

DOCUMENT 00 91 00

ADDENDA

ADDENDUM NUMBER THREE (003)

DATE: June 5, 2025

PROJECT: **Caribou Police Facility**

PROJECT NUMBER: Artifex Project No. 2023102

CLIENT: City of Caribou
25 High Street
Caribou, ME 04736

ARCHITECT: Artifex AE

TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the Bidding Documents dated April 30, 2025, with amendments and additions noted below.

The Bidder is to acknowledge receipt of this Addendum in the space provided in the Bid Form of the Project Manual. Failure to do so may disqualify the Bidder.

This Addendum consists of eight (8) pages, plus noted attachments and specifications.

1.0 **Changes to Bidding:**

1.01 DOCUMENT 00

2.0 **Questions Received**

2.01 Question: *Is SP-1 Joists required to be galvanized?*

Answer: SP-1 joists are to be galvanized and painted

2.02 Question: *Overhead sectional door. Can a spec section be provided?*

Answer: Have included **SECTION 08 36 13 - SECTIONAL DOORS**

2.03 Question: *Openings 125A, 130A, 131A – Detention Holding Cells*

a. Is there a spec for detention doors & frames?

b. Typical Detention Manufactures do not test for STC Rating. Is Detention Grade or STC requirement more important, as will be needed for accurate pricing

c. Is there a spec for detention door hardware

Answer: Detention Grade is more important than STC – have removed requirement for STC rating. Have added **SECTION 08 34 63 - DETENTION DOORS AND FRAMES**

- 2.04 **Question:** *Wood Doors – Is there a spec being issued?*
a. *Doors 105A & 105B Carry an STC rating of 52. Please provide manufacture who can provide that rating in 1 ¾" Door*
Answer: **Refer to attached/added Section 08 34 73.16 Wood Sound Control Door and Steel Frame Assemblies**
- 2.05 **Question:** *Door Hardware Spec. – Hardware sets listed in section 087100 do not have door numbers listed that match the door schedule.*
a. *Please provide hardware spec that assigned door numbers from door schedule to sets in hardware spec*
Answer: **Answer: Bid per attached Hardware Schedule 3.07 Section of Specification Section 08 71 00 attached.**
- 2.06 **Question:** *Finish schedule on DWG's call for CLG-1 to be Armstrong 1940 However Specification 09 51 13 states that ACT-1 should be 1. Armstrong Fine Fissured Ultima (Fine fissured or Ultima can't be both, Fine Fissured matches the performance requirements in the spec) 2. HHF-154 (Does NOT meet BABAA) 3. USG Radar 2220 Please Provide basis of design specification along with tile manufacturers that are actual equals, if not we will provide the cheapest tile that meets the some or most of the performance requirements along with meeting BABAA*
Answer: **Armstrong Fine-Fissured Lay-in 2x2 meet the intent and BABAA requirements.**
- 2.07 **Question:** *Spec Section 09 51 13, The following below does not meet babaa for metal suspension, Please confirm that this project needs to meet babaa and remove products that do not meet babaa or provide correct part numbers that are needed to make sure bidders are apples to apples*
2.5 METAL SUSPENSION SYSTEM
A. *Manufacturers: Subject to compliance with requirements, provide products by one of the following:*
1. *Armstrong World Industries, Inc.; Prelude 15/16" Exposed Tee System (7300 Series). (This Part Number is not BABAA compliant, Armstrong does have a HRC product line that does meet babaa)*
2. *CertainTeed Corporation; S11 System. (CertainTeed DOES NOT Meet BABAA for grid)*
3. *Chicago Metallic Corporation; 1200 System. (This part number is not BABAA compliant)*
4. *United States Gypsum Company; DX 24 System.*
Answer: **To allow flexibility, and as information is not always readily available, spec is revised per 4.0 Specification below.**
- 2.08 **Question:** *The new 09 54 00 Specification from ADD#1 under section 2.1 still list a linear metal ceiling? Is this in the project? Please clarify*
Answer: **METAL CEILINGS section REPLACES the linear ceiling specification 09 54 00 Includes all information needed for both sections**

- 2.09 **Question:** *Finish schedule states CLG-4 is Atas – Is there a spec for this under Division 09 or will this fall under the Siding contractors scope?*
Answer: The specification for this material is found in 09 54 00 Metal Ceilings–This is the linear metal ceiling.
- 2.10 **Question** *Could you please provide a spec for the ODH -1 (Panel 1)*
Answer: Am assuming you mean OHD-1 – refer to attached Specification SECTION 08 36 13 - SECTIONAL DOORS.
- 2.11 **Question** *2.29.15 SECTION 07 21 00 2.3 states Hunter Panel Xci with 3/4" plywood for exterior wall insulation. A100 Wall Assembly does not show plywood as part of the assembly.*
Answer: Delete Hunter Panels from Specifications
- 2.12 **Question** *072100-3.4-A Spec calls for adhesive insulation, can this be installed with mechanical fasteners? In our experience it is a more efficient, and effective way to install this insulation.*
Answer: Mechanical fasteners are allowed
- 2.13 **Question:** *07 21 00 Summary portion of spec calls for vapor retarder to be included in this section, no spec for retarder found. Please provide spec*
Answer: Found in 07 26 00 Fluid Applied Membrane Air Barriers .
- 2.14 **Question:** *07 27 26Spec calls for installer to be ABBA certified, but does not say if there needs to be ABBA inspections, please clarify if the contractor should carry costs for ABBA inspections.*
Answer: ABBA Inspections are not required.
- 2.15 **Question:** *Spec indicates that we are to engage a factory authorized rep to test and inspect, and then in paragraph C it indicates that additional test and inspections at contractors expense, leading us to believe the owner is paying for testing. Please advise if Contractor is to include factory authorized reps for testing and inspections, or if owner will carry this cost.*
Answer: Section 07 41 13.16 requires a factory-authorized representative to test and inspect to ensure installation meets their requirements for warranty. Any additional required by the Owner, the cost will be borne by the owner.
- 2.16 **Question:** *Same question as the metal roofing spec, but for the siding. spec indicates that we are to engage a factory authorized rep to test and inspect, and then in paragraph C it indicates that additional test and inspections at contractors expense, leading us to believe the owner is paying for testing. Please advise if Contractor is to include factory authorized reps for testing and inspections, or if owner will carry this cost.*
Answer: Contractor is to include the costs for inspections/tests required to receive warranty.
- 2.17 **Question:** *Both specs call for either ATA(sic) or Everlast – do the manufacturer for the roofing and siding need to be the same manufacturer? The metal siding spec references the metal roofing spec, but we see no indication they need to be the same mfg. Please advise.*
Answer: Can use separate manufacturers for roof and wall siding.

- 2.18 **Question:** *A501 Detail 3 shows a small 2x6 stud wall. We expect that this is an infill. Does this detail apply to all eave locations on both wood and steel trusses?*
Answer: This detail is not applicable. Per prior Addenda: Please use the Structural drawings' details for the proper definition of the structural aspects of the Project. Architectural sheets are illustrative ONLY and do not necessarily provide complete accurate structural data. 2x10 is correct bearing plate .
- 2.19 **Question:** *A501 Detail 3 shows 2x6 stud wall resting on 2x6 double bearing plate. S403 Detail 1, 2, and 3 show a 2x10 bearing plate.*
Answer: Per 2 prior Addenda: Please use the Structural drawings' details for the proper definition of the structural aspects of the Project. Architectural sheets are illustrative ONLY and do not necessarily provide complete accurate structural data. 2x10 is correct bearing plate .
- 2.20 **Question:** *Electrical Entrance section says to see section 01 21 00 for allowance affecting this section. We did not see an allowance for electrical. Who is to pay for the utility costs? We recommend an allowance be added for this.*
Answer: Owner to arrange for Electrical Service – Contractor to pay and bill through to Owner.
- 2.21 **Question:** *23 05 48 Section 3.02 and 3.04 show inspections. Who is to pay for these special inspections?*
Answer: Owner will pay for inspections.
- 2.22 **Question:** *23 08 00 Who is to pay for the commissioning agent?*
Answer: Owner will pay.
- 2.23 **Question:** *Drawing C100 This drawing has many black marks covering some of the notes. Seems to be an error in the file.*
Answer: If you review the drawing digitally, all notes are unaffected. We have attached a new sheet C100 for download and printing.
- 2.24 **Question:** *2.29.15 SECTION 07 21 00 2.3 states Hunter Panel Xci with 3/4" plywood for exterior wall insulation. A100 Wall Assembly does not show plywood as part of the assembly. If the wall insulation spec is actually for the roof, can you provide a wall insulation spec? Specification section 07 21 00 Thermal Insulation para. 2.3 calls for an Xci plywood faced Hunter panel to be used at exterior wall insulation. The drawings show rigid.*
Answer: Delete Hunter Panels from Specifications.
- 2.25 **Question:** *From Addendum #002, can you further clarify the answers to Questions #2.03 and #2.04? Some of the roof panel and assembly terms are used casually. Can you verify the intent of the roof construction(s)?*
Answer: The major, low-slope, main roof construction features *prefabricated wood trusses topped by a (7/8" minimum) structural plywood deck;*

the balance of the roofs, the high roof and the canopy/entry roof, consist of open-web steel joists carrying 1½" deep galvanized metal roof deck as the structural decking.

The insulation system for all the roofs is expected to consist of continuous rigid foam insulation meeting a minimum of R-35, applied to the structural deck system; the foam insulation board is to be covered by a top *plywood cover board* or *plywood nailbase system* having the capability to serve as the anchorage for the standing-seam metal roofing system.

Plywood panels of 5/8" nominal thickness is recommended for use as cover board or nailbase. Fastenings for the insulation and the metal roofing system are to be as necessary to meet all load requirements to the system, including wind uplift. The total depth of the insulation and roofing systems is as required, but it is to be coordinated with the finished roof edges and rake details as necessary to meet the design intent. Installation of the insulation and standing-seam metal roofing systems shall be as necessary to meet Manufacturers' requirements for performance of their installed products.

The interior roof over the Duty Office (Room #126) is not insulated.

- 2.26 **Question:** The W7 sills do reference a detail with sills (FW-S1 & FW-S2). The sills are solid surface, but the apron is not identified. Is the intent for those aprons to be solid surface?

Answer: Apron is solid surface.

- 2.27 **Question:** Interior windows W1 & W5 from drawing A600 & A602 indicate details W-S1 & W-S5 on A602. See snip it below and please identify the material in question. Is that material part of the window or millwork?

Answer: Part of Millwork. Please see attached
1 Revising W-S1 AND W-S5



- 2.28 **Question:** A501 Detail 3 shows a small 2x6 stud wall. We expect that this is an infill wall for insulation. Does this detail apply to all eave locations on both wood and steel trusses?

Answer: Refer to Question 2.14 and Addendum 001

2.14 on Addendum 001 does not answer this question. 2.14 is a landscaping question.

Answer: It states to refer to Answer 2.14 AND Addendum 1, not ON Addendum 1. Refer to question 2.18 above (this Addendum)

- 2.29 **Question:** The door hardware sets in spec. section 08 71 00 list door numbers related to each hardware set that do not match the door schedule or floor plans door designation number. With the doors being misnumbered either on the plans or in the hardware specs, it is not clear which, if any, get automatic openers.

Answer: Bid per attached Hardware Schedule 3.07 Section of Specification Section 08 71 00 attached.

2.30 **Question:** *The One-Line shows that the Standby Generator is Liquid Propane, as well as Section 2.02. However, Section 2.03 stated that it is diesel fired and requires a UL142 compliant tank. Can you please confirm that the machine is LP fired?*

Answer: *The generator is LPG fired*

2.31 **Question:** *Alternate 7 Does this include the Sally Port Storage as well?*

Answer: *Alternate 7 SOLELY relates to the Sallyport.*

2.32 **Question:** *S101 Please indicate footing reinforcement for interior footing between lines A&B and plan left of line 1. It's indicated to be 5'6" wide which does not match any footing types shown on S400.*

Answer: For interior wall footings running East-West along the south side of Corridor #140 and along the north side of Conference #106 provide 5'-6" wide x 1'-2" thick x continuous strip footings reinforced with 6-#5 x Continuous (L.W.), #5 @ 12" o.c. (S.W.) Bottom Bars, typically. Similar to footing as indicated in Sections #1/S400, #2/S400. Grade 60 deformed bars.

For interior wall footings running North-South along Lines "1" and "2", provide 7'-0" wide x 1'-6" thick x continuous strip footings reinforced with 7-#6 x Continuous (L.W.), #6 @ 12" o.c. (S.W.) Bottom Bars, typically. Similar to footing as indicated in Section #4/S400. Grade 60 deformed bars.

2.33 **Question:** *S101 Please indicate reinforcement for footings along line A between lines 1 and 2, as well as footings connected that are shown to be 1'8" wide. These do not match details given on S400.*

Answer: For interior wall footings running East-West between Lines "A" and "B", north and south of Canteen #123, provide 7'-0" wide x 1'-6" thick x continuous strip footings reinforced with 7-#6 x Continuous (L.W.), #6 @ 12" o.c. (S.W.) Bottom Bars, typically. Similar to footing as indicated in Section #4/S400. Grade 60 deformed bars.

Per details, Section #6/S401, provide 1'-8" wide x 1'-2" thick x continuous strip footing reinforced with 2- #5 x Continuous (L.W.) bottom bars. Typical for the three perimeter walls at the canopy exterior landing slab foundation wall. Provide spread footings MK #F5.0 for the two canopy column piers on "A"-Line. Grade 60 deformed bars.

2.34 **Question:** *There is a note on C200 that calls for the 2" domestic line to be type K copper. The 8" main coming from the road is Ductile Iron, and on the water entry detail on P 5.1 it calls for the 2" to be iron pipe, please confirm which is desired.*

Answer: *It should be ductile iron until it enters the building and comes above grade and then it becomes copper.*

2.35 **Question:** *Are the concrete treads at the interior stairs to receive the concrete sealer?*

Answer: *Spec Section 09 65 13 has been edited to include Rubber treads and nosings at interior stairs. Concrete sealer is not required.*

2.36 **Question:** *E5.6 The detail for the light pole base shows the distance below grade for the conduit, what is the overall depth below grade desired for the bases?*

Answer: *Minimum of 6' below finished grade.*

- 2.37 **Question:** *A700 Is Lockers 143 to mimic Lockers 142? Elevations 16-19 only title Lockers 142, but the enlarged plan displays Lockers 143 with the same elevation numbers.*
Answer: **Rms 141, 142, and 143 all have the same lockers as shown on Elevation 16-19. Details are representative for all the conditions where they occur, unless separately noted.**
- 2.38 **Question:** *A102 EQ23 is not denoted on the floor plan. Addendum #1 clarified that it will appear in room 147 Armory. It appears that there are three units. Please confirm.*
Answer: **3 Units located in Armory 147.**
- 2.39 **Question:** *Are there any fire extinguishers/cabinets the contractor is to provide. Not seeing any on the drawings. There is a specification section for Fire Protection Cabinets 10 44 13 and Fire Extinguisher 10 44 16. There are none located on the drawings.*
Answer: **Inadvertently omitted from drawings. Provide 5 cabinets and extinguishers to be located later.**
- 2.40 **Question:** *The plan calls for a dumpster pad (location and size may vary. We find no detail for any fencing or enclosure for the dumpster pad, and also need to know what size to carry for estimating purposes. Please provide sizing of pad, and if an enclosure is desired or not.*
Answer: **Dumpster pad has been removed from bidding documents.**
- 2.41 **Question:** *CLG-4 is shown at the exterior canopies/soffits as well as in Rooms 136, 137 & 138 inside the building. Are these the same ceiling type? The specification Metal Ceilings 09 54 00 includes both Linear Metal Ceiling Pans as well as Acoustical Metal Panel Ceilings which are 2 different products.*
Answer: **Drawings indicate Rms 136,137,and 138 have CLG-1 .**
- 2.42 **Question:** *Plumbing Schedule on DWG P01. Fixtures P-2W, P-5H, and P-7 are not included in the project drawings.*
Answer: **Do not include fixtures P-2W, P-5H or P-7 in bid.**
- 2.43 **Question:** *DWG M 5.2 Radiant Tubing Installation Detail Indicates a 3 7/8" thick insulated floor panel system to be furnished and installed by the mechanical contractor. I am just checking to see if this is your intent. I did not see this mentioned on the architectural or structural drawings.*
Answer: **Install radiant piping per Structural floor section by Mechanical Contractor.**
- 2.44 **Question:** *Spec Section 221500 General Service Compressed Air Systems. An air compressor or compressed air piping is not included in the project drawings*
Answer: **Do not include air compressor or piping in bid.**

3.0 Changes to General Documents:

None

4.0 Changes to the Specifications:

DELETE from Specifications:

SECTION 07 21 00 **DELETE 2.3** Hunter Panel Xci with 3/4" plywood for exterior wall insulation.

ADD to Specifications:

Section 08 14 16 Flat Panel Wood Doors
Section 08 34 63 Detention Doors and Frames
Section 08 34 73.16 Wood Sound Control Door and Steel Frame Assemblies
Section 08 36 13 - Sectional Doors

REVISED Specifications:

Section 00 01 10 Table of Contents - ATTACHED
Section 08 71 00 Finish Hardware
Section 09 51 13 Acoustic Panel Ceiling – REVISE as follows:

2.5 METAL SUSPENSION SYSTEM

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1. Armstrong World Industries, Inc***
- 2. Chicago Metallic Corporation***
- 3. United States Gypsum Company; DX 24 System.***

Section 09 65 13 Resilient Base and Accessories

2 Changes to the Plans:

A-800 *Finish schedule revise CLG-4: CertainTeed Linear Metal Ceiling*
Attached ADD.3 SK-1 Revised details **W-S1 and W-S5 sheet A-602**

3 Attachments:

- 6.01 Section 00 01 10 Table of Contents
- 6.02 Section 08 14 16 Flat Panel Wood Doors
- 6.03 Section 08 34 63 Detention Doors and Frames
- 6.04 Section 08 34 73.16 Wood Sound Control Door and Steel Frame Assemblies
- 6.05 Section 08 36 13 Sectional Doors
- 6.06 Section 08 71 00 Finish Hardware
- 6.07 Section 09 65 13 Resilient Base and Accessories
- 6.08 Drawings Sheet C-100

-- END OF DOCUMENT --

SECTION 00 01 10 – TABLE OF CONTENTS

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

| | |
|------------|---|
| 00 01 01 | PROJECT TITLE PAGE |
| 00 01 07 | SEALS PAGE |
| 00 01 10 | TABLE OF CONTENTS |
| 00 01 15 | LIST OF DRAWING SHEETS |
| 00 11 13 | ADVERTISEMENT FOR BIDS |
| 00 21 13 | INSTRUCTIONS TO BIDDERS |
| 00 21 13.1 | AIA A701 INSTRUCTION TO BIDDERS |
| 00 22 13 | SUPPLEMENTARY INSTRUCTIONS TO BIDDERS |
| 00 31 26 | EXISTING HAZARDOUS MATERIAL INFORMATION |
| 00 31 32 | GEOTECHNICAL DATA |
| 00 41 13 | BID FORM |
| 00 43 13 | BID SECURITY FORMS |
| 00 43 13.1 | AIA A310 BID BOND |
| 00 43 21 | ALLOWANCES FORM |
| 00 43 22 | UNIT PRICES FORM |
| 00 43 23 | ALTERNATES FORM |
| 00 43 73 | PROPOSED SCHEDULE OF VALUES FORM |
| 00 51 00 | NOTICE OF AWARD |
| 00 52 13 | AIA A101 SAMPLE CONSTRUCTION CONTRACT AGREEMENT |
| 00 60 00 | PROJECT FORMS |
| 00 60 00.1 | AIA A201 GENERAL CONDITIONS |
| 00 61 13 | AIA A312 PERFORMANCE BONDS |
| 00 73 46 | DAVIS-BACON REQUIREMENTS |
| 00 73 46.1 | DAVIS BACON AROOSTOOK COUNTY 2025 |
| 00 75 00 | GRANT CONTRACTING REQUIREMENTS |

DIVISION 01 - GENERAL REQUIREMENTS

| | |
|----------|--|
| 01 10 00 | SUMMARY |
| 01 21 00 | ALLOWANCES |
| 01 22 00 | UNIT PRICES |
| 01 23 00 | ALTERNATES |
| 01 25 00 | SUBSTITUTION PROCEDURES |
| 01 26 00 | CONTRACT MODIFICATION PROCEDURES |
| 01 29 00 | PAYMENT PROCEDURES |
| 01 31 00 | PROJECT MANAGEMENT AND COORDINATION |
| 01 32 00 | CONSTRUCTION PROGRESS DOCUMENTATION |
| 01 32 33 | PHOTOGRAPHIC DOCUMENTATION |
| 01 33 00 | SUBMITTAL PROCEDURES |
| 01 40 00 | QUALITY REQUIREMENTS |
| 01 42 00 | REFERENCES |
| 01 50 00 | TEMPORARY FACILITIES AND CONTROLS |
| 01 60 00 | PRODUCT REQUIREMENTS |
| 01 73 00 | EXECUTION |
| 01 74 19 | CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL |
| 01 77 00 | CLOSEOUT PROCEDURES |
| 01 78 23 | OPERATION AND MAINTENANCE DATA |
| 01 78 39 | PROJECT RECORD DOCUMENTS |

DIVISION 02 – EXISTING CONDITIONS

02 41 19 SELECTIVE STRUCTURE DEMOLITION

DIVISION 03 – CONCRETE

03 10 00 CONCRETE FORMING AND ACCESSORIES

03 20 00 CONCRETE REINFORCING

03 30 00 CAST-IN-PLACE CONCRETE

03 35 36 SPECIAL CONCRETE FLOOR FINISHES

DIVISION 04 – MASONRY

04 20 00 UNIT MASONRY

DIVISION 05 – METALS

05 12 00 STRUCTURAL STEEL FRAMING

05 12 13 ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FRAMING

05 21 00 STEEL JOIST FRAMING

05 31 00 STEEL DECKING

05 40 00 COLD FORMED METAL FRAMING

05 50 00 METAL FABRICATIONS

05 51 13 METAL PAN STAIRS

05 51 19 METAL GRATING STAIRS

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

06 10 00 ROUGH CARPENTRY

~~06 10 53 MISCELLANEOUS ROUGH CARPENTRY~~

06 16 00 SHEATHING

06 17 53 SHOP FABRICATED WOOD TRUSSES

06 20 23 INTERIOR FINISH CARPENTRY

06 40 23 INTERIOR ARCHITECTURAL WOODWORK

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07 13 26 SELF-ADHERING SHEET WATERPROOFING

07 21 00 THERMAL INSULATION

07 27 26 FLUID-APPLIED MEMBRANE AIR BARRIERS

07 41 13.16 STANDING SEAM METAL ROOF PANELS

07 42 13.13 FORMED METAL WALL PANELS

07 62 00 SHEET METAL FLASHING AND TRIM

07 71 00 ROOF SPECIALTIES

07 72 00 ROOF ACCESSORIES

07 84 13 PENETRATION FIRESTOPPING

07 92 00 JOINT SEALANTS

DIVISION 08 – OPENINGS

08 11 13 HOLLOW METAL DOORS AND FRAMES

08 14 16 FLAT PANEL WOOD DOORS**08 34 63 DETENTION DOORS AND FRAMES****08 34 73.16 WOOD SOUND CONTROL DOOR AND STEEL FRAME ASSEMBLIES****08 36 13 SECTIONAL DOORS**

08 41 13 ALUMINUM FRAMED ENTRANCES AND STOREFRONTS

| | |
|----------|-----------------------------------|
| 08 54 13 | FIBERGLASS WINDOWS |
| 08 56 59 | SECURITY AND SERVICE WINDOW UNITS |
| 08 71 00 | FINISH HARDWARE |
| 08 80 00 | GLAZING |

DIVISION 09 – FINISHES

| | |
|---------------------|---------------------------------|
| 09 22 16 | NON-STRUCTURAL METAL FRAMING |
| 09 22 26.23 | METAL SUSPENSION SYSTEMS |
| 09 29 00 | GYPSUM BOARD |
| 09 30 13 | CERAMIC TILING |
| 09 51 13 | ACOUSTIC PANEL CEILINGS |
| 09 54 00 | METAL CEILINGS |
| 09 54 23 | LINEAR METAL CEILING |
| 09 65 13 | RESILIENT BASE AND ACCESSORIES |
| 09 65 16 | RESILIENT SHEET FLOORING |
| 09 65 19 | RESILIENT TILE FLOORING |
| 09 67 23 | RESINOUS FLOORING |
| 09 68 13 | TILE CARPETING |
| 09 91 13 | EXTERIOR PAINTING |
| 09 91 23 | INTERIOR PAINTING |

DIVISION 10 – SPECIALTIES

| | |
|----------|-----------------------------------|
| 10 14 00 | SIGNS |
| 10 28 00 | TOILET, BATH, LAUNDRY ACCESSORIES |
| 10 44 13 | FIRE PROTECTION CABINETS |
| 10 44 16 | FIRE EXTINGUISHERS |
| 10 75 16 | GROUND SET FLAGPOLES |

DIVISION 11 – NOT USED

DIVISION 12 – FURNISHINGS

| | |
|-------------|--|
| 12 36 61.16 | SOLID SURFACING COUNTERTOPS |
| 12 48 13 | ENTRANCE FLOOR MATS, GRILLES, AND FRAMES |

DIVISIONS 13 – 20 NOT USED

DIVISION 21 – FIRE SUPPRESSION

| | |
|----------|--|
| 21 05 00 | COMMON WORK RESULTS FOR FIRE SUPPRESSION |
| 21 05 13 | COMMON MOTOR REQUIREMENTS FOR FIRE SUPPRESSION EQUIPMENT |
| 21 05 23 | GENERAL-DUTY VALVES FOR WATER-BASED FIRE-SUPPRESSION PIPING |
| 21 05 48 | VIBRATION AND SEISMIC CONTROLS FOR FIRE SUPPRESSION PIPING AND EQUIPMENT |
| 21 05 53 | IDENTIFICATION FOR FIRE SUPPRESSION PIPING AND EQUIPMENT |
| 21 08 00 | COMMISSIONING OF FIRE SUPPRESSION |
| 21 13 00 | FIRE-SUPPRESSION SPRINKLER SYSTEMS |

DIVISIONS 22 – PLUMBING

| | |
|----------|--|
| 22 05 00 | COMMON WORK RESULTS FOR PLUMBING |
| 22 05 13 | COMMON MOTOR REQUIREMENTS FOR PLUMBING EQUIPMENT |
| 22 05 16 | EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING |
| 22 05 19 | METERS AND GAUGES FOR PLUMBING PIPING |

| | |
|----------|--|
| 22 05 23 | GENERAL-DUTY VALVES FOR PLUMBING PIPING |
| 22 05 29 | HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT |
| 22 05 48 | VIBRATION AND SEISMIC CONTROLS FOR PLUMBING PIPING AND EQUIPMENT |
| 22 05 53 | IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT |
| 22 07 19 | PLUMBING PIPING INSULATION |
| 22 08 00 | COMMISSIONING OF PLUMBING |
| 22 10 05 | PLUMBING PIPING |
| 22 10 06 | PLUMBING PIPING SPECIALTIES |
| 22 15 00 | GENERAL-SERVICE COMPRESSED-AIR SYSTEMS |
| 22 30 00 | PLUMBING EQUIPMENT |
| 22 40 00 | PLUMBING FIXTURES |

DIVISION 23 – HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

| | |
|-------------|--|
| 23 05 00 | COMMON WORK RESULTS FOR HVAC |
| 23 05 13 | COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT |
| 23 05 16 | EXPANSION FITTINGS AND LOOPS FOR HVAC PIPING |
| 23 05 19 | METERS AND GAUGES FOR HVAC PIPING |
| 23 05 23 | GENERAL-DUTY VALVES FOR HVAC PIPING |
| 23 05 29 | HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT |
| 23 05 33 | HEAT TRACING FOR HVAC PIPING |
| 23 05 48 | VIBRATION AND SEISMIC CONTROLS FOR HVAC |
| 23 05 53 | IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT |
| 23 05 93 | TESTING, ADJUSTING, AND BALANCING FOR HVAC |
| 23 07 13 | DUCT INSULATION |
| 23 07 19 | HVAC PIPING INSULATION |
| 23 08 00 | COMMISSIONING OF HVAC |
| 23 21 13 | HYDRONIC PIPING |
| 23 21 14 | HYDRONIC SPECIALTIES |
| 23 21 23 | HYDRONIC PUMPS |
| 23 23 00 | REFRIGERANT PIPING |
| 23 25 00 | HVAC WATER TREATMENT |
| 23 31 00 | HVAC DUCTS AND CASINGS |
| 23 33 00 | AIR DUCT ACCESSORIES |
| 23 34 16 | CENTRIFUGAL HVAC FANS |
| 23 34 23 | HVAC POWER VENTILATORS |
| 23 34 39 | HIGH-VOLUME, LOW-SPEED PROPELLER FANS |
| 23 37 00 | AIR OUTLETS AND INLETS |
| 23 51 00 | BREECHINGS, CHIMNEYS, AND STACKS |
| 23 52 16 | CONDENSING BOILERS |
| 23 74 33 | DEDICATED OUTDOOR AIR UNITS |
| 23 81 26.13 | SMALL-CAPACITY SPLIT SYSTEM AIR CONDITIONERS |
| 23 82 00 | CONVECTION HEATING AND COOLING UNITS |
| 23 82 16 | AIR COILS |
| 23 82 41 | AIR-TO-WATER HEAT PUMP UNIT |
| 23 84 16.33 | PORTABLE DEHUMIDIFIERS |

DIVISION 24 – NOT USED**DIVISION 25 – INTEGRATED AUTOMATION**

| | |
|----------|-----------------------|
| 25 00 00 | INTEGRATED AUTOMATION |
|----------|-----------------------|

| | |
|----------|---|
| 25 05 00 | COMMON WORK RESULTS FOR INTEGRATED AUTOMATION |
| 25 08 00 | COMMISSIONING OF INTEGRATED AUTOMATION |
| 25 09 12 | VARIABLE-FREQUENCY MOTOR CONTROLLERS |
| 25 09 13 | INSTRUMENTATION AND CONTROL DEVICES FOR HVAC |
| 25 09 93 | SEQUENCE OF OPERATIONS FOR HVAC CONTROLS |

DIVISIONS 26 – ELECTRICAL

| | |
|-------------|---|
| 26 05 19 | LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES |
| 26 05 26 | GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS |
| 26 05 29 | HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS |
| 26 05 33.13 | CONDUITS FOR ELECTRICAL SYSTEMS |
| 26 05 33.16 | BOXES FOR ELECTRICAL SYSTEMS |
| 26 05 33.23 | SURFACE RACEWAYS FOR ELECTRICAL SYSTEMS |
| 26 05 36 | CABLE TRAYS FOR ELECTRICAL SYSTEMS |
| 26 05 48 | VIBRATION AND SEISMIC CONTROLS FOR ELECTRICAL SYSTEMS |
| 26 05 53 | IDENTIFICATION FOR ELECTRICAL SYSTEMS |
| 26 05 73 | POWER SYSTEM STUDIES |
| 26 05 83 | WIRING CONNECTIONS |
| 26 09 23 | LIGHTING CONTROL DEVICES |
| 26 21 00 | LOW-VOLTAGE ELECTRICAL SERVICE ENTRANCE |
| 26 24 16 | PANELBOARDS |
| 26 27 13 | ELECTRICITY METERING |
| 26 27 26 | WIRING DEVICES |
| 26 28 13 | FUSES |
| 26 28 16.13 | ENCLOSED CIRCUIT BREAKERS |
| 26 28 16.16 | ENCLOSED SWITCHES |
| 26 29 13 | ENCLOSED CONTROLLERS |
| 26 32 13 | ENGINE GENERATORS |
| 26 36 00 | TRANSFER SWITCHES |
| 26 41 13 | LIGHTNING PROTECTION FOR STRUCTURES |
| 26 43 00 | SURGE PROTECTIVE DEVICES |
| 26 51 00 | INTERIOR LIGHTING |
| 26 56 00 | EXTERIOR LIGHTING |

DIVISION 27 – COMMUNICATIONS

| | |
|----------|--------------------|
| 27 10 00 | STRUCTURED CABLING |
|----------|--------------------|

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

| | |
|----------|--------------------------|
| 28 46 00 | FIRE DETECTION AND ALARM |
|----------|--------------------------|

DIVISION 29 – 30 NOT USED**DIVISION 31 – EARTH WORK**

| | |
|----------|---------------------|
| 31 10 00 | SITE CLEARING |
| 31 20 55 | SOILS |
| 31 20 60 | AGGREGATE |
| 31 23 11 | ROUGH GRADING |
| 31 23 15 | EXCAVATION AND FILL |
| 31 23 19 | DEWATERING |
| 31 23 20 | BACKFILL |
| 31 23 24 | TRENCHING |

31 27 32 SANITARY SEWER PIPING
31 29 23 LANDSCAPE GRADING

DIVISION 32 – EXTERIOR IMPROVEMENTS

32 12 16 ASPHALT PAVING
32 13 13 CONCRETE PAVING
32 13 74 EROSION CONTROL
32 17 23 PAVEMENT MARKINGS
32 31 13 CHAIN LINK FENCES AND GATES
32 31 19 DECORATIVE METAL FENCES AND GATES
32 92 00 TURF AND GRASSES

DIVISION 33 – UTILITIES

33 41 00 STORM DRAINAGE

APPENDICES

APPENDIX A - ENVIRONMENTAL MEDIA MANAGEMENT PLAN

APPENDIX B – GEOTECHNICAL REPORT

END OF DOCUMENT 00 01 10

SECTION 08 14 16 – FLAT PANEL WOOD DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Five-ply flush wood veneer-faced doors for transparent finish.
2. Factory priming flush wood doors.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product, including the following:

1. Door core materials and construction.
2. Door edge construction
3. Door face type and characteristics.
4. Door louvers.
5. Door trim for openings.
6. Door frame construction.
7. Factory-machining criteria.
8. Factory priming specifications.
- 9.

B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each type of door; construction details not covered in Product Data; and the following:

1. Door schedule indicating door location, type, size, fire protection rating, and swing.
2. Door elevations, dimension and locations of hardware, lite and louver cutouts, and glazing thicknesses.
3. Details of frame for each frame type, including dimensions and profile.
4. Details of electrical raceway and preparation for electrified hardware, access control systems, and security systems.
5. Dimensions and locations of blocking for hardware attachment.
6. Clearances and undercuts.
7. Requirements for veneer matching.

C. Samples: For primed doors.

1.3 CLOSEOUT SUBMITTALS

A. Record Documents: For fire-rated doors, list of door numbers and applicable room name and number to which door accesses.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Smoke- and Draft-Control Door Assemblies: Listed and labeled for smoke and draft control by a qualified testing agency acceptable to authorities having jurisdiction, based on testing in accordance with UL 1784 and installed in compliance with NFPA 105.

2.2 SOLID-CORE, FIVE-PLY FLUSH WOOD VENEER-FACED DOORS FOR TRANSPARENT FINISH

A. Interior Doors, Solid-Core Five-Ply Veneer-Faced

1. Egger Industries
2. Performance Grade: ANSI/WDMA I.S. 1A Standard Duty
3. Faces: Single-ply wood veneer not less than 1/50 inch (0.508 mm) thick.
 - a. Species: Select white ash, Select white maple
 - b. Match between Veneer Leaves: Random match.
4. Core for Non-Fire-Rated Doors:
 - a. ANSI A208.1, Grade LD-1 particleboard.
 - 1) Provide doors with glued-wood-stave or WDMA I.S. 10 structural-composite-lumber cores instead of particleboard cores for doors scheduled to receive exit devices in
 - b. Glued wood stave.
 - c. WDMA I.S. 10 structural composite lumber.
 - d. Either glued wood stave or WDMA I.S. 10 structural composite lumber.
5. Core for Fire-Rated Doors: As required to achieve fire-protection rating indicated on Drawings.
 - a. Blocking for Mineral-Core Doors: Provide composite blocking with improved screw-holding capability approved for use in doors of fire-protection ratings indicated on Drawings as needed to eliminate through-bolting hardware.
6. Construction: Five plies, hot-pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.

2.3 FABRICATION

- A. Factory machine doors for hardware that is not surface applied.
 1. Locate hardware to comply with DHI-WDHS-3.

2. Comply with final hardware schedules, door frame Shop Drawings, ANSI/BHMA-156.115-W, and hardware templates.
3. Coordinate with hardware mortises in metal frames, to verify dimensions and alignment before factory machining.
4. For doors scheduled to receive electrified locksets, provide factory-installed raceway and wiring to accommodate specified hardware.

B. Openings: Factory cut and trim openings through doors.

1. Light Openings: Trim openings with moldings of material and profile indicated.
2. Glazing: Factory install glazing in doors indicated to be factory finished. Comply with applicable requirements in Section 088000 "Glazing."

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Hardware: For installation, see Section 087100 "Door Hardware."
- B. Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- C. Install frames level, plumb, true, and straight.
1. Shim as required with concealed shims. Install level and plumb to a tolerance of 1/8 inch in 96 inches (3.2 mm in 2400 mm).
 2. Anchor frames to anchors or blocking built in or directly attached to substrates.
 - a. Secure with countersunk, concealed fasteners and blind nailing.
 - b. Use fine finishing nails for exposed fastening, countersunk and filled flush with woodwork.
 3. Install smoke- and draft-control doors in accordance with NFPA 105.
- D. Job-Fitted Doors:
1. Align and fit doors in frames with uniform clearances and bevels as indicated below.
 - a. Do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors.
 2. Machine doors for hardware.
 3. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
 4. Clearances:
 - a. Provide 1/8 inch (3.2 mm) at heads, jambs, and between pairs of doors.
 - b. Provide 1/8 inch (3.2 mm) from bottom of door to top of decorative floor finish or covering unless otherwise indicated on Drawings.

- c. Where threshold is shown or scheduled, provide 1/4 inch (6.4 mm) from bottom of door to top of threshold unless otherwise indicated.
- 5. Bevel non-fire-rated doors 1/8 inch in 2 inches (3-1/2 degrees) at lock and hinge edges.

3.2 FIELD QUALITY CONTROL

3.3 ADJUSTING

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 08 14 16

SECTION 08 34 63 - DETENTION DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes detention doors and frames.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: In addition to plans, elevations, sections, and attachment details, provide a schedule using same reference numbers for details and openings as those on Drawings.

1.4 INFORMATIONAL SUBMITTALS

- A. Product test reports.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Security Fasteners: Furnish not less than one box for every 50 boxes or fraction thereof, of each type and size of security fastener installed.
- B. Tools: Provide two sets of tools for installing and removing security fasteners.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
- B. Welding Qualifications: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
 - 2. AWS D1.3, "Structural Welding Code - Sheet Steel."

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver detention hollow-metal work palletized, packaged, or crated. Do not use non-vented plastic.
- B. Deliver welded detention frames with two removable spreader bars across bottom of frames.
- C. Store detention hollow-metal work vertically under cover at Project site with head up. Place on minimum 4-inch- high wood blocking. Provide minimum 1/4-inch space between each stacked door.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Ceco Door Products; an ASSA ABLOY Group company.
 - 2. Custom Products Division; Chief Industries, Inc.
 - 3. Fleming Door Products Ltd.; an ASSA ABLOY Group company.
 - 4. Habersham Metal Products Co.
 - 5. Pioneer Industries, Inc.
 - 6. Sweeper Metal Fabricators Corp.
 - 7. Trussbilt; an ASSA ABLOY Group company.
- B. Source Limitations: Obtain detention doors and frames from single source from single manufacturer.

2.2 DETENTION DOOR AND FRAME ASSEMBLIES

- A. Detention Door and Frame Assemblies: ASTM F 1450 for security grades specified.
 - 1. Bullet Resistance: Level 5 rated when tested according to UL 752.
 - 2. Tool-Attack Resistance: Small-tool-attack-resistance rated when tested according to UL 437 and UL 1034.
- B. Detention Frames: Comply with ASTM F 1592 and removable stop test according to NAAMM-HMMA 863.

2.3 DETENTION DOORS

- A. General: Provide flush-design detention doors of seamless hollow construction, 2 inches thick. Construct detention doors with smooth, flush surfaces without visible joints or seams on exposed faces or stile edges.

- B. Core Construction: Provide the following core construction of same material as detention door face sheets, welded to both detention door faces:
1. Steel-Stiffened Core: 0.042-inch- thick, steel vertical stiffeners extending full-door height, with vertical webs spaced not more than 4 inches apart, spot welded to face sheets a maximum of 3 inches o.c. Fill spaces between stiffeners with insulation.
- C. Vertical Edge Channels: 0.123-inch- thick, continuous channel of same material as detention door face sheets, extending full-door height at each vertical edge; welded to top and bottom channels to create a fully welded perimeter channel.
- D. Top and Bottom Channels: 0.123-inch- thick metal channel of same material as detention door face sheets, spot welded, not more than 4 inches o.c., to face sheets.
1. Reinforce top edge of detention door with 0.053-inch- thick closing channel, welded so channel web is flush with top door edges.
- E. Hardware Reinforcement: Fabricate reinforcing plates from same material as detention door face sheets to comply with the following minimum thicknesses:
1. Full-Mortise Hinges and Pivots: 0.187 inch thick.
 2. Maximum-Security Surface Hinges: 0.250 inch thick.
 3. Strike Reinforcements: 0.187 inch thick.
 4. Lock Fronts, Concealed Holders, and Surface-Mounted Closers: 0.093 inch thick.
 5. All Other Surface-Mounted Hardware: 0.093 inch thick.
 6. Lock Pockets: 0.123 inch thick at non-inmate side, welded to face sheet.
- F. Hardware Enclosures: Provide enclosures and junction boxes for electrically operated detention door hardware of same material as detention door face sheets, interconnected with UL-approved, 1/2-inch- diameter conduit and connectors.
1. Access Plates: Where indicated for wiring installation, provide access plates to junction boxes, fabricated from same material and thickness as face sheet and fastened with at least four security fasteners spaced not more than 6 inches o.c.
- G. Interior Detention Doors: Construct interior doors to comply with NAAMM-HMMA 863 and as specified.
1. Security Grade 1: Provide doors with face sheets of 0.093-inch- minimum-thickness, metallic-coated, cold-rolled steel.

2.4 DETENTION FRAMES

- A. General: Provide fully welded detention frames with integral stops, of seamless construction without visible joints or seams. Fabricate detention frames continuously welded full depth and width of detention frame.
- B. Stop Height: Provide minimum stop height of 0.625 inch for detention door openings and minimum stop height of 1-1/4 inches in security glazing or detention panel openings.
- C. Interior Detention Frames: Construct interior frames to comply with NAAMM-HMMA 863 and as specified.
 - 1. Security Grade 1: Provide frames fabricated from 0.093-inch- minimum-thickness, cold-rolled steel.
- D. Hardware Reinforcement: Fabricate reinforcing plates from same material as detention frame to comply with the following minimum thicknesses:
 - 1. Hinges and Pivots: 0.187 inch thick by 1-1/2 inches wide by 10 inches long.
 - 2. Strikes and Closers: 0.187 inch thick.
 - 3. Surface-Mounted Hardware: 0.093 inch thick.
 - 4. Lock Pockets: 0.123 inch thick at non-inmate side, welded to face sheet. Provide 0.123-inch- thick, lock protection plate for attachment to lock pocket with security fasteners.
- E. Hardware Enclosures: Provide enclosures and junction boxes for electrically operated detention door hardware, interconnected with UL-approved, 1/2-inch- diameter conduit and connectors.
 - 1. Access Plates: Where indicated for wiring installation, provide access plates to junction boxes, fabricated from same material and thickness as face sheet and fastened with at least four security fasteners spaced not more than 6 inches o.c.
- F. Jamb Anchors: Weld jamb anchors to detention frames near hinges and directly opposite on strike jamb or as required to secure detention frames to adjacent construction.
 - 1. Number of Anchors: Provide two anchors per jamb plus the following:
 - a. Detention Door Frames: One additional anchor for each 18 inches, or fraction thereof, above 54 inches in height.
 - b. Detention Frames with Security Glazing or Detention Panels: One additional anchor for each 18 inches, or fraction thereof, above 36 inches in height.

- G. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, formed of same material and thickness as detention frame.
- H. Rubber Door Silencers: Except on weather-stripped detention doors, drill stops in strike jambs to receive three silencers on single-detention-door frames and drill head jamb stop to receive two silencers on double-detention-door frames. Keep holes clear during construction.
- I. Grout Guards: Provide factory-installed grout guards of same material as detention frame, welded to detention frame at back of hardware cutouts, silencers, and glazing-stop screw preparations to close off interior of openings and prevent mortar or other materials from obstructing hardware operation or installation.

2.5 MOLDINGS AND STOPS

- A. Provide fixed moldings on inmate side of glazed openings and removable stops on non-inmate side.
 - 1. Height: As required to provide minimum 1-inch glass engagement, but not less than 1-1/4 inches.
 - 2. Fixed Moldings: Formed from same material as detention door and frame face sheets, but not less than 0.093 inch thick, and spot welded to face sheets a maximum of 5 inches o.c.
 - 3. Removable Stops: Formed from 0.123-inch-thick angle, of same material as detention door face sheets. Secure with button head security fasteners spaced uniformly not more than 6 inches o.c. and not more than 2 inches from each corner, and as necessary to satisfy performance requirements. Form corners with notched or mitered hairline joints.
- B. Coordinate rabbet width between fixed and removable stops with glass or panel type and installation type indicated.

2.6 MATERIALS

- A. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, CS (Commercial Steel), Type B.
- B. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, CS (Commercial Steel), Type B.
- C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, CS (Commercial Steel), Type B; with G60 zinc (galvanized) or A60 zinc-iron-alloy (galvannealed) coating designation.
- D. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- E. Concealed Bolts: ASTM A 307, Grade A.
- F. Masonry Anchors: Same steel sheet as door face.

- G. Embedded Anchors: Hot-dip galvanized according to ASTM A 153/A 153M.
- H. Post-Installed Anchors: Torque-controlled expansion anchors.
- I. Welding Rods and Bare Electrodes: According to AWS specifications for metal alloy welded.
- J. Glazing: Comply with Section 08 8853 "Security Glazing."
- K. Grout: Comply with ASTM C 476, with a slump of not more than 4 inches as measured according to ASTM C 143/C 143M.
- L. Insulation: Slag-wool-fiber/rock-wool-fiber or glass-fiber blanket insulation.
- M. Bituminous Coating: Cold-applied asphalt mastic, compounded for 15-mil dry film thickness per coat.

2.7 FABRICATION

- A. Fabricate detention doors and frames rigid, neat in appearance, and free of defects, warp, or buckle.
- B. Tolerances: Comply with NAAMM-HMMA 863.
- C. Removable Jamb Faces: Provide removable jamb faces where required for access to embedded anchors. Fabricate to allow secure reattachment of removable face with security fasteners.
- D. Hardware Preparation: Factory prepare detention doors and frames to receive mortised hardware, including cutouts, reinforcement, mortising, drilling, and tapping, according to final Door Hardware Schedule and templates provided by detention door hardware supplier.
- E. Factory cut openings in detention doors.
- F. Weld components to comply with referenced AWS standard. Weld before finishing components to greatest extent possible. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.

2.8 FINISHES

- A. Factory Priming for Field-Painted Finish: Apply shop primer immediately after surface preparation and pretreatment. Apply a smooth coat of even consistency to provide a uniform dry film thickness of not less than 0.7 mil.

1. Shop Primer: Manufacturer's or fabricator's standard, fast-curing, corrosion-inhibiting, lead- and chromate-free, universal primer complying with SDI A250.10.

2.9 SECURITY FASTENERS

- A. Operable only by tools produced by fastener manufacturer or other licensed fabricator for use on specific fastener type.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Acument Global Technologies North America.
 - b. Bryce Fastener.
 - c. Safety Socket LLC.
 - d. Tamperproof Screw Co., Inc.
 - e. Tamper-Pruf Screws.
 2. Drive-System Type: Pinned Torx-Plus.

2.10 SEALANTS

- A. Security Sealants: Manufacturer's standard, nonsag, tamper-resistant polyurethane sealant.

2.11 ACCESSORIES

- A. Concealed Bolts: ASTM A 307, Grade A unless otherwise indicated.
- B. Embedded Plate Anchors: Mild steel shapes and plates, minimum 3/16 inch thick; with minimum 1/2-inch- diameter, headed studs welded to back of plate.
- C. Welding Rods and Bare Electrodes: According to AWS specifications.
- D. Pass-Through Openings: Fabricate flush openings using 0.093-inch- thick interior channels of same material as detention door faces, inverted to be flush with openings, welded to inside of both face sheets and with corners fully welded. Mount shutters on non-inmate side of detention doors. Reinforce for locks and food-pass hinges.
 1. Inset Shutters: Fabricate from two steel plates, 0.123 inch thick, of same material as detention door face sheets, spot welded together and sized to inset inside opening and to prevent inmate tampering of lock and hinges.
 2. Overlapping Shutters: For surface application on non-inmate side of door. Fabricate from a single steel plate, of same material as detention door face sheets, 0.187 inch thick, sized to overlap food-pass openings by 1/2 inch.

- E. Speaking Apertures: Consist of a rectangular pattern of holes, minimum 1 inch high by 4 inches wide, with holes 1/4 inch in diameter. Locate holes in both face sheets directly across from each other and spaced not more than 1 inch o.c. vertically and horizontally. Provide 0.067-inch- thick, pressed-steel baffles in interior of detention door between hole patterns to prevent passage of objects.
- F. Gun Ports: Fabricate units to comply with UL 752 and to resist same security level as detention doors in which they are installed.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine roughing-in for embedded and built-in anchors to verify actual locations of detention frame connections before detention frame installation.

3.2 PREPARATION

- A. Before installation and with shipping spreaders removed, adjust detention frames for squareness, alignment, twist, and plumbness to the following tolerances:
 - 1. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb and perpendicular to frame head.
 - 2. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of face.
 - 3. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of door rabbet.
 - 4. Plumbness: Plus or minus 1/16 inch, measured at jambs on a perpendicular line from head to floor.

3.3 INSTALLATION

- A. Anchorage: Set detention frame anchorage devices according to details on Shop Drawings and according to anchorage device manufacturer's written instructions.
- B. Where detention frames are fabricated in sections due to shipping limitations, assemble frames and install angle splices at each corner, of same material and thickness as detention frame, and extend at least 4 inches on both sides of joint.
 - 1. Field splice only at approved locations. Weld, grind, and finish as required to conceal evidence of splicing on exposed faces.

2. Continuously weld and finish smooth joints between faces of abutted, multiple-opening, detention frame members.
 - C. Placing Detention Frames: Install detention frames of sizes and profiles indicated. Set detention frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.
 - D. Grout: Fully grout detention frame jambs and heads. Completely fill space between frames and adjacent substrates. Hand trowel grout and take other precautions, including bracing detention frames, to ensure that frames are not deformed or damaged by grout forces.
 - E. Security Sealant: Apply polyurethane security sealant at all exposed gaps between detention frames and adjacent substrates.
 - F. Swinging Detention Doors: Fit non-fire-rated detention doors accurately in their frames, with the clearances according to NAAMM-HMMA 863.
 - G. Installation Tolerances: Comply with NAAMM-HMMA 863.
 - H. Glazing: Comply with installation requirements in Section 08 8853 "Security Glazing" unless otherwise indicated.
- 3.4 FIELD QUALITY CONTROL
- A. Inspect installed products to verify compliance with requirements. Prepare inspection reports and indicate compliance with and deviations from the Contract Documents.
 - B. Prepare field quality-control certification that states installed products comply with requirements in the Contract Documents.
- 3.5 ADJUSTING AND CLEANING
- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including detention doors and frames that are warped, bowed, or otherwise unacceptable.

END OF SECTION 08 34 63

SECTION 08 34 73.16 WOOD SOUND CONTROL DOOR AND STEEL FRAME ASSEMBLIES**PART 1 - GENERAL****1.1 SECTION INCLUDES**

- .1 Non-fire rated acoustic pressed steel frames.
- .2 Non-fire rated acoustic wood doors.
- .3 Perimeter and bottom acoustic seals and threshold.
- .4 Factory finishing.

1.2 RELATED SECTIONS

- .1 Section 07 92 00 - Joint Sealing: Caulking between doors and adjacent construction.
- .2 Section 08 71 10 - Door Hardware - General.
- .3 Section 09 91 15 - Painting: Field painting of frames.

1.3 REFERENCES

- .1 ASTM E90-09(2016) - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
- .2 ASTM E413-16 - Classification for Rating Sound Insulation. CSDMA, Selection and Usage Guide for Steel Doors and Frames, 2009.

1.4 SUBMITTALS

- .1 Section 01 33 00: Submission procedures.
- .2 Shop Drawings: Indicate door and frame elevations, anchor types and spacing, closure methods, finishes location of cut-outs for hardware.
- .3 Samples: Submit manufacturer's door finish samples, frame corners, and perimeter acoustic gaskets.
- .4 Test Data:
 - .1 Submit test data indicating compliance with the Sound Transmission Class (STC) requirements. Include laboratory name, test report number, and date of test.
 - .2 Submit certification from test laboratory qualified under the National Voluntary Accreditation Program (NVLAP) of the U.S. Bureau of Standards.
- .5 Installation Instructions: Submit manufacturer's installation instructions.

1.5 QUALITY ASSURANCE

- .1 Perform Work to requirements of WDMA (Window and Door Manufacturers Association) standards.
- .2 Provide Products of this section from a single manufacturer, unless components are referenced specifically in other sections.
- .3 Manufacturer: Minimum five (5) years documented experience manufacturing sound control door assemblies.

1.6 DELIVERY, STORAGE AND PROTECTION

- .1 Weld minimum two temporary jamb spreaders per frame prior to shipment.
- .2 Remove frames from wrappings or coverings upon receipt on site and inspect for damage.
- .3 Store doors in horizontal position, frames in vertical position, spaced with blocking to permit air circulation between components.
- .4 Store materials out of water and covered to protect from damage. Use covering that enables air circulation and does not permit light to penetrate.
- .5 Store doors between 10 to 32 degrees C (50 to 90 degrees F) and 25 to 55 percent relative humidity.
- .6 Clean and touch up scratches or disfigurement to wood and metal surfaces.

1.7 WARRANTY

- .1 Manufacturer's Limited Warranty: Five (5) years from date of supply, covering material and workmanship.

Part 2 Products**2.1 MANUFACTURERS**

- .1 AMBICO Limited
1120 Cummings Avenue
Ottawa, Ontario, Canada K1J 7R8
Toll Free Phone 888-423-2224
Phone 613-746-4663
Toll Free Fax 800-465-8561
Fax 613-746-4721
- .2 Or approved equal:

2.2 PERFORMANCE REQUIREMENTS

- .1 Acoustic Performance: Minimum Sound Transmission Class (STC 52) tested to ASTM E90.

2.3 MATERIALS

- .1 Sheet Steel:
 - .1 Galvanized steel to ASTM A653/A653M, ZF75 (A25), minimum 1.5 mm (16 ga) thick.
 - .2 Recycled Content: Minimum []%.
- .2 Reinforcement: Same material as sheet steel.
- .3 Wood door panel Urea-formaldehyde free acoustic core with wood veneer facing.
 - .1 Door facing:
 - .1 Wood face veneer: maple species, match standard wood doors
 - .2 Door edging:
 - .1 For wood faced doors, provide hardwood stiles with stiles to match wood face and hardwood rails.
 - .2 Bottom rail may be omitted if required to meet acoustic performance requirements.

2.4 FABRICATION

- .1 Manufacture doors and frames to STC rating of 52, measured in accordance with ASTM E90.
- .2 Wood Doors:
 - .1 Fabricate doors to ANSI/WDMA IS1A. Provide suitable thickness, design, and acoustic core to achieve specified STC and fire performance ratings.
 - .2 Reinforce doors where surface-mounted hardware is required.
 - .3 Drill and tap steel acoustic core for mortised, templated hardware.
 - .4 Exit Device Vertical Rods: Surface mounted , with concealed top rod; coordinate with exit hardware devices specified in Section 08 71 10.
 - .5 Factory installed glazing.
- .3 Steel Frames:
 - .1 Sheet steel, metal thickness and appropriate to maintain door STC and fire ratings, mitred corners, fully welded seams.
 - .2 Factory assemble and weld frames.
 - .3 Install and adjust perimeter and bottom acoustic seals around frames and mullions.

2.5 FINISHES

- .1 Metal Frame: Factory applied zinc phosphate primer.
- .2 Top and Bottom Rails: Factory sealed with wood sealer.

2.6 ACCESSORIES

- .1 Hinges: Cam lift type, by door manufacturer.

- .2 Threshold: To provide a seal for door in closed position.
- .3 Acoustic seals: Provide perimeter and bottom seals, manufacturer standard.

Part 3 Execution

3.1 INSTALLATION

- .1 Install components to manufacturer's written instructions.
- .2 Install wood doors and frames to ANSI/WDMA IS 1A standards, and in accordance with NFPA 80, and local authority having jurisdiction.
- .3 Coordinate with masonry/gypsum board wall construction for anchor placement.
- .4 Set frames plumb, square, level at correct elevation.
- .5 Adjust operable parts for correct clearances and function.
- .6 Install and adjust perimeter and bottom acoustic seals.
- .7 Finish paint in accordance with Section 09 91 15.
- .8 Touch up finishes where damaged.

3.2 ERECTION TOLERANCES

- .1 Maximum deviation from square, alignment, twist and plumb: +/- 0.75 mm (1/32").

3.3 FIELD QUALITY CONTROL

- .1 Provide qualified manufacturer's representative to instruct installers on the proper installation and adjustment of door assemblies.
- .2 Provide manufacturer's representative to inspect door installation, and test minimum five (5) cycles of operation. Correct any deficient doors.

END OF SECTION 08 34 73.16

SECTION 08 36 13 - SECTIONAL DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Sectional-door assemblies.

1.2 ACTION SUBMITTALS

A. Product Data: For each type and size of sectional door and accessory.

1. Include construction details, material descriptions, dimensions of individual components, profile door sections, and finishes.
2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.

B. Shop Drawings: For each installation and for components not dimensioned or detailed in manufacturer's product data.

1. Include plans, elevations, sections, and mounting details.
2. Include details of equipment assemblies. Indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
4. Include diagrams for power, signal, and control wiring.

C. Samples: For each exposed product and for each color and texture specified.

1.3 INFORMATIONAL SUBMITTALS

A. Sample warranties.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

1.6 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of sectional doors that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including, but not limited to, excessive deflection.
 - b. Failure of components or operators before reaching required number of operation cycles.
 - c. Faulty operation of hardware.
 - d. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use; rust through.
 - e. Delamination of exterior or interior facing materials.
 - 2. Warranty Period: Three years from date of Substantial Completion.
- B. Special Finish Warranty: Manufacturer agrees to repair or replace components that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Warranty Period: 5 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Provide sectional doors that comply with performance requirements specified without failure from defective manufacture, fabrication, installation, or other defects in construction and without requiring temporary installation of reinforcing components.
- B. Structural Performance, Exterior Doors: Capable of withstanding the design wind loads.
 - 1. Design Wind Load: Uniform pressure (velocity pressure) of 20 lbf/sq. ft. (960 Pa), acting inward and outward.
 - 2. Testing: In accordance with ASTM E330.
- C. Windborne-Debris Impact Resistance: Provide sectional doors complying with the following requirements:
 - 1. Glazed Openings: Pass ASTM E1886 Large Missile Test and cyclic-pressure tests in accordance with ASTM E1996 for enhanced protection .
 - 2. Garage-Door Glazed Openings: Pass DASHA 115.
- D. Seismic Performance: Provide sectional doors that withstand the effects of earthquake motions determined in accordance with ASCE/SEI 7.
 - 1. Component Importance Factor: 1.5.

2.2 SECTIONAL-DOOR ASSEMBLY

- A. Steel Sectional Door: Provide sectional door formed with hinged sections and fabricated so that finished door assembly is rigid and aligned with tight hairline joints; free of warp, twist, and deformation; and complies with requirements in DASHA 102.

1. Basis-of-Design Products: Subject to compliance with requirements, provide products by the following or approved substitute:
 - a. Raynor; Thermaseal TM320 Series.
- B. Operation Cycles: Door components and operators capable of operating for not less than 10,000 operation cycles. One operation cycle is complete when door is opened from closed position to the open position and returned to closed position.
- C. Air Infiltration: Maximum rate of 0.4 cfm/sq. ft. (2.03 L/s per sq. m) when tested in accordance with ASTM E283 or DASMA 105.
- D. U-Value: 0.19 Btu/sq. ft. x h x deg F.
- E. Steel Door Sections: ASTM A653/A653M, zinc-coated (galvanized), cold-rolled, commercial steel sheet with G60 (Z180) zinc coating.
 1. Door-Section Thickness: 3 inches.
 2. Section Faces:
 - a. Thermal-Break Construction: Provide sections with continuous thermal-break construction separating the exterior and interior faces of door.
 - b. Exterior Face: Fabricated from single sheets, not more than 24 inches high; with horizontal meeting edges rolled to continuous, interlocking, keyed, rabbeted, shiplap, or tongue-in-groove, weather- and pinch-resistant seals and reinforcing flange return.
 - a. Steel Sheet Thickness: 0.019-inch nominal coated thickness.
 - c. Interior Face: Enclose insulation completely within steel exterior facing and interior facing material, with no exposed insulation. Provide the following interior-facing material:
 - a. Zinc-Coated (Galvanized) Steel Sheet: With minimum nominal coated thickness of dimension recommended in writing by manufacturer to comply with performance requirements
 3. Section Reinforcing: Horizontal and diagonal reinforcement as required to stiffen door and for wind loading. Provide galvanized-steel bars, struts, trusses, or strip steel, formed to depth and bolted or welded in place. Ensure that reinforcement does not obstruct vision lites.
 - a. Bottom Section: Reinforce section with a continuous channel or angle conforming to bottom-section profile and allowing installation of astragal (weatherseal).
 - b. Hardware Locations: Provide reinforcement for hardware attachment.
 4. Thermal Insulation: Insulate interior of steel sections with door manufacturer's standard insulation.
- F. Windows: Full Glazed Aluminum Sash Panels:

- G. Windows: Manufacturer's standard window units of shape and size and in locations indicated on Drawings. Set glazing in vinyl, rubber, or neoprene glazing channel. Provide removable stops of same material as door-section frames. Provide the following glazing:
 - 1. Insulating Glass Units: Manufacturer's standard
- H. Hardware: Heavy-duty, corrosion-resistant hardware, with hot-dip galvanized, stainless steel, or other corrosion-resistant fasteners, to suit door type.
 - 1. Rollers: Heavy-duty rollers with steel ball bearings in case-hardened steel races, mounted to suit slope of track. Extend roller shaft through both hinges where double hinges are required. Match roller-tire diameter to track width.
 - a. Roller-Tire Material: Case-hardened steel
 - 2. Push/Pull Handles: Equip each door with galvanized-steel lifting handles on each side of door, finished to match door.
- I. Counterbalance Mechanism:
 - 1. Torsion Spring: Adjustable-tension torsion springs complying with requirements of DASMA 102 for number of operation cycles indicated, mounted on torsion shaft.
 - 2. Cable Drums and Shaft for Doors: Cast-aluminum cable drums mounted on torsion shaft and grooved to receive door-lifting cables as door is raised.
 - a. Mount counterbalance mechanism with manufacturer's standard ball-bearing brackets at each end of torsion shaft.
- J. Electric Door Operator: Electric door operator assembly of size and capacity recommended by door manufacturer for door and operation cycles specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, control stations, control devices, integral gearing for locking door, and accessories required for proper operation.
 - 1. Comply with NFPA 70.
 - 2. Control equipment complying with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6; with NFPA 70, Class 2 control circuit, maximum 24 V ac or dc.
 - 3. Usage Classification: Medium duty, up to 12 cycles per hour and up to 50 cycles per day
 - 4. Operator Type: Jackshaft, side mounted
 - 5. Motor: Reversible-type for interior, clean, and dry motor exposure. Use adjustable motor-mounting bases for belt-driven operators.
 - 6. Limit Switches: Equip motorized door with adjustable switches interlocked with motor controls and set to automatically stop door at fully opened and fully closed positions.
 - 7. Obstruction Detection: Automatic external entrapment protection consisting of automatic safety sensor capable of protecting full width of door opening. Activation of device immediately stops and reverses downward door travel.
 - a. Monitored Entrapment Protection: Photoelectric sensor designed to interface with door-operator control circuit to detect damage to or disconnection of sensor and complying with requirements in UL 325.

8. Control Station: Surface mounted,
 - a. Operation: Push button interior and key exterior
 9. Emergency Manual Operation: Chain type
 10. Emergency Operation Disconnect Device: Hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.
 11. Motor Removal: Design operator so motor can be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.
- K. Metal Finish:
1. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat.
 - a. Color and Gloss: As selected by Architect from manufacturer's full range

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install sectional doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; in accordance with manufacturer's written instructions.
- B. Tracks:
 1. Fasten vertical track assembly to opening jambs and framing with fasteners spaced not more than 24 inches (610 mm) apart.
 2. Hang horizontal track assembly from structural overhead framing with angles or channel hangers attached to framing by welding or bolting, or both. Provide sway bracing, diagonal bracing, and reinforcement as required for rigid installation of track and door-operating equipment.
- C. Accessibility: Install sectional doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.
- D. Power-Operated Doors: Install automatic garage doors openers in accordance with UL 325.

3.2 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain sectional doors.

END OF SECTION 08 36 13

SECTION 08 71 00 – FINISH HARDWARE

PART 1 –GENERAL

1.01 RELATED DOCUMENTS

- A. All of the Contract Documents, including General and Supplementary Conditions and Division 1 General Requirements, apply to the work of this section.

1.02 DESCRIPTION OF WORK

- A. The work of this section includes, but is not limited to, the following:
 - 1. Providing hardware for all doors, except doors provided with their own hardware.
 - 2. Providing lock cylinders for all work requiring cylinders.
 - 3. Providing the services of a qualified hardware consultant to prepare detailed schedules of hardware required for the project.
 - 4. Access Control, Low Voltage Wire & Wiring to be included in Division 28 46 00 Security and Fire Alarm

1.03 RELATED WORK

- A. Carefully examine all of the Contract Documents for requirements which affect the work of this section. Other specifications sections which directly relate to the work of this section include, but are not limited to, the following:
 - 1. Section 08 11 13 – Hollow Metal Doors and Frames; work requiring template coordination, metal astragals for fire-rated doors.

1.04 INTENT

- A. A major intent of the work of this section is to provide hardware for every door in the project, except as indicated, so that each door functions correctly for its intended use. Provide only hardware that complies with applicable codes and requirements of authorities having jurisdiction including requirements for barrier-free accessibility.

1.05 QUALITY ASSURANCE

- A. Hardware supplier shall have in his employ one or more members of the Door and Hardware Institute to include at least one Certified Architectural Hardware Consultant in good standing, who shall be responsible for preparation of the Finish Hardware Schedule. This Consultant shall be acceptable to the Architect and is to ensure that the intent requirement of this specification is fulfilled, and certify that the work of this section meets or exceeds the requirements specified in this section and the requirements of authorities having jurisdiction.

- B. Hardware supplier shall warrant and guarantee, in writing, that hardware supplied is free of defective material and workmanship. Supplier shall further warrant and guarantee for a period of one year from Owner's Use and Occupancy that the hardware shall function in a satisfactory manner without binding, collapse, or dislodging of its parts, provide the installation is made to the manufacturer's recommendations.
- C. The hardware supplier shall repair or remedy, without charge, any defect of workmanship or material for which he is responsible hereunder.
- D. Electronic security hardware: When electrified hardware is included in the hardware specification, the hardware supplier must employ an individual knowledgeable in electrified components and systems, who is capable of producing wiring diagrams and consulting as needed. Coordinate installation of the electronic security hardware with the Architect and electrical engineers and provide installation and technical data to the Architect and other related subcontractors. Upon completion of electronic security hardware installation, inspect and verify that all components are working properly.

1.06 SUBMITTALS

- A. Submit the following in accordance with SECTION 01 33 00-SUBMITTALS:
 - 1. Schedule: Submit to the Architect six (6) copies of the complete hardware schedule within the fourteen (14) days after receipt of contract award. Submit therewith complete catalog cuts and descriptive data of all products specifically scheduled therein. No materials shall be ordered or templates issued until the hardware schedule has been approved by the Architect. Form and detail of hardware schedule shall be in vertical format in conformance to the door and hardware industry standards. All hardware sets shall be clearly cross-referenced to the hardware set numbers listed in the specifications.
 - 2. Samples: If requested, submit to the Architect for approval, a complete line of samples as directed. Samples shall be plainly marked giving hardware number used in this specification, the manufacturer's numbers, types and sizes. The Architect will deliver approved samples to the project site to be stored. Samples will remain with the Architect until delivery of all hardware to the project is complete, after which time they will be turned over to the General Contractor for incorporation into the work.
 - 3. Keying System Submission: Before cylinders are ordered, submit a complete proposed keying system for approval. This should be done after a keying meeting has been held with the owner's representative.

1.07 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Delivery of hardware shall be made to the project by the Hardware Supplier in accordance with the instructions of the General Contractor.
- B. The finish hardware shall be delivered to the jobsite and received there by the General Contractor. The General Contractor shall prepare a locked storage room with adequate shelving, for all hardware. The storage room shall be in a dry, secure area, and shall not include storage of other products by other trades.
- C. The General Contractor shall furnish the Hardware Supplier with receipts for all hardware and accessory items received, and shall send copies of these receipts to the Architect, if requested.

1.08 REGULATORY REQUIREMENTS

- A. Conform to all applicable codes. Provide all throws, projections, coatings, knurling, opening and closing forces, and other special functions required by State and Local Building Codes, and all applicable Handicap Code requirements.
- B. For fire rated openings, provide hardware complying with NFPA 80 and NFPA 101 without exception. Provide only hardware tested by UL for the type and size of door installed and fire resistance rating required.

1.09 SPECIAL REQUIREMENTS

- A. Hardware Supplier shall determine conditions and materials of all doors and frames for proper application of hardware.
- B. The Hardware Schedule shall list the actual product series numbers. Bidders are required to follow the manufacturers' catalog requirement for the actual size of door closers, brackets and holders. All door opening sizes are as noted on the Door Schedule and all hardware shall be in strict accordance with requirements of height, width, and thickness.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

| | | |
|--|---|---|
| Hinges | McKinney Stanley | Scranton, PA New Britain, CT |
| Locksets | Sargent Schlage (No Exception) | New Haven, CT Colorado Springs, CO |
| Exit Devices | Sargent Von Duprin (No Exception) | New Haven, CT Indianapolis, IN |
| Door Closers | Sargent LCN (No Exception) | New Haven, CT Princeton, IL |
| Auto Door Operators | Horton (No Exception) | Corpus Christi, TX |
| Door Stop | Glynn Johnson Ives Rockwood | Indianapolis, IN New Haven, CT Rockwood, PA |
| Push/Pulls | Rockwood Burns Ives | Rockwood, PA Erie, PA New Haven, CT |
| Protective Plates | Rockwood Burns Ives | Rockwood, PA Erie, PA New Haven, CT |
| Thresholds/ Weatherstripping/ Rain Drips | NGP Pemko Reese | Memphis, TN Memphis, TN Rosemount, MN |
| Silencers | Rockwood | Rockwood, PA |
| Power Supply | Sargent Von Duprin | New Haven, CT Indianapolis, IN |
| Magnetic Lock | Rixson | Monroe, NC |
| Keying | Sargent Schlage (No Exception) | New Haven, CT Colorado Springs, CO |
| Key Cabinet | Telkee | Columbus, OH |

2.02 MATERIALS AND QUALITY

- A. All hardware shall be of the best grade of solid metal entirely free from imperfections manufacturer and finish.
- B. Qualities, weights, and sizes given herein are the minimum that will be accepted. It is the responsibility of the Hardware Supplier to supply the specified size and weight of hardware and the proper function of hardware in each case and to provide UL approved hardware at all fire rated doors.
- C. Provide, as far as possible, locks of one lock manufacturer and hinges of one hinge manufacturer. Modifications to hardware that are necessary to conform to construction shown or specified shall be provided as required for the specified operation and functional features.

2.03 HARDWARE DESIGNATIONS

- A. All items of hardware are referenced by manufacturer's names and numbers. The manufacturer's names and numbers are used to define the function, design, and the quality of the material to be supplied.

Substitution of products other than those listed shall be submitted to the Architect at least ten (10) days PRIOR to the bid date. The Architect shall be the sole judge of any proposed substitution.

2.04 TEMPLATES

- A. Hardware supplier shall immediately, but not later than three (3) days after approval of his Schedule by the Architect, furnish the General Contractor with complete template information necessary for the fabrication of doors, frames, etc. No templates shall be furnished prior to the approval of the hardware schedule.

2.05 HARDWARE FOR LABELED FIRE DOORS, EXIT DEVICES AND SMOKE DOORS

- A. Hardware shall conform to requirements of NFPA 80 for labeled fire doors and to NFPA 101 for exit doors, as well as to other requirements specified. Labeling and listing by UL Building Materials Directory, for class of door being used will be accepted as evidence of conformance to these requirements. Install minimum latch throw as specified on label of individual doors. Provide hardware listed by UL except where heavier materials, larger sizes, or better grades are specified herein under paragraph entitled "Hardware Sets". In lieu of UL labeling and listing, test reports from a nationally recognized testing agency may be submitted showing that hardware has been tested in accordance with UL test methods and that it conforms to NFPA requirements. Specific hardware requirements of door or frame manufacturers which exceed sized or weights of hardware herein listed shall be provided with no additional charge.

2.06 KEYS AND KEYING

- A. The hardware supplier shall review the specific hardware functions with the Architect and owner at the time of the keying review, to assure the appropriateness of each of the hardware functions. Failure to make this review does not relieve the hardware supplier from providing the proper functions.

2.07 FASTENERS

- A. Manufacture hardware to conform to published templates, generally prepared for machine screw installation.
- B. Furnish screws for installation, with each hardware item. Provide Phillips flat-head screws except as otherwise indicated. Furnish exposed screws to match the hardware finish, or, if exposed in surfaces of other work, to match the finish of such other work as closely as possible, except as otherwise indicated.
- C. Provide concealed fasteners for hardware units which are exposed when the door is closed, except to the extent no standard manufactured units of the type specified are available with concealed fasteners. Do not use thru-bolts unless specifically approved by the Architect.
- D. All hardware shall be installed only with fasteners supplied by manufacturers of specific products.

2.08 PACKING AND MARKING

- A. All hardware shall have the required screws, bolts and fastenings necessary for proper installation and shall be wrapped in the same package as the hardware item for which it is intended and shall match finish of hardware with which to be used.
- B. Each package shall be clearly labeled indicating the portion of the work for which it is intended.

2.09 ENVIROMENTAL CONCERN FOR PACKGING

- A. The hardware shipped to the jobsite is to be packaged in biodegradable packs such as paper or cardboard boxes and wrapping. If non-biodegradable packing such as plastic, plastic bags or large amounts of Styrofoam is utilized, then the Contractor will be responsible for the disposal of the non-biodegradable packing to a licensed or authorized collector for recycling of the non-degradable packing.

2.10 FINISH HARDWARE DESCRIPTION

- A. Hardware items shall conform to respective specifications and standards and to requirements specified herein.

B. MATERIALS AND FINISH MATERIALS AND FINISHES SHALL BE:

1. Interior Butts: US 10B (BHMA 613)
2. Exterior Geared Hinges US28 (BHMA 613)
3. Door Closers: Sprayed to match hardware finish.
4. Exit Devices: US10B (BHMA 613)
5. Kick, Push Plates: US10B (BHMA 613)
6. All other hardware shall be: US10B (BHMA 613), or as scheduled.

C. KEYING:

1. General: Cylinder manufacture to have minimum (10) years of experience designing secured master key systems and have on record a published security keying system policy.
2. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
3. Cylinders: Original manufacture cylinders complying with the following:
 - A. Mortise Type: Threaded cylinders with rings and straight or clover type cam.
 - B. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
4. Patented Cylinders: ANSI.BHMA A156.5, Grade 1, Certified cylinder employing a utility patented and restricted keyway requiring the use of patented controlled keys. Provide Large Format Interchangeable Core Cylinders.
 - A. Provide 6 pin multi level master key system comprised of patented controlled keys and security cylinders. Geographically exclusivity to be provided for all security and high security Cylinders
 - B. Acceptable Manufacturer
 - 1) Sargent Manufacturing - Signature Series
 - 2) Schlage - Everest D Series
5. Key Quantity: Provide the following minimum number of keys:
 - A. Top Master Key: 6
 - B. Change Keys Per Cylinder: 4
 - C. Master Keys Per Group: 6
 - D. Control Keys: 2
 - E. Construction Control Keys: 10

D. KEY CABINET:

1. Furnish a wall mounted key cabinet in grey neutratone finish with a capacity capable of containing all the keyed different and alike changes required for this project and an additional 20% greater quantity for future expansion.
2. Provide a complete cross-indexing system, including:
 1. Hook number,
 2. Key number,
 3. Description of item to which key belongs.

E. HINGES

1. Number of hinges per door, two hinges for doors up to and including five feet in height and an additional hinge for each two and one half feet or fraction thereof.

2. Hinges shall be as follows:

| | | | |
|------------|------------|---------------|---------------|
| Exterior | McKinney | TA2314 | 4 ½ x 4 ½ NRP |
| | Stanley | FBB191 | 4 ½ x 4 ½ NRP |
| Interior | McKinney | TA2714 | 4 ½ x 4 ½ |
| | Stanley | FBB179 | 4 ½ x 4 ½ |
| Electric | McKinney | TA2714-CC8 | |
| | Von Duprin | EPT | |
| Continuous | Pemko | CFM JD1 Clear | |

F. DOOR CLOSERS:

1. Door closers shall have fully hydraulic, full rack and pinion action. Cylinder body shall be 1-1/2" in diameter, and double heat treated pinion shall be 11/16" in diameter.
2. Hydraulic fluid shall be of a type requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
3. Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force for physically handicapped. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and hydraulic back-check.
4. All closers shall have solid forged steel main arms (and forged forearms for parallel arm closers).
5. Closer arms (and metal covers when specified) shall have a powder coating finish.
6. Provide drop, mounting plates, where required.
7. Do not locate closers on the side of doors facing corridors, passageways or similar type areas. Where it is necessary, due to certain conditions and approval of the Architect, to have closers in corridors, provide such closers with parallel or track type arms.

8. All door closers shall be adjusted by the installer in accordance with the manufacturer's templates and written instructions. Closers with parallel arms shall have back-check features adjusted prior to installation.
9. Closers shall conform to all applicable code requirements relative to setting closing speeds for closers and maximum pressure for operating interior and exterior doors.
10. Door closers meeting this specification are as follows:

| | LCN | Sargent |
|----------|--------------|------------|
| Exterior | 4111S-H-CUSH | 281 – CPSH |
| Interior | 4011 | 281- 0 |
| | 4111 | 281 – P9 |

G. ELECTRIC DOOR OPENER/CLOSER:

When indicated in the hardware sets provide electric door opener/closer model 4100 as manufactured by Horton.

4100 LE Series

H. EXIT DEVICES:

1. Shall be Von Duprin or Sargent as follows:

| Function | Von Duprin | Sargent |
|----------|-----------------|---------------------|
| A | 33NL x 996NL | 8504 ETL |
| B | EL 3747A x 360T | AD 55 56 8406 x 106 |
| C | 3747A EO | AD 8410 |
| D | EL 9827NL-OP | 55 56 8706 |
| E | 9827 EO | 8710 |
| F | EL 9827F NL-OP | 12 55 56 8706 |
| G | 9827F EO | 12 8710 |
| H | 9827L x 996L | 8713 ETL |
| I | 98L x 996L | 8813 ETL |
| J | 98NL x 996NL | 8804 ETL |

I. HEAVY DUTY LEVER CYLINDRICAL LOCKS:

1. Cylindrical type shall be heavy-duty ANSI A156.13, Series 1000, Grade 1 Operational, 2-3/4" backset, six pin cylinder with lever handles.
2. The following locksets shall be considered acceptable for this project:

| | | |
|---------|-----------|-----------|
| Sargent | 10 Line | LL Design |
| Schlage | ND Series | RHO |

3. Lock functions as indicated in the hardware schedule shall be as follows:

| Function | Schlage | Sargent |
|-------------------|----------|---------|
| A (Storeroom) | 80 | 04 |
| B (Passage) | 10 | 15 |
| C (Electric Lock) | 80 EL-RX | 70 |
| D (Office) | 50 | 05 |
| E (Classroom Sec) | 75 | 38 |
| F (Classroom) | 70 | 37 |
| G (Privacy) | L9040 | 49 8265 |
| H Dead Bolt | | 484 |

J. PUSH PLATES, DOOR PULLS, PUSH/PULL BARS, FLUSH BOLTS, COORDINATORS

1. Shall be as manufactured by Rockwood, Burns or Ives.

- a. Push plates shall be 4" x 16" x .050 thickness unless otherwise listed in hardware sets.

| | |
|----------|-----------|
| Rockwood | 70 Series |
| Burns | 50 Series |
| Quality | 40 Series |

- b. Door pulls shall be 1" x 10"

| | |
|----------|-----------|
| Type A | |
| Rockwood | BF111 |
| Burns | BF26C |
| Quality | BF163-10" |

- c. Push/Pull bars

| | |
|---------------------------|--------------------------------------|
| Type A (Wide Stile Doors) | |
| Rockwood | BF11147 x T1006 Mounting |
| Burns | BF26C x 442 x Sim. Mounting as Above |
| Quality | BF 482 x Sim. Mounting as Above |

- d. Flush Bolts / Surface Bolts / Coordinators

| | | |
|----------|----------------------|-------------|
| Rockwood | Auto Flush Bolts | 1842 / 1942 |
| | Coordinator | 1600 x MB |
| | Standard Flush Bolts | 555 / 557 |
| | Surface Bolt | 12-580 |
| | Door Holder | 494R 32D |

| | | |
|------|----------------------|--------------|
| Ives | Auto Flush Bolts | FB41 / FB 31 |
| | Coordinator | COR 52 X MB |
| | Standard Flush Bolts | 258 / 358 |
| | Surface Bolt | 1640 |

K. KICK PLATES, ARMOR PLATES, MOP PLATES:

1. Kick plates shall be 8 in. high. Armor plates shall be 34 in. high. Mop plates shall be 4 in. high. All plates shall be 2 in. less the width of door. Plates shall be .050 thickness, bevel 4 edges, screws shall be oval head counter-sunk.

L. STOPS

1. Shall be furnished at all doors. Wherever and opened door or any item of hardware thereon strikes a wall, at 90 degrees. Provide wall bumpers, unless otherwise indicated in hardware sets.
2. Where wall bumpers cannot be effectively used, a floor stop shall be furnished and installed.
3. Provide roller bumpers for each door where two doors interfere with each other in swinging.

| Manufacturer | Wall Bumpers | Floor Stops | Roller Bumpers |
|---------------|--------------|-------------|----------------|
| Rockwood | 409 | 440, 442 | 456 |
| Ives | 407 ½ | 436B, 438B | 470 Series |
| Glynn Johnson | WB 50XT | FB13, FB14 | RB-3 |

4. Where overhead stops are listed they shall be the surface mounted type as follows:

| Manufacturer | Series |
|---------------|--------|
| Glynn Johnson | GJ450 |
| Sargent | 1540 |
| ABH | 4400 |

M. THRESHOLDS, WEATHERSTIP, SEAL:

1. Thresholds shall be as detailed and furnished on all doors where shown on drawings. Thresholds shall be aluminum unless otherwise indicated. Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants".
2. Weatherstripping shall be furnished on all exterior doors unless otherwise indicated.

| Product | Pemko | Reese | NGP |
|------------|-----------------|---------------|-------|
| Threshold | Type A – 2001AT | Type B – 255A | |
| Brush Seal | 45062AP | 970 | A626A |

| | | | |
|-------------------|--------------|----------|------------|
| Auto. Door Bottom | 430CR | 330 | 420 |
| Door Sweep | 345AV | 353 | 101AV |
| Set Astragals | 351C x 351CP | 95 x 95P | 140 x 140P |
| Astragal | 357SP | 183S | 139SP |
| Rain Drip | 346C | R210A | 16A |

N. ELECTRIC STRIKES:

1. Electric strikes shall have a non-fail safe type solenoid actuated by a 24 VAC or DC current and face plate shall be in US32D finish. All parts shall be manufactured of corrosion resistant metals with a cast stainless steel case and working parts, and stainless steel springs. The electric strike shall have horizontal adjustment for misalignment, and shall be reversible and capable of accepting locksets specified in the lock or exit device section of this specification.
2. All electric strikes for this project shall be listed by Underwriters Laboratories, Inc. as a burglary protection device. In addition, electric strikes shall also have a UL listing as a fire door accessory. In particular the electric strikes shall carry a listing under the category of "single point locks or latches" for use with single swing fire doors having a 3- hour (A) rating or less. Electric strikes shall fit a cutout in the frame not less than 9" high x 1 3/8" wide with a frame face cutout of 1 1/2" wide and 3 3/4" high.
 1. Electric strikes to be HES model #9600 or Von Duprin 6112 for Rim Exits
 2. Electric strikes to be HES model #1006 or Von Duprin 6211 for Mortise Locks

O. MAG LOCKS:

1. Locknetics M490DEL

P. POWER SUPPLY:

1. Provide power supplies where called for in the hardware sets by Sargent model 3530 or Von Duprin 902 x 900-2RS Circuit Board.

Q. ELECTRIC POWER TRANSFER

1. Where specified Provide Model EPT-10 by Von Duprin

PART 3—EXECUTION

3.01. INSPECTION

1. It shall be the general contractors responsibility to inspect all doors openings and doors to determine that each door and door frame has been properly prepared for the required hardware. If errors in dimensions or preparation are encountered, they are to be corrected by the responsible parties prior to the installation of hardware.

3.02 PREPARATION

1. All doors and frames, requiring field preparation for finish hardware, shall be carefully mortised, drilled for pilot holes, or tapped for machine screws for all items of finish hardware in accordance with the manufacturers' templates and instructions.

3.03 INSTALLATION/ADJUSTMENT/LOCATION

1. All materials shall be installed in a workmanlike manner following the manufacture's recommended instructions.
2. Exit Devices shall be carefully installed so as to permit friction free operation of crossbar, touch bar, lever. Latching mechanism shall also operate freely without friction or binding.
3. Door Closers shall be installed in accordance with the manufacturer's instructions. Each door closer shall be carefully installed, on each door, at the degree of opening indicated on the hardware schedule. Arm position shall be shown on the instruction sheets and required by the finish hardware schedule.
4. The adjustments for all door closers shall be the installer's responsibility and these adjustments shall be made at the time of installation of the door closer. The closing speed and the latching speed valves, shall be adjusted individually to provide a smooth, continuous closing action without slamming. The delayed action feature or back check valve shall also be adjusted so as to permit the correct delayed action cycle or hydraulic back check valve shall also be adjusted so as the opening cycle. All valves must be properly adjusted at the time of installation. Each door closer has adjustable spring power capable of being adjusted, in the field from size 2 thru 6. It shall be the installers' responsibility to adjust the spring power for each door closer in exact accordance with the spring power adjustment chart illustrated in the door closer installation sheet packed with each door closed.
5. Installation of all other hardware, including locksets, push-pull latches, overhead holders, door stops, plates and other items, shall be carefully coordinated with the hardware schedule and the manufacturer's instruction sheets.
6. Locations for finish hardware shall be in accordance with dimensions listed in the pamphlet "Recommended locations for Builders' Hardware" published by the Door and Hardware Institute.

3.04 PROTECTION

1. All exposed portions of finish hardware shall be carefully protected, by use of cloth, adhesive backed paper or other materials, immediately after installation of the hardware item on the door. The finish shall remain protected until completion of the project. Prior to acceptance of the project by the Architect and owner, the general contractor shall remove the protective material exposing the finish hardware.

3.05 CLEANING

1. It shall be the responsibility of the general contractor to clean all items of finish hardware and to remove any remaining pieces of protective materials and labels.

3.06 INSTRUCTIONS AND TOOLS

1. It shall be the responsibility of the finish hardware supplier to provide installation and repair manuals and adjusting tools, wrenches, etc... for the following operating products.
 - a. Locksets (all types)
 - b. Exit Devices (all types)
 - c. Door Closers

3.07 DOOR HARDWARE SETS

1. Each Hardware Set listed below represents the complete hardware requirements for one opening. (Single Door or Pair of Doors). Furnish the quantities required for each set for the work.

ITEM 1

Door 100A

Each Leaf to Have: Cont. Hinge, EPT, Exit Device, Pulls, ADA Operator, Kick Plate, Threshold, Wide stile auxiliary locks, gaskets, Door Bottom, and Power Supply
DPS & Card Reader by Security Contractor
Weather-stripping by Aluminum Door Supplier

ITEM 2

Doors 101A, 103C, 136A, 140A

Each Door to Have: Hinges, Closers, Exit Devices, Kick Plate, Threshold, Mortise locks, lever door handles
DPS, Electric Strike & Card Reader by Security Contractor
Weather-stripping by Door Supplier

ITEM 2A

Doors 101B, 103A, 103B, 106B, 125A, 129A, 129B, 129C, 134A, 135A, 147A

Each Door to Have: Hinges, Closers, Exit Devices, Threshold, Mortise locks, lever door handles, Door Sweep, Silencers
DPS, Electric Strike & Card Reader by Security Contractor

Add Kick plate at 129B

ITEM 3

Doors 110A, 112A, 118A, 123C, 124A, 128A, 137A, 138A, 139A, 145A, 201A
Each Door to Have: Hinges NRP, Lockset (Function A), Lever handles, Closer, Threshold, Door Sweep, Silencers
Transition Strip by Flooring Contractor

Add Kick Plate at 137A and 110A

ITEM 4

Doors 104A, 107A, 108A, 113A, 114A, 116A, 117A, 121A, 122A, 122B, 126A
Each Door to Have: Hinges, Lockset, Closer, Silencers, Lever Door Handles, Silencers
Transition Strip as needed by Flooring Contractor

ITEM 5

Doors 102A, 111A, 120A, 127A, 141A, 142A, 143A, 144A
Door to Have: Hinges, Privacy Set (Function G) lever handles, Closer, Kick Plate, Gasketing

ITEM 6

Doors 105A, 105B
Door to Have: Hinges, Closers, Exit Devices, Threshold, Mortise locks, lever door handles, Door Sweep, Sound-proof weatherstripping surrounds
DPS, Electric Strike & Card Reader by Security Contractor

ITEM 7

Doors RESERVED

ITEM 8

Door 130A, 131A
Doors to Have: Full-Mortise Hinges and Pivots, Strike Reinforcements, Surface-Mounted Closers, Locks within Pockets

END OF SECTION

SECTION 09 65 13 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Resilient base.
 - 2. Resilient molding accessories.
 - 3. **Rubber stair accessories.**

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified, not less than 12 inches long.
- C. Samples for Initial Selection: For each type of product indicated.
- D. Samples for Verification: For each type of product indicated and for each color, texture, and pattern required in manufacturer's standard-size Samples, but not less than 12 inches long.
- E. Product Schedule: For resilient base and accessory products. Use same designations indicated on Drawings.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Furnish not less than 10 linear feet for every 500 linear feet or fraction thereof, of each type, color, pattern, and size of resilient product installed.

1.5 DELIVERY, STORAGE, AND HANDLING

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

1.6 FIELD CONDITIONS

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

PART 2 - PRODUCTS

2.1 THERMOPLASTIC-RUBBER BASE

- A. Basis of Design: Johnsonite, or approved equal.
- B. Product Standard: ASTM F 1861, Type TP (rubber, thermoplastic).
 - 1. Group: I (solid, homogeneous).
 - 2. Style and Location:
 - a. Cove base: Provide where indicated on drawings.
- C. Thickness: 0.125 inch.
- D. Height: 4 inches.
- E. Lengths: Coils in manufacturer's standard length.
- F. Outside Corners: Job formed or preformed.
- G. Inside Corners: Job formed or preformed.
- H. Colors: 66 Either Ore

2.2 VINYL MOLDING ACCESSORY

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Armstrong World Industries, Inc.
 - 2. Burke Mercer Flooring Products, Division of Burke Industries Inc.
 - 3. Flexco.
 - 4. Johnsonite; A Tarkett Company.
 - 5. Musson Rubber Company.
 - 6. Roppe Corporation, USA.
- B. Profile and Dimensions:
 - 1. Reducer Strip between Concrete and VCT: RRS-XX-C by Johnsonite or approved substitute.
- C. Colors and Patterns: As selected by Architect from full range of industry colors.

2.3 RUBBER STAIR ACCESSORIES

- A. **Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E648 or NFPA 253 by a qualified testing agency.**
 - 1. **Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.**
- B. **Basis of Design: Roppe; Fiesta**
- C. **Stair Treads: ASTM F2169.**
 - 1. **Type: TS (rubber, vulcanized thermoset).**
 - 2. **Class: 1 (smooth, flat).**
 - 3. **Group: 2 (with contrasting color for the visually impaired).**
 - 4. **Nosing Style: Square, adjustable to cover angles between 60 and 90 degrees.**
 - 5. **Nosing Height: 1-1/2 inches (38 mm).**
 - 6. **Thickness: 1/4 inch (6 mm) and tapered to back edge.**
 - 7. **Size: Lengths and depths to fit each stair tread in one piece.**
 - 8. **Integral Risers: Smooth, flat; in height that fully covers substrate.**
- D. **Landing Tile: Matching treads; produced by same manufacturer as treads and recommended by manufacturer for installation with treads.**
- E. **Locations: Provide rubber stair accessories in areas indicated.**
- F. **Colors and Patterns: As selected by Architect from manufacturer's full range.**

2.4 INSTALLATION MATERIALS

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

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

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

3.3 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.

- C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- G. Preformed Corners: Install preformed corners before installing straight pieces.
- H. Job-Formed Corners:
 - 1. Outside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
 - a. Form without producing discoloration (whitening) at bends.
 - 2. Inside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
 - a. Miter or cope corners to minimize open joints.

3.4 RESILIENT ACCESSORY INSTALLATION

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

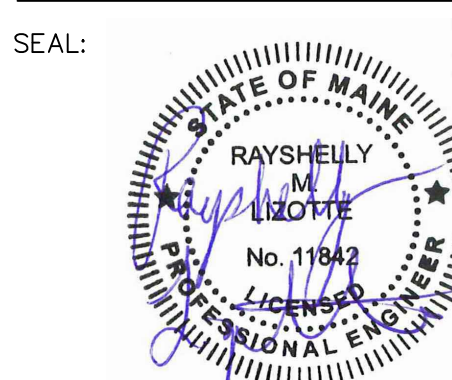
3.5 CLEANING AND PROTECTION

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

END OF SECTION 09 65 13



CONSULTANT:



CITY OF CARIBOU, MAINE
CARIBOU POLICE DEPARTMENT
25 BIRDSEYE AVENUE, CARIBOU MAINE

PROJECT NUMBER: 2023102

SUBMISSION:

ORIGINAL ISSUE DATE:

SHEET REVISION SCHEDULE:

No. DATE

SITE DEMOLITION PLAN

SHEET NUMBER:

C100

