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Triumph Lutheran Brethren Church
East Campus Renovation
Moorhead, MN

Project No. 26-011

Bid Date & Time: Thursday May 28, 2026, at 2:00PM Local Time
Date: May 26, 2026

ADDENDUM A

The following additions, clarifications, deletions and/or changes shall be made to the SPECIFICATIONS and/or DRAWINGS:

SPECIFICATIONS

A. Section 08 7100 – Door Hardware
    a. Add Section 08 7100 to Specifications. See attached.
B. Section 09 5100 – Acoustical Ceilings
    a. Paragraph 2.02, B, 6; Revise CAC requirement from 40 minimum to 35 minimum.

DRAWINGS

A. A5.00 – Casework Details, Enlarged Plans, Frame & Panel Types, Door Schedule, & Interior Elevations.
    a. Door Schedule: Hardware Groups added, see attached drawing.

The following materials and/or equipment have been accepted as APPROVED EQUALS:

Section	Specified Product and/or Approved Manufacturer	Approved Equal
09 5100 Acoustical Ceilings	ACT-1	USG, USG Mars Acoustical Panels #86785

END OF ADDENDUM A

SECTION 08 7100
DOOR HARDWARE

PART 1 - GENERAL

1.1 CONDITIONS

A. Conditions of the contract (General and Supplementary Conditions) and Division 01 - General Requirements, govern the work of this section.

B. This section includes all material, and related service necessary to furnish all finish hardware indicated on the drawings or specified herein.

C. Furnish UL listed hardware for all labeled and 20 min. openings in conformance with the requirements for the class of opening scheduled. Underwriters' requirements shall have precedence over specification where conflicts exist.

D. All work shall be in accordance with all applicable state and local building codes. Code requirements shall have precedence over this specification where conflicts exist.

1.2 WORK INCLUDED

A. This section includes the following:

1. Furnish door hardware (for hollow metal and wood doors) specified herein, listed in the hardware schedule, and/or required by the drawings.
2. Cylinders for Aluminum Doors
3. Thresholds and Weather-stripping (Aluminum frame seals to be provided by aluminum door supplier)
4. Electro-Mechanical Devices
5. Access Control components and or systems specified within this section.

B. Where items of hardware are not definitely or correctly specified and is required for the intended service, such omission, error or other discrepancy should be directed to the Architect prior to the bid date for clarification by addendum. Otherwise furnish such items in the type and quantity established by this specification for the appropriate service intended.

1.3 RELATED WORK IN OTHER SECTIONS

A. This section includes coordination with related work in the following sections:

1. Division 06 Section "Finish Carpentry".
2. Division 06 Section "Cabinet Hardware"
3. Division 08 Section "Hollow Metal Doors and Frames".
4. Division 08 Section "Wood Doors"
5. Division 26 Sections “Electrical”
6. Division 28 Sections "Electronic Safety and Security".

1.4 REFERENCES

A. Publications of agencies and organizations listed below form a part of this specification section to the extent referenced.

1. DHI – Installation Guide for Doors and Hardware (2020).
2. NFPA 80 - Standards for Fire Doors and Windows.
3. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures.
4. UL - Building Material Directory.
5. DHI - Door and Hardware Institute
6. WHI - Warnock Hersey
7. BHMA - Builders Hardware Manufacturers Association
8. ANSI – American National Standards Institute
9. IBC - International Building Code (as adopted and amended by local building code)

1.5 SUBMITTALS

A. Within ten days after award of contract, submit detailed hardware schedule in quantities as required by Division 01 - General Requirements.

B. Schedule format shall be consistent with recommendations for a vertical format as set forth in the Door & Hardware Institute's (DHI) publication "Sequence and Format for the Hardware Schedule". Hardware sets shall be consolidated to group multiple door openings which share similar hardware requirements. Schedule shall include the following information:

1. Door number, location, size, handing, and rating.
2. Door and frame material, handing.
3. Degree of swing.
4. Manufacturer
5. Product name and catalog number
6. Function, type and style
7. Size and finish of each item
8. Mounting heights
9. Explanation of abbreviations, symbols, etc.
10. Numerical door index, indicating the hardware set/ group number for each door.

C. The schedule will be prepared under the direct supervision of a certified Architectural Hardware Consultant (AHC), or certified Door Hardware Consultant (DHC) employed by the hardware distributor. The hardware schedule shall be signed and embossed or stamped with the DHI certification seal of the supervising AHC or DHC. The supervising AHC or DHC shall attend any meetings related to the project when requested by the architect.

D. Check the specified hardware for suitability and adaptability to the details and surrounding conditions.

E. Review drawings from related trades as required to verify compatibility with specified hardware. Indicate unsuitable or in compatible items, and proposed substitutions in the hardware schedule.

F. Provide documentation for all hardware to be furnished on labeled fire doors indicating compliance with positive pressure fire testing UL 10C.

G. Furnish manufacturers' catalog data for each item of hardware in quantities as required by Division 01 - General Requirements.

H. Submit a sample of each type of hardware requested by the architect. Samples shall be of the same finish, style, and function as specified herein. Tag each sample with its permanent location so that it may be used in the final work.

I. Furnish with first submittal, a list of required lead times for all hardware items.

J. After final approved schedule is returned, transmit corrected copies for distribution and field use in quantities as required by Division 01 - General Requirements.

K. Furnish approved hardware schedules, template lists, and pertinent templates as requested by related trades.

L. Furnish necessary diagrams, schematics, voltage and amperage requirements for all electro-mechanical devices or systems as required by related trades. Wiring diagrams shall be opening specific and include both a riser diagram and point to point diagram showing all wiring terminations.

M. After receipt of approved hardware schedule, Hardware supplier shall initiate a meeting including the owner’s representative to determine keying requirements. Upon completion of initial key meeting, hardware supplier shall prepare a proposed key schedule with symbols and abbreviations as set forth in the door and hardware institute’s publication “Keying Procedures, Systems, and Nomenclature”. Submit copies of owner approved key schedule for review and field use in quantities as required by Division 01 - General Requirements. Wiring diagrams shall be included in final submittals transmitted for distribution of field use.

1.6 QUALITY ASSURANCE

A. Manufacturers and model numbers listed are to establish a standard of function and quality. Similar items by approved manufacturers that are equal in design, function, and quality, may be considered for prior approval of the architect, provided the required data and physical samples are submitted for approval as set forth in Division 01 - General Requirements.

B. Where indicated in this specification, products shall be independently certified by ANSI for compliance with relevant ANSI/BHMA standards A156.1 - A156.36 – Standards for Hardware and Specialties. All products shall meet or exceed certification requirements for the respective grade indicated within this specification. Supplier shall provide evidence of certification when requested by the architect.

C. Obtain each type of hardware (hinges, latch & locksets, exit devices, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.

D. Electrical drawings and electrical specifications are based on the specific electrified hardware components specified in hardware sets. When electronic hardware components other than those indicated in hardware sets are provided, the supplier shall be responsible for all costs incurred by the design team and their consultants to review and revise electrical drawings and electrical specifications. Supplier shall also be responsible for any additional costs associated with required changes in related equipment, materials, installation, or final hook up to ensure the system will operate and function as indicated in the construction documents, including hardware set operational / functional descriptions.

E. All hardware items shall be manufactured no earlier than 6 months prior to delivery to site.

F. Installation of hardware shall be installed or directly supervised and inspected by a skilled installer certified by the manufacturer of locksets, door closers, and exit devices used on the project, or with not less than 3 years' experience in successful completion of projects similar in size and scope.

G. Provide hardware for all labeled fire doors, which complies with positive pressure fire testing UL 10C.

H. Comply with all applicable provisions of the standards referenced within section 1.4 of this specification.

I. Hardware supplier shall participate when reasonably requested to meet with the contractor and or architect to inspect any claim for incorrect or non-functioning materials; following such inspection, the hardware supplier shall provide a written statement documenting the cause and proposed remedy of any unresolved items.

1.7 DELIVERY, STORAGE AND HANDLING

A. Hardware supplier shall deliver hardware to the job site unless otherwise specified.

B. All hardware shall be delivered in manufacturers' original cartons and shall be clearly marked with set and door number.

C. Coordinate with contractor prior to hardware delivery and recommend secure storage and protection against loss and damage at job site.

D. Contractor shall receive all hardware and provide secure and proper protection of all hardware items to avoid delays caused by lost or damaged hardware. Contractor shall report shortages to the Architect and hardware supplier immediately after receipt of material at the job site.

E. Coordinate with related trades under the direction of the contractor for delivery of hardware items necessary for factory installation.

1.8 PRE-INSTALLATION MEETING

A. Schedule a hardware pre-installation meeting on site to review and discuss required door operating clearances and the installation of continuous hinges, locksets, door closers, exit devices, overhead stops, and electromechanical door hardware.

B. Meeting attendees shall be notified 7 days in advance and shall include: Architect, Contractor, Door Hardware Installers (including low voltage hardware), Manufacturers representatives for above hardware items, and any other effected subcontractors or suppliers.

C. All attendees shall be prepared to distribute installation manuals, hardware schedules, templates, and physical hardware samples.

1.9 WARRANTY

A. All hardware items shall be warranted against defects in material and workmanship as set forth in Division 01 - General Requirements.

B. Repair, replace, or otherwise correct deficient materials and workmanship without additional cost to owner.

PART 2 - PRODUCTS

2.1 FASTENERS

A. All exposed fasteners shall be Phillips head or as otherwise specified and shall match the finish of the adjacent hardware. All fasteners exposed to the weather shall be non-ferrous or stainless steel. Furnish correct fasteners to accommodate surrounding conditions.

B. Coordinate required reinforcements for doors and frames. Seek approval of the architect prior to furnishing through-bolts. Furnish through-bolts as required for materials not readily reinforced.

2.2 BUTT HINGES

A. Acceptable manufacturers and respective catalog numbers:

	Ives	Stanley	Hager	McKinney
1. Standard Weight, Plain Bearing	5PB1	F179	****	T2714
2. Standard Weight, Ball Bearing	5BB1	BB179	BB1279	TB2714
3. Standard Weight, Ball Bearing, Non-Ferrous	5BB1	FBB191	BB1191	TB2314
4. Heavy Weight, Ball Bearing	5BB1HW	FBB168	BB1168	T4B3786
5. Heavy Weight, Ball Bearing, Non-Ferrous	5BB1HW	FBB199	BB1199	T4B3386

B. Hinges shall be independently certified by ANSI for compliance with ANSI A156.1 (2006). Hinges shall meet or exceed the following ANSI grade requirements as indicated below:

1. Standard Weight, Plain Bearing Hinges: Grade 3
2. Standard Weight, 2 Ball Bearing Hinges: Grade 2
3. Heavy Weight, 4 Ball Bearing Hinges: Grade 1

C. Unless otherwise specified, furnish the following hinge quantities for each door leaf.

1. 3 hinges for doors up to 90 inches.
2. 1 additional hinge for every 30 inches on doors over 90 inches.
3. 4 hinges for Dutch door applications.

D. Unless otherwise specified, top and bottom hinges shall be located as specified in Division 08 Section "Hollow Metal Doors and Frames". Intermediate hinges shall be located equidistant from others.

E. Unless otherwise specified, furnish hinge weight and type as follows:

1. Standard weight: plain bearing hinge 5PB1 or ball bearing hinge 5BB1 for interior openings through 36 inches wide without a door closer.
2. Standard weight: ball bearing hinge 5BB1 for interior opening over 36 through 40 inches wide without a door closer, and for interior openings through 40 inches wide with a door closer.

3. Heavyweight: 4 ball bearing hinge 5BB1HW for interior openings over 40 inches wide, and for all vestibule doors.
4. Heavyweight: 4 ball bearing hinge 5BB1HWss for exterior openings unless otherwise listed in groups.
5. Heavyweight: 4 ball bearing hinge 5BB1HWss 5” for all exterior doors or 4 ball bearing hinge 5BB1HW 5” for interior doors, that have an automatic operator.

F. At existing frames receiving new hinges, match existing hinge size and weight.

G. Unless otherwise specified, furnish brass, bronze, or stainless-steel base metal for hinges at exterior doors. Unless otherwise specified, furnish steel base metal for hinges at interior and labeled doors.

H. Furnish stainless steel base metal for hinges at showers, pools, and wash bay doors.

I. Unless otherwise specified, furnish hinges in the following sizes:

1. 5" x 5" 2-1/4" thick doors
2. 4-1/2" x 4-1/2" 1-3/4" thick doors
3. 3-1/2" x 3-1/2" 1-3/8" thick doors

J. Furnish hinges with width to accommodate trim and allow for 180-degree swing.

K. Unless otherwise specified, furnish hinges with flat button tips with non-rising pins at interior doors, non-removable loose pins (NRP) at exterior, and out-swinging lockable interior doors.

L. Unless otherwise specified, furnish all hinges to template standards.

2.3 POWER TRANSFERS

A. Acceptable manufacturers and respective catalog numbers:

	Von Duprin	ASSA
1. Concealed Two Wire	EPT-2	CEPT-10
2. Concealed Ten Wire	EPT-10	CEPT-10

B. Concealed power transfers shall be concealed in the door and frame when the door is closed.

C. Concealed power transfers shall have a steel tube to protect wires from being cut.

D. Concealed power transfers with spring tubes shall be rejected.

E. Concealed power transfers shall be supplied with a mud box to house all terminations.

2.4 EXIT DEVICES

A. Acceptable manufacturers and respective catalog numbers:

	Von Duprin	Precision
1. Wide Stile, Push Pad	78 Series	2000 Series
2. Wide Stile, Electric Latch Retraction	QEL 78 Series	MLR-2000 Series
3. Lever Trim	780L Series	3900 Series
4. Pull Trim	785 Series	1700A Series

A. Exit devices shall be independently certified by ANSI for compliance with ANSI A156.3, Grade 1 (2008).

B. Obtain exit devices from a single manufacturer, although several may be indicated as offering products complying with requirements.

C. All exit devices shall be equipped with a sound-dampening feature to reduce touch pad return noise.

D. Quiet Electric Latch Retraction shall be accomplished using a motor driven assembly, and shall incorporate the following features:

1. Motor shall retract both the push pad assembly and latchbolt.
2. Automatic calibration of latch throw and pull.
3. Built-in time delay.

4. On-board installation and troubleshooting diagnostics built into power supply and device.
5. Retry mode if device does not pull on the first try.

E. All exit devices shall be provided with flush end caps to reduce potential damage from impact.

F. All exit devices shall be provided with dead-locking latch bolts to ensure security.

G. All exit devices shall be U.L. listed for accident hazard. Exit device for use on fire doors shall also be U.L. listed for fire exit hardware.

H. Provide optional strikes, special length rods, and adapter plates to accommodate door and frame conditions. Provide narrow style series devices in lieu of wide stile series devices where optional strikes will not accommodate door and frame conditions.

I. Coordinate with related trades to ensure adequate clearance and reinforcement is provided in doors and frames. Provide thru bolts as required.

J. Refer to hardware groups for exit device applications utilizing the option of: "less bottom rod and floor strike" (LBR)

K. All exit devices shall be provided with optional trim designs to match other lever and pull designs used on the project.

L. Unless specific exit device dogging options are noted within hardware sets, provide dogging options as follows:
1. Fire Rated devices: Dogging not permitted.
2. Non-Rated Exit Only functions not equipped with outside trim or pull: Less Dogging.
3. Non-Rated Classroom functions: Less Dogging.
4. Non-Rated devices utilizing electric latch retraction or electrified outside trim: Less Dogging.
5. All Other Non-Rated devices: Cylinder Dogging utilizing interchangeable core cylinders. Cylinder keyway shall match locksets furnished on this project.

M. Provide glass bead kits as required to accommodate door conditions. Screws shall not be visible through full glass doors.

N. Where specified, provide compatible keyed mullions with cylinder for pairs of doors.

2.5 LOCKS AND LATCHES

A. Acceptable manufacturers and respective catalog numbers:

	Schlage
1. Grade 2 Cylindrical	ALX Series SAT

B. Bored locks shall be independently certified by ANSI for compliance with ANSI A156.2 (2011).

C. Unless otherwise specified, all locks and latches to have:
1. 2-3/4" Backset
2. 1/2" minimum throw latchbolt
3. 1" throw deadbolt
4. ANSI A115.2 strikes

D. Provide guarded latch bolts for all locksets, and latch bolts with throw to maintain fire rating of both single and paired door assemblies.

E. Provide strike with lip length adequate to clear surrounding trim.

F. Provide wrought boxes for strikes at inactive doors, wood frames, and metal frames without integral mortar covers.

2.6 CLOSERS

A. Acceptable manufacturers and respective catalog numbers:

	LCN	Norton
1.	4050A / 4050A EDA	R7500 / PR7500
2.	1450A / 1450A EDA FC	8501 FC

B. Door closers shall be independently certified by ANSI for compliance with ANSI A156.4, Grade 1 (2013).

C. Obtain door closers from a single manufacturer, although several may be indicated as offering products complying with requirements.

D. Provide extra heavy-duty arm (EDA / HD) when closer is to be installed using parallel arm mounting.

E. Hardware supplier shall coordinate with related trades to ensure aluminum frame profiles will accommodate specified door closers.

F. Closers shall use aluminum cylinders.

G. Closers for fire-rated doors shall be provided with temperature stabilizing fluid that complies with standards UL10C.

H. Unless otherwise specified, all door closers shall have full covers and separate adjusting valves for sweeps, latch, and backcheck.

I. Provide closers for all labeled doors. Provide closer series and type consistent with other closers for similar doors specified elsewhere on the project.

J. Provide closers with adjustable spring power. Size closers to ensure exterior and fire rated doors will consistently close and latch doors under existing conditions. Size all other door closers to allow for reduced opening force not to exceed 5 lbs.

K. Install closers on the room side of corridor doors, stair side of stairways and interior side of exterior doors.

L. Closers shall be furnished complete with all mounting brackets and cover plates as required by door and frame conditions, and by adjacent hardware.

2.7 KICK PLATES AND MOP PLATES

A. Furnish protective plates as specified in hardware groups.

B. Where specified, provide 10" kick plates, 34" armor plates, and 4" mop plates. Unless otherwise specified, metal protective plates shall be .050" thick; plastic plates shall be 1/8" thick.

C. Protective plates shall be 2" less door width, or 1" less door width at pairs. All protective plates shall be beveled 4 sides and counter sunk.

D. Protection plates over 16" shall not be provided for labeled doors unless specifically approved by door manufacturers listing. When protection plates over 16” are provided for labeled doors, the plate shall be labeled.

E. Where specified, provide surface mounted door edges. Edges shall butt to protective plates. Provide edges with cutouts as required adjacent hardware.

F. Adjust dimensions of protection plates to accommodate stile and rail dimensions, lite and louver cutouts, and adjacent hardware. Where required by adjacent hardware, protection plates shall be factory drilled for cylinders or other mortised hardware.

2.8 OVERHEAD STOPS

A. Acceptable manufacturers and respective catalog numbers:

	Glynn-Johnson	Rixson	Sargent
1. Heavy Duty Surface Mount	GJ900 Series	9 Series	590

B. Unless otherwise specified, furnish GJ900 series overhead stop for hollow metal or 1-3/4” solid core doors equipped with regular arm surface type closers that swing more than 140 degrees before striking a wall, for hollow metal or 1-3/4” solid core doors that open against equipment, casework, sidelights, or other objects that would make wall bumpers inappropriate, and as specified in hardware groups.

C. Furnish sex bolt attachments for wood and mineral core doors unless doors are supplied with proper reinforcing blocks.

D. Provide special stop only (“SE” suffix) overhead stops when used in conjunction with electronic hold open closers.

E. Do not provide holder function for labeled doors.

2.9 WALL STOPS AND HOLDERS

A. Acceptable manufacturers and respective catalog numbers:

	Ives	Trimco	Burns
1. Wrought Concave Wall Stop	WS406CCV	1270CV	575

B. Furnish a stop or holder for all doors.

C. Provide concave style wall stop at all adjacent integral push button locks; provide convex style wall stop at all other locations.

D. Where wall stops are not applicable, furnish overhead stops.

E. Furnish floor stops or hinge pin stops only where specified in hardware sets.

F. Do not provide holder function for labeled doors.

2.10 MAGNETIC HOLD OPENS

A. Acceptable manufacturers and respective catalog numbers:

	LCN	ABH	Edwards
1. Wall Holder	SEM 7800	2000	1500

B. Magnetic hold opens shall be independently certified by ANSI for compliance with ANSI A156.15, Grade 1 (2006).

C. Magnetic holder's housing and armature shall be constructed of a die cast zinc material.

D. Provide types as listed in groups.

E. Where wall conditions do not permit the armature to reach the magnet, provide extensions.

F. Provide proper voltage and power consumption as required by Division 16.

G. Coordinate electrical requirements and mounting locations with other trades.

2.11 WEATHERSTRIP, GASKETING

A. Acceptable manufacturers and respective catalog numbers:

	Zero	Pemko	NGP	Reese
1. Weatherstrip	429	2891_PK	700NA	755
2. Adhesive Gasket	188	S88	5050	797
3. Adhesive Edge Seal	****	S771	5060	****
4. Sweep w/ drip	8198	345_N	C627	354
5. Drip Cap	142	346	16	R201

B. Weatherstrip and gasketing shall be independently certified by ANSI for compliance with ANSI A156.22 (2005).

C. Where specified in the hardware groups, furnish the above products unless otherwise detailed in groups.

D. Provide weatherstripping all exterior doors and where specified.

E. Provide intumescent and other required edge sealing systems as required by individual fire door listings to comply with positive pressure standards UL 10C.

F. Provide Zero 188 smoke gaskets at all fire rated doors and smoke and draft control assemblies.

G. Provide gasketing for all meeting edges on pairs of fire doors. Gasketing shall be compatible with astragal design provided by door supplier as required for specific fire door listings.

2.12 THRESHOLDS

A. Acceptable manufacturers and respective catalog numbers:

	Zero	Pemko	NGP	Reese
1. Saddle Thresholds	8655	171	425	S205
2. Half Saddle Thresholds	1674	227	324	S239
3. Interlocking Threshold	74A	114	442-5	T550
4. ¼" Saddle Thresholds	63	151	411	S263
5. Threshold	653	169	****	****

A. Thresholds shall be independently certified by ANSI for compliance with ANSI A156.21 (2001).

B. Hardware supplier shall verify all finish floor conditions and coordinate proper threshold as required to ensure a smooth transition between threshold and interior floor finish.

C. Threshold Types:

1. Unless otherwise specified, provide saddle threshold similar to Zero 8655 for all exterior openings with an interior floor finish less than or equal to 1/4" in height.
2. Unless otherwise specified, provide half saddle threshold similar to Zero 1674 for all exterior openings with an interior floor finish greater than 1/4" in height. Threshold height shall match thickness of interior floor finish.

2.13 POWER SUPPLIES

A. Provide quantities and types as specified in hardware sets. Shared power supplies will not be accepted without prior approval from the owner.

B. All power supplies shall have the following features:

1. 12/24 VDC Output, field selectable.
2. Class 2 Rated power limited output.
3. Universal 120-240 VAC input.
4. Low voltage DC regulated and filtered.
5. Polarized connector for distribution boards.
6. Fused primary input.
7. AC input and DC output monitoring circuit w/LED indicators.
8. Cover mounted AC Input indication.
9. Tested and certified to meet UL294.
10. NEMA 1 enclosure.
11. Hinged cover w/lock down screws.
12. High voltage protective cover.

C. All power supplies shall incorporate fused distribution boards.

D. All electro-mechanical systems requiring fail safe circuits shall be capable of interfacing with the fire alarm system to cut power to appropriate system components. Unless already provided in another system component, all power supplies utilized in fail safe circuits shall include an integral relay which when connected to the N/C fire alarm contact will cut power to all openings connected to the individual power supply. Power supply, unless otherwise specified, will automatically reset itself when fire alarm relay returns to normal state following a fire alarm.

2.14 FINISHES AND BASE MATERIALS

A. Unless otherwise indicated in the hardware groups or herein, hardware finishes shall be applied over base metals (steel-based at labeled doors) as specified in the following finish schedule:

HARDWARE ITEM	BHMA FINISH AND BASE MATERIAL
1. Butt Hinges: Exterior, or Non-Ferrous	614 (US10A - Oxidized Bronze)
2. Butt Hinges: Interior or Ferrous	641 (US10A - Oxidized Bronze on Steel)
3. Exit Devices	313AN (Anodized Duranodic)
4. Locks and Latches	643e (Dark Bronze)
5. Closers	695 (Dark Bronze)
6. Protective Plates	695 (Dark Bronze)
7. Overhead Stops	SP313 (Powder coat dark bronze)
8. Wall Stops and Holders	643e (Aged Bronze)
9. Thresholds	719 (Mill Aluminum)
10. Weather-strip, Sweeps Drip Caps	Dark Bronze Anodized
11. Magnetic Holders	695 (Powder Coat Dark Bronze)
12. Miscellaneous	613 (US10B - Oil Rubbed Bronze)

2.15 KEYING

A. Provide all cylinders in keyways as required to accommodate owners existing key system.

B. All locks under this section shall be keyed as directed by the owner to an existing Master Key System.

C. Furnish a total of 2 keys per cylinder. Actual cut keys to be determined by owner.

D. Master keys, control keys, and change keys shall be delivered by registered mail to the owner. Construction keys shall be delivered to the contractor.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Prior to installation of hardware, installer shall examine door frame installation to ensure frames have been set square and plumb. Installer shall examine doors, door frames, and adjacent wall, floor, and ceiling for conditions, which would adversely affect proper operation and function of door assemblies. Do not proceed with hardware installation until such deficiencies have been corrected.

3.2 INSTALLATION

A. Before hardware installation, general contractor/construction manager shall coordinate a hardware installation seminar with a 1 week notice to all parties involved. The seminar is to be conducted on the installation of hardware, specifically of locksets, closers, exit devices, continuous hinges and overhead stops. Manufacturer's representative of the above products to present seminar. Seminar to be held at the job site and attended by installers of hardware (including low voltage hardware) for aluminum, hollow metal and wood doors. Training to include use of installation manuals, hardware schedule, templates and physical products samples.

B. Shim doors as required to maintain proper operating clearance between door and frame.

C. Install all hardware in accordance with the approved hardware schedule and manufacturer’s instructions for installation and adjustment.

D. Set units level, plumb and true to the line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

E. Provide blocking or reinforcement for all hardware mounted to drywall construction, including wall mounted door stops and holders.

F. Drill and countersink units which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accord with industry standards.

G. Drill appropriate size pilot holes for all hardware attached to wood doors and frames.

H. Unless otherwise specified, locate all hardware in accordance with the recommended locations for builders hardware for standard doors and frames as published by the Door and Hardware Institute (TDH-007-20).

I. Use only fasteners supplied by or approved by the manufacturer for each respective item of hardware.

J. Mortise and cut to close tolerance and conceal evidence of cutting in the finished work.

K. Conceal push and pull bar fasteners where possible. Do not install through bolts through push plates.

L. Install hardware on UL labeled openings in accordance with manufacturer's requirements to maintain the label.

M. Apply self-adhesive gasketing on frame stop at head & latch side and on rabbet of frame at hinge side.

N. Install hardware in accordance with supplemental "S" label instructions on all fire rated openings.

O. Install wall stops to contact lever handles or pulls. Do not mount wall stops on casework, or equipment.

P. Where necessary, adjust doors and hardware as required to eliminate binding between strike and latchbolt. Doors should not rattle.

Q. Overhead stops used in conjunction with electrified hold open closers shall be templated and installed to coincide with engagement of closer hold open position.

R. Install door closers on corridor side of lobby doors, room side of corridor doors, and stair side of stairways.

S. Adjust spring power of door closers to the minimum force required to ensure exterior and fire rated doors will consistently close and latch doors under existing conditions. Adjust all other door closers to ensure opening force does not to exceed 5 lbs.

T. Adjust "sweep", "latch", & "back check" valves on all door closers to properly control door throughout the opening and closing cycle. Adjust total closing speed as required to comply with all applicable state and local building codes.

U. Install "hardware compatible" (bar stock) type weatherstripping continuously for an uninterrupted seal. Adjust templating for parallel arm door closers, exit devices, etc., as required to accommodate weatherstripping.

V. Unless otherwise specified or detailed, install thresholds with the bevel in vertical alignment with the outside door face. Notch and closely fit thresholds to frame profile. Set thresholds in full bed of sealant.

W. Compress sweep during installation as recommended by sweep manufacturer to facilitate a water-resistant seal.

X. Deliver to the owner 1 complete set of installation and adjustment instructions, and tools as furnished with the hardware.

3.3 FIELD QUALITY CONTROL

A. After installation has been completed, the hardware supplier for locksets, door closers, exit devices, and overhead stops shall check the project and verify compliance with installation instructions, adjustment of all hardware items, and proper application according to the approved hardware schedule. Hardware representative shall submit a list of all hardware that has not been installed correctly.

B. After installation has been completed, the hardware supplier shall meet with the owner to explain the functions, uses, adjustment, and maintenance of each item of hardware. Hardware supplier shall provide the owner with a copy of all wiring diagrams. Wiring diagrams shall be opening

specific and include both a riser diagram and point to point diagram showing all wiring terminations.

3.4 ADJUSTMENT AND CLEANING

A. At final completion, and when H.V.A.C. equipment is in operation, installer shall make final adjustments to and verify proper operation of all door closers and other items of hardware. Lubricate moving parts with type lubrication recommended by the manufacturer.

B. All hardware shall be left clean and in good operation. Hardware found to be disfigured, defective, or inoperative shall be repaired or replaced.

3.5 HARDWARE SCHEDULE

A. The following schedule of hardware groups are intended to describe opening function. The hardware supplier is cautioned to refer to the preamble of this specification for a complete description of all materials and services to be furnished under this section.

HW SET 01

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ALX10	SCH
1	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: (F75) PASSAGE LATCH. LATCH RETRACTED BY LEVER EITHER SIDE. BOTH LEVERS ALWAYS UNLOCKED.

HW SET 02

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ALX10	SCH
1	EA	OH STOP	90S	GLY

FUNCTION: (F75) PASSAGE LATCH. LATCH RETRACTED BY LEVER EITHER SIDE. BOTH LEVERS ALWAYS UNLOCKED.

HW SET 03

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	PASSAGE SET	ALX10	SCH
1	EA	BALANCE OF HARDWARE	EXISTING TO REMAIN	

FUNCTION: (F75) PASSAGE LATCH. LATCH RETRACTED BY LEVER EITHER SIDE. BOTH LEVERS ALWAYS UNLOCKED.

NOTE: FIELD VERIFY EXISTING DOOR AND FRAME CAN ACCOMMODATE SPECIFIED HARDWARE PRIOR TO ORDERING.

HW SET 04

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	ENTRANCE/OFFICE LOCK	ALX50	SCH
1	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: (F82) OFFICE LOCK. OUTSIDE LEVER LOCKED/UNLOCKED BY OUTSIDE KEY. INSIDE BUTTON LOCKS OUTSIDE LEVER UNTIL UNLOCKED BY OUTSIDE KEY OR BY TURNING INSIDE LEVER. INSIDE LEVER ALWAYS UNLOCKED.

HW SET 05

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	ENTRANCE/OFFICE LOCK	ALX50	SCH
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	PERIMETER SEAL	188S	ZER

FUNCTION: (F82) OFFICE LOCK. OUTSIDE LEVER LOCKED/UNLOCKED BY OUTSIDE KEY. INSIDE BUTTON LOCKS OUTSIDE LEVER UNTIL UNLOCKED BY OUTSIDE KEY OR BY TURNING INSIDE LEVER. INSIDE LEVER ALWAYS UNLOCKED.

HW SET 06

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	ENTRANCE LOCK	ALX53	SCH
1	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: (F109) ENTRANCE LOCK. OUTSIDE KEY LOCKS/UNLOCKS OUTSIDE LEVER. INSIDE BUTTON LOCKS OUTSIDE LEVER UNTIL UNLOCKED BY OUTSIDE KEY OR BY TURNING INSIDE LEVER. INSIDE TURN LOCKS/UNLOCKS OUTSIDE LEVER. OUTSIDE KEY RETRACTS LATCH WHILE OUTSIDE LEVER IS LOCKED BY INSIDE TURN. INSIDE LEVER ALWAYS UNLOCKED.

HW SET 07

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	ENTRANCE LOCK	ALX53	SCH
1	EA	SURFACE CLOSER	1450 FC / 1450 EDA FC	LCN
1	EA	KICK PLATE	8400 10"	IVE
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY)	ZER

FUNCTION: (F109) ENTRANCE LOCK. OUTSIDE KEY LOCKS/UNLOCKS OUTSIDE LEVER. INSIDE BUTTON LOCKS OUTSIDE LEVER UNTIL UNLOCKED BY OUTSIDE KEY OR BY TURNING INSIDE LEVER. INSIDE TURN LOCKS/UNLOCKS OUTSIDE LEVER. OUTSIDE KEY RETRACTS LATCH WHILE OUTSIDE LEVER IS LOCKED BY INSIDE TURN. INSIDE LEVER ALWAYS UNLOCKED.

HW SET 08

QTY		DESCRIPTION	CATALOG NUMBER	MFR
1	EA	ENTRANCE LOCK	ALX53	SCH
	EA	BALANCE OF HARDWARE	EXISTING TO REMAIN	

FUNCTION: (F109) ENTRANCE LOCK. OUTSIDE KEY LOCKS/UNLOCKS OUTSIDE LEVER. INSIDE BUTTON LOCKS OUTSIDE LEVER UNTIL UNLOCKED BY OUTSIDE KEY OR BY TURNING INSIDE LEVER. INSIDE TURN LOCKS/UNLOCKS OUTSIDE LEVER. OUTSIDE KEY RETRACTS LATCH WHILE OUTSIDE LEVER IS LOCKED BY INSIDE TURN. INSIDE LEVER ALWAYS UNLOCKED.

NOTE: FIELD VERIFY EXISTING DOOR AND FRAME CAN ACCOMMODATE SPECIFIED HARDWARE PRIOR TO ORDERING.

HW SET 09

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	CORRIDOR LOCK W/ OUTSIDE INDICATOR	ND73 OS-OCC	SCH
1	EA	SURFACE CLOSER	1450 FC / 1450 EDA FC	LCN
1	EA	KICK PLATE	8400 10"	IVE
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	PERIMETER SEAL	188S	ZER

FUNCTION: (F90) CORRIDOR LOCK. OUTSIDE KEY LOCKS/UNLOCKS OUTSIDE LEVER. INSIDE PUSH BUTTON LOCKS OUTSIDE LEVER UNTIL INSIDE LEVER IS TURNED OR DOOR IS CLOSED. INSIDE LEVER ALWAYS UNLOCKED.
OUTSIDE INDICATOR DISPLAYS OCCUPIED/VACANT STATUS.

HW SET 10

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ALX80	SCH
1	EA	SURFACE CLOSER	1450 FC / 1450 EDA FC	LCN
1	EA	KICK PLATE	8400 10"	IVE
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY)	ZER

FUNCTION: (F86) STOREROOM LOCK. FIXED OUTSIDE TRIM - OUTSIDE KEY OR INSIDE LEVER RETRACTS LATCH. INSIDE LEVER ALWAYS UNLOCKED.

HW SET 11

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	BALANCE OF HARDWARE	EXISTING TO REMAIN	

HW SET 12

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2/EPT10	VON
1	EA	FIRE EXIT HARDWARE	7827-EO-F-LBR	VON
1	EA	ELEC FIRE EXIT HARDWARE	QEL-7827-L-NL-F-LBR	VON
1	EA	IC CYLINDER	AS REQUIRED	
2	EA	SURFACE CLOSER	1450 FC / 1450 EDA FC	LCN
2	EA	FIRE/LIFE WALL MAG	SEM7800	LCN
1	EA	GASKETING	188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY)	ZER
1	EA	MEETING STILE SEAL	S771	PEM
1	EA	CREDENTIAL READER	BY SECURITY SUPPLIER	B/O
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	WIRING DIAGRAMS	RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)	
	EA	N/C FIRE ALARM CONTACT	BY FIRE ALARM CONTRACTOR	B/O

FUNCTION: NIGHT LATCH PANIC HARDWARE WITH ELECTRIC LATCH RETRACTION. FIXED OUTSIDE TRIM - LATCH RETRACTED BY KEY. LATCH ELECTRICALLY RETRACTED ACCESS CONTROL SYSTEM FOR PUSH/PULL OPERATION. INSIDE PUSH PAD RETRACTS LATCH FOR EGRESS. MAGNETIC HOLDER TO RELEASE UPON ACTUATION OF FIRE ALARM SYSTEM.

HW SET 13

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	POWER TRANSFER	EPT2/EPT10	VON
1	EA	ELEC PANIC HARDWARE	QEL-78-NL	VON
1	EA	IC CYLINDER	AS REQUIRED	
1	EA	SURFACE CLOSER	4050A SCUSH	LCN
1	EA	KICK PLATE	8400 10"	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	GASKETING	429 (MOUNT PRIOR TO CLOSER)	ZER
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	AS REQUIRED	ZER
1	EA	CREDENTIAL READER	BY SECURITY SUPPLIER	B/O
1	EA	POWER SUPPLY	PS902 900-2RS	VON
1	EA	WIRING DIAGRAMS	RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)	

FUNCTION: NIGHT LATCH PANIC HARDWARE WITH ELECTRIC LATCH RETRACTION. FIXED OUTSIDE TRIM - LATCH RETRACTED BY KEY. LATCH ELECTRICALLY RETRACTED BY ACCESS CONTROL SYSTEM FOR PUSH/PULL OPERATION. INSIDE PUSH PAD RETRACTS LATCH FOR EGRESS.

HW SET 14

QTY		DESCRIPTION	CATALOG NUMBER	MFR
	EA	HINGE	AS REQUIRED	IVE
1	EA	FIRE EXIT HARDWARE	78-L-F	VON
1	EA	IC CYLINDER	AS REQUIRED	
1	EA	SURFACE CLOSER	1450 SCUSH FC	LCN
1	EA	KICK PLATE	8400 10"	IVE
1	EA	GASKETING	188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY)	ZER

FUNCTION: CLASSROOM LEVER PANIC HARDWARE. OUTSIDE LEVER LOCKED/UNLOCKED BY OUTSIDE KEY. INSIDE PUSH PAD RETRACTS LATCH FOR FREE EGRESS.

SECTION 09 5100
ACOUSTICAL CEILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Suspended metal grid ceiling system and coordinating trim.

B. Acoustical ceiling tiles.

1.02 REFERENCE STANDARDS

A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2025.

B. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2022.

C. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2019 (Reapproved 2025).

D. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2024.

E. ASTM E580/E580M - Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2024a.

F. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2023.

G. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth; 2024.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.

B. Do not install acoustical units until after interior wet work is dry.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data on suspension system components and acoustical units.

C. Samples: Submit one sample 6 by 6 inch in size illustrating material and finish of acoustical units.

D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 6000 - Product Requirements, for additional provisions.
   2. Extra Acoustical Units: Up to 5% of each type, with a minimum of 3 boxes and a maximum of 8 boxes.

1.05 QUALITY ASSURANCE

A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.06 FIELD CONDITIONS

A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

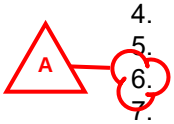
A. Acoustic Tiles/Panels:
   1. Armstrong World Industries, Inc: www.armstrongceilings.com/#sle.
   2. Certainteed Architectural: www.certainteed.com/ceilings-and-walls/#sle.
   3. USG Corporation: www.usg.com/#sle.
   4. Substitutions: See Section 01 6000 - Product Requirements.

B. Suspension Systems:
   1. Same as for acoustical units.
   2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ACOUSTICAL UNITS

A. Acoustical Units - General: ASTM E1264, Class A.

B. Acoustical Tiles, Type (ACT-1): Painted mineral fiber, with the following characteristics:
   1. Basis of Design: Ultima Tegular, as manufactured by Armstrong World Industries Inc, or approved equal.
   2. Classification: ASTM E1264 Type A.
   3. Size: 24 by 24 inches.
   4. Thickness: 3/4 inch.
   5. Noise Reduction Coefficient (NRC) Range: .75 to .90, in accordance with ASTM E1264.
   6. Ceiling Attenuation Class (CAC) Rating: 35 minimum, in accordance with ASTM E
   7. Tile Edge: Beveled Tegular 15/16".
   8. Color: White.



2.03 SUSPENSION SYSTEMS

A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with perimeter moldings, hold-down clips, stabilizer bars, clips, and splices as required.
   1. Materials:
      a. Steel Grid: ASTM A653/A653M, G30 coating, unless otherwise indicated.

B. Exposed Suspension System: Hot-dip galvanized steel grid and cap.
   1. Basis of Design: Prelude XL 15/16" Exposed Tee, as manufactured by Armstrong World Industries Inc, or approved equal.
   2. Structural Classification: Intermediate-duty, when tested in accordance with ASTM C635/C635M.
   3. Profile: Tee; 15/16 inch face width.
   4. Color: White.

2.04 ACCESSORIES

A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.

B. Hanger Wire: 12 gauge, 0.08 inch galvanized steel wire.

C. Hold-Down Clips: Manufacturer's standard clips to suit application.

D. Perimeter Moldings: Same metal and finish as grid.
   1. Size: As required for installation conditions and specified Seismic Design Category.
   2. Angle Molding: L-shaped, for mounting at same elevation as face of grid.

E. Touch-up Paint: Type and color to match acoustical and grid units.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that layout of hangers will not interfere with other work.

3.02 PREPARATION

A. Install after major above-ceiling work is complete.

B. Coordinate the location of hangers with other work.

3.03 INSTALLATION - SUSPENSION SYSTEM

A. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.

B. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
   1. Use longest practical lengths.
   2. Overlap and rivet corners.

C. Suspension System, Non-Seismic: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.

D. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.

E. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.

F. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.

G. Do not eccentrically load system or induce rotation of runners.

3.04 INSTALLATION - ACOUSTICAL UNITS

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

B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.

C. Fit border trim neatly against abutting surfaces.

D. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.

E. Cutting Acoustical Units:
   1. Make field cut edges of same profile as factory edges.
   2. Double cut and field paint exposed reveal edges.

F. Where round obstructions occur, provide preformed closures to match perimeter molding.

G. Install hold-down clips on panels within 20 ft of an exterior door.

3.05 TOLERANCES

A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.

B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

3.06 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Clean surfaces.

C. Replace damaged or abraded components.

END OF SECTION

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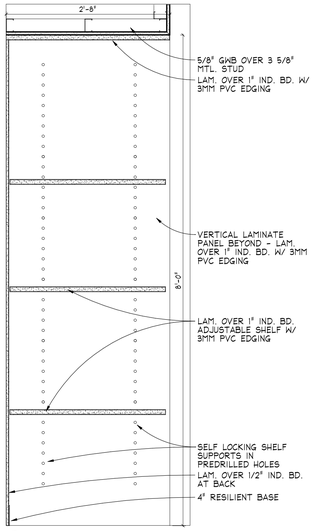
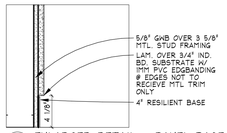
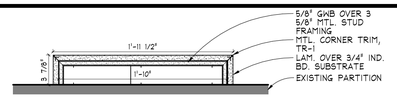


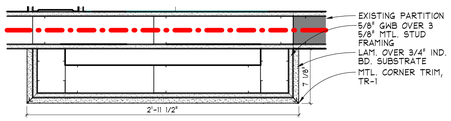
31 ADJUSTABLE SHELVING
SCALE: 1" = 1'-0"



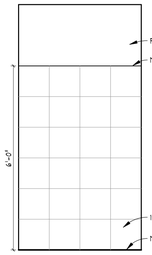
28 ENLARGED DETAIL - PANEL BASE
SCALE: 1 1/2" = 1'-0"



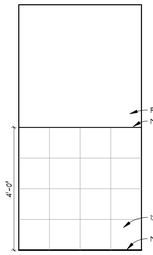
22 ENLARGED DETAIL - PORTAL
SCALE: 1 1/2" = 1'-0"



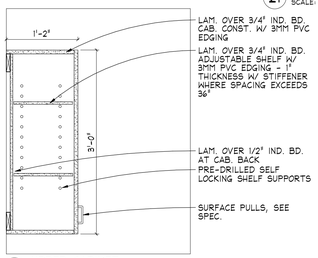
21 ENLARGED DETAIL - COLUMN
SCALE: 1 1/2" = 1'-0"



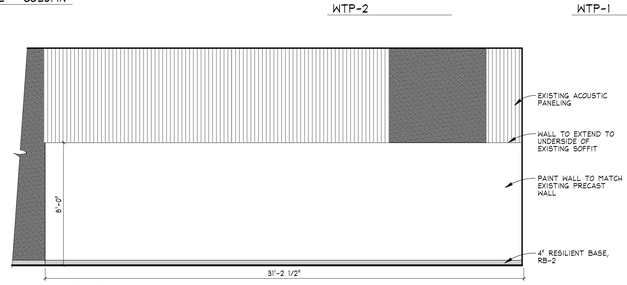
WTP-2



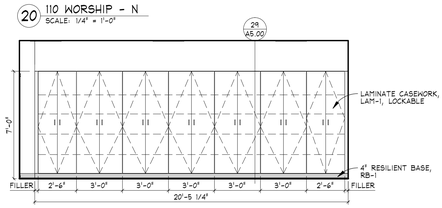
WTP-1



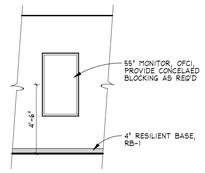
27 UPPER CABINET
SCALE: 1" = 1'-0"



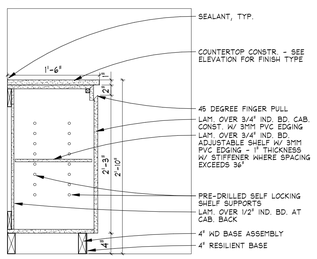
20 110 WORSHIP - N
SCALE: 1/4" = 1'-0"



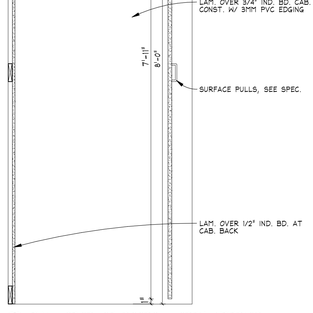
19 100 VESTIBULE - E
SCALE: 1/4" = 1'-0"



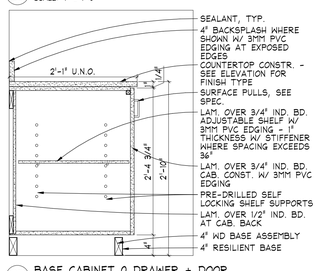
18 TYP. MONITOR ELEV.
SCALE: 1/4" = 1'-0"



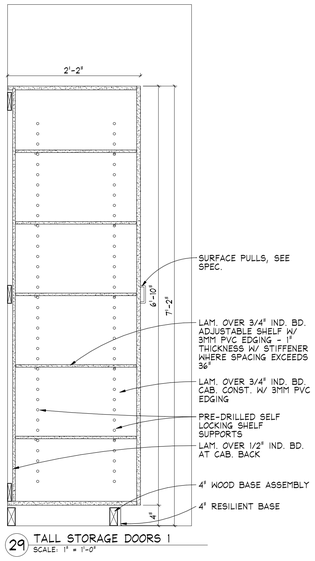
26 BASE CABINET 0 DRAWER + DOOR 2
SCALE: 1" = 1'-0"



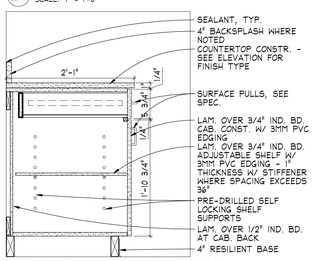
30 TALL STORAGE DOORS - OPEN INTERIOR
SCALE: 1" = 1'-0"



25 BASE CABINET 0 DRAWER + DOOR
SCALE: 1" = 1'-0"



29 TALL STORAGE DOORS 1
SCALE: 1" = 1'-0"



24 BASE CABINET 1 DRAWER + DOOR
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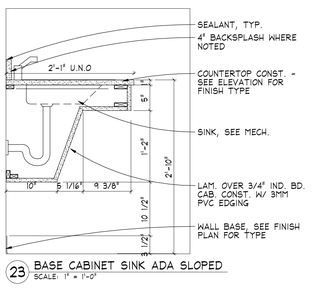
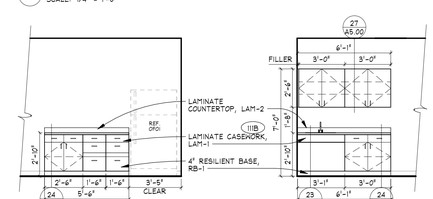
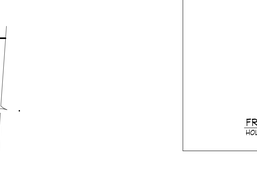


23 BASE CABINET SINK ADA SLOPED
SCALE: 1" = 1'-0"



14 106 BREAKROOM - N
SCALE: 1/4" = 1'-0"

13 129, 134, 135 - TYP. CASEWORK
SCALE: 1/4" = 1'-0"



12 ALT. 1 - 110C RESTROOM
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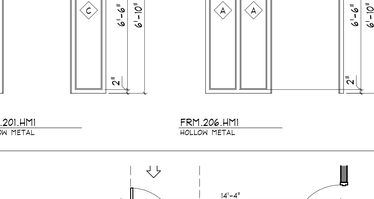

11 ALT. 1 - ENLARGED PLAN - 110C RESTROOM
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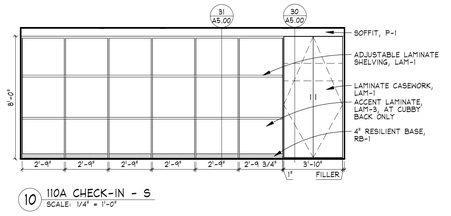
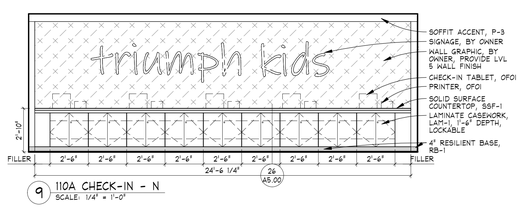
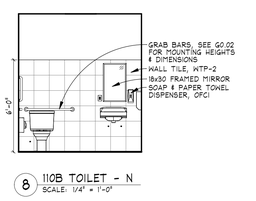


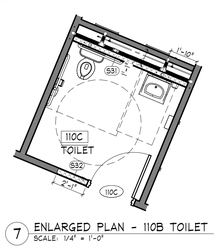
10 110A CHECK-IN - S
SCALE: 1/4" = 1'-0"



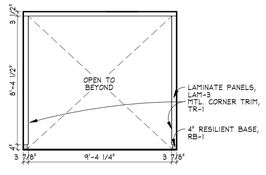
9 110A CHECK-IN - N
SCALE: 1/4" = 1'-0"



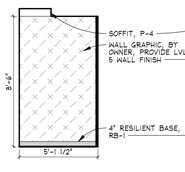
8 110B TOILET - N
SCALE: 1/4" = 1'-0"



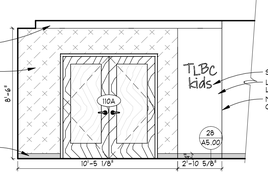
7 ENLARGED PLAN - 110B TOILET
SCALE: 1/4" = 1'-0"



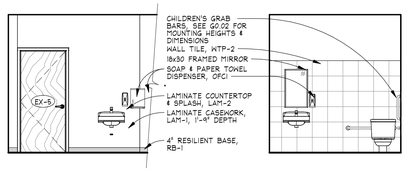
6 TYP. PORTAL
SCALE: 1/4" = 1'-0"



5 202 HALL - W
SCALE: 1/4" = 1'-0"

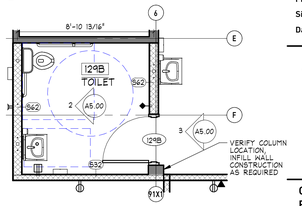


4 202 HALL - N
SCALE: 1/4" = 1'-0"



3 129 TODDLER - W
SCALE: 1/4" = 1'-0"

2 129B TOILET - W
SCALE: 1/4" = 1'-0"



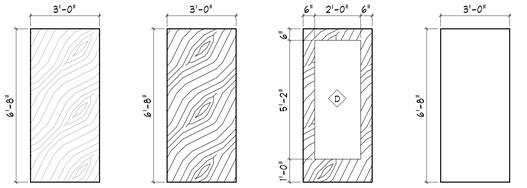
1 ENLARGED PLAN - 129B TOILET
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE

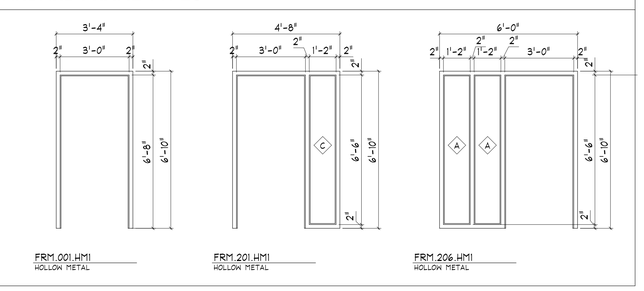
MARK	PANEL WIDTH PANEL 1	PANEL HEIGHT	PANEL 1	PANEL 2	FRAME	FIRE RATED	HARDWARE GROUP	COMMENTS
100B	3'-0"	6'-8"	PNL.F.HM		FRM.206.HM1		13	GARD ACCESS READER
100D	3'-0"	6'-8"	PNL.F.HM		FRM.201.HM1	45MIN	10	
100E	3'-0"	6'-8"	PNL.F.HM		FRM.201.HM1	45MIN	14	
104	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		07	THIS OPENING UNDER ALTERNATE #1
104B	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		02	THIS OPENING UNDER ALTERNATE #1
110A	3'-0"	6'-8"	PNL.FG.WD	PNL.FG.WD	FRM.201.HM1	45MIN	12	GARD ACCESS READER
110C	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		08	
111	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		07	THIS OPENING UNDER ALTERNATE #1
111B	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		02	THIS OPENING UNDER ALTERNATE #1
126	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		06	
126B	3'-0"	6'-8"	PNL.F.HM		FRM.001.HM1		09	NOTE 1, DEMO EX-5
126C	3'-0"	6'-8"	PNL.F.HM		FRM.001.HM1		03	NOTE 1, DEMO EX-1
128	3'-0"	6'-8"	PNL.F.HM		FRM.001.HM1		04	
129	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		11	NOTE 1, DEMO EX-4
129B	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		05	
134	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		08	NOTE 1, DEMO EX-3
135	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		08	NOTE 1, DEMO EX-2
135B	3'-0"	6'-8"	PNL.F.WD		FRM.001.HM1		01	

NOTE 1 - INSTALL SALVAGED DOOR PANEL, DOOR FRAME, & DOOR HARDWARE FOR THIS OPENING. SEE DEMO PLAN FOR CORRESPONDING DOOR NUMBER, DEMO EX-#

PANEL TYPES



STANDARD FRAME TYPES



ZERR·BERG

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GLAZING & FRAMING NOTES

GLASS TYPES ARE LABELED BY LETTERS A,B,&C WHICH CORRESPOND W/ TYPE AS SCHEDULED IN SPECIFICATIONS
SECTION 08 8000 - GLASS & GLAZING

- (A) 1" CLEAR INSULATED GLAZING (TEMPERED WHERE REQ'D BY CODE)
- (B) 1/4" CLEAR TEMPERED GLASS
- (C) 1/4" CLEAR TEMPERED SAFETY GLASS
- (D) FIRE RESISTANT RATED GLASS

ALL GLASS SHALL BE SAFETY GLAZING WHERE REQUIRED BY BUILDING CODES & AS INDICATED

ALL DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION OF FRAMES AND SIZING OF GLAZING UNITS

GENERAL GLAZING

REVISION SCHEDULE

NUMBER	DESCRIPTION	DATE
A	Addenda A	5/26/2026

CONSTRUCTION DOCUMENTS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Print Name: Tyler Brandriet
Signature: Tyler Brandriet
Date: 05/15/2026 Registration No. 58435

TRIUMPH LUTHERAN BRETHREN CHURCH EAST CAMPUS RENOVATION

CASEWORK DETAILS, ENLARGED PLANS, FRAME & PANEL TYPES, DOOR SCHEDULE, & INTERIOR ELEVATIONS

Project No.: 26-011
Date: 05/15/2026

A5.00