

From: John Stalder <john@e-corp4u.com>
Sent: Thursday, March 24, 2022 11:17 AM
To: Steve Peterson <stevep@clhae.com>
Cc: Russ Tonks <russ@e-corp4u.com>; Osman Uygun <osman@e-corp4u.com>
Subject: Reconfigure M1 Room ARTCC Project RFI #1

Steve,

Here are some questions

Doors & Hardware

1. The door schedule indicates the hardware groups are in the spec. we cannot find hardware groups in the spec nor does the door schedule list the hardware group for each door. Can you provide this information. – **See revised A601 and Spec 08710.**

Drywall

1. On sheet A1.1 I don't see wall types called out for the offices on the right side of the plan. Are these all type A? Break room walls show type B & D but the other two walls are not called out. **See attached revised A1.1.**
2. Some of the walls are colored RED and some Light BLUE. What is this to indicate?
See attached revised A1.1, wall hatch legend

Acoustical Ceiling

1. Does the control room get new acoustical ceiling? Where does it stop at grid line K?
We do not, unable to access this area of building, We believe it stops at K? E-Corp researching .

Access flooring

1. Para 2.1.C.2 of the Access Flooring Spec calls out for an Ultimate Load for the panel of 3,100 lbs/in², however the Ultimate Load for the speced ConCore 1250 panel is always 2 x Concentrated Load of 1,250 lbs/in² or 2,500 lbs/in² by industry standards.
2,500 lbs/in² is acceptable.
2. Para 2.4.A.6 calls out for a bolted stringer system to gravity-hold the panels in place. This is appropriate for factory-finished tiled panels that shouldn't have screw holes drilled into the tile to secure the panel to the pedestal. However, para 2.7.C calls out for a corner-locked panel system. This is appropriate when field-applied finishes by others are required that will cover the corner-lock screws holding the panels in place. The Finish Plan Sheet A102 is calling out for the finish on top of the Access Floor in the Control Rm to be 24" x 24" Masland Speak T503 Vibrato #50308 "Azores" carpet tile. Please confirm this carpet finish will be field-applied by others on our bare corner-locked panel system.
We need to match existing raised flooring in Control Room.
3. Para 2.4.A.6 calls out for mechanical anchors to secure our pedestals to the slab. Will our standard pedestal adhesive be acceptable in lieu of anchors if a licensed structural engineer confirms it by calculations? (She would require the weight, dimensions, and method of seismic bracing for any heavy equipment on top of the flooring in order to determine pedestal type and method of attachment.)

4. The Finish Schedule on Sheet A102 calls out for both CPT-1 and VCT-1 in the Control Rm, but we could only locate the location for the carpet tile. Please advise where the VCT-1 goes and confirm both it and the carpet tile will be field-applied by others.

Carpet is shown on raised flooring, and VCT is shown on the concrete floor to both sides. Carpet and VCT installation is means and methods?

Flooring

5. The finish schedule calls for CPT0-1 in the mechanical storage room (1051B) but the floor plan shows Vinyl Composition Tile. Which is correct?
VCT is correct see revised A102
6. Control RM 1052 shows vinyl composition tile on each side of the access flooring. Is this flooring to be new? If so, where does it stop?
Yes on the flooring is new, we think grid K, unable to access this area. E-Corp researching .

John Stalder, Sr. Estimator

E-Corp

1598 North Hill Field Rd, Ste. B
Layton, UT 84041

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US GREEN BUILDING COUNCIL Member

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From: Walt Harriman <wharriman@puglieseinteriors.com>

Sent: Monday, March 21, 2022 5:22 PM

To: John Stalder <john@e-corp4u.com>

Subject: RE: Bid Invite: Reconfigure M1 Room ARTCC Project

John,

Before we can give you a meaningful bid, we have some RFI questions for clarification of the Access Flooring scope:

1. Para 2.1.C.2 of the Access Flooring Spec calls out for an Ultimate Load for the panel of 3,100 lbs/in², however the Ultimate Load for the speced ConCore 1250 panel is always 2 x Concentrated Load of 1,250 lbs/in² or 2,500 lbs/in² by industry standards.
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Regards,

Walt Harriman, LEED® Green Associate

Pugliese Interior Systems (Tate Access Floors)
30182 Esperanza
Rancho Santa Margarita, CA 92688
949-837-9194
949-837-1208 (fax)
www.puglieseinteriors.com

From: John Stalder (E Corp) <team@buildingconnected.com>
Sent: Tuesday, March 15, 2022 3:08 PM
To: Walt Harriman <wharriman@puglieseinteriors.com>
Subject: Bid Invite: Reconfigure M1 Room ARTCC Project

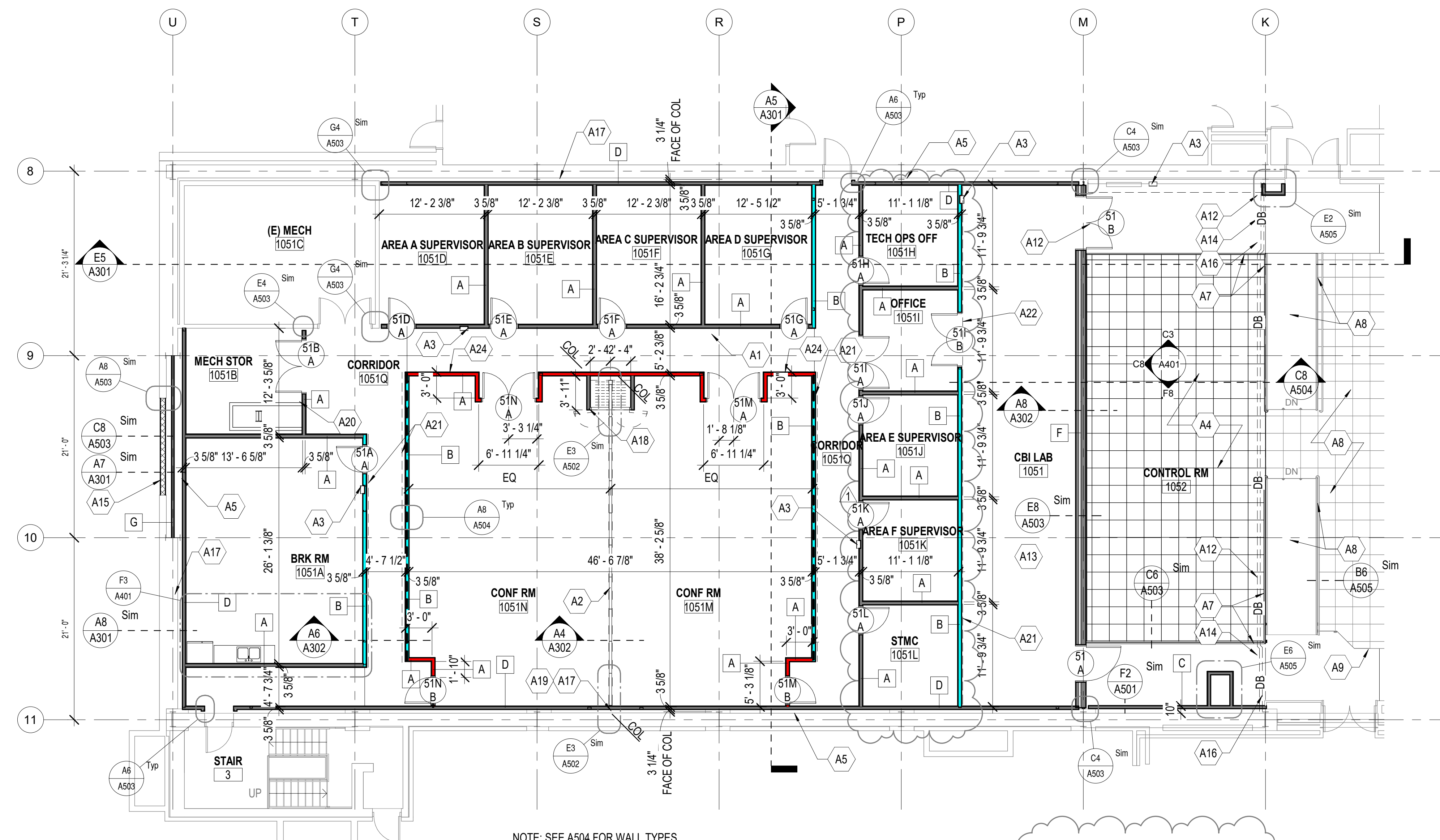


John Stalder from E Corp has invited you to bid on

Reconfigure M1 Room ARTCC: Access Flooring

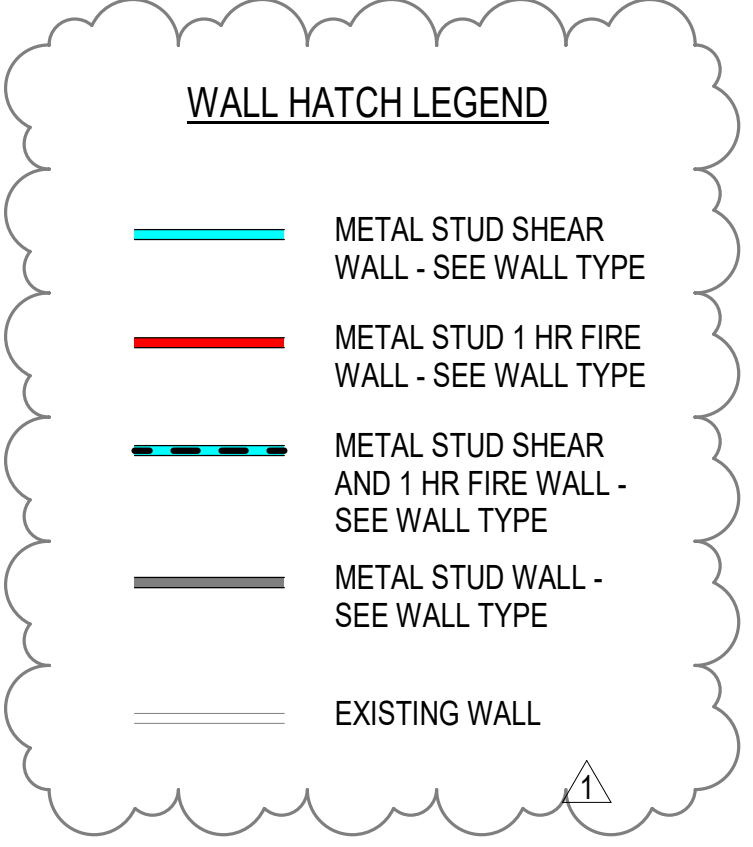
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A



NOTE: SEE A504 FOR WALL TYPES

C8 MAIN FLOOR PLAN
1/8" = 1'-0"
0 4' 8' 16'

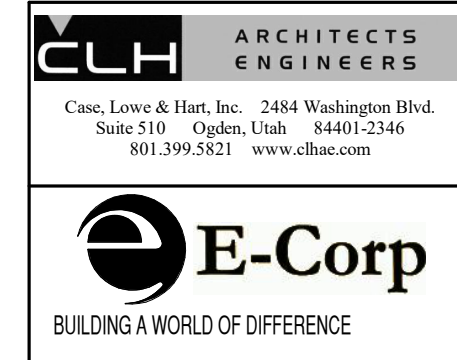
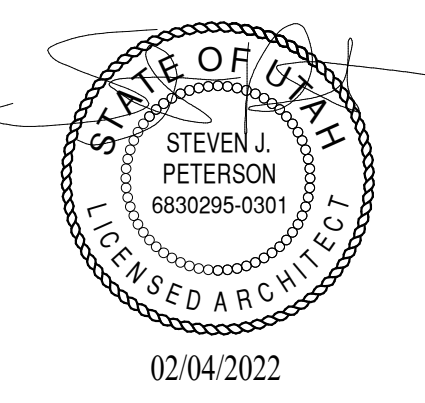
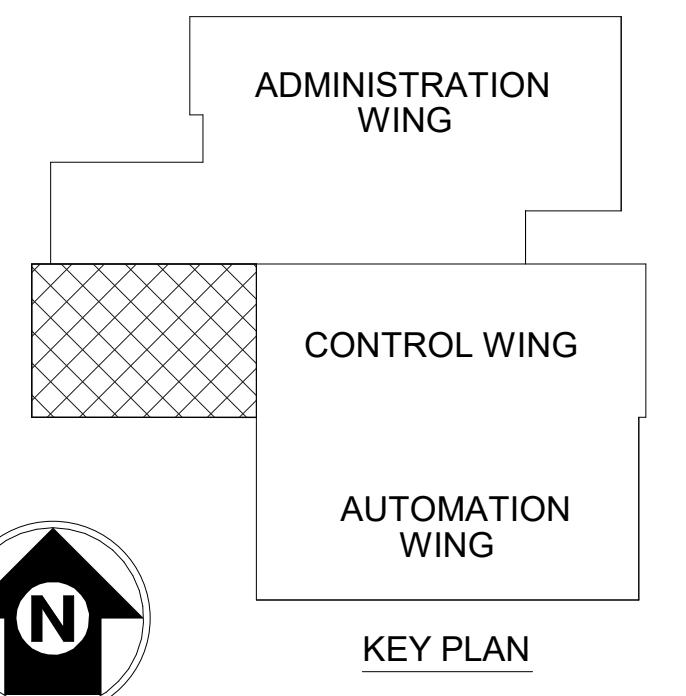


KEY NOTES:

- A1 PROVIDE VERTICAL CONTROL JOINTS AT 30'-0" IN NEW GWB. SEE DETAIL C7/A504. ALIGN JOINTS WITH DOOR JAMBS WHERE POSSIBLE. CONTROL JOINT IS NOT REQUIRED IN SHEAR WALLS- WALL TYPE "B"
- A2 PROVIDE OPERABLE (STACKABLE) PARTITION, MOUNTED TO BEAM ABOVE
- A3 SEMI-RECESSED FIRE EXTINGUISHER CABINET WITH DRY CHEMICAL FIRE EXTINGUISHER. PROVIDE BLOCKING AS REQUIRED. FIELD VERIFY EXACT LOCATION WITH PROJECT MANAGER
- A4 NEW RAISED FLOOR. SEE SPECIFICATION.
- A5 2.7" EXP JOINT BETWEEN EXISTING WALL AND NEW PARTITION.
- A6 PROVIDE HORIZONTAL BLOCKING FOR FLAT-SCREEN TV INSTALLATION (TV BY OTHERS). PROVIDE RECEPTACLE AT 48" AFF-SEE ELECTRICAL. COORDINATE EXACT LOCATION WITH COR.
- A7 NEW RAISED FLOOR SYSTEM GUARD RAILS.
- A8 EXISTING RAISED FLOOR SYSTEM & RAMPS. REMOVE (E) GUARDRAIL AND PROVIDE NEW GUARDRAIL TO MEET ABA.
- A9 PROVIDE NEW GUARD RAIL AT EXISTING RAISED FLOOR RAMP.
- A10 BRIDGE GALLERY ABOVE AT COLUMN LINE 'K'.
- A11 LOCATION OF NEW DOOR IN ATTIC ALONG COLUMN LINE 'M' IS APPROXIMATE. COORDINATE EXACT LOCATION WITH THE LOCATION OF EXISTING BEAM HANGERS.
- A12 INSTALL #6 DRYWALL SCREWS @ 12" O.C. ON EXISTING DRYWALL OVER BRIDGE AND 12" O.C. ON HORIZ TRACK.
- A13 R-13 BATT INSUL ON TOP OF CEILING PANELS- TYP ALL ROOMS
- A14 TEMP DUST PARTITION
- A15 INFILL EXISTING KO WALL PANEL WITH METAL PANELS TO MATCH EXISTING COLOR AND PROFILES.
- A16 FOR ENTIRE LENGTH (62 LINEAR FEET): PROVIDE PATCHING COMPOUND ON EXISTING DAMAGED VINYL GYPSUM WALL BETWEEN BRIDGE CEILING AND NEW CEILING TO HIDE ALL SCREWS, TEARS AND OTHER DAMAGE. PATCHING COMPOUND SHALL BE INSTALLED TO MAKE SMOOTH SEAMLESS SURFACE. PAINT ALL EXPOSED SURFACES.
- A17 WHERE PERIMETER INSULATION WITH VAPOR BARRIER IS MISSING OR DAMAGED, FURNISH AND INSTALL NEW INSULATION AND VAPOR BARRIER TO MATCH EXISTING.
- A18 PROVIDE SIGN THAT STATES "STORAGE FOR FOLDING PARTITION SHALL BE ON THIS SIDE ONLY".
- A19 PROVIDE SIGN THAT STATES "STORAGE OF FOLDING PARTITION PROHIBITED AT THIS END"
- A20 PROVIDE SIGN THAT STATES "NO STORAGE ALLOWED ON MEZZANINE".
- A21 INSTALL PLYWOOD SHEATHING ON THIS FACE OF WALL.
- A22 PROVIDE RETURN AIR OPENING OVER DOOR SEE MECH TO SIZE.
- A23 PROVIDE SELF-CLOSING PIPE GATE
- A24 PROVIDE RETURN AIR OPENING IN FIRE WALL STUD SPACE- SEE MECH AND STRUCTURAL.

GENERAL NOTES:

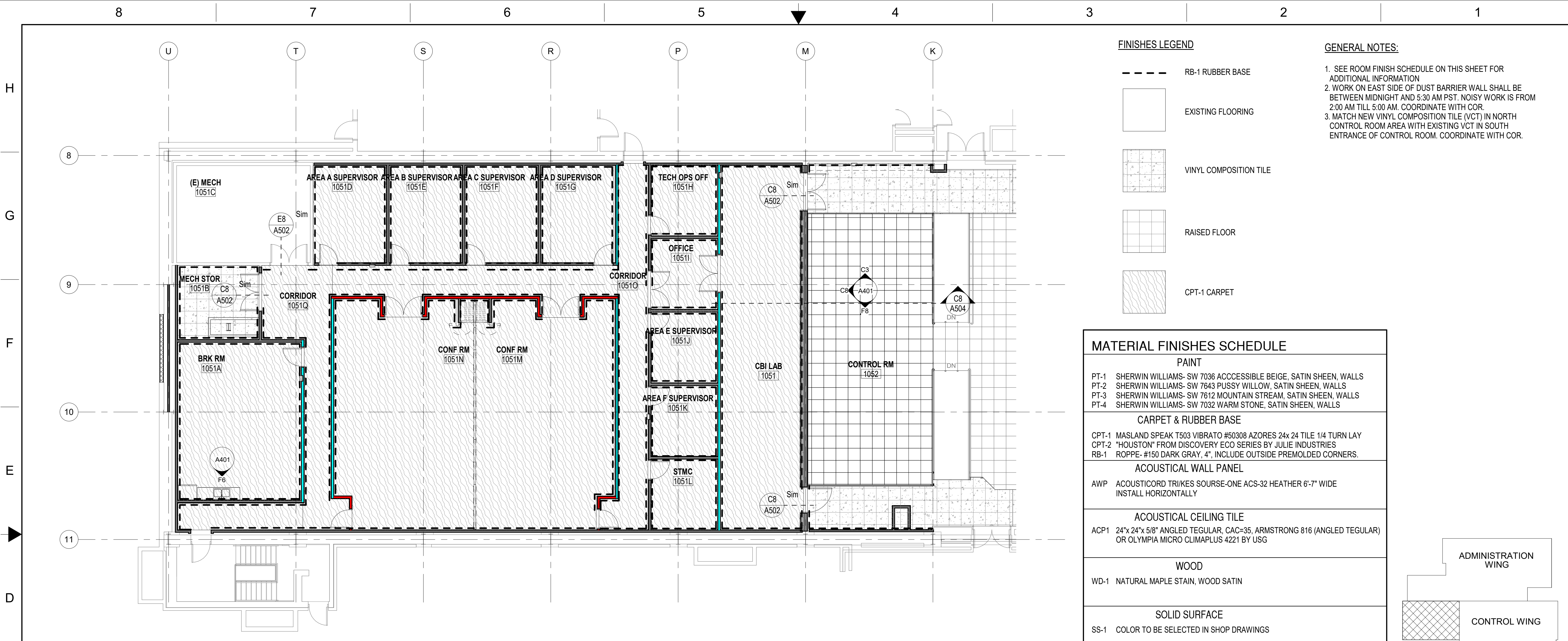
1. THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS PRIOR TO ANY WORK AND SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS INCLUDING THOSE FURNISHED BY SUBCONTRACTORS.
2. ALL DIMENSIONS ON THE PLAN ARE FROM STUD SURFACE TO STUD SURFACE UNLESS OTHERWISE INDICATED.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREIN OR NOT AND TO PROTECT THEM FROM DAMAGE.
4. ALL DEBRIS SHALL BE REMOVED FROM THE BUILDING AND ALL AREAS SHALL BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH WORK SHIFT.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS AND SHALL MAINTAIN THE STRUCTURAL INTEGRITY OF ANY CONSTRUCTION UNTIL ALL LOAD CARRYING SYSTEMS ARE COMPLETED.
6. REFER TO SHEET A504 FOR PARTITION TYPE.
7. DO NOT PROVIDE OR INSTALL GYPSUM BOARD MANUFACTURED IN CHINA.
8. CONTRACTOR SHALL PATCH ALL WALLS WHERE DEVICES HAVE BEEN REMOVED, INCLUDING BUT NOT LIMITED TO FIRE EXTINGUISHER CABINETS, AED CABINETS, LIGHT SWITCHES AND FIRE ALARM EQUIPMENT.
9. NEW METAL STUD TO EXTEND TO NEW MEZZANINE DECK. GYPSUM BOARD TO EXTEND 6" ABOVE CEILING TYP EXCEPT AT FIRE PARTITIONS AND SHEAR WALLS GYPSUM BOARD TO EXTEND TO DECK.
10. REFER TO STRUCTURAL DRAWINGS FOR METAL STUD DESIGN.
11. EXISTING PAINT ON STEEL BEAMS AND GRATING CONTAINS LEAD AND WILL NEED TO HAVE ABATEMENT PERFORMED, BY LICENSED CONTRACTOR.



1		RFI 01	3/31/22
REV	APPROVED DATE	DESCRIPTION	JCN REDLINE DATE APVD
DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION ATO - TECHNICAL OPERATIONS WESTERN SERVICE AREA			
ARTCC RECONFIGURE M1 ROOM MAIN FLOOR PLAN			
PALMDALE		LOS ANGELES CTR	
REVIEWED BY	SUBMITTED BY	APPROVED BY	
ART GAPASIN PROJECT ENGINEER		DARYL KITCHEN MGR. ENGINEERING - LA	
DESIGNED	ISSUED BY	DATE	JCN
KDL	ENGINEERING SERVICES	02.04.2021	1004394
DRAWN	ENROUTE/FSS	DRAWING NO	REV
KDL		ZLA-D-ARTCC- A101	
CHECKED	SJP		

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8 7 6 5 4 3 2 1



FINISHES LEGEND

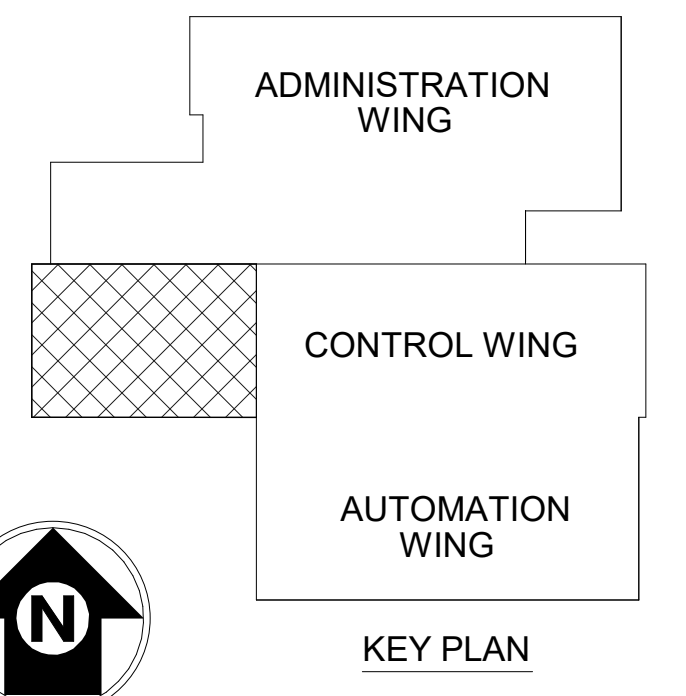
- RB-1 RUBBER BASE
- EXISTING FLOORING
- VINYL COMPOSITION TILE
- RAISED FLOOR
- CPT-1 CARPET

GENERAL NOTES:

1. SEE ROOM FINISH SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION
2. WORK ON EAST SIDE OF DUST BARRIER WALL SHALL BE BETWEEN MIDNIGHT AND 5:30 AM PST. NOISY WORK IS FROM 2:00 AM TILL 5:00 AM. COORDINATE WITH COR.
3. MATCH NEW VINYL COMPOSITION TILE (VCT) IN NORTH CONTROL ROOM AREA WITH EXISTING VCT IN SOUTH ENTRANCE OF CONTROL ROOM. COORDINATE WITH COR.

MATERIAL FINISHES SCHEDULE

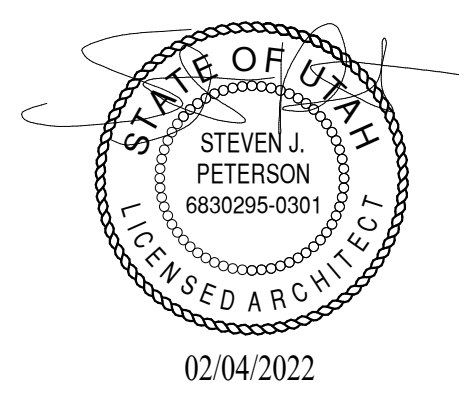
PAINT	
PT-1	SHERWIN WILLIAMS- SW 7036 ACCESSIBLE BEIGE, SATIN SHEEN, WALLS
PT-2	SHERWIN WILLIAMS- SW 7643 PUSSY WILLOW, SATIN SHEEN, WALLS
PT-3	SHERWIN WILLIAMS- SW 7612 MOUNTAIN STREAM, SATIN SHEEN, WALLS
PT-4	SHERWIN WILLIAMS- SW 7032 WARM STONE, SATIN SHEEN, WALLS
CARPET & RUBBER BASE	
CPT-1	MASLAND SPEAK T503 VIBRATO #50308 AZORES 24x 24 TILE 1/4 TURN LAY
CPT-2	"HOUSTON" FROM DISCOVERY ECO SERIES BY JULIE INDUSTRIES
RB-1	ROPPE- #150 DARK GRAY, 4", INCLUDE OUTSIDE PREMOLDED CORNERS.
ACOUSTICAL WALL PANEL	
AWP	ACOUSTICORD TRI/KES SOURCE-ONE ACS-32 HEATHER 6'-7" WIDE INSTALL HORIZONTALLY
ACOUSTICAL CEILING TILE	
ACP1	24"x 24"x 5/8" ANGLED TEGULAR, CAC=35, ARMSTRONG 816 (ANGLED TEGULAR) OR OLYMPIA MICRO CLIMAPLUS 4221 BY USG
WOOD	
WD-1	NATURAL MAPLE STAIN, WOOD SATIN
SOLID SURFACE	
SS-1	COLOR TO BE SELECTED IN SHOP DRAWINGS



C8 MAIN FLOOR FINISH PLAN
 1/8" = 1'-0"
 0 4' 8' 16'

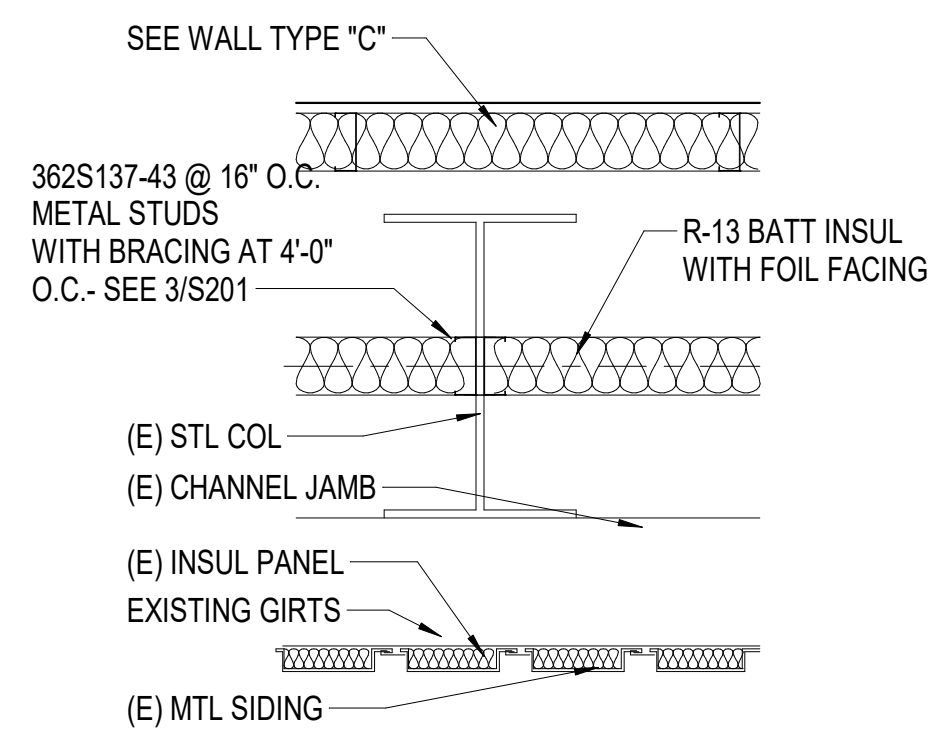
FINISH SCHEDULE

ROOM NUMBER	NAME	FLOOR NAME	WALL BASE	WALL FINISHES				CEILING FINISH	CEILING HEIGHT	COMMENTS
				NORTH	WEST	SOUTH	EAST			
3	STAIR	-	-	-	-	-	-	-	-	NO WORK IN THIS AREA
1051	CBI LAB	CPT-1	RB-1	PT-2	PT-2	PT-1	PT-1	ACP-1	9' - 0"	
1051A	BRK RM	VCT-1	RB-1	PT-1	PT-2	PT-3	PT-1	ACP-1	9' - 0"	WD-1 FOR MILLWORK/SS-1 FOR COUNTERTOP
1051B	MECH STOR	VCT-1	RB-1	PT-1	PT-3	PT-1	PT-1	ACP-1	9' - 0"	
1051C	(E) MECH	-	-	-	-	-	-	-	-	NO WORK IN THIS AREA
1051D	AREA A SUPERVISOR	CPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACP-1	9' - 0"	
1051E	AREA B SUPERVISOR	CPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACP-1	9' - 0"	
1051F	AREA C SUPERVISOR	CPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACP-1	9' - 0"	
1051G	AREA D SUPERVISOR	CPT-1	RB-1	PT-1	PT-1	PT-3	PT-1	ACP-1	9' - 0"	
1051H	TECH OPS OFF	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-3	ACP-1	9' - 0"	
1051I	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-3	ACP-1	9' - 0"	
1051J	AREA E SUPERVISOR	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-3	ACP-1	9' - 0"	
1051K	AREA F SUPERVISOR	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-3	ACP-1	9' - 0"	
1051L	STMC	CPT-1	RB-1	PT-3	PT-1	PT-1	PT-1	ACP-1	9' - 0"	
1051M	CONF RM	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACP-1	10' - 0"	PROVIDE SLIDER "IN USE / NOT IN USE" 8 ON NORTH END OF ROOM, AND 9 ON SOUTH END
1051N	CONF RM	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACP-1	10' - 0"	PROVIDE SLIDER "IN USE / NOT IN USE" 8 ON NORTH END OF ROOM, AND 9 ON SOUTH END
1051O	CORRIDOR	CPT-1	RB-1	PT-1	PT-2	PT-1	PT-2	ACP-1	9' - 0"	
1051P	CORRIDOR	CPT-1	RB-1	PT-2	PT-2	PT-2	PT-2	ACP-1	9' - 0"	
1051Q	CORRIDOR	CPT-1	RB-1	PT-2	PT-2	PT-2	PT-2	ACP-1	9' - 0"	
1051R	CORRIDOR	CPT-1	RB-1	PT-2	PT-2	PT-2	PT-2	ACP-1	9' - 0"	
1052	CONTROL RM	CPT-1/VCT-1	RB-1	PT-1	AWP/PT-1	AWP/PT-1	PT-1	ACP-1	12' - 0"	PROVIDE (2) ONE AT WEST LADDER AND ONE AT EAST LADDER
MEZZ	Room	-	-	-	-	-	-	-	-	

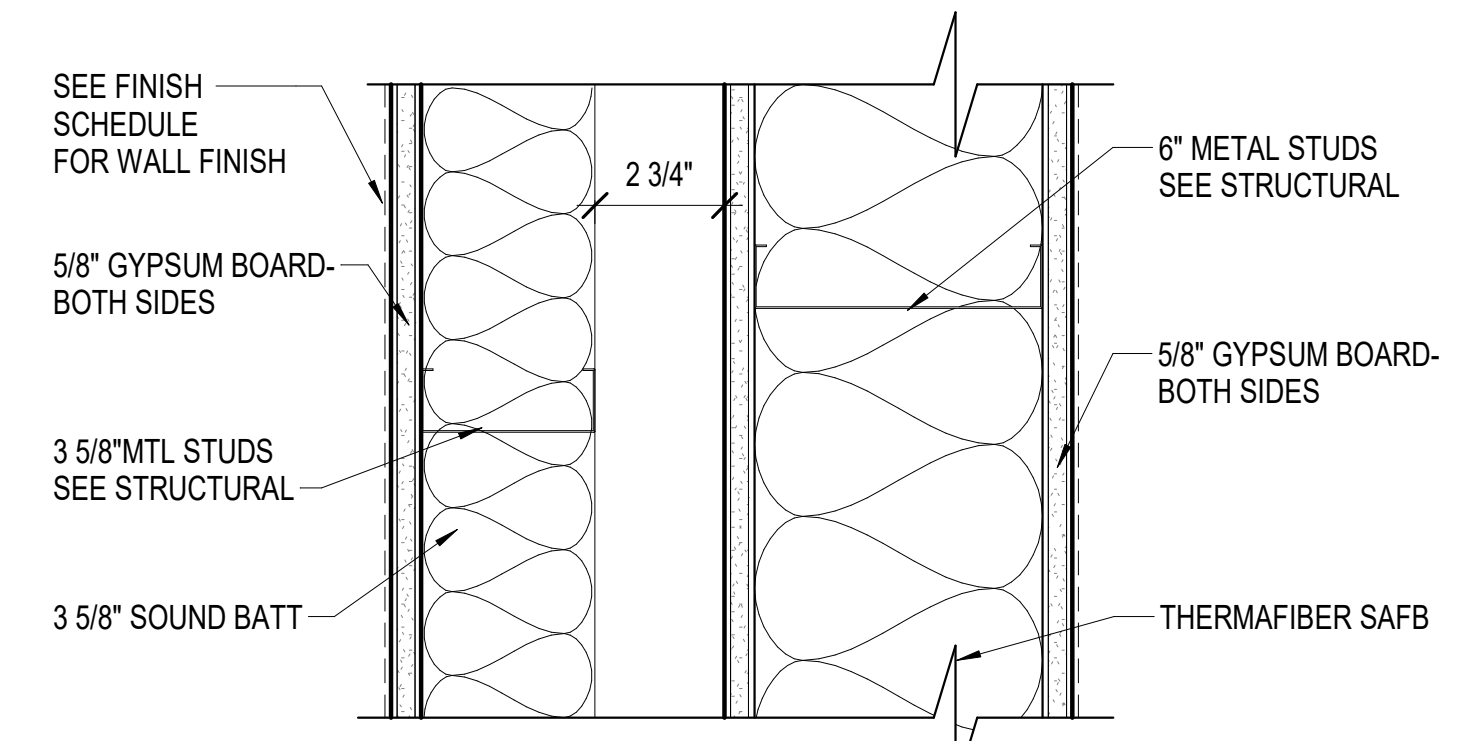


DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION ATO - TECHNICAL OPERATIONS WESTERN SERVICE AREA		ARTCC RECONFIGURE M1 ROOM FINISH PLAN	
PALMDALE		LOS ANGELES CTR	
REVIEWED BY	SUBMITTED BY	APPROVED BY	
ART GAPASIN PROJECT ENGINEER	DARYL KITCHEN MGR. ENGINEERING - LA		
DESIGNED KDL	ISSUED BY	DATE	JCN
DRAWN KDL	ENGINEERING SERVICES	02.04.2021	JCN
CHECKED SJP	ENROUTE/FSS	DRAWING NO	1004394
		ZLA-D-ARTCC- A102	REV

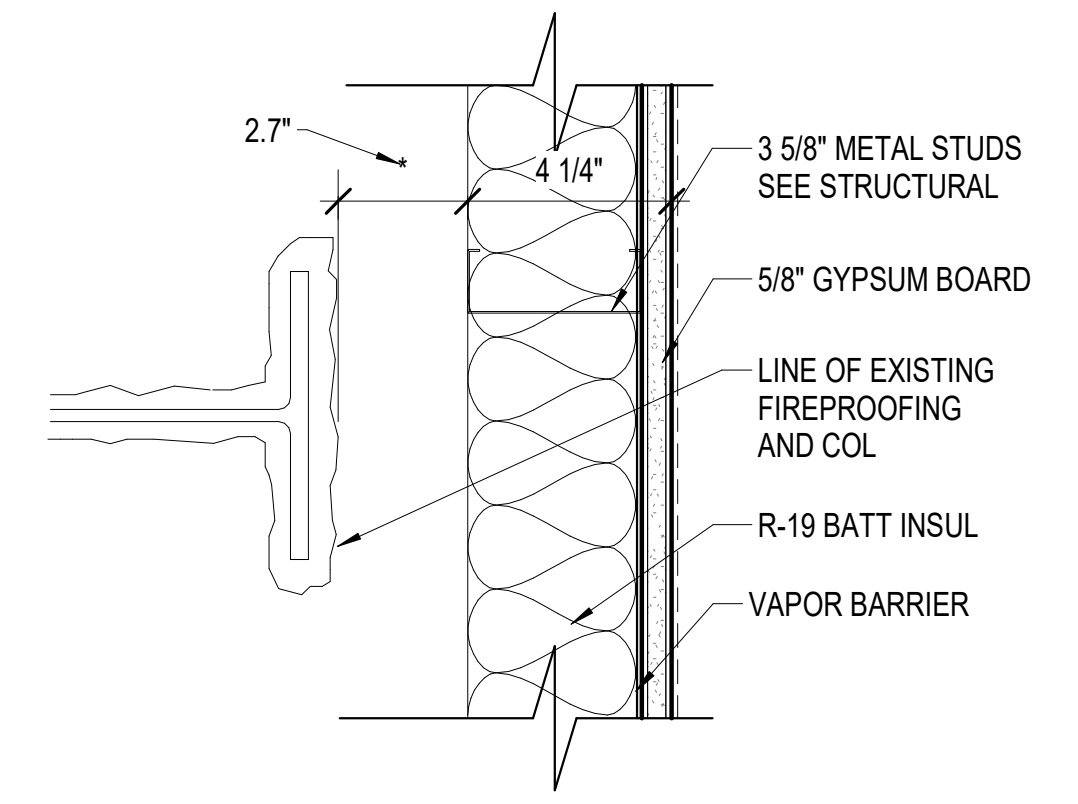
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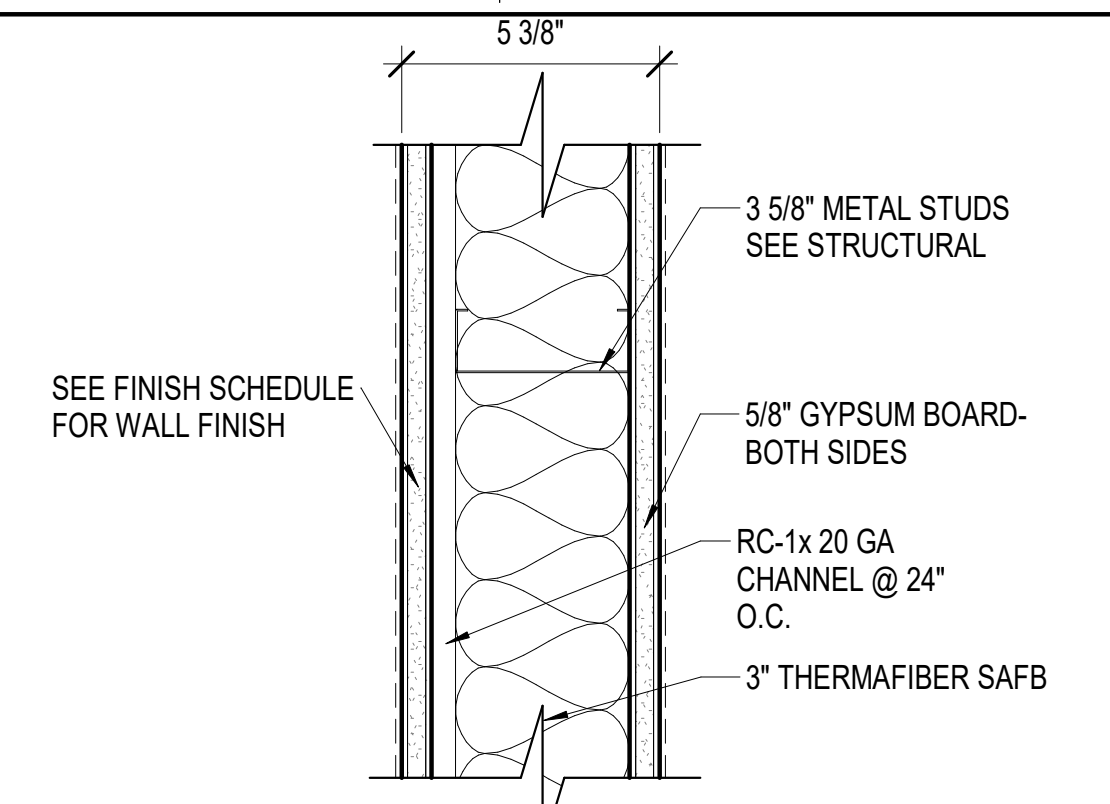
G8 WALL TYPE "G"
 1" = 1'-0"
 0 1/2' 1' 2'



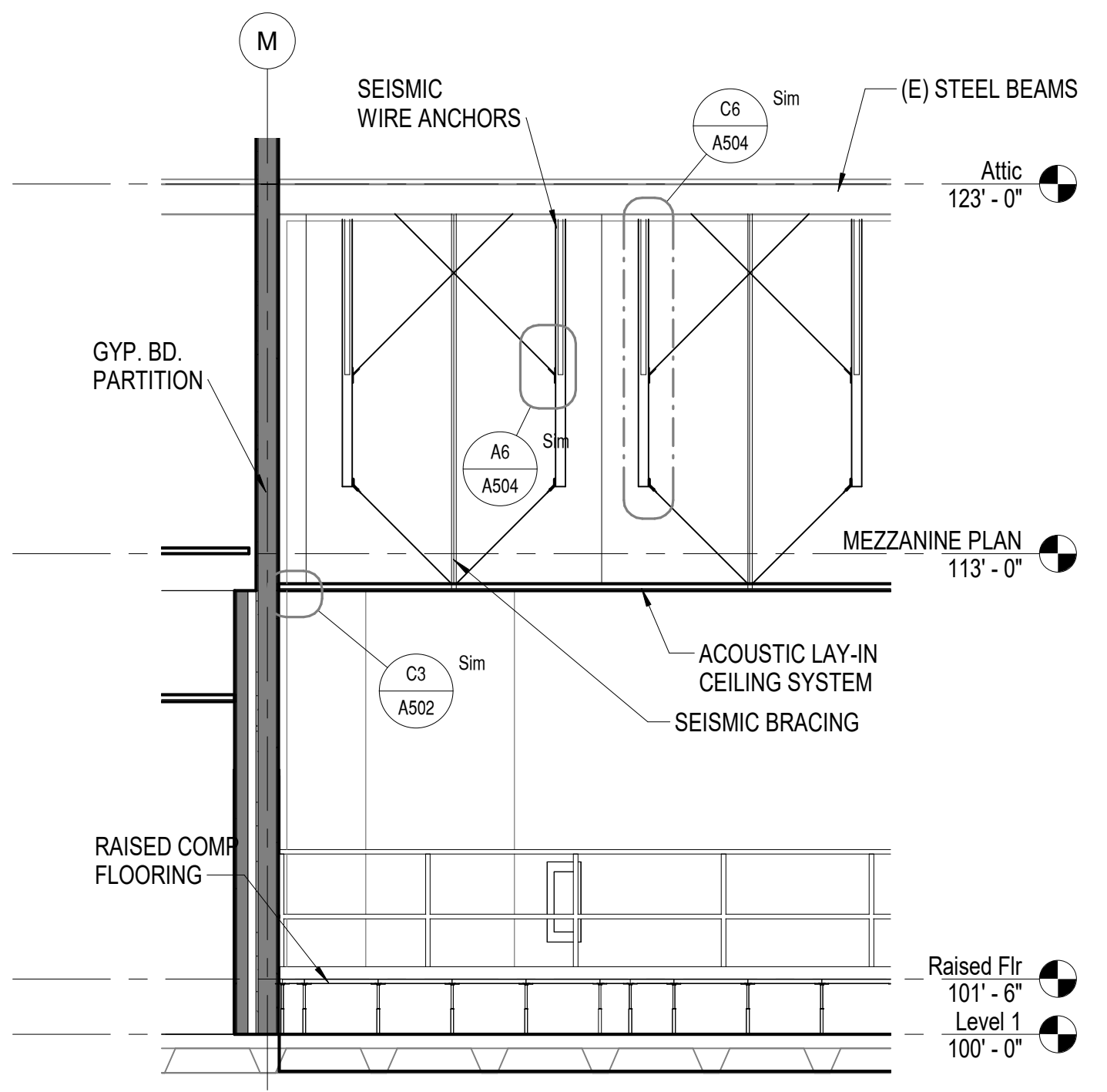
G6 WALL TYPE "F"
 3" = 1'-0"
 0 3" 6" 9"
 NOTE: 54 STC PARTITION
 AND UL U419 1 HOUR FIRE PARTITION



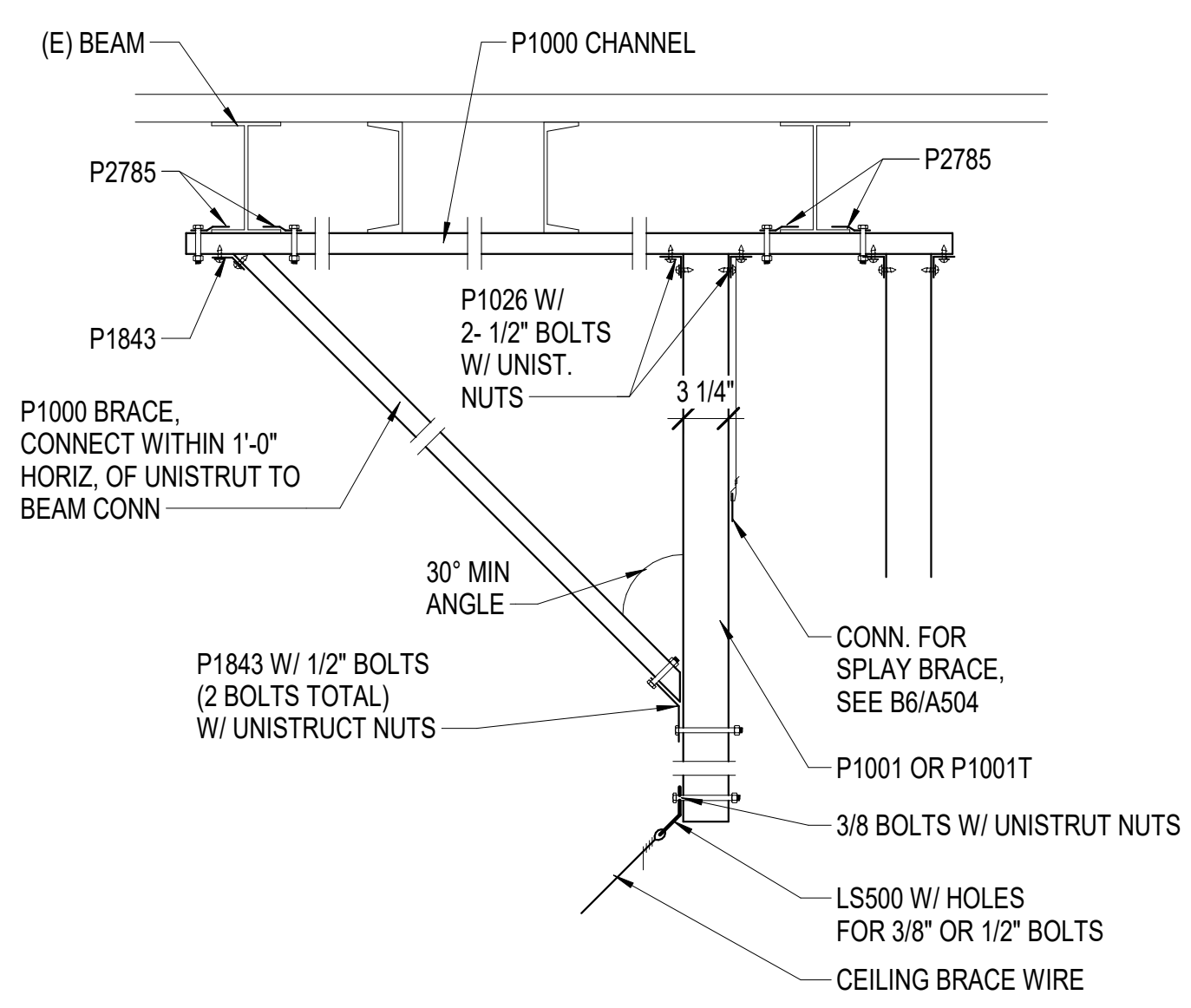
G4 WALL TYPE "C"
 3" = 1'-0"
 0 3" 6" 9"



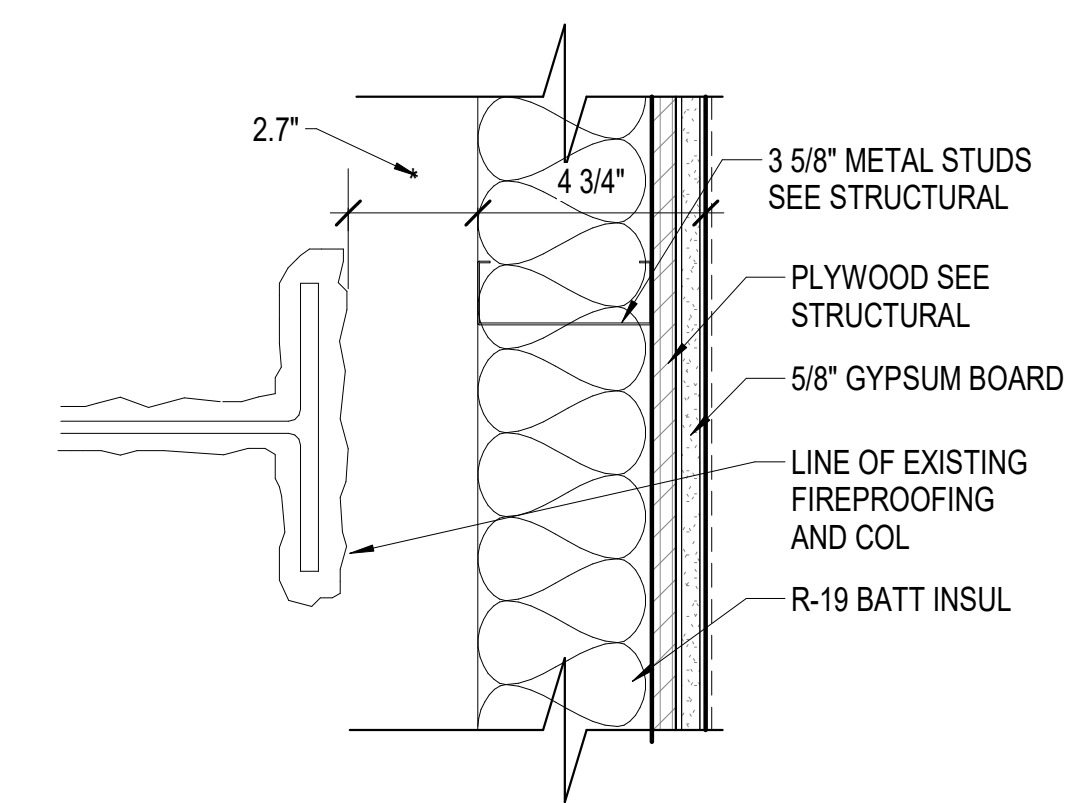
G2 WALL TYPE "A"
 3" = 1'-0"
 0 3" 6" 9"
 NOTE: 54 STC PARTITION
 AND UL U419 1 HOUR FIRE PARTITION



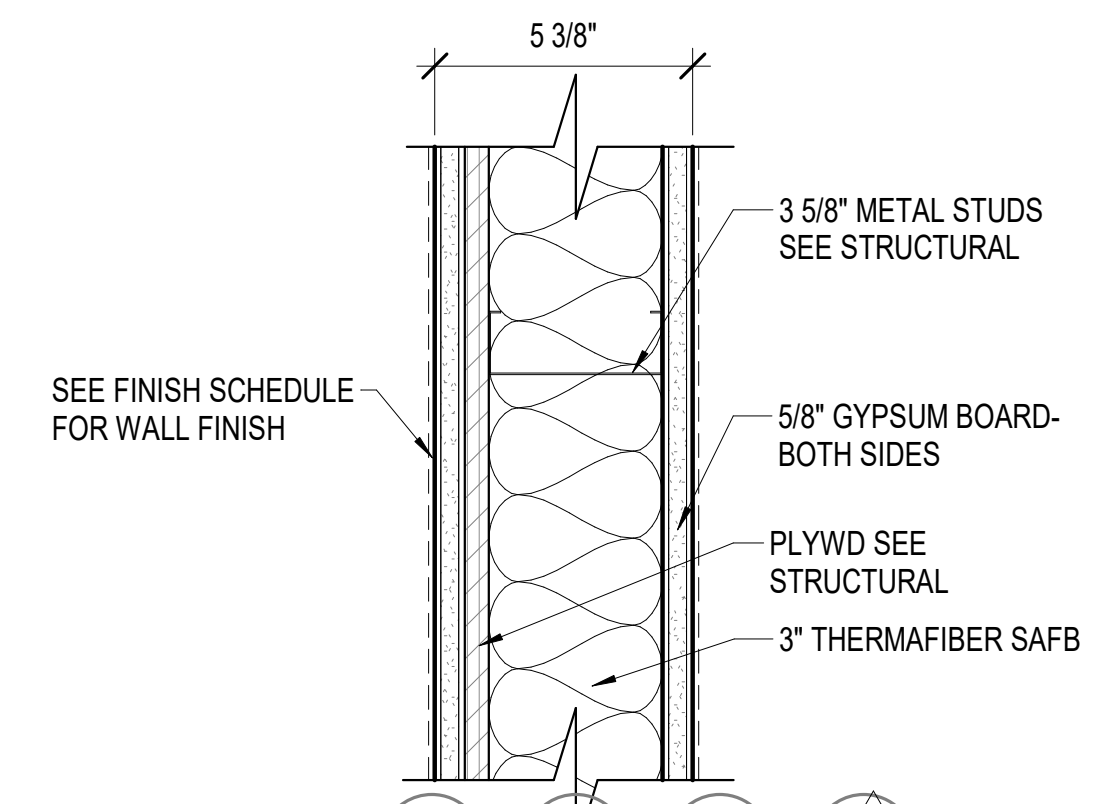
C8 CEILING BRACING DETAIL
 1/4" = 1'-0"
 0 2' 4' 8'



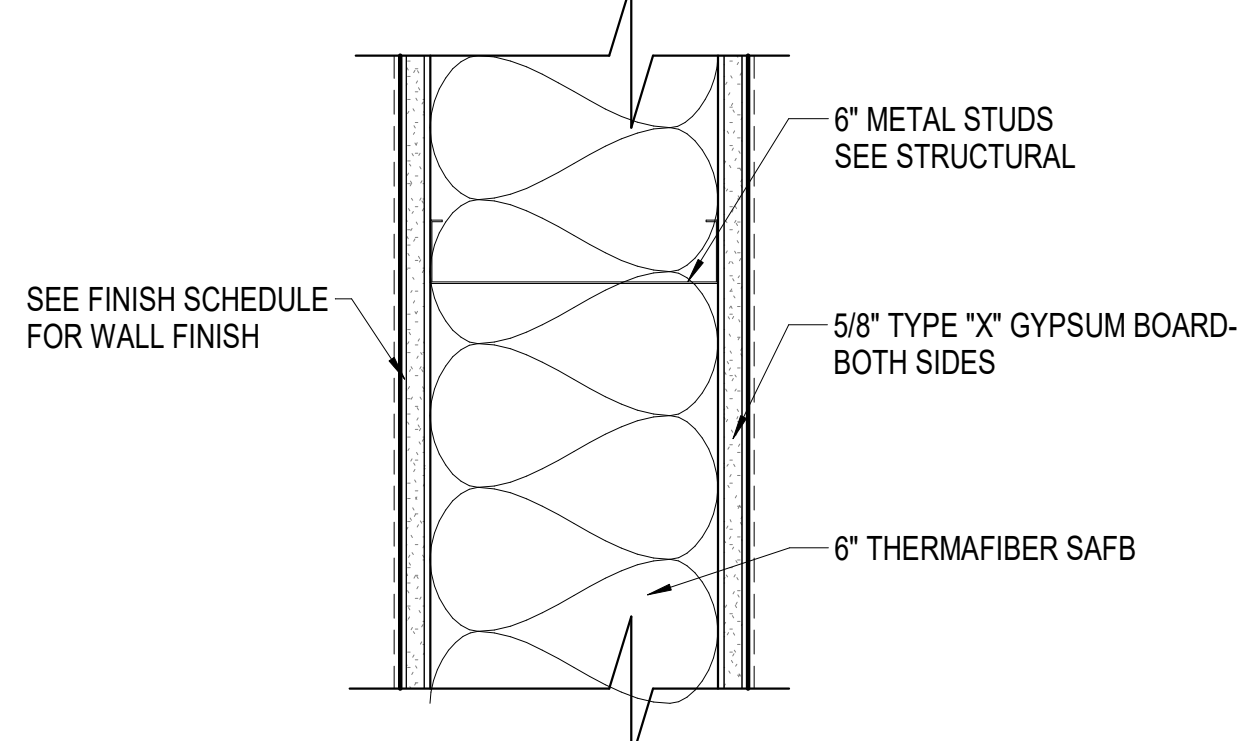
C6 LINE 8 OR LINE 11 DETAIL
 1" = 1'-0"
 0 1/2' 1' 2'



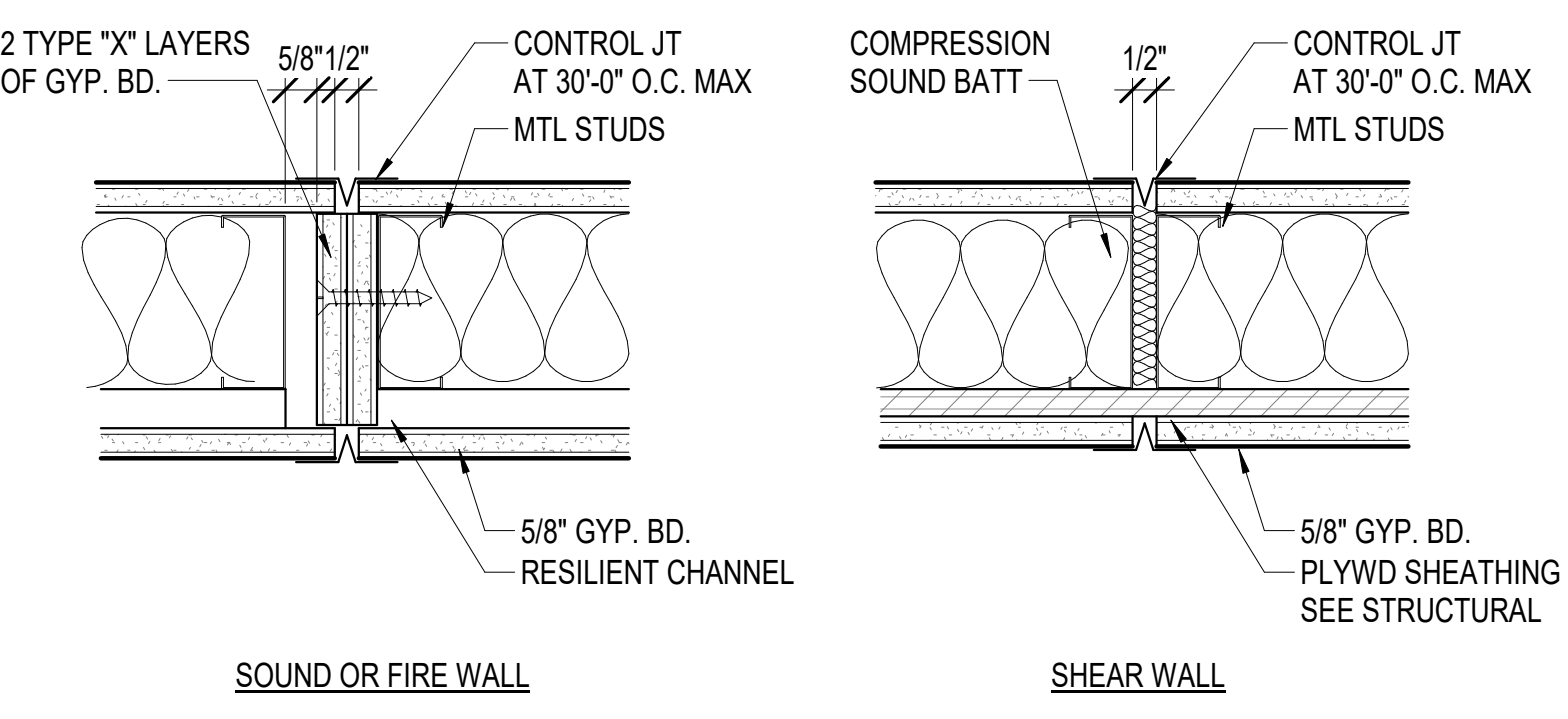
D4 WALL TYPE "D"
 3" = 1'-0"
 0 3" 6" 9"



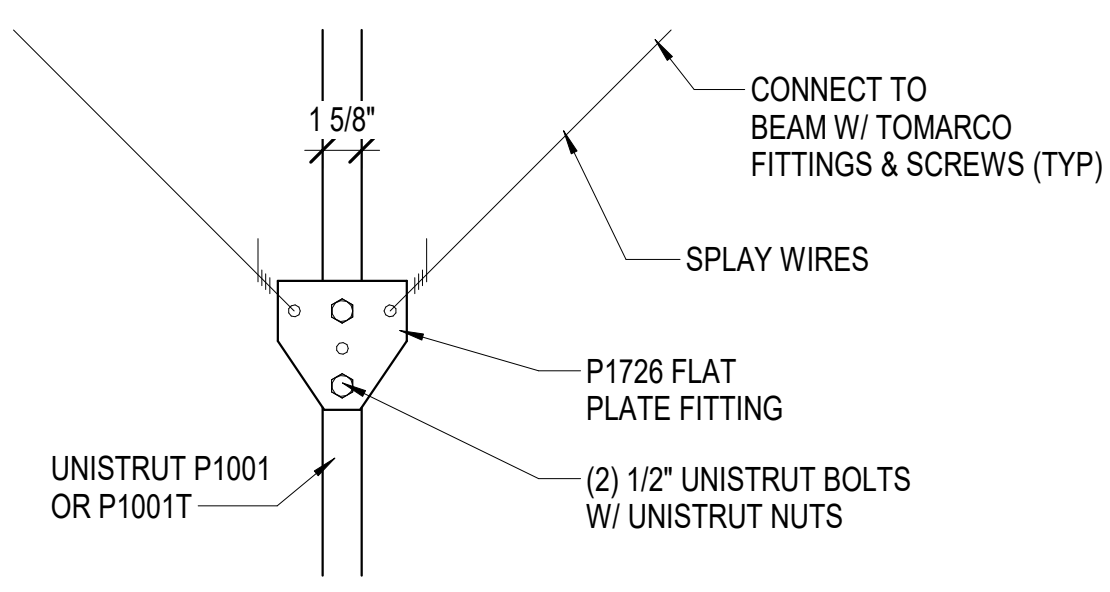
D2 WALL TYPE "B"
 3" = 1'-0"
 0 3" 6" 9"
 NOTE: 54 STC PARTITION
 1 HR FIRE WALL MEETING UL U423



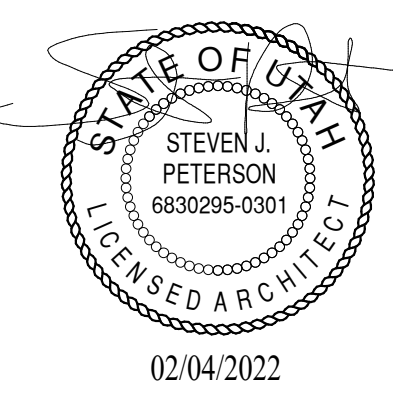
B4 WALL TYPE "E"
 3" = 1'-0"
 0 3" 6" 9"
 NOTE: 50 STC PARTITION
 AND UL U419 1 HOUR FIRE PARTITION



A8 GYP. BD. CONTROL JT
 3" = 1'-0"
 0 3" 6" 9"



A6 SPLAY WIRE DETAIL
 1 1/2" = 1'-0"
 0 1/2' 1' 1 1/2'



REV	APPROVED DATE	DESCRIPTION	JCN	REDLINE DATE	APVD
1		RFI 01		3/31/22	

DEPARTMENT OF TRANSPORTATION
 FEDERAL AVIATION ADMINISTRATION
 ATO - TECHNICAL OPERATIONS WESTERN SERVICE AREA

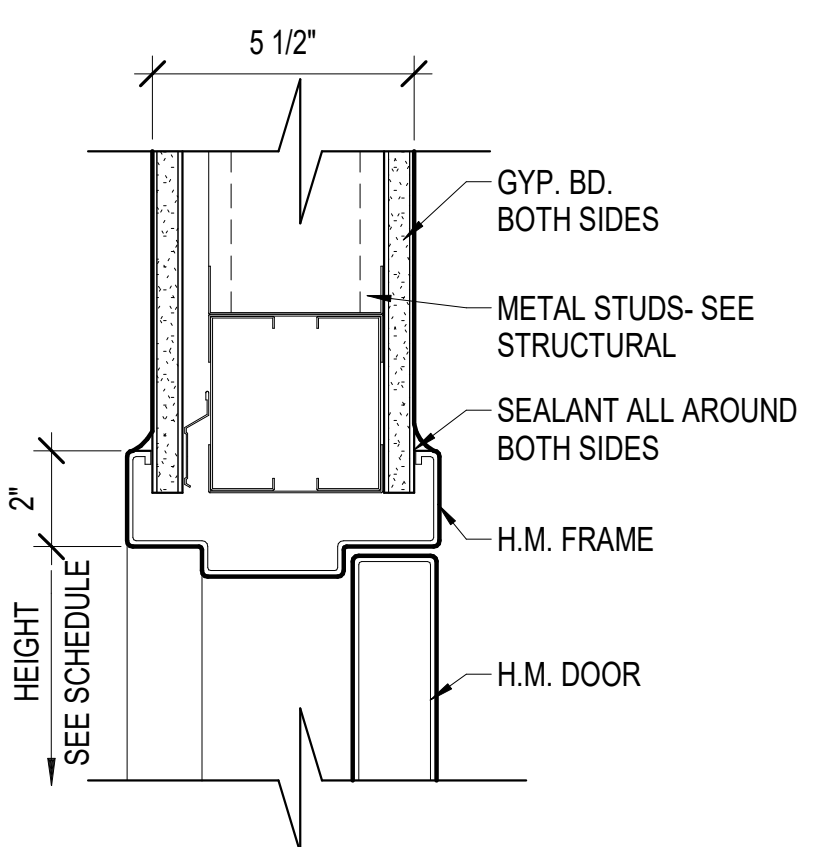
ARTCC RECONFIGURE M1 ROOM WALL TYPES AND DETAILS

PALMDALE LOS ANGELES CTR CA

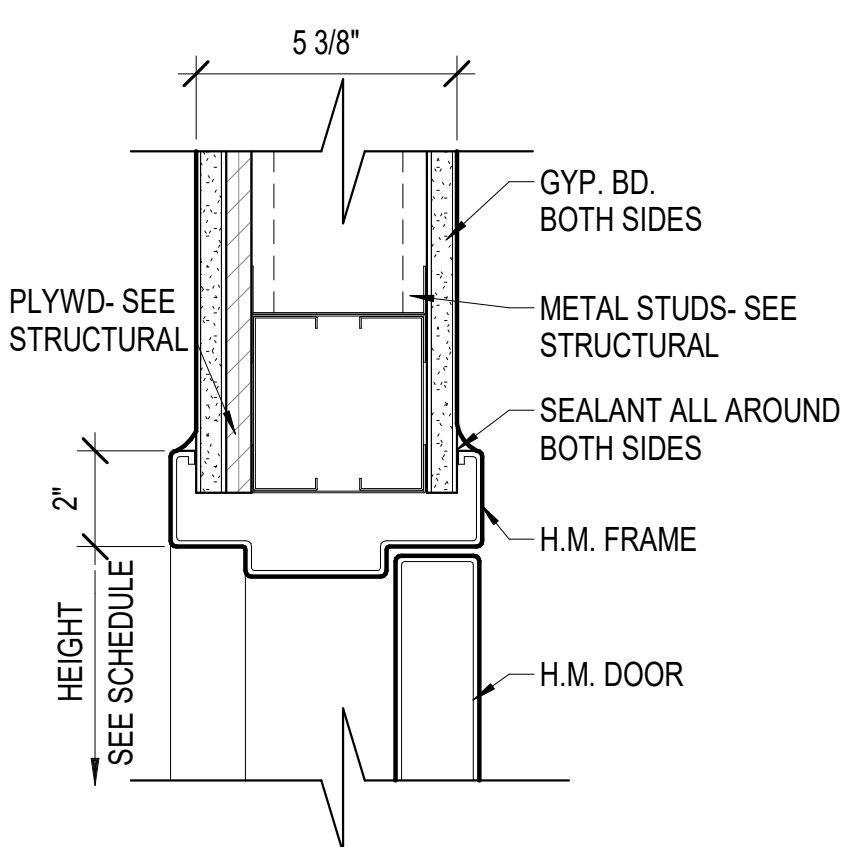
REVIEWED BY	SUBMITTED BY	APPROVED BY
	ART GAPASIN PROJECT ENGINEER	DARYL KITCHEN MGR. ENGINEERING - LA
DESIGNED	ISSUED BY	DATE
KDL	ENGINEERING SERVICES	02.04.2021 JCN
DRAWN	ENROUTE/FSS	DRAWING NO
KDL		ZLA-D-ARTCC- A504
CHECKED	SJP	REV
		1004394

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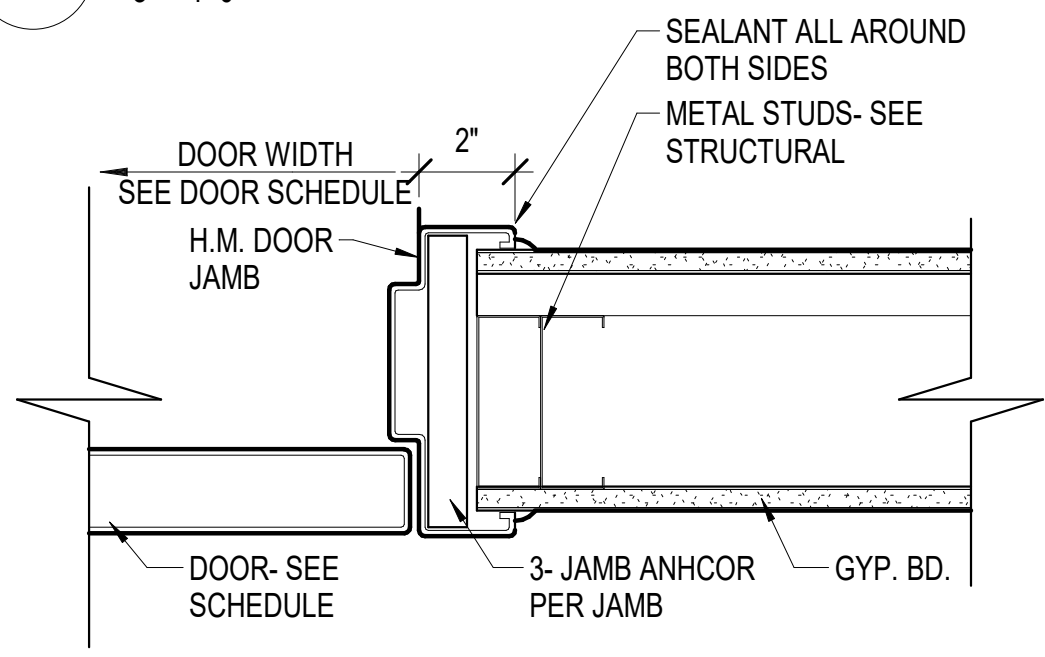
DOOR SCHEDULE																		
DOOR NUMBER	TYPE	DOOR					TOTAL DOOR WIDTH	FRAME			DETAILS			GLAZING	HARDWARE SET	FIRE RATING	STC RATING	COMMENTS
		MATERIAL	WIDTH	HEIGHT	THICKNESS			TYPE	MATERIAL	HEAD	JAMB	THRESHOLD						
51A	N	HM	4'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	D8/A601	D7/A601			60 GLASS	HS-1A	60 MIN	45		
51B	N	HM	3'-0"	7'-0"	1 3/4"	6'-0"	G2	HM	D8/A601	D7/A601			60 GLASS	HS-1	60 MIN	45	PAIR OF HM DOORS	
51A A	N	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	F2/A601	E2/A601			TEMP	HS-3		45		
51B A	F	WD	3'-0"	7'-0"	1 3/4"	6'-0"	G2	HM	C5/A601	A5/A601				HS-5		45	PAIR OF WOOD DOORS	
51D A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51E A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51F A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51G A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51H A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51I A	F	WD	3'-0"	7'-0"	1 3/4"	6'-0"	G2	HM	C5/A601	A5/A601				HS-4		45	PAIR OF WOOD DOORS	
51I B	F	WD	3'-0"	7'-0"	1 3/4"	6'-0"	G2	HM	F2/A601	E2/A601				HS-4		45	LOCKS ONLY NO HANDLES, PAIR OF WOOD DOORS	
51J A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51K A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51L A	F	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601				HS-3		45		
51M A	N	WD	3'-0"	7'-0"	1 3/4"	6'-0"	G2	HM	C5/A601	A5/A601			FIRELITE	HS-2	45 MIN	49	PAIR OF WOOD DOORS	
51M B	N	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601			FIRELITE	HS-2A	45 MIN	49		
51N A	N	WD	3'-0"	7'-0"	1 3/4"	6'-0"	G2	HM	C5/A601	A5/A601			FIRELITE	HS-2	45 MIN	49	PAIR OF WOOD DOORS	
51N B	N	WD	3'-0"	7'-0"	1 3/4"	3'-0"	G1	HM	C5/A601	A5/A601			FIRELITE	HS-2A	45 MIN	49		



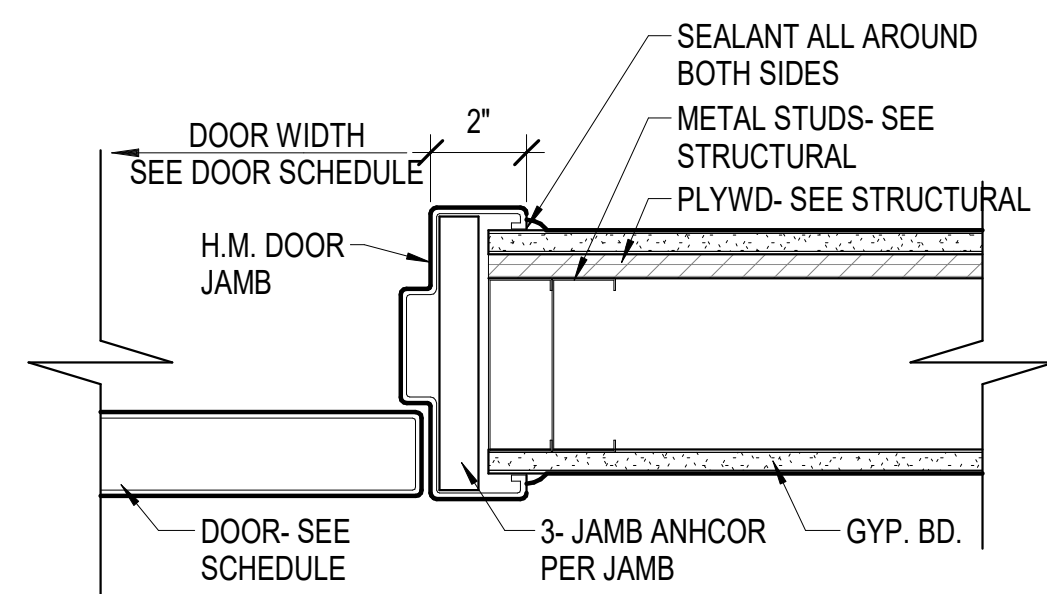
F3 DOOR HEAD- MTL STUDS
3" = 1'-0"



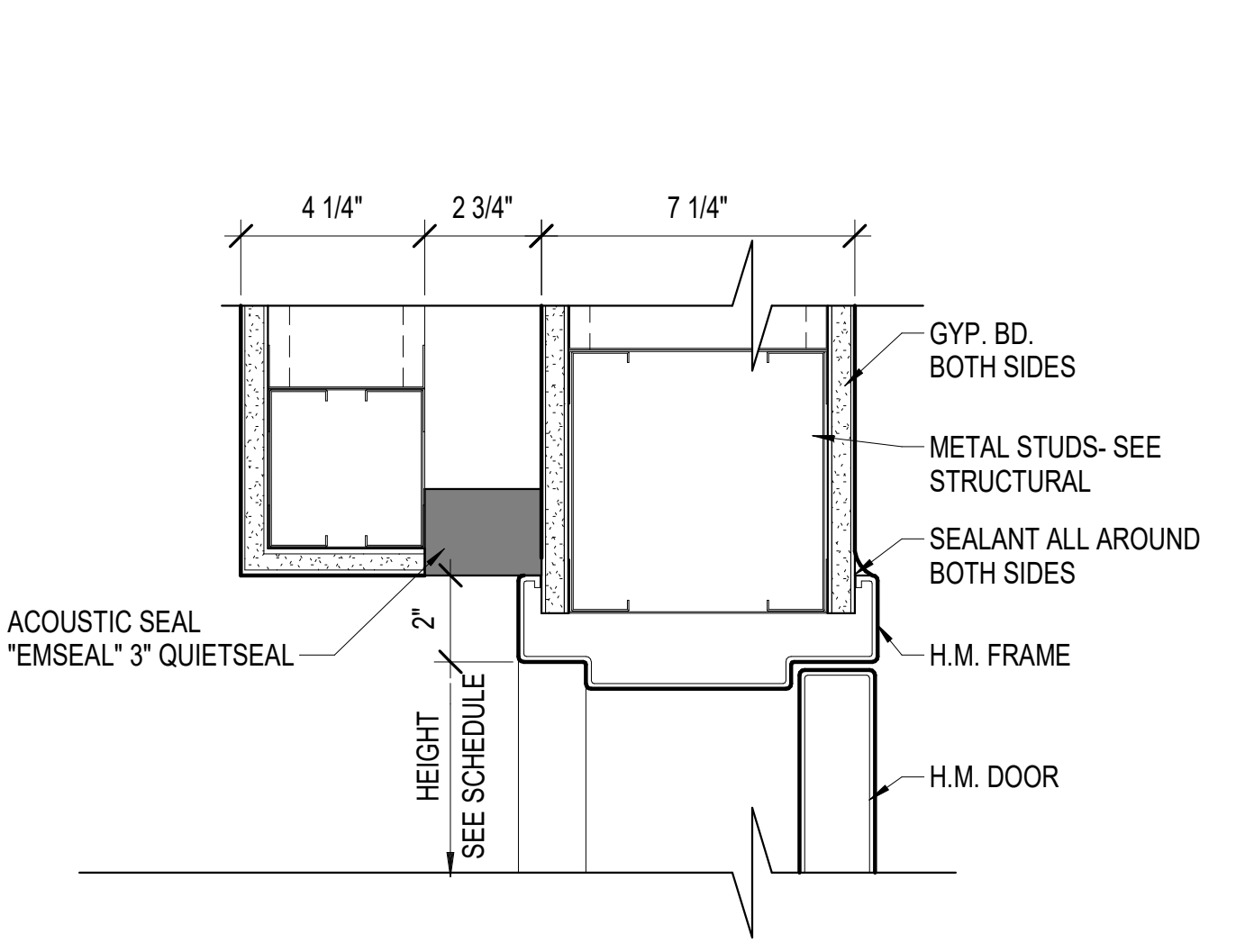
F2 DOOR HEAD- SHEAR MTL STUDS
3" = 1'-0"



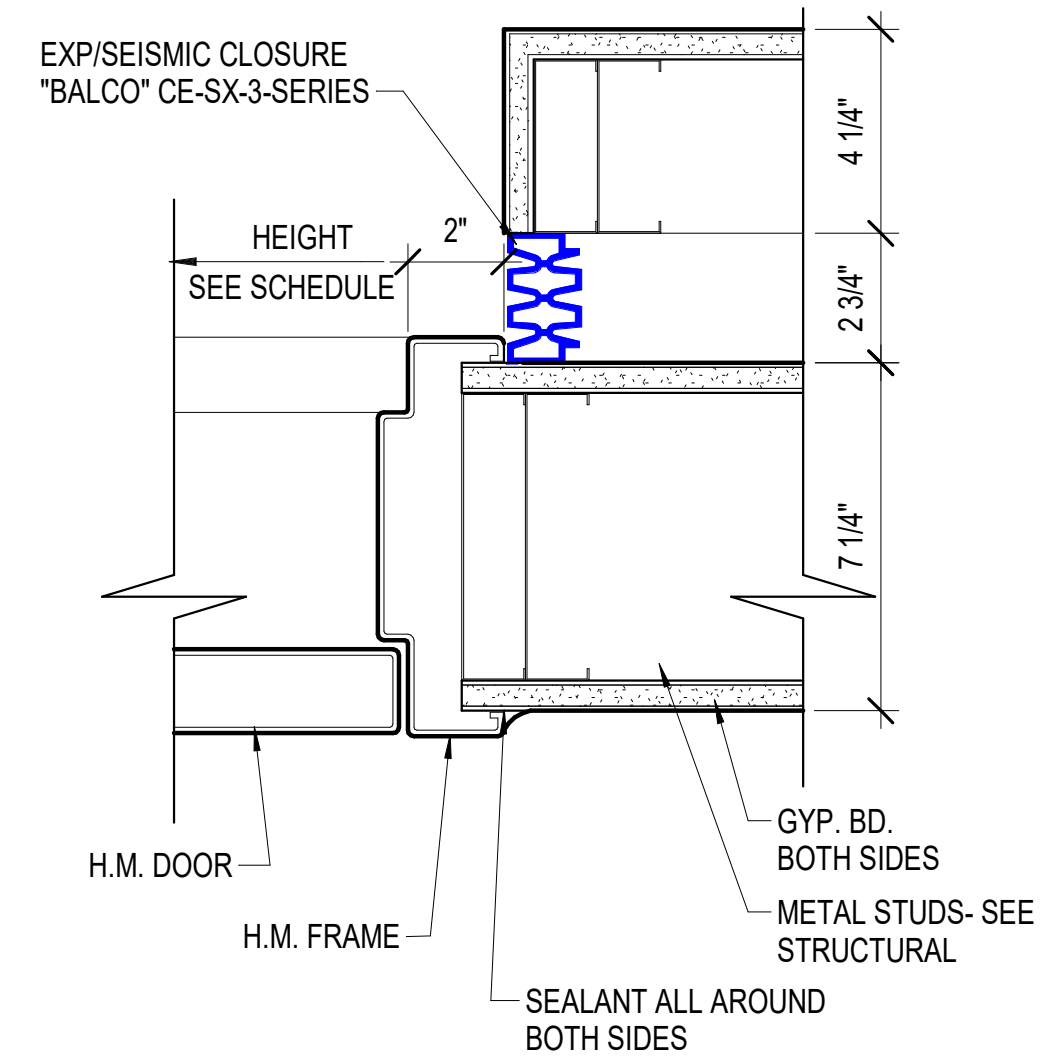
E3 DOOR JAMB- MTL STUDS
3" = 1'-0"



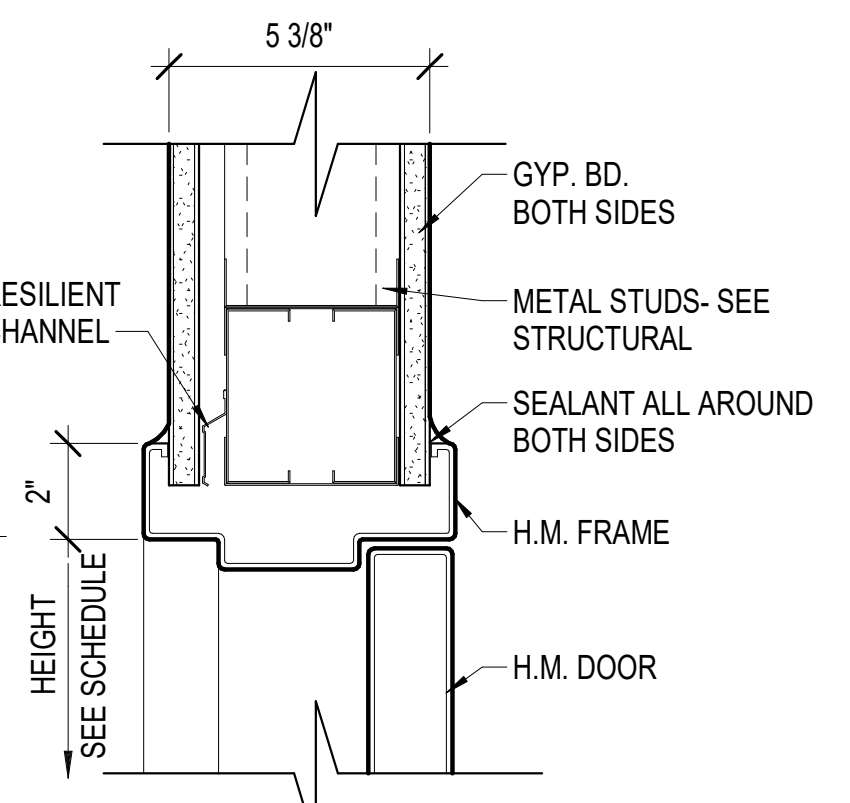
E2 DOOR JAMB- SHEAR MTL STUDS
3" = 1'-0"



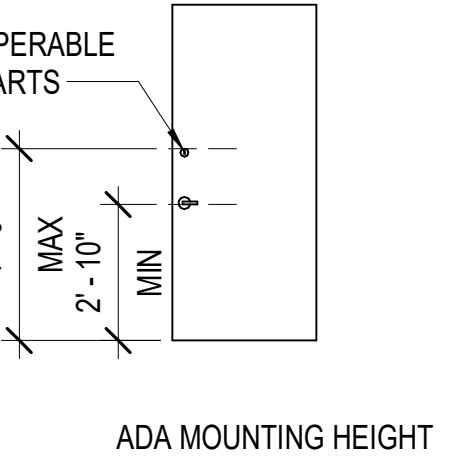
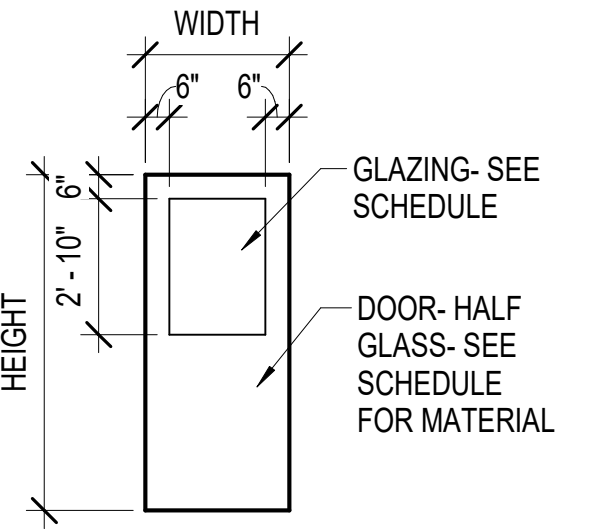
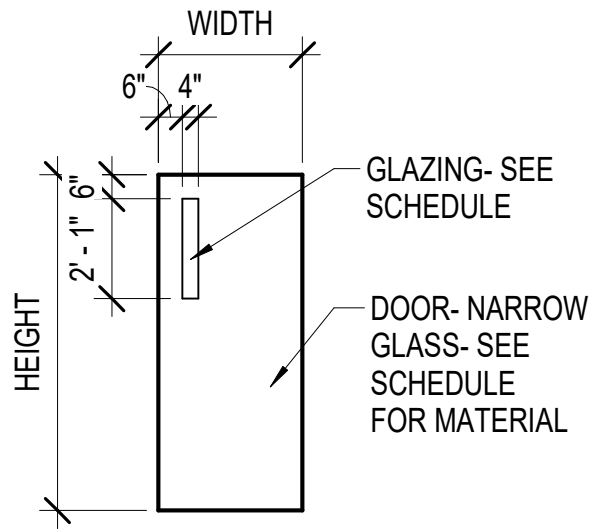
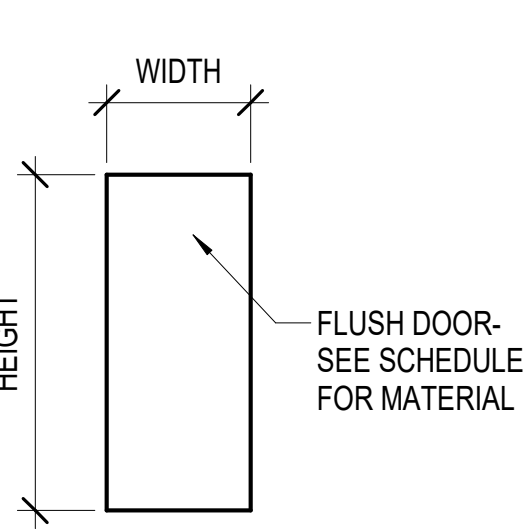
D8 DOOR HEAD- GRID M
3" = 1'-0"



D7 DOOR JAMB- GRID M
3" = 1'-0"



C5 DOOR HEAD- SOUND MTL STUDS
3" = 1'-0"

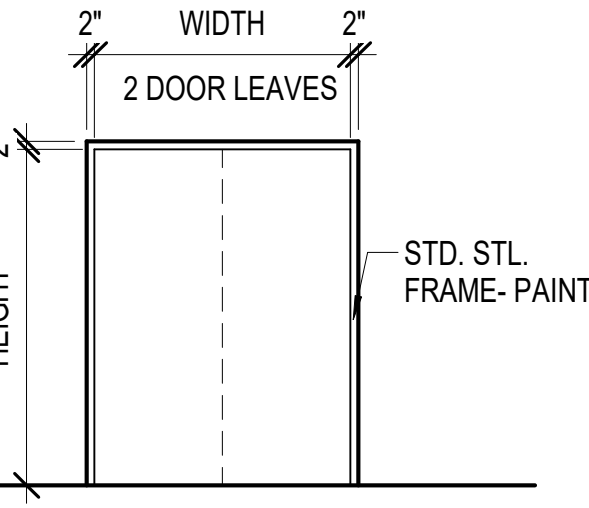
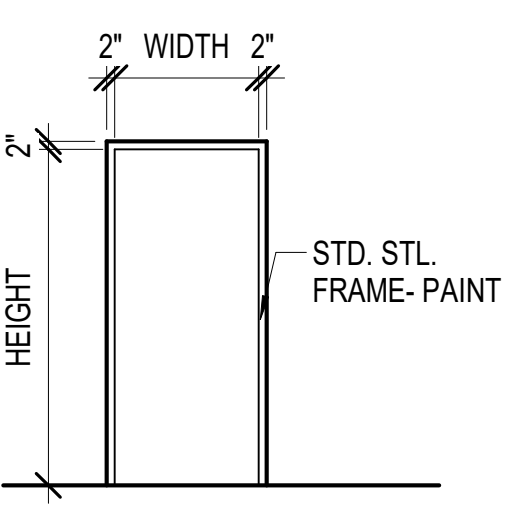


DOOR TYPE F

DOOR TYPE N

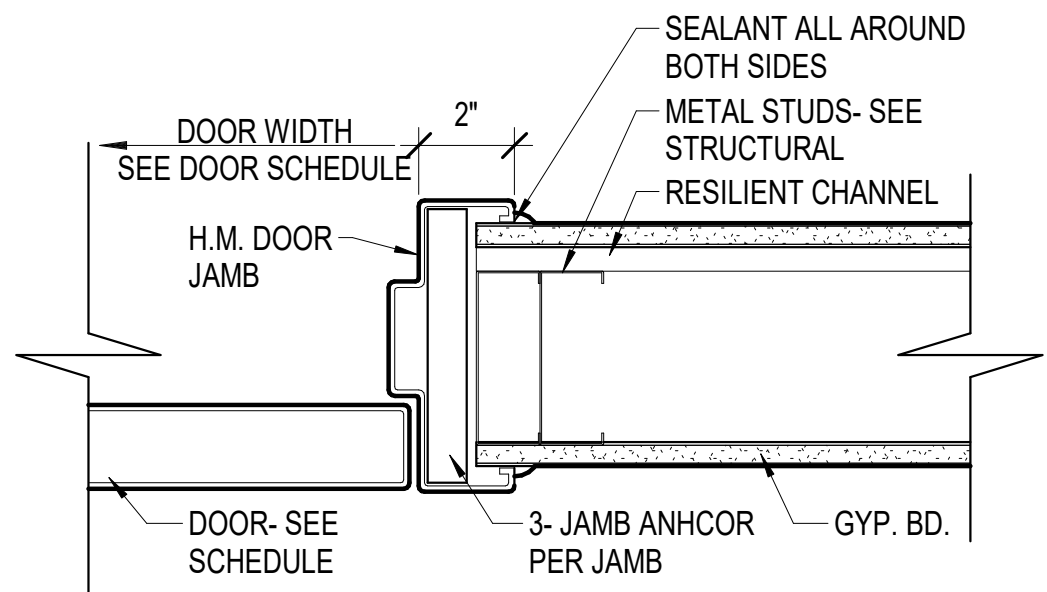
DOOR TYPE G

ADA MOUNTING HEIGHT



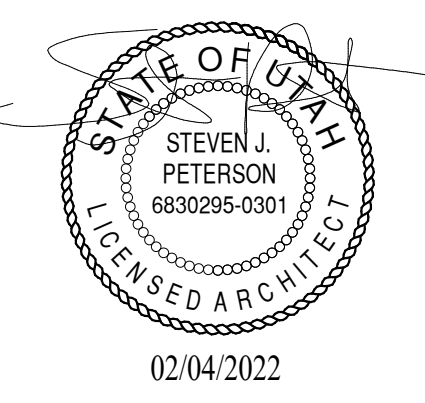
FRAME TYPE G1

FRAME TYPE G2



A5 DOOR JAMB- SOUND MTL STUDS
3" = 1'-0"

C8 DOOR AND FRAME TYPES
1/4" = 1'-0"



1		RFI 01	3/31/22
REV	APPROVED DATE	DESCRIPTION	JCN REDLINE DATE APVD
DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION ATO - TECHNICAL OPERATIONS WESTERN SERVICE AREA			
ARTCC RECONFIGURE M1 ROOM DOOR SCHEDULE AND TYPES			
PALMDALE		LOS ANGELES CTR	
REVIEWED BY	SUBMITTED BY	APPROVED BY	
ART GAPASIN PROJECT ENGINEER		DARYL KITCHEN MGR. ENGINEERING - LA	
DESIGNED	KDL	ISSUED BY	DATE 02.04.2021 JCN 1004394
DRAWN	KDL	ENGINEERING SERVICES	DRAWING NO
CHECKED	SJP	ENROUTE/FSS	ZLA-D-ARTCC- A601

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SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Mechanical door hardware for the following:
 - a. Swinging doors.
2. Cylinders for door hardware specified in other Sections.
3. Electrified door hardware.

1.2 PREINSTALLATION MEETINGS

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

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Door hardware schedule.
- C. Provide samples: For all exposed door hardware.
- D. Keying schedule.

1.4 INFORMATIONAL SUBMITTALS

- A. Sample warranty.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Supplier of products and an employer of workers trained and approved by product manufacturers and of an Architectural Hardware Consultant who is available during

the course of the Work to consult Contractor, Architect, and Owner about door hardware and keying.

1. Scheduling Responsibility: Preparation of door hardware and keying schedule.

B. Architectural Hardware Consultant Qualifications: A person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and who is currently certified by DHI as an Architectural Hardware Consultant (AHC).

1.7 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Three years from date of Substantial Completion unless otherwise indicated below:

a. Manual Closers: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Rated Door Assemblies: Where fire-rated doors are indicated, provide door hardware complying with NFPA 80 that is listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

B. Means of Egress Doors: Latches do not require more than 15 lbf (67 N) to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.

C. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the ABA standards of the Federal agency having jurisdiction.

2.2 HINGES

A. Hinges: BHMA A156.1. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.

B. Electrified Antifriction-Bearing Hinges: Full-mortise mounting.

1. Bearing Material: Manufacturer's standard antifriction bearing.

2. Grade: 1 (heavy weight).

2.3 MECHANICAL LOCKS AND LATCHES

- A. Lock Functions: As indicated in door hardware schedule.
- B. Lock Throw: Comply with testing requirements for length of bolts required for labeled fire doors, and as follows:
 - 1. Bored Locks: Minimum 1/2-inch (13-mm) latchbolt throw.
 - 2. Mortise Locks: Minimum 3/4-inch (19-mm) latchbolt throw.
 - 3. Deadbolts: Minimum 1-inch (25-mm) bolt throw.
- C. Lock Backset: 2-3/4 inches (70 mm) unless otherwise indicated.
- D. Lock Trim:
 - 1. Description: As indicated on Drawings.
 - 2. Levers: Cast.
 - 3. Escutcheons (Roses): Cast.
 - 4. Dummy Trim: Match lever lock trim and escutcheons.
- E. Strikes: Provide manufacturer's standard strike for each lock bolt or latchbolt complying with requirements indicated for applicable lock or latch and with strike box and curved lip extended to protect frame; finished to match lock or latch.
 - 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
- F. Bored Locks: BHMA A156.2; Grade 1; Series 4000.
- G. Mortise Locks: BHMA A156.13; Operational Grade 1; stamped steel case with steel or brass parts; Series 1000.

2.4 AUXILIARY LOCKS

- A. Bored Auxiliary Locks: BHMA A156.36; Grade 1; with strike that suits frame.
- B. Mortise Auxiliary Locks: BHMA A156.36; Grade 1; with strike that suits frame.
- C. Narrow Stile Auxiliary Locks: BHMA A156.36; Grade 1; with strike that suits frame.

2.5 ELECTRIC STRIKES

- A. Electric Strikes: BHMA A156.31; Grade 1; with faceplate to suit lock and frame.

2.6 SURFACE BOLTS

- A. Surface Bolts: BHMA A156.16.

2.7 MANUAL FLUSH BOLTS

- A. Manual Flush Bolts: BHMA A156.16; minimum 3/4-inch (19-mm) throw; designed for mortising into door edge.

2.8 LOCK CYLINDERS

- A. Provide construction cores and keying during the construction period. Construction, control and operating key and cores shall not be part of the FAA's permanent keying system. Furnish permanent cores and keys for FAA.
- B. Cylinders shall be: Best CoreMax Core to receive type X key: 1CX7XC11626.
- C. Coordinate with FAA installation of interchangeable cores by contractor in locksets at completion of installation deliver keysets back to COR. COR will test locksets and keying to ensure proper installation. Contractor shall perform necessary corrections as directed by COR.
- D. Metals: Construct lock cylinder parts from brass or bronze, stainless steel, or nickel silver.
- E. Construction Cores: Provide construction cores that are replaceable by permanent cores. Provide 10 construction master keys.

2.9 KEYING

- A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, appendix. Incorporate decisions made in keying conference.
 - 1. No Master Key System: Only change keys operate cylinder.
 - 2. Master Key System: Change keys and a master key operate cylinders.
 - 3. Grand Master Key System: Change keys, a master key, and a grand master key operate cylinder.
 - 4. Great-Grand Master Key System: Change keys, a master key, a grand master key, and a great-grand master key operate cylinders.
 - 5. Existing System:
 - a. Master key or grand master key locks to Owner's existing system.
 - b. Re-key Owner's existing master key system into new keying system.
 - 6. Keyed Alike: Key all cylinders to same change key.
- B. Keys: Brass.

1. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:
 - a. Notation: Information to be furnished by Owner.
2. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:

2.10 ACCESSORIES FOR PAIRS OF DOORS

- A. Coordinators: BHMA A156.3; consisting of active-leaf, hold-open lever and inactive-leaf release trigger; fabricated from steel with nylon-coated strike plates; with built-in, adjustable safety release; and with internal override.
- B. Carry-Open Bars: BHMA A156.3; prevent the inactive leaf from opening before the active leaf; provide polished brass or bronze carry-open bars with strike plate for inactive leaves of pairs of doors unless automatic or self-latching bolts are used.
- C. Astragals: BHMA A156.22.

2.11 SURFACE CLOSERS

- A. Surface Closers: BHMA A156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written instructions for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

2.12 MECHANICAL STOPS AND HOLDERS

- A. Wall- and Floor-Mounted Stops: BHMA A156.16.

2.13 DOOR GASKETING

- A. Door Gasketing: BHMA A156.22; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.
- B. Maximum Air Leakage: When tested according to ASTM E283 with tested pressure differential of 0.3-inch wg (75 Pa), as follows:
 1. Smoke-Rated Gasketing: 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) of door opening.
 2. Gasketing on Single Doors: 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) of door opening.
 3. Gasketing on Double Doors: 0.50 cfm per ft. (0.000774 cu.) m/s per m) of door opening.

2.14 THRESHOLDS

- A. Thresholds: BHMA A156.21; fabricated to full width of opening indicated.

2.15 AUXILIARY DOOR HARDWARE

- A. Auxiliary Hardware: BHMA A156.16.

2.16 FINISHES

- A. Provide finishes complying with BHMA A156.18 as indicated in door hardware schedule.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Wood Doors: DHI's "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each door hardware item to comply with manufacturer's 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. Do not install surface-mounted items until finishes have been completed on substrates involved.
- C. Hinges: Install types and in quantities indicated in door hardware schedule, but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- D. Lock Cylinders: Install construction cores to secure building and areas during construction period.
 - 1. Replace construction cores with permanent cores as directed by Owner.
 - 2. Furnish permanent cores to Owner for installation.
- E. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- F. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
 - 1. Do not notch perimeter gasketing to install other surface-applied hardware.

- G. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- H. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.2 ADJUSTING

- A. 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.

3.3 Door Hardware Groups

A. HS-1 Doors –51B

1.	Hinges	BB1168 4.5 x 4.5 NRP	26D	HAG	
2.	Thru-Wire Hinge	BB1168 4.5 x 4.5 ETW-8	26D	HAG	
3.	Flushbolt	282D-12"	626	HAG	
4.	Dustproof Strike	280X	626	HAG	
5.	Storage Lockset	45H7D 15H	630	BES	
6.	Electric Strike	6223 FSE 24VDC	630	VON	
7.	Surface Closer	4111 Del Scush	689	LCN	
8.	Sound Seals	(4) S88,(2) 303AS		PEM	
9.	Sound Seals	(2) S44, (2) S88, (2) S773		PEM	
10.	Sound Seals	(2) ACP112, (2) S44		PEM	
11.	Threshold	2009APK	AL	PEM	

B. HS-1A Doors –51A

1.	Hinges	BB1168 4.5 x 4.5 NRP	26D	HAG	
2.	Thru-Wire Hinge	BB1168 4.5 x 4.5 ETW-8	26D	HAG	
3.	Dustproof Strike	280X	626	HAG	
4.	Storage Lockset	45H7D 15H	630	BES	
5.	Electric Strike	6223 FSE 24VDC	630	VON	
6.	Surface Closer	4111 Del Scush	689	LCN	
7.	Sound Seal	S44/S773/S88		PEM	
8.	Sound Seal	2 rows S771		PEM	
9.	Threshold	2009APK	AL	PEM	

C. HS-2 Doors-51M A, 51N A

1.	Hinges	BB1168 4.5 x 4.5 NRP	26D	HAG	
2.	Entry Lockset	93K7AB-15D	630	BES	
3.	Wall Stop	232W	32D	HAG	
4.	Flushbolt	282D-12"	626	HAG	
5.	Sound Seal	S44/S773/S88		PEM	
6.	Sound Seal	2 rows S771		PEM	
7.	Threshold	2009APK	AL	PEM	

D. HS-2A Doors-51M B, 51N B

1.	Hinges	BB1168 4.5 x 4.5 NRP	26D	HAG	
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2.	Entry Lockset	93K7AB-15D	630	BES
3.	Wall Stop	232W		32D HAG
4.	Sound Seal	S44/S773/S88		PEM
5.	Sound Seal	2 rows S771		PEM
6.	Threshold	2009APK		AL PEM

E. HS-3 Doors- 51A A, 51D A, 51E A, 51F A, 51G A, 51H A, 51J A, 51K A, 51L A

1.	Hinges	BB1168 4.5 x 4.5 NRP	26D	HAG
2.	Entry Lockset	93K7AB-15D	626	BES
3.	Wall Stop	232W		32D HAG
4.	Coat Hook	957P		26D HAG
5.	Sound Seal	S44/S773/S88		PEM
6.	Sound Seal	2 rows S771		PEM
7.	Threshold	2009APK		AL PEM

F. HS-4 Doors- 51I A, 51I B

1.	Hinges	BB1168 4.5 x 4.5 NRP	26D	HAG
2.	Entry Lockset	93K7AB-15D	630	BES
3.	Wall Stop	232W		32D HAG
4.	Flushbolt	282D-12"	626	HAG
5.	Sound Seal	S44/S773/S88		PEM
6.	Sound Seal	2 rows S771		PEM
7.	Threshold	2009APK		AL PEM

G. HS-5 Doors- 51B A

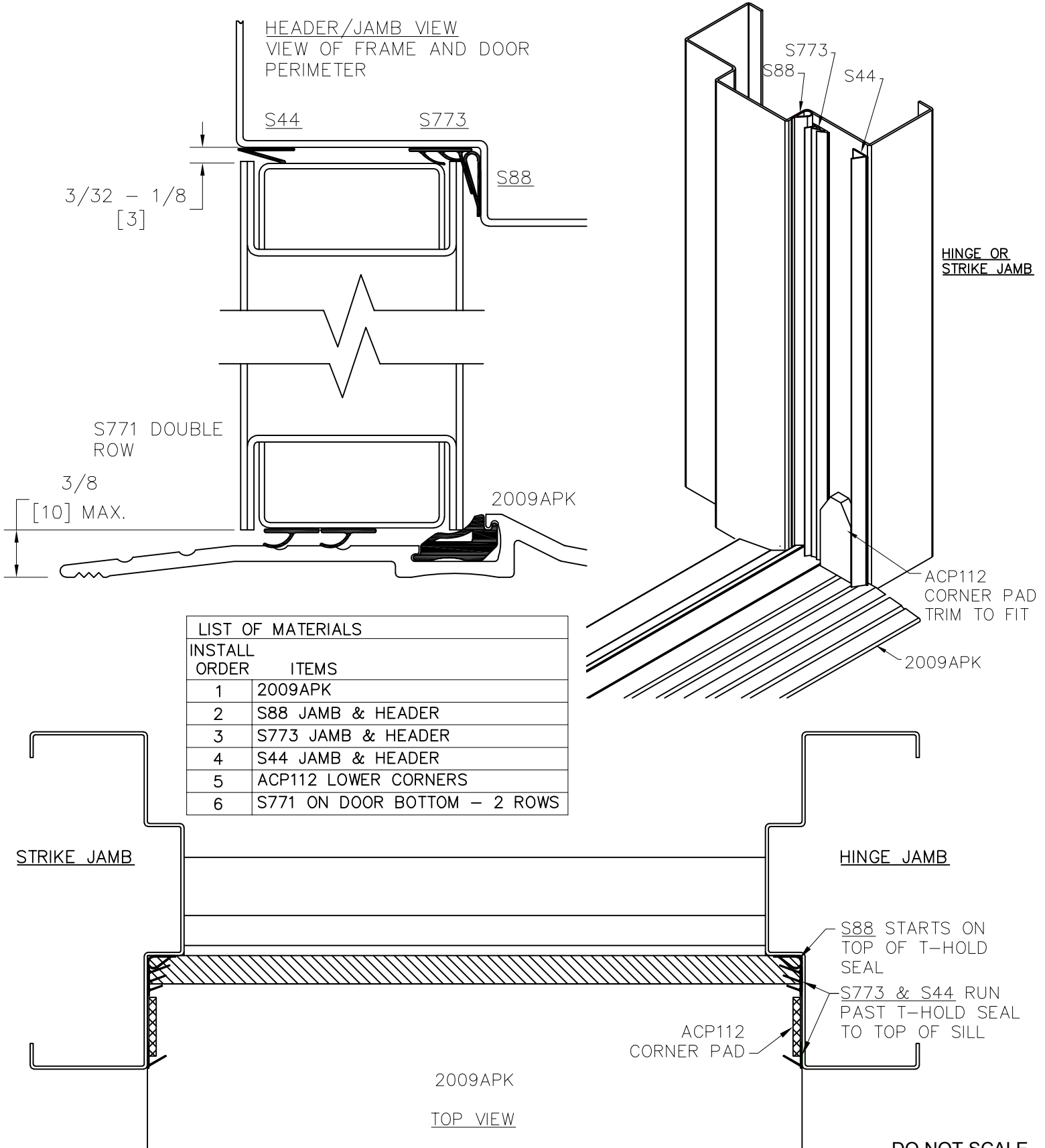
1.	Hinges	BB1168 4.5 x 4.5 NRP	26D	HAG
2.	Storage Lockset	93K7D-15D	630	BES
3.	Wall Stop	232W		32D HAG
4.	Flushbolt	282D-12"	626	HAG

END OF SECTION 087100

Effective Date: MARCH 2020 rev.03

SOUND SEAL SYSTEM 6

SYSTEM DETAIL OF AN ACOUSTICAL SEAL FOR DOOR & FRAME

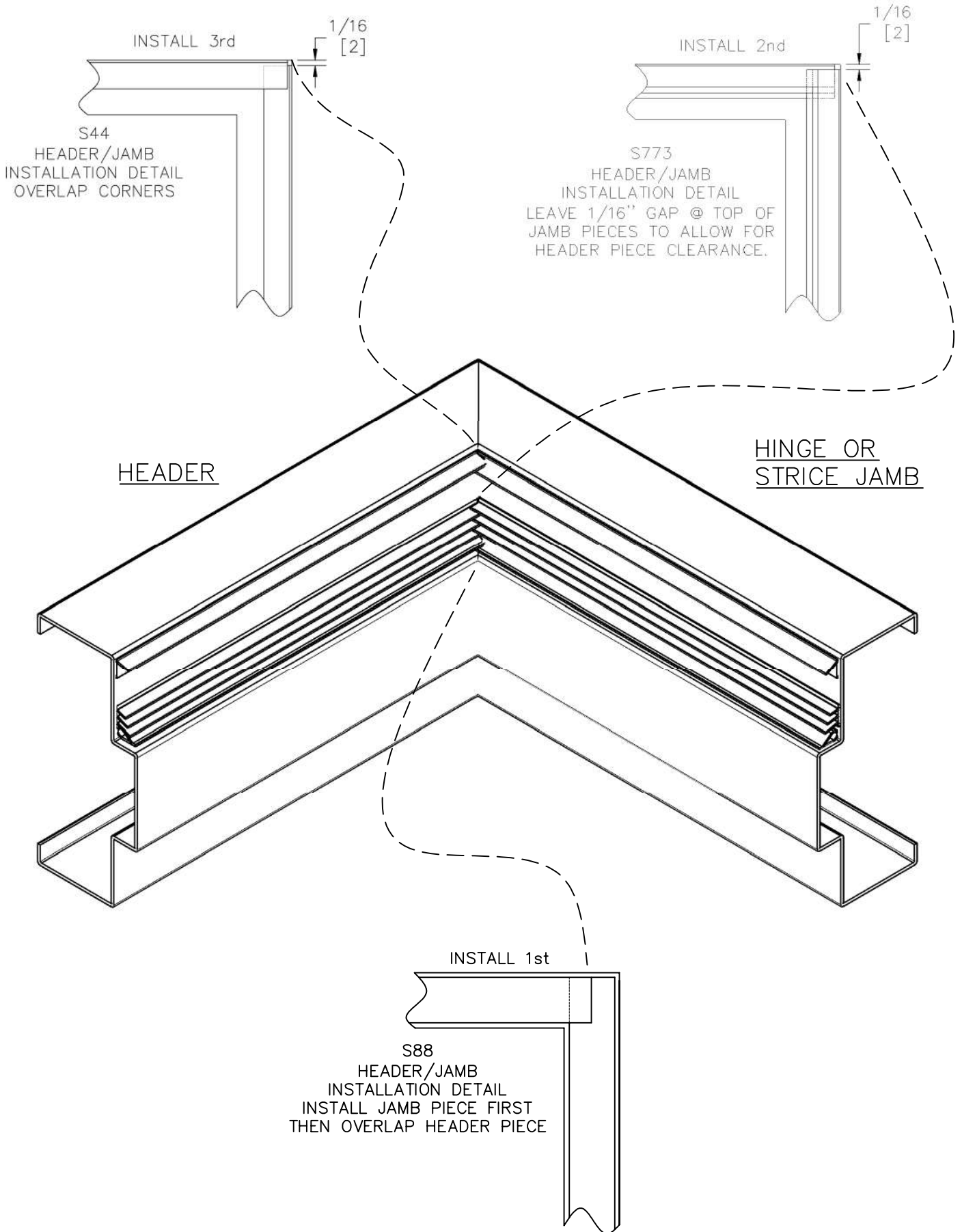


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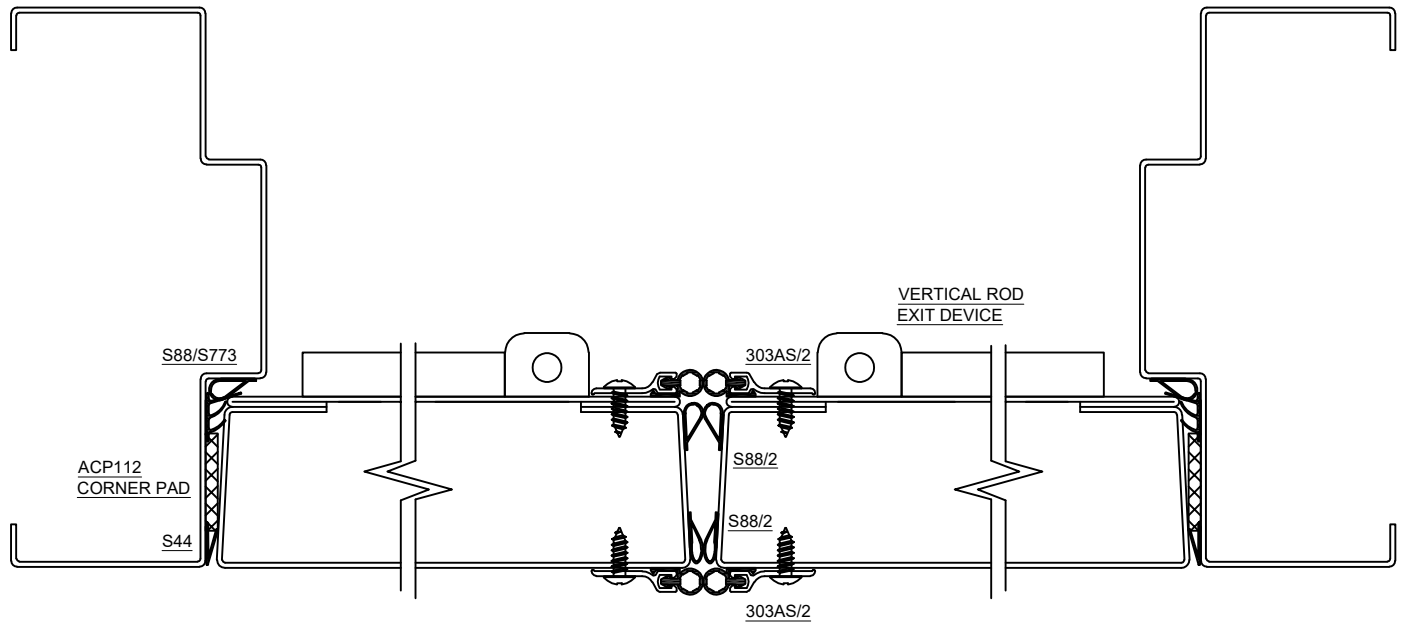
SEAL INSTALLATION DIAGRAM (SOUND SEAL SYSTEM 6)



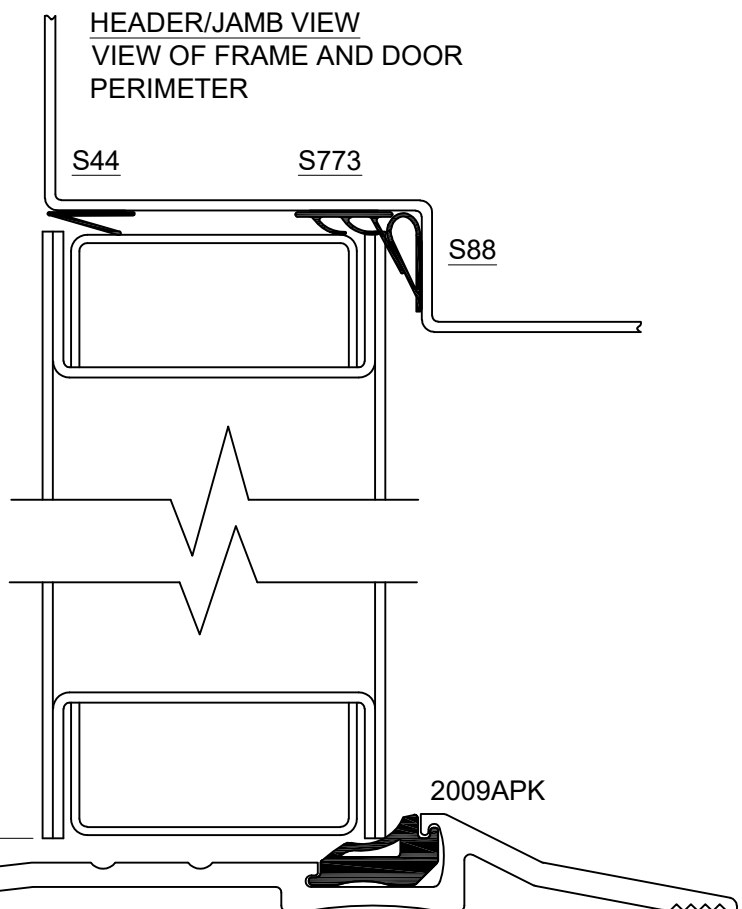
Effective Date: MARCH 2020 rev.02

SOUND SEAL SYSTEM 13 - EXIT DEVICE (STC49)

SYSTEM DETAIL OF AN ACOUSTICAL SEAL FOR DOOR & FRAME WITH ASTRAGAL



LIST OF MATERIALS	
INSTALL ORDER	ITEMS
1	2009APK
2	303AS MEETING STYLE - BOTH SIDES
3	S88 MEETING STYLE - 4 ROWS
4	S88 JAMBS & HEADER
5	S773 JAMBS & HEADER
6	S44 FRAME RABBIT CLOSE TO DOOR FACE
7	ACP112 CORNER PADS



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