control joints, provide U-bead at exposed plaster edges.
- D. Beads, Screeds, Joint Accessories, and Other Trim: Depth governed by plaster thickness, and maximum possible lengths.
  1. Material: Formed galvanized sheet steel or Zinc, expanded metal flanges.
  2. Expansion Joints: Accordion profile with factory-installed protective tape, 2 inch wide flanges.
  3. Base Screeds:
    - a. Material: Galvanized steel, ASTM A653/A653M, with G90/Z275 zinc coating; minimum 26-gauge, 0.0179-inch thick base metal.
  4. Control Joints: Accordion profile with factory-installed protective tape, 2 inch flanges.

## 2.5 ACCESSORIES

- A. Security Access Panels - Non-Fire Rated: Formed steel shop primed.

1. Product: Model BMP: 12 Ga. 32" x 32", Concealed Piano hinge, Latch bolt-key operated manufactured by Babcock-Davis.
- B. Anchorage: Tie wire, nails, and other metal supports, of type and size to suit application; to rigidly secure materials in place, galvanized.
- C. Fasteners: Self-piercing tapping screws; ASTM C1002 or ASTM C954.
- D. Tie Wire: Annealed galvanized steel.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that substrates are ready to receive work and conditions are suitable for application.
- C. Do not begin until unacceptable conditions have been corrected.
- D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 INSTALLATION - GENERAL

- A. Install interior lath and furring for gypsum plaster in accordance with ASTM C841.

### 3.3 CEILING FRAMING INSTALLATION

- A. Install furring after work above ceiling or soffit is complete. Coordinate the location of hangers with other work.
- B. Install furring independent of walls, columns, and above-ceiling work.
- C. Space main carrying channels at maximum 72 inch on center, and not more than 6 inches from wall surfaces. Lap splice securely.
- D. Securely fix carrying channels to hangers to prevent turning or twisting and to transmit full load to hangers.
- E. Install furring channels perpendicular to carrying channels, not more than 2 inches from perimeter walls, and rigidly secure. Lap splices securely.
- F. Reinforce openings in suspension system that interrupt main carrying channels or furring channels with lateral channel bracing. Extend bracing minimum 24 inches past each opening.
- G. Laterally brace suspension system.

### 3.4 CONTROL AND EXPANSION JOINT INSTALLATION

- A. Locate joints as indicated on drawings and comply with ASTM C1063.
  - 1. Area of plaster panel not to exceed 20 sq ft for horizontal, curved or angled surfaces.
  - 2. Spacing between control joints not to exceed 6 ft in each direction.
  - 3. Area bounded by control joints not to exceed a length-to-width ratio of 2-1/2 to 1.

### 3.5 ACCESS PANELS INSTALLATION

- A. Install access panels and rigidly secure in place.
- B. Install frames plumb and level in opening. Secure rigidly in place.
- C. Position to provide convenient access to concealed work requiring access.

### 3.6 LATH INSTALLATION

- A. Apply lath taut, with long dimension perpendicular to supports.
- B. Lap or nest ends of metal lath in accordance with ASTM C841.
- C. Secure end laps with tie wire where they occur between supports.
- D. Attach metal lath to metal supports using tie wire at maximum 6 inches on center.
- E. Place base screeds at termination of plaster areas; secure rigidly in place.
- F. Place 4 inch wide strips of lath centered over junctions of dissimilar backing materials, and secure rigidly in place.
- G. Place additional strip mesh diagonally at corners of lathed openings. Secure rigidly in place.

### 3.7 TOLERANCES

- A. Maximum Variation from True Lines and Levels: 1/8 inch in 10 feet.

END OF SECTION

## SECTION 09 23 00

### GYPSUM PLASTERING

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Gypsum plastering.

##### 1.2 RELATED REQUIREMENTS

- A. Section 09 22 36 - Lath: Metal lath, furring, and accessories for plaster base.

##### 1.3 REFERENCE STANDARDS

- A. ASTM A924/A924M - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process; 2022a.
- B. ASTM C28/C28M - Standard Specification for Gypsum Plasters; 2010 (Reapproved 2020).
- C. ASTM C35 - Standard Specification for Inorganic Aggregates for Use in Gypsum Plaster; 2001 (Reapproved 2019).
- D. ASTM C206 - Standard Specification for Finishing Hydrated Lime; 2014 (Reapproved 2022).
- E. ASTM C841 - Standard Specification for Installation of Interior Lathing and Furring; 2023.
- F. ASTM C842 - Standard Specification for Application of Interior Gypsum Plaster; 2005 (Reapproved 2021).

#### PART 2 PRODUCTS

##### 2.1 MANUFACTURERS

- A. Gypsum Plaster:
  - 1. National Gypsum Company: [www.nationalgypsum.com/#sle](http://www.nationalgypsum.com/#sle).
  - 2. USG: [www.usg.com/#sle](http://www.usg.com/#sle).

##### 2.2 PLASTER MATERIALS

- A. Gypsum Neat Plaster: ASTM C28/C28M; fibered.
- B. Ready-Mixed Gypsum Plaster: ASTM C28/C28M; mill-mixed type, requiring only the addition of water.

- C. Products:
  - 1. USG: Structo-Base for scratch and brown coat.
  - 2. USG: Diamond Veneer Finish Plaster.
- D. Lime: ASTM C206, Type S; special finishing hydrated lime.
- E. Aggregate for Base Coats: ASTM C35; sand and lightweight aggregates.

### 2.3 LATH AND ACCESSORIES

- A. Metal Lath and Accessories: As specified in Section 09 22 36.
- B. Finishing Accessories: ASTM C841, galvanized steel sheet ASTM A924/A924M G90 or rolled zinc, unless noted otherwise.
  - 1. Types: As detailed or required for finished appearance.
  - 2. Special Shapes: In addition to conventional corner bead and control joints, provide U-bead at exposed plaster edges.
  - 3. Products:
    - a. Same manufacturer as framing materials.
- C. Beads, Screeds, Joint Accessories, and Other Trim: Depth governed by plaster thickness, maximum possible lengths.
  - 1. Material: Formed galvanized sheet steel, or Zinc, expanded metal flanges.
  - 2. Expansion Joints: Accordion profile with factory-installed protective tape, 2 inch wide flanges.
  - 3. Control Joints: Accordion profile with protective tape, 2 inch flanges.
- D. Strip Mesh: Expanded metal lath, minimum 0.018 inch thick, 2 inch wide by 24 inch long; galvanized.

### 2.4 PLASTER MIXES

- A. Over Metal Lath: Three-coat application, ready-mixed plaster, mixed and proportioned in accordance with ASTM C842 and manufacturer's instructions.
- B. Ready-Mixed Plaster Materials: Mix in accordance with manufacturer's instructions.
- C. Finish Coat for Troweled Finish: , mixed and proportioned in accordance with ASTM C842.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that existing conditions are satisfactory before starting work.
- B. Grounds and Blocking: Verify items within walls for other sections of work have been installed.
- C. Metal Lath and Accessories: Verify lath is flat, secured to substrate, and joint and surface perimeter accessories are in place.
- D. Mechanical and Electrical: Verify services within ceiling have been tested and approved.

### 3.2 PLASTERING

- A. Apply gypsum plaster in accordance with ASTM C842 and manufacturer's instructions.
- B. Thickness of Plaster including Finish Coat:
  - 1. Over metal lath: 5/8 inch.
- C. Finish Texture: Float to a consistent and smooth finish.

END OF SECTION

## **SECTION 09 68 13**

### **TILE CARPETING**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Carpet tile, fully adhered.
- B. Resilient base.

##### **1.2 REFERENCE STANDARDS**

- A. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2019a, with Editorial Revision (2020).
- B. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring; 2022.
- C. CRI 104 - Standard for Installation of Commercial Carpet; 2015.

##### **1.3 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical characteristics; sizes, patterns, colors available, and method of installation.
- C. Samples: Submit two carpet tiles illustrating color and pattern design for each carpet color selected.
- D. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 60 00 - Product Requirements, for additional provisions.
  - 2. Extra Carpet Tiles: Quantity equal to 5 percent of total installed of each color and pattern installed.
  - 3. Extra Wall Base: 10 linear feet of each type and color.

##### **1.4 QUALITY ASSURANCE**

- A. Installer Qualifications: Company specializing in installing carpet tile with minimum three years experience.

##### **1.5 FIELD CONDITIONS**

- A. Store materials in area of installation for minimum period of 24 hours prior to installation.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Tile Carpeting: As scheduled on the drawings.

### 2.2 ACCESSORIES

- A. Subfloor Filler: White premix latex; type recommended by flooring material manufacturer.
- B. Edge Strips: Rubber, color as selected by Architect.
- C. Carpet Tile Adhesive:
  - 1. Products:
    - a. Stauf USA, LLC; D737 High-Tack: [www.staufusa.com/#sle](http://www.staufusa.com/#sle).

### 2.3 RESILIENT BASE

- A. Resilient Base - Type B-1: ASTM F1861, Type TS rubber, vulcanized thermoset; top set Style B, Cove
  - 1. Manufacturers:
    - a. Burke Flooring; Commercial Wall Base: [www.burkeflooring.com](http://www.burkeflooring.com).
    - b. Johnsonite, a Tarkett Company; Dura-cove: [www.johnsonite.com](http://www.johnsonite.com).
    - c. Roppe Corpe; 700 Series: [www.roppe.com](http://www.roppe.com).
  - 2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
  - 3. Height: 4 inch, 6 inch where shown on the drawings.
  - 4. Thickness: 0.125 inch.
  - 5. Finish: Satin.
  - 6. Length: Roll.
  - 7. Color: As indicated on drawings.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that subfloor surfaces are dust-free and free of substances that could impair bonding of adhesive materials to subfloor surfaces.

### 3.2 INSTALLATION

- A. Install carpet tile in accordance with manufacturer's instructions.
- B. Blend carpet from different cartons to ensure minimal variation in color match.
- C. Cut carpet tile clean. Fit carpet tight to intersection with vertical surfaces without gaps.
- D. Lay carpet tile in square pattern, with pile direction alternating to next unit, set parallel to building lines.
- E. Locate change of color or pattern between rooms under door centerline.
- F. Fully adhere carpet tile to substrate.
- G. Trim carpet tile neatly at walls and around interruptions.
- H. Complete installation of edge strips, concealing exposed edges.

### 3.3 INSTALLATION - RESILIENT BASE

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.
- B. Miter internal corners. At external corners, 'V' cut back of base strip to 2/3 of its thickness and fold. At exposed ends, use premolded units.
- C. Install base on solid backing. Bond tightly to wall and floor surfaces.
- D. Scribe and fit to door frames and other interruptions.

### 3.4 CLEANING

- A. Remove excess adhesive without damage, from floor, base, and wall surfaces.
- B. Clean and vacuum carpet surfaces.

END OF SECTION

**SECTION 09 91 23**  
**INTERIOR PAINTING**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
- D. Do Not Paint or Finish the Following Items:
  - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.

**1.2 REFERENCE STANDARDS**

- A. SSPC V1 (PM1) - Good Painting Practice: Painting Manual Volume 1; 2024.
- B. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).
- C. SSPC-SP 2 - Hand Tool Cleaning; 2018.
- D. SSPC-SP 3 - Power Tool Cleaning; 2018.

**1.3 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
  - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
  - 2. Cross-reference to specified paint system products to be used in project; include description of each system.
- C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
  - 1. Where sheen is specified, or shown on the drawings, provide required sheen.
- D. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 60 00 - Product Requirements, for additional provisions.

2. Extra Paint and Finish Materials: 1 gal of each color; store where directed.
3. Label each container with color in addition to the manufacturer's label.

#### 1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Company specializing in performing the type of work specified with minimum 5 years' experience.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

#### 1.6 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply materials when relative humidity exceeds 85 percent, at temperatures less than 5 degrees F above the dew point, or to damp or wet surfaces.
- D. Minimum Application Temperatures for Paints: 50 degrees F for interiors unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 fc measured mid-height at substrate surface.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Provide paints and finishes from the same manufacturer to the greatest extent possible.
- B. Paints:
  1. Diamond Vogel Paints: [www.diamondvogel.com/#sle](http://www.diamondvogel.com/#sle).
  2. Pittsburgh Paints: [www.ppgpaints.com/#sle](http://www.ppgpaints.com/#sle).
  3. Sherwin-Williams Company: [www.sherwin-williams.com/#sle](http://www.sherwin-williams.com/#sle).
- C. Substitutions: See Section 01 60 00 - Product Requirements.

## 2.2 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
  - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
  - 2. Provide materials that are compatible with one another, and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
  - 3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B. Flammability: Comply with applicable code for surface burning characteristics.
- C. Sheens: Provide the sheens specified or as shown on the drawings.
- D. Colors: As indicated on drawings.

## 2.3 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- C. Test shop-applied primer for compatibility with subsequent cover materials.
- D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:
  - 1. Gypsum Wallboard: 12 percent.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

- C. Remove or repair existing paints or finishes that exhibit surface defects.
- D. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- E. Seal surfaces that might cause bleed through or staining of topcoat.
- F. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.
- G. Ferrous Metal:
  - 1. Solvent clean according to SSPC-SP 1.
  - 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
  - 3. Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and SSPC\_SP3. Protect from corrosion until coated.
- H. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

### 3.3 APPLICATION

- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- B. Apply products in accordance with manufacturer's written instructions.
- C. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
- D. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- E. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- F. Sand metal surfaces lightly between coats to achieve required finish.
- G. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- H. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

### 3.4 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

### 3.5 PROTECTION

- A. Protect finishes until completion of project.
- B. Touch-up damaged finishes after Substantial Completion.

### 3.6 SCHEDULE

#### A. Surface Preparation:

- 1. Notes to S-W 3 and 12 refer to the Sherwin Williams System of surface preparation specifications.
- 2. NOTE: All Mils/ct are DFT (Dry Film Thickness).

#### B. Concrete

- 1. 1 coat - PPG - Spedhide interior eggshell latex enamel (6-411 series) 1.6 mils/ct

#### C. Ferrous Metal - Acrylic

- 1. Preparation - SSP SP03
- 2. 1 coat - PPG - Pitt-Tech Plu (4020 Series pf) 2 mil
- 3. 2 coats - PPG - Pitt-Tech Plus EP DTM Acrylic - 2.0 mils/ct

#### D. Gypsum Board

- 1. 1 coat - PPG - Speedhide Interior Quick-Drying Latex Sealer (6-2) 1 mil/ct
  - 2. 2 coats - PPG - Speedhide Interior Eggshell Latex Enamel (6-411 Series) 1.6 mils/ct
- OR
- 3. 1 coat - S. Williams - Preprite Wall and Wood Primer 1.6 mils/ct
  - 4. 2 coats - S. Williams - Promar 200 Latex Semi-Gloss Eggshell Enamel 1.2 mils/ct

### 3.7 INTERIOR ITEMS TO RECEIVE PAINT:

#### A. Concrete columns.

- 1. Rooms 102, 103
  - a. Sheen: Eggshell.

#### B. Metal doors.

- 1. Sheen: Eggshell.

- C. Metal frames.
  - 1. Sheen: Eggshell.
- D. Gypsum board.
  - 1. Sheen: Eggshell.

END OF SECTION