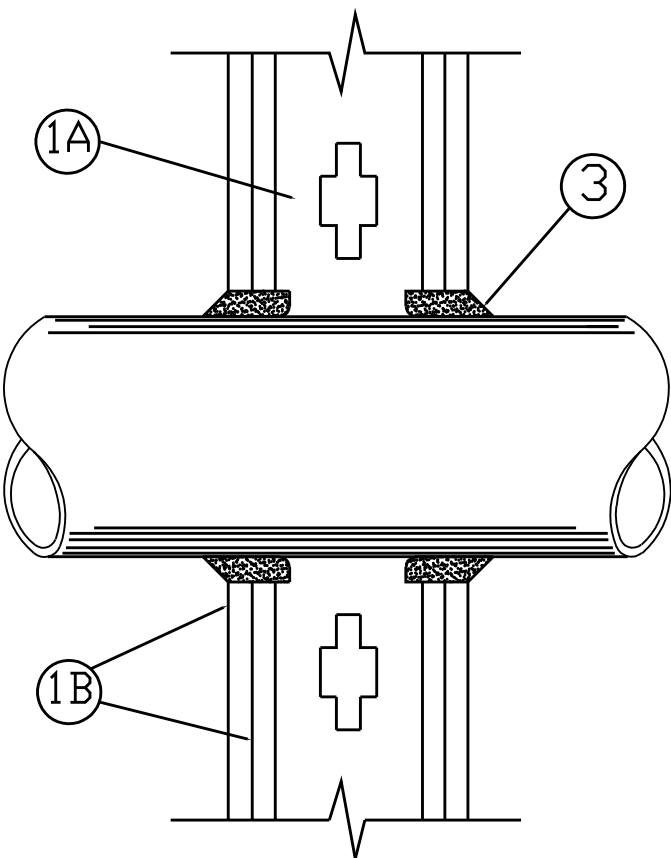


TYPICAL DEVICE MOUNTING HEIGHTS

- NOT TO SCALE
NOTES:
- HEIGHTS SHOWN ARE TYPICAL TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.
 - DEVICES ABOVE DOORS SHALL BE CENTERED BETWEEN TOP OF DOOR TRIM AND CEILING LINE.
 - MOUNTING HEIGHTS SHOWN ON ARCHITECTURAL ELEVATIONS AND NOTED ON ELECTRICAL FLOOR PLANS SHALL GOVERN OVER THOSE SHOWN ABOVE.
 - FOR CEILING HEIGHTS HIGHER THAN 7'2", INSTALL FIRE ALARM NOTIFICATION AUDIO AND VISUAL APPLIANCES AT 8'0\"/>
 - MOUNTING HEIGHTS PER IBC 2009 AND ADA CODES



Max Pipe or Conduit Diam in. (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

PENETRATION THROUGH A FIRE-RATED WALL

NOT TO SCALE

ELECTRICAL LEGEND

(NOT ALL SYMBOLS REQUIRED FOR THIS PROJECT)

RECESSED OR SURFACE DOWNLIGHT	ABBREVIATIONS
WALL MOUNTED LIGHT FIXTURE	AC - ABOVE COUNTER
RECESSED FLOOR, LIGHT FIXTURE	AFF - ABOVE FINISHED FLOOR
SURFACE FLOOR, LIGHT FIXTURE	AFG - ABOVE FINISHED GRADE
FIXTURE DESIGNATIONS:	AHJ - AUTHORITY HAVING JURISDICTION
UPPER CASE - FIXTURE TYPE	AL - ALUMINUM
LOWER CASE - SWITCH DESIGNATION	CU - COPPER
SHADING ON FIXTURE INDICATES EMERG. BATTERY BACKUP	EC - ELECTRICAL CONTRACTOR
FLUORESCENT STRIP FIXTURE	EM - EMERGENCY
TRACK LIGHT AS NOTED OR SCHEDULED	GC - GENERAL CONTRACTOR
WALL WASHER	GND - GROUND
POLE-MOUNTED FIXTURE	GFI - GROUND FAULT INTERRUPTER
POST (BOLLARD) FIXTURE	MC - MECHANICAL CONTRACTOR
STEP LIGHT	NIC - NOT IN CONTRACT
CEILING OR WALL MOUNTED EXIT LIGHT	NL - NIGHT LIGHT
EMERGENCY BATTERY LIGHTS	NTS - NOT TO SCALE
DUPLEX RECEPTACLE @ 18" UNLESS NOTED	PC - PLUMBING CONTRACTOR
DUPLEX RECEPTACLE @ 18" UNLESS NOTED W/ 2 USB PORTS	REF - REFERENCE
DOUBLE DUPLEX RECEPTACLE @ 18" UNLESS NOTED	US - UNDERGROUND
FLUSH FLOOR DUPLEX RECEPTACLE	UNO - UNLESS NOTED OTHERWISE
SPECIAL RECEPTACLES INSTALLED - SWITCHED @ 18" UNLESS NOTED	UTP - UNSHIELDED TWISTED PAIR
POP-UP RECEPTACLE	WP - WEATHER PROOF
TELE-POWER POLE	XFMR - TRANSFORMER
MULTI-OUTLET PLUG STRIP	+18" - MOUNTING HEIGHT TO CENTERLINE OF DEVICE AFF OR AFG
JUNCTION BOX IN FLOOR, CEILING OR IN WALL	
COMPUTER/TELEPHONE OUTLET IN FLOOR OR WALL	
TELEVISION OUTLET	
TELEPHONE BACKBOARD	
CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING	
CIRCUIT HOMERUN	
CONDUIT RUN BELOW FLOOR OR GRADE	
CONDUIT SUB-UP - CAP & MARK	
LIGHT SWITCH AT 48" UNLESS NOTED	
SUBSCRIPTS:	
2 = 2-POLE SWITCH	
3 = 3-WAY SWITCH	
4 = 4-WAY SWITCH	
M = MOTION-OPERATED SWITCH	
K = KEY-OPERATED SWITCH	
TO = THERMAL OVERLOAD SWITCH	
P = SWITCH WITH PILOT LIGHT	
DIMMER SWITCH W/ WATTAGE	
CEILING MOUNT MOTION SENSOR	
PUSHBUTTON CONTROL STATION	
PHOTOELECTRIC CELL	
TIME SWITCH	
THERMOSTAT AT 60" UNLESS NOTED	
DIVISION 15 EQUIPMENT	
COMMUNICATION SYSTEM	
FOOD SERVICE EQUIPMENT	
SPEAKER IN CEILING OR WALL	
VOLUME CONTROL AT 60" UNLESS NOTED	
MICROPHONE OUTLET IN FLOOR BOX OR WALL	
CALL-IN SWITCH	
PROGRAM BELL	
INTERCOM	
CLOCK	
AMPLIFIER	

1. WALL ASSEMBLY - THE 1, 2, 3 OR 4 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 DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

- A. STUDS** - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 HR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.
- B. GYPSUM BOARD*** - NOM 1/2 OR 5/8 IN. (13 OR 16 MM) THICK, 4 FT. (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. 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).

2. THROUGH PENETRANT - ONE CONDUIT INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNUAL SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN. (0 MM) (POINT CONTACT) TO MAX 2 IN. (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 TUBING MAY BE USED:

- A. CONDUIT** - NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING
- 3. FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT** - MIN 5/8, 1-1/4, 1-7/8 AND 2-1/2 IN. (16, 32, 48 AND 64 MM) THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY, 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 OF WALL.

THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED TO THE LEFT.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT.

*BEARING THE UL CLASSIFICATION MARKING

ELECTRICAL SPECIFICATIONS

A. General Requirements

- SCOPE: Furnish all materials and labor required to execute this work as indicated on drawing and as specified, as necessary to complete the contract. Electrical work shall include, but not limited to, these major items:
 - Complete wiring system for new lighting and power as shown, including new panelboards, new conduits, new wires, new wiring devices, new control devices, etc. for a complete lighting and and power system.
 - Complete feeder(s) installation as required for new and/or electrical apparatus as shown on single line diagram and drawings.
 - Complete branch circuit wiring required for the connection of emergency lighting and exit signs to existing emergency stand by power system.
 - Complete provision, installation and connection of lighting fixtures, exit signs and lamps as specified and as shown on drawings.
 - Fire alarm system will be by electrical contractor.
 - Complete connection of HVAC/Plumbing motor(s), water heater(s), equipment, etc. furnish by mechanical - refer to both electrical and and mechanical drawing for scope and work and additional information.
 - Provide grounding and bonding facilities.
 - Complete all electrical demolition as required.
- Core drilling and patching of existing building structure required for electrical work. Core drilling shall follow Building Standard procedures and contractor shall have written approvals from building owner prior to start of any work.
- Test of entire system and work.
- Operating, Maintenance and Identification Instructions manuals, if any.
- PERMITS AND FEES: Obtain and pay for all necessary permits, inspections, examinations and fees or charges necessary for execution and completion of electrical work.
- REGULATIONS AND CODES:
 - Applicable codes: National Electric Code (2011) Conform to the prevailing edition and amendments thereto of the Town of Vail Electrical Code, pertinent NFPA publications and to the requirements of Federal, State or other City agencies having jurisdiction.
- SHOP DRAWINGS AND SUBMITTAL:
 - Contractor shall submit shop drawings for engineer review and approval.
 - Shop drawing submittal shall include:
 - Lighting fixtures.
 - Panelboard(s).

- CONDUIT AND WIRE:
 - CONDUCTOR SIZES AND TYPES: For sizes #1/0 AWG and larger, use copper THW or aluminum XHHW. For sizes #1 AWG and smaller, use only copper wire with 600V insulation, types TW, THHN, or THW - stranded in sizes #8 and larger, solid in sizes #10 and smaller. Control wiring shall be #14, stranded. Use type THHN for wires entering or passing through fluorescent lighting fixtures. All motors shall be wired with copper conductors only.
 - MC cable permitted per local codes. Run hard pipe from panel to local junction box, and run MC cable from junction box to device.
- ELECTRICAL DEVICES
 - Convenience receptacles will be 20 amp, commercial grade, exit style, 15 amp will be acceptable for Residences. Finish per owner or architect.
 - Light switches will be 20 amp, commercial grade, exit style. Finish per owner or architect.
 - Dimming switches will be a minimum of 600w or as noted. Provide exit style, finish per owner or architect.
 - All mounting heights will conform to ADA guidelines. Typical receptacle heights will be +18" AFF and switch heights will be +46" AFF unless noted otherwise.
 - Provide GFI type receptacles at kitchens, bathrooms, garages, exterior etc. as required by code.
 - Provide tamper proof receptacles at all residential areas as required by code.
- SUPPORT
 - Support all electrical equipment independent of accessible ceilings as required by NEC.
- ELECTRICAL BOXES
 - At fire rated wall space electrical boxes at opposite sides of the wall no less than 24" horizontal distance.
 - When phone, TV & power receptacles are shown on plan next to each other. Locate respective receptacles next to each other on site with no more than 1" separating cover plates.
- METERING
 - EC shall coordinate whether or not meters require lever bypass with local utility and provide all meters with a lever bypass when required.

GENERAL NOTES ALL SHEETS

THE ELECTRICAL CONTRACTOR WILL PROVIDE A WALK THROUGH WITH THE OWNER/ARCHITECT PRIOR TO FINAL ROUGHIN AS FOLLOWS:

- CONFIRM ALL LOCATIONS FOR LIGHT SWITCHES; ADD THREE WAYS IF FOUND NECESSARY.
- REVIEW RECEPTACLE LOCATIONS; MOVE AS REQUIRED. PROVIDE UNIT PRICING IF ADDITIONAL RECEPTACLES ARE REQUIRED.
- REVIEW RECEPTACLE LOCATIONS AT COUNTERS AND CONFIRM IF THOSE RECEPTACLES SHOULD BE ABOVE COUNTER OR BELOW. MOVE AS REQUIRED.

IN GENERAL CONFIRM POWER AND LIGHTING REQUIREMENTS. THE ELECTRICIAN SHOULD BE PREPARED TO REWORK SOME DEVICE LOCATIONS. SIGNIFICANT REWORK SHOULD BE FLAGGED AND UNIT PRICING PROVIDED AND WRITTEN AUTHORIZATION FOR ADDITIONAL COSTS APPROVED PRIOR TO PROCEEDING.

PANEL UNIT 2803 (EXISTING)													
PROJECT: EDGE MONT CONDO UNIT 2803						ENGINEER:			SOH				
PROJECT # : 19095						VOLTAGE:			120/208V, 1P, 3W				
MOUNTING: RECESSED						MAINS:			200A MLO				
TYPE: QO RESIDENTIAL						A/C:			10K				
DESCRIPTION	A	PHASE	B	BKR	P	CIR	CIR	P	BKR	A	PHASE	B	DESCRIPTION
FCU	800			20	1	1	2	1	20	1000			LIGHTS
FCU	800		800	20	1	3	4	1	20	180			BATH 3 REC
FRIDGE	1000			20	1	5	6	1	20	1000			LIGHTS
DISHWASHER	1000		1000	20	1	7	8	1	20	360			MASTER BATH REC
DISPOSAL	1000			20	1	9	10	1	20	1000			KITCHEN LIGHTS
KITCHEN CTR REC			1500	20	1	11	12	1	20	1000			CORRIDOR LIGHTS
KITCHEN CTR REC	1500			20	1	13	14	1	20	1000			BED 3 LIGHTS
ISLAND REC	360		360	20	1	15	16	1	20	200			MUA PUMPS
WINE COOLER	800			20	1	17	18	1	20	1000			LIVING ROOM REC
MICROWAVE	800			20	1	19	20	1	20	1000			CORRIDOR REC
WASHING MACHINE	1200			20	1	21	22	1	20	1000			BED 2 REC
DRYER				30	2	23	24	1	20	1000			AV
"	2500					25	26	1	20	1000			MASTER BED AV
LAUNDRY REC			180	20	1	27	28	1	20	1000			AV CLOSET
DBS	360			20	1	29	30	1	20	1000			MASTER BED OUTLETS
MEDIA AV REC	360		360	20	1	31	32	1	20	1000			BED 2 AV
MEDIA AV REC	360			20	1	33	34	1	20	1000			BED 2 OUTLETS
MEDIA RM AC			1000	20	2	35	36	1	20	1000			RANGE HOOD
"	1000					37	38	2	60	4000			STEAM SHOWER
ROOF TOP FCU			1000	20	2	39	40			4000			"
"	1000					41	42	1	20	1500			MAKE UP AIR UNIT
LOAD CALCULATION SUMMARY ADD NEW CIRCUIT #42 FOR MAKE UP AIR UNIT. REST IS EXISTING.													
CALCULATED POWER FACTOR: 0.97													
				CONNECTED LOAD		CONNECTED AMPS		DEMAND LOAD		DEMAND AMPS			
APPLIANCES				8000		38		8000		29			
LIGHTING & RECEPT.				25960		125		11036		53			
MECHANICAL				7300		35		7800		38			
KITCHEN OVEN & DRYER				5000		24		5000		24			
TOTAL				46260		222		29836		143			

ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



PROGRESS DRAWINGS - NOT FOR CONSTRUCTION

EDGE MONT - BLDG. A

STEAMBOAT SPRINGS, CO

AEC PROJECT #: 19095

DATE: ISSUE:

01-15-20 PROGRESS/PRICING

Drawn By:

SOH

Checked By:

AEC

ELECTRICAL PLAN

SCALE 1/4" = 1'-0"

E1.0

1 of 1

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