# ABBREVIATIONS

| | |
|---|---|
| ACU | AIR CONDITIONING UNIT |
| AD | ACCESS DOOR |
| AFF | ABOVE FINISHED FLOOR |
| AHU | AIR HANDLING UNIT |
| AL | ACOUSTIC LINING |
| BHP | BRAKE HORSEPOWER |
| BOD | BOTTOM OF DUCT |
| BOP | BOTTOM OF PIPE |
| BTU | BRITISH THERMAL UNIT |
| BTUH | BTU PER HOUR |
| CA | COMPRESSED AIR |
| CD | CONDENSATE DRAIN |
| CFM | CUBIC FEET PER MINUTE |
| CONT. | CONTINUATION |
| COR | CONTRACTING OFFICER'S REPRESENTATIVE |
| CU | CONDENSING UNIT |
| D | DRAIN |
| DX | DIRECT EXPANSION |
| ENT | ENTERING |
| EXH | EXHAUST |
| EMCS | ENERGY MANAGEMENT CONTROL SYSTEM |
| °F | DEGREES FAHRENHEIT |
| FB | FLAT BOTTOM |
| FCU | FAN COIL UNIT |
| FD | FLOOR DRAIN |
| F.G. | FILTER GAUGE |
| FLEX | FLEXIBLE |
| FPM | FEET PER MINUTE |
| FS | FLOOR SINK |
| FT | FLAT TOP |
| FT. | FEET |
| GPH | GALLONS PER HOUR |
| GPM | GALLONS PER MINUTE |
| HB | HOSE BIBB |
| HD | HAND DAMPER (VOLUME DAMPER) |
| HEPA | HIGH EFFICIENCY PARTICULATE AIR (FILTER) |
| IN | INCHES |
| IU | INDOOR UNIT |
| KW | KILOWATT |
| KWH | KILOWATT HOUR |
| MA | MAIN AIR (CONTROLS) |
| MCC | MOTOR CONTROL CENTER |
| NA | NOT APPLICABLE |
| NIC | NOT IN CONTRACT |
| NO. | NUMBER (QUANTITY) |
| OA | OUTSIDE AIR |
| OBD | OPPOSED BLADE DAMPER |
| PRV | PRESSURE REDUCING VALVE |
| PSIG | POUNDS PER SQUARE INCH GAGE |
| QTY | QUANTITY |
| QUAD | QUADRANT |
| R.A. | RETURN AIR |
| Rh | RELATIVE HUMIDITY |
| RL | REFRIGERATION LIQUID |
| RPM | REVOLUTIONS PER MINUTE |
| RS | REFRIGERATION SUCTION |
| SCD | SMOKE CONTROL DAMPER |
| SP | STATIC PRESSURE (INCHES OF WATER) |
| SDVV | SINGLE DUCT VARIABLE VOLUME |
| ST | SOUND TRAP |
| TOPT | TOP OF PIPE TRAPEZE |
| TP | TOTAL PRESSURE (INCHES OF WATER) |
| TYP. | TYPICAL |
| V | VOLTS |
| VAC | VOLTS, ALTERNATING CURRENT |
| VAV | VARIABLE AIR VOLUME |
| VEL | VELOCITY |
| VTR | VENT THRU ROOF |

# MECHANICAL SYMBOL LEGEND

## DUCTWORK SYMBOLS

- FLEXIBLE DUCT
- ACOUSTICAL DUCT LINING
- MANUAL BALANCING DAMPER
- FIRE DAMPER (F.DPR)
- SMOKE DAMPER (S.DPR)
- COMBINATION FIRE/SMOKE DAMPER (F/S DPR)
- 1 HR. FIRE BARRIER
- 2HR. FIRE BARRIER
- SMOKE BARRIER
- 2HR. SMOKE BARRIER

  (VERIFY WITH ARCHITECTURAL DRAWINGS)
- POINT OF CONNECTION, NEW DUCT TO EXISTING DUCT OR / POINT OF REMOVAL FROM EXISTING DUCT TO DEMO DUCT
- EXISTING DUCT TO BE REMOVED
- FLEXIBLE CONNECTION
- RISE IN DUCT
- VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EXCEPT TRANSFER AIR SOUND ELBOW)
- SHORT RADIUS ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EXCEPT TRANSFER AIR SOUND ELBOW)
- STANDARD LONG RADIUS ELBOW
- SUPPLY DUCT
- RETURN DUCT
- EXHAUST DUCT
- STAMPED FACE CEILING DIFFUSERS
- PERFORATED FACE CEILING DIFFUSERS
- CEILING EXHAUST REGISTER
- CEILING RETURN AIR REGISTER OR GRILLE
- SIDEWALL EXHAUST OR RETURN AIR GRILLE OR REGISTER
- SIDEWALL SUPPLY REGISTER
- DUCT TRANSITION
- DUCT TRANSITION FROM RECTANGULAR TO ROUND
- 24"x12" — 24x12 — INDICATES A 24"x12" RECTANGULAR DUCT (WIDTH x DEPTH)
- 12"Ø — 12"Ø — INDICATES A 12" ROUND DUCT
- 24"/12" — 24x12Ø — INDICATES A 24"x12" FLAT OVAL DUCT (WIDTH x DEPTH)
- DUCT MOUNTED SMOKE DETECTOR (SD)
- DUCT MOUNTED STATIC PRESSURE PROBE
- ACCESS DOOR
- ROOM THERMOSTAT/TEMP. TRANSMITTER LOCATION ONLY SEE CONTROL DRAWINGS FOR TYPE (T)
- ROOM HUMIDISTAT/HUMIDITY TRANSMITTER LOCATION ONLY SEE CONTROL DRAWINGS FOR TYPE (H)
- ROOM CARBON DIOXIDE TRANSMITTER LOCATION ONLY SEE CONTROL DRAWINGS FOR TYPE (CO2)
- ELECTRICAL DISCONNECT

## VALVE SYMBOLS

- GATE VALVE
- GLOBE VALVE
- CHECK VALVE
- PLUG VALVE
- PRESSURE REDUCING VALVE
- 3-WAY MODULATING CONTROL VALVE
- 2-WAY CONTROL VALVE
- SAFETY VALVE OR PRESSURE RELIEF VALVE
- SOLENOID VALVE
- 3/4" BALL VALVE WITH ADAPTER TO 3/4" HOSE THREAD
- DIAPHRAGM VALVE
- BUTTERFLY VALVE
- BALL VALVE
- VALVE IN RISE
- WATER FLOW MEASURING DEVICE
- CIRCUIT SETTER

## PIPING SYMBOLS

MECHANICAL PIPING

| | |
|---|---|
| HWS | HEATING WATER SUPPLY |
| HWR | HEATING WATER RETURN |
| CHS | CHILLED WATER SUPPLY |
| CHR | CHILLED WATER RETURN |
| D | DRAIN |
| CD | CONDENSATE DRAIN |
| V | VENT |
| MU | MAKE-UP WATER |
| RS | REFRIGERATION SUCTION |
| RL | REFRIGERATION LIQUID |
| R | REFRIGERATION |
| TWS | TOWER WATER SUPPLY |
| TWR | TOWER WATER RETURN |
| TWB | TOWER WATER BYPASS |
| HPS | STEAM - HIGH PRESSURE SUPPLY |
| HPR | STEAM - HIGH PRESSURE RETURN |
| MPS | STEAM - MEDIUM PRESSURE SUPPLY |
| HPR | STEAM - MEDIUM PRESSURE RETURN |
| LPS | STEAM - LOW PRESSURE SUPPLY |
| LPR | STEAM - LOW PRESSURE RETURN |
| CND | CONDENSER WATER |
| PC | PUMPED CONDENSATE |
| GWS | GEOTHERMAL SUPPLY |
| GWR | GEOTHERMAL RETURN |
| DOWN | DIRECTION PITCH |
| | DIRECTION OF FLOW |
| | EXISTING |
| | DEMO |
| | POINT OF CONNECTION, NEW PIPING TO EXISTING. |

PLUMBING PIPING

| | |
|---|---|
| CW | COLD WATER - POTABLE |
| D | DRAIN |
| DI | DEIONIZED WATER |
| DT | DRAIN TILE |
| G | NATURAL GAS |
| GRV | GAS REGULATOR VENT |
| GSAN | SANITARY DRAINAGE (GREASE SANITARY DRAINAGE) |
| GV | GREASE VENT |
| HW | HOT WATER - POTABLE |
| HWC | HOT WATER CIRCULATING - POTABLE |
| HW140 | HOT WATER - POTABLE NUMBER INDICATES TEMP |
| HWC140 | HOT WATER CIRC. - POTABLE NUMBER INDICATES TEMP |
| IA | INSTRUMENT AIR |
| MA | MEDICAL AIR |
| MV | MEDICAL VACUUM |
| N | NITROGEN |
| NCW | NON-POTABLE COLD WATER |
| NHW | NON-POTABLE HOT WATER |
| NO | NITROUS OXIDE |
| O | OXYGEN |
| P | PROPANE GAS |
| PD | PUMPED DISCHARGE |
| SAN | SANITARY DRAINAGE |
| ST | STORM DRAINAGE |
| STW | STW SOFT TEMPERED WATER |
| TW | TW TEMPERED WATER |
| V | VENT |
| VAC | LAB VACUUM |
| W | SERVICE WATER - POTABLE |

## FITTING SYMBOLS

- ELBOW - DOWN
- ELBOW - UP
- PIPE RISE-DROP
- ELBOW - DROP TO TEE
- TEE - DROP FROM TEE
- END CAP
- FLEX CONNECTION
- PIPE REDUCER - CONCENTRIC
- PIPE REDUCER - ECCENTRIC
- PIPE STRAINER
- UNION - SCREWED
- AIR VENT - AUTOMATIC
- AIR VENT - MANUAL
- GAUGE - DIFFERENTIAL
- GAUGE - PRESSURE
- GAUGE - PRESSURE WITH COCK
- GAUGE - TEMPERATURE
- PIPE ANCHOR
- PIPE EXPANSION JOINT
- PIPE GUIDE
- SENSOR - FLOW
- SWITCH - FLOW
- SWITCH HUMIDITY
- SWITCH - PRESSURE
- SWITCH - TEMPERATURE
- TEMPERATURE - PRESSURE TEST FITTING
- THERMOMETER
- THERMOMETER WELL
- BASKET STRAINER
- STEAM TRAP INVERTED BUCKET
- METER - TOTALIZING BTU
- METER - TOTALIZING FLOW

## SECTION SYMBOL

SECTION LOCATION — A1 / M301 — DRAWING NUMBER WHERE DETAILED

DETAIL SYMBOL

DETAIL LOCATION — X#/X### — DRAWING NUMBER WHERE DETAILED

SECTION AND DETAIL TITLES

SECTION LETTER LOCATION — A1 SECTION SCALE

DETAIL NUMBER LOCATION — A1 DETAIL SCALE

EQUIPMENT SYMBOLS

- LETTERS REFER TO THE EQUIPMENT TYPE
- XX-## — NUMBERS REFER TO SPECIFIC EQUIPMENT
- SYMBOL INDICATES EQUIPMENT IDENTIFIED IN EQUIPMENT SCHEDULE
- ##x## / XX-# / ### — SIDEWALL GRILLE DIMENSION WHERE SHOWN ON PLANS
- SYMBOL INDICATES GRILLE OR DIFFUSER IDENTIFIED IN EQUIPMENT SCHEDULE
- CFM

# GENERAL NOTES

A. ALL PIPING AND/OR DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR ABOVE CEILINGS, UNLESS OTHERWISE NOTED.

B. PROVIDE ACCESS PANELS OR DOORS IN INACCESSIBLE CEILINGS AND/OR CHASES FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, COILS, FANS, CONTROLS, ETC. THEY SHALL BE FURNISHED UNDER DIVISION 23 AND INSTALLED UNDER THE ARCHITECTURAL SPECIFICATION. ACCESS DOOR RATING SHALL MATCH CLASSIFICATION OF WALL AND CEILING FIRE RATING.

C. COORDINATE THE LOCATION OF ALL DIFFUSERS, GRILLES, REGISTERS, ACCESS DOORS, ETC., WITH THE ARCHITECTURAL REFLECTED CEILING PLAN(S).

D. ALL ROUND RUNOUTS AND DROPS TO DIFFUSERS SHALL BE THE SAME NOMINAL SIZE AS THE SCHEDULED DIFFUSER NECK SIZE.

E. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. ALL DUCT SIZES SHOWN ON DRAWINGS ARE NET INSIDE DIMENSIONS. PROVIDE ONE INCH ACOUSTICAL LINING (TYPE D3 INSULATION) IN LOW VELOCITY RECTANGULAR DUCTWORK FOR THE FIRST 10 DIAMETERS OF DUCTWORK CONNECTED TO DEVICE, OR AS INDICATED ON DRAWINGS, WHICHEVER IS GREATER. FOR THE REMAINDER OF THIS DUCTWORK PROVIDE AS INDICATED IN THE INSULATION SPECIFICATIONS.

F. PROVIDE 1/2" MANUAL AIR VENTS AT ALL HIGH POINTS OF CLOSED SYSTEM PIPING AND 1/2" MANUAL DRAIN VALVES WITH HOSE CONNECTION AT LOW POINTS AS REQUIRED TO PROVIDE COMPLETE SYSTEM DRAINAGE. WHERE DRAIN VALVES OCCUR ABOVE CEILING AREAS AND IN AREAS OUTSIDE MECHANICAL RANGE PROVIDE HOSE CONNECTION ON VALVE.

G. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE-RATED AND/OR SMOKE-RATED WALLS AND ASSEMBLIES. PROVIDE APPROVED FIRE DAMPERS IN ALL REQUIRED PENETRATIONS FOR DUCTWORK, GRILLES, REGISTERS AND DIFFUSERS. ALL PIPE AND DUCTWORK PENETRATIONS OF FIRE, SMOKE AND FULL HEIGHT WALLS SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. APPROVED FIRE-PROOF CAULKING MATERIAL.

H. CONTRACTOR SHALL COORDINATE ALL DUCTWORK, PIPING, PLUMBING AND FIRE PROTECTION PIPING WITH STRUCTURAL AND ELECTRICAL SYSTEMS AND SHALL PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

I. CONTRACTOR SHALL FURNISH ALL NECESSARY STRUCTURES, INSERTS, SLEEVES, AND HANGING DEVICES FOR INSTALLATION OF MECHANICAL AND PLUMBING EQUIPMENT, DUCTWORK AND PIPING, ETC. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR AND ALL BUILDING TRADES TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

J. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY MISCELLANEOUS ANGLES, CHANNELS, UNISTRUT, ETC., AS MAY BE REQUIRED TO ADEQUATELY SUPPORT THE MECHANICAL PIPING, DUCTWORK, AND EQUIPMENT IN A MANNER APPROVED BY THE ARCHITECT, WHICH WILL NOT OVERLOAD THE BUILDING STRUCTURAL SYSTEM.

K. CONTRACTOR SHALL PROVIDE RETURN AIR OR TRANSFER AIR OPENINGS IN FULL HEIGHT WALLS SIZED AT 350 FPM (UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE DRAWINGS) TO CREATE AND/OR MAINTAIN A RETURN AIR PATH AS REQUIRED. FIRE DAMPERS AND/OR SMOKE DAMPERS SHALL BE PROVIDED IN SUCH OPENINGS WHERE REQUIRED.

L. SEAL ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, DUCT WALL PENETRATIONS AND FITTING CONNECTIONS ON ALL DUCT SYSTEMS.

M. MECHANICAL ITEMS SUCH AS ROOF DRAINS, FLOOR DRAINS, PLUMBING FIXTURES, ETC. SHOWN ON THE ARCHITECTURAL DRAWINGS BUT NOT SHOWN ON THE MECHANICAL DRAWINGS SHALL BE INCLUDED IN THE PROJECT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE A/E FOR INCLUSION IN ADDENDUM.

N. IT IS CRITICAL THAT THE CONTRACTOR PERFORM A COMPLETE REVIEW OF ALL SUBMITTALS PRIOR TO SUBMISSION TO THE AE/COR. INCOMPLETE, INCORRECT AND UNCLEAR SUBMITTALS WILL BE REJECTS AND MARKED AS "REVISE AND RESUBMIT". ALL SUBMITTALS MUST CLEARLY INDICATE THE EQUIPMENT SELECTIONS FOR THE PROJECT. TECHNICAL DRAWINGS OF COMPLETE ASSEMBLIES, REFLECTING ACCURATE PROJECT CONDITIONS, SHALL BE SUBMITTED WITH EQUIPMENT SELECTIONS TO ENSURE SPACE ALLOWANCES ARE REFLECTED IN THE ACTUAL SPACE AVAILABLE. WHERE SIZE DEVIATIONS DIFFER FROM THE BASIS OF DESIGN CONTRACTOR SHALL HIGHLIGHT THE DIFFERENCES FOR AE/COR REVIEW WITHIN THE SUBMITTAL. CONTRACTOR SHALL PROVIDE INSTALLATION ROUTE AND VERIFICATION THAT ACCESS POINTS, PLACEMENT ROUTE, SUPPORTS, AND REQUIRED EQUIPMENT CLEARANCES ARE IDENTIFIED ON THE ROUTE DRAWING. SAFETY PROTOCOLS FOR SUBJECT STATION SHALL BE REFLECTED ON EQUIPMENT CLEARANCES. PLATFORMS AND INTERFACE AREAS (FILTER, GAUGES, MONITORS, VALVES, ETC.) SHALL HAVE PROPER CLEARANCE AS DEFINED BY THE MANUFACTURER. VA SAFETY PERSONNEL AND SERVICE PERSONNEL ACCESS POINTS OF USE SHALL BE CLEARLY IDENTIFIED ON THE DRAWINGS.


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COLORADO LICENSED — BRENDAN M. SCHMITT — 40538 — PROFESSIONAL ENGINEER — 07/17/25

# CHAMONIX UNIT C17 RENOVATION

476 WOOD ROAD SNOWMASS VILLAGE, CO

| | |
|---|---|
| PROJECT NUMBER: | 2024-05 |
| DRAWN BY: | PK |
| CHECKED BY: | BMS |
| ISSUE: | PERMIT SET |
| DATE: | 07/17/2025 |
| REVISION: | DATE |

TITLE: MECHANICAL COVER

SHEET #: M-001

# MECHANICAL GENERAL NOTES AND SPECIFICATIONS

MECHANICAL DESIGN SHALL CONFORM TO THE 2015 INTERNATIONAL RESIDENTIAL CODE. PROJECT SHALL BE COORDINATED WITH THE EXISTING BUILDING SERVICES AND SHALL INCLUDE ALL ITEMS NECESSARY FOR COMPLETE AND FULLY OPERATIONAL MECHANICAL SYSTEMS. MAKE CONNECTIONS TO AND EXTEND SYSTEMS INSTALLED BY OTHERS AND/OR FURNISHED BY OTHERS. PROVIDE ACCESSORIES AND INCIDENTAL ITEMS AS REQUIRED FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM WHETHER OR NOT SPECIFICALLY SPECIFIED AND/OR SHOWN ON THE PLANS.

COORDINATE WITH OTHER TRADES FOR A COORDINATED INSTALLATION WITHIN THE AVAILABLE SPACE. WHERE CROWDED CONDITIONS EXIST, PREPARE COORDINATION DRAWINGS SHOWING ALL TRADE CONFLICTS AND SUBMIT TO ARCHITECT FOR APPROVAL AND DIRECTION PRIOR TO ROUGH-IN AND/OR INSTALLATION.

RELOCATION OF OUTLETS AND/OR DEVICES MADE PRIOR TO ROUGH-IN SHALL BE DONE AT NO ADDITIONAL COST. ALL WORK SHALL BE PERFORMED BY PROPERLY LICENSED MECHANICS OR UNDER THEIR DIRECT SUPERVISION. ALL MATERIALS AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE APPLICABLE STANDARDS OF UL AND SHALL BEAR THE UL LABEL AS EVIDENCE THAT THE MATERIAL AND/OR EQUIPMENT MEETS THIS REQUIREMENT.

INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND DETAILS UNLESS OTHERWISE NOTED IN THESE PLANS. IF DISCREPANCIES EXIST CONTACT THE ENGINEER PRIOR TO ORDERING EQUIPMENT AND ROUGH-IN. ALL EQUIPMENT START UP AND TESTING SHALL BE PERFORMED BY THE EQUIPMENT MANUFACTURER TRAINED SERVICE TECHNICIAN.

THE SUB-CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIARIZED WITH ALL REQUIREMENTS OF THE CONTRACT PRIOR TO SUBMISSION OF BID. THE SUB-CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO BID OR START OF INSTALLATION.

THE SUB-CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS WHEN THEY BECOME DUE, AND SHALL NOT COVER ANY WORK UNTIL APPROVED BY THE INSPECTION AUTHORITY. ANY AND ALL FEES ASSOCIATED WITH THE MECHANICAL WORK, INCLUDING CONSTRUCTION AND INSPECTIONS SHALL BE PAID FOR BY THE SUB-CONTRACTOR IN ORDER TO DELIVER A COMPLETE AND FINISHED BUILDING, READY FOR OCCUPANCY AND 100% USAGE. THE SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE SUB-CONTRACTOR HAS FAMILIARIZED HIMSELF/HERSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED, WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORESEEN HAD PROPER EXAMINATION BEEN MADE. ANY COSTS DUE TO THE LACK OF COOPERATION AMONG TRADES SHALL BE BORNE BY THE SUB-CONTRACTOR.

THE INFORMATION PRESENTED ON THESE DRAWINGS IS DIAGRAMMATIC IN NATURE. IT DOES NOT NECESSARILY REPRESENT ALL FITTINGS, HANGERS, ETC. FOR A COMPLETE WORKING SYSTEM. PROVIDE ALL MATERIALS AND LABOR FOR COMPLETELY FINISHED AND OPERATIONAL SYSTEMS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR: EXACT WALL LOCATIONS, DIMENSIONS, AND PLUMBING FIXTURE LOCATIONS AND REQUIREMENTS.

SUB-CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY ALTERATIONS REQUIRED BY THE OWNER, ARCHITECT, OR FIELD CONDITIONS.

ALL EQUIPMENT SHALL BE NEW, SHALL COMPLY WITH APPLICABLE INDUSTRY STANDARDS, WITH SPECIFICATIONS ON DRAWINGS, AND ENERGY CODE COMPLIANCE CERTIFICATION AS ADOPTED BY THE STATE, AS WELL AS LOCAL JURISDICTIONAL BUILDING DEPARTMENT. SUBMIT DATA FOR APPROVAL PRIOR TO ORDERING EQUIPMENT. SUBMITTAL SHALL INCLUDE ENERGY CODE COMPLIANCE CERTIFICATION.

SUB-CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT INCLUDING: FIXTURES SPECIFIED IN EQUIPMENT SCHEDULE ON DRAWINGS FOR REVIEW/APPROVAL (5) DAYS PRIOR TO BID. EQUIPMENT IS NOT TO BE ORDERED WITHOUT SUBMITTAL TO ARCHITECT/OWNER/ENGINEER.

PIPING

A. ALL CHILLED WATER AND HOT WATER PIPING LARGER THAN 2" SHALL BE WELDED STEEL OR GROOVED MECHANICAL COUPLINGS.
B. CONDENSATE DRAIN PIPING SHALL BE TYPE M COPPER WITH SOLDERED JOINTS.
C. REFRIGERATION PIPING SHALL BE TYPE L COPPER WITH SILVER SOLDERED JOINTS. PIPING CIRCUITS, MANIFOLDS, AND SIZING SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. VERIFY LINE SET LENGTH LIMITATIONS CONSTRUCTION CONDITIONS PRIOR TO ORDERING EQUIPMENT. NOTIFY ENGINEER OF ANY DISCREPANCIES.
D. CHILLED AND HEATING WATER PIPING SHALL BE TYPE L COPPER WITH SOLDERED JOINTS.
E. FIRE STOP ALL PIPING MATERIALS PASSING THROUGH FIRE RATED STRUCTURES OR FIRE RATED ASSEMBLIES IN ACCORDANCE WITH THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. USE CURRENTLY LISTED U.L. CLASSIFIED PRODUCTS, TESTED BY ASTM E814. USE FOR ALL APPLICABLE PIPE PENETRATIONS THROUGH FIRE RATED FLOORS, WALLS, OR FLOOR CEILING ASSEMBLIES IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.

ALL SPACE HEATING SUPPLY AIR DUCTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST S.M.A.C.N.A. DUCT CONSTRUCTION STANDARDS AND BE INSULATED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL JURISDICTIONAL ENERGY CONSER- VATION STANDARDS AND THE LATEST EDITION INTERNATIONAL MECHANICAL CODE.

ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. INCREASE LISTED DUCT SIZE TO ACCOMMODATE LINER.

FLEX SHALL NOT EXCEED 6 FT. IN LENGTH AND SHALL BE TYPE "1" FACTORY DUCT. PROVIDE WITH 1 IN. EXTERNAL INSULATION IF MAIN SUPPLY DUCT IS INSULATED.

ALL SUPPLY RUN-OUTS TO HAVE MANUALLY ADJUSTABLE VOLUME DAMPERS WITH ABILITY TO LOCK IN PLACE. THIS SUB-CONTRACTOR SHALL INCLUDE IN HIS/HER BID THE COMPLETE COST FOR THE ELECTRICAL CONTRACTOR TO INTERLOCK EXHAUST FANS AS REQUIRED BY EQUIPMENT SCHEDULE. THIS SUB-CONTRACTOR SHALL FIELD VERIFY 10 FT. MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKE AND ALL VENTS OR EXHAUST OUTLETS.

WALL THERMOSTATS FOR HEATING/COOLING UNITS TO BE AUTOMATIC CHANGEOVER TYPE AND INSTALLED 48 IN. ABOVE FINISHED FLOOR. HEATING/COOLING UNITS SHALL MAINTAIN MINIMUM OUTSIDE AIR AS SHOWN ON SCHEDULE OR SHOWN IN FRESH AIR CALCULATIONS.

ALL AIR HANDLERS OR ROOTOP UNITS SUPPLYING MORE THAN 2000 CFM OF AIR SHALL BE EQUIPPED WITH A SMOKE DETECTOR IN THE MAIN RETURN AIR DUCT WHICH WILL SHUT THE POWER OFF TO THE UNIT WHEN SMOKE IS DETECTED. THIS SMOKE DETECTOR SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR AND WIRED BY THE MECHANICAL CONTRACTOR. IN BUILDINGS WHERE FIRE DETECTION OR ALARM SYSTEMS ARE PROVIDED, THE SMOKE DETECTOR SHALL BE WIRED BY THE ELECTRICAL CONTRACTOR AND SHALL BE SUPERVISED BY FIRE ALARM SYSTEM. SEE LATEST EDITION INTERNATIONAL MECHANICAL CODE FOR ADDITIONAL REQUIREMENTS. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL REMOTE TEST SWITCH AND INDICATING LIGHT AT CEILING LOCATION NEAR FURNACE/ROOFTOP LOCATION.

MECHANICAL CONTRACTOR IS RESPONSIBLE TO HAVE ROOFTOP UNIT MANUFACTURERS TECHNICIAN START ALL ROOFTOP UNITS. PROVIDE WRITTEN REPORT FROM MANUFACTURER FOR START-UP COMMISSIONING.

DUCTWORK

A. DUCTWORK SHALL BE GALVANIZED SHEET METAL INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS. INSTALL TURNING VANES IN ALL ELBOWS. ALL SPIN-IN FITTINGS AND RUNOUTS TO ANY REGISTERS, RETURN, OR EXHAUST TERMINAL SHALL BE PROVIDED WITH MANUAL VOLUME DAMPERS.
B. ALL DUCTWORK SHALL BE SEALED IN ACCORDANCE WITH SMACNA STANDARDS. THE DUCT PRESSURE CLASS SHALL BE AS NOTED ON PLANS OR CORRESPONDING TO THE MAXIMUM EQUIPMENT ESP ON EACH SYSTEM. THE DUCTWORK SHALL BE SEALED TIGHT. LEAKAGE MAY NOT EXCEED 10% OF DESIGN AIRFLOW AT DESIGN PRESSURE. FOR SMOKE CONTROL SYSTEMS THE DUCT MUST BE TESTED AT 1.5 TIMES ITS DESIGN PRESSURE AND LEAKAGE MAY NOT EXCEED 5% OF DEIGN AIRFLOW.
C. ALL EXPOSED ROUND DUCTWORK SHALL BE SPIRAL DUCT. NO JOISTS OR CONNECTIONS SHALL HAVE ANY VISIBLE SEALANT FROM THE EXTERIOR SO THE DUCTWORK HAS A CLEAN AND WORKMAN LIKE APPEARANCE.
D. DUCT SIZES GIVEN ARE NET INSIDE FREE AREA.
E. EQUIPMENT FLEXIBLE DUCTWORK CONNECTION NOT TO EXCEED 10 INCHES IN LENGTH WITH A MAX. 25 FLAME/50 SMOKE INDEX.
F. FLEXIBLE DUCTWORK TO AIR DEVICES SHALL HAVE A MAXIMUM STRETCHED LENGTH OF 6 FEET. SUITABLE FOR RETURN AIR PLENUM.
G. ALL EXHAUST TERMINALS MUST BE 3'-0" AWAY FROM IN ELEVATION FROM OPERABLE PORTION OF WINDOW AND DOORS. MC TO OFFSET AS REQUIRED.
H. ALL DIRECT VENT VENT TERMINALS MUST BE 4'-0" AWAY IN ELEVATION HORIZONTALLY OR BELOW AND ATLEAST 1'-0" ABOVE ANY OPERABLE PORTION OF A WINDOW OR DOOR. MC TO OFFSET AS REQUIRED.

INSULATION

A. ALL ROUND CONCEALED RIGID SUPPLY DUCTWORK SHALL BE EXTERNALLY WRAPPED WITH NOMINAL 1-1/2" THICK (MINIMUM R-6.0) FIBER GLASS INSULATION WITH FIRE RETARDANT VAPOR BARRIER.
B. OUTDOOR AIR INTAKE DUCTS SHALL BE EXTERNALLY WRAPPED WITH NOMINAL 1-1/2" THICK (MINIMUM R-5.0) FIBER GLASS INSULATION WITH FIRE RETARDANT VAPOR BARRIER.
C. IN DRY ENVIRONMENTS (GENERALLY 1% SUMMER DESIGN MCWB < 74 F): WHEN LOCATED IN UNCONDITIONED SPACES ALL RECTANGULAR DUCTWORK SHALL BE LINED WITH 1" THICK 2 POUND DENSITY (MINIMUM R-6.0) FIBER GLASS ACOUSTIC DUCT LINER. ALL DUCTWORK EXPOSED TO OUTDOOR AMBIENT TYPE CONDITIONS (UNCONDITIONED ATTICS, OUTSIDE AIR DUCTS, ETC) SHALL BE EXTERNALLY WRAPPED OR INTERNALLY LINED IN 2 - 2.5" NOMINAL INSULATION (MINIMUM R-8.0). ALL OUTDOOR DUCTWORK SHALL HAVE 2 - 2.5" DUCTLINER (MINIMUM R-8.0) AND THE DUCT BE SEALED WEATHERPROOF PER SMACNA GUIDELINES. RECTANGULAR DUCT WORK IN RETURN AIR PLENUM SHALL BE LINED WITH 1/2" THICK 2 POUND DENSITY (MINIMUM R2.1) MAT-LACED ACOUSTIC DUCT LINER.

HEAT PUMP UNITS

A. FURNISH AND INSTALL HORIZONTAL HEAT PUMPS AS SCHEDULED ON THE PLANS. HEAT PUMP UNITS SHALL BE AS MANUFACTURED BY ARCTIC HEAT PUMP, SPACE PAK OR OTHER EQUAL MANUFACTURERS.
B. UNIT SHALL BE CERTIFIED AND COORDINATED WITH THE CONDENSER WATER SYSTEM. CONTRACTOR TO PROVIDE CONDENSER WATER PIPING AND CONTROLS FOR A COMPLETE INSTALLATION AND INTEGRATION WITH THE BUILDING SYSTEMS
C. UNITS SHALL BE ARI CERTIFIED IN PERFORMANCE.

FURNACE UNITS

A. FURNISH AND INSTALL HORIZONTAL FURNACE UNITS WITH COOLING COIL AND/OR HEATING COIL AS SCHEDULED ON THE PLANS. FURNACE UNITS SHALL BE AS MANUFACTURED BY CARRIER, YORK, OR EQUAL MANUFACTURE.
B. PROVIDE SPACE THERMOSTAT AND INTERLOCK WIRING DIAGRAM APPROPRIATE FOR SYSTEM. THERMOSTAT SHALL HAVE HEAT OFF COOL, FAN AUTO CONTINUOUS SWITCH.
C. UNIT SHALL BE CERTIFIED AND COORDINATED WITH CONDENSING UNIT OF SAME MANUFACTURER. UNIT MANUFACTURE SHALL SIZE REFRIGERANT PIPING TO BE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENT.
D. AIR COOLED CONDENSING UNITS:
  D.1. FURNISH AND INSTALL AIR COOLED DIRECT EXPANSION REFRIGERANT CONDENSING UNITS WHICH ARE COMPATIBLE WITH AND OF SAME MANUFACTURER AS FAN COIL UNITS.
  D.2. UNITS SHALL BE ARI CERTIFIED IN PERFORMANCE.
E. CONDENSATE DRAINS.
  E.1. ROUTE CONDENSATE DRAIN TO NEAREST FLOOR DRAIN, FLOOR SINK, OR LAV/SINK TRAP. PROVIDE SEPARATE DRAIN LINE FOR FAN COIL DRAIN PAN.
  E.2. PROVIDE CONDENSATE PUMP AND COORDINATE WITH ELECTRICAL CONTRACTOR FOR FULL INSTALLATION WHEN A GRAVITY DRAIN IS NOT AVAILABLE.

ELECTRIC HEATING UNITS

A. FURNISH AND INSTALL ELECTRIC HEATING EQUIPMENT AS SCHEDULED AND INDICATED ON THE PLANS.
B. ELECTRIC UNIT HEATERS SHALL BE FURNISHED COMPLETE WITH ALL MOUNTING HARDWARE AND ACCESSORIES INCLUDING SPACE THERMOSTAT AND/OR SELF CONTAINED THERMOSTAT AS REQUIRED FOR OPERATION.
C. PROVIDE WHITE COLOR FINISH UNLESS OTHERWISE INDICATED.
D. ALL UNITS SHALL BE UL LISTED.
E. MC SHALL REVIEW SURFACE VERSUS RECESS MOUNTING OPTIONS WITH GC PRIOR TO ORDERING EQUIPMENT. ASK FOR CLARIFICATION IF CONFLICTS ARISE DUE TO RATED WALLS, RATED CEILING, STRUCTURE, ETC.

EXHAUST FANS

E.1. TOILET ROOM EXHAUST SHALL BE PROVIDED WITH TIMER SWITCH (5MIN INTERVALS THRU 30MIN) .
E.2. TOILET EXHAUST FAN TO BE PROVIDED WITH ON/OFF SWITCH INDEPENDENT FROM LIGHT SWITCH.
E.3. MECH AND ELEVATOR ROOM FAN SHALL OPERATE CONTINUOUSLY

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07/17/25

CHAMONIX UNIT C17 RENOVATION
476 WOOD ROAD SNOWMASS VILLAGE, CO

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|---|---|
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| DRAWN BY: | PK |
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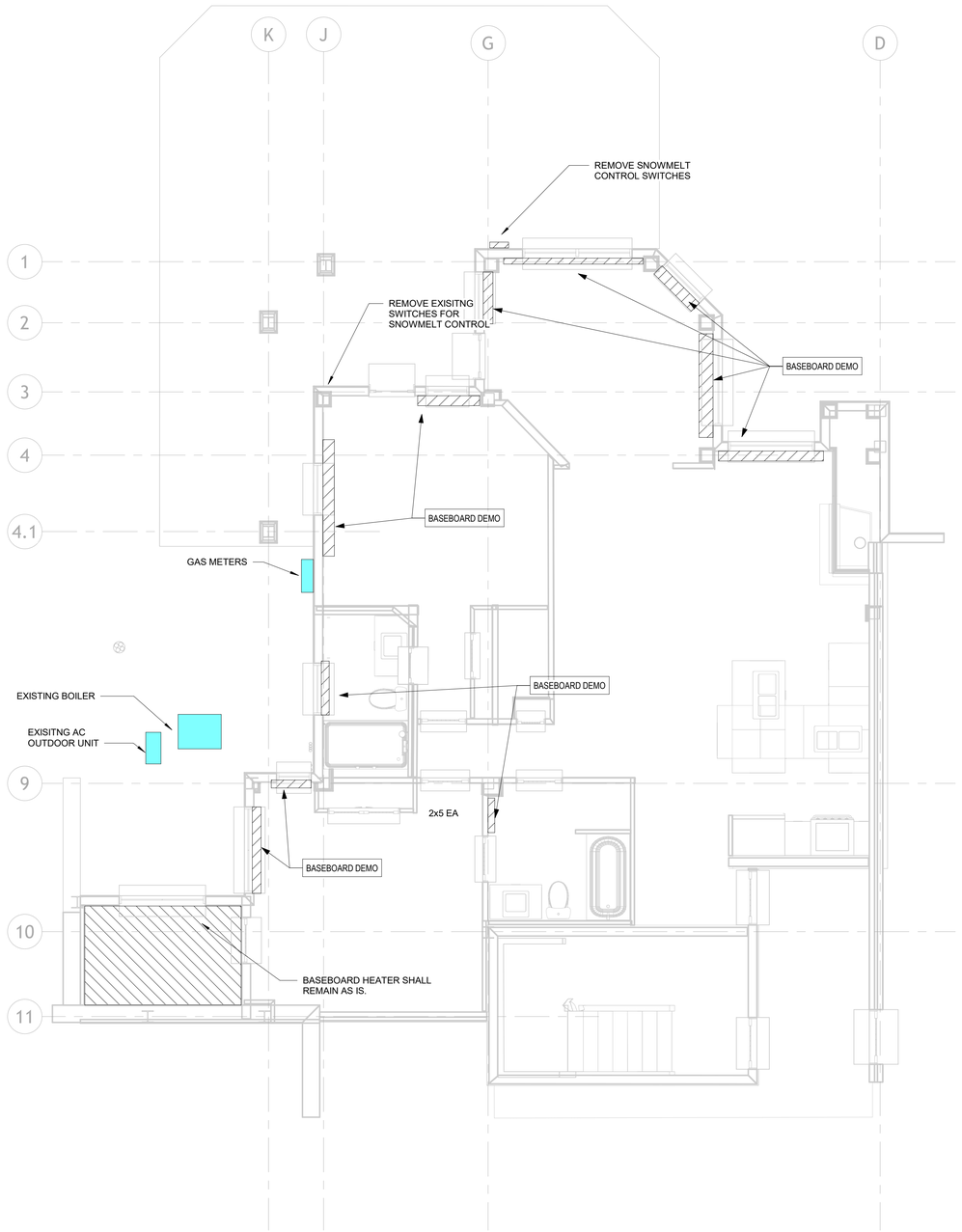
TITLE
MECHANICAL SPECS

SHEET #
M-002




1 FLOOR LEVEL DEMO
1/4" = 1'-0"

# MECHANICAL GENERAL NOTES

1. ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE 2021 IRC, IMC, 2021 IECC, AND ALL LOCAL & STATE CODES.
2. ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
3. MECHANICAL CONTRACTORS SHALL RECEIVE PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE MAKING CUTS THROUGH ANY STRUCTURAL MEMBER.
4. THESE PLANS ARE SCHEMATIC IN NATURE AND MECHANICAL CONTRACTOR SHALL COORDINATE INSTALLATION WITH CONSTRUCTION SUPERVISOR AND WITH ALL OTHER TRADES TO AVOID CONFLICTS.
5. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO REVIEW THE DRAWINGS FOR ALL DISCIPLINES AND PROVIDE LABOR AND MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
6. THE MECHANICAL CONTRACTORS SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWINGS BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.
7. ALL PROPOSED MECHANICAL EQUIPMENT SHALL BE ON THE APPROVED LIST PRIOR TO SUBMITTALS. ALL APPROVED MANUFACTURERS MUST BE CAPABLE OF MEETING THE REQUIREMENTS OF THE SPECIFIED EQUIPMENT.
8. PAINT ALL VTR'S, FLUES, EXHAUST CAPS, AND OTHER MECHANICAL ITEMS ON THE ROOF TO MATCH THE ROOF COLOR.
9. INSULATED FLEXIBLE DUCTWORK MAY BE USED FOR RUNOUTS TO GRILLES AND DIFFUSERS, IN LENGTHS OF 5'-0" OR LESS.
10. MAINTAIN MINIMUM OF 10'-0" DISTANCE BETWEEN ALL FRESH AIR INTAKES AND EXHAUST OR GAS FLUE DISCHARGES.
11. LOCATE ACCESS HATCHES SO AS TO PROVIDE OPTIMUM SERVICEABILITY TO EQUIPMENT AND/OR VALVING. SEE ARCHITECTURAL SPECIFICATION FOR TYPE AND COLOR. COORDINATE LOCATION WITH STRUCTURAL & LIGHTING.
12. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
13. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR VERIFICATION OF EXISTING JOB CONDITIONS PRIOR TO BID. NO ADDITIONAL COST SHALL BE AWARDED TO THE SUCCESSFUL CONTRACTOR (OR THEIR SUBCONTRACTORS) AFTER BIDS HAVE BEEN SUBMITTED AND CONTRACTS AWARDED FOR FAILURE TO VERIFY EXISTING FIELD CONDITIONS. DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION FOR ALTERNATIVE METHODS OF INSTALLATION PRIOR TO THE BIDDING OF THIS PROJECT.
14. UNLESS OTHERWISE NOTED ALL EXISTING MECHANICAL EQUIPMENT, PIPING, ETC, TO BE REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR UNDER THIS CONTRACT. THE OWNER SHALL RETAIN THE RIGHT TO KEEP ANY REMOVED ITEMS.
15. ALL HEAT EXCHANGERS SHALL BE PIPED IN COUNTERFLOW ORIENTATION.
16. UNLESS OTHERWISE INDICATED ALL DUCTWORK SHOULD HAVE ACCOUSTIC LINING WITHIN 10' OF EQUIPMENT.
17. ALL DUCTWORK SHOWN IS TO BE ROUTED BETWEEN FINISHED FLOOR OF ASSOCIATED LEVEL AND FINISH FLOOR OF LEVEL ABOVE.
18. ALL EQUIPMENT SHOWN IS TO BE LOCATED BETWEEN FINISHED FLOOR OF ASSOCIATED LEVEL AND FINISHED FLOOR OF LEVEL ABOVE. AIR TERMINALS WITH TAGS ARE SERVING THE PLAN'S ASSOCIATED LEVEL.
19. MECHANICAL EQUIPMENT LOCATED IN CEILING OR ATTIC SHALL INCLUDE A UL508 LISTED WATER DETECTION DEVICE IN THE DRAIN PAN THAT WILL SHUT THE EQUIPMENT OFF IN THE EVENT THE DRAIN IS PLUGGED OR PUMP BECOMES NON FUNCTIONAL.
20. REFERENCE ARCHITECTURAL LIGHTING PLANS FOR EXACT EXHAUST FAN AND DIFFUSER LOCATIONS.
21. RADIANT MANIFOLDS TO BE LOCATED WITHIN TEN FEET OF ZONE.
22. THERMOSTATS AND SENSORS TO BE LOCATED ON UNOCCUPIED AREA OF WALL, FREE FROM ARTWORK AND WALL HANGINGS. FINAL LOCATION SHALL BE COORDINATED WITH ARCHITECT.
23. GENERAL CONTRACTOR TO PROVIDE ACCESS PANELS FOR RADIANT AND SNOWMELT MANIFOLDS.

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476 WOOD ROAD SNOWMASS VILLAGE, CO

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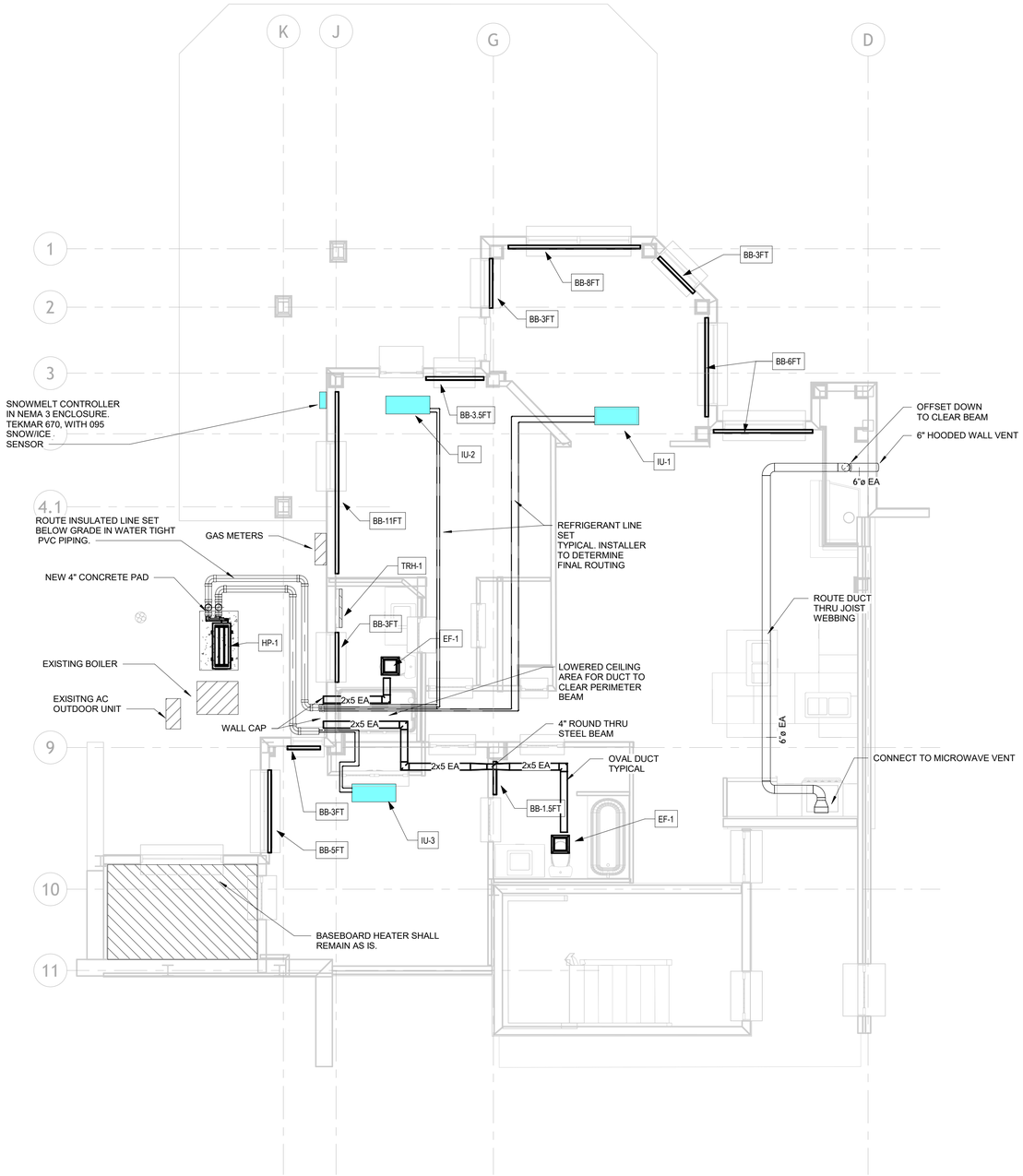
TITLE
MECH DEMO PLAN

SHEET #
MD101

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23. GENERAL CONTRACTOR TO PROVIDE ACCESS PANELS FOR RADIANT AND SNOWMELT MANIFOLDS.

# ENERGY CODE COMPLIANCE

1. COMPLIANCE WITH THE 2021 IECC. THESE NOTES COVER MANDATORY REQUIREMENTS OF THE CODE. ADDITIONAL REQUIREMENTS ARE NOTED ON THE PLANS AND IN THE SPECIFICATIONS.
2. MINIMUM REQUIREMENTS FOR SUPPLY AND RETURN DUCTWORK INSULATION:
   A. R-6: DUCTS LOCATED IN UNCONDITIONED SPACES
   B. R-8: DUCTS LOCATED OUTSIDE OF THE BUILDING'S INSULATION ENVELOPE (SUCH AS ABOVE THE ATTIC INSULATION)
3. CONTRACTOR SHALL VERIFY WITH THE MANUFACTURER, THE R-VALUES OF THE ACTUAL INSULATION USED. R-VALUES SHALL BE INSTALLED VALUES.
4. WHERE DUCTS USED FOR COOLING ARE EXTERNALLY INSULATED, THE INSULATION SHALL BE COVERED WITH A VAPOR RETARDER HAVING A MAXIMUM PERMEANCE OF 0.05 PERM OR ALUMINUM FOIL HAVING A MINIMUM THICKNESS OF 2 MILS, INSULATION HAVING A PERMANCE OF 0.05 PERMS OR LESS SHALL NOT BE REQUIRED TO BE COVERED. ALL JOINTS AND SEAMS SHALL BE SEALED TO MAINTAIN THE CONTINUITY OF THE VAPOR RETARDER.
5. ALL DUCT JOINTS, SEAMS, AND CONNECTIONS SHALL BE FASTENED AND SEALED WITH WELDS, GASKETS, ADHESIVES, MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, OR TAPES, TAPES AND MASTICS SHALL BE LISTED AND LABELED PER UL181A OR UL181B. DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS, DUCT CONNECTIONS TO FLANGES OR EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED.
6. MINIMUM REQUIREMENTS (THICKNESS) FOR PIPING INSULATION SHALL BE AS FOLLOWS:

| FLUID | NOMINAL PIPE DIAMETER | INSULATION R-VALUE |
|---|---|---|
| DOMESTIC WATER | ANY SIZE | R-3 |
| HOT/CHILLED WATER | ANY SIZE | R-3 |
| REFRIGERANT | ANY SIZE | R-3 |

   THE ABOVE INSULATION IS BASED ON HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU-INCH/HOUR-FT2-°F
7. AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE O&M MANUAL SHALL CONTAIN THE FOLLOWING:
   A. EQUIPMENT CAPACITY (INPUT & OUTPUT)
   B. EQUIPMENT OPERATING AND MAINTENANCE INSTRUCTIONS
   C. CONTROL SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCES
   D. CONTROL SYSTEM SETPOINTS SHALL BE SHOWN ON CONTROL DRAWINGS, AT CONTROL DEVICES
   E. A COMPLETE WRITTEN NARRATIVE ON HOW EACH MECHANICAL SYSTEM IS INTENDED TO OPERATE

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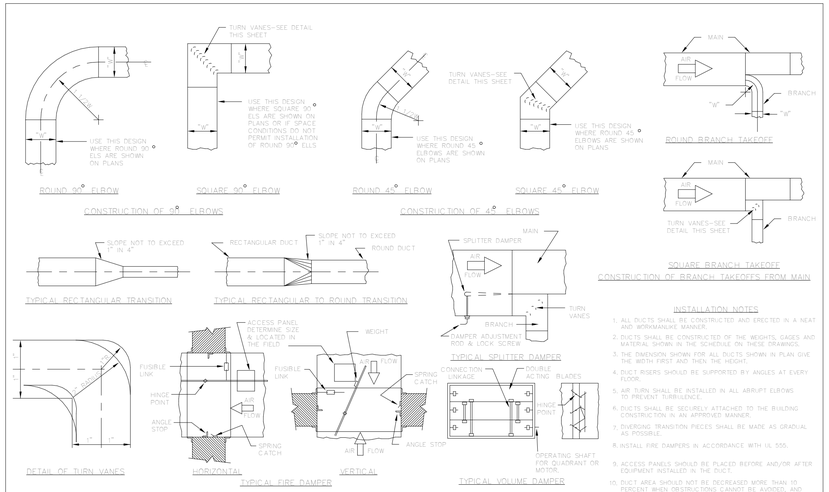
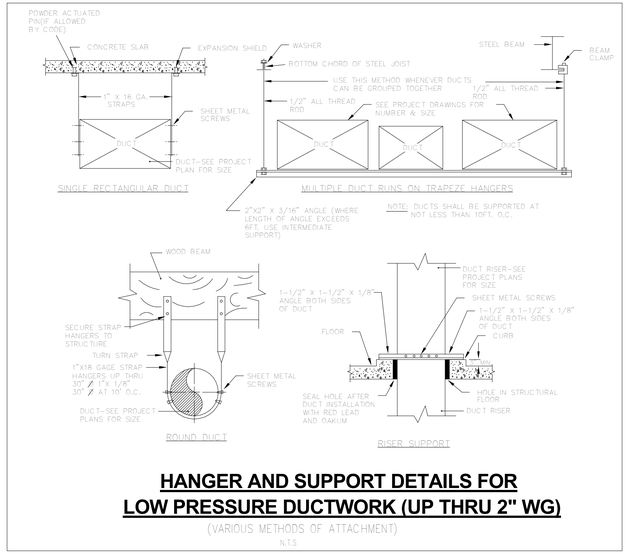
TITLE
MECH NEW WORK PLAN

SHEET #
MH101




## DETAILS OF THE LOW VELOCITY DUCT LAYOUT

SCALE




## HANGER AND SUPPORT DETAILS FOR LOW PRESSURE DUCTWORK (UP THRU 2" WG)

(VARIOUS METHODS OF ATTACHMENT)

N.T.S

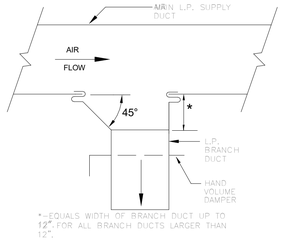
### DUCT CONSTRUCTION SHEET METAL THICKNESSES

RECTANGULAR DUCTS

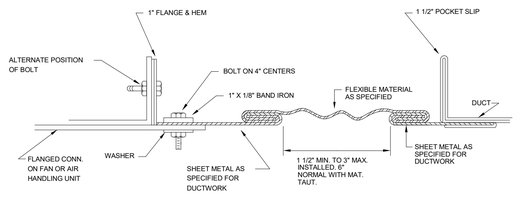
| MAXIMUM SIZE (INCHES) | STEEL (MINIMUM THICKNESS, NOMINAL) | ALUMINUM (MINIMUM THICKNESS, NOMINAL) |
|---|---|---|
| THROUGH 12 | 0.022 INCH (26 GAGE, GALV.) | 0.020 INCH (NO. 24 B&S GAGE) |
| 13 THROUGH 30 | 0.028 INCH (24 GAGE, GALV.) | 0.025 INCH (NO. 22 B&S GAGE) |
| 31 THROUGH 54 | 0.034 INCH (22 GAGE, GALV.) | 0.032 INCH (NO. 20 B&S GAGE) |
| 55 THROUGH 84 | 0.040 INCH (20 GAGE, GALV.) | 0.040 INCH (NO. 18 B&S GAGE) |
| OVER 84 | 0.052 INCH (18 GAGE, GALV.) | 0.051 INCH (NO. 16 B&S GAGE) |

ROUND DUCTS

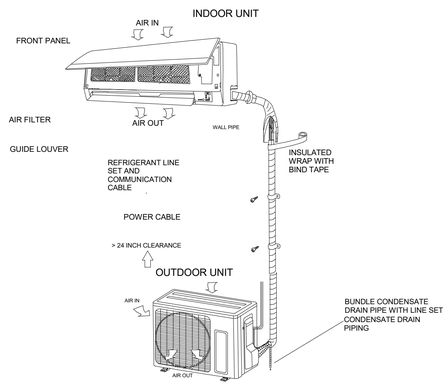
| MAXIMUM SIZE (INCHES) | SPIRAL SEAM DUCT STEEL (MINIMUM THICKNESS, NOMINAL) | LONGITUDINAL SEAM DUCT STEEL (MINIMUM THICKNESS, NOMINAL) | FITTINGS STEEL (MINIMUM THICKNESS, NOMINAL) |
|---|---|---|---|
| THROUGH 12 | 0.019 INCH (28 GAGE, GALV.) | 0.022 INCH (26 GAGE, GALV.) | 0.022 INCH (26 GAGE, GALV.) |
| 13 THROUGH 18 | 0.022 INCH (26 GAGE, GALV.) | 0.028 INCH (24 GAGE, GALV.) | 0.028 INCH (24 GAGE, GALV.) |
| 19 THROUGH 28 | 0.028 INCH (24 GAGE, GALV.) | 0.034 INCH (22 GAGE, GALV.) | 0.034 INCH (22 GAGE, GALV.) |
| 29 THROUGH 36 | 0.034 INCH (22 GAGE, GALV.) | 0.040 INCH (20 GAGE, GALV.) | 0.040 INCH (20 GAGE, GALV.) |
| 37 THROUGH 52 | 0.040 INCH (20 GAGE, GALV.) | 0.052 INCH (18 GAGE, GALV.) | 0.052 INCH (18 GAGE, GALV.) |




## TYPICAL LOW PRESSURE BRANCH DUCT TAKE-OFF

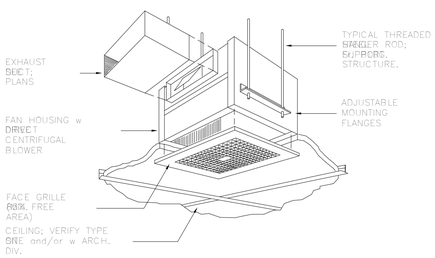



## RECTANGULAR FLEXIBLE CONNECTION DETAIL



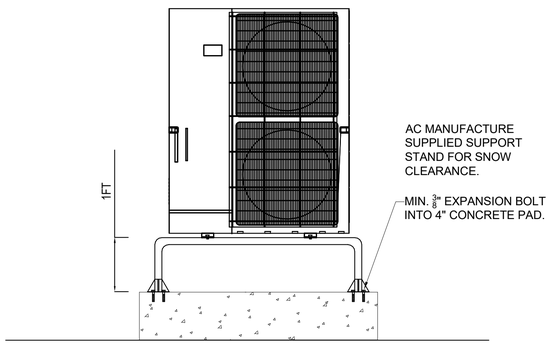

## TYPICAL SPLIT SYSTEM DETAIL

SCALE



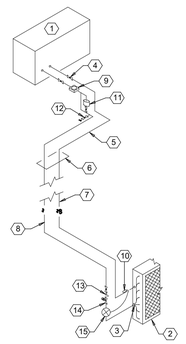

## CEILING EXHAUST FAN DETAIL

SCALE




## OUTDOOR HEAT PUMP SUPPORT DETAIL

SCALE



1. PAD MOUNTED HEAT PUMP, 4" CONCRETE PAD
2. INDOOR UNIT, DIRECT EXPANSION (DX) COIL.
3. DISTRIBUTION NOZZLE
4. GLOBE VALVES AT OUTDOOR UNIT.
5. SWING JOINT.
6. PIPE PENETRATION THROUGH ROOF, SEE PIPING THRU ROOF DETAIL ON THIS SHEET.
7. REFRIGERANT SUCTION LINE
8. REFRIGERANT LIQUID LINE
9. SIGHT GLASS
10. REMOTE BULB
11. FILTER
12. LIQUID CHARGING VALVE
13. STRAINER
14. SOLENOID VALVE TO BE LOCATED AS CLOSE TO EXPANSION VALVE AS POSSIBLE.
15. EXPANSION VALVE

## SPLIT SYSTEM REFRIGERANT PIPING DETAIL

SCALE

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# CHAMONIX UNIT C17 RENOVATION

476 WOOD ROAD SNOWMASS VILLAGE, CO

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TITLE
MECHANICAL DETAILS

SHEET #
M-501

# VENTILATION SCHEDULE

| SYSTEM | ROOM/ZONE NAME | ZONE FLOOR AREA (SQ.FT) | OUTDOOR AIR FLOW PER AREA (CFM/SQ.FT) | ZONE OCCUPANT DENSITY (#BEDROOMS+1) | OUTDOOR AIR FLOW PER OCCUPANT (CFM/PERSON) | TOTAL OCCUPANTS # | OUTDOOR AIR FLOW (CFM) | AIR DISTRIBUTION EFFECTIVNESS (Ez) | MINIMUM REQUIRED VENTILATION AIR FLOW (CFM) |
|---|---|---|---|---|---|---|---|---|---|
| EF-1 | WHOLE HOUSE | 1250 | 0.01 | 3 | 7.5 | 3 | 35 | 1.0 | 35 |

REMARKS:
1. EF-1 SHALL OPERATE INTERMITTANTLY TO MEET VENTILATION REQUIRMENTS
3. PER IRC 2015

# EXHAUST FAN SCHEDULE

| SYMBOL | TYPE | BLOWER | | | | ELECTRICAL | | | MAXIMUM SONES | OPERATING WEIGHT (LBS) | MANUFACTURER AND MODEL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CFM | ESP | MAXIMUM RPM | DRIVE | WATTS | AMPS | V/Φ | | | | |
| EF-1 | CEILING MOUNT | 50 | 0.2 | 722 | DIRECT | 3.1 | 0.04 | 120/1 | 0.3 | 13 | PANASONIC FV-0511VK2 | 1, 2, 3 |

REMARKS:
1. SUBMIT ALTERNATE MANUFACTURER FOR APPROVAL.
2. PROVIDE UNIT WITH BACK DRAFT DAMPERS, OUTLET FLEX DUCT CONNECTION, FAN SPEED CONTROLLER, THERMAL OVERLOAD PROTECTION, HANGING VIBRATIONG ISOLATORS.
3. PROVIDE WITH PANASONIC FV-WCPT1-W SMARTH SWITCH FOR VENTILATION AND FAN/LIGHT CONTROL.

# HYDRONIC RADIATOR HEATER SCHEDULE

| MARK | TYPE | HEATING CAPACITY (BTU/HR) | TOTAL LENGTH(FT) | HEATING WATER SUPPLY | | | SIZE (IN) | MANUFACTURERE AND MODEL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EWT | LWT | MIN. FLOW (GPM) | | | |
| BB-1 | BASEBOARD | 600/FT | ON PLANS | 180 | -- | 2.0 | 6"x2"x LENGTH | RUNTAL UF-2 | 1, 2, 3 |
| TRH-1 | TOWEL RACK RADIATOR | 2,228 | -- | 180 | -- | 2.0 | 33x19.5x4.5 | RUNTAL NTR-3320 | 1, 3, 4 |

REMARKS:
1. SUBMIT ALTERNATE FOR APPROVAL
2. PROVIDE TRIM PANELS TO CONCEAL ALL PIPING AND VALVES
3. FINISH/COLOR TO BE DETERMINED BY ARCHITECH/OWNER....

# OUTDOOR UNIT HEAT PUMP SCHEDULE

| MARK | SERVICE | TYPE | NOMINAL SIZE | REFRIGERANT TYPE | SEER | COP@17F | ELECTRICAL DATA | | | MANUFACTURER AND MODEL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | V/Ø | MCA | MOCP | | |
| HP-1 | IU-1,2,3 | AIR-TO-AIR | 2 TONS | R410 | 20.0 | 2.24 | 230/1 | 14.0 | 25 | MITSUBISHI / MXZ-3C24NA3-U1 | 1, 2, 3 |

REMARKS:
1. SUBMIT ALTERNATE FOR APPROVAL
2. PROVIDE WITH 12" SUPPORT STAND FOR SNOW CLEARENCE
3. PROVIDE WITH MITSUBISHI TEMPERATURE TSTAT/CONTROLLER FOR EACH INDOOR UNIT

# INDOOR UNIT SCHEDULE

| INDOOR UNIT | | | | | | | | | | | | OUTDOOR UNIT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MARK | MANUFACTURER AND MODEL | SERVICE AREA | COOLING CAPACITY (BTU) | HEATING CAPACITY@17F (BTU) | AIRFLOW | ESP (" WC) | VOLT/PH | MCA | SOUND PRESSURE (dB) | DIMENSIONS (IN) | WEIGHT (LBS) | MARK | |
| IU-1 | MITSUBISHI MLZ-KP09NA | SOLARIUM+LIVING +KITCHEN | 9000 | 12000 | 311 | -- | 208/230/1 | 12.0 | 38 | 43Wx14Dx7.2H | 42 | HP-1 | 1,2,3,4,5,6 |
| IU-2 | MITSUBISHI MLZ-KP06NA | BEDROOM#1 | 6000 | 9000 | 260 | -- | 208/230/1 | 12.0 | 32 | 43Wx14Dx7.2H | 42 | HP-1 | 1,2,3,4,5,6 |
| IU-3 | MITSUBISHI MLZ-KP06NA | BEDROOM#2 | 6000 | 9000 | 260 | -- | 208/230/1 | 12.0 | 32 | 43Wx14Dx7.2H | 42 | HP-1 | 1,2,3,4,5,6 |

REMARKS:
1. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. PROPERLY SUPPORT AND PROTECT ALL EXTERIOR PIPING INTO BUILDING. PROTECT PENETRATIONS PER IBC FIRE RATINGS AS REQUIRED.
3. COOLING DESIGN CAPACITIES BASED ON IAT: 80F DB / 67F WB AND OAT: 85F DB.
4. HEATING DESIGN CAPACITIES BASED ON IAT: 70F DB AND OAT: 17F DB / 43F WB.
5. OUTDOOR UNITS ARE CONNECTED TO INDOOR UNITS DIRECTLY
6. PROVIDE CONDENSATE PUMP.

# MANUAL J HEATING AND COOLING LOAD CALCULATIONS SUMMARY

| | | | | |
|---|---|---|---|---|
| **PROJECT TITLE:** | CHAMONIX BUILDING C UNIT 17 | | | |
| **PROJECT LOCATION:** | SNOWMASS VILLAGE, COLORADO | | | |
| **DESIGNER:** | BMS Engineering LLC | | **DATE:** | 06-29-2025 |
| **DESIGN CONDITIONS:** | SUMMER | 85.0 °F DB | WINTER | -14.0 °F DB |
| **INDOOR CONDITIONS:** | SUMMER | 75.0 F DB | WINTER | 70.0 F DB |

| | | | HEATING | | COOLING | |
|---|---|---|---|---|---|---|
| **AREA** | **FLOOR SQ....** | **ZONE #** | **(BTU/Hr)** | **BTU/Hr/SQ. FT** | **SENSIBLE (BTU/Hr)** | **TOTAL (BTU/Hr)** |
| KITCHEN/LIVING+ENTRY | 432 | 1 | 4623 | 10.7 | 750 | 760 |
| MASTER BEDRM#1 | 203 | 2 | 9563 | 47.1 | 2250 | 2260 |
| BEDRM#2 | 280 | 3 | 4280 | 15.2 | 2800 | 2800 |
| MASTER BATHRM#1 | 47 | 2 | 3000 | 63.8 | 1554 | 1555 |
| BATHRM#2 | 64 | 3 | 250 | 3.9 | 0 | 0 |
| SOLARIUM | 136 | 4 | 12480 | 91.7 | 5000 | 5000 |
| OWNERS CLOSET | 52 | 3 | 3600 | 69.2 | 650 | 650 |
| TOTAL= | | | 37,796 | | 13,025 | |
| | | | | | | |

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COLORADO LICENSED
BRENDAN M. SCHMITT
40538
PROFESSIONAL ENGINEER
07/17/25

CHAMONIX UNIT C17 RENOVATION
476 WOOD ROAD SNOWMASS VILLAGE, CO

| | |
|---|---|
| PROJECT NUMBER: | 2024-05 |
| DRAWN BY: | Author |
| CHECKED BY: | Checker |
| ISSUE: | PERMIT SET |
| DATE: | 07/17/2025 |
| REVISION: | DATE |

TITLE
MECHANICAL SCHEDULES

SHEET #
M-601

# ELECTRICAL LEGEND

(Not all symbols listed below are used on these drawings)

## LIGHTING

| SYMBOL | DESCRIPTION |
|---|---|
| A / A | RECESSED FLUORESCENT LUMINAIRE, LAY-IN GRID CEILING, LOWERCASE SCRIPT INDICATES SWITCHING; UPPERCASE INDICATES LUMINAIRE TYPE. |
| | RECESSED FLUORESCENT LUMINAIRE, FLANGED |
| | SURFACE MOUNTED LUMINAIRE |
| | SURFACE OR PENDANT MOUNTED STRIP |
| | SURFACE MOUNTED WALL LUMINAIRE |
| | PENDANT MOUNTED LINEAR LUMINAIRE |
| | RECESSED DIRECT/INDIRECT LUMINAIRE |
| | UNDERCABINET LIGHTING |
| | SURFACE MOUNTED CEILING LUMINAIRE |
| | PENDANT MOUNTED LUMINAIRE |
| | SURFACE MOUNTED WALL LUMINAIRE |
| | RECESS MOUNTED WALL LUMINAIRE |
| | RECESS MOUNTED CEILING LUMINAIRE |
| | RECESS MOUNTED CEILING LUMINAIRE-DIRECTIONAL |
| OR | |
| | POLE MOUNTED LUMINAIRE |
| | SPOT / FLOOD LIGHT |
| | BOLLARD |
| | TRACK LIGHTING |
| | EMERGENCY LIGHTING UNIT |
| | EXIT LIGHT, ARROWS AS INDICATED, FACES INDICATED BY SHADING |
| Sa | SINGLE POLE SWITCH (SUBSCRIPT DENOTES SWITCHING) |
| S2 | SWITCH: 2 = 2-POLE; 3 = 3-WAY; 4 = 4-WAY |
| SK | K = KEY OPERATED SWITCH; M = HORSEPOWER RATED |
| SD | DIMMER SWITCH |
| SLV | LV = LOW VOLTAGE SWITCH; MC = MOMENTARY CONTACT |
| $S_{TO}$ | THERMAL OVERLOAD SWITCH |
| PC | PHOTOCELL |
| TC | TIME CLOCK |
| OC | OCCUPANCY SENSOR WALL MOUNTED DUAL TECHNOLOGY; VS = VACANCY SENSOR |
| OC | OCCUPANCY SENSOR CEILING MOUNT DUAL TECHNOLOGY; VS = VACANCY SENSOR |
| S | SHADING INDICATES CONNECTION TO EMERGENCY SYSTEM; LS INDICATE LIFE SAFETY CIRCUIT. |

## POWER

| SYMBOL | DESCRIPTION |
|---|---|
| | SINGLE RECEPTACLE |
| | DUPLEX RECEPTACLE |
| | DUPLEX RECEPTACLE ABOVE COUNTER |
| | DOUBLE DUPLEX RECEPTACLE |
| | DOUBLE DUPLEX RECEPTACLE ABOVE COUNTER |
| | DUPLEX RECEPTACLE, HALF SWITCHED |
| CLG | DUPLEX RECEPTACLE, CEILING MOUNTED |
| | DUPLEX RECEPTACLE, FLOOR MOUNTED |
| | DOUBLE DUPLEX RECEPTACLE, FLOOR MOUNTED |
| | SPECIAL RECEPTACLE |
| | SPECIAL RECEPTACLE, FLOOR MOUNTED |
| | JUNCTION BOX, WALL OR CEILING MOUNTED |
| | ELECTRICAL PANELBOARD OR OTHER CABINET AS NOTED |
| | DISCONNECT SWTICH (NON-FUSED) |
| | DISCONNECT SWITCH (FUSED) |
| | COMBINATION STARTER/DISCONNET |
| | MOTOR STARTER |
| PM | PLUG MOLD (MULTI-OUTLET ASSEMBLY) |
| WM | WIREMOLD (SURFACE RACEWAY) |
| | CONNECTION TO PRE-WIRED EQUIPMENT |
| | CONDUIT CONCEALED |
| | CONDUIT EXPOSED |
| | CONDUIT, UNDERGROUND OR CONCEALED IN FLOOR |
| | CONDUIT TURNING DOWN |
| | CONDUIT TURNING UP |
| | CONDUIT CAPPED |
| | GROUND BAR |
| | MAIN SWITCHBOARD/DISTRIBUTION CENTER |
| T | TRANSFORMER |
| CT | CURRENT TRANSFORMER |
| GANN | GENERATOR ANNUNCIATOR PANEL |
| M | MOTOR |
| A-1 | SHADING INDICATES EMERGENCY SYSTEM TEXT INDICATES PANEL AND CIRCUIT DESIGNATION |

## ONE LINE DIAGRAM

| SYMBOL | DESCRIPTION |
|---|---|
| | DISCONNECT SWITCH |
| | DISCONNECT SWITCH, FUSED |
| LSIG | CIRCUIT BREAKER; L=LONG TIME PICKUP, S=SHORTTIME PICKUP; I - INSTANEOUS TRIP, G=GROUND FAULT |
| | FUSE |
| | GROUND |
| T## | STEP DOWN TRANSFORMER, ## INDICATES KVA |
| | CURRENT TRANSFORMER |
| | POTENTIAL TRANSFORMER |
| | SERVICE ENTRANCE TRANSFORMER |
| M | METER |
| | EQUIPMENT ENCLOSURE |
| KA | KIRK KEY INTERLOCK, SUBSCRIPT INDICATES INTERLOCKED GROUP |
| EA | ELECTRICAL INTERLOCK, SUBSCRIPT INDICATES INTERLOCKED GROUP |
| M | MECHANICAL INTERLOCK |
| A | PANELBOARD "A" |
| PM | EM=ENERGY METER, PM=POWER METER, CM=CIRCUIT MONITOR |
| V | VOLTMETER |
| A | AMMETER |
| G | ENGINE GENERATOR |
| | CONTACTOR/RELAY/CAPACITOR (AS NOTED) |
| | TRANSFER SWITCH - ATS=AUTOMATIC, MTS=MANUAL |
| GFI | GROUND FAULT INTERUPTER |
| TVSS | TRANSIENT VOLTAGE SURGE SUPPRESSER |
| ST | SHUNT TRIP |
| | DRAW-OUT DEVICE |
| | PLUG-IN DEVICE |
| EO | ELECTRICALLY OPERATED |
| | SERVICE WEATHERHEAD |

## ABBREVIATIONS

| | |
|---|---|
| A | AMPERES |
| AFF | ABOVE FINISHED FLOOR |
| AFG | ABOVE FINISHED GRADE |
| ATS | AUTOMATIC TRANSFER SWITCH |
| BFG | BELOW FINISHED GRADE |
| C | CONDUIT |
| CATV | CABLE TELEVISION |
| CB | CIRCUIT BREAKER |
| CCTV | CLOSED CIRCUIT TELEVISION |
| EM | EMERGENCY |
| EP | EXPLOSION PROOF |
| EPO | EMERGENCY POWER OFF |
| EWC | ELECTRIC WATER COOLER |
| FA | FIRE ALARM |
| G | GROUND |
| GFI | GROUND FAULT INTERRUPTING |
| HOA | HAND OFF AUTOMATIC |
| IG | ISOLATED GROUND |
| MCB | MAIN CIRCUIT BREAKER |
| MCC | MOTOR CONTROL CENTER |
| MDC | MAIN DISTRIBUTION CENTER |
| MH | MOUNTING HEIGHT |
| MLO | MAIN LUGS ONLY |
| MTS | MANUAL TRANSFER SWITCH |
| NC | NORMALLY CLOSED |
| NIC | NOT IN CONTRACT |
| NL | NIGHT LIGHT |
| NO | NORMALLY OPEN |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OFCI | OWNER FURNISHED, CONTRACTOR INSTALLED |
| OFOI | OWNER FURNISHED, OWNER INSTALLED |
| PB | PULL BOX |
| TP | TAMPER PROOF |
| TVSS | TRANSIENT VOLTAGE SURGE SUPPRESSER |
| TYP | TYPICAL |
| UF | UNDER FLOOR |
| UG | UNDER GROUND |
| UON | UNLESS OTHERWISE NOTED |
| UPS | UNINTERRUPTABLE POWER SUPPLY |
| V | VOLTS |
| VFD | VARIABLE FREQUENCY DRIVE |
| WP | WEATHER PROOF |
| XFMR | TRANSFORMER |

# ELECRICAL SPECIFICATIONS:

BASIC ELECTRICAL REQUIREMENTS:
1. PERFORM ALL WORK IN ACCORDANCE WITH THE CURRENT EDITIONS OF NATIONAL & LOCAL CODES TO INCLUDE LOCAL AMENDMENTS TO CODES, ORDINANCES AND REGULATIONS AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
1. PAY FOR ALL FEES AND PERMITS AS REQUIRED FOR THE COMPLETE INSTALLATION OF ALL ELECTRICAL SYSTEMS INCLUDED IN THE SCOPE OF WORK.
2. SCOPE OF WORK SHALL INCLUDE ALL COMPONENTS NECESSARY FOR THE COMPLETE AND FUNCTIONAL INSTALLATION OF ALL ELECTRICAL SYSTEMS DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS. MAKE FINAL CONNECTIONS TO ALL APPLIANCES AND EQUIPMENT REQUIRING ELECTRIC SERVICE THAT ARE FURNISHED AND INSTALLED BY OTHERS. PROVIDE ELECTRICAL ACCESSORY COMPONENTS AS REQUIRED FOR A CODE COMPLIANT INSTALLATION.
3. DO NOT SCALE ELECTRICAL DRAWINGS. COORDINATE THE INSTALLATION OF EACH ELECTRICAL SYSTEM WITH ALL OTHER DISCIPLINES. WHERE A CONFLICT EXISTS, PREPARE COORDINATION DRAWINGS AND SUBMIT TO THE ARCHITECT FOR DIRECTION PRIOR TO ROUGH-IN. RELOCATION OF ELECTRICAL DEVICES MADE PRIOR TO ROUGH-IN SHALL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE OWNER.
4. ALL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A STATE OF COLORADO LICENSED ELECTRICIAN. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND BEAR THE LISTING OF THE APPROVED NRTL AS EVIDENCE THAT THE MATERIALS AND EQUIPMENT ARE APPROVED FOR INSTALLATION.
5. CONFIRM ELECTRICAL RATINGS OF ALL APPLIANCES AND EQUIPMENT ACTUALLY ORDERED PRIOR TO ROUGH-IN. COMPLY WITH MANUFACTURER'S WIRING REQUIREMENTS FOR THE INSTALLATION OF ALL APPLIANCES AND EQUIPMENT.
6. ALL FASTENED IN PLACE OR PERMANENTLY CONNECTED APPLIANCES AND EQUIPMENT REQUIRING ELECTRIC SERVICE SHALL BE PROVIDED WITH A LOCAL DISCONNECTING MEANS IN THE FORM OF A CORD AND PLUG SET, UNIT SWITCH OR SEPARATE DISCONNECTING SWITCH.
7. ALL WIRING IN FINISHED AREAS AND ALL WIRING SUPPLYING EXTERIOR CIRCUITS SHALL BE CONCEALED.
8. DIMENSIONS AND QUANTITIES LISTED ON THE ELECTRICAL DRAWINGS HAVE BEEN ESTIMATED FOR ENGINEERING CALCULATIONS ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTIMATING DISTANCES AND QUANTITIES RELATED TO THE INSTALLATION OF ALL ELECTRICAL SYSTEMS.

ELECTRICAL SERVICE
1. THE UTILITY SERVICE IS EXISTING TO REMAIN.
2. THE PROJECT SITE SHALL BE SERVED BY A NEW 120/208V THREE-PHASE, 4-WIRE, GROUNDED NEUTRAL CONDUCTOR ELECTRIC SERVICE.

CONDUCTORS AND CABLES:
1. SERVICE LATERAL AND FEEDER CONDUCTORS SHALL BE ALUMINUM OR COPPER-CLAD ALUMINUM RATED FOR 600V.
2. TYPE XHHW-2 SINGLE CONDUCTORS PROTECTED IN SCHEDULE 40 RIGID PVC CONDUIT SHALL SERVE AS THE BASIS OF DESIGN FOR ALL SERVICE LATERALS AND UNDERGROUND FEEDERS.
3. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER. INSTALL SOLID CONDUCTORS FOR No. 10 AWG AND SMALLER. INSTALL STRANDED CONDUCTORS FOR No. 8 AWG AND LARGER UNLESS NOTED OTHERWISE.
4. TYPE NM-B CABLE SHALL BE PERMITTED FOR USE ON ALL INTERIOR BRANCH CIRCUITS RATED 60A OR LESS.
5. TYPE XHHW SINGLE CONDUCTORS PROTECTED IN SCHEDULE 40 RIGID PVC CONDUIT SHALL BE PERMITTED FOR USE AS EXTERIOR BRANCH CIRCUIT WIRING AND INTERIOR BRANCH CIRCUIT WIRING EMBEDDED IN CEMENT, CONCRETE OR AGGREGATE.
6. DIRECT-BURIED CABLES EMERGING FROM GRADE SHALL BE PROTECTED IN SCHEDULE 40 PVC CONDUIT EXTENDING FROM THE MINIMUM COVER DISTANCE BELOW GRADE TO THE POINT OF TERMINATION.
7. MULTI-WIRE BRANCH CIRCUITS SHALL NOT BE PERMITTED. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR ALL 120V LINE-TO-NEUTRAL BRANCH CIRCUITS.

GROUNDING:
1. GROUNDING ELECTRODE SYSTEM SHALL COMPLY WITH NFPA 70 ARTICLE 250 SECTION III.
2. ALL GROUNDING ELECTRODE CODUCTORS SHALL BE COPPER RATED FOR 600V. BOTH BARE AND GREEN INSULATED CONDUCTORS ARE ACCEPTABLE. PROTECT IN SCHEDULE 40 PVC CONDUIT WHERE EXPOSED TO PHYSICAL DAMAGE.
3. CONTINUOUS EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSTALLED AS PART OF ALL FEEDERS AND BRANCH CIRCUITS.
4. BOND ALL FASTENED IN PLACE AND PERMANENTLY INSTALLED APPLIANCES AND EQUIPMENT REQUIRING ELECTRIC SERVICE IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S GROUNDING REQUIREMENTS.
5. BOND ALL METAL PIPING INSTALLED IN, OR ATTACHED TO, A BUILDING OR STRUCTURE IN ACCORDANCE WITH NFPA 70 - 250.104(B).

WIRING DEVICES:
1. ALL RECEPTACLES, GFCI RECEPTACLES, SPECIAL PURPOSE RECEPTACLES AND LINE VOLTAGE SWITCHES SHALL BE FROM A SINGLE MANUFACTURER.
2. ALL DUPLEX AND SIMPLEX RECEPTACLES, INCLUDING GFCI TYPES, SHALL BE NEMA 5-20R.
3. PROVIDE TAMPER-RESISTANT RECEPTACLES PER NEC 406.12.
4. GFCI RECEPTACLES SHALL BE WIRED IN A NON-FEED-THRU TYPE FASHION UNO.
5. INSTALL RECEPTACLES FLUSH IN WALLS WITH THE LONG AXIS ORIENTED VERTICAL. UNLESS NOTED OTHERWISE, INSTALL ALL RECEPTACLES AT 18" AFF TO CENTERLINE OF DEVICE. INSTALL RECEPTACLES LOCATED ABOVE COUNTERS WITH CENTERLINE 4" ABOVE TOP OF COUNTER. IF THE COUNTER HAS A BACKSPLASH, INSTALL THE RECEPTACLE WITH CENTRLINE 4" ABOVE TOP OF BACKSPLASH.
6. INSTALL SIMPLEX TYPE RECEPTACLES FOR SERVICE TO DISH WASHERS, GARBAGE DISPOSALS, GAS RANGE, KITCHEN HOOD AND CLOTHES WASHING MACHINE.
7. INSTALL SWITCHES AND KEY PAD WALL STATIONS FLUSH IN WALLS WITH THE LONG AXIS ORIENTED VERTICAL. INSTALL ALL SWITCHES AND KEY PAD WALL STATIONS AT 46" AFF TO CENTERLINE OF DEVICE UNLESS NOTED OTHERWISE.
8. GANG TOGETHER ADJACENT LINE VOLTAGE SWITCHES. COORDINATE WITH FRAMING MEMBERS OF WALLS TO ENSURE ADEQUATE SPACE IS AVAILABLE PRIOR TO ROUGH-IN.
9. PROVIDE COVER PLATES FOR ALL WIRING DEVICES.
10. DEVICES AND COVER PLATES ARE TO BE WHITE.

LOAD CENTERS:
1. LOAD CENTERS SHALL BE 120/240V, SINGLE-PHASE, 3-WIRE.
2. LOAD CENTER ENCLOSURES SHALL BE EQUIPPED WITH HINGED FRONT COVERS.
3. LOAD CENTERS, CIRCUIT BREAKERS AND ALL ACCESSORY LOAD CENTER COMPONENTS SHALL BE BY A SINGLE MANUFACTURER.

SAFETY SWITCHES:
1. PROVIDE FUSED, METALLIC GALVANIZED STEEL AIR CONDITIONER DISCONNECT SWITCH AT EACH OUTDOOR VRF UNIT. DISCONNECT SHALL BE EQUAL TO CUTLER-HAMMER CATALOG #DF222 "AMPERAGE"-R. RE: MECHANICAL EQUIPMENT SCHEDULE FOR FUSE RATINGS.
2. PROVIDE CLASS RK5 TIME-DELAY FUSES FOR ALL OUTDOOR VRF UNIT DISCONNECTS. PROVIDE OWNER WITH TWO (2) SPARE FUSES PER AMPERAGE INCLUDED IN THE SCOPE OF THIS PROJECT.

LIGHTING:
1. LUMINAIRE ELECTRICAL COMPONENTS, DEVICES AND ACCESSORIES SHALL BE LISTED AND LABELED AS DEFINED IN NFPA 70 BY AN NRTL AND MARKED FOR THEIR INTENDED LOCATION AND APPLICATION.
2. PROVIDE ALL ACCESSORIES AND INCIDENTAL COMPONENTS AS REQUIRED FOR A COMPLETE AND OPERABLE LIGHTING SYSTEM.
3. INSTALLATION LOCATION OF ALL LUMINAIRES SHALL BE AS INDICATED ON ARCHITECTURAL REFLECTED CEILING PLANS, ELEVATIONS AND DETAILS. INSTALL LUMINAIRES LEVEL, PLUMB AND SQUARE WITH CEILINGS AND WALLS UNLESS NOTED OTHERWISE. INSTALL LAMPS AND LIGHT SOURCES IN EACH LUMINAIRE.
4. ADJUST AIMABLE LUMINAIRES IN THE PRESENCE OF THE ARCHITECT OR OWNER.
5. WHEN CONSTRUCTION IS SUFFICIENTLY COMPLETE AND PRIOR TO OCCUPANCY BY THE OWNER, THOROUGHLY CLEAN ALL COMPONENTS OF ALL LUMINAIRES.
6. RECESSED LUMINAIRES INSTALLED IN CEILINGS WITH INSULATION SHALL BE IDENTIFIED AS TYPE IC FOR INSULATION CONTACT AND SHALL HAVE INTEGRAL THERMAL OVERLOAD PROTECTION.

LIGHTING CONTROLS:
1. PROVIDE MANUFACTURER'S FULL WARRANTY COVERING 100% OF PARTS AND LABOR FROM THE DATE OF SYSTEM STARTUP COMPLETION.
2. CONSULT WITH LOCAL AUTHORITIES TO CONFIRM PERMISSIBLE WIRING METHODS FOR THE INSTALLATION OF CLASS 2 CIRCUIT CONDUCTORS.
3. CONSULT WITH OWNER FOR REQUIRED PERFORMANCE CRITERIA AND DESIRED LEVEL OF TECHNICAL SUPPORT.

CABLE TV, TELEPHONE
1. CONTRACTOR SHALL FURNISH AND INSTALL ALL CUSTOMER RESPONSIBILITIES AS REQUIRED BY THE UTILITY.
2. COORDINATE LOCATION OF SERVICE PROVIDER'S SERVICE ENTRANCE CABLING, RACEWAY AND NETWORK INTERFACE DEVICE REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
3. CABLE ROUTING STRATEGY SHALL BE HOME RUN TYPE WITH EACH INDIVIDUAL JACK WIRED DIRECTLY TO THE SIGNAL DISTRIBUTION DEVICE.
4. ALL CABLING SHALL BE INSTALLED PRIOR TO WALLS BEING COVERED BY INSULATION AND DRYWALL. PROVIDE MINIMUM 18" OF EXTRA CABLE AT EACH TERMINATION POINT.
5. PHONE/INTERNET CABLING TYPE SHALL BE CAT 5E OR PER SERVICE PROVIDER'S RECOMMENDATION FOR OPTIMAL PERFORMANCE. TV CABLING SHALL BE RG6 COAX.
6. PROVIDE COVER PLATES FOR ALL DATA OUTLETS.
7. OUTLETS AND COVER PLATES ARE TO BE WHITE.

SMOKE AND CARBON MONOXIDE:
1. SMOKE ALARMS SHALL BE INSTALLED IN EACH BEDROOM, OUTSIDE OF EACH BEDROOM AND ON EACH LEVEL IN ACCORDANCE WITH IFC 907.
2. CARBON MONOXIDE DETECTION SHALL BE INSTALLED IN ACCORDANCE WITH IFC 915.
3. SMOKE AND CARBON MONOXIDE ALARMS SHALL BE WIRED 120V WITH 10-YEAR BACKUP BATTERIES.
4. FINISH SHALL BE WHITE.
5. INSTALLATION SHALL ACCOMPLISHED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
6. ALL ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH MANNER THAT ACTUATION OF ONE ALARM WILL ACTIVE ALL ALARMS WITHIN THE UNIT.

# GENERAL NOTES:

1. WORK INCLUDED IN THE CONTRACT IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
2. ALL ELECTRICAL WORK PERFORMED UNDER THIS CONTRACT SHALL CONFORM WITH THE 2020 NATIONAL ELECTRICAL CODE, 2018 INTERNATIONAL BUILDING CODES, AND LOCAL BUILDING AND FIRE DEPARTMENT REQUIREMENTS.
3. ELECTRICAL CONTRACTOR SHALL FULLY COORDINATE WITH OWNER REPRESENTATIVES. PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS OF OWNER REPRESENTATIVES. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY CHANGES REQUIRED BY THE BUILDING MANAGEMENT AND TENANT REPRESENTATIVES.
4. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL WORK. LOCATIONS ARE APPROXIMATE AND SHALL BE SUBJECT TO MINOR MODIFICATIONS AS DIRECTED BY THE GENERAL CONTRACTOR AND OWNER REPRESENTATIVES. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXACT FITTING OF ALL MATERIALS, EQUIPMENT, ETC., IN THE BUILDING AND TENANT SPACE. ALL DIMENSIONS SHALL BE VERIFIED ON THE JOB. ELECTRICAL CONTRACTOR SHALL CUT, CHANNEL, CHASE, AND/OR DRILL FLOORS, WALLS, PARTITIONS, CEILINGS, OR OTHER SURFACES AS REQUIRED FOR INSTALLATION, UPPORT, ANCHORAGE, ETC., OF WORK. PROVIDE X-RAY OF FLOOR PRIOR TO CORE DRILLS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUBSEQUENT PATCHING WORK.
5. A DETAILED WRITTEN METHOD OF PROCEDURE IS REQUIRED WHEN A CONSTRUCTION ACTIVITY OR AN OUTAGE AFFECTS THE SAFETY OF OCCUPANTS, TELEPHONE/DATA/FIRE ALARM EQUIPMENT OR COMPONENTS OF ANY SYSTEM WHICH SUPPORTS THIS EQUIPMENT OR ESSENTIALLY AFFECTS THE BUILDING MANAGEMENT, OPERATIONS OR SECURITY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
6. PRIOR TO SUBMITTING BIDS, THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING ELECTRICAL EQUIPMENT CONDITIONS AND DIFFICULTIES THAT WILL AFFECT EXECUTION OF THE WORK. FIELD VERIFY QUANTITIES OF EXISTING LIGHT FIXTURES, ELECTRICAL DEVICES, COMMUNICATION DEVICES, FIRE ALARM DEVICES, AND ELECTRICAL EQUIPMENT. NOTIFY THE ARCHITECT AND ENGINEER OF ANY EXISTING CONDITIONS, WHICH MODIFY THE SCOPE OF WORK AS SHOWN ON THE CONSTRUCTION DOCUMENTS. SUBMISSION OF A BID PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR MOBILIZATION, LABOR, EQUIPMENT, AND/OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED.
7. PROTECT STRUCTURE AND OWNER EQUIPMENT FROM DAMAGE. IMMEDIATELY REPLACE OR REPAIR, TO ORIGINAL CONDITION, DAMAGE CAUSED BY THE CONTRACTOR WHETHER EQUIPMENT APPEARS TO BE CURRENTLY IN USE OR NOT, UNLESS WRITTEN AUTHORIZATION FROM THE OWNER INDICATES OTHERWISE. PREPARE LISTING OF ALL EXISTING DAMAGED ITEMS AND SUBMIT TO OWNER PRIOR TO BEGINNING WORK.
8. EXISTING INFORMATION SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM OWNER FURNISHED DRAWINGS AND/OR LIMITED FIELD OBSERVATIONS. CMO CONSULTING ENGINEERS, LLC IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR THE ADEQUACY, SAFETY AND CONFORMANCE TO CURRENT PREVAILING CODES OF ANY WORK SHOWN AS EXISTING ON THESE DRAWINGS.
9. FIELD LOCATE EXISTING UNDERGROUND PUBLIC AND OWNER UTILITIES OF ALL TRADES AND BUILDING GROUNDING/LIGHTNING PROTECTION SYSTEMS PRIOR TO ANY EXCAVATION. REPLACE OR REPAIR DAMAGED UTILITIES AND GROUNDING/LIGHTNING PROTECTION SYSTEMS TO ORIGINAL CONDITION.
10. INSTALL CONDUIT CONCEALED IN FINISHED AREAS UNLESS OTHERWISE NOTED.
11. DO NOT ROUTE CONDUIT WITHIN STRUCTURAL OR TOPPING SLABS OF FLOORS UNLESS SPECIFICALLY NOTED OTHERWISE AND WRITTEN APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
12. FIRE SEAL ALL FIRE RATED WALL AND FLOOR PENETRATIONS. VERIFY RATED WALL LOCATIONS ON ARCHITECTURAL DRAWINGS.
13. PROVIDE SEPARATE INSULATED GROUNDING CONDUCTOR IN ALL FEEDER, HOMERUN AND BRANCH CIRCUITS.
14. REFER TO ARCHITECTURAL AND MECHANICAL EQUIPMENT DRAWINGS FOR EXACT LOCATIONS OF ELECTRICAL DEVICES AND LIGHT FIXTURES. DO NOT SCALE FROM THE ELECTRICAL PLANS. ADDITIONAL ELECTRICAL REQUIREMENTS ON ARCHITECTURAL PLANS, KITCHEN EQUIPMENT PLANS, AND MECHANICAL PLANS SHALL BE INCLUDED IN THE ELECTRICAL CONTRACTORS BID.
15. DEMOLITION OF ANY ELECTRICAL AND COMMUNICATIONS CONDUIT, WIRING, CABLING, OR DEVICE MEANS TO REMOVE IN ITS ENTIRETY. REMOVE UNUSED CONDUITS FROM CEILING SPACES IN AREAS OF WORK. RETURN UNUSED ELECTRICAL EQUIPMENT AND LIGHT FIXTURES TO BUILDING MANAGEMENT FOR STORAGE AND/OR REMOVAL FROM SITE AS DIRECTED BY OWNERS.
16. WHERE REMODELING INTERFERES WITH EXISTING CIRCUITS AND EQUIPMENT WHICH ARE NOT TO BE REMOVED OR ARE OUTSIDE OF THE PROJECT AREA, SUCH CIRCUITS AND EQUIPMENT SHALL BE REWORKED AND RELOCATED AS REQUIRED TO COMPLETE THE PROJECT.
17. MINIMUM WORKING CLEARANCES PER THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE SHALL BE PROVIDED AROUND AND IN FRONT OF ALL ELECTRICAL EQUIPMENT.
18. ELECTRICAL CONTRACTOR SHALL MAINTAIN ON THE JOB AN UP TO DATE SET OF WORKING DRAWINGS, MARKED UP TO SHOW ELECTRICAL SYSTEMS AS INSTALLED. PROVIDE TENANT REPRESENTATIVES WITH ONE SET OF REPRODUCIBLES WITH "AS BUILT" PROJECT RECORD INFORMATION CLEARLY INDICATED. ELECTRICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LOCAL FEES, PERMITS, AND SERVICES OF INSPECTION AUTHORITIES REQUIRED BY ELECTRICAL WORK FOR THIS ELECTRICAL CONSTRUCTION.
19. PROVIDE TYPED, UPDATED, COMPLETE AND ACCURATE PANELBOARD CIRCUIT DIRECTORIES AT THE COMPLETION OF WORK. CLEAN EXPOSED PANELBOARD SURFACES AND CHECK TIGHTNESS OF ELECTRICAL CONNECTIONS. REPLACE DAMAGED CIRCUIT BREAKERS AS REQUIRED AND ROVIDE FILLER PLATES FOR VACANT SPACES.
20. PROVIDE UPDATED LABELING OF ALL NEW AND RELOCATED ELECTRICAL EQUIPMENT IN SCOPE OF WORK INCLUDING, BUT NOT LIMITED TO, ENGINE GENERATOR SYSTEMS, TRANSFER SWITCHES, TRANSFORMERS, SWITCHGEAR, SWITCHBOARDS, PANELBOARDS, MOTOR CONTROL CENTERS, AND DISCONNECTS TO INDICATE THE AMPERE RATING, VOLTAGE RATING, PHASE, CONDUCTOR COLOR CODING WITHIN THE EQUIPMENT AND APPLICABLE AIC RATING.
21. ALL NEW AND MODIFIED ELECTRICAL EQUIPMENT, SUCH AS SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS, THAT ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT PER NEC ARTICLE 110.16.


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07/17/25

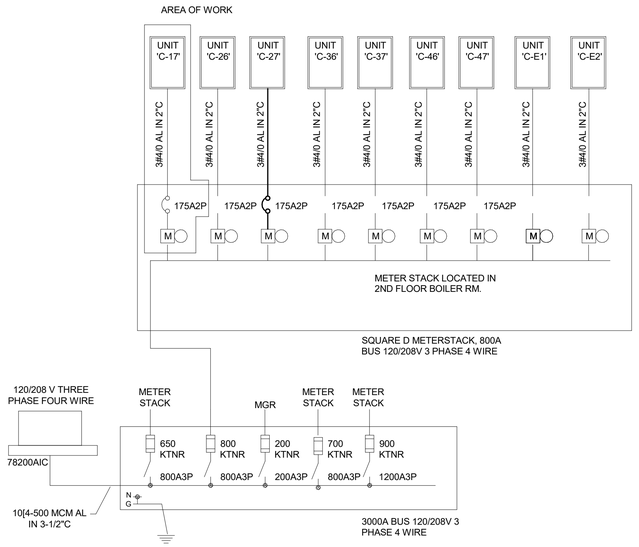
# CHAMONIX UNIT C17 RENOVATION

476 WOOD ROAD SNOWMASS VILLAGE, CO

| | |
|---|---|
| PROJECT NUMBER: | 2024-05 |
| DRAWN BY: | PK |
| CHECKED BY: | BMS |
| ISSUE: | PERMIT SET |
| DATE: | 07/17/2025 |
| REVISION: | DATE |

TITLE
ELECTRICAL SPECS

SHEET #
E-001




## ELECTRICAL ONE-LINE DIAGRAM

### CHAMONIX SNOWMASS - MINIMUM SERVICE LOAD CALCULATION

SERVICE DESCRIPTION: UNIT C-17 — APPLIANCE/ CONDITIONED
VOLTAGE RATING: 120/208V SINGLE-PHASE W/ GROUNDED NEUTRAL
FLOOR AREA: 1140 SF

GENERAL LOADS: 100% FIRST 10kVA PLUS 40% REMAINDER

| | | |
|---|---|---|
| GENERAL LIGHTING AND RECEPTACLES | | |
| LIGHTING AND RECEPTACLES: | 1140 SF x 3VA/SF | 3420 VA |
| SMALL APPLIANCE AND LAUNDRY BRANCH CIRCUITS | | |
| SMALL APPLIANCE BRANCH CIRCUITS: | 2 x 1500VA | 3000 VA |
| LAUNDRY BRANCH CIRCUIT(S): | 1 x 1500VA | 1500 VA |
| FASTENED-IN-PLACE, PERMANENTLY CONNECTED OR DEDICATED CIRCUIT APPLIANCES | | |
| REFRIGERATOR | | 1440 VA |
| EXHAUST FANS (EF-1 AND EF-2) | | 20 VA |
| ELEC RANGE/OVEN | | 5000 VA |
| WASHER/DRYER | | 6000 VA |
| MICROWAVE | | 1200 VA |
| DISHWASHER | | 1000 VA |
| ICE MACHINE | | 1000 VA |
| RANEG HOOD | | 100 VA |
| STEAM SHOWER | | 9152 VA |
| TOTAL LOAD: | | 24,912 VA |
| NEC GENERAL LOAD CALC = | | 13,826.16 VA |

HEATING AND AIR CONDINTIONING: 100% OF NAMEPLATE RATINGS FOR EACH UNIT

| | |
|---|---|
| HEATING AND AIR CONDITIONING UNITS | |
| BOILER B-1 | 500 VA |
| PUMPS | 150 VA |
| HP-1 | 6240 VA |
| IU-1,2,3 (TOTAL THREE) | 686 VA |
| OUTDOOR PATIO HEATER | 4000 VA |
| TOTAL HEATING AND AIR CONDITIOING LOAD = | 10,890 VA |

CALCULATED LOAD FOR MINIMUM SERVICE AMPACITY

| | |
|---|---|
| MINIMUM SERVICE LOAD = | 24.72 kVA |
| MINIMUM SERVICE AMAPCITY = | 118.83 A |

### RESIDENTIAL APPLIANCE SCHEDULE

9/27/2025

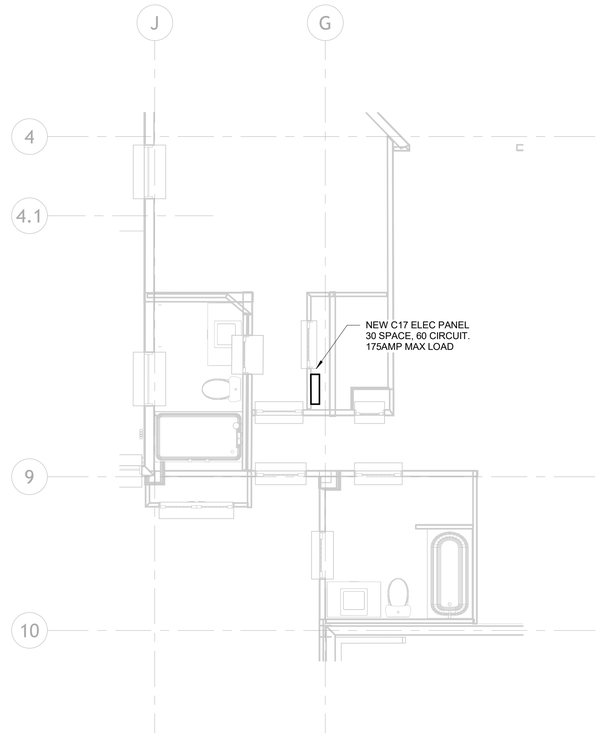
| DESCRIPTION | ELECTRICAL RATINGS VOLTAGE | PHASE | WATT | HP | AMPS | ELECTRICAL CONNECTION MCA | MOP | CORD & PLUG | HARD WIRED W/O DISC | HARD WIRED W/ DISC | | SUPPLY WIRING | | | NOTES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REF-1 | REFRIGERATOR | | | | | 120 | 1 | | - | 12 | | | 5-20P | - | - | 2#12, 1#12G | STANDARD W/ CORD & PLUG SET |
| MW-1 | STANDARD MICROWAVE OVEN | | | | | 120 | 1 | | - | 10 | | | 5-20P | - | - | 2#12, 1#12G | STANDARD W/ 3' CORD & PLUG SET |
| DS-1 | FOOD WASTE DISPOSER | | | | | 120 | 1 | | - | 8.1 | | | 5-20P | - | - | 2#12, 1#12G | STANDARD W/ CORD & PLUG SET, ON/OFF CONTROL SWITCH |
| DW-1 | DISHWASHER | | | | | 120 | 1 | | - | 10 | | | 5-20P | - | - | 2#12, 1#12G | STANDARD W/ CORD & PLUG SET |
| IM-1 | ICE MACHINE | | | | | 120 | 1 | | - | 10 | | | 5-20P | - | - | 2#12, 1#12G | STANDARD W/ CORD & PLUG SET |
| SR-1 | SMALL REFRIG | | | | | 120 | 1 | 540 | - | | | | 5-20P | - | - | 2#12, 1#12G | STANDARD W/ CORD & PLUG SET |
| DR-1 | DRYER | | | | | 208 | 1 | 5000 | - | | | | 14-30P | - | - | 3#10, 1#10G | STANDARD W/ CORD & PLUG SET |
| WA-1 | WASHER | | | | | 120 | 1 | | - | 12.5 | | | 5-20P | - | - | 2#12, 1#12G | STANDARD W/ CORD & PLUG SET |
| OV-1 | OVEN/RANGE | | | | | 208 | 1 | 5000 | - | | | | 14-30P | - | - | 3#10, 1#10G | STANDARD W/ CORD & PLUG SET |
| HD-1 | HOOD | | | | | 120 | 1 | 100 | | | | | 5-15R | | | 2#14, 1#14G | |
| SS-1 | STEAM SHOWER | | | | | 208 | 1 | 9000 | | | | 40 | - | | 60A DPST | 2#8, 1#10G | |
| HP-1 | HEAT PUMP | | | | | 208 | 1 | | | | 30 | 40 | | | 60A DPST | 2#8, 1#10G | |
| IU 1,2,3 | FAN COIL | | | | | 208 | 1 | | | 2.4 | | | | | 60A DPST | 3#8, 1#10G | WIRE WITH HEAT PUMP |
| EF-1 | EXHAUST FAN | | | | | 120 | 1 | 5 | | | | | | | | 2#14, 1#14G | |
| EF-2 | EXHAUST FAN | | | | | 120 | 1 | 5 | | | | | | | | 2#14, 1#14G | |
| B-1 | BOILER | | | | | 120 | 1 | | | 8 | | 15 | | | | 2#14, 1#14G | |
| BH-1 | BOILER CAB HEATER | | | | | 120 | 1 | | | 10 | | | 5-15R | | | 2#14, 1#14G | |
| P-1-5 | PUMPS | | | | | 120 | 1 | | | 1 | | | 5-15R | | | 2#14, 1#14G | |
| RH-1,2 | PATIO HEATERS | | | | | 208 | 1 | 5000 | - | | | | 14-30P | - | - | 3#10, 1#10G | |

GENERAL NOTES:

1. TERMINATION PROVISIONS OF EQUIPMENT FOR CIRCUITS RATED 100A OR LESS ARE ASSUMED TO BE RATED 60°C. TERMINATION PROVISIONS OF EQUIPMENT FOR CIRCUITS RATED OVER 100A SHALL BE RATED 75°C MINIMUM.
2. ALL 125-VOLT, SINGLE-PHASE, 15A & 20A RECEPTACLES INSTALLED WITHIN THE KITCHEN AREA SHALL BE GFCI PROTECTION FOR PERSONNEL TYPE.
3. ALL DISCONNECTING SWITCH ENCLOSURES INSTALLED WITHIN THE KITCHEN AREA SHALL BE RATED NEMA 4X.
4. COORDINATE DEVICE MOUNTING HEIGHTS WITH KITCHEN CONSULTANT DRAWINGS PRIOR TO ROUGH-IN.
5. ALL DISCONNECTING SWITCHES SHALL BE FUSED AT 125% OF EQUIPMENT NAMEPLATE RATING. FUSES SHALL BE TYPE FRN-R FOR 250V AND TYPE FRS-R FOR 600V.

GENERAL NOTE:

1. CONFIRM ELECTRICAL SUPPLY PROVISIONS WITH MANUFACTURER'S REQUIREMENTS FOR APPLIANCES ACTUALLY ORDERED PRIOR TO ROUGH-IN.




1 FLOOR LEVEL ELEC
1/4" = 1'-0"

## DEMOLITION NOTES:

1. UNLESS NOTED OTHERWISE, BOLD ITEMS INDICATE EQUIPMENT, DEVICES, ETC. TO BE REMOVED.
2. DEMOLITION DRAWINGS MAY NOT SHOW EVERY ITEM TO BE DEMOLISHED. CONTRACTOR SHALL VISIT SITE TO DETERMINE AND COORDINATE THE EXACT EXTENT OF DEMOLITION TO FACILITATE ALL WORK INDICATED BY THE CONTRACT DOCUMENTS PRIOR TO QUOTATION. NO EXTRAS WILL BE ALLOWED FOR WORK REQUIRED TO ACHIEVE THE END RESULT AS INDICATED BY THE CONTRACT DOCUMENTS. REWORK EXISTING TERMINATIONS, CONNECTIONS, CONDUIT, WIRING, ETC. TO ACCEPT NEW WORK. MAINTAIN CIRCUIT CONTINUITY TO EXISTING CIRCUITS AND DEVICES TO REMAIN OR BE RELOCATED. PRIOR TO COMMENCEMENT OF ANY DEMO WORK, CONFIRM EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
3. ALL ITEMS IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ALL WIRING AND EXPOSED CONDUIT AND CONDUIT SUPPORTS BACK TO POINT OF ORIGIN OR NEXT DEVICE TO REMAIN. REMOVED ITEMS SHALL BE TURNED OVER TO THE OWNER, UNLESS NOTED OTHERWISE, AND STORED IN THE AREA DESIGNATED BY THE OWNER. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL ITEMS THE OWNER CHOOSES NOT TO ACCEPT.
4. WHERE EXISTING CONDUITS ARE SHOWN TO BE REMOVED AND HAVE BEEN ROUTED IN CONCRETE FLOOR SLABS, CONCRETE WALLS OR CONCRETE CEILINGS, THEY SHALL BE CUT BACK FLUSH WITH CONCRETE. FILL WITH GROUT TO ACHIEVE A SMOOTH AND EVEN FINISH FLUSH WITH CONCRETE SURFACE AFTER CONDUCTORS HAVE BEEN REMOVED.
5. REUSE EXISTING CONDUIT WHERE CURRENT NEC AND LOCAL CODE REQUIREMENTS ARE MAINTAINED. PROVIDE NEW CONDUIT AND WIRE FOR NEW INSTALLATIONS AND EXTENSION OF EXISTING INSTALLATIONS. REUSE EXISTING CONDUIT IN PLACE, DO NOT REINSTALL EXISTING CONDUIT. PROVIDE LABELING PER SPECIFICATIONS FOR REUSED CONDUIT.
6. RELOCATED EQUIPMENT AND DEVICES ARE TO BE CLEANED OF ALL FOREIGN MATERIAL. REPLACE EQUIPMENT OR DEVICES WHICH ARE DEFECTIVE OR DAMAGED DURING RELOCATION.
7. WHERE EXISTING DEVICES, SWITCHES, MOTOR CONNECTIONS, ETC. ARE TO BE REMOVED FROM WALLS WHICH ARE REMAINING, WALLS SHALL BE PATCHED TO MATCH ORIGINAL FINISH. BLANK COVERPLATES OVER EXISTING BOXES ARE NOT ACCEPTABLE, UNLESS NOTED OTHERWISE.

## POWER PLAN NOTES:

1. MAKE ALL FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT REQUIRING ELECTRICAL CONNECTION. THIS SHALL INCLUDE BUT NOT BE LIMITED TO ALL MECHANICAL AND OTHER EQUIPMENT INCLUDED IN THIS PROJECT.
2. PROVIDE FUSES SIZED PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.
3. DISCONNECT SWITCH LOCATIONS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS TO SUIT EQUIPMENT AND SPACE. DISCONNECT SWITCHES SHALL BE WITHIN SIGHT OF THE EQUIPMENT THEY SERVE AND MOUNTED AT 6'-3", MAXIMUM, TO TOP OF CABINET. MAINTAIN NEC WORK SPACE REQUIREMENTS.
4. COORDINATE AND VERIFY EXACT MOUNTING LOCATIONS OF WALL AND FLOOR DEVICES WITH ARCHITECTURAL ELEVATIONS, AND ANY FURNITURE OR SPECIALTY EQUIPMENT SUPPLIER DRAWINGS PRIOR TO ROUGH-IN.
5. COORDINATE EXACT REQUIREMENTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
6. ALL RECEPTACLES INSTALLED IN COMMON AREAS SHALL BE TAMPER RESISTANT TYPE RECEPTACLES.
7. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120V AND 277V CIRCUIT. CIRCUITS MAY BE COMBINED INTO HOMERUNS OF UP TO SIX (6) CURRENT CARRYING CONDUCTORS, INCLUDING NEUTRALS, UNLESS OTHERWISE INDICATED. WHERE CIRCUITS ARE COMBINED WITHIN A SINGLE CONDUIT, PROVIDE STRIPING FOR FULL LENGTH OF NEUTRAL CONDUCTOR INSULATION TO MATCH THE COLOR CODE OF THE ASSOCIATED PHASE CONDUCTOR. SEE SPECIFICATION FOR COLOR CODES.
8. ALL RECEPTACLE OUTLETS LOCATED IN TOILET ROOMS, SHOWER ROOMS, ROOFTOPS, OUTDOOR LOCATIONS, MECHANICAL ROOMS, WITHIN 6 FEET OF A SINK, OR OTHER WET LOCATIONS SHALL BE PROVIDED WITH GFCI PROTECTION PER NEC ARTICLE 210. ADDITIONAL GFCI PROTECTION SHALL BE PROVIDED AS INDICATED.
9. ALL OUTDOOR AND ROOFTOP RECEPTACLES SHALL BE OUTDOOR RATED AND SHALL HAVE A WEATHERPROOF IN USE COVER.

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476 WOOD ROAD SNOWMASS VILLAGE, CO

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TITLE: ELECTRICAL ONE-LINE, SCHEDULES

SHEET # E-002