AP.



451 & 475 30th Street

OGDEN, UTAH

ARCHITECT

OWNER

A4.7b - TYPICAL PENETRATION DETAILS

A4.7c - TYPICAL PENETRATION DETAILS

A4.7d - TYPICAL PENETRATION DETAILS

A6.4 - UNIT REFLECTED CEILING PLANS

A7.0 - INTERIOR ELEVATION / DETAILS

A4.8 - TYPICAL SOUND DETAILS

A6.1 - LEVEL 1 R.C.P.

A6.2 - LEVEL 2 R.C.P.

A6.3 - LEVEL 3 R.C.P.

GENERAL CONTRACTOR

CIVIL ENGINEER

STRUCTURAL ENGINEER

MECHANICAL/PLUMBING ENGINEER

ELECTRICAL ENGINEER

HARRIS ACHITECTURE PROVO, UTAH

ACTION PROPERTY MGT SANDY, UTAH

BONNEVILLE BUILDERS SALT LAKE CITY, UTAH

PARK ENGINEERING, INC HEBER CITY, UTAH

SPANISH FORK, UTAH

ROYAL ENGINEERING PROVO, UTAH

ROYAL ENGINEERING PROVO, UTAH

ELECTRICAL

CIVIL	ARCHITECTURAL
SEE CIVIL SUBMITTAL	A2.1 - EXTERIOR BUILDING ELEVATIONS A3.0 - BUILDING CUT SECTIONS A3.1 - BUILDING CUT SECTIONS A3.2 - BUILDING CUT SECTIONS
LANDSCAPE	A3.3 - WALL TYPES / DETAILS A4.0 - DOOR SCHEDULE
SEE CIVIL SUBMITTAL	A4.1 - WINDOW TYPES A4.1a - DOOR TYPES A4.2 - DOOR DETAILS A4.3 - TYPICAL DETAILS
ARCHITECTURAL	A4.4 - TYPICAL DETAILS A4.5 - DUMPSTER ENCLOSURE DETAILS
A0.0 - TITLE SHEET A0.1 - PROJECT INFORMATION A0.2 - PROJECT IDENTIFICATION SIGN	A4.6 - SIGNAGE DETAILS A4.7 - TYPICAL PENETRATION DETAILS A4.7a - TYPICAL PENETRATION DETAILS

A0.2 - PROJECT IDENTIFICATION SIGN A0.3 - LEVEL 1 & 2 FIREWALL / EXIT PLAN A0.4 - LEVEL 3 FIREWALL / EXIT PLAN A1.0 - FLOOR SLAB PLAN A1.1 - LEVEL 1 FLOOR PLAN A1.1a - LEVEL 1 DIMENSIONAL PLAN A1.2 - LEVEL 2 FLOOR PLAN A1.2a - LEVEL 2 DIMENSIONAL PLAN

A1.3 - LEVEL 3 FLOOR PLAN A1.3a - LEVEL 3 DIMENSIONAL PLAN A1.4 - ROOF PLAN A1.5 - UNIT TYPE 1 TYPICAL FLOOR PLAN A1.6 - UNIT TYPE 2 & 3 TYPICAL FLOOR PLANS A2.0 - EXTERIOR BUILDING ELEVATIONS

ARCHITECTURAL	STRUCTURAL
A2.1 - EXTERIOR BUILDING ELEVATIONS A3.0 - BUILDING CUT SECTIONS A3.1 - BUILDING CUT SECTIONS A3.2 - BUILDING CUT SECTIONS A3.3 - WALL TYPES / DETAILS A4.0 - DOOR SCHEDULE A4.1 - WINDOW TYPES A4.1a - DOOR TYPES A4.2 - DOOR DETAILS A4.3 - TYPICAL DETAILS A4.4 - TYPICAL DETAILS	S0.0 - STRUCTURAL NOTES S0.1 - STRUCTURAL NOTES S1.0 - FOOTING AND FOUNDATION PLAN S2.0 - STRUCTURAL DETAILS S3.1 - LEVEL 1 SHEAR PLAN S3.2 - LEVEL 2 SHEAR PLAN S3.3 - LEVEL 3 SHEAR PLAN S4.0 - LEVEL 2 FRAMING PLAN S4.1 - LEVEL 3 FRAMING PLAN S4.2 - ROOF FRAMING PLAN S5.0 - STRUCTURAL DETAILS

S5.0 - STRUCTURAL DETAILS S5.1 - STRUCTURAL DETAILS S5.2 - STRUCTURAL DETAILS S6.0 - STRUCTURAL SCHEDULES M1.1 - LEVEL 1 MECHANCIAL PLAN M1.2 - LEVEL 2 MECHANICAL PLAN M1.3 - LEVEL 3 MECHANICAL PLAN M1.4 - ROOF MECHANCIAL PLAN M4.1 - ENLARGED UNITS TYPICAL MECHANICAL **PLANS** M6.1 - MECHANICAL SCHEDULES M6.2 - MECHANICAL DETAILS M6.3 - MECHANICAL DETAILS M6.4 - MECHANICAL DETAILS M7.1 - MECHANICAL SPECIFICATIONS M7.2 - MECHANICAL SPECIFICATIONS M7.3 - MECHANICAL SPECIFICATIONS

MECHANICAL

SYMBOLS, AND SHEET INDEX

M0.1 - GENERAL MECHANICAL NOTES,

P0.1 - GENERAL PLUMBING NOTES, SYMBOLS, AND SHEET INDEX P1.1 - UNDERGROUND PLUMBING PLAN P1.2 - LEVEL 1 PLUMBING PLAN P1.3 - LEVEL 2 PLUMBING PLAN P1.4 - LEVEL 3 PLUMBING PLAN P1.5 - ROOF PLUMBING PLAN P4.1 - ENLARGED UNITS TYPICAL PLUMBING **PLANS** P6.1 - PLUMBING SCHEDULE & SCHEMATICS P6.2 - CULINARY WATER SCHEMATICS P6.3 - WASTE AND VENT SCHEMATICS P6.4 - PLUMBING DETAILS P6.5 - PLUMBING DETAILS P7.1 - PLUMBING SPECIFICATIONS P7.2 - PLUMBING SPECIFICATIONS

PLUMBING

E0.3 - SITE PHOTOMETRIC PLAN E1.1 - LEVEL 1 ELECTRICAL PLAN E1.2 - LEVEL 2 ELECTRICAL PLAN E1.3 - LEVEL 3 ELECTRICAL PLAN E1.4 - ROOF ELECTRICAL PLAN E4.1 - TYPICAL UNIT ELECTRICAL PLAN E5.1 - ELECTRICAL DETAILS E5.2 - ELECTRICAL DETAILS E5.3 - ELECTRICAL DETAILS E6.1 - ELECTRICAL SCHEDULES

E0.1 - ELECTRICAL COVER SHEET

E0.2 - SITE ELECTRICAL PLAN

E6.2 - ELECTRICAL SCHEDULES E7.1 - ELECTRICAL SPECIFICATIONS



09/26/2019

A0.0

HOR

HORIZONTAL

HOUR

GENERAL NOTES:

- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED BUILDING PERMITS, SCHEDULING INSPECTIONS AND PROVIDING MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND APPLICABLE REGULATIONS ENFORCED BY LOCAL AND STATE AGENCIES.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS ON SITE AND REPORT ANY DISCREPANCIES AND/OR UNFORESEEN ADVERSE CONDITIONS REQUIRING DRAWINGS AND/OR CONSTRUCTION MODIFICATION IN WRITING TO THE ARCHITECT'S AND CONSTRUCTION
- 3. ALL NEW CONSTRUCTION AND MODIFICATIONS TO ANY EXISTING CONSTRUCTION OF SYSTEMS RELATED TO ANY CONSTRUCTION MUST CONFORM TO THE APPROPRIATE CONSTRUCTION, ENERGY, MECHANICAL, ELECTRICAL, STRUCTURAL, CIVIL OR ANY OTHER BUILDING RELATED STATE OR LOCAL CODES / ORDINANCES THAT ARE ADOPTED AND ENFORCEABLE.
- W/ ARCHITECT PRIOR. 5. EXTEND SHAFT WALLS, STAIR WALLS, AND CORRIDOR WALLS TO BOTTOM OF DECK. FIRE TAPE ONLY AT UNEXPOSED AREA OR ABOVE FINISHED

REGARDING FINISH AT CONCRETE FOUNDATIONS WALLS, PROVIDE RUBBED FINISH IMMEDIATELY AFTER FORMS AR REMOVED - VERIFY

- 6. ALL ITEMS THAT PENETRATE FIRE RATED CEILINGS (LIGHTS & ETC.) SHALL BE TENTED WITH 5/8" TYPE 'X OR TYPE 'C' GYPSUM BOARD.
- 7. CONTRACTOR TO PROVIDE WOOD BACKING (FRTW WHERE REQUIRED) FOR ALL ITEMS ATTACHED TO WALLS.
- 8. "PROVIDE" SHALL REPRESENT THE REQUIREMENT TO SUPPLY AND INSTALL THE ITEM INDICATED.
- 9. ANY AND ALL QUESTIONS REGARDING THESE DRAWINGS SHALL BE DIRECTED TO THE ARCHITECT OR OWNER'S REPRESENTATIVE.
- 10. THE ARCHITECT & OWNER ASSUME NO RESPONSIBILITY FOR ANY UNFORESEEN EXISTING CONDITIONS, ANY CONTRACTOR' WORK, WORKMEN, SUBCONTRACTORS OR ANY PERSON CONNECTED WITH ANY CONSTRUCTION ON THIS WORK.
- 11. PROVIDE 10# ABC FIRE EXTINGUISHERS (PER NFPA 10) EVERY 3,0000 SQ. FT. MAX WITH A MAX. TRAVEL DISTANCE OF 75' TO AN EXTINGUISHER - TYPICAL - VERIFY EXACT LOCATIONS WITH THE FIRE MARSHAL & SEMI-RECESSED CABINET PER SPECIFICATION.
- 12. DIMENSIONS ARE TO FACE OF FRAMING TO FACE OF FRAMING / CONCRETE UNLESS OTHERWISE NOTED.
- 13. PROVIDE FIRE SAFING AND SEALANTS PER MFR'S INSTRUCTIONS AT PENETRATION OF ALL WALLS REQUIRING FIRE RESISTANCE AS INDICATED. FIRE RESISTANCE OF FIRE SAFING AND SEALANTS SHALL MEET THAT OF THE WALL IN WHICH PENETRATION OCCURS.
- 14. SEE SHEET A3.3 FOR WALL TYPES DETAILS.
- 15. VERIFY WITH ARCHITECT AND MANUFACTURER EXACT ROUGH OPENING DIMENSIONS FOR ALL BUILT IN ITEMS.
- 16. COORDINATE DUCT INSTALLATION WITH STRUCTURAL, ELECTRICAL, PLUMBING AND FIRE SPRINKLER INSTALLATION.
- 17. FIRE RATED THRU-PENETRATIONS MUST BE TREATED ACCORDING TO EACH MANUFACTURER'S SPECIFICATION FOR TYPE AND SIZE OF MATERIAL AND THE ANNULAR SPACE REQUIREMENTS OF EACH PENETRATION.
- 18. SEE PLUMBING DRAWINGS FOR TYPICAL FLOOR DRAIN DETAIL.
- 19. ALL GYPSUM BOARD EDGES TO BE ROUND NOSE UNLESS OTHERWISE NOTED.
- 20. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF HATCHES, ETC.
- 21. MAINTAIN FIRE PROTECTION SYSTEM DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS TO PROTECT WORKMEN AND STRUCTURES.
- 22. SECURITY SYSTEM / ELEC. KEY CARD ACCESS AND FF&E TO BE PROVIDED AND INSTALLED BY OWNER.
- 23. PROVIDE A MONUMENT SIGN INTO THE PROJECT (BY OWNER) COORDINATE DESIGN WITH ARCHITECT
- 24. LANDSCAPE DRAWINGS TO BE PROVIDED BY OWNER. SEE DRAWINGS BY OTHERS TYPICAL.
- 25. FIRE SPRINKLER STANDPIPES, VALVE GAUGES, ETC MUST NOT ENCROACH INTO THE REQUIRED STAIRWAY WIDTH RADIUS.
- 26. DEFERRED SUBMITTALS: FIRE PROTECTION SYSTEM, ROOF COVERING INSTALLATION DETAILS, THRU PENETRATION FIRE STOP DETAILS, AND ROOF LEVEL CERTAINTEED INSULATION AND CERTAINTEED "MEMBRAIN" SYSTEM.
- 27. APPLIANCES TO BE PROVIDED AND INSTALLED BY THE G.C. APPLIANCE PACKAGE TO BE APPROVED BY OWNER.

ABREVIATIONS

AΒ	ANCHOR BOLT	HT, HGT	HEIGHT
A/C	AIR CONDITIONING	HVAC	HEATING / BENTILATION / A/C
/C	ACOUSTIC(AL)	ID	INTERIOR DESIGNER
ACT	ACOUSTIC CEILING TILE	IN	INCH(ES)
ADD	ADDENDUM	INCL	INCLUDE(D), INCLUDING
ADJ	ADJACENT	INFO	INFORMATION
\FF	ABOVE FINISHED FLOOR	INS	INSULATE, INSULATION
LUM	ALUMINUM	INT	INTERIOR
LT	ALTERNATE, ALTERNATIVE	JT	JOINT
PPROV	APPROVE(D), APPROVAL	LAM	LAMINATE
APPROX	APPROXIMATE(LY)	LAV	LAVATORY
ARCH	ARCHITECT(URAL)	MAX	MAXIMUM
UTO	AUTOMATIC	MECH	MECHANICAL
BD	BOARD	MFR	MANUFACTURER
BET		MTL	
	BETWEEN		METAL
BLDG	BUILDING	MIN	MINIMUM
BOT	BOTTOM	MIR	MIRROR(ED)
CAB	CABINET	MISC	MISCELLANEOUS
CB	CERAMIC BASE	NO	NUMBER
CLG	CEILING	OC	ON CENTER
LR	CLEAR(ANCE)	OPP	OPPOSITE
TR	CENTER	PL	PLASTIC LAMINATE
CMU	CONCRETE MASONRY UNIT	PT	PAINT(ED)
COL	COLUMN	PSF	POUNDS PER SQ FT
CONC	CONCRETE	PSI	POUNDS PER SQ IN
CONST	CONSTRUCTION	PVC	POLYVINYL CHLORIDE
CONT	CONTINUE, CONTINUOUS	PWD	PLYWOOD
CONTR	CONTRACT(OR)	QTY	QUANTITY
COORD	COORDINATE, COORDINATOR	RA	RETURN AIR
ORR	CORRIDOR	RE	REFERENCE, REFER TO
CT	CERAMIC TILE	REINF	REINFORCE(D), REINFORCMENT
)BL	DOUBLE	REP	REPRESENTATIVE
DEMO	DEMOLISH, DEMOLITION	REQ	REQUIRE(D), REQUIREMENT
DIA	DIAMETER	RM	ROOM
DIM	DIMENSION	SA	SUPPLY AIR
)N	DOWN	SCH	SCHEDULE
)R	DOOR	SEC	SECTION
)TL	DETAIL	SHT	SHEET
)WG	DRAWING	SIM	SIMILAR
			-
:A	EACH ELEVATION	SPEC	SPECIFICATION(S)
LEV, EL	ELEVATION	SQ	SQUARE
ELEC	ELECTRICAL	SS	STAINLESS STEEL
Q	EQUAL	STD	STANDARD
QUIP	EQUIPMENT	STL	STEEL
XIST. EX.	EXISTING	STRUC	STRUCTURAL
XT	EXTERNAL	SYM	SYMMETRIC(AL)
EWC	ELECTRIC WATER COOLER	SV	SHEET VINYL
A	FRESH AIR	TEN	TENANT
EC	FIRE EXTINGUISHER CABINET	T&G	TONGUE AND GROOVE
FEC	FIXTURES / FURNISHINGS / EQUIPMENT	TEMP	TEMPERATURE
	CONTRACTOR	THK	THICK(NESS)
IN	FINISHED	THRU	THROÙGH
LR	FLOOR	TYP	TYPICAL
OS	FACE OF STUD	UL	UNDERWRITERS LABORATORY
:RP	FIBER REINFORCED PANEL	UNFIN	UNFINISHED
T.	FOOT, FEET	UON	UNLESS OTHERWISE NOTED
SA	GAUGE	VAR	VARIABLE, VARIES
SALV	GALVANIZED	VERT	VERTICAL
GC	GENERAL CONTRACTOR	VERT	VERIFY IN FIELD
SL LAM		VIF	
	GLU LAMINATED BEAM		VINYL WITH
GYB, GYP BD	GYPSUM WALL BOARD	W/	WITHOUT
GYP	GYPSUM	W/O	WITHOUT
1	HIGH	WC	WATER CLOSTE
HDWR	HARDWARE	WD	WOOD
HM	HOLLOW METAL		

CODE INFORMATION

A NEW APARTMENT COMPLEX FOR **ACTION REALESTATE LLC** 465 EAST 30TH STREET

OGDEN, UTAH

APPLICABLE CODES: 2018 IBC, 2018 IMC, 2017 NEC, 2018 IPC, 2018 IFC, 2018 IFGC, 2018 IECC, 2009 ICC/ANSI A117.1 THE CONTRACTOR IS TO COMPLY WITH ALL APPLICABLE CODES, ORDINANCE RULES, REGULATIONS, ORDERS AND OTHER LEGAL REQUIREMENTS OF ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION.

2.	SEE STRUCTURAL DRAWINGS FOR SEISMIC I	DESIGN CATEGORY, SOIL PROFILE, WIND LOAD, EXPOSURE,	ETC.
3.	OCCUPANCY	LEVELS 1-3 - R-2	IBC SECTION 310
4.	TYPE OF CONSTRUCTION	TYPE 5B	IBC TABLES 504.3, 504.4, 506.2, & 601
5.	ALLOWABLE AREA	SEE CALCS ON THIS SHEET	IBC SECTION 506
6.	NUMBER OF STORIES	3 ALLOWED IN B (SPRINKLED) PROVIDED 3 60' MAX HEIGHT (SPRINKLED) (BUILDING IS 36'-5")	IBC TABLE 504.4 IBC TABLE 504.3
7.	NUMBER OF OCCUPANTS LEVEL 1 LEVEL 2 LEVEL 3	39 (SEE CALC. BELOW) 39 (SEE CALC. BELOW) 39 (SEE CALC. BELOW)	IBC TABLE 1004.5
0	ECDECC CADACITY		

8. EGRESS

GROUP R-2

10. FIRE SPRINKLERS

GROUP

SS CAPACITY		
R-2	NUMBER OF EXITS REQ'D: 2 PROVIDED: 4	IBC SECTION 1006
	COMMON PATH OF TRAVEL ALLOWED: 125' PROVIDED: LESS THAN 125'	IBC SECTION 1006.2.1
	EXIT ACCESS TRAVEL DISTANCE ALLOWED: 250' PROVIDED: LESS THAN 250'	IBC TABLE 1017.2
	STAIR EGRESS WIDTH REQUIRED: 11.7" PROVIDED: 105" MIN. (BASED ON 39 OCC)	IBC SECTION 1005.3.1

PROVIDED: 144" MIN. (BASED ON 117 OCC) 9. ACCESSIBILITY

> OF THESE 4, 3 OF ARE REQUIRED TO BE ACCESSIBLE (60% MIN.) - PROJECT PROVIDES 4 THAT ARE ACCESSIBLE IBC SECTION 1107.6.2.2.1 & 1 TYPE "A" UNIT REQUIRED

IBC SECTION 1005.3.2

IBC SECTION 1105

IBC SECTION 903

IBC SECTION 708

1 PROVIDED (THE REMAINDER ARE ALL FAIR HOUSING TYPE "B" UNITS)

OTHER EGRESS WIDTH REQUIRED: 23.4"

PROJECT CONTAINS 4 PUBLIC ENTRANCES.

NOT REQUIRED - BUT PROVIDED (NFPA 13) 11. OCCUPANCY SEPARATION 1/2 HOUR SEPARATION PARTITION WALL REQUIRED 1 HOUR PROVIDED

> R-2 / R-2 IBC SECTION 711.2.4.3 1/2 HOUR HORIZONTAL FLOOR / CLG. REQUIRED 1 HOUR PROVIDED

12. FIRE RATINGS (SEE SHEETS A3.3 & A3.4) NON RATED IBC TABLE 601 EXTERIOR WALLS SEE HORIZONTAL SEPARATION SHEET A3.4 TENANT FLOOR / CEILINGS 1 HOUR RATED TENANT ROOF / CEILINGS 1 HOUR RATED TENANT SEPARATION WALLS 1 HOUR RATED 1 HOUR RATED SEE HORIZONTAL SEPARATION SHEET A3.4 COMMON FLOOR / CEILINGS COMMON ROOF / CEILINGS 1 HOUR RATED STRUCTURAL FRAME 1 HOUR RATED GA WP #3510 BEARING WALLS 1 HOUR RATED NON RATED NON BEARING WALLS 1 HOUR RATED IBC SECTION 713 3 LEVEL STAIR WALLS 3 LEVEL STAIR ROOF / CLGS. 1 HOUR RATED IBC SECTION 713 EXTERIOR OPENINGS NON RATED

OCCUPANCY CALCS.

<u>1</u>			LEVEL 3	
RESIDENCE	5,792 (GROSS) S.F. / 200 =	29 OCCUPANTS	(R-2)	R

(R-2) RESIDENCE 5,792 (GROSS) S.F. / 200 = 29 OCCUPANTS COMMONS 1,641 (GROSS) S.F. / 200 = 9 OCCUPANTS COMMONS 1,619 (GROSS) S.F. / 200 = 9 OCCUPANTS STORAGE 122 (GROSS) S.F. / 200 = 1 OCCUPANT STORAGE 144 (GROSS) S.F. / 200 = 1 OCCUPANT

TOTAL LEVEL 1 39 OCCUPANTS

TOTAL LEVEL 3

(R-2) RESIDENCE 5,792 (GROSS) S.F. / 200 = 29 OCCUPANTS COMMONS 1,687 (GROSS) S.F. / 200 = 9 OCCUPANTS STORAGE 77 (GROSS) S.F. / 200 = 1 OCCUPANT

39 OCCUPANTS

TOTAL BUILDING

117 OCCUPANTS

39 OCCUPANTS

EXITING / FIRE

TOTAL LEVEL 2

LEVEL 2

SEE PLANS ON SHEETS A0.3 - A0.5 FOR EXITING AND FIRE WALLS

ACCESSIBLE UNITS

(1) TYPE "A" UNIT IS REQUIRED, 3 UNITS PROVIDED, REMAINDER OF UNITS ARE TYPE "B" (BOTH WILL COMPLY WITH

DEFERRED SUBMITTALS

- THE CONTRACTOR SHALL SUBMIT THE FOLLOWING DOCUMENTS TO THE ARCHITECT AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL AFTER THEY HAVE BEEN ENGINEERED BY OTHERS. THE DOCUMENTS MAY BE SUBMITTED AFTER THE BUILDING PERMIT IS ISSUED (IF ALLOWED BY THE BUILDING DEPARTMENT), BUT MUST BE SUBMITTED AND RECEIVED BACK AS APPROVED PRIOR TO COMMENCING FABRICATION OR CONSTRUCTION OF THE COMPONENTS.
- ALL OTHER NON-STRUCTURAL ELEMENTS NOT SPECIFICALLY LISTED BUT DEEMED NECESSARY BY THE BUILDING
- FIRE PROTECTION SYSTEM.
- THRU PENETRATION FIRE STOP DETAILS, AND ROOF LEVEL CERTAINTEED INSULATION AND CERTAINTEED

NOTE: SEE STRUCTURAL ENGINEER'S SHEETS S0.0 & S0.1 FOR ADDITIONAL INFO. REGARDING DEFERRED SUBMITTALS.

GENERAL BUILDING NOTES

BUILDING DESCRIPTION

3 LEVEL WOOD FRAME BUILDING - SLAB ON GRADE - APARTMENTS

SQUARE FOOTAGE

<u> </u>	
LEVEL 1 =	7,584 SQ. FT.
LEVEL 2 =	7,337 SQ. FT.
E\/E 2	7 272 CO ET

LEVEL 2 = LEVEL 3 =	7,337 SQ. FT. 7,372 SQ. FT.	
TOTAL BUILDING =	22,293 SQ. FT.	

ALLOWED "R-2" SF = 21,000 IBC TABLE 506.2

ALLOWABLE AREA CALCS - LEVELS 1-3 (TYPE 5B)

ALLOWED "R-2" SF = 21,000 IBC TABLE 506.2 ACTUAL "R-2" SF = 7,337

LEVEL 2 - R-2

UNIT COUNT

LEVEL 1

LEVEL 2

LEVEL 3 =

TOTAL BUILDING =

6 UNITS

6 UNITS

6 UNITS

18 UNITS

ROOM NAME AND NUMBER

INTERIOR ELEVATION KEY

WOOD BLOCKING

PLYWOOD

GYPSUM BOARD

WALL IN PLAN

CONCRETE

BRICK

WINDOW

CONCRETE BLOCK

RIGID INSULATION

(INTERRUPTED MEMBER)

INSULATION (LOOSE OR BATT)

(ROUGH CONTINUOUS MEMBER)

LEVEL 3 - R-2 ALLOWED "R-2" SF = 21,000 IBC TABLE 506.2

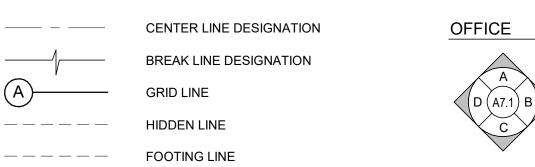
ACTUAL "R-2" SF = 7,584

ACTUAL "R-2" SF = 7,372

LEVEL 1 - R-2

NOTE: NO FRONTAGE INCREAS REQUIRED

SYMBOLS



BUILDING SECTION 1 = SECTION No.

A1 = SHEET WHERE DRAWN

WALL SECTION . A1 1 = SECTION No. A1 = SHEET WHERE DRAWN

DETAIL SECTION 1 = SECTION No. A1 = SHEET WHERE DRAWN

DETAIL REFERENCE \ A1 / 1 = SECTION No. A1 = SHEET WHERE DRAWN

DOOR DESIGNATION 101 = DOOR No.

101

CONST / DEMO NOTE DESIGNATION

WALLTYPE DESIGNATION

4 - ; 4 4 4

EARTH

GRANULAR FILL

SPECIAL INSPECTIONS REQ.

SEE SHEETS S0.0 & S0.1 FOR TRUSS LOADS @ SPECIAL INSPECTIONS SPECIAL INSPECTION IS REQUIRED FOR EIFS (IF APPLICABLE) PER IBC.

SUBMITTAL REVIEW PROCESS

PER IBC SECTION 107.3.4 HARRIS ARCHITECTURE, THE REGISTERED DESIGN PROFESSIONAL IN CHARGE SHALL BE RESPONSIBLE FOR REVIEWING AND COORDINATING SUBMITTAL DOCUMENTS PREPARED BY OTHERS, INCLUDING PHASED AND DEFERRED SUBMITTAL ITEMS, FOR COMPATIBILITY WITH THE DESIGN OF THE BUILDING.

PER IBC SECTION 107.3.4.1 DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTTION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND BEEN FOUND TO BE IN GENERAL CONFOMANCE TO THE DESIGN OF THE BUILDING.

UNIT COUNTS LEVEL 1 TYPE# UNIT NUMBER 101, 102, 103, 104, 105 TOTAL LEVEL 2 TYPE# QTY. UNIT NUMBER 201, 202, 203, 204, 205 206 TOTAL

REVISIONS

DRAWN BY

Author

TYPE# UNIT NUMBER 301, 302, 303, 304, 305 TOTAL

ARTMENT

S.

30th

30th STREET APARTMENTS

OGDEN

5'-0"

UTAH

RENDERING - SUPPLIED ON CD BY ARCHITECT

ARCHITECT



OWNER

ACTION PROPERTY MGT SANDY, UTAH

GENERAL CONTRACTOR

BONNEVILLE BUILDERS SALT LAKE CITY, UTAH

STRUCTURAL ENGINEER

LEI **SPANISH FORK, UTAH** MECH/PLUMB/ELEC **ENGINEER**

> ROYAL ENGINEERING PROVO, UTAH

CIVIL ENGINEER

PARK ENGINEERING, INC **HEBER CITY, UTAH**

NOTE: VERIFY ALL INFO WITH OWNER PRIOR TO FABRICATION OF SIGN

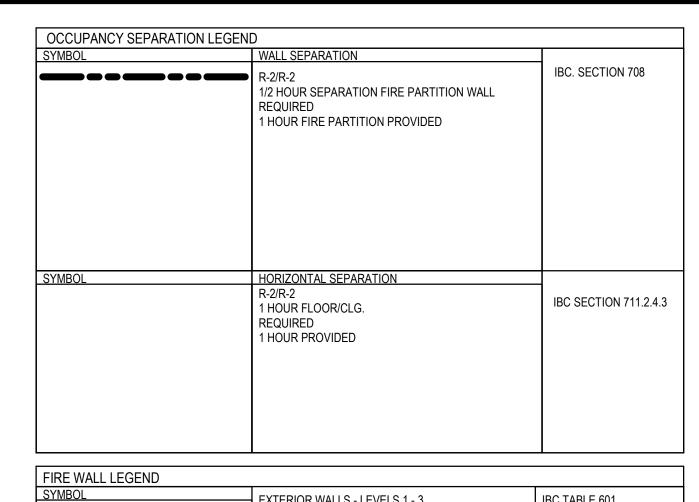
NOTE: VERIFY LOCATION AND DESIGN WITH CITY OF OREM SIGN ORDINANCES



30th STREET

09/26/2019

A0.2



FIRE WALL LEGEND		
SYMBOL	EXTERIOR WALLS - LEVELS 1 - 3 NON RATED 1 HOUR PROVIDED	IBC TABLE 601
	3 STORY STAIR 1 HOUR FIRE BARRIER REQUIRED 1 HOUR FIRE BARRIER PROVIDED	IBC SECTION 713
	CORRIDORS 30 MINUTE FIRE PARTITION REQUIRED 1 HOUR FIRE PARTITION PROVIDED	IBC SECTION 1020.1
	BEARING WALLS 1 HOUR REQUIRED TYPE VB CONSTRUCTION	
SHEET SPECIFIC NOTES		

SHEET SPECIFIC NOTES	
NOTE: PROVIDE 10# ABC FIRE EXTINGUISHERS (PER NFPA 10) EVERY 3,000 SQ. FT. MIN WITH A MAX. TRAVEL DISTANCE OF 75' TO AN EXTINGUSHER - TYPICAL - VERIFY EXACT LOCATIONS WITH THE CITY OF DRAPER CITY FIRE MARSHAL. (ALL CABINETS WITHIN RATED WALLS TO BE FIRE RATED AS PER THE SPECIFICATIONS).	COMMON X'-X" — COMMON PATH OF TRAVEL DISTANCE TOTAL X'-X" — TOTAL TRAVEL DISTANCE
NOTE: FOR FIRE-RATED CEILINGS AT ELEVATOR SHAFT AND STAIRS SEE CORRESPONDING CROSS SECTIONS. THIS HATCHING DENOTES A 1-HOUR SHAFT FOR A 1-LEVEL DUCT RUN. FIRE EXTINGUISHER CABINETS HANDLE TO BE CENTERED OR BOTTOM NFPA GUIDELINES STATE THAT THE DISTANCE FROM FLOOR TO TOP OF EXTINGUISHER TO BE NO MORE THAN 5 FEET.	OCCUPANCY CLASSIFICATION OF INDICATED AREA X X N= NET S.F PER OCCUPANT G= GROSS S.F PER OCCUPANT FLOOR AREA ALLOWANCE PER OCCUPANT OF INDICATED AREA CALCULATED OCCUPANT LOAD OF INDICATED AREA CALCULATED OCCUPANT LOAD OF INDICATED AREA

SYMBOL	DESCRIPTION
	COMMON PATH OF EGRESS TRAVEL
	ROUTE OF TOTAL EXIT ACCESS TRAVEL DISTANCE
PH	DOOR PROVIDED WITH PANIC HARDWARE
ML	DOOR PROVIDED WITH MAGNETIC LOCK AND EXIT SENSOR BAR
F.E.C.	SEMI-RECESSED FIRE EXTINGUISHER CABINET VERIFY EXACT LOCATION WITH LOCAL FIR MARSHAL
X	REQUIRED OCCUPANT CAPACITY OF DOOR- STAIR
X	ACTUAL OCCUPANT LOAD OF BUILDING
EX X	EXIT SIGN- CEILING OR WALL MOUNTED

LEVEL		F 700 (ODOO) O F (000	00 00011041170	
(R-2)	RESIDENCE COMMONS STORAGE	5,792 (GROSS) S.F. / 200 = 1,619 (GROSS) S.F. / 200 = 144 (GROSS) S.F. / 200 =	9 OCCUPANTS 1 OCCUPANT	
TOTAL	LEVEL 1	3	39 OCCUPANTS	
LEVEL	2			
(R-2)	RESIDENCE COMMONS STORAGE	5,792 (GROSS) S.F. / 200 = 1,687 (GROSS) S.F. / 200 = 77 (GROSS) S.F. / 200 =	29 OCCUPANTS 9 OCCUPANTS 1 OCCUPANT	
TOTAL	LEVEL 2	3	39 OCCUPANTS	
LEVEL	3			
(R-2)	RESIDENCE COMMONS STORAGE	5,792 (GROSS) S.F. / 200 = 1,641 (GROSS) S.F. / 200 = 122 (GROSS) S.F. / 200 =	29 OCCUPANTS 9 OCCUPANTS 1 OCCUPANT	
TOTAL	LEVEL 3	3	39 OCCUPANTS	
TOTAL	LEVEL BUILDI	NG 1	17 OCCUPANTS	

30th STREET APARTMENTS
LEVEL 1 & 2 FIREWALL / EXIT PLAN

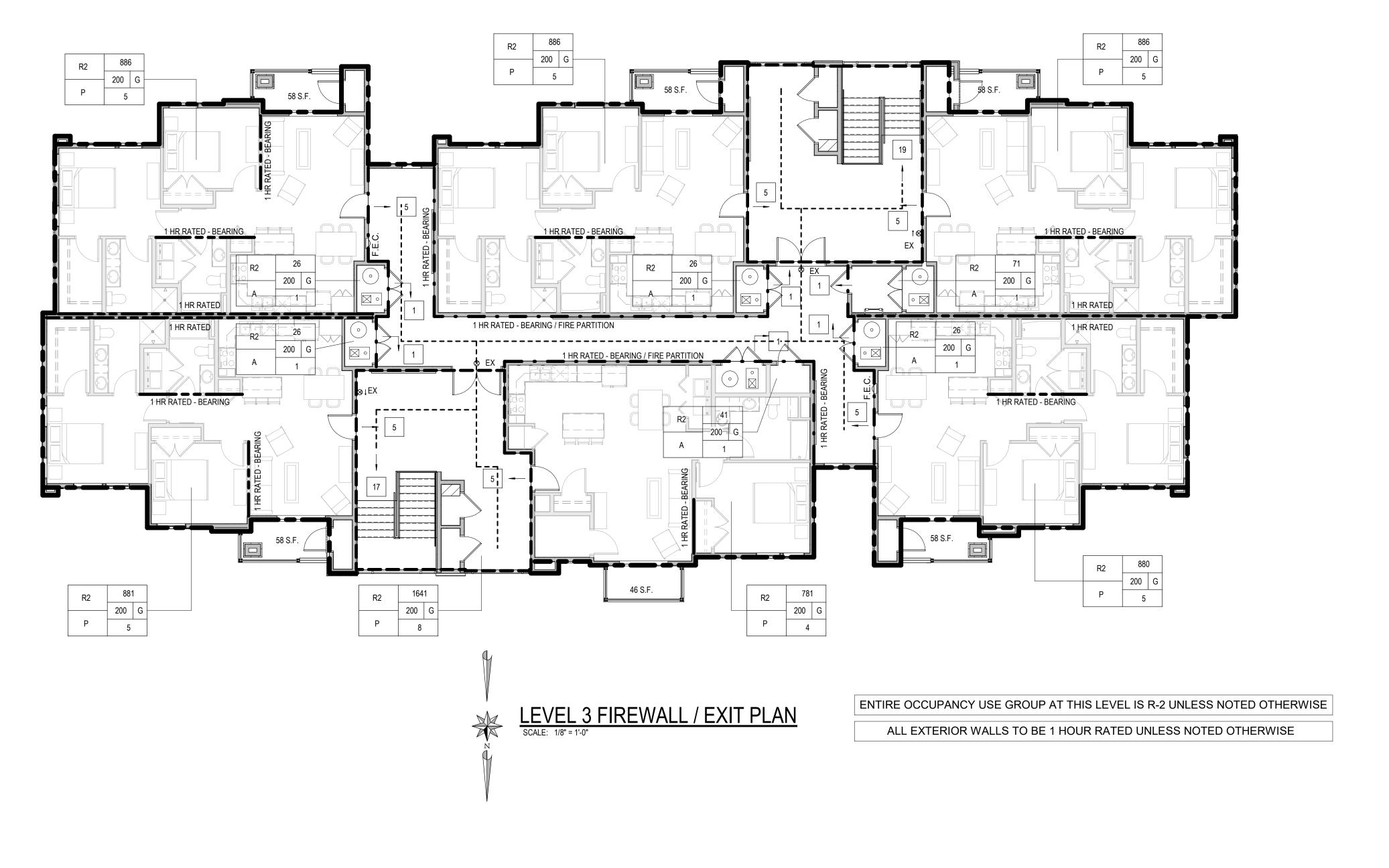
REVISIONS

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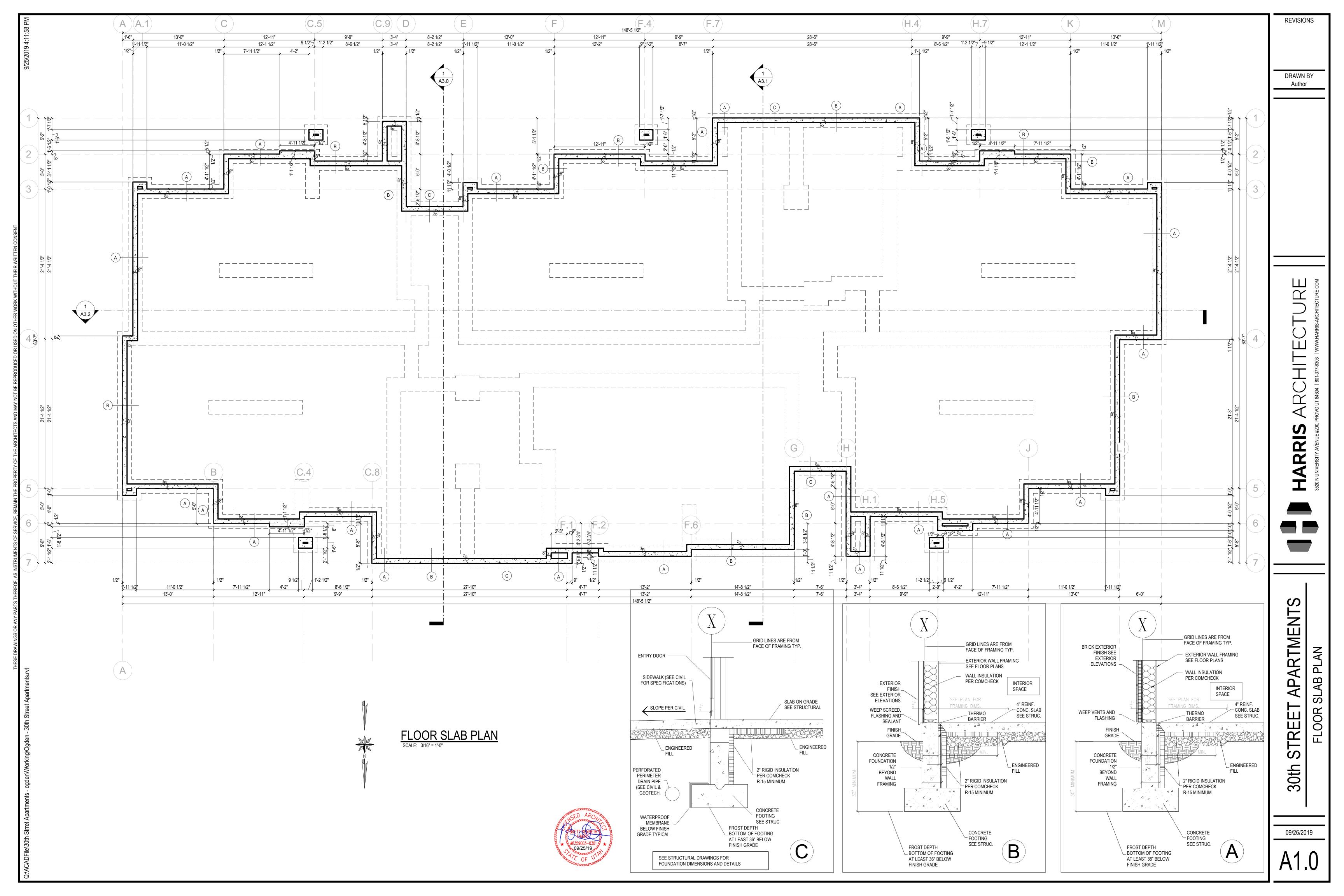
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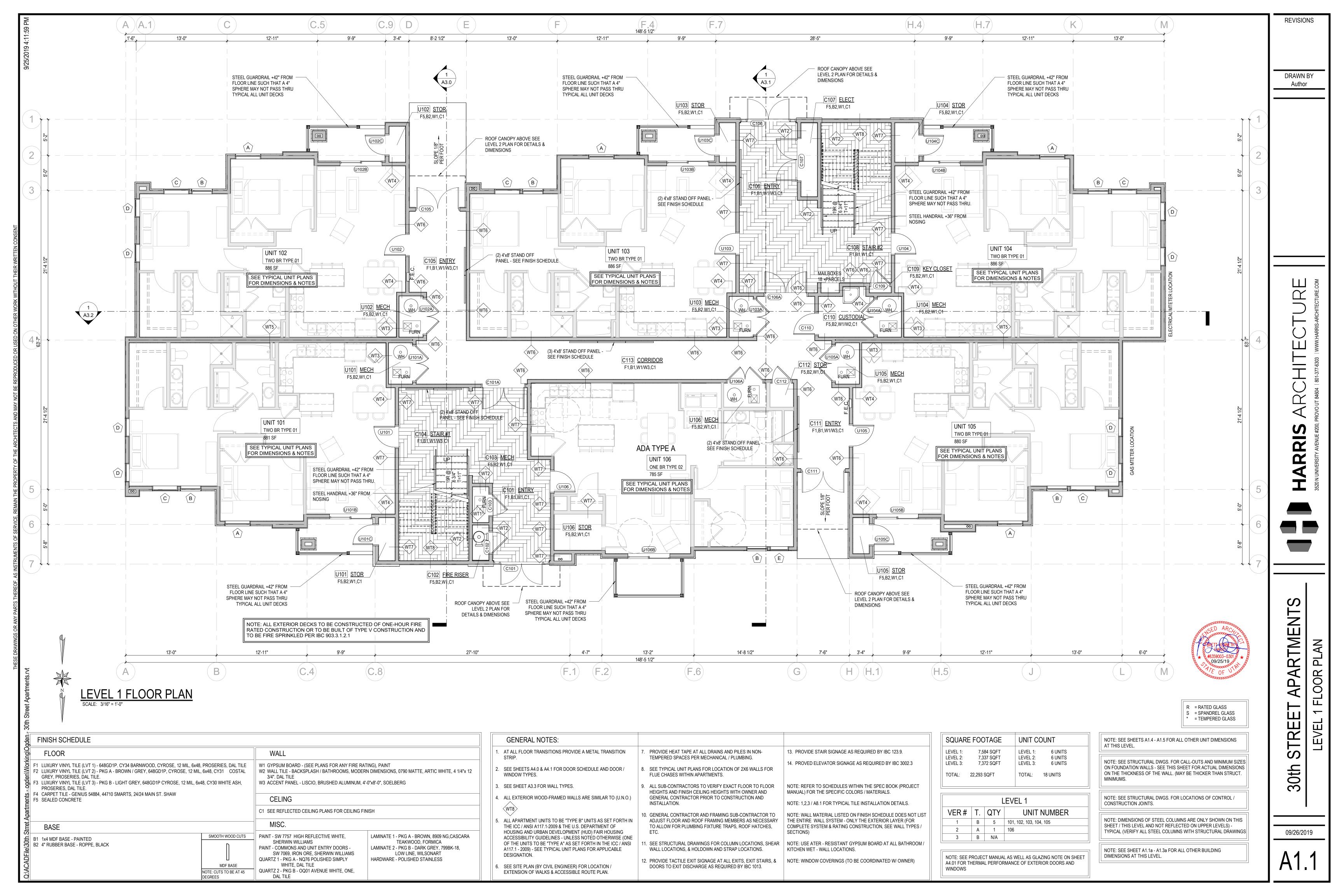


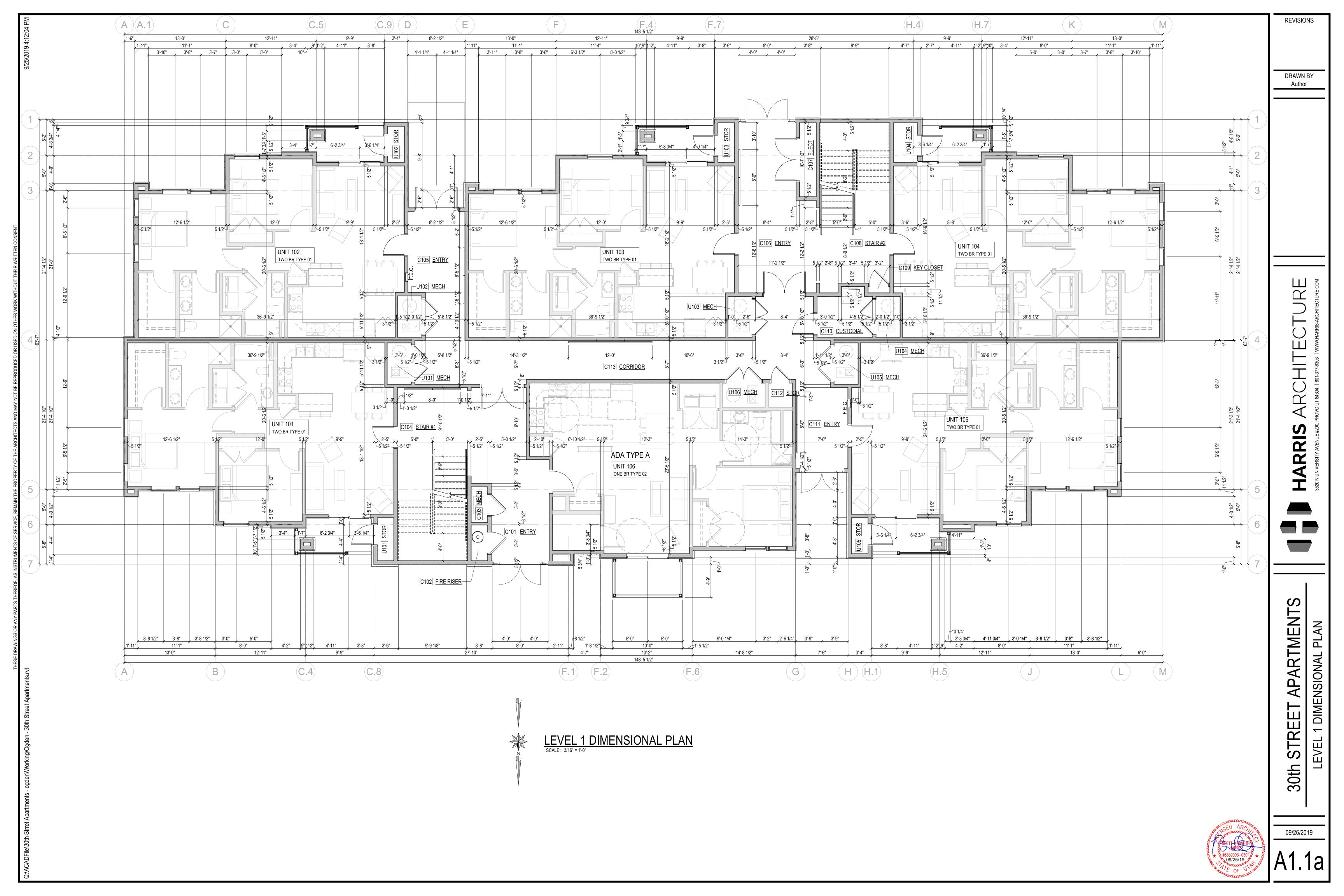
	REQUIR	R SEPARATION FIRE PARTITION WALL ED FIRE PARTITION PROVIDED	IBC. SECTION 708
SYMBOL	R-2/R-2 1 HOUR REQUIR	NTAL SEPARATION FLOOR/CLG. ED PROVIDED	IBC SECTION 711.2.4
EIDE WALL LEGEND			
SYMBOL SYMBOL	NON RA 1 HOUR 3 STORY 1 HOUR 1 HOUR CORRID 30 MINU 1 HOUR BEARING	PROVIDED / STAIR FIRE BARRIER REQUIRED FIRE BARRIER PROVIDED	IBC TABLE 601 IBC SECTION 713 IBC SECTION 1020.1
NFPA 10) EVERY 3,000 SC TRAVEL DISTANCE OF 75 TYPICAL - VERIFY EXACT DRAPER CITY FIRE MARS RATED WALLS TO BE FIR SPECIFICATIONS). NOTE: FOR FIRE-RATED AND STAIRS SEE CORRED TO THE PROPERTY OF THE PROPERTY	FIRE EXTINGUISHERS (P. Q. FT. MIN WITH A MAX. 5' TO AN EXTINGUSHER - TLOCATIONS WITH THE CENTAL. (ALL CABINETS WITH	COMMON X'-X" CO TOTAL X'-X" TO SHAFT ONS. A VEL CHAT OR TO	MMON PATH OF TRAVEL DISTANCE TAL TRAVEL DISTANCE S.F OF INDICATED AREA X N= NET S.F PER OCCUPANT G= GROSS S.F PER OCCUPANT FLOOR AREA ALLOWANCE PER OCCUPANT OF INDICATED AREA CALCULATED OCCUPANT LOAD OF INDICATED AREA
EGRESS LEGEND SYMBOL	DESCRIPTION		
	COMMON PATH OF EGR	ESS TRAVEL	
PH ML	ROUTE OF TOTAL EXIT		
	ROUTE OF TOTAL EXIT DOOR PROVIDED WITH DOOR PROVIDED WITH SEMI-RECESSED FIRE EMARSHAL	PANIC HARDWARE MAGNETIC LOCK AND EXIT SENSOR BAR EXTINGUISHER CABINET VERIFY EXACT LOCAPACITY OF DOOR- STAIR	
F.E.C. X X X X V	ROUTE OF TOTAL EXIT	PANIC HARDWARE MAGNETIC LOCK AND EXIT SENSOR BAR EXTINGUISHER CABINET VERIFY EXACT LOCAPACITY OF DOOR- STAIR AD OF BUILDING	
ML F.E.C. X X X EX	ROUTE OF TOTAL EXIT DOOR PROVIDED WITH DOOR PROVIDED WITH SEMI-RECESSED FIRE E MARSHAL REQUIRED OCCUPANT (ACTUAL OCCUPANT LO)	PANIC HARDWARE MAGNETIC LOCK AND EXIT SENSOR BAR EXTINGUISHER CABINET VERIFY EXACT LOCAPACITY OF DOOR- STAIR AD OF BUILDING WALL MOUNTED D = 29 OCCUPANTS D = 9 OCCUPANTS	
ML F.E.C. X X X EX W OCCUPANCY CALCS. LEVEL 1 (R-2) RESIDENCE COMMONS	ROUTE OF TOTAL EXIT. DOOR PROVIDED WITH DOOR PROVIDED WITH SEMI-RECESSED FIRE E MARSHAL REQUIRED OCCUPANT (ACTUAL OCCUPANT LO, EXIT SIGN- CEILING OR 5,792 (GROSS) S.F. / 200 1,619 (GROSS) S.F. / 200	PANIC HARDWARE MAGNETIC LOCK AND EXIT SENSOR BAR EXTINGUISHER CABINET VERIFY EXACT LOCAPACITY OF DOOR- STAIR AD OF BUILDING WALL MOUNTED D = 29 OCCUPANTS D = 9 OCCUPANTS	
EX OCCUPANCY CALCS. LEVEL 1 (R-2) RESIDENCE COMMONS STORAGE	ROUTE OF TOTAL EXIT. DOOR PROVIDED WITH DOOR PROVIDED WITH SEMI-RECESSED FIRE E MARSHAL REQUIRED OCCUPANT (ACTUAL OCCUPANT LO, EXIT SIGN- CEILING OR 5,792 (GROSS) S.F. / 200 1,619 (GROSS) S.F. / 200	PANIC HARDWARE MAGNETIC LOCK AND EXIT SENSOR BAR EXTINGUISHER CABINET VERIFY EXACT LOCAPACITY OF DOOR- STAIR AD OF BUILDING WALL MOUNTED D = 29 OCCUPANTS D = 9 OCCUPANTS D = 1 OCCUPANTS D = 29 OCCUPANTS D = 29 OCCUPANTS D = 9 OCCUPANTS D = 9 OCCUPANTS D = 9 OCCUPANTS	
F.E.C. EX EX OCCUPANCY CALCS. LEVEL 1 (R-2) RESIDENCE COMMONS STORAGE TOTAL LEVEL 1 LEVEL 2 (R-2) RESIDENCE COMMONS	ROUTE OF TOTAL EXIT. DOOR PROVIDED WITH DOOR PROVIDED WITH SEMI-RECESSED FIRE E MARSHAL REQUIRED OCCUPANT LO, EXIT SIGN- CEILING OR 5,792 (GROSS) S.F. / 200 1,619 (GROSS) S.F. / 200 144 (GROSS) S.F. / 200 1,687 (GROSS) S.F. / 200 1,687 (GROSS) S.F. / 200	PANIC HARDWARE MAGNETIC LOCK AND EXIT SENSOR BAR EXTINGUISHER CABINET VERIFY EXACT LOCAPACITY OF DOOR- STAIR AD OF BUILDING WALL MOUNTED D = 29 OCCUPANTS D = 9 OCCUPANTS D = 1 OCCUPANTS D = 29 OCCUPANTS D = 29 OCCUPANTS D = 9 OCCUPANTS D = 9 OCCUPANTS D = 9 OCCUPANTS	
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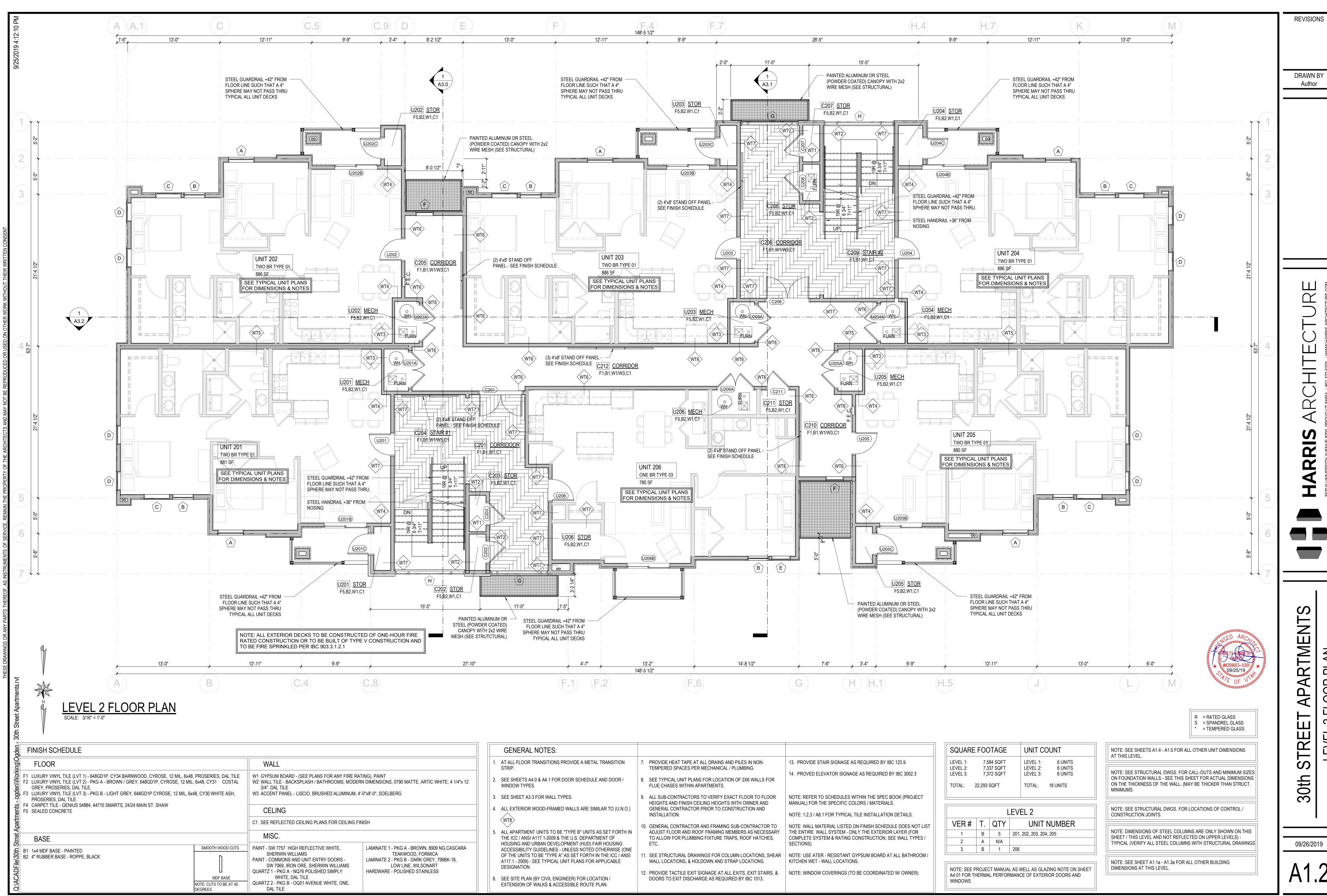
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APARTMENTS 30th STREET



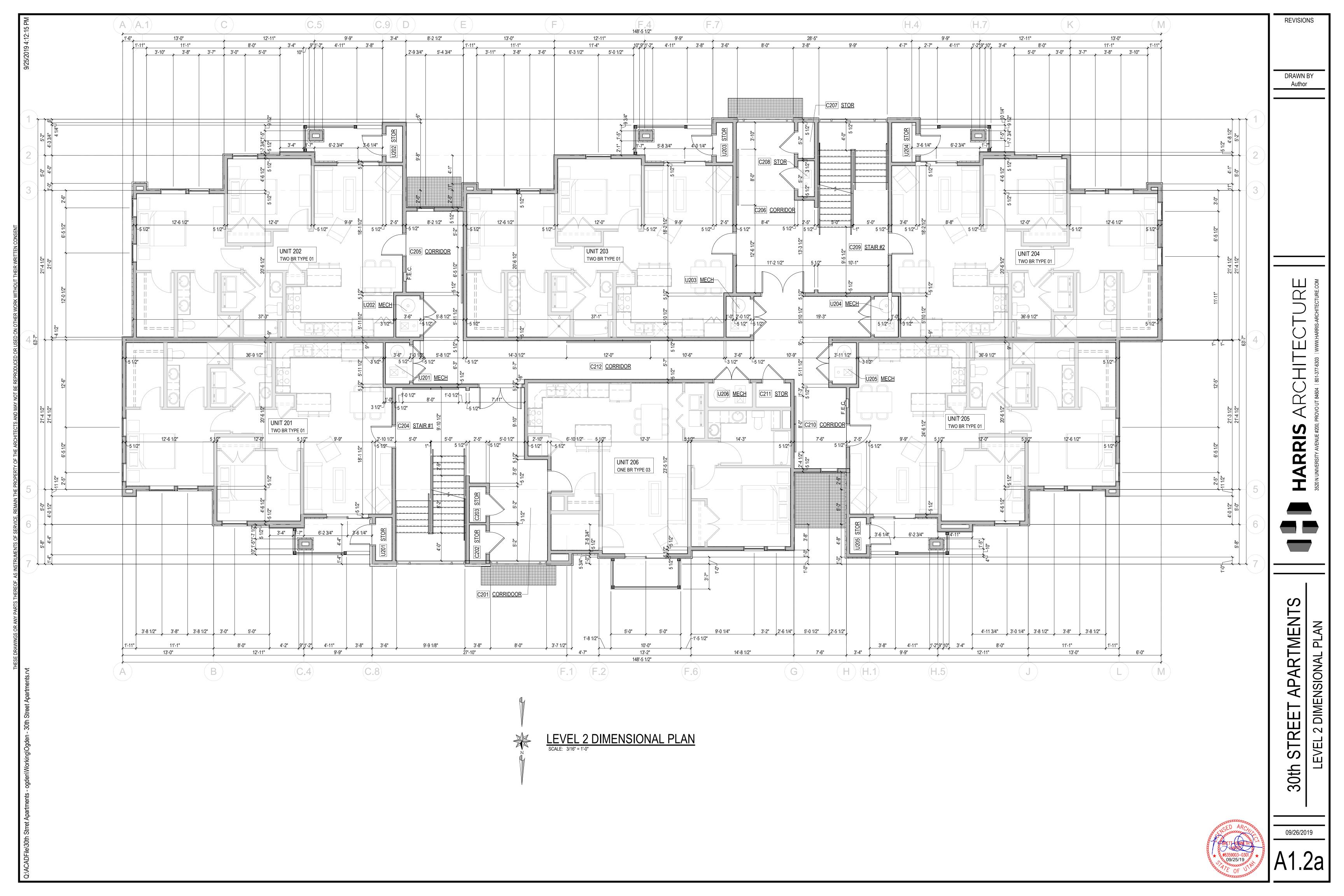


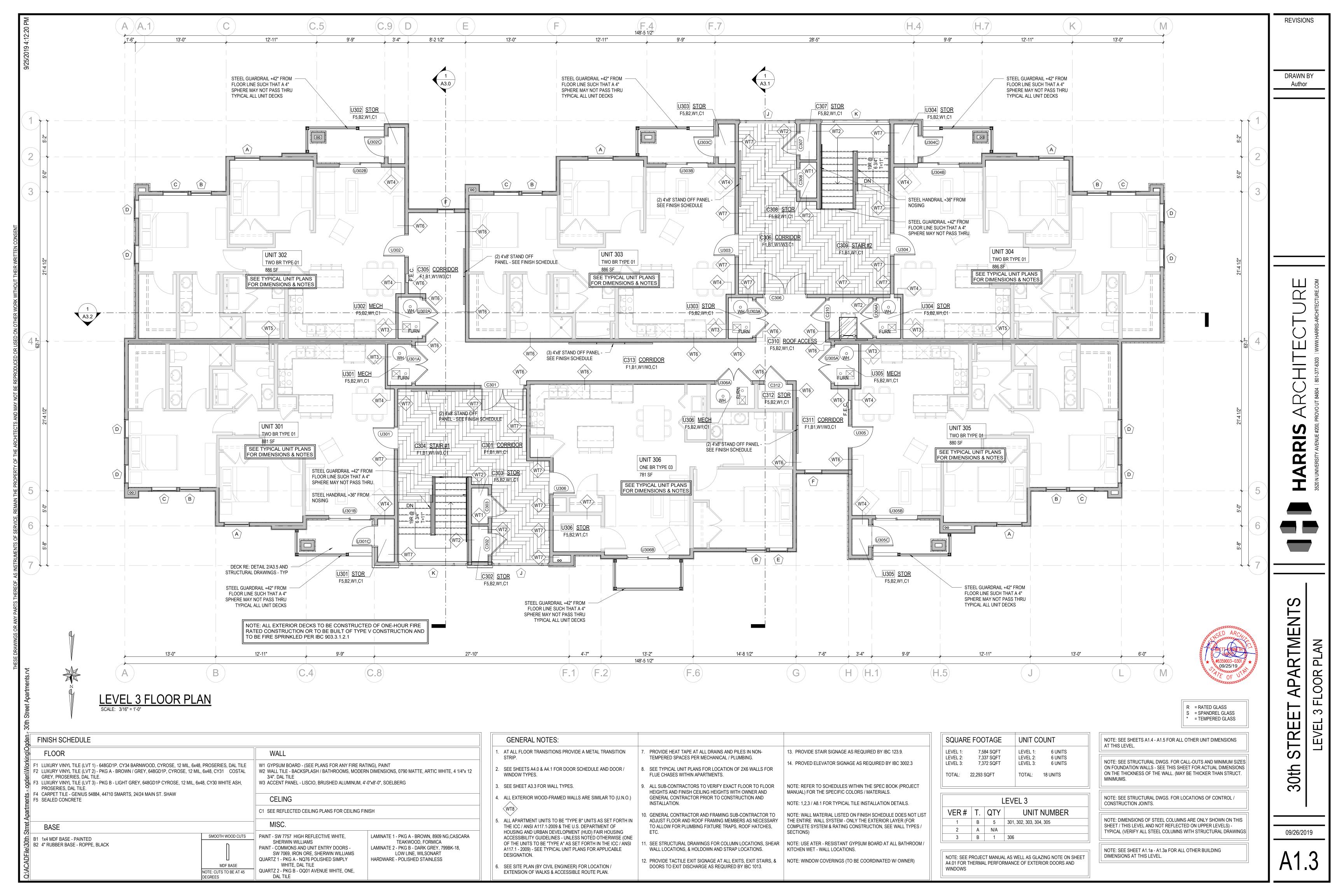


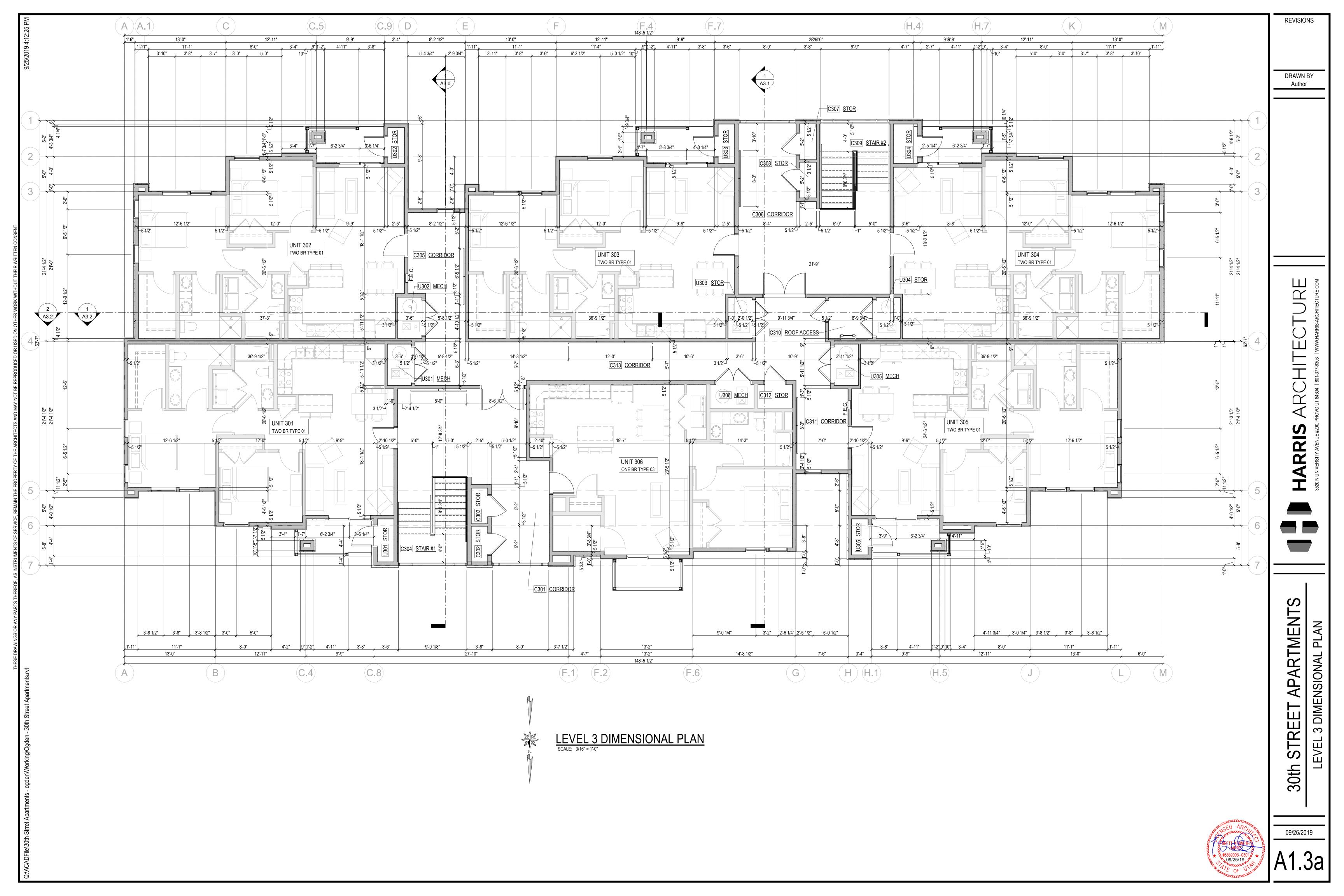


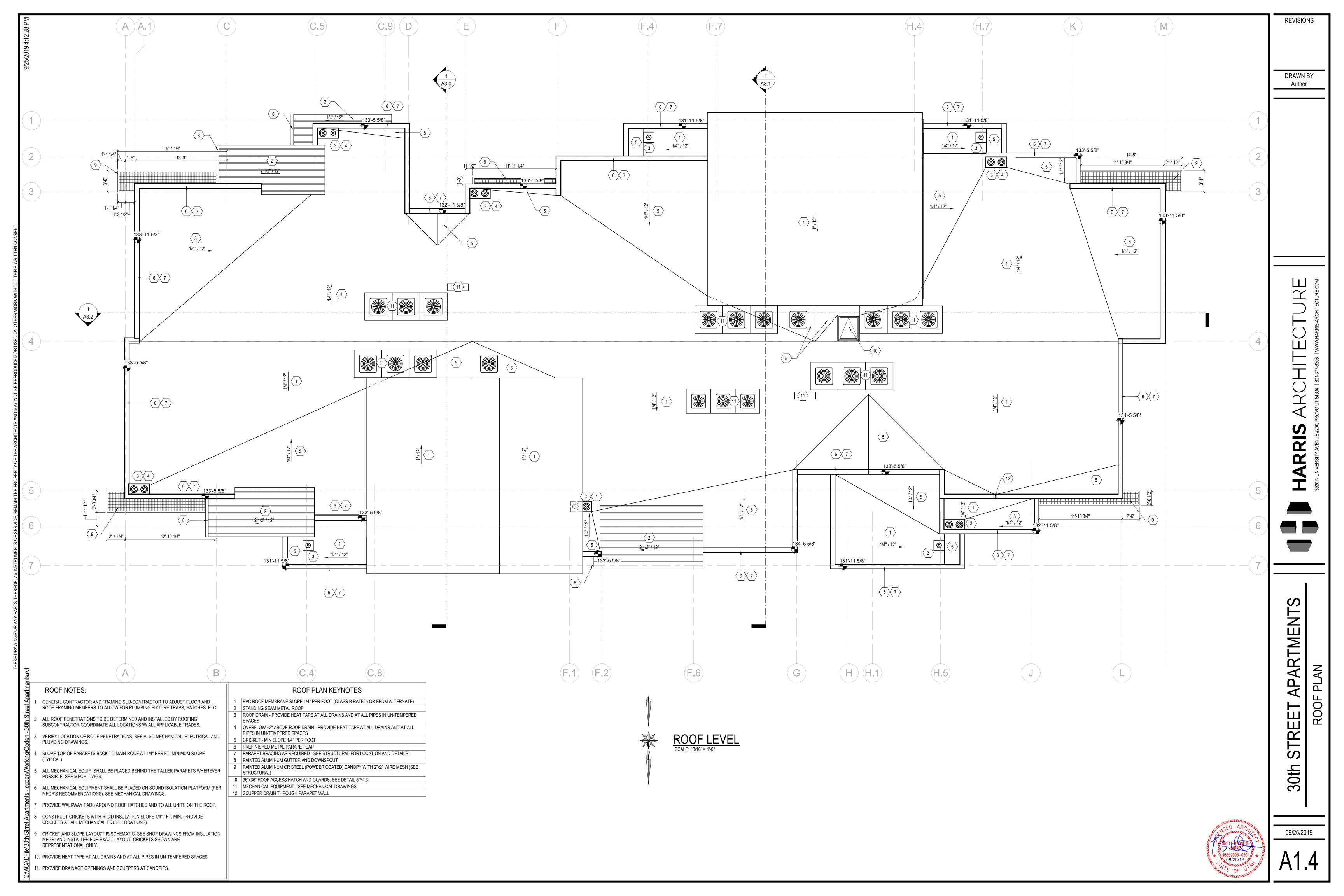
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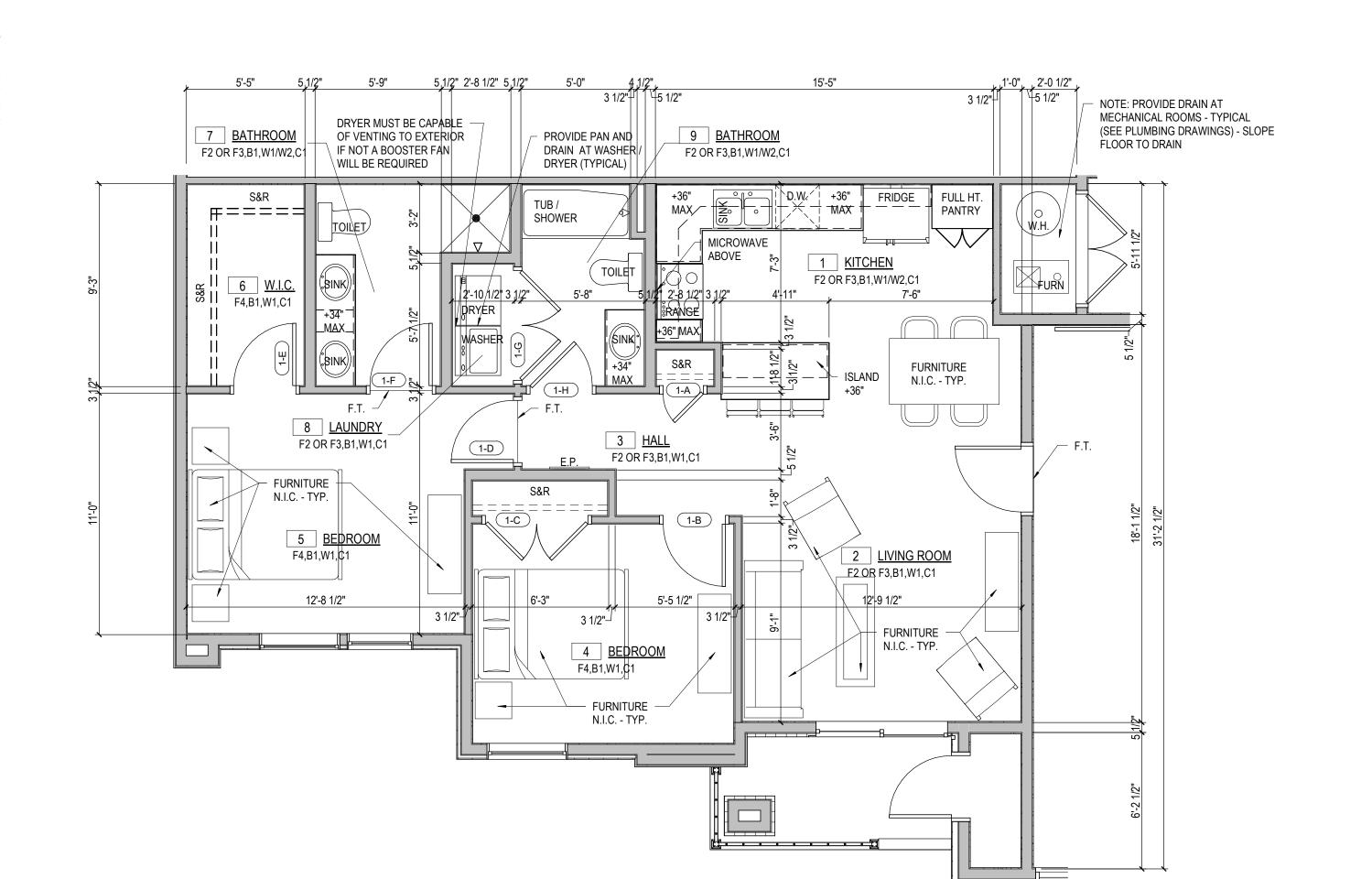




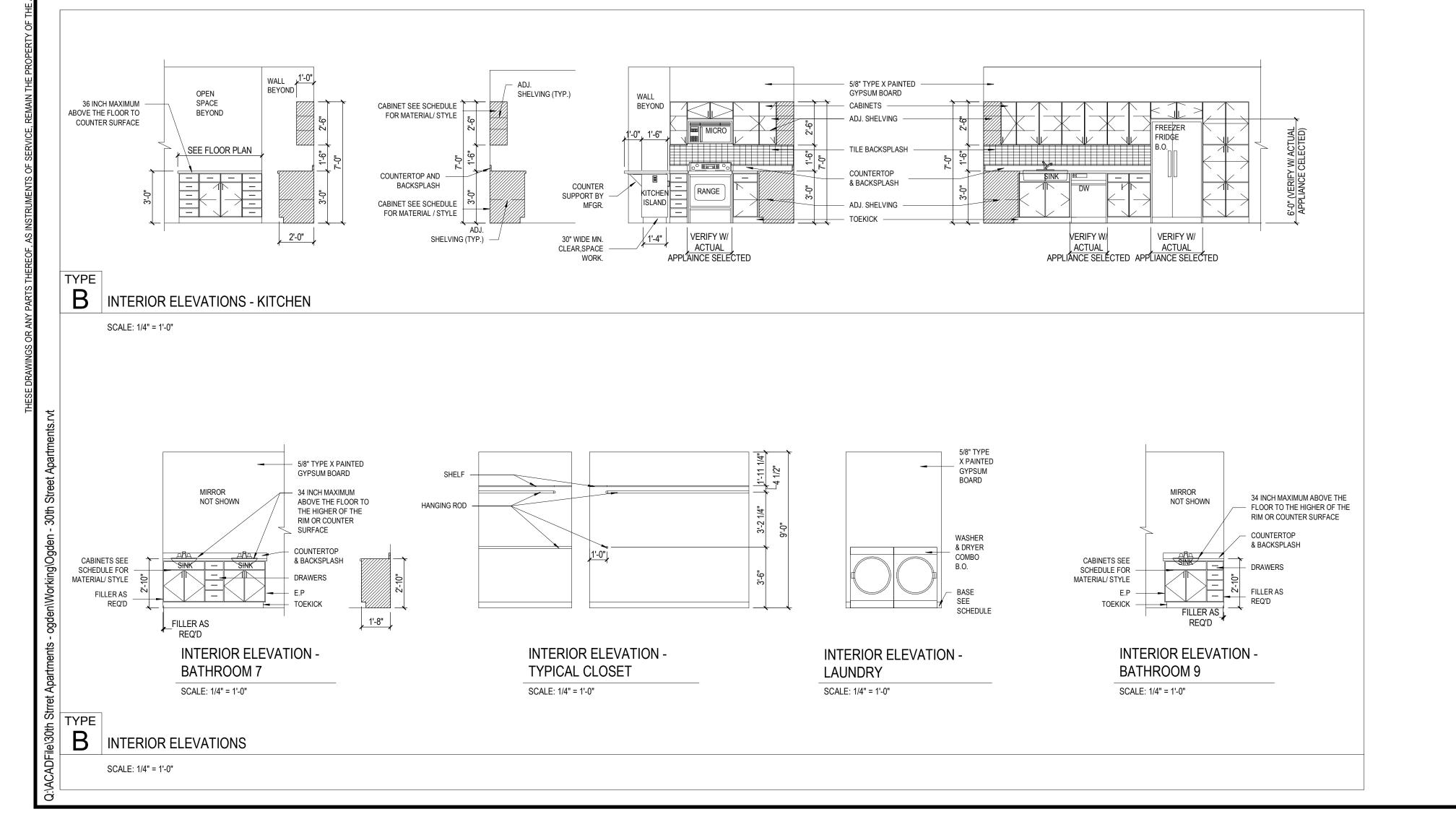
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UNIT TYPE 1 - TWO BEDROOM



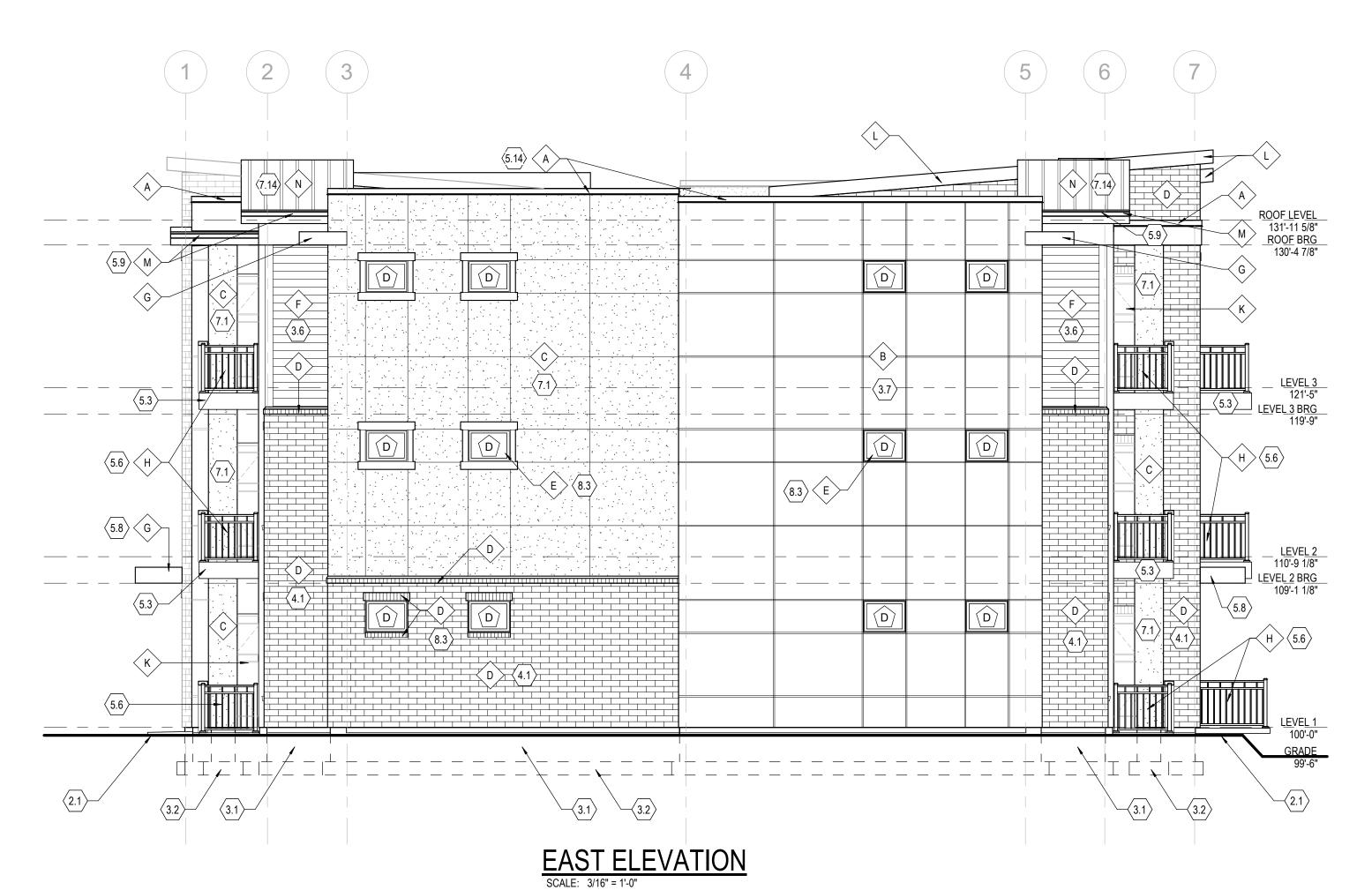


			Journal of the second	
FINISH SCHEDULE				
FLOOR		WALL		
 F1 LUXURY VINYL TILE (LVT 1) - 648GD1P. CY34 BARNWOOD, CYROSE, 12 MIL, 6x48, PROSERIES, DAL TILE F2 LUXURY VINYL TILE (LVT 2) - PKG A - BROWN / GREY, 648GD1P, CYROSE, 12 MIL, 6x48, CY31 COSTAL GREY, PROSERIES, DAL TILE. F3 LUXURY VINYL TILE (LVT 3) - PKG B - LIGHT GREY, 648GD1P CYROSE, 12 MIL, 6x48, CY30 WHITE ASH, PROSERIES, DAL TILE. F4 CARPET TILE - GENIUS 54884, 44710 SMARTS, 24/24 MAIN ST. SHAW F5 SEALED CONCRETE 		W1 GYPSUM BOARD - (SEE PLANS FOR ANY FIRE RATING), PAINT W2 WALL TILE - BACKSPLASH / BATHROOMS, MODERN DIMENSIONS, 0790 MATTE, ARTIC WHITE, 4 1/4"x 12 3/4". DAL TILE W3 ACCENT PANEL - LISCIO, BRUSHED ALUMINUM, 4'-0"x8'-0", SOELBERG CELING C1 SEE REFLECTED CEILING PLANS FOR CEILING FINISH		
BASE		MISC.		
B1 1x4 MDF BASE - PAINTED B2 4" RUBBER BASE - ROPPE, BLACK	MDF BASE NOTE: CUTS TO BE AT 45 DEGREES	PAINT - SW 7757 HIGH REFLECTIVE WHITE, SHERWIN WILLIAMS PAINT - COMMONS AND UNIT ENTRY DOORS - SW 7069, IRON ORE, SHERWIN WILLIAMS QUARTZ 1 - PKG A - NQ76 POLISHED SIMPLY WHITE, DAL TILE QUARTZ 2 - PKG B - OQ01 AVENUE WHITE, ONE, DAL TILE	LAMINATE 1 - PKG A - BROWN, 8909 NG,CASCARA TEAKWOOD, FORMICA LAMINATE 2 - PKG B - DARK GREY, 799BK-18, LOW LINE, WILSONART HARDWARE - POLISHED STAINLESS	

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REVISIONS

TMENT FLOOR 30th



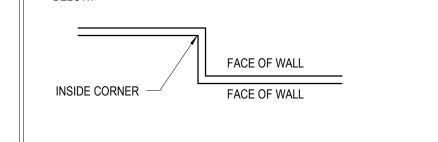
GENERAL NOTES:

- . PROVIDE / MAINTAIN 30" MINIMUM FROST DEPTH CLEARANCE FROM TOP OF GRADE TO BOTTOM OF FOOTING - SEE STRUCTURAL FOR EXACT HEIGHTS OF FOUNDATION WALLS.
- . GENERAL CONTRACTOR TO COORDINATE ALL FOOTING HEIGHTS AND FOOTING STEPS WITH CIVIL AND STRUCTURAL AND WITH FINAL GRADES ON SITE.
- B. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF HATCHES,
- 4. SOILS ENGINEER TO PROVIDE INSPECTION OF THE SITE ONCE EXCAVATION HAS TAKEN PLACE TO DETERMINE IF ANY PERIMETER DRAINAGE SYSTEM AND WATERPROOFING MEMBRANE IS REQUIRED.
- 5. ALL SUB-CONTRACORS TO VERIFY EXACT FLOOR TO FLOOR HEIGHTS AND FINISH CEILING HEIGHTS WITH OWNER PRIOR TO CONTRCUTION AND INSTALLATION.
- 6. FOR SOUND INSULATION AT INTERIOR WALLS SEE FLOOR PLANS AND WALL TYPE DETAILS, SHEETS ___ & ___. VERIFY INTENT WITH OWNER.
- 7. SEE ROOF PLAN FOR ALL DIMENSIONS OF CANOPIES.
- S = SPANDREL GLASS (SEE FLOOR PLANS / ELEVATIONS FOR ADDITIONAL LOCATIONS). * = TEMPERED GLASS (SEE FLOOR PLANS / ELEVATIONS FOR ADDITIONAL LOCATIONS). SEE SHEETS A4.0 - A4.1 FOR DOOR AND WINDOW TYPES

	KEY TO EXTERIOR FINISH	HES
A	PRE-FINISHED ALUMINUM CAP	BLACK
B	CEMENT BOARD SIDING, SMOOTH FINISH, ALLURA	SNOW
C	STUCCO (HARD COAT) FINE FINISH, SENERGY	BRUME
D	BRICK, INTERSTATE	MIDNIGHT BLACK
E	VINYL WINDOW	BLACK
F	SIDING, ALLURA	CEDAR TS
G	METAL CANOPY, PAINTED	BLACK
H	DECK / RAILING	BLACK
$\langle 1 \rangle$	ALUMINUM STOREFRONT	BLACK
$\langle \overline{\zeta} \rangle$	SLIDER DOOR	BLACK
K	HOLLOW METAL DOOR & FRAME	BLACK
(L)	ALUMINUM FASCIA	BLACK
$\overline{\mathbb{M}}$	ALUMINUM GUTTER AND DOWNSPOUT	BLACK
N	STANDING SEAM METAL ROOF	CHARCOL GRAY

FINISH NOTES:

- NOTE: ALL METAL TRIMS / VENTS ON EXTERIOR OF BUILDIGN TO BE PAINTED TO MATCH THE COLOR OF THE BRICK / STUCCO / METAL PANELS / OR OTHER EXTERIOR FINISHES THAT THEY ARE LOCATED IN. VERIFY PAINT COLOR WITH ARCHITECT AND
- NOTE: SEE ARCHITECTURAL FINISH SCEDULES FOR ACTUAL COLORS AND MATERIALS. NOTE: ALL COLORS / MATERIALS TO BE SUBMITTED TO ARCHITECT AND OWNER FOR
- NOTE: EXTERIOR FINISHES / COLORS TO TERMINATE NO INSIDE CORNERS ONLY. SEE



	KEY NOTES
SITE CONSTRUCTION	

(2.1) FINISH GRADE - SLOPE AWAY 1/2 INCH PER FOOT MIN.

(3.1) CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS. (3.2) CONCRETE FOOTING - SEE STRUCTURAL DRAWINGS.

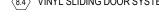
- (3.6) CEMENT BOARD SIDING.
- (3.7) CEMENT BOARD PANEL. <u>MASONRY</u>

4.1 BRICK (SEE MFGR ATTACHMENT DETAILS)

<u>METALS</u>

(5.2) PREFINISHED METAL FLASHING. WOOD FRAMED DECK - SEE DETAIL 2/A3.5 AND STRUCT.

- 6.6 STEEL GUARDRAIL (POWDER COATED AT EXTERIOR LOCATIONS -PAINTED AT INTERIOR LOCATIONS) +42" FROM FLOOR LINE SUCH THAT 4" SPHERE MAY NOT PASS THRU (SEE STRUCT. DWGS. FOR CALL - OUTS AND CONNECTION DETAILS.
- (5.8) STEEL CANOPY (PAINTED) SEE STRUCT. FOR ATTACHMENT. PREFINISHED ALUM. FASCIA, SOFFIT (VENTED @ PITCHED ROOFS), GUTTERS, & DOWNSPOUTS (DOWNSPOUTS DRAIN TO MEMBRANE
- ROOF BELOW) (5.10) PREFINISHED ALUM. DRIP
- (5.14) PRE-FINISHED ALUMINUM PARAPET CAP
- THERMAL & MOISTURE
- $\langle 7.1 \rangle$ STUCCO HARD COAT.
- (7.14) STANDING SEAM METAL ROOF SYSTEM INSTALLED PER MANUFACTURES RECOMMENDATIONS. DOORS AND WINDOWS
- (8.1) HOLLOW METAL DOOR
- $\langle 8.2 \rangle$ ALUMINUM ENTRY / WINDOW SYSTEM.
- (8.3) VINYL WINDOW (SLIDING OR SINGLE HUNG) SEE PLAN AND ELEVATIONS FOR SIZES / OPERATION.
- (8.4) VINYL SLIDING DOOR SYSTEM.





09/26/2019

30th

REVISIONS

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ARCHITECTURE

RRIS

ELEVATIONS

BUILDING

ARTMENT

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KEY NOTES

(3.1) CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS.

(2.1) FINISH GRADE - SLOPE AWAY 1/2 INCH PER FOOT MIN.

(3.2) CONCRETE FOOTING - SEE STRUCTURAL DRAWINGS.

(5.3) WOOD FRAMED DECK - SEE DETAIL 2/A3.5 AND STRUCT.

(5.6) STEEL GUARDRAIL (POWDER COATED AT EXTERIOR LOCATIONS -

(5.8) STEEL CANOPY (PAINTED) - SEE STRUCT. FOR ATTACHMENT.

7.14) STANDING SEAM METAL ROOF SYSTEM INSTALLED PER

(8.3) VINYL WINDOW (SLIDING OR SINGLE HUNG) - SEE PLAN AND ELEVATIONS FOR SIZES / OPERATION.

(5.9) PREFINISHED ALUM. FASCIA, SOFFIT (VENTED @ PITCHED ROOFS),

GUTTERS, & DOWNSPOUTS (DOWNSPOUTS DRAIN TO MEMBRANE ROOF BELOW)

PAINTED AT INTERIOR LOCATIONS) +42" FROM FLOOR LINE SUCH THAT 4" SPHERE MAY NOT PASS THRU (SEE STRUCT. DWGS. FOR

4.1 BRICK (SEE MFGR ATTACHMENT DETAILS)

CALL - OUTS AND CONNECTION DETAILS.

(5.14) PRE-FINISHED ALUMINUM PARAPET CAP

MANUFACTURES RECOMMENDATIONS.

8.2 ALUMINUM ENTRY / WINDOW SYSTEM.

(8.4) VINYL SLIDING DOOR SYSTEM.

(5.2) PREFINISHED METAL FLASHING.

(5.10) PREFINISHED ALUM. DRIP

THERMAL & MOISTURE 7.1 STUCCO - HARD COAT.

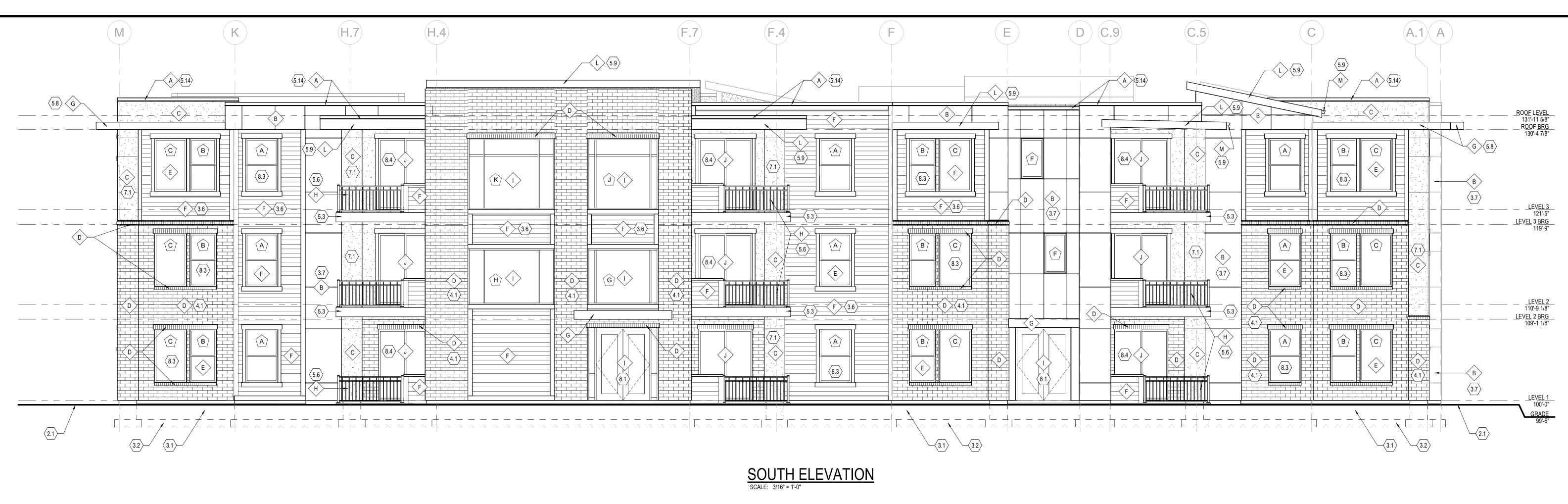
DOORS AND WINDOWS (8.1) HOLLOW METAL DOOR

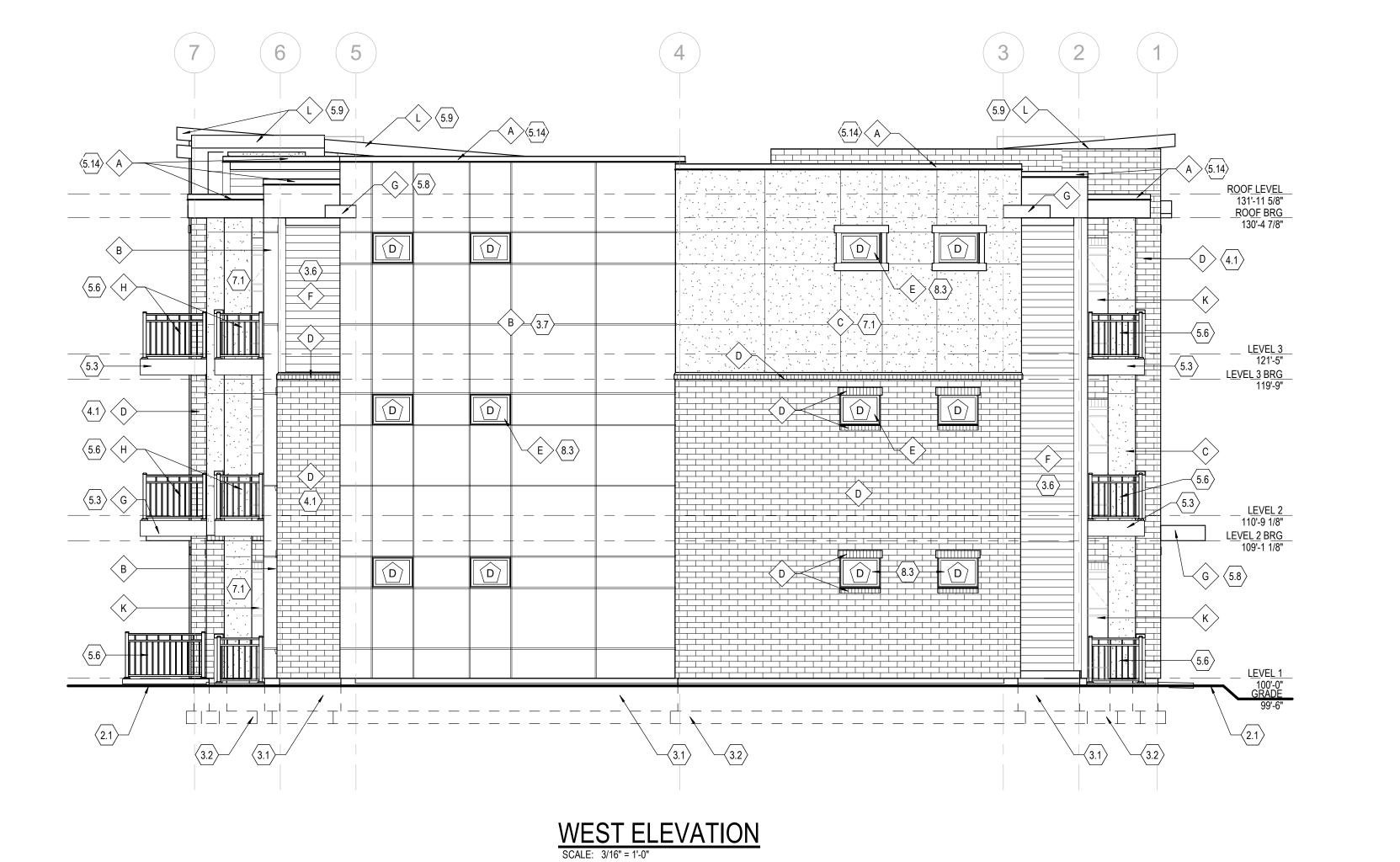
SITE CONSTRUCTION

(3.6) CEMENT BOARD SIDING.

(3.7) CEMENT BOARD PANEL.

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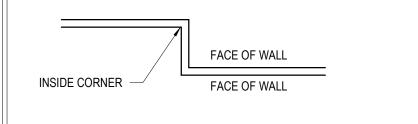


GENERAL NOTES:

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- GENERAL CONTRACTOR TO COORDINATE ALL FOOTING HEIGHTS AND FOOTING STEPS WITH CIVIL AND STRUCTURAL AND WITH FINAL GRADES ON SITE.
- GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF HATCHES,
- SOILS ENGINEER TO PROVIDE INSPECTION OF THE SITE ONCE EXCAVATION HAS TAKEN PLACE TO DETERMINE IF ANY PERIMETER DRAINAGE SYSTEM AND WATERPROOFING MEMBRANE IS REQUIRED.
- ALL SUB-CONTRACORS TO VERIFY EXACT FLOOR TO FLOOR HEIGHTS AND FINISH CEILING HEIGHTS WITH OWNER PRIOR TO CONTRCUTION AND INSTALLATION.
- 6. FOR SOUND INSULATION AT INTERIOR WALLS SEE FLOOR PLANS AND WALL TYPE DETAILS, SHEETS ___ & ___. VERIFY INTENT WITH OWNER.
- 7. SEE ROOF PLAN FOR ALL DIMENSIONS OF CANOPIES.
- S = SPANDREL GLASS (SEE FLOOR PLANS / ELEVATIONS FOR ADDITIONAL LOCATIONS). * = TEMPERED GLASS (SEE FLOOR PLANS / ELEVATIONS FOR ADDITIONAL LOCATIONS). SEE SHEETS A4.0 - A4.1 FOR DOOR AND WINDOW TYPES

	KEY TO EXTERIOR FINISHES						
$\overline{\langle A \rangle}$	PRE-FINISHED ALUMINUM CAP	BLACK					
B	CEMENT BOARD SIDING, SMOOTH FINISH, ALLURA	SNOW					
⟨c⟩	STUCCO (HARD COAT) FINE FINISH, SENERGY	BRUME					
(D)	BRICK, INTERSTATE	MIDNIGHT BLACK					
E	VINYL WINDOW	BLACK					
F	SIDING, ALLURA	CEDAR TS					
G	METAL CANOPY, PAINTED	BLACK					
H	DECK / RAILING	BLACK					
$\overline{\bigcirc}$	ALUMINUM STOREFRONT	BLACK					
$\overline{\bigcirc}$	SLIDER DOOR	BLACK					
K	HOLLOW METAL DOOR & FRAME	BLACK					
Ĺ	ALUMINUM FASCIA	BLACK					
M	ALUMINUM GUTTER AND DOWNSPOUT	BLACK					
N	STANDING SEAM METAL ROOF	CHARCOL GRAY					

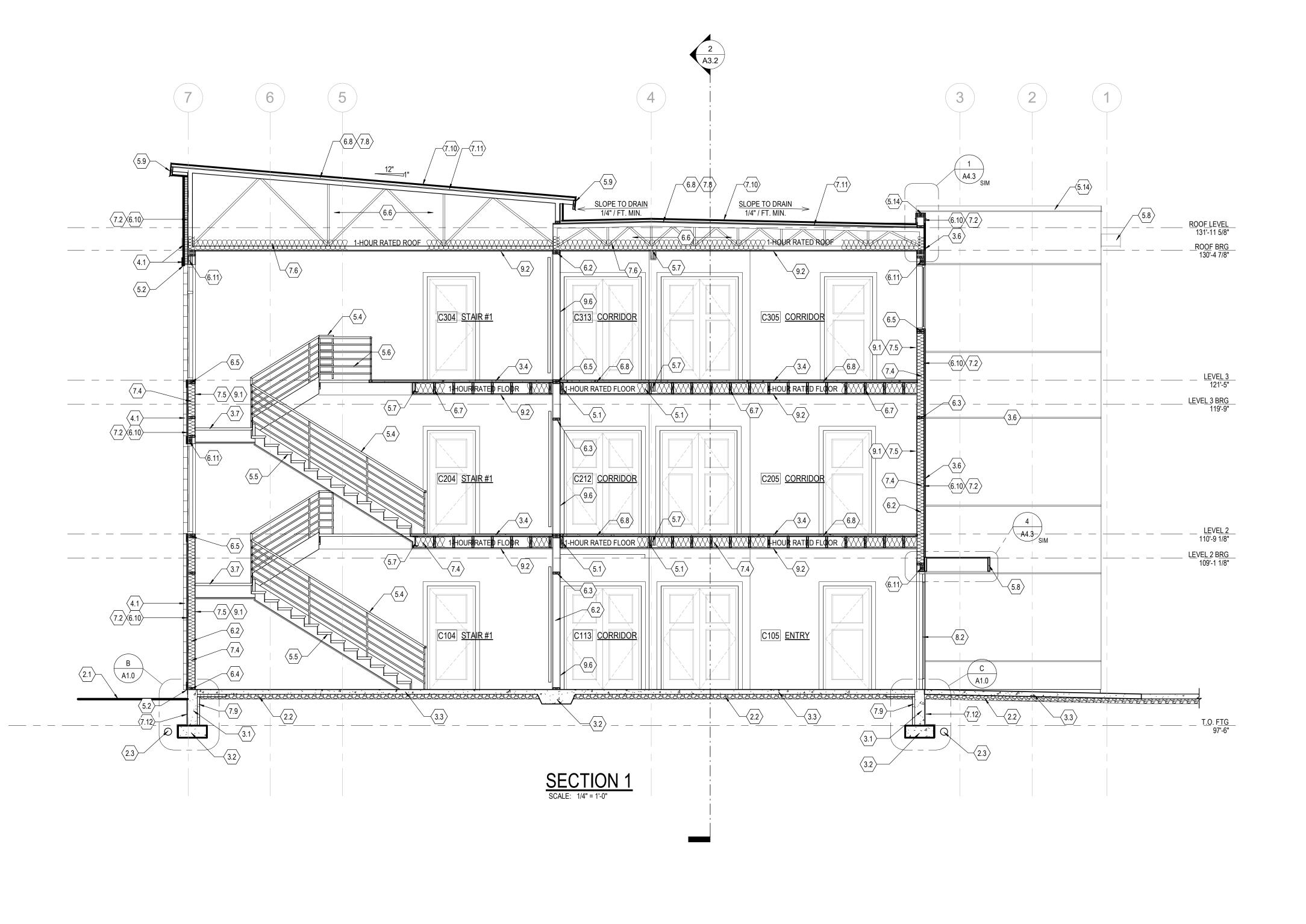
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FINISH NOTES:	
NOTE: ALL METAL TRIMS / VENTS ON EXTERIOR OF BUILDIGN TO BE PAINTED TO MATCH THE COLOR OF THE BRICK / STUCCO / METAL PANELS / OR OTHER EXTERIOR FINISHES THAT THEY ARE LOCATED IN. VERIFY PAINT COLOR WITH ARCHITECT AND	

NOTE: EXTERIOR FINISHES / COLORS TO TERMINATE NO INSIDE CORNERS ONLY. SEE

09/26/2019



KEY NOTES

SITE CONSTRUCTION

(2.1) FINISH GRADE - SLOPE AWAY 1/2 INCH PER FOOT MIN.

(2.2) ENGINEERED GRAVEL FILL - SEE STRUCT. & GEOTECH.

2.3 PERFORATED DRAIN PIPE AT PERIMETER - SEE CIVIL & GEOTECH.

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(3.1) CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS. (3.2) CONCRET FOOTING - SEE STRUCTURAL DRAWINGS.

> 3.3 4" REINFORCED CONCRETE SLAB ON GRADE - SEE STRUCTURAL (3.4) 1" GYPCRETE (SEALED WHERE FLOOR FINISH REQUIRES GLUE

DOWN) OVER 1/4" SOUND REDUCTION MAT (IF OWNER CHOOSES TO ELIMINATE SOUND MAT THE GYPCRETE MUST CHANGE TO

(3.6) CEMENT BOARD SIDING.

2 1/2" REINFORCED CONCRETE OVER WOOD SUB FLOOR - SEE STRUCTURAL DRAWINGS.

4.1 BRICK (SEE MFGR ATTACHMENT DETAILS)

(5.1) SIMPSON HANGER - SEE STRUCTURAL DRAWINGS.

5.2 PREFINISHED METAL FLASHING. (5.3) WOOD FRAMED DECK - SEE DETAIL 2/A3.5 AND STRUCT.

(5.4) STEEL HANDRAILING (PAINTED) - +36" FROM NOSING - SEE DETAIL

(5.5) CONCRETE - FILLED STEEL PAN TREADS AND STEEL RISERS

(5.6) STEEL GUARDRAIL (POWDER COATED AT EXTERIOR LOCATIONS - PAINTED AT INTERIOR LOCATIONS) +42" FROM FLOOR LINE SUCH THAT 4" SPHERE MAY NOT PASS THRU (SEE STRUCT. DWGS. FOR CALL - OUTS AND CONNECTION DETAILS.

(5.7) BEAM - SEE STRUCT. (5.8) STEEL CANOPY (PAINTED) - SEE STRUCT. FOR ATTACHMENT.

ROOF BELOW)

(5.14) PRE-FINISHED ALUMINUM PARAPET CAP

(5.15) 30"x36" ROOF ACCESS HATCH. SEE DETAILS ON SHEET A4.4

(5.16) ROOF ACCESS LADDER

WOOD AND PLASTICS (6.1) 2x4 STUDS - SEE STRUCT. FOR SPACING.

(6.2) 2x6 STUDS - SEE STRUCT. FOR SPACING.

6.3 BLOCKING - SEE STRUCT. (6.4) 2x TREATED PLATE - SEE STRUCT. FOR BOLT PATTERN AND

(6.5) DOUBLE - 2x TOP PLATE 48" LAP SPLICE MIN. (6.6) PRE-MANUFACTURED ROOF TRUSS - SEE STRUCT. FOR SPACING.

(6.7) 18" DEEP TRUSS - SEE STRUCT. FOR SERIES & SPACING.

(6.8) 3/4" T&G SHEATHING NAIL AND GLUE.

6.9 BLOCKING AT +8'-0" AND AT CEILING.

(6.10) WOOD SHEATHING - SEE STRUCT. FOR TYPE AND THICKNESS.

(6.11) WOOD BEAM / HEADER - SEE STRUCT DRAWINGS.

THERMAL & MOISTURE

1 STUCCO - HARD COAT. CONTINUOUS AIR BARRIER - TYPVEK COMMERCIAL WRAP "D" OR APPROVED EQUAL. (TAPE AND SEAL SEAMS & PENETRATIONS) TYP. AT EXTERIOR WALLS. (AT GENERAL CONTRACTOR'S OPTION:

A FLUID APPLIED AIR BARRIER MAY BE USED IN LIEU) (7.4) BATT INSULATION - R19.

7.5 6 MIL POLYETHYLENE MOISTURE BARRIER W/ JOINTS LAPPED PER SPECIFICATIONS.

(7.6) BATT INSULATION - FILL VOID OF JOIST R49 MIN (FSK BATTS ABOVE DROP CEILINGS) - SEE COMCHECK.

(7.7) BATT INSULATION - R23 OR FIBERFILL INSULATION - EQUAL TO

7.8 TAPERED RIGID INSULATION (1" MIN.)

(7.9) 2" RIGID INSULATION - R10

7.10 PVC ROOF MEMBRANE - SEE SPECIFICATION TRAFFIC BEARING ROOF DECK SURFACE (CLASS B RATED) (PROVIDE EPDM ALTENATE BID)

(7.11) 1/4" ROOF COVER BOARD.

(7.12) WATER PROOF MEMBRANE - SEE SPECIFICATIONS.

(7.13) WATER PROOF DECK COATING. (7.14) STANDING SEAM METAL ROOF SYSTEM INSTALLED PER

MANUFACTURES RECOMMENDATIONS.

DOORS AND WINDOWS (8.1) HOLLOW METAL DOOR

(8.2) ALUMINUM ENTRY / WINDOW SYSTEM.

(8.3) VINYL WINDOW (SLIDING OR SINGLE HUNG) - SEE PLAN AND ELEVATIONS FOR SIZES / OPERATION.

(8.4) VINYL SLIDING DOOR SYSTEM.

<u>FINSHES</u> (9.1) 5/8" TYPE "X" GYP BOARD.

(92) (1) LAYER OF 5/8" TYPE "C" GYP BOARD (SKIP TROWEL TEXTURED AND PAINTED) OVER 1/2" RESILIENT CHANNEL (1-HOUR RATED

(1) LAYER 5/8" TYPE "X" GYP BD EACH SIDE OF WALL (1-HOUR RATED WALL)

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Author

(3.1) CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS. (3.2) CONCRET FOOTING - SEE STRUCTURAL DRAWINGS.

(3.3) 4" REINFORCED CONCRETE SLAB ON GRADE - SEE STRUCTURAL (3.4) 1" GYPCRETE (SEALED WHERE FLOOR FINISH REQUIRES GLUE

DOWN) OVER 1/4" SOUND REDUCTION MAT (IF OWNER CHOOSES TO ELIMINATE SOUND MAT THE GYPCRETE MUST CHANGE TO

(3.6) CEMENT BOARD SIDING.

3.7 2 1/2" REINFORCED CONCRETE OVER WOOD SUB FLOOR - SEE STRUCTURAL DRAWINGS.

4.1 BRICK (SEE MFGR ATTACHMENT DETAILS)

(5.1) SIMPSON HANGER - SEE STRUCTURAL DRAWINGS.

5.2 PREFINISHED METAL FLASHING.

(5.3) WOOD FRAMED DECK - SEE DETAIL 2/A3.5 AND STRUCT. (5.4) STEEL HANDRAILING (PAINTED) - +36" FROM NOSING - SEE DETAIL

(5.5) CONCRETE - FILLED STEEL PAN TREADS AND STEEL RISERS

(5.6) STEEL GUARDRAIL (POWDER COATED AT EXTERIOR LOCATIONS - PAINTED AT INTERIOR LOCATIONS) +42" FROM FLOOR LINE SUCH THAT 4" SPHERE MAY NOT PASS THRU (SEE STRUCT. DWGS. FOR CALL - OUTS AND CONNECTION DETAILS.

(5.7) BEAM - SEE STRUCT.

(5.8) STEEL CANOPY (PAINTED) - SEE STRUCT. FOR ATTACHMENT. ROOF BELOW)

(5.14) PRE-FINISHED ALUMINUM PARAPET CAP

(5.15) 30"x36" ROOF ACCESS HATCH. SEE DETAILS ON SHEET A4.4

(5.16) ROOF ACCESS LADDER

WOOD AND PLASTICS

(6.1) 2x4 STUDS - SEE STRUCT. FOR SPACING. (6.2) 2x6 STUDS - SEE STRUCT. FOR SPACING.

6.3 BLOCKING - SEE STRUCT.

(6.4) 2x TREATED PLATE - SEE STRUCT. FOR BOLT PATTERN AND (6.5) DOUBLE - 2x TOP PLATE 48" LAP SPLICE MIN.

(6.6) PRE-MANUFACTURED ROOF TRUSS - SEE STRUCT. FOR SPACING.

(6.7) 18" DEEP TRUSS - SEE STRUCT. FOR SERIES & SPACING.

(6.8) 3/4" T&G SHEATHING NAIL AND GLUE.

6.9 BLOCKING AT +8'-0" AND AT CEILING.

(6.10) WOOD SHEATHING - SEE STRUCT. FOR TYPE AND THICKNESS.

(6.11) WOOD BEAM / HEADER - SEE STRUCT DRAWINGS.

THERMAL & MOISTURE

1 STUCCO - HARD COAT.

CONTINUOUS AIR BARRIER - TYPVEK COMMERCIAL WRAP "D" OR APPROVED EQUAL. (TAPE AND SEAL SEAMS & PENETRATIONS) TYP. AT EXTERIOR WALLS. (AT GENERAL CONTRACTOR'S OPTION: A FLUID APPLIED AIR BARRIER MAY BE USED IN LIEU)

7.4 BATT INSULATION - R19.

6 MIL POLYETHYLENE MOISTURE BARRIER W/ JOINTS LAPPED PER SPECIFICATIONS.

(7.6) BATT INSULATION - FILL VOID OF JOIST R49 MIN (FSK BATTS ABOVE DROP CEILINGS) - SEE COMCHECK.

(7.7) BATT INSULATION - R23 OR FIBERFILL INSULATION - EQUAL TO

7.8 TAPERED RIGID INSULATION (1" MIN.)

(7.9) 2" RIGID INSULATION - R10

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MANUFACTURES RECOMMENDATIONS.

(7.14) STANDING SEAM METAL ROOF SYSTEM INSTALLED PER

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(8.1) HOLLOW METAL DOOR

(8.2) ALUMINUM ENTRY / WINDOW SYSTEM.

(8.3) VINYL WINDOW (SLIDING OR SINGLE HUNG) - SEE PLAN AND ELEVATIONS FOR SIZES / OPERATION.

 $\langle 8.4 \rangle$ VINYL SLIDING DOOR SYSTEM.

<u>FINSHES</u>

(9.1) 5/8" TYPE "X" GYP BOARD. (9.2) (1) LAYER OF 5/8" TYPE "C" GYP BOARD (SKIP TROWEL TEXTURED AND PAINTED) OVER 1/2" RESILIENT CHANNEL (1-HOUR RATED

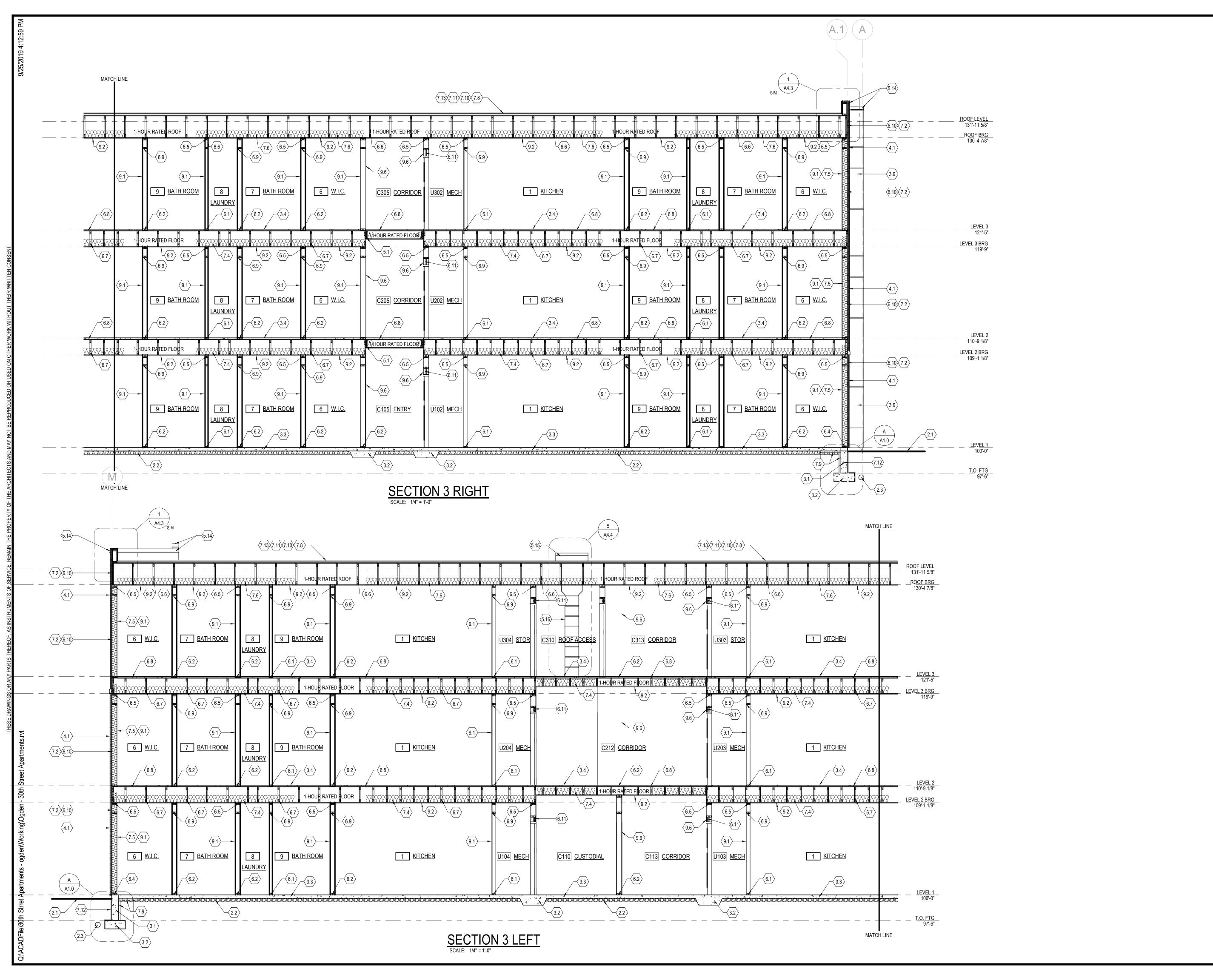
(1) LAYER 5/8" TYPE "X" GYP BD EACH SIDE OF WALL (1-HOUR RATED WALL)





BUILDING

30th



KEY NOTES

- SITE CONSTRUCTION
- (2.1) FINISH GRADE SLOPE AWAY 1/2 INCH PER FOOT MIN.
- (2.2) ENGINEERED GRAVEL FILL SEE STRUCT. & GEOTECH. (2.3) PERFORATED DRAIN PIPE AT PERIMETER - SEE CIVIL & GEOTECH.

REVISIONS

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30th 09/26/2019

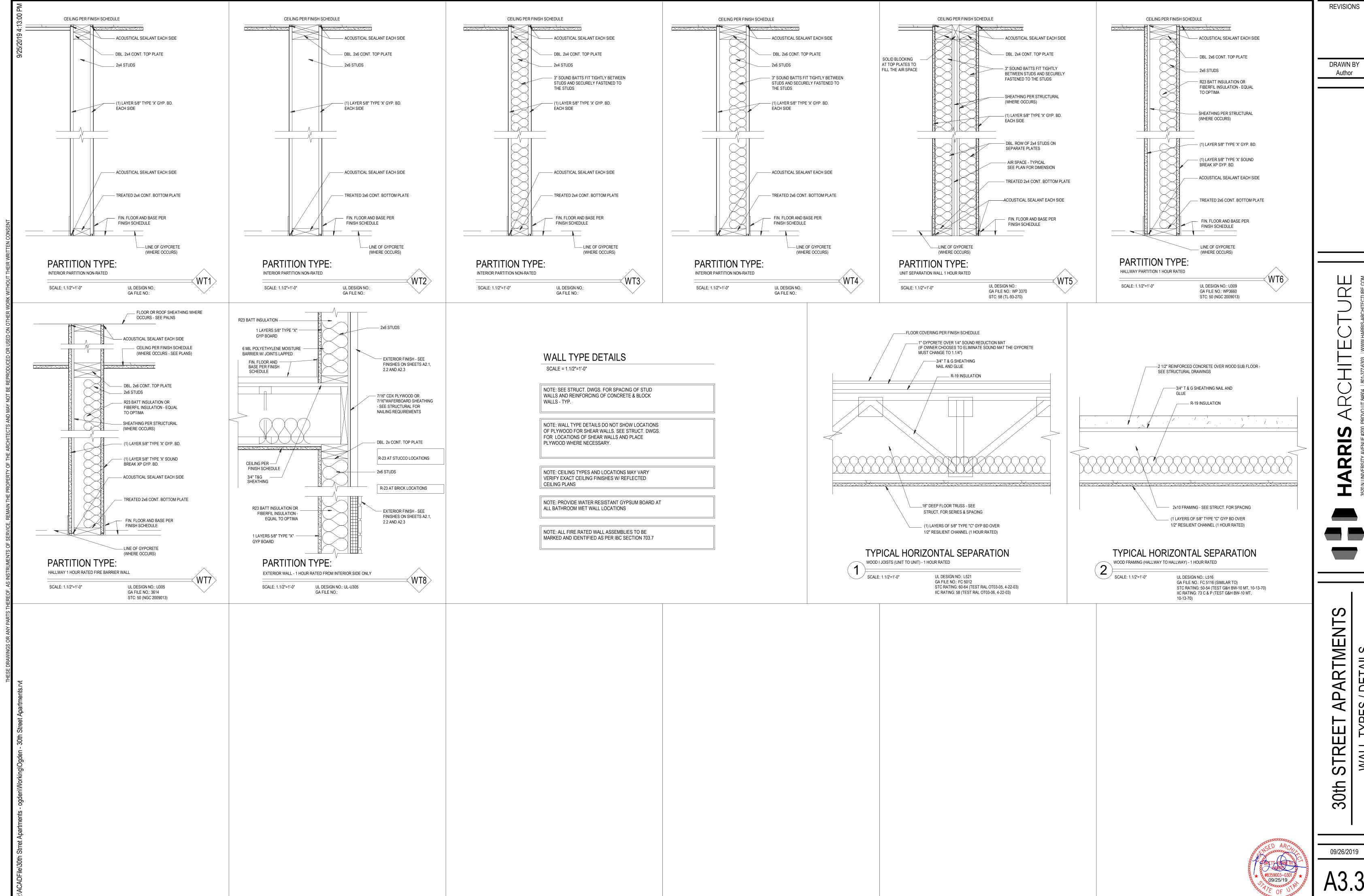
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BUILDING



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	DOOR SCHEDULE									
LEVEL	MARK	DETAIL#	DOOR SIZE	DOOR MATERIAL	FRAME TYPE	GLASS TYPE	HARDWARE	FINISH	FIRE RATING PER MIN	REMARKS
	_									
LEVEL 3	C301	D6	PR 3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		AFGIKLNVW	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	C302	D7	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABIK	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	C303	D7	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABIK	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	C306	D6	PR 3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		AFGIKLNVW	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	C307	D7	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABIK	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	C308	D7	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABIK	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	C310	D7	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABIK	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	C312	D7	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEG	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U301	D1	3'-0"x7'-0"x1 3/4"	WOOD (SOLID CORE)	HOLLOW METAL		ABEGIKP	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U301A	D2	PR 2'-6"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEGKV	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U301B	D3	6'-0"x8'-0" SLIDING	VINYL	VINYL	TEMP	Т			COMPLETE ASSEMBLY BY DOOR MFGR.
LEVEL 3	U301C	D4	2'-10"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEHI	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U302	D1	3'-0"x7'-0"x1 3/4"	WOOD (SOLID CORE)	HOLLOW METAL		ABEGIKP	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U302A	D2	PR 2'-6"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEGKV	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U302B	D3	6'-0"x8'-0" SLIDING	VINYL	VINYL	TEMP	Т			COMPLETE ASSEMBLY BY DOOR MFGR.
LEVEL 3	U302C	D4	2'-10"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEHI	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U303	D1	3'-0"x7'-0"x1 3/4"	WOOD (SOLID CORE)	HOLLOW METAL		ABEGIKP	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U303A	D2	PR 2'-6"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEGKV	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
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LEVEL 3	U303C	D4	2'-10"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEHI	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U304	D1	3'-0"x7'-0"x1 3/4"	WOOD (SOLID CORE)	HOLLOW METAL		ABEGIKP	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U304A	D2	PR 2'-6"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEGKV	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U304B	D3	6'-0"x8'-0" SLIDING	VINYL	VINYL	TEMP	Т			COMPLETE ASSEMBLY BY DOOR MFGR.
LEVEL 3	U304C	D4	2'-10"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEHI	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U305	D1	3'-0"x7'-0"x1 3/4"	WOOD (SOLID CORE)	HOLLOW METAL		ABEGIKP	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U305A	D2	PR 2'-6"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEGKV	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U305B	D3	6'-0"x8'-0" SLIDING	VINYL	VINYL	TEMP	Т			COMPLETE ASSEMBLY BY DOOR MFGR.
LEVEL 3	U305C	D4	2'-10"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEHI	PAINT		FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U306	D1	3'-0"x7'-0"x1 3/4"	WOOD (SOLID CORE)	HOLLOW METAL		ABEGIKP	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U306A	D2	PR 2'-6"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		ABEGKV	PAINT	20 MINS	FLUSH H.M. FRAME W/ APPLIED MOLDINGS
LEVEL 3	U306B	D3	6'-0"x8'-0" SLIDING	VINYL	VINYL	TEMP	Т			COMPLETE ASSEMBLY BY DOOR MFGR.
UNIT LEVEL	1-A	D5	1'-10"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
UNIT LEVEL	1-B	D5	2'-10"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ADI	PAINT		
UNIT LEVEL	1-C	D5	PR 2'-4"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
UNIT LEVEL	1-D	D5	2'-10"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ADI	PAINT		
UNIT LEVEL	1-E	D5	2'-10"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
UNIT LEVEL	1-F	D5	2'-10"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ADI	PAINT		
UNIT LEVEL	1-G	D5	PR 2'-6"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
	1-H	D5	2'-10"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ADI	PAINT		
	2-A	D5	3'-0"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
	2-B	D5	2'-4"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
UNIT LEVEL		D5	PR 2'-6"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
UNIT LEVEL		D5	3'-0"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ADI	PAINT		
UNIT LEVEL		D5	3'-0"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ADI	PAINT		
UNIT LEVEL		D5	PR 2'-6"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		
	2-G	D5	3'-0"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ABEI	PAINT		
UNIT LEVEL	2-	D5	PR 2'-6"x6'-8"x1 3/4"	WOOD (HOLLOW CORE)	WOOD		ACI	PAINT		



HARDWARE CODE: A. HINGES

- B. LOCK SET LEVER HANDLE
- C. PASSAGE SET LEVER HANDLE
- D. PRIVACY SET LEVER HANDLE E. DEAD BOLT
- F. PANIC HARDWARE G. CLOSING DEVICE
- H. WEATHERSTRIP, SWEEP, & ADA COMPLIANT THRESHOLD
- J. HEAD AND FOOT BOLTS AUTO
- K. SMOKESEAL AND SWEEP
- L. PUSH-PULLS (PULL ONLY @ PANIC HARDWARE DOORS)
- M. DOUBLE ACTING HINGES
- N. MAGNETIC HOLD OPEN DEVICE
- O. CYLINDER LOCK W/ THUMBTURN P. ELECTRONIC ACCESS CONTROL (BY OWNER)
- Q. SLIDING DOOR HARDWARE (PRIVACY LATCH ON BATHROOMS) R. PULLS AND ROLLER CATCH
- S. HEAD & FOOT BOLTS
- T. LOCK STILE CONTAINED MORTISE LOCK AND HANDLE ASSEMBLY BY MANUFACTURER U. KICK PLATE
- V. CLOSING SEQUENCER W. REMAINDER OF DOOR HARDWARE VY DOOR SUPPLIER
- X. SOUND GASKETS Z. DOOR HARDWARE BY MANUFACTURER

REVISIONS

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Author

ARTMENT

AP,

STREE 30th

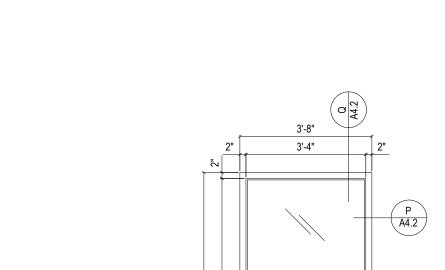
30th

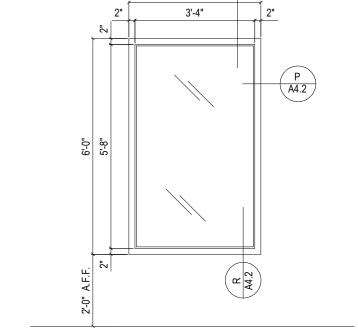
= TEMPERED GLASS (SEE FLOOR PLANS/ELEVATIONS FOR ADDITIONAL LOCATIONS.

S = SPANDREL GLASS (SEE FLOOR PLANS/ELEVATIONS FOR ADDITIONAL LOCATIONS.

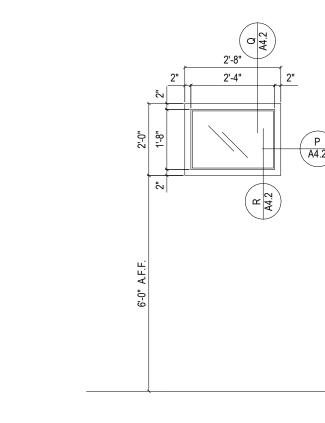
R = RATED GLASS (SEE FLOOR PLANS/ELEVATIONS FOR ADDITIONAL LOCATIONS.

09/26/2019

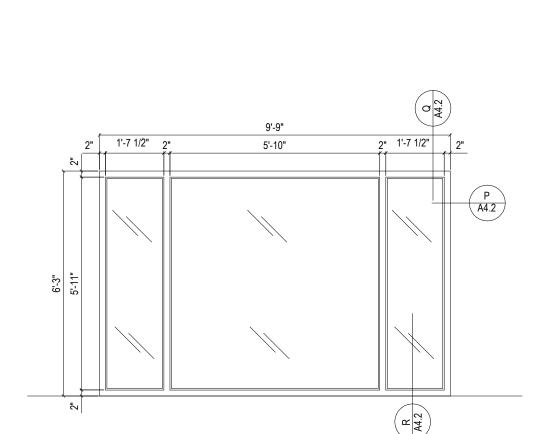












WINDOW DETAIL TYPE

NOTE: TO PREVENT HEAT BUILD-UP AT ALL SPANDREL WINDOW LOCATIONS DRILL 3/4" HOLES @ 12" O/C IN THE STUDS - ALL 4 SIDES AND SURROUNDING SHEATHING TO VENT THE SPACE BEHIND THE WINDOW

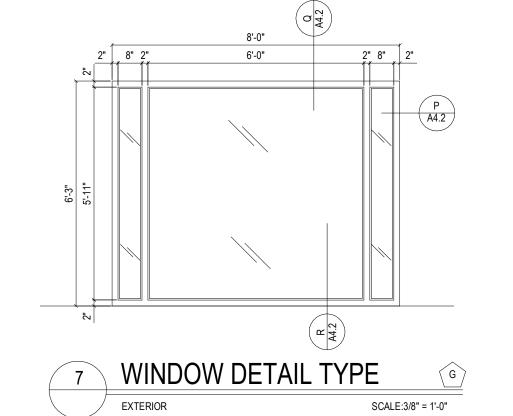
THE DOOR FRAME DETAILS FOR INTERIOR WALLS DO NOT INDICATE THROAT DIMENSION TO INCLUDE ANY SHEAR WALL MATERIAL. IT IS THE RESPONSIBILITY OF THE DOOR/FRAME SUPPLIER TO REVIEW THE STRUCTURAL SHEAR WALL DRAWINGS AND ACCOUNT FOR ANY INCREASE IN DOOR FRAME THROAT DIMENSION DUE TO SHEAR WALL MATERIAL.

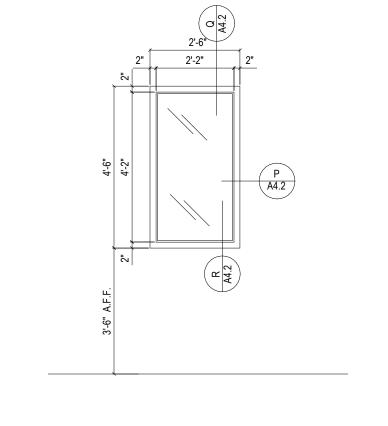
NOTE: -VERIFY ALL PANEL STYLES ON DOORS W/ OWNER -ALL HARDWARE TO BE BRUSHED CHROME

-GLAZING REQUIREMENTS -GLAZING TO BE INSULATED, LOW "E" ON ALL SIDES (CLEAR) - TYPICAL U.N.O

NOTE: HOLLOW METAL DOOR FRAMES

SCALE:3/8" = 1'-0"



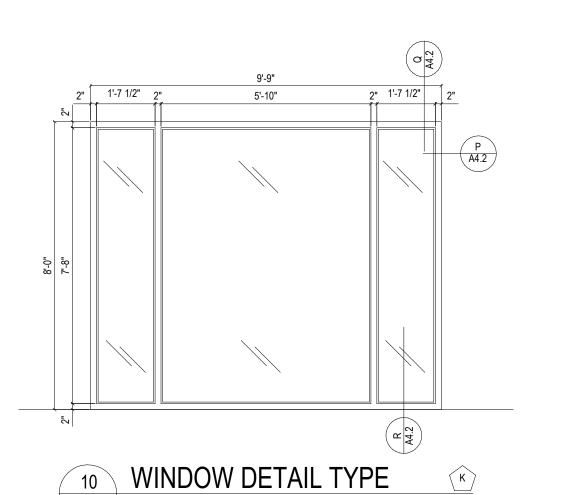


2 WINDOW DETAIL TYPE

SCALE:3/8" = 1'-0"

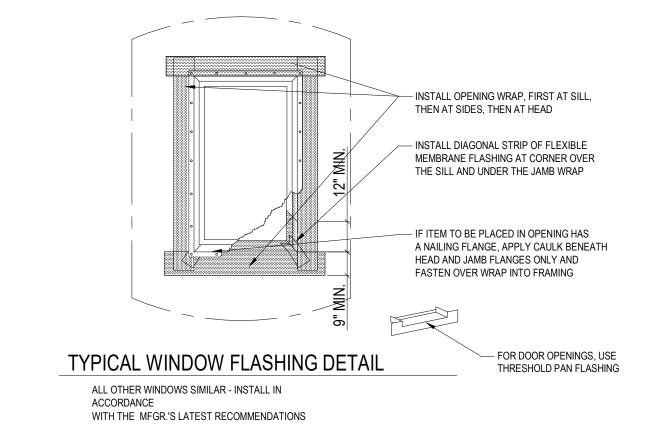
CONTRACTOR TO VERIFY WINDOW OPENING WITH LOCATION OF EXHAUST VENTS. (3' CLEARANCE IS REQUIRED)

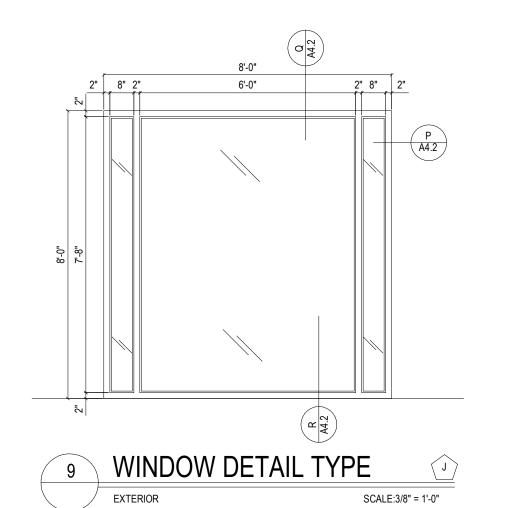
6	WINDOW	DETAIL TYPE	F
	EXTERIOR	SCALE	3/8" = 1'-0"



SCALE:3/8" = 1'-0"

EXTERIOR





WINDOW DETAIL TYPE

1 WINDOW DETAIL TYPE

SCALE:3/8" = 1'-0"

SCALE:3/8" = 1'-0"

09/26/2019

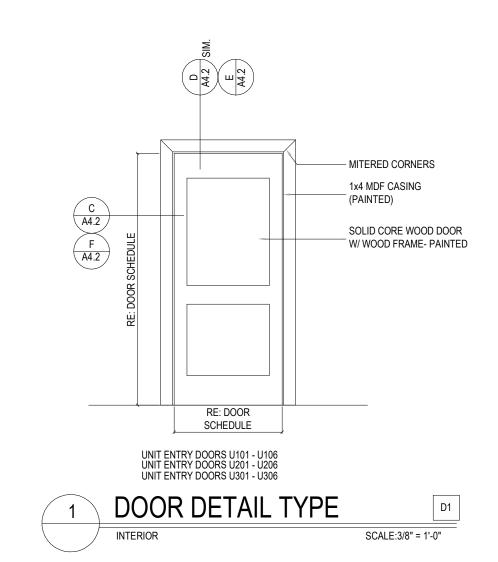


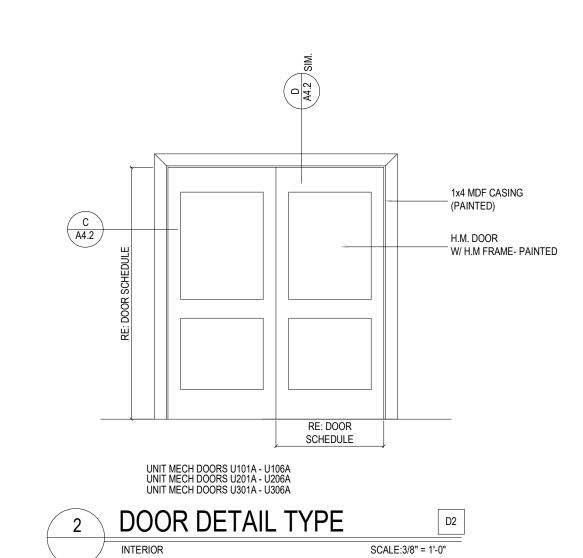
REVISIONS

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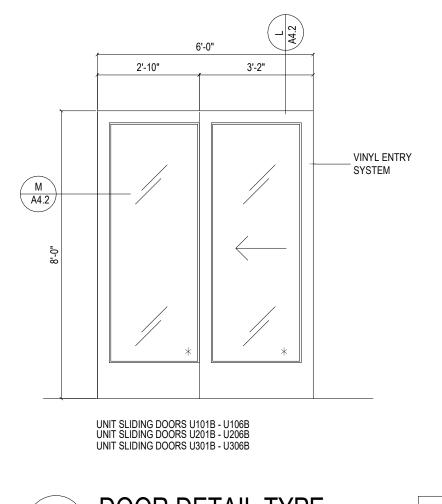
1x4 MDF CASING (PAINTED) HOLLOW CORE WOOD DOOR
W/ WOOD FRAME- PAINTED RE: DOOR SCHEDULE INT. UNIT DOORS 1A-1H, INT. UNIT DOORS 2A-2I,

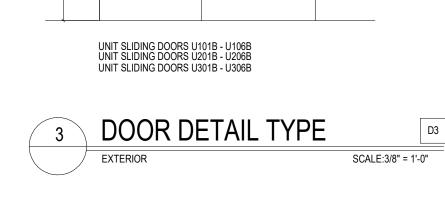
5 DOOR DETAIL TYPE INTERIOR SCALE:3/8" = 1'-0"

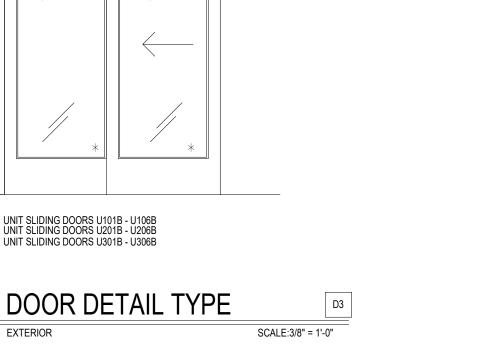


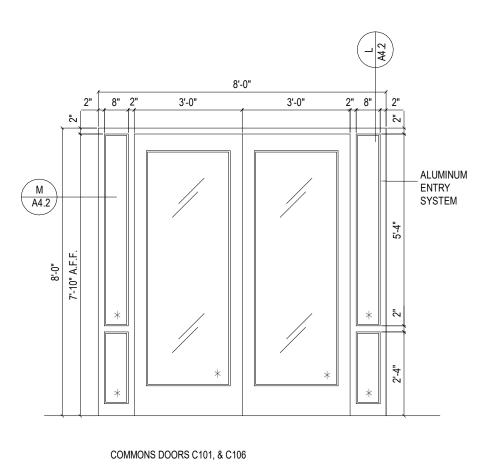


SCALE:3/8" = 1'-0"

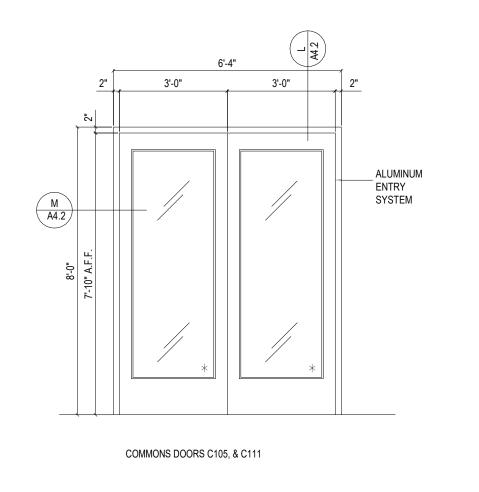












RE: DOOR SCHEDULE

UNIT STORAGE DOORS U101C - U105C UNIT STORAGE DOORS U201C - U205C UNIT STORAGE DOORS U301C - U305C

4 DOOR DETAIL TYPE

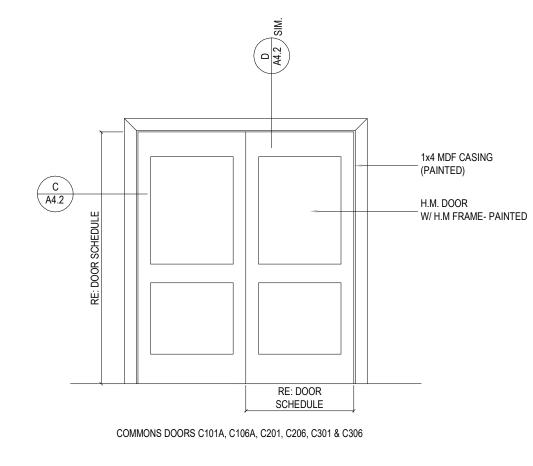
H A4.2

H.M. DOOR

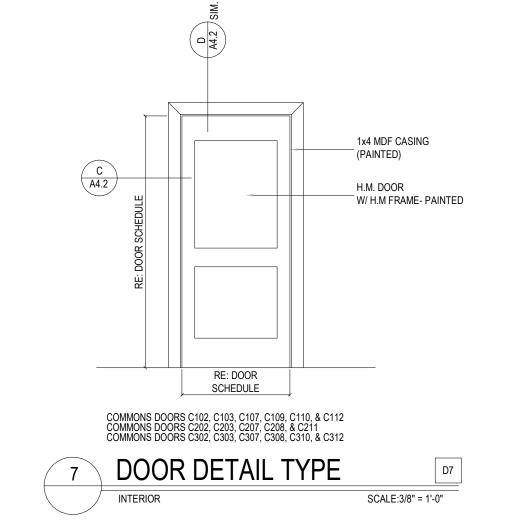
W/ H.M FRAME- PAINTED

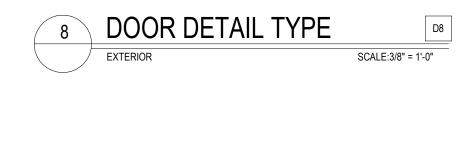
SCALE:3/8" = 1'-0"











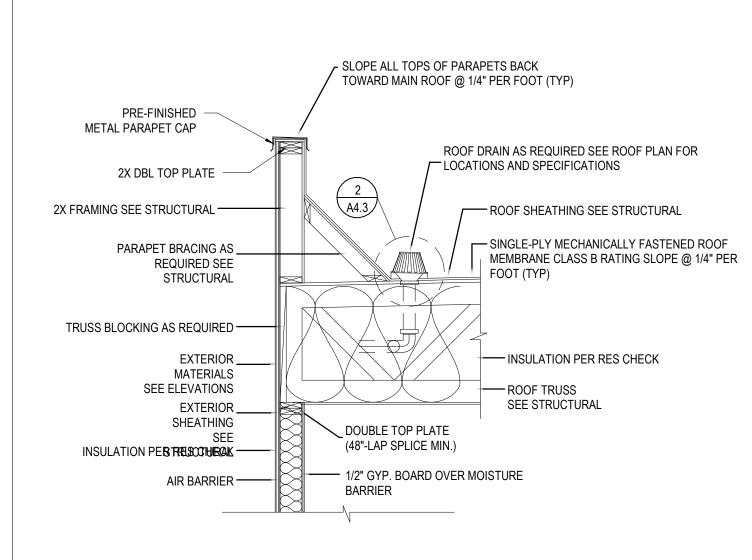


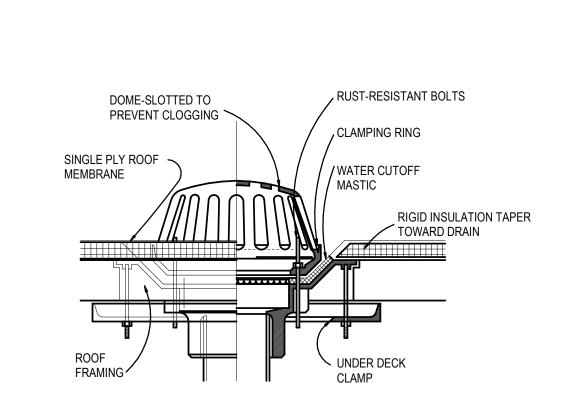
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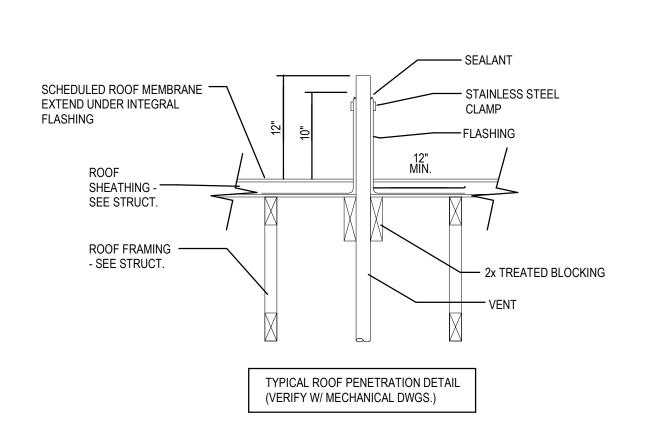
Author

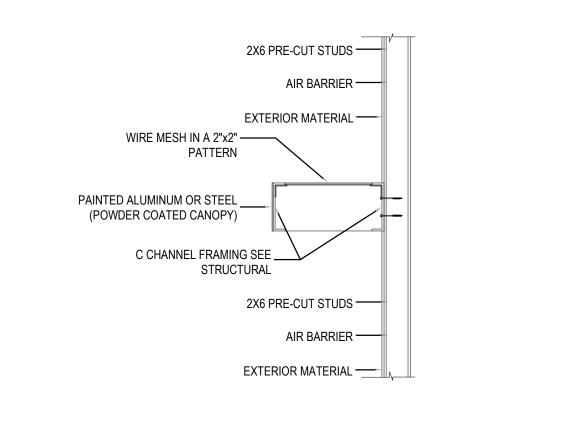
DOOR STREE











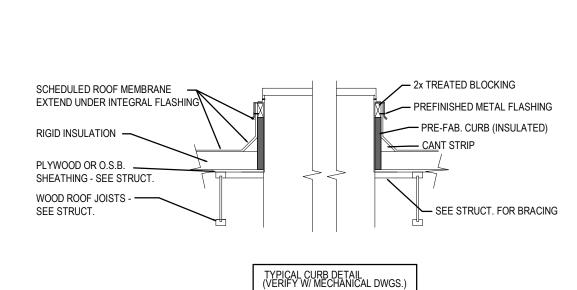
PARAPET DETAIL SCALE: 1/2" = 1'-0"

TYP. ROOF DRAIN DETAIL SCALE: N.T.S.

TYP. ROOF PENETRATION DETAIL SCALE: N.T.S.

ROOF CANOPY DETAIL

SCALE: 1/2" = 1'-0"



1/4" METAL TRANSITION STRIP - SEE SCHEDULE FOR FINISH COLOR 1/4" METAL TRANSITION STRIP - SEE DOOR (WHERE OCCURS) SCHEDULE FOR FINISH COLOR INSTALLATION FLANGE — SHIM CARPET W/ FLOORSTONE TO BE UNDER CARPET CONC. SLAB OR GYPCRETE AS REQ'D FOR FLUSH INSTALLATION TYP. CARPET TO CONCRETE TRANSITION TYP. CARPET TO TILE TRANSITION

1.1/4" GYPCREETE &

--- 3/4" T&G FLOOR

SHEATHING

6 MIL POLYETHYLENE MOISTURE BARRIER 5/8" TYPE "X" GYP BOARD

FLOOR TRUSS SEE

STRUCT. DWGS

- INSULATION

PER COMM CHECK

(1) LAYER OF 5/8" TYPE "C" GYP.

CHANNEL. (1 HOUR RATED CEILING)

BD. OVER 1/2" RESILIENT

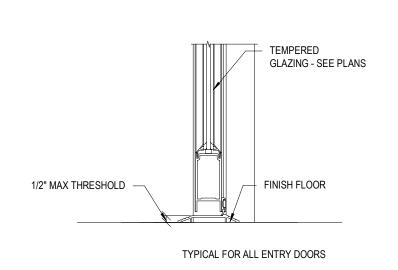
SOUND MAT.

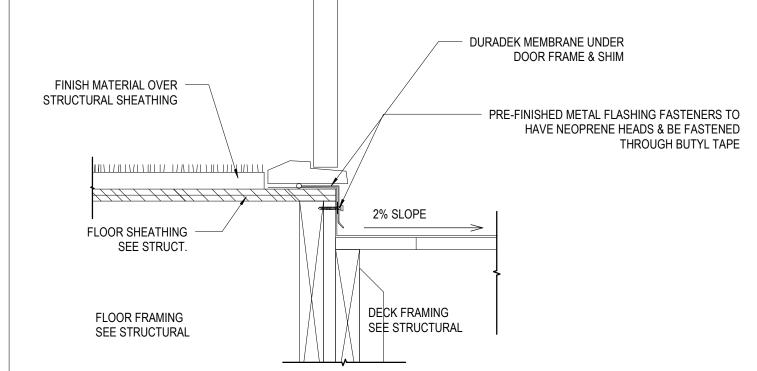
1/4" METAL TRANSITION STRIP - SEE SCHEDULE FOR FINISH COLOR

DOOR (WHERE OCCURS)

—CONC. SLAB OR GYPCRETE

TYP. CARPET TO LVT TRANSITION





SEE DOOR SCHEDULE

CURB DETAIL

STEEL GUARDRAIL (POWDER

COATED) - SEE DETAILS

STRUCTURAL SLEEVE

DECK DETAILS

BOLT THROUGH

FINISH SEE

ELEVATIONS

1 1/2" (MIN.) CONCRETE DECK. OVER ICE & WATER SHIELD DECTEC WATERPROOF _ DECK COATING LAG BOLTS PER DECTEC OVER — STRUCTURAL FLASHING FLASHING, TYP. 6" STRUCTURAL PREFINISHED METAL FLASHING – & DRIP EDGE ADJUST LENGTH - SLEEVE- SEE STRUCTURAL FOR GUARDRAIL ATTACHMENT. (POWDER COATED) LAG BOLTS AND -WASHERS 3/4" T & G STRUCTURAL ^{_} SHEATHING, POWDER COATED BASE ~ NAIL AND GLUE PLATE PER MFGR. RECOMMENDATIONS LAG BOLTS SEE STRUCTURAL FOR DETAILS PREFINISHED ALUM. C DETAIL 6" STRUCTURAL SLEEVE-FASCIA AND SOFFIT SEE STRUCTURAL

DECTEC _

NAIL AND GLUE

2X10 - SEE STRUCT.

(2) RIM BOARDS —/ SEE STRUCT.

OVER FLASHING

WASHERS

PREFINISHED ALUM.

FASCIA AND SOFFIT

FLASHING & DRIP EDGE

ADJUST LENGTH FOR GUARDRAIL ATTACHMENT

~ POWDER COATED BASE PLATE PER MFGR. RECOMMENDATIONS

FLASHING, TYP.

B DETAIL

WATERPROOF

DECK COATING

1 1/2" (MIN.) CONCRETE DECK.

OVÈR ICE & WATER SHIELD

SCALE: 1 1/2" = 1'-0"

FLOORING TRANSITION DETAILS

VINYL WINDOW ——

EXTERIOR FINISH PER PLANS ----

TAPE AND SEAL SEAMS & _

EXTERIOR WALLS.

EXTERIOR _

SHEATHING -

SEE STRUC.

DOUBLE TOP PLATE ----

FOR SPACING

VYNIL WINDOW ---

-SEE STRUCTURAL

HEADER —

2X STUDS SEE STRUC.

PENETRATIONS. TYPICAL AT

CONTINUOUS AIR BARRIER -





DOOR @ DECK DETAIL

10 FLOOR SYSTEM DETAILS

REVISIONS

DRAWN BY Author

STREET

30th

DRAWN BY

Author

APARTMENTS DETAILS STREET 30th

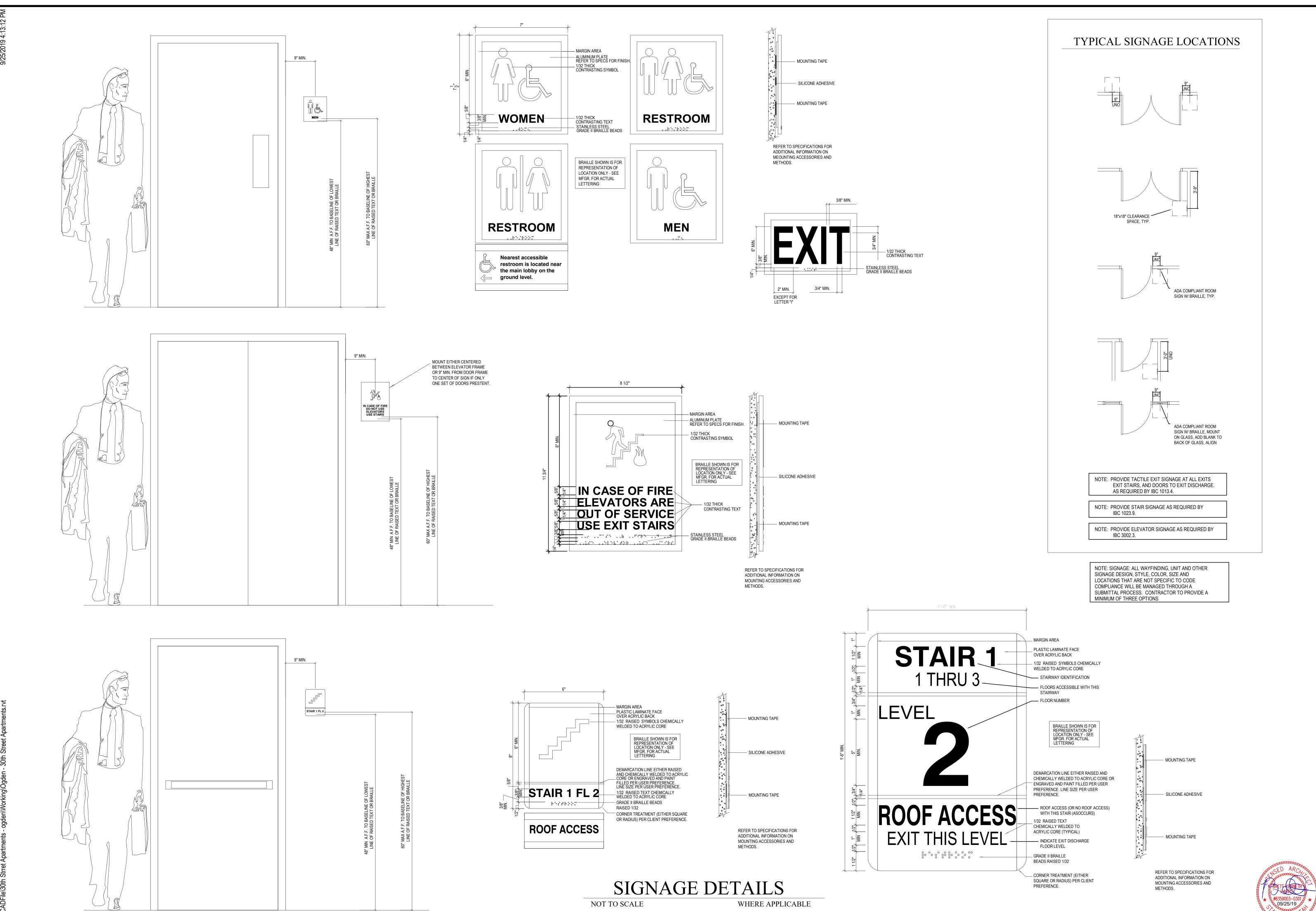
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RIS ARCHITECTURE.

30th STREET APARTMENTS

09/26/2019

A4.5



DRAWN BY Author

APARTMENTS SIGNAGE STREET 30th

09/26/2019

A4.6

C. Furring Channels – Rigid or resilient galv steel furring channels installed perpendicular to bottom chord of trusses. D. Gypsum Board* – Nom 4 ft (122 cm) wide by 5/8 in. (16 mm) thick, screw-attached to furring channels. 1.1 Chase Wall (Optional, not shown) – The through penetrants (Item No. 2) may be routed through a 1 hr fire-rated single, double or

Studs - Nom 2 in. by 6 in. (51 mm by 152 mm) or double nom 2 in. by 4 in. (51 mm by 102 mm) lumber studs. B. Sole Plate – Nom 2 in. by 6 in. (51 mm by 152 mm) or parallel 2 in. by 4 in. (51 mm by 102 mm) lumber plates, tightly butted. C. Top Plate – The double top plate shall consist of two nom 2 in. by 6 in. (51 mm by 152 mm) or two sets of parallel 2 in. by 4 in. (51 mm by 102 mm) lumber plates, tightly butted. D. Gypsum Board* – Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

2. Cables – Max seven conductor No. 12 AWG (or smaller) power/control cables or max 100 pair No. 22 AWG (or smaller) telecommunication cables or max four conductor with ground No. 2/0 AWG (or smaller) aluminum SER cables with polyvinyl chloride insulation and jacket materials. Tightly bundled group of cables (max 3 in. (76 mm) diam cable bundle) centered in circular cutouts. Circular cutouts to have a diam 1/2 in. to 3/4 in. (13 mm to 19 mm) larger than diam of cable bundle such that a 1/4 in. to 3/8 in. (6 mm to 10 mm) annular space is present between the cable bundle and the perimeter of the circular cutout. Cables to be rigidly supported on both

3. **Firestop System** – The details of the firestop system shall be as follows:

A. Fill, Void or Cavity Materials* - Wrap Strip - Nom 1/4 in. (6 mm) thick intumescent elastomeric material faced on one side with aluminum foil, supplied in 2 in. (51 mm) wide strips. Nom 2 in. (51 mm) wide strip tightly wrapped around cable bundle (foil side exposed), secured with two steel tie wires and slid into hole-sawed opening in flooring (Item 1B) and in gypsum wallboard ceiling (Item 1D) or the sole plate (Item 1.1B) and top plate (Item 1.1C) of the chase wall. Bottom edge of wrap strip to project 9/16 in. to 11/16 in. (14 mm to 17.5 mm) below bottom surface of flooring and below bottom (ceiling) surface of gypsum wallboard or the bottom edge of the top plate. 3M COMPANY - FS-195+.

B. Fill, Void or Cavity Materials* - Caulk, Sealant or Putty - Applied to fill interstices between cables, to the max extent possible, within confines of wrap strip at both the floor and ceiling elevations. Nom 1/4 in. (6 mm) thickness of caulk or putty to be applied to the exposed edge of the wrap strip layer (top of flooring or sole plate and bottom of gypsum wallboard ceiling or top plate). Generous application of caulk or putty to be applied to fill all gaps at the wrap strip/flooring and wrap strip/gypsum wallboard ceiling or wrap strip/top plate interfaces. 3M COMPANY - CP 25WB+, IC 15WB+, FireDam 150+ caulk, FB-3000 WT sealant, or MP+ Stix putty

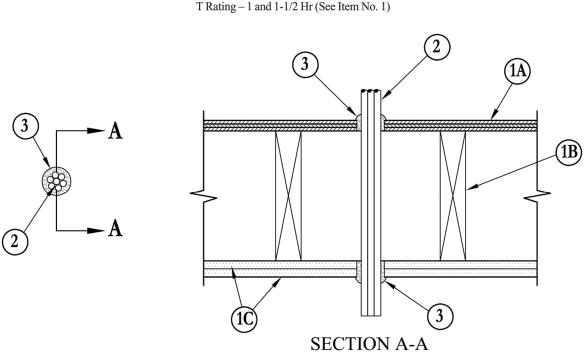
*Bearing the UL Classification Marking

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System No. F-C-3017

September 03, 2004

F Rating – 1 and 2 Hr (See Item No. 1)



1. Floor-Ceiling Assembly – The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L505, L511 or L536 in the UL Fire Resistance Directory. The F Rating of the firestop system is equal to the rating of the floor-ceiling assembly. The T Rating of the firestop system is 1 and 1-1/2 hr for 1 and 2 hr rated floor-ceiling assemblies, respectively. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System – Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening is 1-1/2 in. B. **Wood Joists*** – For 1 hr fire-rated floor-ceiling assemblies, nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel

joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped. For 2 hr fire-rated floor-ceiling assemblies, nom 2 by 10 in, lumber joists spaced 16 in. OC with nom 1 by 3 in, lumber bridging and with ends firestopped. C. **Gypsum Board*** – Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. First layer of wallboard nailed to

wood joists. Second layer of wallboard (2 hr fire-rated assembly) screw-attached to furring channels. Max diam of opening is 1-1/2 in. 1.1 Chase Wall (Optional not shown) – The through penetrants (Item No. 2) may be routed through a fire-rated single, double or staggered wood stud/gypsum wallboard chase wall having a fire rating consistent with that of the floor-ceiling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance

Directory and shall include the following construction features: A. **Studs** – Nom 2 by 6 in. or double nom 2 by 4 in. lumber studs.

B. **Sole Plate** – Nom 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly butted.

C. Top Plate – The double top plate shall consist of two nom 2 by 6 in. or two sets of parallel 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 1-1/2 in. D. Gypsum Board* - Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

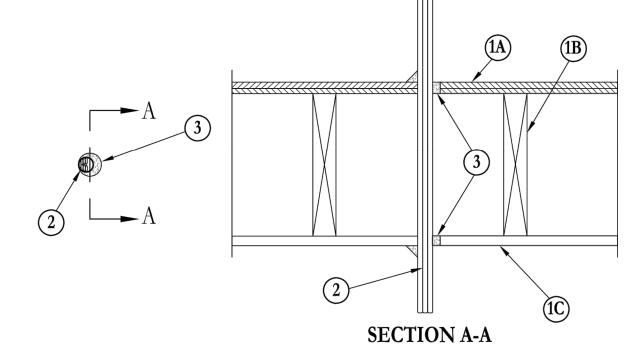
2. Cables – Max three conductor with ground No. 12 AWG (or smaller) NM cables with polyvinyl chloride insulation and jacket materials. Min one cable to max seven cables tightly bundled to be installed eccentrically or concentrically in opening with annular space between the cables and the periphery of the opening of min 0 in. (point contact) to max 1-1/4 in. Cables to be rigidly supported on both sides of Floor-Ceiling assembly. 3. Fill, Void or Cavity Materials* - Caulk, Sealant or Putty - Min 3/4 in. thickness of fill material applied within the annulus, flush with

top surface of floor or sole plate. Min 5/8 in. or 1-1/4 in. thickness of fill material, for 1 and 2 hr rated assemblies, respectively, applied within the annulus, flush with bottom surface of ceiling or top plate. An additional min 1/4 in. crown of fill material applied to perimeter of penetrant at its egress from the top of flooring and underside of ceiling or from top of sole plate and underside of top plate. 3M COMPANY – CP 25WB+ Caulk, FB-3000 WT sealant or MP+ Stix Putty

*Bearing the UL Classification Mark

This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory. c(UL)us

System No. F-C-3048 May 18, 2005 F Rating – 1 Hr T Rating – 1 Hr



Floor-Ceiling Assembly – The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction details of the floor-ceiling assembly are summarized below:

individual Floor-Ceiling Design. Max diam of opening is 1-1/2 in. (38 mm). Wood Joists – Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural

A. Flooring System – Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the

Wood Members* with bridging as required and with ends firestopped. Gypsum Board* - Nom 4 ft (122 cm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Max diam of

opening is 1-1/2 in. (38 mm). 1.1 Chase Wall - (Optional, not. shown) - The cables (Item No. 2) may be routed through a fire-rated single, double or staggered wood stud/ gypsum wallboard chase wall having a fire rating consistent with that of the floor-ceiling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs – Nom 2 in. by 6 in. (51 mm by 152 mm) or double nom 2 in. by 4 in. (51 mm by 102 mm) lumber studs.

B. Sole Plate – Nom 2 in. by 6 in. (51 mm by 152 mm) or parallel 2 by 4 in. (51 mm by 102 mm) lumber plates, tightly butted. Top Plate – The double top plate shall consist of two nom 2 in. by 6 in. (51 mm by 152 mm) or two sets of parallel 2 by 4 in. (51 mm by 102 mm) lumber plates, tightly butted. Max diam of opening is 1-1/2 in. (38 mm).

Wallboard, Gypsum* - Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design. Cables – Max three conductor with ground No. 12 AWG (or smaller) NM copper cable with polyvinyl chloride insulation and jacket materials or No. 20 A WG (or smaller) Type RG coaxial cable with polyvinyl chloride insulation. Min one cable to max seven cables tightly bundled to be installed eccentrically or concentrically in opening with annular space between the cables and the periphery of the opening of

min 0 in. (point contact) to max 1-1/4 in. (0 mm to 32 mm). Cables to be rigidly supported on both sides of Floor-Ceiling assembly. Fill, Void or Cavity Materials* - Caulk or Sealant - Min 3/4 in. (19 mm) thickness of caulk applied within the annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with bottom surface of ceiling or top plate. Min 1/2 in. (13 mm) diam bead of caulk applied at the cable/floor or sole plate interface at point contact location on the top surface of floor or sole plate and at the cable/ceiling or top plate interface at point contact location.

3M COMPANY - FireDam 150+, CP 25WB+, IC 15WB+ caulk or FB-3000 WT sealant *Bearing the UL Classification Mark

T Rating – 1 Hr SECTION A-A

System No. F-C-3070

May 19, 2005

F Rating – 1 Hr

Floor-Ceiling Assembly – The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction details of the floor-ceiling assembly are summarized below:

A. Flooring System – Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in. (76 mm). B. Wood Joists - Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural

Wood Members* with bridging as required and with ends firestopped. C. Gypsum Board* - Nom 4 ft (122 cm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in. (76 mm).

1.1 Chase Wall (Optional, not. shown) – The through penetrants (Item No. 2) may be routed through a fire-rated single, double or staggered wood stud/gypsum board chase wall having a fire rating consistent with that of the floor-ceiling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs – Nom 2 in. by 6 in. (51 mm by 152 mm) or double nom 2 in. by 4 in. (51 mm by 102 mm) lumber studs. B. Sole Plate – Nom 2 in. by 6 in. (51 mm by 152 mm) or parallel 2 in. by 4 in. (51 mm by 102 mm) lumber plates, tightly butted. Max

diam of opening is 3 in. (76 mm).

2. Top Plate – The double top plate shall consist of two nom 2 in, by 6 in, (51 mm by 152 mm) or two sets of parallel 2 in, by 4 in, (51 mm by 102 mm) lumber plates, tightly butted. Max diam of opening is 3 in. (76 mm).

D. Gypsum Board* – Thickness, type, number of layers and fasteners shall be as specified in individual Wall and

Cables - Max 2 in. diam cable bundle installed eccentrically or concentrically within opening. Annular space between cable bundle and periphery of opening to be min 0 in. (point contact) to max 1 in. (0 mm to 25 mm). Cable bundle to be rigidly supported on both sides of wall. The following types and sizes of cables may be used:

A. Max 200 pair No. 22 AWG (or smaller) copper conductor with polyvinyl chloride (PVC) insulation and jacketing material. B. Max 1/C No. 350 kcmil (or smaller) copper conductor cable with cross-linked polyethylene (XLPE) or PVC jacket. C. Max 7/C No. 12 AWG (or smaller) copper conductor power and control cables with XLPE or PVC insulation with

XLPE or PVC jacket. D. Max 3/C No. 2/0 AWG (or smaller) copper or aluminum conductor SER cables with XLPE or PVC insulation and jacket. E. Max 4/C No. 2/0 AWG (or smaller) copper conductor, aluminum clad or steel clad TECK 90 cable with or without PVC jacketed.

Max 110/125 fiber optic (F.O.) cable with PVC insulation and jacket. G. Max 3/C with ground No. 8 AWG (or smaller) copper conductor NM cable with PVC insulation and jacket.

H. Max RG/U coaxial cable with fluorinated ethylene insulation and jacket. Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with Hylar jacket and insulation.

Through Penetrating Product* - Any cables, Armored Cable+ or Metal Clad Cable+ currently Classified under the Through Penetrating Product category.

See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers

Fill, Void or Cavity Materials* - Caulk or Sealant - Min 3/4 in. (19 mm) thickness of caulk applied within annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with bottom surface of ceiling or top plate. Min 1/4 in. (6 mm) diam bead of caulk applied at point contact locations at cable bundle/floor or sole plate interface on top surface of floor or sole plate and at cable bundle/ceiling or top plate interface.

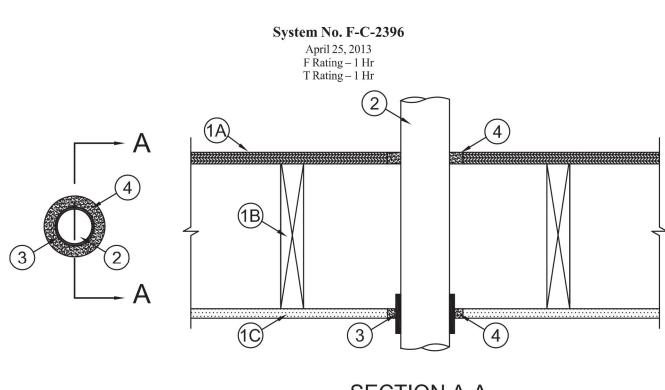
3M COMPANY - CP 25WB+, IC 15WB+ caulk or FB-3000 WT sealant *Bearing the UL Classification Marking



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SECTION A-A

Floor-Ceiling Assembly – The 1 hr fire rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as summarized below: A. Flooring System – Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the

individual Floor-Ceiling Design. Max diam of opening is 6 in. (152 mm). Wood Joists – Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood **Members*** with bridging as required and with ends firestopped.

C. Gypsum Board* – Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design. Max diam of opening is 6 in. (152 mm).

1 Chase Wall - (Optional, not shown) - The tubing (Item No. 2) may be routed through a fire-rated single, double or staggered wood stud/ gypsum board chase wall having a fire rating consistent with that of the floor-ceiling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs** – Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. Sole Plate – Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diameter of opening shall be 1-1/2 in. (38 mm) larger than the outside diam of tubing (Items 2). Top Plate – The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diameter of opening shall be 1-1/2 in. (38 mm) larger than the outside diam of tubing (Items 2).

D. Gypsum Board* – Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design. Through Penetrant – One nonmetallic pipe or conduit to be centered within the opening. Annular space between the pipe or conduit and the periphery of the opening shall be nom 3/4 in. (19 mm). Penetrant to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipe or conduit may be used:

A. Polyvinyl Chloride (PVC) Pipe – Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. B. Rigid Nonmetallic Conduit (RNC)+ - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with

the National Electrical Code (NFPA 70) Fill, Void or Cavity Material* – Wrap Strip – Min 3/16 in. (5 mm) thick intumescent material supplied in 2-1/2 in. (64 mm) wide strips. Single layer of pre-cut wrap strip tightly wrapped around nonmetallic pipe and secured with the adhesive closure tab. Wrap strip is to be recessed within the opening in the gypsum board ceiling such that the bottom of the wrap strip layer is 7/8 in. (22 mm) below the bottom plane of the ceiling.

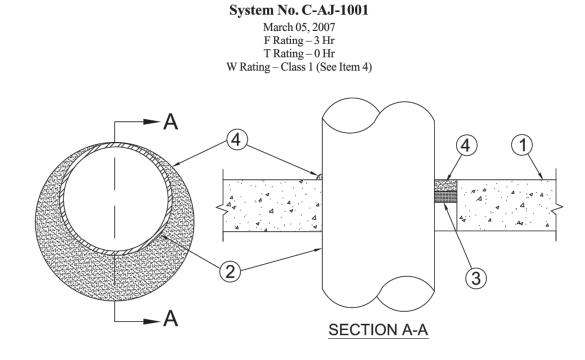
3M COMPANY 3M FIRE PROTECTION PRODUCTS – Fire Barrier Tuck-In Wrap Strip WS 200, WS 300 or WS 400

Fill, Void or Cavity Material* – Sealant – Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with the top surface of the floor. Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with the bottom surface of the gypsum board ceiling. 3M COMPANY

3M FIRE PROTECTION PRODUCTS – IC 15WB+, CP 25WB+ or FB-3000 WT Sealant aring the UL Classification Mark

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1. **Floor or Wall Assembly** – Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of circular through opening is 32-1/2 in. (826 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

1A. Steel Sleeve (Optional, not shown) - Nom 12 in. (305 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe sleeve cast into concrete floor or wall. Sleeve to be flush with or project max 2 in. (51 mm) from top surface of floor or from both surfaces of wall. As an alternate, nom 12 in. (305 mm) diam (or smaller) sleeve fabricated from nom 0.019 in. (0.48 mm) thick galv steel cast or grouted into floor or wall assembly flush with floor or wall surfaces.

2. **Through Penetrant** – One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm, point contact) to max 1-3/8 in. (35 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes,

Steel Pipe – Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe. A1. Iron Pipe – Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.

Conduit – Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.

Conduit – Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing. Packing Material - Polyethylene backer rod or nom 1 in. (25 mm) thickness of tightly-packed ceramic (alumina silica) fiber blanket,

mineral wool batt or glass fiber insulation material used as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of solid concrete or concrete block wall as required to accommodate the required thickness of caulk fill material (Item 4). As an alternate when max pipe size is 10 in. (254 mm) diam and when max annular space is 1 in. (25 mm), a min 1 in. (25 mm) thickness of tightly-packed ceramic fiber blanket or mineral wool batt packing material may be recessed min 1/2 in. (13 mm) from bottom surface of floor or from either side of solid concrete wall.

4. Fill, Void or Cavity Materials* – Caulk or Sealant – Applied to fill the annular space to the min thickness shown in the following table:

Max Pipe Diam In. (mm)	Max Annular Space In. (mm)	Packing Mtl Type (a)	Min Caulk Thkns In. (mm)
10 (254)	1 (25)	BR, CF, GF or MW	1/2 (13) (b)
10 (254)	1 (25)	CF or MW	1/2 (13) (c)
30 (762)	2-1/2 (64)	BR, CF, GF or MW	1 (25) (b)

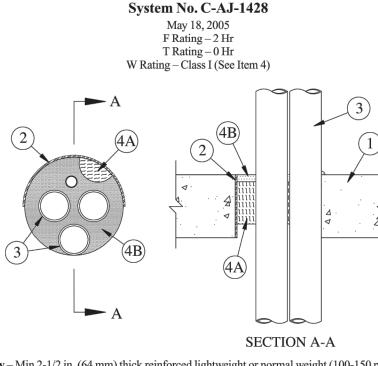
(a) BR = Polyethylene backer rod. CF = Ceramic fiber blanket.GF = Glass fiber insulation.

MW = Mineral-wool batt. (b) Caulk installed flush with top surface of floor or both surfaces of wall. (c) Caulk installed flush with bottom surface of floor or one surface of solid (non-concrete block) wall. 3M COMPANY – CP 25WB+ or FB-3000 WT

(Note: W Rating applies only when FB-3000 WT is used on top surface of floor and when it laps onto concrete for sleeved opening.) *Bearing the UL Classification Marking

This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory.





1. Floor or Wall Assembly – Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floors or min 3 in. (76 mm) thick reinforced lightweight or normal weight concrete walls. Floor assembly may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening 12 in. (305 mm). Max diam of opening in floors constructed of hollow-core concrete is 7 in. (178). See Concrete Blocks (CAZT) and Precast Concrete Units (CFTV) categories in Fire Resistance Directory for names of manufacturers.

2. Steel Sleeve (Optional) - Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor or wall assembly. Steel sleeve may be installed flush or may project max 2 in. (51 mm) beyond the floor or wall surfaces. Through Penetrants - One or more metallic pipes, conduits, tubes or flexible metal pipes installed concentrically or eccentrically within opening. Annular space between penetrants and periphery of opening or sleeve shall be min of 0 in. (point contact) to max 2-1/2 in. (0 mm to max 64 mm). The space between penetrants shall be min of 1/4 in. to max 2-1/2 in. (6 mm to max 64 mm). Penetrants to be rigidly supported

on both sides of floor or wall assembly. The following types and sizes of penetrants may be used: A. Steel Pipe-Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe – Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe. C. Conduit – Nom 4 in. (102 mm) diam (or smaller) steel conduit or steel electrical metallic tubing.

D. **Copper Tubing** – Nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper tubing.

E. Copper Pipe – Nom 3 in. (76 mm) diam (or smaller) Regular (or heavier) copper pipe.

Through Penetrating Product* – Flexible Metal Piping—The following types of steel flexible metal gas piping may be used: Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. OMEGA FLEX INC.

2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. TITEFLEX CORP, A BUNDY CO.

3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. WARD MFG INC.

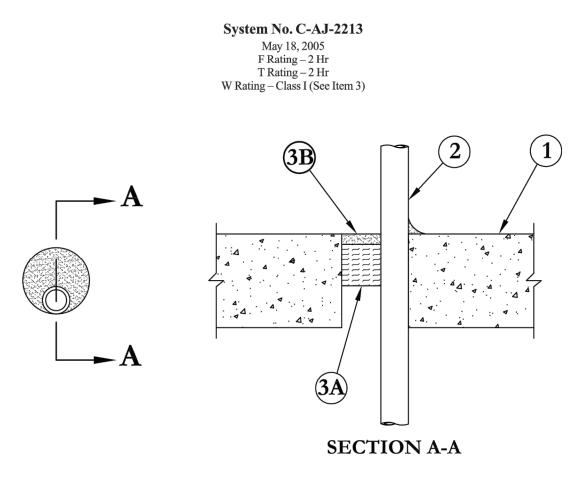
4. **Firestop System** – The details of the firestop system shall be as follows:

A. Packing Material – Min 3 in. (76 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or top edge of sleeve or from both surfaces of wall or both ends of sleeve as required to accommodate the required thickness of fill material. In floors constructed of hollow-core concrete, packing material to be recessed from top and bottom surfaces of floor or sleeve as required to accommodate the required thickness of

top surface of floor or top edge of sleeve or with both surfaces of wall or both ends of sleeves. In floors constructed of hollow-core concrete, min 1/2 in. (13 mm) thickness of caulk applied within the annulus, flush with top and bottom surfaces of floor or sleeve. Min 1/4 in. (6 mm) diam bead of caulk applied to the penetrant/concrete or penetrant/sleeve interface at the point contact location on the top surface of floor or both surfaces of wall or hollow-core concrete.

This material was extracted and drawn by 3M Fire Protection Products from the 2006 edition of the UL Fire Resistance Directory. c(UL)us





Floor or Wall Assembly – Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 3 in. (76 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers. 2. Cross linked Polyethylene (PEX) Tubing – Nom 1 in. (25 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply)

piping systems installed either concentrically or eccentrically within the firestop system. The annular space between tubing and periphery of opening shall be min of 0 in. (point contact) to max 1-7/8 in. (0 mm to max 48 mm). Tubing to be rigidly supported on both sides of floor or . **Firestop System** – The details of the firestop system shall be as follows:

A. Packing Material – Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material* - Caulk or Sealant - Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. Min 1/2 in. (13 mm) diam bead of caulk applied to the concrete/tubing interface at the point contact location on the top surface of floor or both surfaces of wall.

3M COMPANY - CP 25WB+, IC 15WB+-caulk or FB-3000 WT sealant. (Note: W Rating applies only when FB-3000 WT sealant is used.) *Bearing the UL Classification Mark

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Fill, Void or Cavity Materials* - Caulk or Sealant - Min 1/2 in.-(13 mm) thickness of caulk applied within the annulus, flush with

3M COMPANY – IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant. (Note: W Rating applies only when FB-3000 WT is used.)

Floor or Wall Assembly – Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 4 in. See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

SECTION A-A

- Through Penetrants One nonmetallic pipe or conduit to be installed concentrically within the firestop system. The annular space between the pipe or conduit and the periphery of the opening shall be 1/4 in. Pipe or conduit to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
- (process or supply) or vented (drain, waste or vent) piping systems. B. Rigid Nonmetallic Conduit++- Nom 3 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the

A. Polyvinyl Chloride (PVC) Pipe Pipe – Nom 3 in. diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed

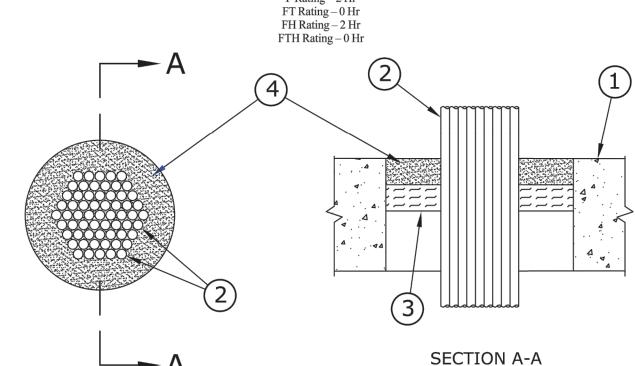
- National Electrical Code (NFPA No. 70). C. Chlorinated Polyvinyl Chloride (CPVC) Pipe – Nom 3 in. diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply)
- D. Acrylonitrile Butadiene Styrene (ABS) Pipe Nom 3 in. diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in
- closed (process or supply) or vented (drain, waste or vent) piping systems. 3. **Firestop System** – The firestop system shall consist of the following:
- A. Fill, Void or Cavity Materials* Wrap Strip Min 1/8 in. thick intumescent material supplied in 2 in. wide strips. Wrap strip tightly wrapped around nonmetallic pipe with continuous layers and secured with two 1/4 in. wide bands of filament tape placed 1/2 in. from bottom and top of wrap strip. The layers of wrap strip are to be recessed within the opening such that the top of the wrap strip layers is 1/4 in. below top surface of floor. For wall assemblies, wrap strip layers to be installed on both sides of wall and recessed within wall such that the end of the layers is recessed 1/4 in. from both surfaces of wall. For nom 2 in. diam (and smaller) pipes, one layer is required. For nom 2-1/2 in. and 3 in. diam pipes, two layers are required. 3M COMPANY – Ultra GS
- B. Fill, Void or Cavity Materials* Sealant Min 1/4 in. thickness of sealant applied within annular space, flush with top surface of floor or both surfaces of wall.

3M COMPANY – FB-1000 NS, FB-1003 SL or FB-3000 WT sealant.

*Bearing the UL Classification Mark ++Bearing the UL Listing Mark

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System No. C-AJ-3021 March 28, 2012 ANSI/UL1479 (ASTM E814) F Rating – 2 Hr T Rating – 0 Hr CAN/ULC S115 F Rating – 2 Hr



Floor or Wall Assembly – Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 6-1/4 in. (159 mm). See Concrete Blocks* (CAZT) category in the Fire Resistance Directory for names of manufacturers.

A. Steel Sleeve – (Optional, Not Shown) – Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve cast into floor or wall assembly. Sleeve to be flush with floor or wall surfaces.

Cables – Min 12 percent to max 40 percent fill area per max 4 in. (102 mm) diam steel sleeved through opening. Min 20 percent to max 40 percent fill area per max 6-1/4 in. (159 mm) diam non-sleeved through opening. Cables to be rigidly supported on both sides of floor or wall

assembly. The following types and sizes of cables may be used: A. Max 7/C No. 12 AWG multiple copper conductor power and control cables with polyvinyl chloride (PVC) insulation and jacket

B. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 3/4 in.

C. Max 200 pair No. 24 AWG copper conductor telephone cables with PVC insulation and jacket materials. D. Max 350 kcmil power cables with PVC insulation and jacket material.

ANSI/UL1479 (ASTM E814)

F Ratings – 1 and 2 Hr (See Item 1)

T Rating – 0 Hr

Packing Material – Nom 1 in. (25 mm) thickness of ceramic (aluminum silica) fiber blanket or mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed min 1 in. (25 mm) from top surface of floor or sleeve or from both

3A. Forming Material* - As an alternate to the packing material in Item 3, nom 4 in. (102 mm) wide strips of min 1/2 in (13 mm) thick compressible mat to be stacked to a thickness greater than the width of the annular space and compression-fitted, edge-first, to fill the annular space to a min 4 in. (102 mm) depth. As an option, the strips of min 1/2 in. (13mm) thick compressible mat may be folded in half, lengthwise, and stacked to a thickness greater than the width of the annular space and compression-fitted, edge-first, to fill the annular space to a min 2 in. (51 mm) depth. Top of forming material to be recessed from top surface of floor or from both surfaces of wall as necessary to accommodate the required thickness of caulk fill material. 3M FIRE PROTECTION PRODUCTS – Fire Barrier Packing Material

Fill, Void, or Cavity Materials* - Putty - Moldable putty material kneaded by hand and applied to fill annular space (and interstices between cables to max extent possible) to a min depth of 1 in. (25 mm), flush with top surface of floor or sleeve In wall assemblies, required putty depth to be installed symmetrically on both sides of wall.

3M FIRE PROTECTION PRODUCTS – Type MPS-2+ Bearing the UL Classification Mark

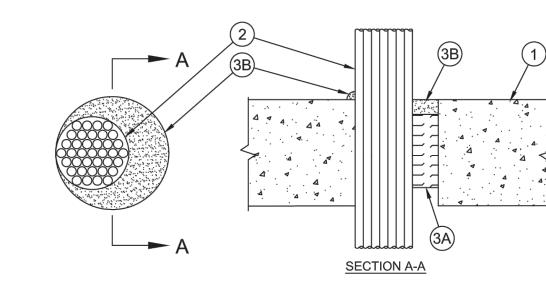
3M COMPANY

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System No. C-AJ-3164 May 22, 2009 F Rating – 2 Hr

T Rating - 0 Hr



1. Floor or Wall Assembly – \min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600 - 2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 4 in. (102 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Cables – Aggregate cross-sectional area of cables in opening to be min 24 percent to max 60 percent of the cross-sectional area inside the

opening. The annular space between cables and periphery of opening shall be min of 0 in. (point contact) to max 2 in. (0 mm to 51 mm). Cables to be rigidly supported on both sides of floor or wall assembly. Any combination of the following types and sizes of cable may be

A. Max 1/C 350 kcmil (or smaller) copper conductor cable with cross-linked polyethylene (XLPE) jacket.

B. Max 250 pair No. 24 AWG copper conductor telecommunication cables with polyvinyl chloride (PVC) insulation and jacket. C. Max 7/C No. 12 AWG copper conductor power and control cables with XLPE or PVC insulation with XLPE or PVC jacke

D. Max 3/C No. 2/0 AWG copper or aluminum conductor cables with PVC insulation and jacket. E. Max 3/C No. 2/0 (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TEK cable.

F. Max 1-10/125 Fiber Optic (F.O.) cable with PVC insulation and jacket.

G. Max 3/C with ground No. 12 AWG (or smaller) copper conductor NM cable with PVC insulation and jacket. H. Max 3/C No. 2/0 AWG copper conductor XHHW-2 w/grd aluminum interlocked armor cable with or without PVC jacket. SERVICE WIRE CO

I. Max 3/C No. 2/0 AWG copper conductor XHHW-2 w/grd tray cable. SERVICE WIRE CO

3. Firestop System – The details of the firestop system shall be as follows

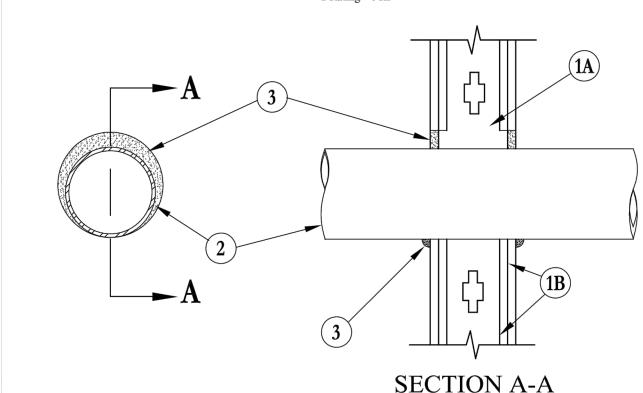
A. Packing Material – Min 3 in. (76 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the

B. Fill Void or Cavity Materials* - Caulk or Sealant - Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. Min 1/2 (13 mm) in. thickness of fill material applied into interstices of cables on the top surface of floor or both surfaces of wall. Min 1/2 in. (13 mm) diam bead of caulk applied to the cable/conccrete interface at the point contact location on the top surface of floor or both surfaces of wall. 3M COMPANY – FD-150+, CP 25WB+, IC 15WB+ caulk or FB-3000 WT sealant

*Bearing the UL Classification Mark

This material was extracted and drawn by 3M Fire Protection Products from the 2009 edition of the UL Fire Resistance Directory. c(UL)us

System No. W-L-1146 September 03, 2004 F Ratings – 1 and 2 Hr (See Item 1) T Rating -0 Hr



Wall Assembly – The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs – Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. by 4 in. (51 mm by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 in. to 6 in. (102 to 152 mm) wider and 4 in. to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is centered in the opening, a 2 in. to 3 in. (51 mm to 76 mm) clearance is present between the penetrating item and the

B. Gypsum Board* – The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. Through Penetrant – One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (point contact) to max 2 in. (0 mm to 51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or

A. **Steel Pipe** – Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.

C. Conduit – Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in (102 mm) diam (or smaller) steel electrical metallic tubing

D. Copper Tubing – Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing E. Copper Pipe – Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

Fill, Void or Cavity Materials* - Caulk or Sealant - Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. Min 1/2 in. (13 mm) diam bead of caulk applied to the penetrant/wallboard interface at the point contact location on both sides of wall.

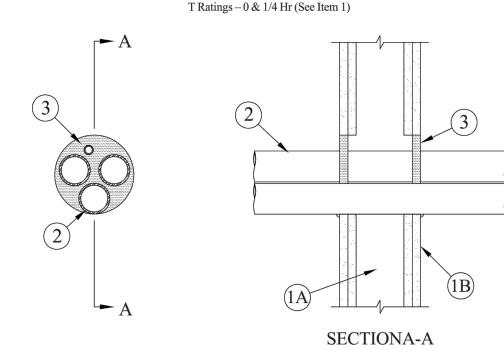
3M COMPANY - CP 25WB+ caulk or FB-3000 WT sealant. Bearing the UL Classification Mark

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System No. W-L-2300

May 19, 2005

System No. W-L-1287 May 19, 2005 F Ratings – 1 & 2 Hr (See Item 1)



1. Wall Assembly – The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 8 in. (203 mm)

A. Studs – Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. by 4 in. (51 mm by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC. B. **Gypsum Board*** – The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T Rating is 0 and 1/4 Hr for 1 and 2 Hr rated assemblies, respectively. 2. Through Penetrants – One or more metallic pipes, conduits, tubes or flexible metal pipes installed concentrically or eccentrically within

- opening. Annular space between penetrants and periphery of opening to be min 0 in. (point contact) to max 2 in. (0 mm to max 51 mm). Space between penetrants to be min 1/4 in. to max 2 in. (6 mm to max 51 mm). Penetrants to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:
- A. **Steel Pipe** Nom 3 in. (76 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
- B. Iron Pipe Nom 3 in. (76 mm) diam (or smaller) cast or ductile iron pipe. C. Conduit – Nom 3 in. (76 mm) diam (or smaller) steel conduit or steel electrical metallic tubing.
- D. Copper Tubing Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing. E. Copper Pipe – Nom 2 in. (51 mm) diam (or smaller) Regular (or heavier) copper pipe.
- F. Through Penetrating Product* Flexible Metal Piping The following types of steel flexible metal gas piping may be used: 1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
- OMEGA FLEX INC. 2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on
- 3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. WARD MFG INC.
- 3. Fill, Void or Cavity Material* Caulk or Sealant Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both
- 3M COMPANY IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant.

*Bearing the UL Classification Marking

This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory. c(UL)us



UL System No. W-L-1353 XHEZ – Through-penetration Firestop Systems XHEZ7 – Through-penetration Firestop Systems Certified for Canada May 02,2017

CAN/ULC S115

F Ratings – 1 and 2 Hr (See Item 1)

FT Rating – 0 Hr

I. Wall Assembly – The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features: A. Studs – Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102

mm) (or larger) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 B. Gypsum Board* – Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Max diam. of opening is 3-1/2 in. (89 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. 2. Metallic Pipe – Metallic pipe, tube or conduit installed within the stud cavity and connected to metallic tee for use in closed (process

or supply) or vented (drain, waste or vent) piping systems. Pipe, tube or conduit penetrating wall assembly on one side of wall to be installed either concentrically or eccentrically with the annular space between the penetrant and the periphery of opening of min 0 in. (0 mm, point contact) to max 1 in. (25 mm). The following types of metallic pipes, tubes, conduits and tees may be used: A. Steel Pipe – Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe – Nom 2 in. (51 mm) diam (or smaller) cast or ductile iron pipe.

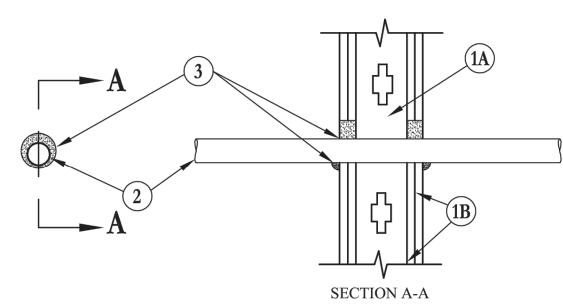
c. Copper Tubing – Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing. **D.** Copper Pipe – Nom 2 in. (51 mm) diam (or smaller) Regular (or heavier) copper pipe.

E. Conduit – Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit or electrical metallic steel tubing (EMT). 2A.Conduit Body* – (Not Shown) - When a steel conduit or EMT is used, nom 2 in. size (or smaller) steel conduit body with steel fittings as an alternate to the metallic tee. Refer to Conduit Fittings (DWTT) category in the UL Electrical Construction Directory.

3. Fill, Void or Cavity Material* - Caulk - Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with surface of wall. At the point contact location between duct and wallboard, a min 1/2 in. (13 mm) diam bead of sealant shall be applied at the wallboard/duct interface on both surfaces of wall assembly.

3M COMPANY – IC 15WB+ caulk, CP 25WB+ caulk or FB-3000 WT Sealant

System No. W-L-2088 May 23, 2005 F Ratings – 1 and 2 Hr (See Item 1) T Ratings – 0, 1 and 2 Hr (See Item 2)



1. Wall Assembly – The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following

A. Studs – Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in, by 4 in, (51 mm by 102

mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. B. Gypsum Board* – Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Diam of opening shall be 7/8 in. (22 mm) larger than the outside diam of nonmetallic pipe or conduit (Item 2). The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Through Penetrants – One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space for max 1-1/4 in. (32 mm) diam pipe or conduit shall be min 0 in. (point contact) to max 7/8 in. (0 mm to max 22 mm). The annular space for pipe or conduit larger than nom 1-1/4 in. (32 mm). diam shall be min 1/2 in. to max 1 in. (13 mm to max 25 mm). Pipe or conduit to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:

closed (process or supply) or vented (drain, waste or vent) piping system. B. Polyvinyl Chloride (PVC) Pipe - Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) piping system

A. Polyvinyl Chloride (PVC) Pipe – Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in

C. Chlorinated Polyvinyl Chloride (CPVC) Pipe – Nom 3 in. (76 mm) diam (or smaller) SDR 11 CPVC pipe for use in closed (process or supply) piping systems. D. Rigid Nonmetallic Conduit++-Nom 3 in. (76 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article

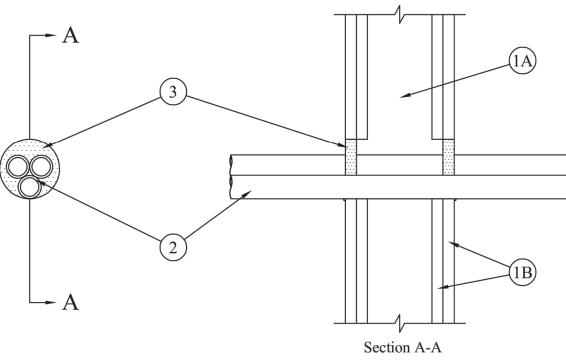
347 of the National Electrical Code (NFPA No 70). E. Electrical Nonmetallic Tubing (ENT)++- Nom 1 in. (25 mm) diam (or smaller) ENT formed of PVC, installed in accordance with

Article 331 of the National Electrical Code (NFPA No. 70). See Rigid Nonmetallic Conduit (DZKT) and Electrical Nonmetallic Tubing (FKHU) categories in the UL Electrical Construction Equipment Directory for names of manufacturers.

F. Acrylonitrile Butadiene Styrene (ABS) Pipe – Nom. 2 in. (51 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. The hourly T Rating is dependent on the hourly rating of the wall assembly, the pipe or conduit size and whether the pipe is intended for use as a closed or vented system, as shown in the following table.

Nom Pipe Diam In. (mm)	Wall Assembly Rating Hr	Closed (c) or Vented (v)	T Rati Hr
1/2 to 3 (13 to 76)	1	С	1
1/2 to 1-1/4 (13 to 32)	1	v	1
1/2 to 1-1/4 (13 to 32)	2	С	2
1/2 to 1-1/4 (13 to 32)	2	v	1
2 (51)	1	v	0
2 (51)	2	V	0

F Ratings – 1 & 2 Hr (See Item 1) T Ratings – 0 & 1/2 Hr (See Item 1)



Wall Assembly - The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features: A. Studs – Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. by 4 in. (51 mm by 102

mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC. B. Gypsum Board* – The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the

individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 4 in. (102 mm). The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T Rating is 0 and 1/2 Hr for 1 and 2 Hr rated assemblies, respectively.

Through Penetrants – One or more nonmetallic pipes, conduits or tubes installed concentrically or eccentrically within opening. Annular space between penetrants and periphery of opening to be min 0 in. (point contact) to max 1 in. (0 mm to max 25 mm). Space between penetrants shall be min 0 in. (point contact) to max 1 in. (0 mm to max 25 mm). Penetrants to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:

A. Polyvinyl Chloride (PVC) Pipe – Nom 1-1/2 in. (38 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. Rigid Nonmetallic Conduit++-Nom 1-1/2 in. (38 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70). C. Chlorinated Polyvinyl Chloride (CPVC) Pipe - Nom 1-1/2 in. (38 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed

(process or supply) piping systems D. Crosslinked Polyethylene (PEX) Tubing – Nom 1 in. (25 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

3. Fill, Void or Cavity Material* - Caulk or Sealant - Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both

surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides

3M COMPANY – IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant (Note: CP 25WB+ not suitable for use with CPVC pipes.) *Bearing the UL Classification Marking

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