Addendum 04

DOCUMENT 00 91 00

DATE: March 03, 2026

PROJECT: Put-in-Bay Local Schools
1919 Building Renovations
548 Catawba Avenue
Put-In-Bay, Ohio 43456

PROJECT #: 25019.01

OWNER: Put-in-Bay Local Schools
Contact: Scott Mangas, Superintendent
548 Catawba Avenue
Put-In-Bay, Ohio 43456

ARCHITECT: Garmann Miller
38 South Lincoln Drive
P.O. Box 71
Minster, Ohio 45865

TO: Prospective Bidders

This addendum form is a part of the Contract Documents and modifies the Construction Documents dated February 12, 2026, with amendments and additions noted below.

Acknowledge receipt of this Addendum on the Bid Form. Failure to do so may disqualify the Bidder.

This addendum consists of 3 pages, 6 specification sections, 5 re-issued drawing sheets.

FOR INFORMATION ONLY

Staging & laydown area information:

- The contractor cannot use the inside gym for staging/lay-down
- The basketball exterior basketball court can be sued for staging/lay -down beginning May 1,2026.
- Parking area along Concord drive is available to the contractor from June 1 – Aug 21 is available for contractor use and parking. All of that will be available except for the two parking spots furthest east. These will be occupied by owner's two temporary storage pods.

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- The fenced-in area to the north of the existing school is available for contractor use but would need to be restored to its original condition if disturbed. Access to this area may be available through the adjacent Fire Dept. and/or Village properties.

Questions

1. Question: Are the curbs for the mechanical equipment part of the items sourced by the Owner?
   Answer: Yes, roof curbs and roof cub adaptors are being furnished by the owner with the pre-purchased rooftop units. Contractor to install as indicated on the plans.
2. Spec section 01 21 00 "Allowances" calls for a contingency allowance of $300,000.00. Are we to include this in our base bid costs?
   Answer: Yes
3. Has the $300,000.00 contingency allowance been included in the estimated project cost of $4,200,000.00?
   Answer: Yes
4. Is the I.T. scope or work provided through ERATE included in the AE estimate of 4.2 million?
   Answer: No
5. Is the switch gear and mechanical equipment purchased by the Owner included in the AE estimate of 4.2 million?
   Answer: No
6. And is this included in the loose furniture budget?
   Answer: No
7. Is the roofing budget based on Base bid work or assuming alternates will be selected (standing seam metal roof)?
   Answer: The roofing budget is based on the base bid work.
8. Are there any "soft costs" included in the AE estimate?
   Answer: No
9. In order to accurately estimate the cost of potential temporary heating and cooling costs, we will need definite arrival dates for the electrical and mechanical equipment
   Answer: Electrical equipment is estimated to ship on June 17, 2026, the mechanical equipment is estimated to ship mid-July.
10. Is the building structure considered to be combustible or non-combustible?
    Answer: Construction type V-B as listed on G0.1
11. A1.1 Keynote 02 41 00 D1 – New Masonry opening – Is there a lintel schedule?
    Answer: No lintel schedule. Keynote on A6.1 says that there must be an 8" bearing on each end. Contractor to determine length.
12. A1.2 – M6 Infill – 2 locations
    Answer: The two openings in B111
13. A1.3 – Room 210 – Looks to be 2 walls for a closet here. Will these be masonry walls?
    Answer: Wall tag says S3.2. Refer to A1.1
14. New HM door install – Door A102a, A201a and A211a
    a. Door A211a looks to be calling for lintels but I am not sure if that is what is being indicated with the darkened line above the opening. There is a detail for this on A6.1

Answer: Door schedule shows that frame to remain. No lintel is required.

CHANGES TO THE PROJECT MANUAL

1. 00 41 13 – Bid Form: Contract time revised for start and completion dates.
2. 01 11 00 – Summary of Work: Section revised to include allowable dates and times for construction activities.
3. 08 06 71 – Spec has been added.
4. 08 71 00 – Spec has been added.
5. 09 65 13 – Resilient Base & Accessories – Added Stair Nosings.
6. 12 35 50.13 Educational Casework – Added Rivereast Custom Cabinets, Inc. as approved manufacturer.

CHANGES TO THE DRAWINGS

1. A1.2 First Floor Plan & Demolition Plan – Unit B, Detail 01 – First Floor Demolition Plan-Unit B
   a. Changed keynote for door going into B104. "Remove existing door & frame."
2. A6.1 Door Schedule
   a. Revised "Door Schedule"
   b. Added new head and jamb detail for B104.
3. A9.0 Finish Material Schedule & Typical Details
   a. Finish Material Schedule
      i. Added 09 65 00 Resilient Flooring – Rubber Stair Nosing RSN1
      ii. CPT3 – Revised comments.
   b. Added Detail 08 – Typical Floor Finish Transition – Rubber Stair Nosing and Trim at Base.
4. A9.2 Second Floor Finish Plan – Unit A
   a. Keynote Description
      i. Revised keynote 09 68 13.A.
5. M5.1 Mechanical Schedules
   a. Variable Refrigerant Flow Air Source Heat Pump Schedule
      i. Added field provided disconnect by Division 26.
      ii. Added phase/voltage monitor by Division 23 to prevent compressor ramp up during voltage drop.

ATTACHMENTS

The following attachments are included and are part of this addendum:

Specifications Sections: 00 41 13, 01 11 00, 08 06 71, 08 71 00, 09 65 13, 12 35 50.13.

Drawing Sheets: A1.2, A6.1, A9.0, A9.2, M5.1

END OF ADDENDUM

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SECTION 00 41 13 - BID FORM

THE PROJECT AND THE PARTIES

TO:

Put-In-Bay Local Schools
548 Catawba Avenue
Put-in-Bay, Ohio43456

FOR:

Project: Put-In-Bay Local Schools 1919 Building Renovations

Project Number: 25019.01
548 Catawba Avenue
Put-in-Bay, Ohio43456

DATE: _____ (Bidder to enter date)

SUBMITTED BY:

Bidder's Full Name: _____

Address: _____

City, State, Zip: _____

Telephone:_____

Fax No.: _____

E-mail: _____

OFFER

Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Garmann/Miller & Associates Inc. for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

Item 1 - Contract A, General Construction - Base Bid:

_____

_____ dollars
All Contingency Allowances described in Section 01 21 00 are included in the Bid Sum.

Item 1a - Alternate 01 - Standing Seam Metal Roof over 1919 Original Building:
If Alternate 01 is accepted, add:

_____

_____ dollars

Item 1b - Alternate 02 - Standing Seam Metal Roof over 2001 and Library Additions:
If Alternate 02 is accepted, add:

_____

_____ dollars

Item 1c - Alternate 03 - Shingle Roof over 2001 and Library Additions:
If Alternate 03 is accepted, add:

_____

_____ dollars

Item 1d - Alternate 04 - HVAC Controls by Wadsworth Solutions:
If Alternate 04 is accepted, add:

_____

_____ dollars

We have included the Bid Bond or security deposit as required by the Advertisement, Notice to Bidders, Instructions to Bidders.

This is a Tax Exempt Project.

Builders Risk Insurance is to be furnished by the Owner.

ACCEPTANCE

This offer shall be open to acceptance and is irrevocable for sixty days from the bid closing date.

If this bid is accepted by Owner within the time period stated above, we will:
Execute the Agreement within ten (10) days of receipt of Notice of Award.
Commence work within ten (10) days after written Notice to Proceed of this bid.

If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

In the event our bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

CONTRACT TIME

Owners desired start date:
Second shift only work allowed: May 4 - May 29, 2026
All work allowed: June 1 - August 21, 2026

Substantial Completion/Temporary Occupancy date: August 21, 2026

Project completion date: December 1, 2026

If this Bid is accepted, we will:

Complete the Work by Date or at an earlier date of _____ (Bidder to enter completion date or time frame prior to completion date listed.)

ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

Addendum # _____ Dated _____.
Addendum # _____ Dated _____.
Addendum # _____ Dated _____.
Addendum # _____ Dated _____.

BID FORM SUPPLEMENTS

Bid Bond

Noncollusion Affidavit

Contractor's Affidavit

BID FORM SIGNATURE(S)

_____

(Bidder - print the full name of your firm)

was hereunto affixed in the presence of:

_____

(Authorized signing officer)

_____

(Authorized signing officer, Title)

SEALED SUBMISSION:

Bid is to be submitted in Duplicate.

Bid is to be submitted in a sealed envelope containing bid and bid form supplements and addressed as follows:

Prime Contract Bid for:
Put-In-Bay Local Schools
548 Catawba Avenue
Put-in-Bay, Ohio 43456

END OF BID FORM

SECTION 01 11 00
SUMMARY OF WORK

PART 1 GENERAL

1.01 PROJECT

A. Project Name: Put-In-Bay Local Schools 1919 Building Renovations

B. Owner's Name: Put-In-Bay Local Schools

C. Architect's Name: Garmann/Miller & Associates Inc.

D. The Project consists of the alteration and partial reroof of the existing school building.

E. The project is a signature project for the Owner and construction of the highest quality facility is vitally important in this respect, each contractor assumes a position of trust confidence in the performance of its duties to the Owner and shall perform its work on the project with the highest degree of competence, diligence, cooperation and workmanship.

1.02 CONTRACT DESCRIPTION

A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 00 50 00 - Contracting Forms and Supplements.

1.03 OWNER OCCUPANCY

A. Owner intends to occupy the Project upon Substantial Completion.

B. Schedule the Work to accommodate Owner occupancy.

1.04 CONTRACTOR USE OF SITE AND PREMISES

A. Provide access to and from site as required by law and by Owner:

B. Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.

C. Existing building spaces may not be used for storage.

D. Limit disruption of utility services to hours the building is unoccupied.

1.05 WORK SEQUENCE

A. The Owner intends to award contracts soon after the receipt of bids.

B. General guidelines for the Work in stages during the constrcution period are provded here. constuction schedule and activities will be coordinated with the owner:

1. Stage 1: May 4 – May 29: School is in session. Second shift* work only allowed. Work that will not disrupt the normal operation of the school day may occur. Examples: removal of ceiling tiles (grid must remain), building investigation, work in mechanical/electrical rooms..
2. Stage 2: May 25 – May 29: Owner will be moving loose furnishing out of the rooms to be fully renovated. Rooms not in the full renovation portion of the building, but having technology/HVAC /fire alarm scope, will have loose furnishing stacked and moved to one side of the room..
3. Stage 3: June 1 – August 21: work allowed all shifts. Any work in the gymnasium space is required to be completed by August 1st. The owner will begin volleyball practices in the gym space on August 1st.
4. August 21: temporary occupancy permit required; systems operational and all items necessary for temporary occupancy permit to be issues shall be com.
5. Stage 4: [____][August 24 – August 28: owner will be moving loose furnishing back into the renovated spaces. Contractors can work all shifts.]
6. August 27 – owner’s teacher workday – teachers back in the building

7. Stage 5: [____][March 31 – December 1: Second shift* work only allowed.]
8. Completion date: December 1
9. *Second shift work only: work can occur 4pm-5am. All rooms to be fully cleaned, systems operational, items for school operations each day.

C. Coordinate construction schedule and operations with Owner.

1.06 CONTRACT NO. A - GENERAL CONSTRUCTION

A. Provide all Work except Work specifically assigned to other contractors in this Section.

1.07 ESTIMATE OF CONSTRUCTION COST

A. The total estimate of construction cost is $4,200,000.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 08 06 71 – DOOR HARDWARE SCHEDULE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section references specification sections relating to commercial door hardware for the following:

1. Swinging doors.

B. Commercial door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical and access control door hardware.
3. Electromechanical and access control door hardware power supplies, back-ups and surge protection.
4. Automatic operators.
5. Cylinders specified for doors in other sections.

C. Related Sections:

1. Division 08 Section “Door Hardware”.

D. Codes and References: Comply with the version adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. State Building Codes, Local Amendments.

E. Standards: Reference Related Sections for requirements regarding compliance with applicable industry standards.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."

2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.

3. Content: Include the following information:

a. Type, style, function, size, label, hand, and finish of each door hardware item.
b. Manufacturer of each item.
c. Fastenings and other pertinent information.
d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
e. Explanation of abbreviations, symbols, and codes contained in schedule.
f. Mounting locations for door hardware.
g. Door and frame sizes and materials.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.

D. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in

Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.

F. Warranties and Maintenance: Special warranties and maintenance agreements specified in the Related Sections.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.5 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

1.6 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. Refer to “PART 3 – EXECUTION” for required specification sections.

PART 3 - EXECUTION

3.1 DOOR HARDWARE SETS

A. The door hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.

2. The supplier is responsible for handing and sizing all products.

3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.

4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

B. Products listed in the hardware sets shall be supplied by and in accordance with the requirements described in the specification section as noted for each item.

1. Section 08 71 00 – Door Hardware.

C. Manufacturer's Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. SU - Securitron
4. YA - ASSA ABLOY ACCENTRA
5. RO - Rockwood
6. NO - Norton Rixson

Hardware Sets

Set: 1.0

Doors: A112a

2 Continuous Hinge	CFM_SLF-HD1 x Length Required x PT	PE

2	Electric Power Transfer	EL-CEPT	630	SU
1	Keyed Mullion	KRM200 x Length Required	600	YA
1	Rim Exit Device, Nightlatch	7100 B MELR 121NL 2109 Less Dogging	630	YA
1	Rim Exit Device, Exit Only	7100 B MELR EO Less Dogging	630	YA
1	Mortise Cylinder (Mullion)	2153 x Collar Required x Schlage C	626	YA
1	Offset Pull	RM5277-36 x Mtg-Type 12HD	US32D	RO
1	Automatic Opener (Pair)	D6031-36	600x689	NO
1	Gasketing	Provided by Aluminum Frame Supplier		
2	Sweep	3452CNB x Length Required		PE
1	Threshold	278x292AFGT x Length Required x MSES25SS		PE
1	Credential Reader	Provided by Security Supplier		
2	ElectroLynx Harness (door)	QC-C**** x Length Required		MK
2	ElectroLynx Harness (frame)	QC-C1500P		MK
2	Door Position Switch	DPS-M-BK		SU
1	Operator Actuator	505 / 503 (As Required)		NO
1	Operator Actuator - Vestibule	504		NO
1	Power Supply	AQL_ x Amps & Relays Required (Consolidate as Applicable)		SU
1	Wiring Diagram	Elevation and Point to Point as Specified		

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

SYSTEM OPERATIONAL NARRATIVE
Doors are normally closed and secured.
Presenting valid credential to reader momentarily retracts latch allowing manual entry or via door operators.
Entry also possible via key override.
Free egress at all times.
Request to exit switches, incorporated in exit devices, signal an egress.
Door position switches monitor the doors open/closed status.
Latch remains projected during power loss. (Fail Secure)

Set: 2.0

Doors: A102a, A201a

3	Hinge	T4A3386 [NRP]	US32D	MK
1	Rim Exit Device, Classroom	7105 AU626F 2109	630	YA
1	Mortise Cylinder (Dogging)	2153 Schlage C	626	YA
1	Surface Closer	CPS7500	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
1	Gasketing	S88BL (Head & Jambs)		PE
1	Rain Guard	346C x Width of Frame Head		PE
1	Gasketing	S44BL (Head & Jambs)		PE
1	Sweep	3452CNB x Length Required		PE
1	Threshold	278x292AFGT x Length Required x MSES25SS		PE
1	Door Position Switch	DPS-M-BK		SU

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

SYSTEM OPERATIONAL NARRATIVE
Door position switch monitors the door's open/closed status.

Set: 3.0

Doors: A211a

3	Hinge	T4A3386 [NRP]	US32D	MK
1	Deadbolt	D122 2808	626	YA
1	Push Pull	111x73C/73CL x Cutouts if Required	US32D	RO
1	Surface Closer w/Hold Open Stop Arm	CPS7500T	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Gasketing	S88BL (Head & Jambs)		PE
1	Rain Guard	346C x Width of Frame Head		PE
1	Gasketing	S44BL (Head & Jambs)		PE

1	Sweep	3452CNB x Length Required		PE
1	Door Position Switch	DPS-M-BK		SU

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

SYSTEM OPERATIONAL NARRATIVE
Door position switch monitors the doors open/closed status.

Set: 4.0

Doors: A112b

2	Continuous Hinge	CFM_SLF-HD1-[M@83"&95" ONLY] x Length Required		PE
2	Dummy Bar	720DB	630	YA
2	Offset Pull	RM5277-36 x Mtg-Type 12HD	US32D	RO
1	Automatic Opener (Pair)	D6031-36	689	NO
1	Gasketing	Provided by Aluminum Frame Supplier		
1	Operator Actuator	505 / 503 (As Required)		NO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 5.0

Doors: A120, A106, A110, A205a

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Storeroom or Closet Lock	AU 5405LN 2802	626	YA
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
1	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 6.0

Doors: B111

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Storeroom or Closet Lock	AU 5405LN 2802	626	YA
1	Surface Closer	CLP7500T	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Gasketing	S88BL (Head & Jambs)		PE
1	Gasketing	S44BL (Head & Jambs)		PE
1	Sweep	315CN x Length Required		PE

Set: 7.0

Doors: A105a, A105b

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Entry Lock	AU 5407LN 2802	626	YA
1	Surface Closer	P7500	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
1	Gasketing	S88BL (Head & Jambs)		PE

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 8.0

Doors: A109b

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Entry Lock	AU 5407LN 2802	626	YA

1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 9.0

Doors: B104

4	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Entry Lock	AU 5407LN 2802	626	YA
1	Surface Closer	7500H	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 10.0

Doors: B103a, B103b

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Entry Lock	AU 5407LN 2802	626	YA
1	Surface Closer	P7500	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or

filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 11.0

Doors: A109a

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Entry Lock	AU 5407LN 2802	626	YA
1	Surface Closer w/Hold Open Stop Arm	CPS7500T	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 12.0

Doors: A121, A122, A204, A205, A207, A210, A212

3	Hinge	T4A3786 [NRP]	US26D	MK
1	Classroom Lock	AU 5408LN 2802	626	YA
1	Surface Closer w/Hold Open	PR7500H	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 13.0

Doors: A102b, A108, A201b, A203, A211b

3	Hinge	T4A3786 [NRP]	US26D	MK

1	Classroom Lock	AU 5408LN 2802	626	YA
1	Surface Closer w/Hold Open Stop Arm	CPS7500T	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 14.0

Doors: A103

3	Hinge	T4A3786 [NRP]	US26D	MK
1	Classroom Lock	AU 5408LN 2802	626	YA
1	Surface Overhead Holder/Stop	10-336 5258	630	NO
1	Surface Closer	7500H	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 15.0

Doors: A206a ,A206b

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Privacy Lock w/Indicators	AUR 8802FL V21	626	YA
1	Mop Plate	K1050 6" high CSK BEV	US32D	RO
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or

filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

Set: 16.0

Doors: A118, A119

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK
1	Privacy Lock w/Indicators	AUR 8802FL V21	626	YA
1	Surface Closer	7500H	689	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Mop Plate	K1050 6" high CSK BEV	US32D	RO
1	Door Stop	403 (or) 441CU (As Condition Requires)	US26D	RO
3	Silencer	608-RKW		RO

Notes:
It is the responsibility of the General Contractor (GC) to field verify and confirm all existing openings and/or conditions prior to releasing any material for fabrication. Include any custom strike plates and/or filler plates as required for a complete installation. Any modifications or adjustments required as a result of existing field conditions are to be addressed by the GC or installer.

END OF SECTION 080671

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Automatic operators.

C. Related Sections:

1. Division 01 Section "General Conditions”.
2. Division 06 Section “Rough Carpentry”.
3. Division 06 Section “Finish Carpentry”.
4. Division 08 Section “Operations and Maintenance”.
5. Division 08 Section “Hollow Metal Doors and Frames”.
6. Division 08 Section “Flush Wood Doors”.
7. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.
8. Division 08 Section “Automatic Door Operators”.
9. Division 26 Section "Electrical”

D. Codes and References: Comply with the version adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. UL/ULC and CSA C22.2 - Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
8. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:

1. ANSI/BHMA Certified Product Standards - A156 Series.
2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
3. ANSI/UL 294 - Access Control System Units.
4. UL 305 - Panic Hardware.
5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

    a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
    b. Complete (risers, point-to-point) access control system block wiring diagrams.
    c. Wiring instructions for each electronic component scheduled herein.

2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

E. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

1.4 CLOSEOUT SUBMITTALS

A. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

B. Project Record Documents: Provide record documentation of as-built door hardware sets in digital format (.pdf, .docx, .xlsx, .csv) and as required in Division 01, Project Record Documents.

1.5 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).

C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.6 DELIVERY, STORAGE AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.7 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.8 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Hardware shall not have any visible manufacturer names on exposed materials, except cylinders, when the door is in a closed position.

2.2 BUTT HINGES

A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:

a. Two Hinges: For doors with heights up to 60 inches.
b. Three Hinges: For doors with heights 61 to 90 inches.
c. Four Hinges: For doors with heights 91 to 120 inches.
d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following:

a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for all out-swinging lockable doors.

5. Manufacturers:

a. Hager Companies (HA) - BB Series, 5-knuckle.
b. McKinney (MK) - TA/T4A Series, 5-knuckle.
c. dormakaba BEST (ST) - F/FBB Series, 5-knuckle.

2.3 CONTINUOUS HINGES

A. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge. with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Manufacturers:.

    a. Hager Companies (HA).
    b. Pemko (PE).
    c. dormakaba BEST (ST).

2.4 POWER TRANSFER DEVICES

A. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

    a. Securitron (SU) - EL-CEPT Series.
    b. dormakaba BEST (ST) EPT-12C Series.
    c. Von Duprin (VD) - EPT-10 Series.

B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Provide one each of the following tools as part of the base bid contract:

    a. McKinney (MK) - Electrical Connecting Kit: QC-R001.
    b. McKinney (MK) - Connector Hand Tool: QC-R003.

2. Manufacturers:

    a. McKinney (MK) - QC-C Series.
    b. dormakaba BEST (ST) - WH Series.
    c. Von Duprin (VD) - Connect.

2.5 DOOR OPERATING TRIM

A. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
3. Pulls shall be provided with a 10” clearance from the finished floor on the push side to accommodate wheelchair accessibility.
4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets. When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.
5. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood (RO).
    c. Trimco (TC).

2.6 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

1. Manufacturers:

    a. ASSA ABLOY ACCENTRA (YA).
    b. Schlage (SC).

B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:

1. Threaded mortise cylinders with rings and cams to suit hardware application.
2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
4. Tubular deadlocks and other auxiliary locks.
5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
6. Keyway: Match Facility Standard.

C. Keying System: Each type of lock and cylinders to be factory keyed.

1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.

2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. Existing System: Field verify and key cylinders to match Owner's existing system.

D. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

E. Construction Keying: Provide construction master keyed cylinders.

F. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.7 MORTISE LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): Provide ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed mortise locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. At toilet rooms with indicators

2. Manufacturers:

a. ASSA ABLOY ACCENTRA (YA) - 8800FL Series.
b. dormakaba BEST (BE) - 45H Series.
c. Schlage (SC) - L9000 Series.

2.8 CYLINDRICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed cylindrical locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:

a. ASSA ABLOY ACCENTRA (YA) - 5400LN Series.
b. dormakaba BEST (BE) - 9K Series.
c. Schlage (SC) - ND Series.

2.9 DEADLOCKS AND LATCHES

A. Cylindrical Deadlocks: ANSI/BHMA A156.36 Grade 1 Certified Products Directory (CPD) listed deadlocks to fit standard ANSI 161 preparation. Provide tapered collars to resist vandalism and 1" throw solid steel bolt with hardened steel roller pins. Deadlocks to be products of the same source manufacturer and keyway as other locksets.

1. Manufacturers:

    a. ASSA ABLOY ACCENTRA (YA) - D100 Series.
    b. dormakaba BEST (BE) - T Series.
    c. Schlage (SC) - B600 Series.

2.10 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.11 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. Exit devices shall have a five-year warranty.
2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.

4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2” wide stiles.
9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed exit devices. Listed manufacturers shall meet all functions and features as specified herein.

1. Electromechanical exit devices shall have the following functions and features:

    a. Universal Molex plug-in connectors that have standardized color-coded wiring and are field configurable in fail safe or fail secure and operate from 12vdc to 24vdc regulated.
    b. EcoFlex or equivalent technology that reduces energy consumption up to 92% as certified by GreenCircle.
    c. Options to be available for request-to-exit or enter signaling, latchbolt and touchbar monitoring.
    d. Field configurable electrified trim to fail-safe or fail-secure that operates from 12-24VDC.
    e. Five-year limited warranty for electromechanical features.

2. Manufacturers:

    a. ASSA ABLOY ACCENTRA (YA) - 7000 Series.
    b. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
    c. dormakaba BEST (PR) - Apex 2000 Series.
    d. Von Duprin (VD) - 35A/98 XP Series.

2.12 SURFACE DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.

1. Heavy duty surface mounted door closers shall have a 30-year warranty.

2. Manufacturers:

a. Corbin Russwin Hardware (RU) - DC6000 Series.
b. Norton Rixson (NO) - 7500 Series.
c. Sargent Manufacturing (SA) - 351 Series.

2.13 ELECTROHYDRAULIC DOOR OPERATORS

A. Electrohydraulic Door Operators (High Traffic): Provide ANSI/BHMA A156.19 Certified Products Directory (CPD) listed low energy operators that meet ANSI/BHMA A156.4 requirements and are UL listed for use on fire rated doors and UL10C certified that comply with requirements for the Americans with Disabilities Act (ADA). Operators shall be verified by GreenCircle to offer energy savings of 19% when compared to similar products to accommodate openings up 250 pounds and 48” wide. Provide accessories such as custom templates, special mounting brackets, spacers and drop plates as needed for proper installation. Operators shall accommodate openings up to 200 pounds and 48” wide. Listed manufacturers shall meet all functions and features as specified herein.

1. Provide operators with features as follows:

    a. Non-handed with push and pull side mounting.
    b. Operates as mechanical surface closer during close cycles, when door is opened manually or if power is off.
    c. Activation by push button, hands-free or radio frequency devices.
    d. On board electronics to collect usage and cycle count data to facilitate preventative maintenance/diagnostics.
    e. Two-year limited warranty.
    f. Wi-Fi interface where the operator is a secure, password protected WiFi hot spot with no connection to building's IT required.
        1) Simple setup with no app required.
        2) View status and make adjustments without removing the cover.
        3) Built-in logic to support single use restroom applications with no external relay boards, logic modules, position switches required.
    g. Mounting backplate to simplify and speed up installation.

2. Operators shall have the following functionality:

    a. Adjustable Hold Open: Amount of time a door will stay in the full open position after an activation.
    b. Blow Open for Smoke Ventilation: Door opens when signal is received from alarm system allowing air or smoke to flow through opening. Door will stay open until signal from alarm system is stopped.
    c. Infinite Hold Open: Door will hold open at set position until power is turned off.
    d. Obstruction Detection: Door closes if it hits an obstruction while opening; door will reverse to open position if it hits an obstruction while closing. Door will stop once it hits an obstruction and will rest against the obstruction until removed.
    e. Open Delay: Delays operator opening for locking hardware.
    f. Overload Safety Shut-Off: After two minutes of receiving a door activation signal, inverter times out and door closes to prevent motor/inverter damage.
    g. Presence Detector Input: Input for external sensor to detect presence at door open or close position only.
    h. Push & Go: As the door is manually opened, the operator "senses" movement and opens door to the full-open position.
    i. Selector Mode Switch: Off disables the signal inputs unless Blow Open is activated, on activates the signal inputs, hold open activates the unit (unless Blow Closed is activated) to the hold open position.
    j. Vestibule Delay: When the wall switch is pressed, first door in vestibule will open. Second door will open once vestibule door delay has expired. Delay is adjustable.

3. Manufacturers:

    a. Besam (BE) – SW100 Series.
    b. Horton (HO) – 4000 Series.
    c. Norton Rixson (NO) - 6000 Series.

2.14 ARCHITECTURAL TRIM AND ACCESSORIES

A. Door, Frame and Wall Protective Trim: ANSI/BHMA A156.6, protective products as specified in the hardware sets. Door protection plates shall be not more than 2" less than door width on stop side and 1” less door width on the pull side or on stop side of pairs of doors. Listed manufacturers shall meet all functions and features as specified herein.

1. Provide protective trim with functions and features as follows:

    a. Meets ADA requirements for smooth bottom door surfaces.
    b. UL Classified options for use on fire-rated doors up to 3 hours.
    c. Fabricated from stainless steel, brass, bronze, aluminum, or high-impact plastic.
    d. Available in a variety of sizes, finishes, and profiles to suit aesthetic and functional requirements.
    e. Designed to protect doors, frames, and adjacent walls from damage due to impact, abrasion, or traffic.
    f. Fasteners included; adhesive-backed options available for select models.
    g. Ten-year limited warranty.

2. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood (RO).
    c. Trimco (TC).

2.15 DOOR STOPS AND HOLDERS

A. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood (RO).
    c. Trimco (TC).

B. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Manufacturers:

    a. Norton Rixson (NO).

b. Rockwood (RO).
c. Sargent Manufacturing (SA).

2.16 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Manufacturers:

1. National Guard Products (NG).
2. Pemko (PE).
3. Reese Enterprises, Inc. (RE).

2.17 ELECTRONIC ACCESSORIES

A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Manufacturers:

a. Alarm Controls (AK) - CP1-1026 Series.

b. Securitron (SU) - DPS Series.

B. Intelligent Switching Power Supplies: Provide the least number of power supplies at the appropriate amperage level sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.

1. Power supplies shall meet all functions and features as specified herein.

a. UL listed dual voltage 12 or 24 VDC field selectable continuous output.
b. Dedicated fast charger to prolong battery life with low battery cutoff to protect batteries from deep discharge.
c. Enhanced surge immunity for input/output protection
d. Separate, dedicated battery charging circuit to keep locks cooler.
e. Dual-color LED visual notification to prevent applying incorrect voltages to the power supply.
f. Instant auto-switch to battery on AC loss.
g. Expandable up to 16 outputs in the standard enclosure
h. Integrated fire alarm interface to allow main output shutdown or disconnect on a per output basis when using an R8 output module.
i. Network ready and remotely manage locks and connected devices when using an M8 managed output module on network models.
j. Lifetime replacement, no-fault, no questions asked warranty.

2. Manufacturers:

a. Securitron (SU) - AQL Series.

2.18 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.19 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Push Plates and Door Pulls: When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.

E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

F. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection (Punch Report): Reference Division 01 Sections “Closeout Procedures”. Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

B. Refer to Section 080671, Door Hardware Sets, for hardware sets.

END OF SECTION 087100

SECTION 09 65 13
RESILIENT BASE & ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDE

A. Resilient Wall Base

B. Resilient Stair Treads and Risers

C. Stair Nosings

D. Adhesives

1.02 RELATED REQUIREMENTS

A. Section 05 51 00 - Metal Stairs

B. Section 09 65 00 - Resilient Flooring

C. Section 09 68 13 - Tile Carpeting

1.03 REFERENCED DOCUMENTS

A. ASTM F 1861 Standard Specification for Resilient Wall base

B. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials

C. ASTM F 386 Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces

D. ASTM E 648 Standard Test Method for Critical Radiant Flux of Flooring systems Using a Radiant Energy Source.

E. ASTM E 662 Test Method for Specific Density of Smoke Generated by Solid Materials.

F. ASTM F 925 Standard Test Method for Resistance to Chemicals of Resilient Flooring.

G. ASTM F 137 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus

H. ASTM F 1515 Standard Test Method for Measuring Light Stability of Resilient Vinyl Flooring by Color Change

I. National Fire Protection Association (NFPA): NFPA 255, Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Energy Source

J. National Fire Protection Association (NFPA) 258 Test Method for Specific Density of Smoke Generated by Solid Materials.

K. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

1.04 SUBMITTALS

A. Product Data: Submit product data, including manufacturer's specification summary sheet for specified products

B. Shop Drawings: Submit shop drawings showing layout, finish colors, patterns and textures.

C. Samples: Submit selection and verification samples for finishes, colors, and textures.

D. Quality Assurance Submittals: Submit the following:
   1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
   2. Manufacturer's Instructions: Manufacturer's installation and maintenance instructions.

E. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. Extra Wall Base: 25 linear feet of each type and color.
   2. Extra Stair Materials: Quantity equivalent to 5 percent of each type and color.
   3. Obtain Owner's signature acknowledging receipt of extra stock.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installing work similar to that required for this project.

B. Regulatory Requirements
   1. Fire Performance characteristics: Provide resilient sheet vinyl floor covering with the following fire performance characteristics as determined by testing products in accordance with ASTM method (and) NFPA method) indicated below by a certified testing laboratory or another testing and inspecting agency acceptable to authorities having jurisdiction.
      a. ASTM E 648 (NFPA 253), Critical Radiant Flux of Floor Covering Systems: Class 1, > 1.0 W/cm2
      b. ASTM E 662 (NFPA 258), Specific Optical Density of Smoke Generated by Solid Materials: Passes, <450
      c. ASTM E 84 (NFPA 255), Surface Building Characteristics of Building Materials: Class C

C. Single-Source Responsibility: Obtain resilient wall base and manufacturer’s recommended adhesive from a single supplier.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

B. Storage and Protection: Store materials protected from exposure to harmful weather conditions and acclimated to site conditions at temperature and humidity conditions recommended by manufacturer.

C. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

1.07 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Manufacturer's standard warranty to repair or replace installation that fails in material and workmanship.
   1. Warranty Period: 3 years form the date of Substantial Completion

PART 2 PRODUCTS

2.01 REFER TO "FINISH MATERIAL SCHEDULE" ON SHEET A9.0 FOR MANUFACTURER INFORMATION AND MATERIAL SELECTIONS. ALSO REFERENCE OTHER A9 SERIES DRAWINGS (FINISH PLANS) FOR ADDITIONAL INFORMATION, LOCATIONS AND EXTENT OF MATERIALS.

2.02 MANUFACTURER:

A. Roppe Corporation: www.roppe.com

B. Acceptable Manufacturers:
   1. Burke Flooring: www.burkemercer.com.
   2. Johnsonite, a Tarkett Company: www.johnsonite.com.
   3. Substitutions: See Section 01 60 00 - Product Requirements.

2.03 RESILIENT WALL BASE

A. Minimum Requirements:
   1. Thickness tolerance: Complies with ASTM F-386
   2. Flexibility: Complies with ASTM F-137
   3. Resistance to Heat Aging: Complies with ASTM F-1515
   4. Resistance to Detergents: Complies with ASTM F-925
   5. Resistance to Alkalis: No fading or softening
   6. Dimensional Stability: Complies with ASTM F 1861
   7. Squareness: 90 degrees +/- 0.5 degrees

B. Product:
   1. Refer to A9, Material Finish Schedule for product information and details.(RB)
   2. Basis of Design:
      a. a. Complies with ASTM F-1861 Type TS (Thermoset Vulcanized Rubber), Group 1 (Solid)
      b. Contains 10% natural rubber
      c. Thickness: 1/8” (3.175 mm) nominal
      d. Color as selected by Architect from manufacturer’s standard colors.
      e. Profile:
         1) Standard toe (cove)
      f. Nominal Height: 4"
      g. Lengths: rolls (coil)
      h. Corners
         1) Formed by installer on site

2.04 RESILIENT STAIR TREADS

A. Refer to A9, Material Finish Schedule for product information and details.(RST)

B. Stair Treads: Rubber; full width and depth of stair tread with integral riser in one piece; tapered thickness.
   1. Manufacturers:
      a. Burke Flooring; www.burkeflooring.com.
      b. Johnsonite, a Tarkett Company; www.johnsonite.com.
      c. Roppe Corp; www.roppe.com.
      d. Substitutions: See Section 01 60 00 - Product Requirements.
   2. Minimum Requirements: Comply with ASTM F2169, Type TS, rubber, vulcanized thermoset.
   3. Minimum Requirements: Comply with ASTM F1700, of Class III, Type B.
   4. VOC Content: As specified in Section 01 61 16.
   5. Nominal Thickness: 0.1875 inch.
   6. Nosing: Square.
      a. Striping: 2 inch wide contrasting color abrasive strips.
   7. Texture: Smooth.
   8. Pattern: [As indicated on drawings].
   9. Color: As indicated on drawings.

2.05 RESILIENT STAIR NOSING

A. Refer to A9.0, Material Finish Schedule for product information and details. (RSN)

B. Stair Nosing: Curved Profile, VDL-XX-RD

C. Stair Nosing Trim: Rubber Trim to create joint between resilient stair riser and carpet tile at top edge of stair.

1. Manufacturers:
    a. Roppe
    b. Flexco
    c. Tarkett
    d. Substitutions: See Section 01 60 00-Product Requirements.

2.06 ACCESSORIES

A. Primers, Adhesives, and Seaming Materials: Waterproof; types recommended by flooring manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Site Verification of Conditions: Verify substrate conditions are acceptable for installing product in accordance with manufacturer's instructions.

B. Material Inspection: In accordance with manufacturer's installing requirements, visually inspect materials prior to installing. Material with visual defects shall not be installed.

3.02 PREPARATION

A. Prepare substrate in accordance with manufacturer's instructions.

B. Prepare manufacturer’s recommended substrates to be smooth, rigid, flat, level, permanently dry, clean and free of foreign materials such as paint, dust, grease, oils, solvent, old adhesive residue, vinyl wall coverings, non-porous surfaces and all other contaminants that may interfere with adhesive bond.

3.03 INSTALLATION

A. Starting installation constitutes acceptance of conditions.

B. Install in accordance with manufacturer's instructions.

C. Spread only enough adhesive to permit installation of materials before initial set.

D. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.

E. Miter internal corners. At external corners, 'V' cut back of base strip to 2/3 of its thickness and fold.

F. Install base on solid backing. Bond tightly to wall and floor surfaces.

G. Install base on casework base. Bond tightly to casework and floor.

H. Scribe and fit to door frames and other interruptions.

I. Trowel marks and other imperfections showing through installed base shall be reason to, remove base, sand out trowel marks, remove or correct imperfections and reinstall base.

3.04 CLEANING

A. Remove excess adhesive from floor, base, and wall surfaces without damage.

B. Repair or replace damaged installed products.

C. Clean installed products in accordance with manufacturer's instructions prior to owner's acceptance.

D. Remove construction debris from project site and legally dispose of debris.

END OF SECTION

SECTION 12 35 50.13
EDUCATIONAL CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Casework manufactured with plastic laminate facing.

1.02 RELATED SECTIONS

A. Section 07 92 00 - Joints Sealants

B. Division 22 - Plumbing

C. Division 26 - Electrical

D. Division 27 - Communications

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on all hardware.

C. Shop Drawings shall be submitted soon after the award of contract. Drawings shall consist of floor plans indicating arrangement and relationship to adjacent work and equipment, complete elevations of casework. Centerline of services requirement shall be noted.

D. Submit three (3) complete color samples of every component for Architect selection. Selection shall be from manufacturer standards.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

B. Installer Qualifications: Company specializing in performing the work of this section with minimum 3 years of experience.

C. Casework Grade: Provide plastic laminate faced casework complying with the referenced quality standard and the following grade:
   1. Grade: custom.

D. Design Requirements for Educational Casework
   1. Design system of cabinets which will be chip and abrasion-resistant under normal usage and will protect student clothing, materials, musical instruments and cases from damage under normal use.
   2. Design shelving to withstand continuous use without surface or front edge breakdown.
   3. Hanger rods or hooks to support a minimum vertical load of 200 pounds applied anywhere.
   4. Full-height door to support a minimum vertical load of 200 pounds applied at outer edge.

1.05 PRE-INSTALLATION MEETING

A. Convene two weeks before starting work of this section.

1.06 DELIVERY, STORAGE, AND PROTECTION

A. Do not deliver casework to project until dry and heated storage space is provided.

1.07 PROJECT CONDITIONS

A. Casework supplier shall be responsible for quantities shown on the drawings.

B. Casework supplier shall be responsible for making field measurements to insure proper fit of casework items.

C. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

D. For delivery and installation of casework and equipment, building conditions shall be as follows:
   1. Building is secure and weather tight, with windows and doors installed, heat and air conditioning systems functional. Walls and openings are plumb, straight and square.
   2. Concrete floors must be level within acceptable trade tolerances. Floor must be within 1/8 inch of level per 10 foot run, non-accumulative, when tested with a straight edge in any one direction.
   3. Wood or metal blocking (wall grounds) must be installed within partitions prior to delivery of casework and furnishings to allow for immediate installation on delivery.

PART 2 PRODUCTS

2.01 MANUFACTURER

A. Stevens Cabinets Co, Model 1200 Series (3MM Edge, Full Overlay).
   1. The catalog numbers of the manufacturer listed are intended to include a complete and total item as the catalog number is specified in the current catalog. The item shall be provided complete with hardware, accessories, features and components.

B. Other Acceptable Manufacturers:
   1. TMI Systems Design Corporation, Dickinson North Dakota: Model Series Educational.
   2. Case Systems, Normal Wood Products, Midland, Michigan; Model Series Education.
   3. Hoge Lumber Company, New Knoxville, Ohio; Model Series Educational.
   4. **Rivereast Custom Cabinets, Inc, Toledo, Ohio.**
   5. Substitution Procedures: See Section 01 60 00 - Product Requirements.
      a. Submit samples of each proposed substitution to the offices of Garmann/Miller & Associates for evaluation. Samples shall be retrieve by submitter upon evaluation by Architect.
      b. Sample size to be nominally 2'-0" by 3'-0" with a drawers, doors, shelves and accessories showing compliance with this specification.

2.02 MATERIALS

A. Wood Base Components
   1. Wood fabricated from old growth timber is not permitted.
   2. Wood fabricated from timber recovered from riverbeds or otherwise abandoned is permitted, unless otherwise noted, provided it is clean and free of contamination; identify source; provide lumber re-graded by an inspection service accredited by the American Lumber Standard Committee, Inc.
   3. Particleboard, medium density fiberboard, plywood, wheatboard, strawboard, and panel substrates shall contain no added urea-formaldehyde resins

B. Plastic laminates, provide one of the following
   1. High Pressure decorative laminate complying with NEMA LD3, Grade GP-28
   2. High Pressure decorative laminate complying with NEMA LD3, Grade CL-20
   3. High Pressure decorative laminate complying with NEMA LD3, Grade BK-20

C. Edge Banding for Plastic Laminate:
   1. Rigid PVC extrusions, through color with satin finish, 3 mm thick at door and drawer fronts, 1 mm thick elsewhere.

D. Melamine Faced Particleboard:
   1. Medium density particleboard complying with ANSI A208.1, Grade M-2, with decorative surface of thermally fused melamine impregnated web complying with ALA 1992.

E. Particleboard: ANSI A 208.1, Grade M-2

1. Solid FSC certified particleboard core conforming to ANSI 208.A LD-2 consisting of recycled fiber with no added urea-formaldehyde bonding resins.

F. Hardboard: AHA A135.4, Class 1 tempered
   1. AHA A135.4, Class 1 tempered

2.03 HARDWARE

A. Hinges: Heavy duty five knuckle style, with overlaying leaves capable of 270 degree swing. Hinges shall be constructed of 0.90 inch minimum thickness steel, hospital tipped with non-removable pin.
   1. Color: as selected from manufacturer's standard.
   2. Doors less than 47 inches in height shall have two (2) hinges and doors 47 inches in height and greater shall have three (3) hinges
   3. Hinges shall have vertical adjustment and shall be mounted with two (2) 5 mm thread screws, each leaf with additional #8 screws: two (2) in cabinet leaf and three (3) in door leaf. Total nine (9) fasteners per hinge.

B. Door Catches:
   1. Catches shall be a heavy duty spring loaded, large diameter (17.5 mm) roller type catch. Doors less than 48 inches in height shall one (1) catch mounted at the bottom and doors 48 inches in height and greater shall be provided with catches both top and bottom of door.
   2. Catch strike plate shall be injection molded ABS, with integrally molded engagement ring. Strike shall have a wide face bumper insuring a positive door stop.

C. Pulls: Solid metal, 5 inches in length.
   1. Style: A minimum of (5) different styles as offered by Cabinet manufacturers' standard. Stevens - Essentials Collection - Bar128
   2. Color: as selected from manufacturer's standard. - Brushed Nickel Finish

D. Drawer Slides
   1. Drawers shall be suspended with bottom mount, side and bottom attached nylon roller epoxy coated steel slides to ensure quiet, smooth operation. Lateral stability is achieved through a special formed captive profile. Slides shall have 100 pound load rating, with both in and out drawer stop, 3 inch self close feature and side adjustment cam allowing 3 mm side to side alignment.
      a. Drawers noted for file use or full extension shall have 150 pound load rating, with both in and out drawer stop, 3 inch self close feature and side adjustment cam allowing 3 mm side to side alignment.
      b. Drawers noted for file use shall include extruded to mounted molded side rails to accept standard hanging file folders with a 200 pound rating.

E. Hangard Bars: Shall be heavy chrome plated oval tubing mounted in adjustable end wall sockets.

F. Shelf Supports: Adjustable shelf supports shall be injection molded clear polycarbonate. Supports shall incorporate integral molded lock tabs to retain shelf from tipping or inadvertent lift out. Supports shall have 5 mm diameter double pin engagement into precision bored cabinet vertical hole patterns. Adjustment shall be 1-1/4 inches (32mm) spacing. Supports shall have a compression ridge effecting force against shelf edge to maintain positive pin engagement. Supports shall have molded-in screw attachment feature. Static test load shall exceed 200 pound per clip. Shelf spans above 27 inches shall have 5-point support with backs drilled to receive a mid-span shelf support, further reducing deflection. Shelf spans 27 inches or less shall have end 4-point support.

G. Casters and Mounting Frame: Heavy duty non-maring swivel casters shall have ball bearing swivels, four (4) bolt mounting and tread braking. Mobile cabinets shall have 5 inch diameter casters, rated for 300 pounds each. Two (2) casters to be swivel braking and two (2) to be non-swivel, non-braking. Casters shall be integral bolted onto steel channel cabinet member. Fourteen (14) gauge formed channel member shall be 3 3/4 inch wide with 3/4 inch downturn legs each with double thick hem edge. Steel frame member shall have bolt attachment to bottom and cross bolted into barrel style fastening system.

H. Locks:
   1. Provide either of the lock systems listed below:
      a. High security 6-tumbler lock system shall be provided where noted by model number or indicated on drawings. Locks shall have diecast body with dead bolt engagement tang. Locks shall have removable and interchangeable 6-tumbler core for easily field and customer re-keying options.
      b. Locks shall be cylinder type, die-cast, with five (5) disc tumbler mechanism. Each lock shall be provided with a key.
   2. Keying:
      a. Each room shall be keyed alike with each room keyed differently.
      b. Locks shall be master keyed using the casework manufacturers master keying system. (This is independent of any other master keying system)
      c. Provide lock where indicated.
      d. Provide locks on all wardrobe units .

I. Chain Stop:
   1. Manufacturers standard, install on all doors that will hit casework components or adjacent walls

J. Grommets: 60 mm diameter two piece round with break away tab corner.
   1. Color: as selected from manufacturer's standard.

K. Cabinet Boxes - cut outs:
   1. All cabinet box cut outs must be completed in the field unless otherwise noted on the cabinet shop drawing submittals.
   2. Special attention to field measuring, cutting or drilling shall be made when making any cabinet cut outs.
   3. Cut outs shall be made as tight to the size of the cabinet penetration as possible.
   4. Cut outs for low voltage wiring shall be trimmed accordingly with specified mounting bracket.
      a. Manufacturer:
         1) Erico, Caddy Mounting Bracket, (MPL series) or equal
         2) Mounting brackets placed inside the cabinet box shall match the same size, location and configuration as the box placed inside the wall that the cabinet butts up against.
         3) Mounting Bracket furnished and installed by Low Voltage Contractor.
         4) Install mounting brackets in cabinet using proper length wood screws.
   5. Cut outs for electrical wiring shall be made so that outlet box extension is mounted flush to back panel of casework. Casework installer shall field measure and cut holes in casework to accommodate outlet installation.
   6. Excessively overcutting any cabinet cut outs is not permitted, unless specifically approved by Garmann/ Miller & Associates.
   7. Plumbing penetrations and cut outs shall have proper finish trim around pipes to properly cover any cut outs. Trims to be supplied and installed by Plumbing Contractor.

2.04 COMPONENTS

A. Cabinet Boxes - Base and Wall:
   1. Core:
      a. Base Cabinets:
         1) Front and Sides: 3/4 inch particleboard
         2) Base - Bottom - Toe Kick: 3/4 inch plywood
         3) Back: Entrapped 3/8 inch particle or 1/4 inch tempered hardboard
      b. Wall Cabinets:
         1) Top and Bottom: 3/4 inch particleboard
         2) Sides: 3/4 inch particleboard
         3) Back: Entrapped 3/8 inch particle or 1/4 inch tempered hardboard
   2. Surface:
      a. Exposed Vertical Surfaces: GP28
      b. Semi-exposed parts (interior of open cabinets, not including drawer body): CL20 or melamine
      c. Concealed Surfaces: CL20 or melamine
      d. Panel ends: GP28
   3. Edge: Finish all exposed edges (including wall cabinet top and bottom) with 1 mm PVC
   4. Construction/Joinery: Doweled, glued under pressure

B. Cabinet Doors
   1. Core: 3/4 inch particleboard
   2. Surface: GP28 with CL20 liner on back
   3. Edge: 3 mm PVC
   4. Hardware: Heavy duty, 5 (five) knuckle, 2-3/4 inch institutional type hinge (no concealed hinges)
   5. Construction/Joinery: Doweled, glued under pressure

C. Drawer Fronts:
   1. Core: 3/4 inch particleboard
   2. Surface: GP28 with CL20 liner on back
   3. Edge: 3 mm PVC
   4. Construction/Joinery: Doweled, glued under pressure
   5. Hardware: Wire design pulls

D. Drawer Sides and Backs:
   1. Core: 1/2 inch particleboard of 5/8 inch medium density fiberboard
   2. Surface: Melamine on all visible surfaces with drawer in normal open position.
   3. Hardware: Combination epoxy coated steel and nylon roller bearing drawer slides, self closing. Full extension for file drawers.

E. Drawer Bottoms:
   1. Core:
      a. Fully captured construction: Minimum thickness 1/4 inch.
      b. Platform construction: Minimum thickness 1/2 inch.
   2. Surface: Melamine panel product or particle board.
   3. Hardware: Platform construction must use wrap around drawer slide.

F. Interior Cabinet Shelves:
   1. Core: 1 inch particle board
   2. Top and Bottom Surface: Thermofused Laminate
      a. Color: Match the interior color; Pearl unless noted othwerwise.

3. Edge: 1 mm PVC on front and back edges
4. Construction/Joinery: Multiple holes (minimum 5 mm diameter at 1-1/4 inches on center.
5. Hardware: Adjustable shelf supports

2.05 FABRICATION

A. Cabinets parts shall be accurately machined and precision bored for premium grade quality joinery construction. Cabinets shall be assembled under controlled case clamp conditions assuring final cabinet squareness and proper joint compression.

B. Cabinet corners shall be joined with dowel pin construction with 8 mm industrial grade hardwood laterally fluted dowels with chamfered edges..

C. Cabinet ends shall be dowel pinned into horizontal members. Ends shall be one piece continuous from top to floor for added load carrying capacity.

D. Tops and bottoms shall be joined to cabinets ends using dowels and glue. Top of base cabinet shall be full depth.

E. Frame rails shall be joined to ends with dowels and glue.

F. Two (2) toe kick panels shall be insert from cabinet from and back edges, and doweled into cabinet with the same fluted dowel pin and glue joint construction as base and wall cabinets

G. Wall cabinet top and bottoms shall feature the same fluted dowel pin and glue construction.

H. Mounting rails shall be fully concealed behind backs. Rails shall be 3/4 inch thick and fastened to cabinet ends the dowel and glue construction. Wall cabinets and tall cabinets shall incorporate two (2) rails. Wall cabinets shall have rails positioned at top and bottom. Tall cabinets shall have rails positioned at top and intermediate location. Base cabinet units shall have rail positioned in the upper back area.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that job site and the conditions under which the work of this section is to be performed. Notify the Architect of any unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable.

3.02 INSTALLATION

A. Be sure that any concete floor finish is complete before installing any cabinets or other materials that may affect the finish of the specified flooring.

B. Install in accordance with manufacturer's instructions.

C. Casework, countertops and related materials to be conditioned to average prevailing humidity condition in installation areas prior to start of work.

D. Casework shall be installed plumb, level, true, straight with no distortions. Securely attach to building structure with anchorage devices of appropriate type size and quantity to meet codes and safety conditions.

E. Where laminated clad casework and countertops abuts other finished work scribe and trim to accurate fit.

F. Cut openings in countertops for sinks and other items required. Cut to size from template furnished by supplier for sinks or use designated sink on job.

G. Countertops shall be installed flush against wall. Provide clear sealant at top and around ends of countertops, endsplashes and backsplashes where they meet wall.

H. Adjust casework and hardware so that doors and drawers operate smoothly without or bind.

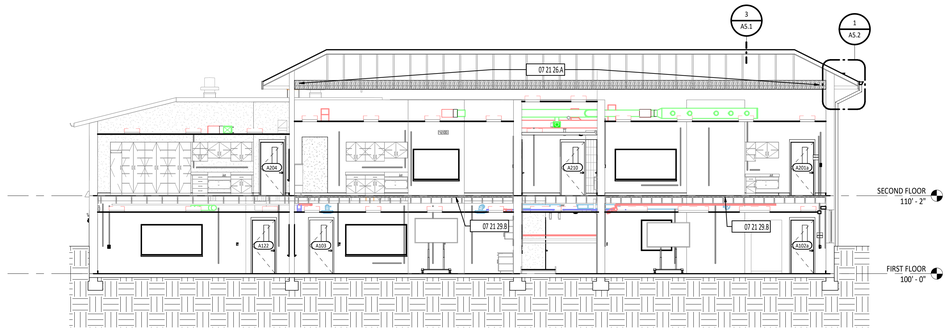
I. Install a chain stop on doors where door will hit an obstruction casework components or adjacent walls before it is full opened install on all doors that will hit

3.03 CLEANING

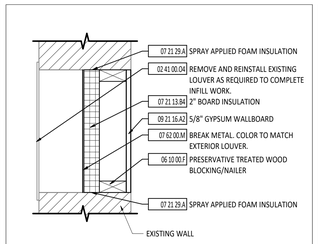
A. Clean exposed surfaces, edges, and cabinet interiors. Clean construction and installation marks.

B. Protect installed casework from subsequent construction operations.

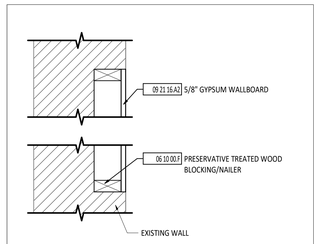
END OF SECTION



3 / A1.2 BUILDING SECTION
1/8" = 1'-0"

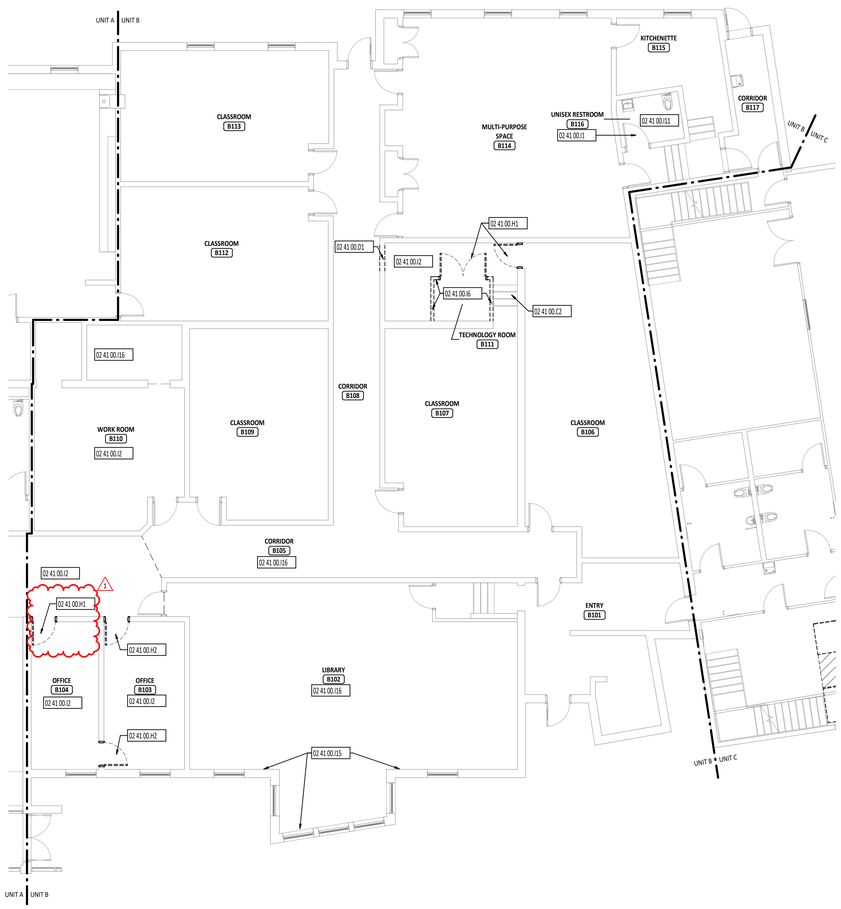


4 / A1.2 MECHANICAL UNIT INFILL
1 1/2" = 1'-0"

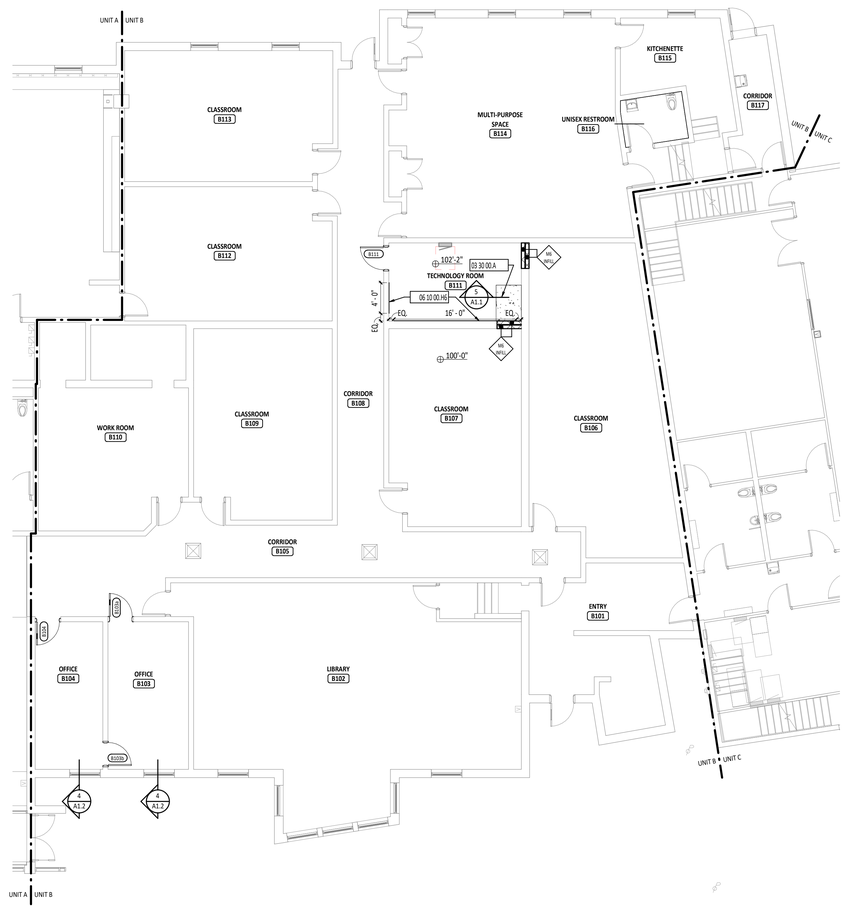


5 / A1.2 MECHANICAL UNIT INFILL
1 1/2" = 1'-0"

#	KEYNOTE DESCRIPTION
02 41 00.C2	REMOVE EXISTING CONCRETE STEPS. PREPARE FOR SLAB INFILL.
02 41 00.D1	REMOVE PORTION OF EXISTING CONCRETE MASONRY UNIT WALL FOR NEW OPENING.
02 41 00.H1	REMOVE EXISTING DOOR & FRAME
02 41 00.H2	REMOVE EXISTING DOOR. FRAME TO REMAIN.
02 41 00.I1	REMOVE EXISTING FLOORING TO ALLOW FOR NEW CONSTRUCTION. PATCH AND REPAIR CONCRETE SLAB TO PREPARE IT TO RECEIVE SCHEDULED FINISH.
02 41 00.I2	REMOVE EXISTING FLOORING AND BASE TO ALLOW FOR NEW CONSTRUCTION. PATCH AND REPAIR CONCRETE SLAB AND WALL TO PREPARE IT TO RECEIVE SCHEDULED FINISH.
02 41 00.I6	REMOVE EXISTING METAL STUD WALL
02 41 00.I11	REMOVE EXISTING WALL TILE ON ALL WALLS. PATCH AND REPAIR WALL SURFACE TO ACCEPT NEW FINISHES.
02 41 00.I15	REMOVE EXISTING BASEBOARD HEATING - REFERENCE MECHANICAL DRAWINGS FOR MORE INFORMATION. PATCH AND REPAIR WALL SURFACE AS REQUIRED TO ACCEPT SCHEDULED FINISHES.
02 41 00.I16	EXISTING FLOORING AND BASE TO REMAIN. PROTECT DURING CONSTRUCTION.
02 41 00.O4	REMOVE AND REINSTALL EXISTING LOUVER AS REQUIRED TO COMPLETE INFILL WORK.
03 30 00.A	CONCRETE SLAB INFILL
06 10 00.F	PRESERVATIVE TREATED WOOD BLOCKING/NAILER
06 10 00.H6	3/4" FIRE-RETARDANT PLYWOOD - 4'-0" x 8'-0" MOUNTED 8" AFF - PAINT.
07 21 13.B4	2" BOARD INSULATION
07 21 26.A	BLOWN INSULATION - R-49
07 21 29.A	SPRAY APPLIED FOAM INSULATION
07 21 29.B	2" SOUND CONTROL SPRAY APPLIED INSULATION. APPLIED TO UNDERSIDE OF FLOOR
07 62 00.M	BREAK METAL. COLOR TO MATCH EXTERIOR LOUVER.
09 21 16.A2	5/8" GYPSUM WALLBOARD



1 / A1.2 FIRST FLOOR DEMOLITION PLAN - UNIT B
1/8" = 1'-0"



2 / A1.2 FIRST FLOOR PLAN - UNIT B
1/8" = 1'-0"

FIRST FLOOR PLAN ROOM INDEX - UNIT B		
ROOM NUMBER	ROOM NAME	AREA
B101	ENTRY	329 SF
B102	LIBRARY	1,099 SF
B103	OFFICE	202 SF
B104	OFFICE	170 SF
B105	CORRIDOR	571 SF
B106	CLASSROOM	666 SF
B107	CLASSROOM	433 SF
B108	CORRIDOR	415 SF
B109	CLASSROOM	437 SF
B110	WORK ROOM	484 SF
B111	TECHNOLOGY ROOM	175 SF
B112	CLASSROOM	463 SF
B113	CLASSROOM	451 SF
B114	MULTI-PURPOSE SPACE	811 SF
B115	KITCHENETTE	224 SF
B116	UNISEX RESTROOM	51 SF
B117	CORRIDOR	95 SF

FLOOR PLAN GENERAL NOTES

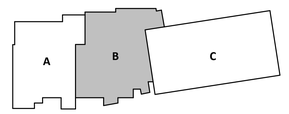
A ALL DIMENSIONS ARE MEASURED TO THE FACE OF MASONRY OR THE FACE OF METAL STUD UNLESS NOTED OTHERWISE.
B ALL CMU CORNERS, HORIZONTAL OR VERTICAL, SHALL BE BULLNOSE UNLESS NOTED OR DETAILED OTHERWISE.
C INSTALL TREATED WOOD BLOCKING IN WALLS AS REQUIRED TO SECURE ALL EQUIPMENT, ACCESSORIES, HANDRAILS, CASEWORK, ETC. COORDINATE THIS WORK WITH ALL APPROPRIATE CONTRACTORS, SUPPLIERS AND MANUFACTURERS RECOMMENDATIONS.
D CAULK AT ALL CMU TO GYPSUM WALLBOARD WALLS.
E HINGE SIDE OF DOOR JAMB AT INTERSECTING WALLS TO BE LOCATED 4" FROM ADJACENT WALL UNLESS NOTED OTHERWISE - REFERENCE FLOOR PLANS.
F ALL WALLS TO BE PATCHED AFTER REMOVAL OF MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY.

DEMOLITION FLOOR PLAN GENERAL NOTES

A THESE NOTES APPLY TO ALL ARCHITECTURAL DRAWINGS. FOR DEMOLITION NOTES AND SYMBOLS APPLICABLE ONLY TO DRAWINGS OF DISCIPLINE OTHER THAN ARCHITECTURAL, REFER TO SPECIFIC DRAWINGS OF THAT GENERAL DEMOLITION NOTES DISCIPLINE.
B FIELD VERIFY CONDITIONS AND COORDINATE DEMOLITION OR REMOVAL WORK WITH CORRESPONDING NEW CONSTRUCTION WORK AND WITH ALL APPROPRIATE TRADES PRIOR TO STARTING DEMOLITION WORK. IF DISCREPANCIES ARE FOUND BETWEEN CONTRACT DOCUMENTS AND ACTUAL FIELD CONDITIONS, NOTIFY ARCHITECT IMMEDIATELY.
C OWNER SHALL REMOVE LOOSE ITEMS, I.E. EQUIPMENT, FURNITURE, ARTWORK, PLAQUES, ETC., PRIOR TO CONTRACTOR'S START OF WORK IN SPECIFIED AREAS. WHERE PARTIAL OCCUPANCY, CONTRACTOR SHALL COORDINATE SCHEDULE WITH OWNER.
D REMOVE ITEMS TO BE DEMOLISHED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED. DESCRIPTION OF PRIMARY ITEMS TO BE REMOVED IS GENERAL IN NATURE, AND REMOVAL OF SECONDARY COMPONENTS SUCH AS BLOCKING, SUPPORTS, ANCHORS, TRIM, ADHESIVE, PIPING, WIRING, ETC., RELATED TO PRIMARY ITEMS SHALL BE INCLUDED.
E PROTECT EXISTING SURFACES TO REMAIN IN AREAS ADJACENT TO DEMOLITION WORK. CONTRACTOR TO REPAIR EXISTING SURFACES TO REMAIN DAMAGED DURING CONSTRUCTION AND DEMOLITION.
F PATCH EXISTING FLOOR, WALL, AND CEILING CONSTRUCTION AT ABANOONED PENETRATION LOCATIONS WITH NEW MATERIALS AS REQUIRED TO RECEIVE NEW FINISHES AND TO MAINTAIN ORIGINAL FIRE RATING ASSEMBLY WHERE APPLICABLE.
G SELECTIVE DEMOLITION FOR INSTALLATION OF NEW MECHANICAL, PLUMBING, OR ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR TRADE REQUIRING THE DEMOLITION.
H DEMOLISHED MATERIALS ARE THE PROPERTY OF THE CONTRACTOR UNLESS NOTED OTHERWISE AND SHALL BE PROMPTLY DISPOSED OFF SITE IN A LEGAL MANNER.
I REPAIR FINISHES AND SURFACES LEFT EXPOSED BY DEMOLITION OR REMOVAL OF EQUIPMENT USING NEW MATERIALS TO MATCH SURROUNDING SURFACES. REPAIR EXISTING FLOOR, BASE, WALL AND CEILING FINISHES TO CORRECT DEFECTS CAUSED OR EXPOSED BY DEMOLITION WORK OR EQUIPMENT REMOVAL. REPAIRED SURFACES SHALL BE SMOOTH AND UNDETECTABLE UNDER FINAL FINISHES. AREAS NOTED ON THE DWGS. TO BE REPAIRED OR PATCHED ARE GIVEN FOR REFERENCE AND SHALL NOT BE INTERPRETED TO LIMIT THE SCOPE OF WORK.
J DIMENSIONAL INFORMATION FOR NEW OPENINGS INDICATED ON DEMOLITION DWGS. ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION AND COORDINATION WITH NEW CONSTRUCTION.
K PRIOR TO START OF DEMOLITION, DUST AND SOUND BARRIERS SHALL BE CONSTRUCTED.
L PROPER EGRESS AND APPROVED BARRIERS MUST BE MAINTAINED THROUGHOUT THE DEMOLITION AREA AT ALL TIMES.
M REMOVE DEBRIS DAILY.
N GENERAL TRADES TO REMOVE TV MOUNTS & HARDWARE. REFERENCE TECHNOLOGY DRAWINGS FOR LOCATIONS.
O FLAT PANEL TVS ARE TO BE TURNED OVER TO THE OWNER AND THE CONSULE TVS CAN BE TRASHED.

FLOOR PLAN SYMBOLS LEGEND

AED — AUTOMATED EXTERNAL DEFIBRILLATOR DESIGNATION
XXXX — DOOR DESIGNATION - REFERENCE DOOR/OPENING SCHEDULE.
FE_ — FIRE EXTINGUISHER DESIGNATION - REFERENCE SPECIFICATIONS
FEC_ — FIRE EXTINGUISHER CABINET DESIGNATION - REFERENCE SPECIFICATIONS
A101 — ROOM DESIGNATION - REFERENCE ROOM INDEX.
XX — CURTAIN WALL/STOREFRONT/WINDOW TYPE DESIGNATION
XX HT — WALL TYPE DESIGNATION - REFERENCE WALL TYPES.
X — STRUCTURAL GRID - REFERENCE STRUCTURAL DRAWINGS.
XX XX XX.XX — DIVISIONAL KEYNOTE DESIGNATION - REFERENCE KEYNOTE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
KEYNOTE DESIGNATION
SPECIFICATION SECTION
AREA OF DETAIL — CALLOUT: X / XX.X — SIM — DETAIL NUMBER / SHEET NUMBER
EXTERIOR ELEVATION: X / XX.X — DETAIL NUMBER / SHEET NUMBER
INTERIOR ELEVATION: X / XX.X — DETAIL NUMBER / SHEET NUMBER
SECTION: X / XX.X — SIM — DETAIL NUMBER / SHEET NUMBER



KEY PLAN

STATE OF OHIO
ANDREW P. HUELSMAN
E-78372
REGISTERED
PROFESSIONAL ENGINEER

ANDREW P. HUELSMAN
LICENSE #E-78372
EXPIRATION DATE: 12/31/2027

GARMANN MILLER
MARION, OHIO | COLUMBUS, OHIO | INDIANAPOLIS, INDIANA | FORT WAYNE, INDIANA
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RENOVATIONS TO

PUT-IN-BAY LOCAL SCHOOLS
1919 BUILDING RENOVATIONS

SARATANIKA AVENUE, PUT-IN-BAY, OH 43456

ISSUANCES/REVISIONS		
1	CONSTRUCTION DOCUMENTS - ADDENDUM 04	03/03/2026
	CONSTRUCTION DOCUMENTS	02/12/2026

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25019.01	ZLW	LKL

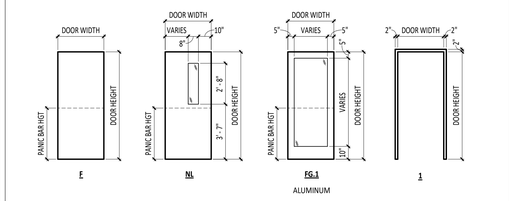
SHEET TITLE:
FIRST FLOOR PLAN & DEMOLITION PLAN - UNIT B

SHEET NUMBER:
A1.2

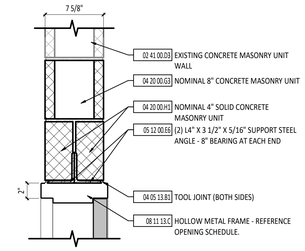
PRINTED ON: 3/3/2026 9:45:00 AM

DOOR/OPENING SCHEDULE

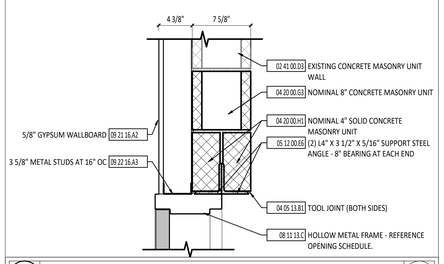
NUMBER	DOOR SIZE	DOOR THK	DOOR MATL	DOOR TYPE	DOOR GLASS	FRAME DEPTH	FRAME MATL	FRAME TYPE	FRAME GLASS	DETAIL NUMBER HEAD	DETAIL NUMBER JAMB	DETAIL NUMBER SILL	HARDWARE SET	ROOM KEY SIDE	FUNCTION	LABEL (MIN)	NOTES
A102a	3'-0" x 7'-0"	1 3/4"	HM	NL	EG1	EX	EX	-	-	-	-	-	2.0	Exterior	Exterior	-	2
A102b	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	13.0	A104	Interior	-	2
A103	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	14.0	A104	Interior	-	2
A105a	3'-0" x 7'-0"	1 3/4"	WD	F	-	8 3/4"	HM	-	-	3/A6.1	5/A6.1	-	7.0	A104	Interior	45 MIN	1
A105b	3'-0" x 7'-0"	1 3/4"	WD	F	-	8 3/4"	HM	-	-	3/A6.1	5/A6.1	-	7.0	A104	Interior	45 MIN	1
A106	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	5.0	A104	Interior	-	2
A108	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	13.0	A104	Interior	-	2
A109a	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	11.0	A111	Interior	-	2
A109b	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	8.0	A108	Interior	-	2
A110	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	5.0	A109	Interior	-	2
A112a	(2) 3'-0" x 7'-0"	1 3/4"	AL	FG.1	EG1	EX	EX	-	-	-	-	-	1.0	Exterior	Exterior	-	2
A112b	(2) 3'-0" x 7'-0"	1 3/4"	AL	FG.1	G1	EX	EX	-	-	-	-	-	4.0	A112	Interior	-	2
A118	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	16.0	A104	Interior	-	2
A119	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	16.0	A104	Interior	-	2
A120	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	5.0	A104	Interior	-	2
A121	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	12.0	A104	Interior	-	2
A122	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	12.0	A104	Interior	-	2
A201a	3'-0" x 7'-0"	1 3/4"	HM	NL	EG1	EX	EX	-	-	-	-	-	2.0	Exterior	Exterior	-	2
A201b	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	13.0	A202	Interior	-	2
A203	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	13.0	A202	Interior	-	2
A204	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	12.0	A202	Interior	-	2
A205	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	12.0	A202	Interior	-	2
A205a	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	5.0	A205	Interior	-	2
A206a	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	15.0	A202	Interior	-	2
A206b	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	15.0	A205	Interior	-	2
A207	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	12.0	A202	Interior	-	2
A210	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	12.0	A202	Interior	-	2
A211a	3'-0" x 7'-0"	1 3/4"	HM	NL	EG1	EX	EX	-	-	-	-	-	3.0	Exterior	Exterior	-	2
A211b	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	13.0	A202	Interior	-	2
A212	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	12.0	A202	Interior	-	2
B103a	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	EX	EX	-	-	-	-	-	10.0	B105	Interior	-	2
B103b	3'-0" x 7'-0"	1 3/4"	WD	F	-	EX	EX	-	-	-	-	-	10.0	B103	Interior	-	2
B104	3'-0" x 7'-0"	1 3/4"	WD	NL	G1	5 3/4"	HM	-	-	6/A6.1	7/A6.1	-	9.0	B105	Interior	-	2
B111	3'-0" x 7'-0"	1 3/4"	WD	F	-	8 3/4"	HM	1	-	4/A6.1	4/A6.1	-	6.0	B108	Interior	-	-



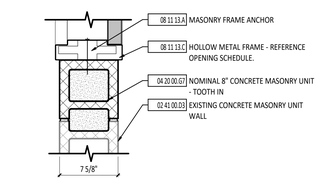
1 / A6.1 — DOOR TYPES & HOLLOW METAL DOOR FRAME TYPES
1/4" = 1'-0"



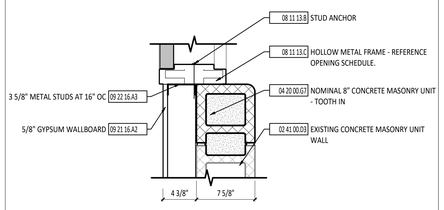
2 / A6.1 — HEAD DETAIL - INTERIOR
1 1/2" = 1'-0"



3 / A6.1 — HEAD DETAIL - INTERIOR
1 1/2" = 1'-0"

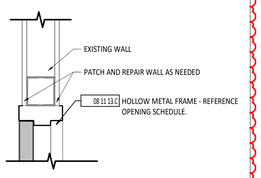


4 / A6.1 — JAMB DETAIL - INTERIOR
1 1/2" = 1'-0"

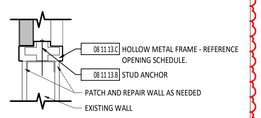


5 / A6.1 — JAMB DETAIL - INTERIOR
1 1/2" = 1'-0"

1



6 / A6.1 — HEAD DETAIL - INTERIOR
1 1/2" = 1'-0"



7 / A6.1 — JAMB DETAIL - INTERIOR
1 1/2" = 1'-0"

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DOOR GENERAL NOTES

A REFERENCE A6 SHEETS FOR DOOR AND STOREFRONT DETAILS.
B REFERENCE SPECIFICATION SECTION 08 71 00 FOR HARDWARE SETS.
C FIELD VERIFY ALL OPENING SIZES.

DOOR/OPENING SCHEDULE ABBREVIATIONS

SYMBOL DESCRIPTION

AL ALUMINUM
F FLUSH
FG FULL GLASS
HM HOLLOW METAL
NL NARROW LITE
W WOOD

DOOR/OPENING SCHEDULE NOTES

1. ACOUSTICAL DOOR AND FRAME.
2. EXISTING FRAME TO REMIAN.

#	KEYNOTE DESCRIPTION
02 41 00.D3	EXISTING CONCRETE MASONRY UNIT WALL
04 05 13.B1	TOOL JOINT (BOTH SIDES)
04 20 00.G3	NOMINAL 8" CONCRETE MASONRY UNIT
04 20 00.G7	NOMINAL 8" CONCRETE MASONRY UNIT - TOOTH IN
04 20 00.H1	NOMINAL 4" SOLID CONCRETE MASONRY UNIT
05 12 00.E6	(2) L4" X 3 1/2" X 5/16" SUPPORT STEEL ANGLE - 8" BEARING AT EACH END
08 11 13.A	MASONRY FRAME ANCHOR
08 11 13.B	STUD ANCHOR
08 11 13.C	HOLLOW METAL FRAME - REFERENCE OPENING SCHEDULE.
09 21 16.A2	5/8" GYPSUM WALLBOARD
09 22 16.A3	3 5/8" METAL STUDS AT 16" OC

STATE OF OHIO
ANDREW P. HUELSMAN
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RENOVATIONS TO

PUT-IN-BAY LOCAL SCHOOLS
1919 BUILDING RENOVATIONS

5 KELLEYS ISLAND AVENUE, PUT-IN-BAY, OH 43456

ISSUANCES/REVISIONS

1	CONSTRUCTION DOCUMENTS - ADDENDUM 04	03/03/2026
	CONSTRUCTION DOCUMENTS	02/12/2026

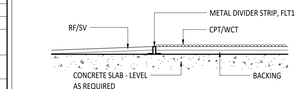
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25019.01	ZLW	CWS

SHEET TITLE:
DOOR SCHEDULE

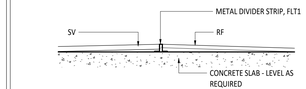
SHEET NUMBER:
A6.1

FINISH MATERIAL SCHEDULE

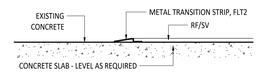
NAME	MANUFACTURER	STYLE	NUMBER	COLOR	SIZE	COMMENTS	EQUAL #1	EQUAL #2
09 30 00 TILING - CERAMIC PORCELAIN TILE								
CT1	DALTILE	COLOR WHEEL LINEAR - GLOSSY	X114	DESERT GRAY	4" X 12"	STACK BOND INSTALLATION PATTERN.	CROSSVILLE, COLOR BY NUMBER	REFER TO SPECIFICATIONS
CT2	DALTILE	COLOR WHEEL LINEAR - GLOSSY	1174	SEA BREEZE	4" X 12"	STACK BOND INSTALLATION PATTERN.	CROSSVILLE, COLOR BY NUMBER	REFER TO SPECIFICATIONS
09 30 00 TILING - METAL TRIM								
MT1	SCHLUTER	RONDEC	--	BRUSHED ALUMINUM FINISH	--		REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
09 30 00 TILING - TILE GROUT								
TG1	LATICRETE	REFER TO SPECIFICATIONS	87	STORM GREY	--		MAPEI	TEC
09 51 00 ACOUSTICAL CEILINGS - SUSPENSION SYSTEM								
TYPE A	ARMSTRONG	PRELUDE XL	--	WHITE	15/16" WIDE FACE	DOUBLE WEB CONSTRUCTION , CLASS 1 ZINC COATING, 8 GUAGE STEEL	CERTAINTEED	USG
09 51 00 ACOUSTICAL CEILINGS - TILE								
TYPE A	ARMSTRONG CEILING	SCHOOL ZONE FINE FISSURED	1714	WHITE	2' X 4', 3/4" THICKNESS	SQUARE EDGE , 81% LIGHT REFLECTANCE, .70 MINIMUM NRC, SAG RESISTANT, ANTI-MICROBIAL. USE WITH SUSPENSIONS SYSTEM TYPE A. CORRESPONDS WITH CEILING TYPE A ON A7 SHEETS.	USG: RADAR CLIMA PLUS HIGH NRC	CERTAINTEED: FINE FISSURED HIGH NRC
TYPE B	ARMSTRONG	CERAMAGUARD	608	WHITE	24" X 48", 5/8" THICKNESS	SQUARE EDGE, .86 LIGHT REFLECTANCE, .55 MINIMUM NRC, SAG RESISTANT, ANTI-MICROBIAL, MOLD/MILDEW RESISTANT, WASHABLE. USE WITH SUSPENSION SYSTEM TYPE A. CORRESPONDS WITH CEILING TYPE B ON A7 SHEETS.	USG	CERTAINTEED
09 65 00 RESILIENT FLOORING - RUBBER FLOORING								
RF1	TARKETT/JOHNSONITE	MESTO CONFIGURATIONS TILE	PS3D	NOBLE KNIGHT DARK	12" X 24"	ASHLAR INSTALLTION.	NORA	MONDO
RF2	TARKETT/JOHNSONITE	MESTO CONFIGURATIONS TILE	PS3L	NOBLE KNIGHT LIGHT	12" X 24"	ASHLAR INSTALLTION.	NORA	MONDO
RF3	TARKETT/JOHNSONITE	MESTO CONFIGURATIONS TILE	PS4	AFTER MIDNIGHT	12" X 24"	ASHLAR INSTALLTION.	NORA	MONDO
09 65 00 RESILIENT FLOORING - FLOOR TRANSITIONS								
FLT1	SCHLUTER	SCHIENE	--	BRUSHED ALUMINUM FINISH	--	LEVEL FLOOR TRANSITION	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
FLT2	SCHLUTER	RENO-U	--	BRUSHED ALUMINUM FINISH	--		REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
FLT3	SCHLUTER	RENO-RAMP	--	BRUSHED ALUMINUM FINISH	--		REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
09 65 00 RESILIENT FLOORING - RUBBER BASE								
RB1	TARKETT/JOHNSONITE	TRADITIONAL RUBBER BASE	63	BURNT UMBER	4" COVE TOE	PROVIDE MITERED INSIDE CORNERS.	ROPPE	MANNINGTON MILLS
RB2	TARKETT/JOHNSONITE	TRADITIONAL RUBBER BASE	TA5	COLONIAL GREY	4" COVE TOE	PROVIDE MITERED INSIDE CORNERS.	ROPPE	MANNINGTON MILLS
09 65 00 RESILIENT FLOORING - RUBBER STAIR NOSING								
RSN1	TARKETT/JOHNSONITE	RUBBER STAIR NOSING - VDL-XX-RD	--	63 BURNT UMBER	--	USED AT THE TOP OF STAIRS TO TRANSITION FROM NOTED FLOOR FINISH TO RESILIENT RISERS OF TOP STEP.	ROPPE	FLEXCO
09 65 00 RESILIENT FLOORING - RUBBER STAIR TREAD								
RST1	TARKETT/JOHNSONITE	ANGLE FIT RUBBER TREADS WITH RISER	--	COLOR SPLASH FRPATSP VF6	--	HAMMERED STAIR TREAD TEXTURE.	ROPPE	FLEXCO
09 65 00 RESILIENT FLOORING - SHEET VINYL FLOORING								
SV1	TARKETT	iQ OPTIMA	0853	MEDIUM GRAY	--	HEAT WELD SEAMS WITH MATCHING WELD ROD. INSTALL COVE BASE 4" H WITH METAL CAP.	MANNINGTON	GERFLOR
SV2	GERFLOR	MIPOLAM BIOCONTROL ESD+	1000	GRAPHITE	--	STATIC DISSIPATIVE FLOORING. HEAT WELD SEAMS WITH MATCHING WELD ROD.	TARKETT	MANNINGTON
09 68 00 CARPETING - CARPET TILE								
CPT1	PATCRAFT	ORGANIC INTERRUPTION - LINEAR TENSION	00550	SLATE	18" X 36"	ASHLAR INSTALLATION.	MOHAWK	SHAW CONTRACT
CPT2	PATCRAFT	ORGANIC INTERRUPTION - LINEAR TENSION	00460	HARBOR	18" X 36"	ASHLAR INSTALLATION.	MOHAWK	SHAW CONTRACT
CPT3	MILLIKEN	REMIX 2.0 - MIX TAPE TRIMLINE	MXT126-27	VINYL WITH BLUE	1M x 1M	MONOLITHIC INSTALLATION. PRINTWORKS CUSTOM CARPET TILE - DR NUMBER: 01461401. CUSTOM SENSORY PATHWAY DESIGN - DR NUMBERS: 01462727, 01462937, 01462938, 01462939, 01462940, 01462941, 01463019. SEE FINISH FLOOR PLAN FOR LOCATION.		--
09 68 00 CARPETING - WALK-OFF CARPET								
WCT1	TARKETT	ASSERTIVE - RIB	26202	STEELWORK	24" X 24"	QUARTER TURN INSTALLATION.	PATCRAFT	MOHAWK
09 91 23 PAINTING - EPOXY PAINT								
EPT1	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 6231	ROCKY CANDY	--		REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
09 91 23 PAINTING - PAINT								
PT1	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 6231	ROCK CANDY	--		REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
PT2	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 6801	REGALE BLUE	--	ACCENT COLOR	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
PT3	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 7068	GRIZZLE GRAY	--	HM DOORS AND FRAMES	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
PT4	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 7007	CEILING BRIGHT WHITE	--	GYP. BOARD CEILINGS AND BULKHEADS	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
PT5	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 6811	HONORABLE BLUE	--	ACCENT COLOR	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS
10 51 23 - METAL LOCKER								
LKR1	REFER TO SPECIFICATION	REFER TO SPECIFICATION	--	GREY	--	CORRESPONDS WITH LOCKER TYPE LMKVD1.7	REFER TO SPECIFICATION	REFER TO SPECIFICATION
12 24 00 WINDOW SHADES- ROLLER SHADE								
RS1	DRAPER	CLUTCH OPERATED FLEXSHADE	--	E SCREEN - WHITE PEARL	--	3% OPENNESS FACTOR	MECHOSHADE	HUNTER DOUGLAS ARCHITECTURAL
12 35 50.13 EDUCATIONAL CASEWORK - CASEWORK HARDWARE								
CH1	STEVEN ADVANTAGE	SLIM CREST 128 ADA	SAD13MN	NICKEL	--		HAFELE, PULSAR COLLECTION, HANDLE 1550.00.492	RICHELIEU, FUNCTIONAL METAL PULL - 1094
12 35 50.13 EDUCATIONAL CASEWORK - PLASTIC LAMINATE								
LT1	FORMICA	STANDARD HIGH PRESSURE LAMINATE	5795-NG	CAMEL ELM	--	NATURAL GRAIN TEXTURE	WILSONART	NEVAMAR
12 36 00 - COUNTERTOPS								
SS1	DUPONT CORIAN	SOLID SURFACE	--	DOVE	1/2" THICK		WILSONART	FORMICA



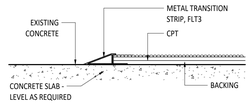
1 A9.0 **FLOOR TRANSITION - RESILIENT FLOORING TO CARPET**
6" = 1'-0"



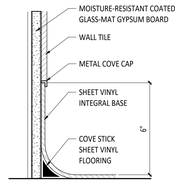
2 A9.0 **FLOOR TRANSITION - RESILIENT TO RESILIENT FLOORING**
6" = 1'-0"



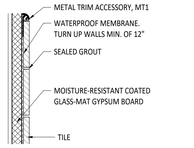
3 A9.0 **FLOOR TRANSITION - CONCRETE TO RESILIENT FLOORING**
6" = 1'-0"



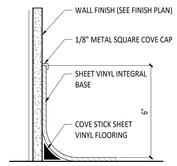
4 A9.0 **FLOOR TRANSITION - CONCRETE TO CARPET**
6" = 1'-0"



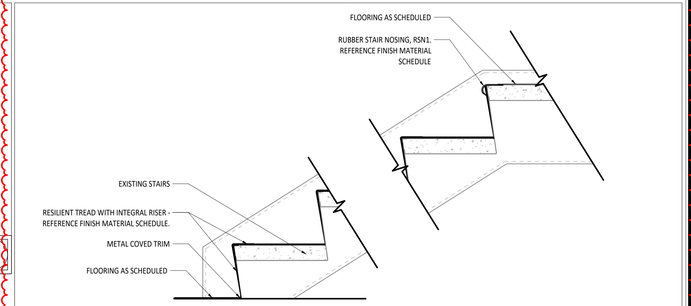
5 A9.0 **TYPICAL SHEET VINYL COVE BASE TO TILE WALL - 6" DETAIL**
3" = 1'-0"



6 A9.0 **TYPICAL TILE TRIM - EXPOSED EDGE**
3" = 1'-0"



7 A9.0 **TYPICAL SHEET VINYL COVE BASE - 6" DETAIL**
3" = 1'-0"



8 A9.0 **TYPICAL FLOOR TRANISTION - RUBBER STAIR NOSING AND TRIM AT BASE**
1 1/2" = 1'-0"

FINISH SCHEDULE ABBREVIATIONS

ABBREVIATIONS USED ON THE CONTRACT DOCUMENTS, INCLUDE BUT ARE NOT LIMITED TO THOSE LISTED BELOW

ACT ACOUSTICAL CEILING TILE	MCP METAL CEILING PANEL
ACR ACOUSTIC CEILING REFLECTOR	MT METAL TRIM
AMF ARCHITECTURAL METAL FINISH	PC POLISHED CONCRETE
AWP ACOUSTICAL WALL PANEL	PP POLYASPARTIC POLYUREA
BB BURNISHED BLOCK BASE	PT PAINT
BG BUMPER GUARD	QT QUARRY TILE
CC CUBICLE CURTAIN	QZ QUARTZ
CF CONCRETE FINISH	RA RUBBER ATHLETIC FLOOR
CG CORNER GUARD	RB RESILIENT BASE
CH CABINET HARDWARE	RES RESINOUS FLOORING
CMU CONCRETE MASONRY UNIT	RF RUBBER FLOORING
CPT CARPET	RS ROLLERSHADE
CR CRASH RAIL	RST RUBBER STAIR TREADS
CT CERAMIC TILE	SC SEALED CONCRETE
DF DRAPERY FABRIC	SDG SUSPENDED DECORATIVE GRID
DH DECORATIVE HARDWARE	SS STAINLESS STEEL
DP DECORATIVE PANEL	SSM SOLID SURFACE MATERIAL
EPF EPOXY POURED FLOOR	ST STONE
EFG ENTRANCE FLOOR GRILL	SV SHEET VINYL
EPT EPOXY PAINT	SWP SHEET WALL PROTECTION
EXP EXPOSED STRUCTURE	TF TACKABLE FABRIC
FB FACE BRICK VENEER	TG TILE GROUT
FLT FLOOR TRANSITION	TZ EPOXY TERRAZZO
FT FLOOR TILE	UPH UPHOLSTERY TEXTILE
FWS FABRIC WALL SYSTEM	VB VENTED RESILIENT BASE
GL GLAZING	VT VINYL TILE
GT GLASS TILE	VWC VINYL WALLCOVERING
GWB GYPSUM WALLBOARD	WCP WOOD CEILING PANEL
HC HARDENED CONCRETE	WCT WALK OFF CARPET
HPC HIGH PERFORMANCE COATING	WD WOOD
HR HANDRAIL	WF WOOD FLOOR
L LINOLEUM	WT WALL TILE
LE LAMINATE EDGEBANDING	WTP WOOD TRIM PROFILE
LKR LOCKER	
LP LAMINATE PANEL	
LT PLASTIC LAMINATE	

TYPICAL FINISHES

* UNLESS NOTED OTHERWISE, THESE FINISH SELECTIONS SHALL BE USED THROUGHOUT THE PROJECT. CONTRACTOR SHOULD BRING ANY DISCREPANCIES TO THE ARCHITECT'S ATTENTION IMMEDIATELY.

CASEWORK HARDWARE	CH1
EXPOSED HVAC ELEMENTS (CEILING)	MATCH PT4
EXPOSED HVAC ELEMENTS (WALLS)	MATCH ADJACENT WALL FINISH
EXPOSED STRUCTURE (CEILING)	MATCH PT4
EXPOSED METAL DECK	MATCH PT4
GWB CEILINGS AND BULKHEADS	PT4
HOLLOW METAL DOOR FRAMES	PT3
HOLLOW METAL DOORS	PT3
INTERIOR WOOD DOORS	WD1
SOLID SURFACE COUNTERTOPS	SS1
LAMINATE CASEWORK (VERTICAL)	LT1
METAL LOCKERS	LKR1
WOOD STAIR STRINGERS, TRIM WORK	EXISTING TO REMAIN

FINISH TAG LEGEND

*REMARKS NUMBERS COORDINATE WITH "INTERIOR FINISH REMARKS" NOTES LEGEND ABOVE

MATERIALS NOTED IN FINISH TAG SHOULD BE CONSIDERED THE OVERALL FINISHES IN THE ROOM MARKED UNLESS NOTED OTHERWISE WITH KEYNOTES ON FINISH PLAN OR INTERIOR ELEVATIONS.

INTERIOR FINISH REMARKS

1. MULTIPLE WALL FINISHES IN THIS ROOM. REFER TO INFORMATION NOTED ON FINISH PLANS AND INTERIOR ELEVATIONS.
2. MULTIPLE FLOOR FINISHES IN THIS ROOM. REFER TO TYPICAL RUBBER TILE CLASSROOM PATTERN DETAIL ON SHEET A9.2.
3. INTEGRAL COVE BASE IN THIS ROOM. REFER TO TYPICAL DETAIL ON SHEET A9.0.
4. NO INTERIORS SCOPE IN THIS ROOM, UNLESS NOTED OTHERWISE.
5. MULTIPLE FLOOR FINISHES IN THIS ROOM. RANDOM MIX OF 50% CPT1 AND 50% CPT2.

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RENOVATIONS TO

PUT-IN-BAY LOCAL SCHOOLS 1919 BUILDING RENOVATIONS

5A CATAWBA AVENUE - PUT-IN-BAY, OH 43456

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PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25019.01	ALR	BAB

SHEET TITLE:

FINISH MATERIAL SCHEDULE & TYPICAL DETAILS

SHEET NUMBER:

A9.0

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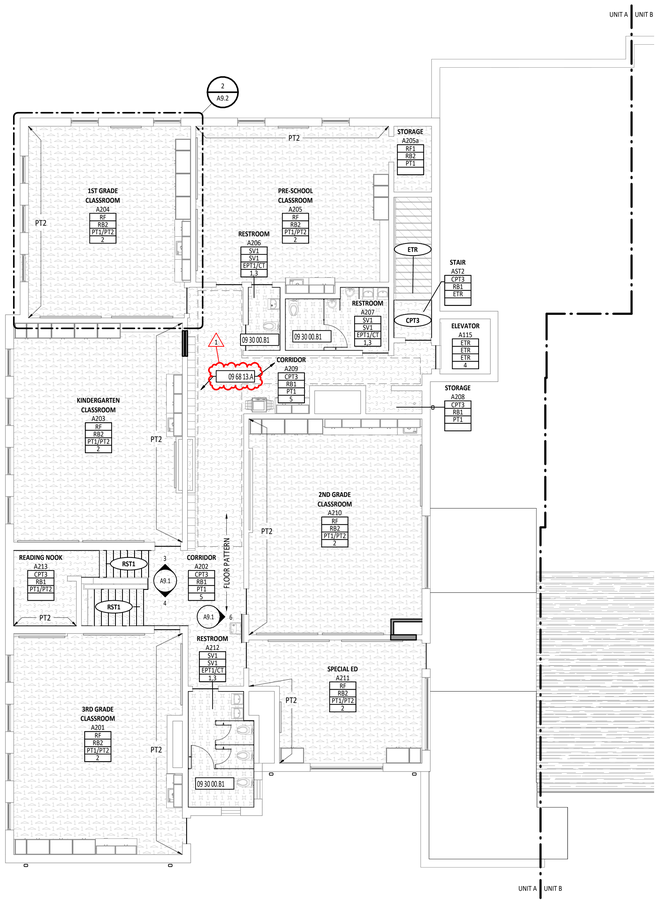

1 A9.2 **SECOND FLOOR FINISH PLAN - UNIT A**
1/8" = 1'-0"

ASHLAR INSTALLATION PATTERN - 1/3 OFFSET.
ALIGN WITH LENGTH OF THE ROOM.

50% RF1, 25% RF2, 25% RF3

2 A9.2 **TYPICAL RUBBER TILE CLASSROOM PATTERN DETAIL**
1/4" = 1'-0"

SECOND FLOOR PLAN ROOM INDEX - UNIT A

ROOM NUMBER	ROOM NAME	AREA
A115	ELEVATOR	50 SF
A201	3RD GRADE CLASSROOM	617 SF
A202	CORRIDOR	424 SF
A203	KINDERGARTEN CLASSROOM	623 SF
A204	1ST GRADE CLASSROOM	525 SF
A205	PRE-SCHOOL CLASSROOM	521 SF
A205a	STORAGE	42 SF
A206	RESTROOM	34 SF
A207	RESTROOM	101 SF
A208	STORAGE	22 SF
A209	CORRIDOR	134 SF
A210	2ND GRADE CLASSROOM	622 SF
A211	SPECIAL ED	323 SF
A212	RESTROOM	125 SF
A213	READING NOOK	76 SF
AST1	STAIR	79 SF
AST2	STAIR	92 SF
AST2	STAIR	90 SF

FLOOR FINISHES GENERAL NOTES

A. FLOORING TRANSITIONS AND SEAMS AT DOOR SHALL OCCUR DIRECTLY UNDER THE CENTERLINE OF CLOSED DOOR UNLESS NOTED OTHERWISE.
B. FLOORING TRANSITIONS ARE TO BE EASED TO ACHIEVE A SMOOTH AND UNIFORM TRANSITION.
C. TRANSITION STRIPS ARE REQUIRED IN ALL INSTANCES WHERE A FLOOR MATERIAL TRANSITION OCCURS.
D. FLOOR FINISHES SHALL EXTEND UNDER BUILT-IN COUNTER AND EQUIPMENT.
E. REFERENCE THE FINISH MATERIAL SCHEDULE FOR MANUFACTURERS, TYPES, AND COLOR SELECTIONS.
F. REFERENCE INTERIOR ELEVATIONS, WHERE PROVIDED, FOR ADDITIONAL INFORMATION.
G. ALL BASE MATERIALS SHALL BE INSTALLED TIGHT TO FLOORING SURFACE.
H. REFERENCE FINISH FLOOR MATERIAL LEGEND FOR SPECIFIC FLOORING MATERIAL AND COLOR.
I. OUTER CORNERS AND EXPOSED EDGES OF WALL TILE TO HAVE TILE FINISHING TRIM - REFERENCE TYPICAL DETAILS ON SHEET A9.0 FOR ADDITIONAL INFORMATION.
J. EXPOSED CEILING / STRUCTURE TO BE PAINTED, UNLESS NOTED OTHERWISE
K. ALL INTERIOR WALL FINISH TRANSITIONS SHOULD OCCUR AT AN INSIDE CORNER, IF A MATERIAL OR COLOR CHANGE OCCURS AT AN OUTSIDE CORNER, CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
L. ALL EXISTING WOOD TRIM TO REMAIN UNPAINTED. PROTECT DURING CONSTRUCTION.

#	KEYNOTE DESCRIPTION
09 30 00.81	CERAMIC WALL TILE (CT1) & (CT2) INSTALLED FROM FINISHED FLOOR TO 5'-0" H ON ALL WALLS - REFERENCE FINISH MATERIAL SCHEDULE. SEE TYPICAL TILE ELEVATION ON SHEET A9.1 FOR INSTALL PATTERN.
09 68 13.A	CPT3 MILLIKEN CUSTOM PRINTWORKS SENSORY PATHWAY DESIGN IN THIS LOCATION - REFER TO MILLIKEN'S SEAMING DIAGRAM FOR INSTALL. REFERENCE FINISH MATERIAL SCHEDULE FOR DESIGN RELEASE NUMBERS.

1

FINISH TAG LEGEND

A1XX — ROOM NUMBER
FLOOR FINISH — RF1
BASE FINISH — RB1
WALL FINISH — PT1
FINISH REMARK* — 2

*REMARKS NUMBERS COORDINATE WITH "INTERIOR FINISH REMARKS" NOTES LEGEND ABOVE

MATERIALS NOTED IN FINISH TAG SHOULD BE CONSIDERED THE OVERALL FINISHES IN THE ROOM MARKED UNLESS NOTED OTHERWISE WITH KEYNOTES ON FINISH PLAN OR INTERIOR ELEVATIONS.

INTERIOR FINISH REMARKS

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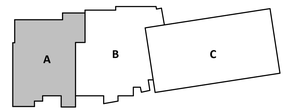
2. MULTIPLE FLOOR FINISHES IN THIS ROOM. REFER TO TYPICAL RUBBER TILE CLASSROOM PATTERN DETAIL ON SHEET A9.2.
3. INTEGRAL COVE BASE IN THIS ROOM. REFER TO TYPICAL DETAIL ON SHEET A9.0.
4. NO INTERIORS SCOPE IN THIS ROOM, UNLESS NOTED OTHERWISE.
5. MULTIPLE FLOOR FINISHES IN THIS ROOM. RANDOM MIX OF 50% CPT1 AND 50% CPT2.

FLOOR FINISH MATERIAL LEGEND

CARPET TILE 1 (CPT1)		SHEET VINYL 1 (SV1)	
CARPET TILE 2 (CPT2)		SHEET VINYL 2 (SV2)	
CARPET TILE 3 (CPT3)		RUBBER TILE 1 (RF1)	
WALK-OFF CARPET 1 (WCT1)		RUBBER TILE 2 (RF2)	
RESILIENT STAIR TREAD 1 (RST1)		RUBBER TILE 3 (RF3)	
EXISTING FLOORING TO REMAIN (ETR)			



KEY PLAN

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25019.01	ALR	BAB

SHEET TITLE:

SECOND FLOOR FINISH PLAN - UNIT A

SHEET NUMBER:

A9.2

PRINTED ON: 3/3/2026 10:24:15 AM

RADIANT CEILING PANEL SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	HEATING CAPACITY	ELECTRICAL POWER	FLA	VOLTAGE	PHASE	DIMENSIONS LENGTH	WIDTH	UNIT WEIGHT	REMARKS
RCP-1	MARKEL	CP707	ELECTRIC	2560 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-2	MARKEL	CP707	ELECTRIC	2560 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-3	MARKEL	CP707	ELECTRIC	2560 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-4	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	
RCP-5	MARKEL	CP707	ELECTRIC	2560 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-6	MARKEL	CP707	ELECTRIC	2560 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-7	MARKEL	CP707	ELECTRIC	2560 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-8	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	
RCP-9	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	
RCP-10	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	
RCP-11	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	
RCP-12	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	
RCP-13	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	SURFACE MOUNTED
RCP-14	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	SURFACE MOUNTED
RCP-15	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	SURFACE MOUNTED
RCP-16	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	SURFACE MOUNTED
RCP-17	MARKEL	CP707	ELECTRIC	1707 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-18	MARKEL	CP707	ELECTRIC	1707 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-19	MARKEL	CP707	ELECTRIC	1707 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-20	MARKEL	CP707	ELECTRIC	1707 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-21	MARKEL	CP707	ELECTRIC	1707 Btu/h	750 W	3 A	277 V	1	4' - 0"	2' - 0"	20 lb	
RCP-22	MARKEL	CP703	ELECTRIC	1280 Btu/h	375 W	1 A	277 V	1	2' - 0"	2' - 0"	13 lb	SURFACE MOUNTED

VARIABLE AIR VOLUME TERMINAL UNIT SCHEDULE

ID	MANUFACTURER	MODEL NO.	NECK SIZE	TYPE	PRIMARY AIRFLOW MAX	MIN	EXTERIOR ZONE	HEATING COIL AIRSIDE DESIGN FLOW	EAT(db)	LAT(db)	DIMENSIONS HEIGHT	HEATING ELEMENT POWER	SCR	NC	UNIT WEIGHT	VOLT	PH	REMARKS
VAV-A101	METALAIRE	TH-508 EH	8"	SINGLE DUCT	425 CFM	225 CFM	Yes	425 CFM	55.0 °F	86.6 °F	10"	4.5 kW	Yes	19	39 lb	480 V	3	
VAV-A102	METALAIRE	TH-506 EH	6"	SINGLE DUCT	400 CFM	200 CFM	Yes	400 CFM	55.0 °F	86.6 °F	10"	4.0 kW	Yes	15	37 lb	480 V	3	
VAV-A103	METALAIRE	TH-508 EH	8"	SINGLE DUCT	750 CFM	375 CFM	Yes	750 CFM	55.0 °F	86.6 °F	10"	7.5 kW	Yes	19	39 lb	480 V	3	
VAV-A201	METALAIRE	TH-508 EH	8"	SINGLE DUCT	425 CFM	225 CFM	Yes	425 CFM	55.0 °F	86.6 °F	10"	4.5 kW	Yes	19	39 lb	480 V	3	
VAV-A202	METALAIRE	TH-508 EH	8"	SINGLE DUCT	425 CFM	225 CFM	Yes	425 CFM	55.0 °F	86.6 °F	10"	4.5 kW	Yes	19	39 lb	480 V	3	
VAV-A203	METALAIRE	TH-504 EH	4"	SINGLE DUCT	200 CFM	125 CFM	Yes	200 CFM	55.0 °F	86.6 °F	8"	2.5 kW	Yes	15	37 lb	480 V	3	
VAV-A204	METALAIRE	TH-508 EH	8"	SINGLE DUCT	600 CFM	325 CFM	Yes	600 CFM	55.0 °F	86.6 °F	10"	6.5 kW	Yes	19	39 lb	480 V	3	
VAV-A205	METALAIRE	TH-508 EH	8"	SINGLE DUCT	725 CFM	350 CFM	Yes	725 CFM	55.0 °F	86.6 °F	10"	7.5 kW	Yes	19	39 lb	480 V	3	
VAV-A206	METALAIRE	TH-508 EH	8"	SINGLE DUCT	600 CFM	300 CFM	Yes	600 CFM	55.0 °F	86.6 °F	10"	6.0 kW	Yes	19	39 lb	480 V	3	
VAV-A207	METALAIRE	TH-504 EH	4"	SINGLE DUCT	125 CFM	100 CFM	Yes	125 CFM	55.0 °F	86.6 °F	8"	2.0 kW	Yes	15	37 lb	480 V	3	
VAV-A208	METALAIRE	TH-504 EH	4"	SINGLE DUCT	300 CFM	150 CFM	Yes	300 CFM	55.0 °F	86.6 °F	8"	3.0 kW	Yes	15	37 lb	480 V	3	
VAV-B101	METALAIRE	TH-508 EH	8"	SINGLE DUCT	425 CFM	225 CFM	Yes	425 CFM	55.0 °F	86.6 °F	10"	4.5 kW	Yes	19	39 lb	480 V	3	
VAV-B102	METALAIRE	TH-508 EH	8"	SINGLE DUCT	775 CFM	400 CFM	Yes	775 CFM	55.0 °F	86.6 °F	10"	8.0 kW	Yes	19	39 lb	480 V	3	
VAV-B103	METALAIRE	TH-504 EH	4"	SINGLE DUCT	225 CFM	125 CFM	Yes	225 CFM	55.0 °F	86.6 °F	8"	2.5 kW	Yes	15	37 lb	480 V	3	
VAV-B104	METALAIRE	TH-508 EH	8"	SINGLE DUCT	450 CFM	225 CFM	No	450 CFM	55.0 °F	86.6 °F	10"	4.5 kW	Yes	19	39 lb	480 V	3	
VAV-B105	METALAIRE	TH-506 EH	6"	SINGLE DUCT	400 CFM	200 CFM	No	400 CFM	55.0 °F	86.6 °F	8"	4.0 kW	Yes	15	37 lb	480 V	3	
VAV-B106	METALAIRE	TH-505 EH	6"	SINGLE DUCT	350 CFM	175 CFM	No	350 CFM	55.0 °F	86.6 °F	8"	3.5 kW	Yes	15	37 lb	480 V	3	
VAV-B107	METALAIRE	TH-504 EH	4"	SINGLE DUCT	150 CFM	75 CFM	No	150 CFM	55.0 °F	97.1 °F	8"	2.0 kW	Yes	15	37 lb	480 V	3	
VAV-B108	METALAIRE	TH-505 EH	8"	SINGLE DUCT	400 CFM	200 CFM	No	400 CFM	55.0 °F	86.6 °F	8"	4.0 kW	Yes	15	39 lb	480 V	3	
VAV-B109	METALAIRE	TH-508 EH	8"	SINGLE DUCT	600 CFM	300 CFM	No	600 CFM	55.0 °F	86.6 °F	10"	6.0 kW	Yes	19	39 lb	480 V	3	
VAV-B110	METALAIRE	TH-508 EH	10"	SINGLE DUCT	600 CFM	300 CFM	No	600 CFM	55.0 °F	86.6 °F	10"	6.0 kW	Yes	19	46 lb	480 V	3	
VAV-B111	METALAIRE	TH-508 EH	8"	SINGLE DUCT	500 CFM	250 CFM	No	500 CFM	55.0 °F	86.6 °F	10"	5.0 kW	Yes	19	39 lb	480 V	3	

EXHAUST FAN SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	ARRANGEMENT	FAN AIRFLOW DESIGN	PRESS ESP	RPM	DRIVE TYPE	MOTOR POWER	ECM	SONES	ROOF CURB	UNIT WEIGHT	FLA	VOLT	PH	CONTROL SPEED CONTROLLER	DISCONNECT TYPE	ACCESSORIES	REMARKS
EF-A101	GREENHECK	G-130-VG	ROOF MOUNTED	DOWNFLOW	1400 CFM	0.50 in-wg	1244	DIRECT	0.50 hp	No	10	Yes	65 lb	6.6 A	120 V	1	NO			CONTROL BY BAS.
EF-B101	GREENHECK	G-060-VG	ROOF MOUNTED	DOWNFLOW	75 CFM	0.30 in-wg	1500	DIRECT	0.50 hp	No	3	Yes	35 lb	1.3 A	120 V	1	NO			CONTROL BY LIGHTS BY DIVISION 26.
EF-C101	GREENHECK	BSQ-240HP	INLINE	HORIZONTAL	5900 CFM	0.50 in-wg	729	BELT	1.50 hp	No	15	No	232 lb	3.0 A	460 V	3	NO			CONTROL BY SPACE STATIC PRESSURE SENSOR.
EF-C102	GREENHECK	BSQ-240HP	INLINE	HORIZONTAL	5900 CFM	0.50 in-wg	729	BELT	1.50 hp	No	15	No	232 lb	3.0 A	460 V	3	NO			CONTROL BY SPACE STATIC PRESSURE SENSOR.
EF-C201	FANTECH	RVF-8XL	WALL MOUNTED	DOWNFLOW	250 CFM	0.50 in-wg	2889	DIRECT	0.01 hp	Yes	8	No	12 lb	1.1 A	120 V	1	NO			FIELD PAINTED HOUSING TO MATCH EXTERIOR SIDING. CONTROL BY BAS.
EF-C202	FANTECH	RVF-8XL	WALL MOUNTED	DOWNFLOW	250 CFM	0.50 in-wg	2889	DIRECT	0.01 hp	Yes	8	No	12 lb	1.1 A	120 V	1	NO			FIELD PAINTED HOUSING TO MATCH EXTERIOR SIDING. CONTROL BY BAS.

VARIABLE REFRIGERANT FLOW FAN COIL UNIT SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	SUPPLY AIRFLOW	BRANCH SELECTOR ID	EVAPORATOR COOLING COIL CAP TOTAL	AIRSIDE EAT(db)	EAT(wb)	LAT(db)	LAT(wb)	CONDENSER HEATING COIL CAP	AIRSIDE EAT(db)	LAT(db)	SOUND PRESS LEVEL (dBA) LOW	HIGH	UNIT WEIGHT	MCA	MOCP	VOLT	PH	INTERLOCK ID	REMARKS
FC-A101	DAIKIN	FXZA09AAVJU	4-WAY CASSETTE	317 CFM	BC-1	9555 Btu/h	80.0 °F	67.0 °F	61.8 °F	42.8 °F	11601 Btu/h	62.1 °F	95.2 °F	26	33	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-A102	DAIKIN	FXZA09AAVJU	4-WAY CASSETTE	317 CFM	BC-1	9555 Btu/h	80.0 °F	67.0 °F	61.8 °F	42.8 °F	11601 Btu/h	62.1 °F	95.2 °F	26	33	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-A103	DAIKIN	FXZA09AAVJU	4-WAY CASSETTE	317 CFM	BC-1	9555 Btu/h	80.0 °F	67.0 °F	61.8 °F	42.8 °F	11601 Btu/h	62.1 °F	95.2 °F	26	33	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-A104	DAIKIN	FXZA09AAVJU	4-WAY CASSETTE	317 CFM	BC-1	9555 Btu/h	80.0 °F	67.0 °F	61.8 °F	42.8 °F	11601 Btu/h	62.1 °F	95.2 °F	26	33	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-A105	DAIKIN	FXZA05AAVJU	4-WAY CASSETTE	300 CFM	BC-1	5802 Btu/h	80.0 °F	67.0 °F	65.9 °F	42.8 °F	7165 Btu/h	62.1 °F	83.7 °F	26	32	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-A106	DAIKIN	FXZA05AAVJU	4-WAY CASSETTE	300 CFM	BC-1	5802 Btu/h	80.0 °F	67.0 °F	65.9 °F	42.8 °F	7165 Btu/h	62.1 °F	83.7 °F	26	32	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
BC-1: 6						49824 Btu/h																
FC-B101	DAIKIN	FXZA05AAVJU	4-WAY CASSETTE	300 CFM	BC-2	5802 Btu/h	80.0 °F	67.0 °F	65.9 °F	42.8 °F	7165 Btu/h	62.1 °F	83.7 °F	26	32	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-B102	DAIKIN	FXZA05AAVJU	4-WAY CASSETTE	300 CFM	BC-2	5802 Btu/h	80.0 °F	67.0 °F	65.9 °F	42.8 °F	7165 Btu/h	62.1 °F	83.7 °F	26	32	35 lb	0.3 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-B103	DAIKIN	FXZA15AAVJU	4-WAY CASSETTE	405 CFM	BC-2	15015 Btu/h	80.0 °F	67.0 °F	56.1 °F	42.8 °F	18426 Btu/h	62.1 °F	103.3 °F	28	37	36 lb	0.4 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
FC-B104	DAIKIN	FXZA15AAVJU	4-WAY CASSETTE	405 CFM	BC-2	15015 Btu/h	80.0 °F	67.0 °F	56.1 °F	42.8 °F	18426 Btu/h	62.1 °F	103.3 °F	28	37	36 lb	0.4 A	15 A	208 V	1	VRF-1	STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON COMPRESSOR AND ALL PARTS. PROVIDE UNIT WITH ADDITIONAL MOUNTIG HARDWARE AS NEEDED. INSTALL IN LOCATION TO MAINTAIN ACCESS FOR MAINTENANCE.
BC-2: 4						41634 Btu/h																

VARIABLE REFRIGERANT FLOW AIR-SOURCE HEAT PUMP UNIT SCHEDULE

1

ID	MANUFACTURER	MODEL NO.	TYPE	NOMINAL COOLING CAP	NOMINAL HEATING CAP	AUXILIARY FAN AIRFLOW	COMPRESSOR REFRIGERANT TYPE	CHARGE	LOW AMBIENT KIT	PIPE LENGTHS DESIGN	MAX TOTAL LENGTH	MAX VERTICAL	SUMMER AMBIENT DBT	WINTER AMBIENT DBT	EER	IEER	SCHE	SOUND PRESS LEVEL	UNIT WEIGHT	MCA	MOCP	VOLT	PH	REMARKS
VRF-1	DAIKIN	REYA96AAYDA	HEAT RECOVERY	8 ton	77000 Btu/h	8965 CFM	R32	41.5 lb	Yes	155'	3280'	361'	95.0 °F	0.0 °F	14.6	30	26.1	61	752 lb	17.5 A	20 A	460 V	3	FACTORY INSTALLED A2L REFRIGERANT LEAK DETECTION SYSTEM AT OUTDOOR UNIT. DIVISION 26 CONTRACTOR TO PROVIDE FIELD INSTALLED DISCONNECT. DIVISION 23 CONTRACTOR TO FIELD PROVIDE PHASE/VOLTAGE MONITOR OR FACTORY PROVIDED WITH OUTDOOR UNIT. PHASE/VOLTAGE MONITOR TO PREVENT COMPRESSOR RAMP UP DURING VOLTAGE DROP.

VARIABLE REFRIGERANT FLOW BRANCH SELECTOR SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	ARRANGEMENT	REFRIGERANT TYPE	BRANCH QTY	UNIT WEIGHT	MCA	MOCP	VOLT	PH	REMARKS
BC-1	DAIKIN APPLIED	BSF4A54AAVJ	MULTI-PORT	HORIZONTAL	R32	4	68 lb	1.2 A	15 A	230 V	1	FACTORY INSTALLED A2L REFRIGERANT LEAK DETECTION SYSTEM AT BRANCH SELECTOR. PROVIDE ALL THREAD, UNISTRUT, AND ADDITIONAL MOUNTING HARDWARE FOR INSTALLATION FROM STRUCTURE ABOVE.
BC-2	DAIKIN APPLIED	BSF4A54AAVJ	MULTI-PORT	HORIZONTAL	R32	4	68 lb	1.2 A	15 A	230 V	1	FACTORY INSTALLED A2L REFRIGERANT LEAK DETECTION SYSTEM AT BRANCH SELECTOR. PROVIDE ALL THREAD, UNISTRUT, AND ADDITIONAL MOUNTING HARDWARE FOR INSTALLATION FROM STRUCTURE ABOVE.

WALL MOUNTED HEAT PUMP SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	FAN DESIGN AIRFLOW	COOLING COIL NOMINAL CAP	CAP TOTAL	AIRSIDE EAT(db)	EAT(wb)	HEATING COIL CAP	AIRSIDE EAT(db)	LAT(db)	UNIT WEIGHT	INTERLOCK ID	REMARKS
SSCU-201a	DAIKIN	FTXV12AVJU9	DUCTLESS WALL MOUNTED HEAT PUMP	392 CFM	1.00 ton	10600 Btu/h	80.0 °F	67.0 °F	13500 Btu/h	70.0 °F	60.0 °F	19 lb	SSCU-C201a	INDOOR UNIT POWERED BY EXTERIOR UNIT. PROVIDE WIRED THERMOSTAT.
SSCU-202a	DAIKIN	FTXV12AVJU9	DUCTLESS WALL MOUNTED HEAT PUMP	392 CFM	1.00 ton	10600 Btu/h	80.0 °F	67.0 °F	13500 Btu/h	70.0 °F	60.0 °F	19 lb	SSCU-C202a	INDOOR UNIT POWERED BY EXTERIOR UNIT. PROVIDE WIRED THERMOSTAT.

SPLIT SYSTEM HEAT PUMP SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	COMPRESSOR CAP	TYPE	REFRIGERANT TYPE	CHARGE	LOW AMBIENT KIT	DESIGN PIPE LENGTH	SUMMER AMBIENT DBT	WINTER AMBIENT DBT	SEER	EER	SOUND PRESS LEVEL	UNIT WEIGHT	MCA	MOCP	VOLT	PH	INTERLOCK ID	REMARKS
SSCU-C201b	DAIKIN	RXT12AVJU9	HEAT PUMP	1 ton	INVERTER	R32	1.74 lb	Yes	40'	95.0 °F	47.0 °F	20	12	50	72 lb	14.6 A	15 A	230 V	1	SSCU-1a	MOUNT ON NEOPRENE ISOLATORS. PROVIDE SNOW HOOD AND WIND BAFFLE ACCESSORIES
SSCU-C202b	DAIKIN	RXT12AVJU9	HEAT PUMP	1 ton	INVERTER	R32	1.74 lb	Yes	40'	95.0 °F	47.0 °F	20	12	50	72 lb	14.6 A	15 A	230 V	1	SSCU-2a	MOUNT ON NEOPRENE ISOLATORS. PROVIDE SNOW HOOD AND WIND BAFFLE ACCESSORIES

WALL MOUNTED AIR CONDITIONER SCHEDULE

ID	MANUFACTURER	MODEL NO.	TYPE	FAN DESIGN AIRFLOW	COOLING COIL NOMINAL CAP	INTERLOCK ID	REMARKS
SSCU-B101a	DAIKIN	FTK18BXVJU	DUCTLESS WALL MOUNTED AC UNIT	500 CFM	1.5 ton	SSCU-B101b	INDOOR UNIT POWERED BY EXTERIOR UNIT. PROVIDE WIRED THERMOSTAT AND CONDENSATE PUMP. A2L REFRIGERANT LEAK DETECTION SYSTEM TO BE PROVIDED BY MANUFACTURER.

ASHRAE 62.1 VENTILATION RATE PROCEDURE SUMMARY

ROOM IDENTITY NO.	LOCATION NAME	Occupancy Category	Area, Az	Selected Supply Airflow	Number of People, Pz	Outdoor Airflow Rate Per Person, Rp	Outdoor Airflow Rate Per Unit Area, Ra	Zone Air Distribution Effectiveness, Ez	Breathing Zone Outdoor Airflow, Voz	Required Outdoor Air Intake Flow, Vot	OA Delivered	Specified Exhaust Airflow
A112	VESTIBULE	(none)	44 SF									0 CFM
A115	ELEVATOR-1	(none)	50 SF									0 CFM
A115	ELEVATOR-2	(none)	47 SF									0 CFM
A205a	STORAGE	(none)	42 SF									0 CFM
A208	STORAGE	(none)	22 SF									0 CFM
AST1	STAIR-1	(none)	79 SF									0 CFM
AST1	STAIR-2	(none)	117 SF									0 CFM
AST2	STAIR-1	(none)	92 SF									0 CFM
AST2	STAIR-2	(none)	90 SF									0 CFM
CST1	STAIR	(none)	76 SF									0 CFM
CST2	STAIR	(none)	87 SF									0 CFM
Default: 11			746 SF	0 CFM	0				0 CFM	0 CFM	0 CFM	0 CFM
C108	GYM-1	Gym, sports arena (play area)	5806 SF	7750 CFM	10	20.0 CFM	0.18 CFM/SF	1	1245 CFM	1245 CFM		0 CFM
C108	GYM-2	Spectator areas	1251 SF	1750 CFM	85	7.5 CFM	0.06 CFM/SF	1	713 CFM	713 CFM		0 CFM
C109	STAGE	Stages, studios	1032 SF	1390 CFM	10	10.0 CFM	0.06 CFM/SF	1	162 CFM	162 CFM		0 CFM
C207	MEZZANINE	Storage rooms	83 SF	100 CFM	0	0.0 CFM	0.12 CFM/SF	1	10 CFM	10 CFM		0 CFM
C208	MEZZANINE	Storage rooms	436 SF	200 CFM	0	0.0 CFM	0.12 CFM/SF	1	52 CFM	52 CFM		0 CFM
GYM-RTU: 5			8608 SF	11190 CFM	105				2182 CFM	2182 CFM	0 CFM	0 CFM
B117	CORRIDOR	(none)	95 SF									0 CFM
C101	CORRIDOR	(none)	121 SF									0 CFM
C102	MECH/ELEC ROOM	(none)	227 SF									0 CFM
C103	WOMENS RESTROOM	(none)	104 SF									0 CFM
C104	MENS RESTROOM	(none)	97 SF									0 CFM
C105	SHOWER	(none)	55 SF									0 CFM
C106	SHOWER	(none)	59 SF									0 CFM
HEATING ONLY: 7			758 SF	0 CFM	0				0 CFM	0 CFM	0 CFM	0 CFM
A117	CLASSROOM	Classrooms (age 9 plus)	805 SF	750 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	167 CFM	208 CFM		0 CFM
A118	UNISEX RESTROOM	Toilets (public)	48 SF	0 CFM	0			0.8				0 CFM
A119	UNISEX RESTROOM	Toilets (public)	48 SF	0 CFM	0							0 CFM
A120	CUSTODIAL CLOSET	Non-Occupiable	31 SF	0 CFM	0							0 CFM
A121	HS SOCIAL STUDIES	Classrooms (age 9 plus)	498 SF	400 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	130 CFM	162 CFM		0 CFM
A122	4TH/5TH GRADE CLASSROOM	Classrooms (age 9 plus)	517 SF	425 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	132 CFM	165 CFM		0 CFM
A201	3RD GRADE CLASSROOM	Classrooms (age 9 plus)	617 SF	600 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	144 CFM	180 CFM		0 CFM
A202	CORRIDOR	Corridors	424 SF	125 CFM		0.0 CFM	0.06 CFM/SF					0 CFM
A203	KINDERGARTEN CLASSROOM	Classrooms (ages 5–8)	623 SF	600 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	145 CFM	181 CFM		0 CFM
A204	1ST GRADE CLASSROOM	Classrooms (ages 5–8)	525 SF	425 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	133 CFM	166 CFM		0 CFM
A205	PRE-SCHOOL CLASSROOM	Classrooms (ages 5–8)	521 SF	425 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	133 CFM	166 CFM		0 CFM
A206	RESTROOM	Toilets (public)	34 SF	0 CFM								0 CFM
A207	RESTROOM	Toilets (public)	100 SF	125 CFM								0 CFM
A209	CORRIDOR	Corridors	134 SF	100 CFM	0	0.0 CFM	0.06 CFM/SF	0.8	8 CFM	10 CFM		0 CFM
A210	2ND GRADE CLASSROOM	Classrooms (ages 5–8)	622 SF	600 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	145 CFM	181 CFM		0 CFM
A211	SPECIAL ED	Classrooms (ages 5–8)	323 SF	300 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	109 CFM	136 CFM		0 CFM
A212	RESTROOM	Toilets (public)	124 SF	125 CFM								0 CFM
B113	CLASSROOM	Classrooms (age 9 plus)	451 SF	425 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	124 CFM	155 CFM		0 CFM
B114	MULTI-PURPOSE SPACE	Multi-use assembly	811 SF	775 CFM	10	7.5 CFM	0.06 CFM/SF	0.8	124 CFM	155 CFM		0 CFM
B115	KITCHENETTE	Break rooms	224 SF	225 CFM	2	5.0 CFM	0.06 CFM/SF	0.8	23 CFM	29 CFM		0 CFM
B116	UNISEX RESTROOM	Toilets (public)	51 SF	0 CFM	0							0 CFM
RTU-1: 21			7531 SF	6425 CFM	82				1515 CFM	1894 CFM	0 CFM	0 CFM
A111	CORRIDOR	Corridors	530 SF	0 CFM	0	0.0 CFM	0.06 CFM/SF	0.8	32 CFM	40 CFM		0 CFM
A113	MENS RESTROOM	Toilets (public)	89 SF	0 CFM	0							0 CFM
A114	WOMENS RESTROOM	Toilets (public)	79 SF	0 CFM	0							0 CFM
A116	MACHINE ROOM	Elevator machine rooms	45 SF	100 CFM	0	0.0 CFM	0.12 CFM/SF	0.8	5 CFM	7 CFM		0 CFM
B101	ENTRY	Corridors	329 SF	200 CFM	0	0.0 CFM	0.06 CFM/SF	0.8	20 CFM	25 CFM		0 CFM
B105	CORRIDOR	Corridors	571 SF	200 CFM	0	0.0 CFM	0.06 CFM/SF	0.8	34 CFM	43 CFM		0 CFM
B106	CLASSROOM	Computer lab	666 SF	600 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	150 CFM	187 CFM		0 CFM
B107	CLASSROOM	Classrooms (age 9 plus)	433 SF	350 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	122 CFM	152 CFM		0 CFM
B108	CORRIDOR	Corridors	415 SF	150 CFM	0	0.0 CFM	0.06 CFM/SF	0.8	25 CFM	31 CFM		0 CFM
B109	CLASSROOM	Classrooms (age 9 plus)	437 SF	350 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	122 CFM	153 CFM		0 CFM
B110	WORK ROOM	Break rooms	484 SF	300 CFM	1	5.0 CFM	0.06 CFM/SF	0.8	34 CFM	43 CFM		0 CFM
B111	TECHNOLOGY ROOM	Telephone closets	175 SF	250 CFM	0	0.0 CFM	0.00 CFM/SF	0.8	0 CFM	0 CFM		0 CFM
B112	CLASSROOM	Classrooms (age 9 plus)	463 SF	450 CFM	7	10.0 CFM	0.12 CFM/SF	0.8	126 CFM	157 CFM		0 CFM
C107	MUSIC ROOM	Music/theater/dance	539 SF	500 CFM	7	10.0 CFM	0.06 CFM/SF	0.8	102 CFM	128 CFM		0 CFM
RTU-2: 14			5255 SF	3450 CFM	36				772 CFM	965 CFM	0 CFM	0 CFM
C201	LOCKER ROOM	Locker Rooms	444 SF	425 CFM	10			0.8				215 CFM
C202	STORAGE	Non-Occupiable	56 SF	50 CFM	0			0.8				0 CFM
C203	STORAGE	Non-Occupiable	44 SF									0 CFM
C204	LOCKER ROOM	Locker Rooms	425 SF	425 CFM	10			0.8				215 CFM
C205	STORAGE	Non-Occupiable	56 SF	50 CFM	0			0.8				0 CFM
C206	STORAGE	Non-Occupiable	56 SF	50 CFM	0			0.8				0 CFM
SSCU: 6			1081 SF	1000 CFM	20				0 CFM	0 CFM	0 CFM	430 CFM
C110	STORAGE	(none)	93 SF									0 CFM
Unconditioned: 1			93 SF	0 CFM	0				0 CFM	0 CFM	0 CFM	0 CFM
C111	PE OFFICE	Storage rooms	326 SF	300 CFM	0	0.0 CFM	0.12 CFM/SF	0.8	39 CFM	49 CFM		0 CFM
C112	STORAGE	(none)	67 SF									0 CFM
UV-1: 2			393 SF	300 CFM	0				39 CFM	49 CFM	0 CFM	0 CFM
A101	VESTIBULE	Corridors	45 SF		0	0.0 CFM	0.06 CFM/SF	0.8	3 CFM	3 CFM		0 CFM
A102	GUIDANCE	Classrooms (age 9 plus)	617 SF		7	10.0 CFM	0.12 CFM/SF	0.8	144 CFM	180 CFM		0 CFM
A103	5TH/6TH GRADE CLASSROOM	Classrooms (age 9 plus)	623 SF		7	10.0 CFM	0.12 CFM/SF	0.8	145 CFM	181 CFM		0 CFM
A104	CORRIDOR	Corridors	1003 SF	275 CFM	0	0.0 CFM	0.06 CFM/SF	0.8	60 CFM	75 CFM		0 CFM
A105	MECH	Electrical equipment rooms	225 SF		0	0.0 CFM	0.06 CFM/SF	0.8	14 CFM	17 CFM		0 CFM
A106	TELE-COM	Non-Occupiable	81 SF		0							0 CFM
A107	MECH.	Non-Occupiable	90 SF		0							0 CFM
A108	HALL	Corridors	63 SF		0	0.0 CFM	0.06 CFM/SF	0.8	4 CFM	5 CFM		0 CFM
A109	OFFICE	Office space	181 SF		1	5.0 CFM	0.06 CFM/SF	0.8	16 CFM	20 CFM		0 CFM
A110	STOR.	Storage rooms	63 SF		0	0.0 CFM	0.12 CFM/SF	0.8	8 CFM	9 CFM		0 CFM
B102	LIBRARY	Libraries	1099 SF		7	5.0 CFM	0.12 CFM/SF	0.8	167 CFM	209 CFM		0 CFM
B103	OFFICE	Office space	202 SF		2	5.0 CFM	0.06 CFM/SF	0.8	22 CFM	28 CFM		0 CFM
B104	OFFICE	Office space	170 SF		2	5.0 CFM	0.06 CFM/SF	0.8	20 CFM	25 CFM		0 CFM
VRF: 13			4463 SF	275 CFM	26				602 CFM	752 CFM	0 CFM	0 CFM

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	QTY	FACE SIZE	NECK SIZE	WIDTH	HEIGHT	BLADE DESIGN THICKNESS	SPACING	DEFLECTION ANGLE SINGLE	DOUBLE	ORIENTATION	INSTALLATION BORDER TYPE	NOTES
SD	LOUVERED DOUBLE DEFLECTION GRILLE	TITUS	300FL	1	---		10"	6"	1/8"	3/4"	0.0°	0.0°	DOUBLE-LONG	TYPE 1 (SURFACE)	
RG1	EGGCRATE RETURN GRILLE	TITUS	50F	2	24x12		8"	8"	---	1/2"	0.0°		GRID	TYPE 3 (LAY-IN)	
AT/RG	EGGCRATE RETURN GRILLE	TITUS	50F	2	---		8"	8"	---	1"	0.0°		GRID	TYPE 1 (SURFACE)	
SD	LOUVERED DOUBLE DEFLECTION GRILLE	TITUS	300FL	2	---		10"	8"	1/8"	3/4"	0.0°	0.0°	DOUBLE-LONG	TYPE 1 (SURFACE)	
RG1	EGGCRATE RETURN GRILLE	TITUS	50F	3	24x12		12"	8"	---	1/2"	0.0°		GRID	TYPE 3 (LAY-IN)	
RG1	EGGCRATE RETURN GRILLE	TITUS	50F	2	24x12		18"	8"	---	1/2"	0.0°		GRID	TYPE 3 (LAY-IN)	
AT/RG	EGGCRATE RETURN GRILLE	TITUS	50F	2	24x12		22"	8"	---	1"	0.0°		GRID	TYPE 3 (LAY-IN)	
AT/RG	EGGCRATE RETURN GRILLE	TITUS	50F	2	---		22"	8"	---	1"	0.0°		GRID	TYPE 1 (SURFACE)	
RG1	EGGCRATE RETURN GRILLE	TITUS	50F	2	24x12		22"	10"	---	1/2"	0.0°		GRID	TYPE 3 (LAY-IN)	
RG1	EGGCRATE RETURN GRILLE	TITUS	50F	3	---		12"	12"	---	1/2"	0.0°		GRID	TYPE 1 (SURFACE)	
RG1	EGGCRATE RETURN GRILLE	TITUS	50F	1	---		18"	12"	---	1/2"	0.0°		GRID	TYPE 1 (SURFACE)	
AT/RG	EGGCRATE RETURN GRILLE	TITUS	50F	2	---		16"	16"	---	1"	0.0°		GRID	TYPE 1 (SURFACE)	
AT/RG	EGGCRATE RETURN GRILLE	TITUS	50F	4	---		22"	22"	---	1"	0.0°		GRID	TYPE 1 (SURFACE)	
CD	SQUARE PLAQUE DIFFUSER	TITUS	OMNI-AA	9	24x24	6"								TYPE 3 (LAY-IN)	
CD	SQUARE PLAQUE DIFFUSER	TITUS	OMNI-AA	2	24x24	8"								TYPE 3 (LAY-IN)	
RD	ROUND INDUSTRIAL DIFFUSER	TITUS	TMR	14	---	16"								SURFACE	

LINEAR SLOT DIFFUSER SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	QTY	MATERIAL	FINISH	SYSTEM	LINEAR DIFFUSER SLOT WIDTH	SLOT QTY	PLENUM NOM. LENGTH	INSULATED	NECK SIZE	TYPE Oval	Round	INSTALLATION BORDER TYPE	SPECIFICATION
SL	LINEAR SLOT DIFFUSER	TITUS	FT-10	19	ALUMINUM	WHITE ENAMEL	S/A	1"	1	2' - 0"	No	6"	No	Yes	TYPE 3 (LAY-IN)	ARCHITECTURAL LINEAR SLOT DIFFUSER
SL	LINEAR SLOT DIFFUSER	TITUS	FT-10	15	ALUMINUM	WHITE ENAMEL	S/A	1"	2	2' - 0"	No	8"	No	Yes	TYPE 3 (LAY-IN)	ARCHITECTURAL LINEAR SLOT DIFFUSER

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL NO.	TYPE	COMPRESSOR CAP	REFRIGERANT TYPE	LOW AMBIENT KIT	DESIGN PIPE LENGTH	SEER	EER	MCA	MOCP	VOLT	PH	INTERLOCK ID	REMARKS
SSCU-B101b	SPLIT-SYSTEM CONDENSING UNIT	DAIKIN	RKF18AXVJU	COOLING ONLY	1.5 ton	R32	Yes	40'	21	12.5	16.3 A	20 A	208 V	1	SSCU-B101a	MOUNT ON NEOPRENE ISOLATORS. PROVIDE SNOW HOOD AND WIND BAFFLE ACCESSORIES. A2L REFRIGERANT LEAK DETECTION SYSTEM TO BE PROVIDED BY MANUFACTURER.

STATE OF OHIO
ANDREW P. HUELSMAN E-78372
REGISTERED
PROFESSIONAL ENGINEER
ANDREW P. HUELSMAN
LICENSE #E-78372
EXPIRATION DATE: 12/31/2027

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RENOVATIONS TO

PUT-IN-BAY LOCAL SCHOOLS 1919 BUILDING RENOVATIONS

584 CATAWBA AVE, PUT-IN-BAY, OH 43456

ISSUANCES/REVISIONS

	CONSTRUCTION DOCUMENTS	02/12/2026
1	CONSTRUCTION DOCUMENTS - ADDENDUM 04	03/03/2026

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25019.01	ICW	AJB

SHEET TITLE:

MECHANICAL SCHEDULES

SHEET NUMBER:

M5.1

PRINTED ON: 3/3/2026 11:47:08 AM