

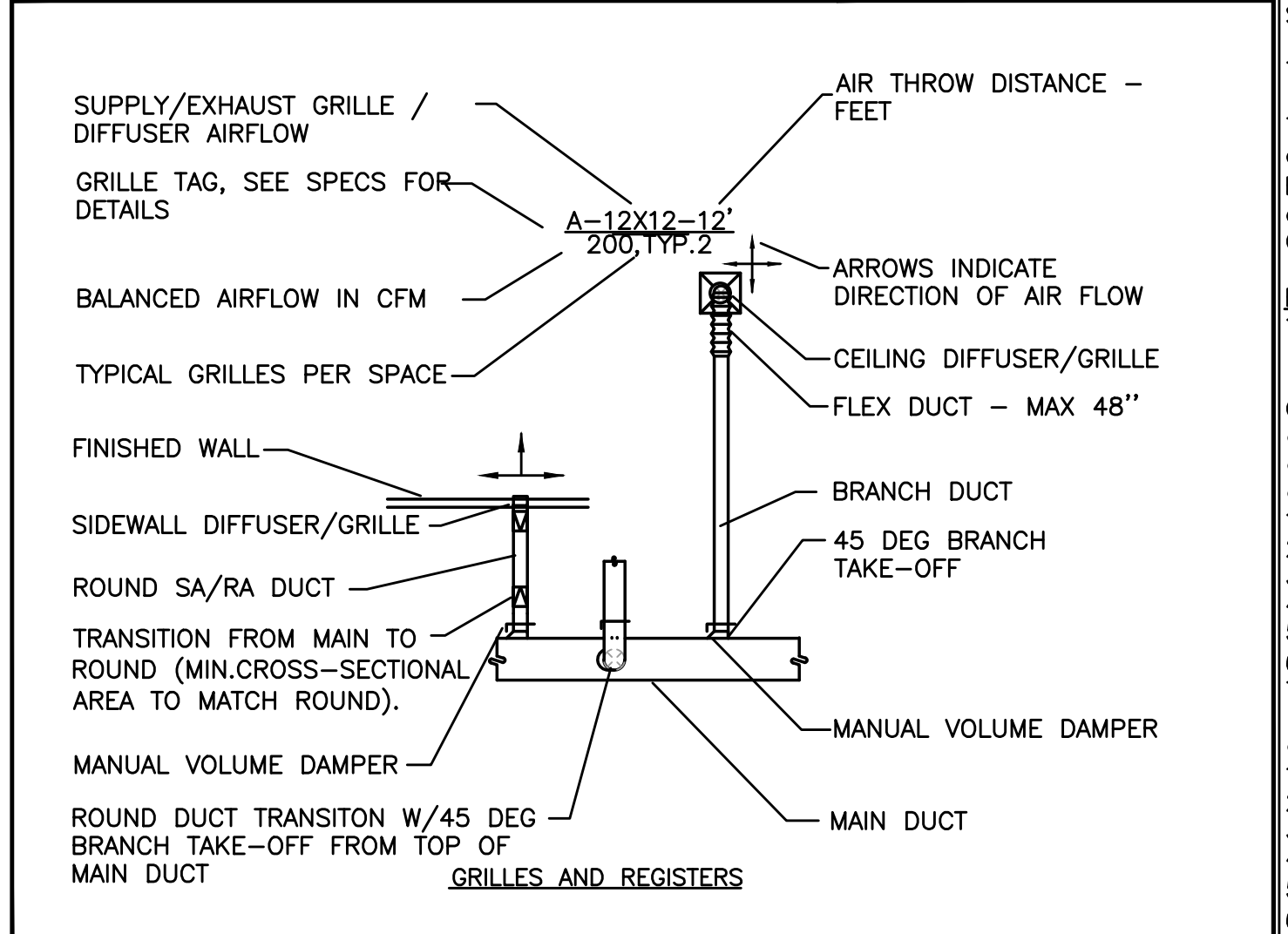
MECHANICAL LEGEND

| | | | |
|--|-------------------------------------|--------|--|
| | SUPPLY AIR DIFFUSER | AFF | ABOVE FINISH FLOOR |
| | RETURN AIR DIFFUSER | AHU | AIR HANDLING UNIT |
| | EXHAUST AIR DIFFUSER | B.D. | BOTTOM OF DUCT |
| | DIRECTIONAL AIR FLOW | BHP | BRAKE HORSEPOWER |
| | MANUAL VOLUME DAMPER | BOG | BOTTOM OF GRILLE |
| | SUPPLY/OUTSIDE AIR DUCT UP & DOWN | BTU | BRITISH THERMAL UNITS |
| | RETURN AIR DUCT UP & DOWN | CFM | CUBIC FEET PER MINUTE |
| | EXHAUST AIR DUCT UP & DOWN | CONN. | CONNECTION |
| | DEMOLISH | CONT. | CONTINUOUS |
| | CONNECT TO EXISTING | DB | DRY BULB TEMPERATURE |
| | THERMOSTAT | DIA. | DIAMETER |
| | TEMPERATURE SENSOR | DIST. | DISTRIBUTION |
| | NOTE | EAH | EXHAUST AIR HANDLING UNIT |
| | EQUIPMENT DESIGNATOR | EDB | ENTERING DRY BULB TEMPERATURE |
| | GATE VALVE/SHUT-OFF VALVE SEE SPECS | EWB | ENTERING WET BULB TEMPERATURE |
| | CHECK VALVE | EXT | EXTERIOR |
| | BALANCING VALVE | FF | FINISH FLOOR |
| | FLOW CONTROL/LIMITING VALVE | FIXT. | FIXTURE |
| | THERMOMETER | F.O.B. | FLAT ON BOTTOM |
| | PUMP | FPM | FEET PER MINUTE |
| | STRAINER W/ DRAIN VALVE | FPS | FEET PER SECOND |
| | PRESSURE GAUGE | FT. | FEET / FOOT |
| | PETE'S PLUG | GA. | GAUGE |
| | DOUBLE CHECK ASSEMBLY | GEH | GREASE EXHAUST AIR DUCT |
| | PRESSURE REDUCING VALVE | CPM | GALLONS PER MINUTE |
| | UNION | HP | HEIGHT |
| | 2-WAY CONTROL VALVE | HSP | HORSEPOWER |
| | 3-WAY CONTROL VALVE | I.D. | INSIDE DIAMETER |
| | TRIPLE DUTY VALVE | IN. | INCHES |
| | CAP | L | LENGTH |
| | MOTORIZED DAMPER | LBS. | POUNDS |
| | BALL/SHUT-OFF VALVE(SEE SPECS) | LDB | LEAVING DRY BULB TEMPERATURE |
| | FIRE DAMPER | LWB | LEAVING WET BULB TEMPERATURE |
| | FIRE / SMOKE DAMPER | MA | MAKE UP AIR |
| | SMOKE DAMPER | MAX. | MAXIMUM |
| | FAN MOTOR | MHI | THOUSANDS OF BTUs PER HOUR |
| | | MD | MOTORIZED DAMPER |
| | | MIN. | MINIMUM |
| | | MV | MANUAL VOLUME DAMPER |
| | | NC | NOISE CRITERIA |
| | | N.C. | NORMALLY CLOSED |
| | | N.I.M. | NOT IN MECHANICAL |
| | | NO. | NUMBER |
| | | N.O. | NORMALLY OPEN |
| | | O.A. | OUTSIDE AIR |
| | | PSI | POUNDS PER SQUARE INCH |
| | | P/T | PRESSURE / TEMPERATURE |
| | | R.A. | RECTANGULAR |
| | | RECT. | RECTANGULAR |
| | | REQ'D | REQUIRED |
| | | S.A. | SUPPLY AIR |
| | | S.P. | STATIC PRESSURE |
| | | SQ. | SQUARE |
| | | TEMP. | TEMPERATURE |
| | | TEMP. | TEMPERATURE |
| | | TP. | TYPICAL |
| | | VAV | VARIABLE AIR VOLUME |
| | | WB | WET BULB TEMPERATURE |
| | | WDR | WATER PRESSURE DROP |
| | | WPD | WATER PRESSURE DROP |
| | | # | DIAMETER |
| | | (E) | EXISTING |
| | | (D) | DEMOLISH |
| | | (N) | NEW WORK |
| | | (G) | NATURAL GAS |
| | | (CD) | CONDENSATE DRAIN |
| | | (RF) | TWO OR THREE REFRIGERANT LINES |
| | | HWS | (HWS) HEATING WATER SUPPLY |
| | | HWR | (HWR) HEATING WATER RETURN |
| | | CHS | (CHWS) CHILLED WATER SUPPLY |
| | | CHR | (CHWR) CHILLED WATER RETURN |
| | | | EQUIPMENT MAINTENANCE CLEARANCE AND ACCESS |

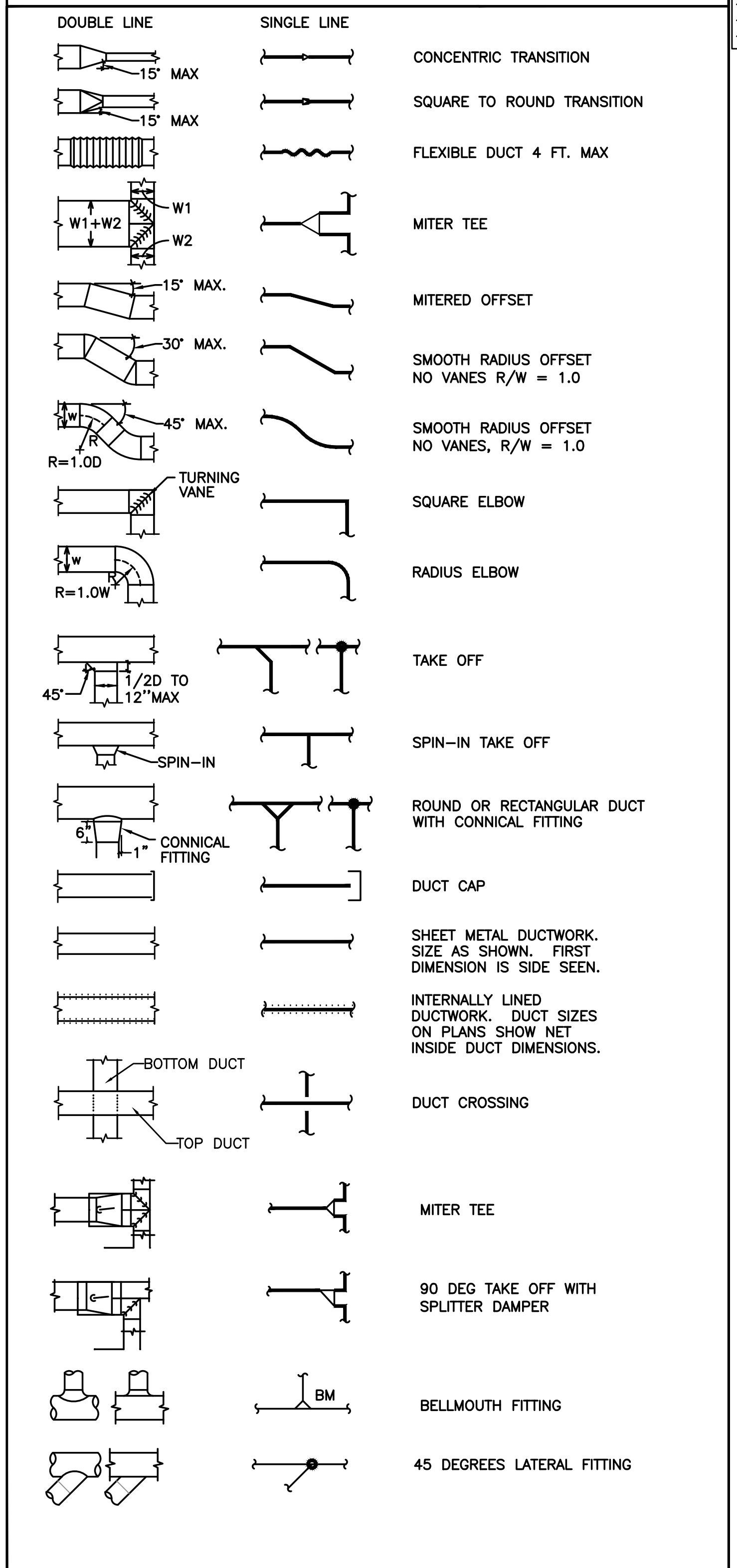
MECHANICAL GENERAL NOTES

- THE DRAWINGS ARE DIAGRAMMATIC. PROVIDE ALL MATERIAL (NEW AND UNDIMENSIONED) AND LABOR FOR A COMPLETE AND OPERABLE SYSTEM. VERIFY ALL BUILDING MEASUREMENTS AND EQUIPMENT LOCATIONS BEFORE PROCEEDING WITH ANY OF THE WORK.
- VERIFY ALL EXISTING CONDITIONS RELATIVE TO THE SCOPE OF WORK. REPORT DISCREPANCIES BACK TO THE ENGINEER.
- VERIFY INDICATED (E) DUCTWORK/PIPE SIZES PRIOR TO RECONNECTING NEW EQUIPMENT. EQUIPMENT SHALL NOT BE CONNECTED TO EXISTING DUCT/PIPE OF SMALLER DIAMETER THAN NEW DUCT/PIPE. REPORT DISCREPANCIES BACK TO ENGINEER.
- DO NOT FABRICATE EQUIPMENT SUPPORTS/BASES W/O CONFIRMING SPACE EXISTS AND THE BUILDING ATTACHMENT POINTS.
- REFER TO THE MECHANICAL SPECIFICATIONS FOR MATERIALS, EQUIPMENT, AND ADDITIONAL CONSTRUCTION INSTRUCTIONS NOT COVERED BY THESE PLANS.
- ALL INSTALLATIONS SHALL COMPLY WITH APPLICABLE FEDERAL AND STATE CODES INCLUDING, 2019 OREGON STRUCTURAL SPECIALTY CODE (OSCC) INCLUDING APPENDIX N FOR OREGON FIRE CODE REGULATIONS, 2021 OREGON PLUMBING SPECIALTY CODE (OPSC), 2019 OREGON MECHANICAL SPECIALTY CODE (OMSC), 2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC)-BASED ON ASHRAE 90.1-2019, AND NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), WHERE TWO CODES DIFFER THE MORE STRICT OF THE TWO SHALL BE FOLLOWED.
- OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES HAVING JURISDICTION. SUBMIT ALL CERTIFICATES PRIOR TO ACCEPTANCE.
- COORDINATE ALL MECHANICAL AND CONTROL WORK WITH GENERAL CONTRACTOR, CONTROL CONTRACTOR, ELECTRICAL AND ARCHITECTURAL.
- COORDINATE OTHER TRADES FOR PATCH/REPAIR OF WALLS WHERE EXISTING SENSORS ARE REMOVED OR MODIFIED.
- PATCH & REPAIR WALLS / FLOORS / CEILING WHERE OLD DUCTWORK/PIPES HAVE BEEN REMOVED TO MATCH EXISTING FINISHES.
- COORDINATE WITH OTHER CRAFTS AS REQUIRED TO COMPLETE WORK IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.
- PROVIDE OWNER INSTRUCTION BY QUALIFIED PERSONNEL ON EQUIPMENT AND SYSTEMS AT OWNER'S REQUEST.
- ALL DUCTWORK SHALL BE GALVANIZED STEEL, UNLESS OTHERWISE INDICATED, CONFORMING TO LATEST SMACNA, ASHRAE, OMSC, NFPA, AND UL STANDARDS.
- MANUFACTURERS AND MODEL NUMBERS LISTED IN THE EQUIPMENT SCHEDULES ARE THE BASIS OF DESIGN.
- CUT WALLS FOR PROPER EQUIPMENT, DUCT OR PIPE INSTALLATION. FILL HOLES WHICH ARE CUT OVERSIZED FOR A TIGHT FIT AROUND OBJECTS PASSING THROUGH.
- PROVIDE UL LISTED FIRESTOP SYSTEM TO MAINTAIN THE CODE REQUIRED F AND T RATING OF THE CONSTRUCTION ASSEMBLY AT A DUCT/PIPE PENETRATION THROUGH A RATED BUILDING CONSTRUCTION.
- INSTALL LABELS ON ALL MECHANICAL EQUIPMENT. SEE SPECIFICATIONS FOR CRITERIA.
- CONTROLS AND WIRING SHALL MEET ALL ELECTRICAL REQUIREMENTS OF APPLICABLE ELECTRICAL SPECIFICATIONS AND REQUIREMENTS OF OWNER, BUILDING OFFICIALS AND EQUIPMENT SUPPLIERS OF EQUIPMENT INSTALLED ON PROJECT.
- ELECTRIC MOTORS SHALL HAVE BUILT-IN THERMAL OVERLOAD PROTECTION OR BE PROTECTED EXTERNALLY WITH SEPARATE THERMAL OVERLOAD DEVICES, WITH LOW-VOLTAGE RELEASE OR LOCK OUT AS REQUIRED.
- ALL NEW EQUIPMENT, PIPING, CONDUIT, AND DUCTWORK SHALL BE INSTALLED PER CURRENT SEISMIC CODE REQUIREMENTS.
- PROVIDE LOW LEAK AUTOMATIC DAMPERS ON OUTSIDE AIR, EXHAUST AIR AND RELIEF AIR CONTROL DAMPERS WHERE THESE ARE INDICATED.

AIR DISTRIBUTION DETAILS



AIR DISTRIBUTION DETAILS



SYSTEM COMMISSIONING-VERIFICATION AND TESTING REQUIREMENTS:

ASHRAE 90.1-2019 REQUIREMENTS SECTION 4.2.5 THROUGH 4.2.5.3

THE OWNER OR GC SHALL PROQUIRE A COMMISSIONING PROVIDER THAT MEETS ONE OF THE FOLLOWING:

THE COMMISSIONING PROVIDER SHALL BE:

- A THIRD PARTY ENTITY NOT ASSOCIATED WITH THE BUILDING PROJECT
- AN OWNER'S QUALIFIED EMPLOYEE.
- AN INDIVIDUAL ASSOCIATED WITH THE DESIGN FIRM, BUT NOT DIRECTLY ASSOCIATED WITH THE DESIGN OR INSTALLATION OF THE BUILDING SYSTEMS.

EXCEPTIONS:

- BUILDING IS LESS THAN 10,000 SQ FT

CONTRACTOR RESPONSIBILITIES

- THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL THE REQUIREMENTS OF ASHRAE 90.1-2019.
- THE GENERAL CONTRACTOR OR OWNER SHALL HIRE AND UTILIZE AN APPROVED CX AGENT
- THE CX AGENT SHALL:
 - PREPARE A CX PLAN
 - OVERSEE THE TAB MEASUREMENTS
 - CONDUCT THE PER-FUNCTIONAL & FUNCTIONAL TESTS
 - PREPARE THE PRELIMINARY CX REPORT
 - REVIEW THE TAB REPORT
 - REVIEW THE O&M'S
 - PREPARE THE SYSTEMS MANUALS

SYSTEMS REQUIRED TO BE COMMISSIONED

- SERVICE WATER HEATERS
- MOVING VALVES & REQ'D SYSTEMS
- ROOFTOP UNIT - HALLWAY VENTILATION
- SPLIT SYSTEM FAN COOLS
- PHPS (SAMPLE SELECTION).
- DWELLING UNIT EXHAUST FANS (SAMPLE SELECTION).
- LIGHTING CONTROL SYSTEMS
- OCCUPANCY SENSORS
- EMERGENCY POWER SYSTEMS (GENERATOR)
- THERMOSTAT OPERATIONS AND SET POINTS
- FIRE PIT 7 BBO TIMERS AND AUTO-SHUT OFF
- FIRE PUMP AND DOMESTIC WATER BOOSTER PUMP.

MECHANICAL SHEET INDEX

| | |
|-------|----------------------------------|
| M0.01 | MECHANICAL LEGENDS & SCHEDULES |
| M2.01 | BUILDING 1 - LEVEL 1 - MECH PLAN |
| M2.02 | BUILDING 1 - LEVEL 2 - MECH PLAN |
| M2.03 | BUILDING 1 - LEVEL 3 - MECH PLAN |
| M2.04 | BUILDING 1 - LEVEL 4 - MECH PLAN |
| M2.05 | BUILDING 1 - LEVEL 5 - MECH PLAN |
| M2.06 | BUILDING 1 - ATTIC - MECH PLAN |
| M2.07 | BUILDING 1 - ROOF - MECH PLAN |
| M6.01 | MECHANICAL DETAILS |
| M6.02 | MECHANICAL DETAILS |

3.2 DUCTWORK/INSULATION

- A. Ductwork - Insulate the following:
- All supply and return ductwork in systems routed in unconditioned spaces or exposed to the outside conditions.
 - All outside air intake ducts.
 - All ductwork required to be insulated by code.
 - The last 5' of duct work connected to a lower or exhaust termination.
- B. Insulation Thickness: Select board and blanket insulation of thickness required to provide the following installed R-value.
- All heating and cooling system supply and return ducts located on the exterior of the insulated building envelope, including ventilated attics, and all outside air intake ducts, R-8.
 - All heating and cooling system supply and return ducts located in unconditioned spaces within the building insulation envelope, R-5.
 - All heating and cooling system supply ducts located in conditioned spaces and where exposed in unfinished spaces or concealed from view in finished spaces, R-3.5. Exposed ductwork in finished spaces shall not be externally insulated.
 - Ducts located within or below concrete slabs on grade, R-4.
- C. Fittings: Install with wire, straps, and duct adhesive as required. To prevent sagging on all rectangular or square ducts over 24" wide, install Gmundel or equal welding pins on the bottom. Maximum spacing 18" on center in both directions.
- D. Installation: Applied with but joints, all seams sealed with vapor seal mastic or taped with 2" wide vapor-proof, pressure-sensitive tape. Seal all penetrations with vapor barrier adhesive.
- E. Internally Lined Ductwork: Where internally lined ductwork is indicated on the Drawings and/or specified, no exterior insulation is required. Select duct lining to provide the required R-value. Carefully lap the ends of the exterior insulation a minimum of 6" past the interior insulation unless otherwise shown. Seal the end of vapor barrier jacket to the duct with mastic where the vapor barrier is required.
- E.1. Line Supply ducts routed in vertical shafts directly below RTUs.

EXHAUST FANS

| MARK NUMBER | EF 1 | EF 2 | EF 3 | EF 4 | EF 5 | EF 6 | EF 7 | EF 8 | TF |
|----------------------------|--------------------------|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|----------------------|-------------------|
| TYPE | CEILING CABINET | CEILING CABINET | CEILING CABINET | CEILING CABINET | CEILING CABINET | CEILING CABINET | CEILING CABINET | TRASH DIRECT DRIVE | CEILING CABINET |
| SYSTEM | STUDIO | RESTROOM | JANITOR | DOG WASH | BIKE | 1ST FLOOR TRASH | TRASH VESTIBULE | TRASH CHUTE | CORRIDOR |
| CFM | 30/80 | 100 | 100 | 100 | 300 | 200 | 100 | 400 | 300 |
| TOTAL SP. (IN H2O) | 0.20 | 0.125 | 0.125 | 0.125 | 0.125 | 0.125 | 0.5 | 0.125 | |
| RPM | 1062/1146 | 1250 | 1250 | 1250 | 2500 | 740 | 1250 | 1567 | 2500 |
| TIP SPEED (FPM) | NA | - | - | - | - | - | - | 4463 | - |
| MOTOR WAITS OR HP | 5/11.7 W | 100 W | 100 W | 100 W | 135 W | 127 W | 100 W | 1/10 HP | 135 W |
| CONTROLLED BY | ** | T-STAT | LIGHTS | LIGHTS | HUMIDISTAT | CONTINUOUS | CONTINUOUS | CONTINUOUS | CONTINUOUS |
| INTERLOCK WITH | MOTION SENSOR | NONE | NONE | NONE | NONE | NONE | NONE | NONE | NONE |
| FAN SPEED CONTROLLER | YES | NO | NO | NO | YES | YES | NO | NO | YES |
| WHEEL TYPE | BI | FC | FC | FC | BI | BI | FC | FC | BI |
| BACK DRAFT DAMPER | YES | GRAVITY | GRAVITY | GRAVITY | GRAVITY | GRAVITY | GRAVITY | GRAVITY | GRAVITY |
| ISOLATION | RUBBER | RUBBER | RUBBER | RUBBER | RUBBER | RUBBER | RUBBER | RUBBER | RUBBER |
| DESIGN WEIGHT (LBS) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 35 | 25 |
| MAX. SONES | 0.3/0.6 | 1.5 | 1.5 | 1.5 | 4.5 | 1.7 | 1.5 | 7.8 | 4.5 |
| MAX AMPS - *(MCA/MOCP) | 0.27 | 1.3 | 1.3 | 1.3 | 1.34 | 1.8 | 1.3 | 1.38(2/15) | 1.34 |
| POWER (VOLTS/PHASE/Hz) - * | 120/1/60 | 120/60/1 | 120/60/1 | 120/60/1 | 120/60/1 | 120/60/1 | 120/60/1 | 120/60/1 | 120/60/1 |
| BASIS OF DESIGN: | PANASONIC * FV-05-11KSL2 | BROAN L100 | BROAN L100 | BROAN L100 | GREENHECK SP-A390 | BROAN L200 | BROAN L100 | GREENHECK CUE-090-VG | GREENHECK SP-A390 |

ROOFTOP HVAC UNITS

| MARK NUMBER | RTU-1 (8 TON) |
|-------------------------------------|---------------|
| SYSTEM | CORRIDORS |
| TYPE | GAS PACK |
| DISCHARGE | VERTICAL |
| TOTAL CFM | 2400 |
| ECONOMIZER | NO |
| MIN. OSA | 2400 |
| MAX OSA (FULL OCCUPANCY) | - |
| CO2 CONTROL | - |
| EXTERNAL SP. (H2O) | 0.7 |
| TOTAL SP. (H2O) | 1.2 |
| RPM | 2418 |
| WHEEL TYPE/ SIZE | - |
| MOTOR BHP | 1.39 |
| POWER EXH FAN/ACCESSORY | NO |
| MIN FILTER SIZE | 16X20X2 |
| FILTER TYPE | THROW AWAY |
| GAS INPUT/OUTPUT (MBH) | 150/120 |
| EFF. (AFUE) | 81 |
| STAGES/TYPE | 1 |
| TOTAL CLG. (TONS) | 6 |
| SENSIBLE CLG. (MBH) | 80 |
| ENT. EVAP AIR TEMP. (DB/WB.) | 80/67 |
| LVG. EVAP AIR TEMP. (DB/WB.) | 58.5/57.5 |
| AMBIENT AIR (°F) | - |
| EER/EER | 12/14 |
| REFRIGERANT | R410A |
| REFRIGERANT CHARGE | - |
| DESIGN WEIGHT (LBS.) | 867 |
| SMOKE DETECTOR (SUPPLY DUCT) | YES |
| SPRING ISOLATION ROOF CURB | YES |
| CONVENIENCE OUTLET - ALWAYS POWERED | - |
| VOLTAGE/PHASE - *** | 208/3 |
| MCA/MOCP - *** | 34/50 |
| BASIS OF DESIGN - CARRIER MODEL | 48HCTD07A2A5 |

INDOOR UNITS - SPLIT SYSTEM HEAT PUMP

| MARK NUMBER | REC-1 (3.5 MBH) *** | REC-2 (1.5 MBH) |
|------------------------|------------------------|-----------------------|
| SYSTEM | 1ST FLOOR COMMON AREAS | CO-WORKING ROOM |
| TYPE | DUCTED | WALL MOUNT |
| COOLING CAPACITY (BTU) | 32810 | 12000 |
| HEATING CAPACITY (BTU) | 30710 | 12000 |
| AUXILIARY HEAT (KW) | 10 | N/A |
| TOTAL SUPPLY CFM | 1150 | 382 |
| OSA CFM | - | N/A |
| EXTERNAL SP. (H2O) | 0.25 | - |
| MOTOR HP | 1/3 | 90F |
| VOLTS/PHASE** | 208/1 | 208/1 |
| MCA/MOCP** | 45.5/60* | - |
| WEIGHT | 135 | 23 |
| BASIS OF DESIGN | CARRIER FMC423600AL | CARRIER 40MAHQB018XA3 |
| OUTDOOR UNIT | HP-1 (3 TON) | HP-2 (1.5 TON) |

* - PROVIDE 1-STAT MODEL # 33CS2PP2S-03
 ** - ELECTRICAL DATA LISTED FOR REFERENCE ONLY. COORDINATE WITH ELECTRICAL DESIGN BUILT CONTRACTOR FOR VOLTAGE AND PHASE REQUIREMENTS. ELECTRICAL CONTRACTOR RESPONSIBLE FOR SIZING ALL CONDUCTORS & OVERCURRENT PROTECTION. VERIFY WITH EQUIPMENT SUBMITTALS FOR EQUIPMENT ELECTRICAL REQUIREMENTS
 *** - ELECTRIC HEAT MODEL NUMBER EHK3-10B, 10KW 240V EQUIPMENT HEAT WITH CIRCUIT BREAKER. ACCESS PANEL FOR INDOOR UNIT, MODEL # KFAGP201COV.

OUTDOOR UNITS - SPLIT SYSTEM HEAT PUMP

| MARK NUMBER | HP-1 (3 TON) | HP-2 (1.5 TON) |
|------------------------|------------------------|----------------------|
| SYSTEM | 1ST FLOOR COMMON AREAS | CO-WORKING ROOM |
| TYPE | AIR-COOLED | AIR-COOLED |
| COOLING CAPACITY (BTU) | 32810 | 12000 |
| HEATING CAPACITY (BTU) | 30710 | 12000 |
| EFFICIENCY SEER/EER | 14.0/11.0 | 14/25.5 |
| EFFICIENCY HSPF/COOP | 8.5/3.82 | 13.0/3.81 |
| REFRIGERANT | R410A | R410A |
| REFRIGERANT CHARGE | - | 2.8 LBS. |
| MAX OPERATING TEMPS | - | 86F |
| MAX PIPING LENGTH | - | 82 |
| MAX PIPING HEIGHT | - | 32 |
| VOLTS-PHASE | 208/1 | 208/1 |
| MCA/MOP | 18.3/30 | 16/25 |
| COMPRESSOR | - | - |
| WEIGHT (LBS) | 170 | 74 |
| BASIS OF DESIGN | CARRIER 25HCE436AP03 | CARRIER 38MAR8012AA3 |

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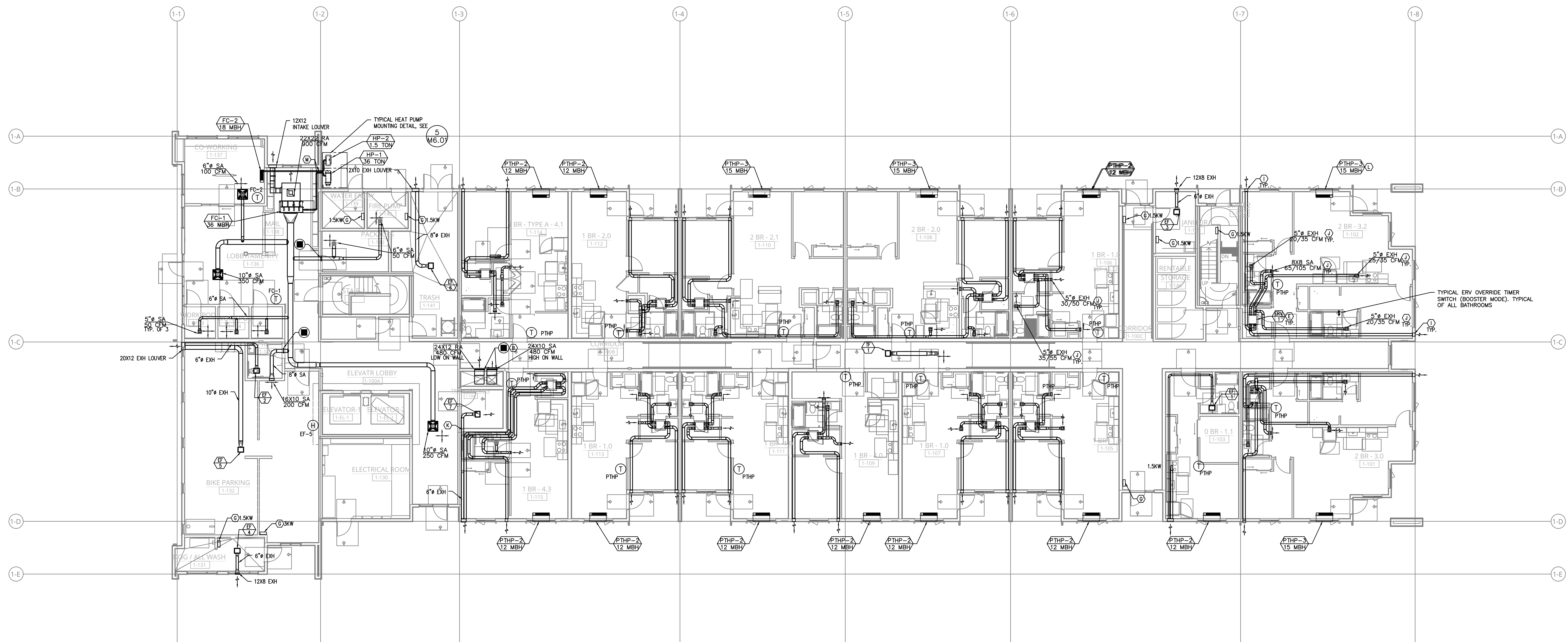
ERV SCHEDULE

| MARK NUMBER | ERV |
|-------------------------------------|----------------|
| SYSTEM | DWELLING UNITS |
| CFM | 65/105 |
| ESP, IN.W.C. | 0.4 |
| MOTOR H.P. | - |
| ECM | YES |
| FILTER | 2" MERV 8 |
| CFM | 65/105 |
| ESP, IN.W.C. | 0.4 |
| MOTOR H.P. | - |
| ECM | YES |
| FILTER | 2" MERV 8 |
| SUMMER DESIGN TEMPERATURE DB/WB, °F | 88/86 |
| WINTER DESIGN TEMPERATURE DB °F | 24 |
| MINIMUM SUMMER EFFECTIVENESS | 65% |
| MINIMUM WINTER EFFECTIVENESS | 71% |
| ELECTRICAL (V/PH) | 120/1 |
| AMPS | 0.9 |
| WATTS | 103 |
| BASIS OF DESIGN: BROAN | ERV100S |
| NOTES: | 1.2 |

1. PROVIDE UNIT WITH MOTORIZED OSA AND EXHAUST DAMPERS. INTERLOCK DAMPERS WITH FAN OPERATION.
 2. INSTALL IN DWELLING UNITS WITH 500 SF FLOOR AREA OR

VENTILATION AIR SCHEDULE - LEVEL 1

| ROOM NUMBER AND NAME | AREA (SQ. FT.) | OCCUPANT LOAD (#/1000 SQ. FT.) | NUMBER OF OCCUPANTS | OUTSIDE AIR REQUIREMENT (CFM) | OUTSIDE AIR REQUIRED (CFM) | ZONE OSA (CFM) | SUPPLY AIR (CFM) | PRIMARY OSA FRACTION | RETURN AIR (CFM) | EXHAUST AIR (CFM) | Zone Ventilation Efficiency | Corrected OSA CFM | AR SYSTEMS | |
|----------------------|----------------|--------------------------------|---------------------|-------------------------------|----------------------------|----------------|------------------|----------------------|------------------|-------------------|-----------------------------|-------------------|------------|------|
| | Az | Pz | Rp | Ra | Vbz | Ez | Voz | Vpz | Zp | | | | | |
| ELEV LOBBY | 533 | 0 | 0 | 0 | 0.06 | 32 | 0.8 | 40 | 250 | 0.16 | 0 | 1.09 | 82.06 | FC-1 |
| LOBBY/AMENITY | 546 | 0 | 0 | 0 | 0.06 | 33 | 0.8 | 41 | 300 | 0.14 | 0 | 1.11 | 84.06 | FC-1 |
| MALL | 191 | 0 | 0 | 0 | 0.12 | 23 | 0 | | | | | | | |



1 BUILDING 1 -- LEVEL 1 -- MECH PLAN
 M2.01 SCALE: 1/8" = 1'-0"

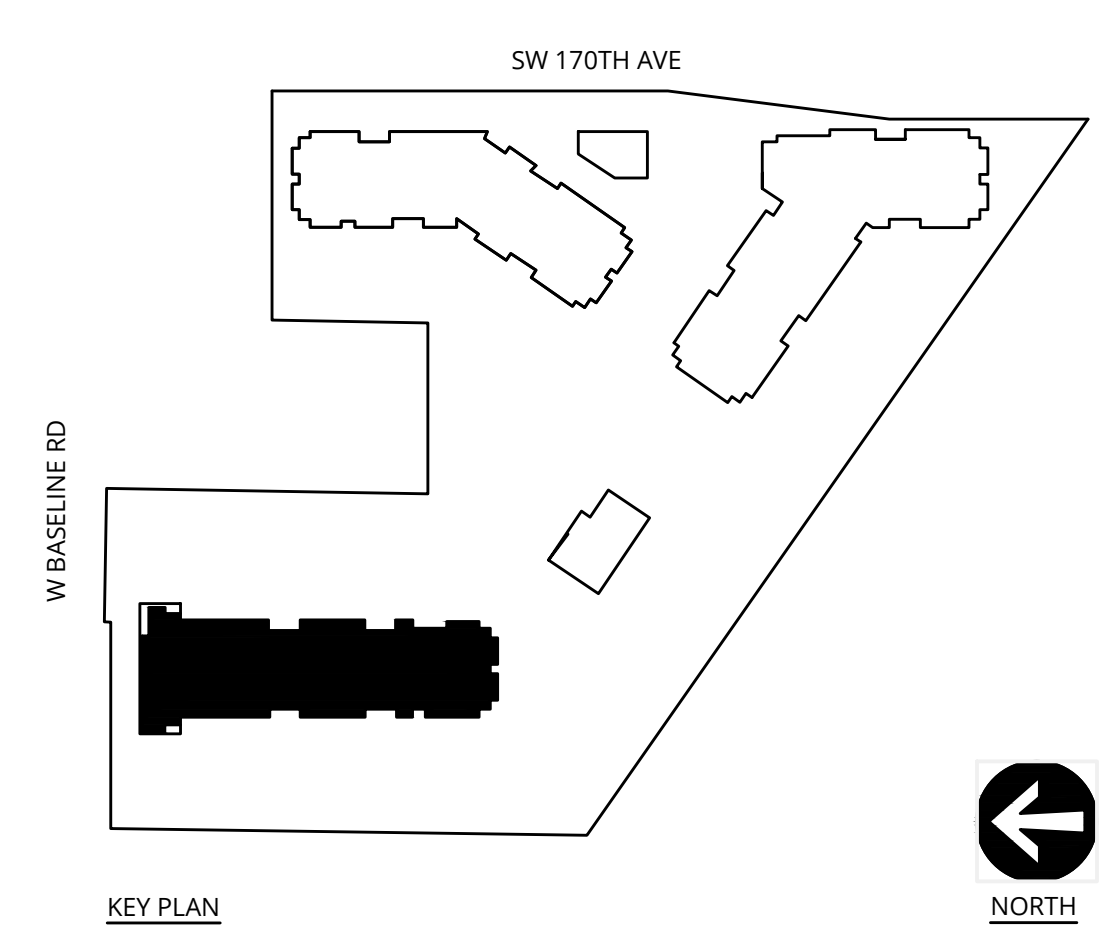
KEY NOTES:

- (A) - SUPPLY DUCT FROM RTU, SEE BELOW
- (B) - SUPPLY AIR OR RETURN GRILLE, SIZED FOR BOTH FREE AREA AND FOR ACTUATOR ACCESS, SEE FOR GRILLE INSTALLATION, AND SEE FOR TYPICAL F/S
- (C) - PANASONIC WHISPERGREEN CEILING FAN WITH 4" DUCT TO ROOF OR EXTERIOR WALL TERMINATION VIA SOFFIT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO FAN, FAN TO OPERATE AT LOW SPEED CONTINUOUS (30 CFM) AND INCREASE TO 80 CFM WHEN BUILT-IN MOTION SENSOR IS ACTIVATED. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. SEE
- (D) - CONDENSING DRIVERS - NO VENTING REQUIRED -
- (E) - FOR ERV DETAILS, SEE
- (F) - 6" HOOD DUCT TO ROOF TOP DOGHOUSE VIA SOFFIT(S) AND SHAFT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO HOOD. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. HOOD FAN TO OPERATE INTERMITTENTLY
- (G) - X KW WALL(SEE PLANS) HEATER QMARK AWH4404F OR EQUAL. EQUIPMENT BY ELECTRICAL CONTRACTOR. SHOWN FOR REFERENCE ONLY.
- (H) - DUCTED FAN COIL DETAIL, SEE
- (I) - EXTERIOR EXHAUST - SEE MAINTAIN 36" CLEAR TO OPERABLE WINDOWS AND DOORS.
- (J) - SUPPLY/EXHAUST FOR ERV, CFM AND GRILLE SIZE SEE
- (K) - FIRE PENETRATION DETAILS, SEE
- (L) - P/THP (PACKAGED TERMINAL HEAT PUMP) WITH FACTORY WALL SLEEVE, CONDENSATE DRAIN KIT, AND 42X16 ALUMINUM ARCHITECTURAL GRILLE AT EXTERIOR. INSTALL GRAVITY CONDENSATE DRAIN KIT, PLUMBING CONTRACTOR TO MAKE CONNECTION AT DRAIN KIT AND CONTINUE DRAIN LINE TO AN APPROVED LOCATION. SEE
- (M) - REFRIGERANT LINE SETS FROM CONDENSING UNITS TO FAN COILS ON LEVEL 1.
- (N) - COVE STYLE WALL HEATERS FOR LIVING UNITS, 1125 W (94" LONG) FOR 1&2 BEDROOM LIVING UNITS. INSTALL AT 90° AFF.

SHAFT DUCT SIZES

| FLOOR | SUPPLY AIR | CFM | RETURN AIR | CFM | UNIT |
|-------|------------|------|------------|------|-------|
| ATTIC | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 5TH | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 4TH | 24 X 16 | 1920 | 24 X 16 | 1920 | RTU-1 |
| 3RD | 24 X 16 | 1440 | 24 X 16 | 1440 | RTU-1 |
| 2ND | 24 X 12 | 960 | 24 X 12 | 960 | RTU-1 |
| 1ST | 24 X 12 | 480 | 24 X 12 | 480 | RTU-1 |

VENTILATION CALCULATIONS:
 DWELLING UNIT >5000 SQ FT, VENTILATED BY MECHANICAL VENTILATION WITH ERV'S. DWELLING UNIT <5000 SQ FT, VENTILATED BY MECHANICAL VENTILATION, VIA P/THP (SIZED PER ASHRAE 62.2).
 HALLWAYS ARE VENTILATED BY RTU'S SIZED TO EXCEED THE MINIMUM 0.06 CFM/SQ FT REQUIREMENT.
 SEE VENTILATION SCHEDULES FOR OTHER UNITS.



ELMONICA STATION APARTMENTS BUILDING 1
 SW 170TH AND W BASELINE

REMBOLD PROPERTIES

| REVISION | DATE | REASON FOR ISSUE |
|----------|------|------------------|
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MECHANICAL PLAN - LEVEL 1

PERMIT SET

DATE: 09/23/2022 PROJECT NUMBER: 215390

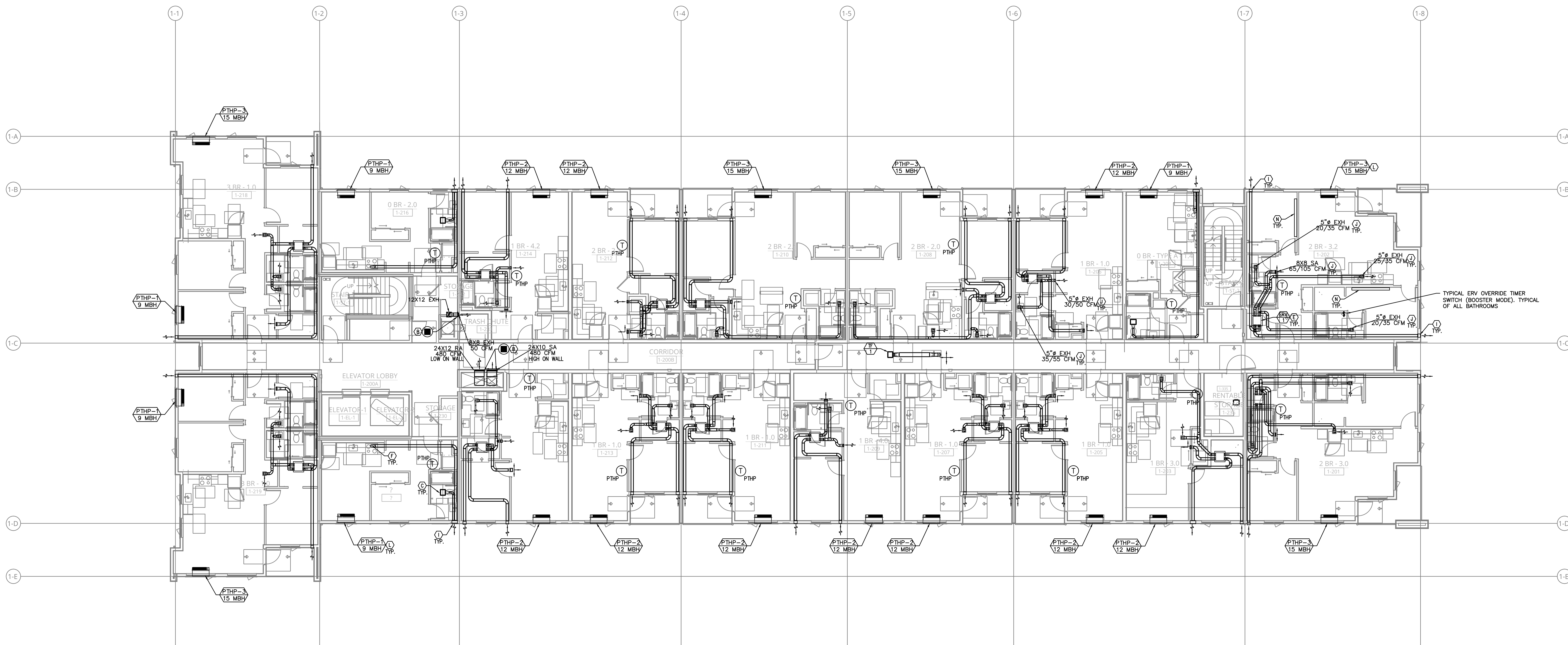
M2.01-1



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PORTLAND, OR 97209
T 503.245.7100
1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
T 206.376.1600
1014 HOWARD STREET
SAN FRANCISCO, CA 94103
T 415.252.7063
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Consulting Engineers
3087 S.W. 4th St.
Portland, OR 97214
PH: (503) 231-0518
FAX: (503) 231-0077
INC. WWW.JACOBS-ENG.COM
CONTACT: MATT AURTY



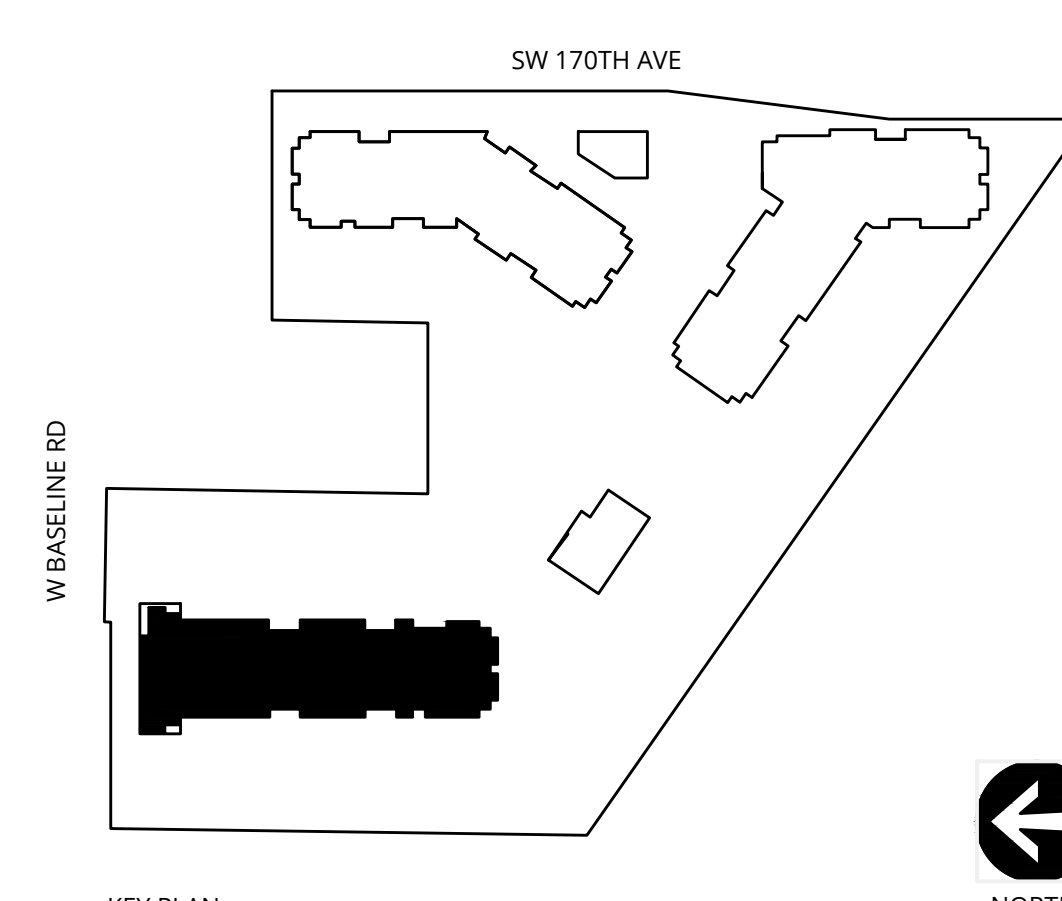
1 BUILDING 1 - LEVEL 2 - MECH PLAN
SCALE: 1/8" = 1'-0"

KEY NOTES:

- (A) - SUPPLY DUCT FROM RTU, SEE BELOW
- (B) - SUPPLY AIR OR RETURN GRILLE, SIZED FOR BOTH FREE AREA AND FOR ACTUATOR ACCESS, SEE (7) FOR GRILLE INSTALLATION, AND SEE (8) FOR TYPICAL F/S INSTALLATION, AND CONTROLS.
- (C) - PANASONIC WHISPERGREEN CEILING FAN WITH 4" DUCT TO ROOF OR EXTERIOR WALL TERMINATION VIA SOFFIT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO FAN, FAN TO OPERATE AT LOW SPEED CONTINUOUS (30 CFM) AND INCREASE TO 80 CFM WHEN BUILT-IN MOTION SENSOR IS ACTIVATED. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. SEE (3) EF (1)
- (D) - CONDENSING DRYERS - NO VENTING REQUIRED -
- (E) - FOR ERV DETAILS, SEE (2) ERV (1) 6" OA, 6" EXH, & 6" SA
- (F) - 6" HOOD DUCT TO ROOF TOP DOGHOUSE VIA SOFFIT(S) AND SHAFT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO HOOD. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. HOOD FAN TO OPERATE INTERMITTENTLY
- (G) - X KW WALL(SEE PLANS) HEATER QMARK AWH4404F OR EQUAL. EQUIPMENT BY ELECTRICAL CONTRACTOR. SHOWN FOR REFERENCE ONLY.
- (H) - DUCTED FAN COIL DETAIL, SEE (6) M6.01
- (I) - EXTERIOR EXHAUST - SEE (2) MAINTAIN 36" CLEAR TO OPERABLE WINDOWS AND DOORS.
- (J) - SUPPLY/EXHAUST FOR ERV, CFM AND GRILLE SIZE SEE (9) M6.01
- (K) - FIRE PENETRATION DETAILS, SEE (1) M6.02
- (L) - PTHP (PACKAGED TERMINAL HEAT PUMP) WITH FACTORY WALL SLEEVE, CONDENSATE DRAIN KIT, AND 42X16 ALUMINUM ARCHITECTURAL GRILLE AT EXTERIOR. INSTALL GRAVITY CONDENSATE DRAIN KIT, PLUMBING CONTRACTOR TO MAKE CONNECTION AT DRAIN KIT AND CONTINUE DRAIN LINE TO AN APPROVED LOCATION. SEE (4) M6.01
- (M) - REFRIGERANT LINE SETS FROM CONDENSING UNITS TO FAN COILS ON LEVEL 1.
- (N) - COVE STYLE WALL HEATERS FOR LIVING UNITS, 1125 W (94" LONG) FOR 1&2 BEDROOM LIVING UNITS. INSTALL AT 90° AFF.

| FLOOR | SUPPLY AIR | CFM | RETURN AIR | CFM | UNIT |
|-------|------------|------|------------|------|-------|
| ATTIC | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 5TH | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 4TH | 24 X 16 | 1920 | 24 X 16 | 1920 | RTU-1 |
| 3RD | 24 X 16 | 1440 | 24 X 16 | 1440 | RTU-1 |
| 2ND | 24 X 12 | 960 | 24 X 12 | 960 | RTU-1 |
| 1ST | 24 X 12 | 480 | 24 X 12 | 480 | RTU-1 |

VENTILATION CALCULATIONS:
 DWELLING UNIT >500SQ FT, VENTILATED BY MECHANICAL VENTILATION WITH ERV'S. DWELLING UNIT <500SQ FT, VENTILATED BY MECHANICAL VENTILATION, VIA PTHP (SIZED PER ASHRAE 62.2).
 HALLWAYS ARE VENTILATED BY RTU'S SIZED TO EXCEED THE MINIMUM 0.06 CFM/SQ FT REQUIREMENT.
 SEE VENTILATION SCHEDULES FOR OTHER UNITS.



ELMONICA STATION APARTMENTS BUILDING 1
SW 170TH AND W BASELINE
REMBOLD PROPERTIES

| REVISION | DATE | REASON FOR ISSUE |
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MECHANICAL PLAN - LEVEL 2

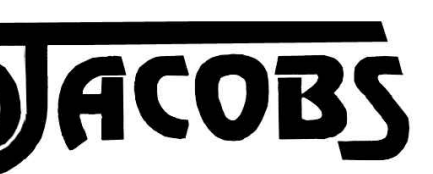
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DATE: 09/23/2022 PROJECT NUMBER: 215390

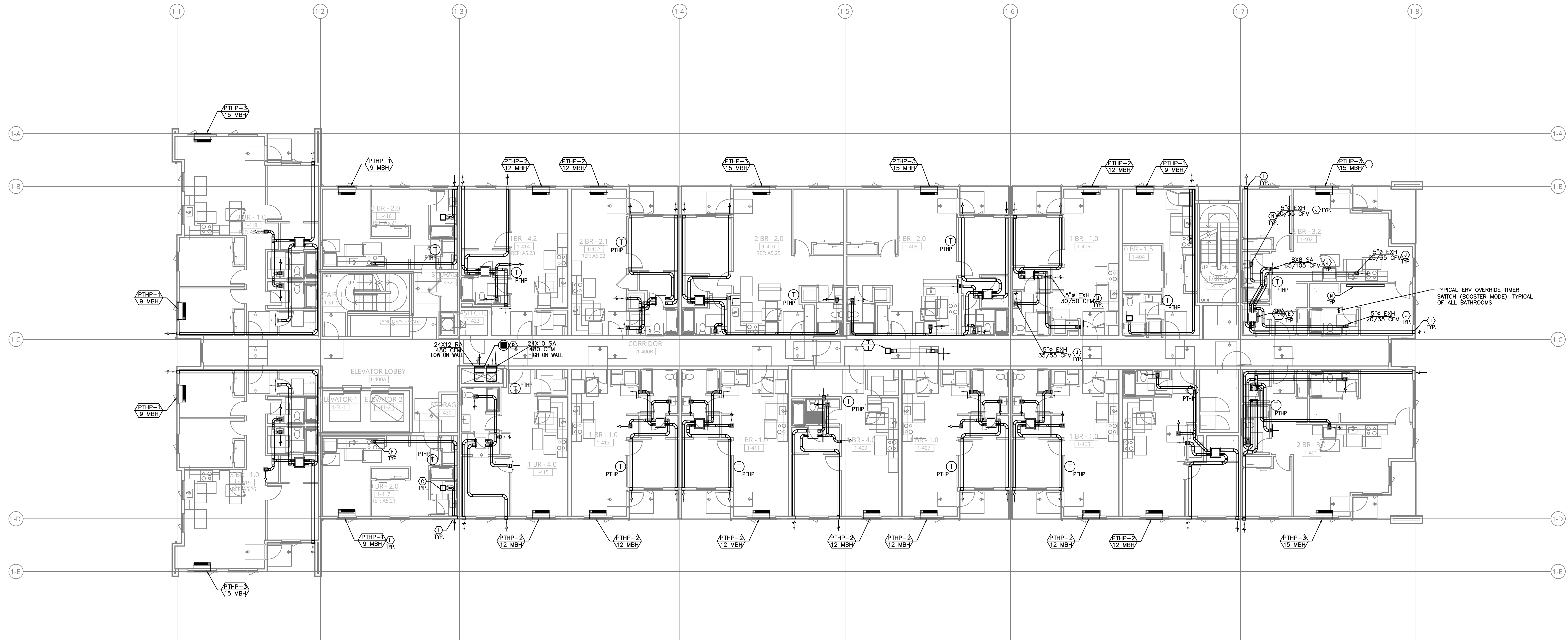
M2.02-1



38 NORTHWEST DAVIS, SUITE 300
PORTLAND, OR 97209
T 503.245.7100
1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
T 206.376.1600
1014 HOWARD STREET
SAN FRANCISCO, CA 94103
T 415.252.7063
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3007 S.W. 4th St.
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INC. WWW.META-ENG.COM
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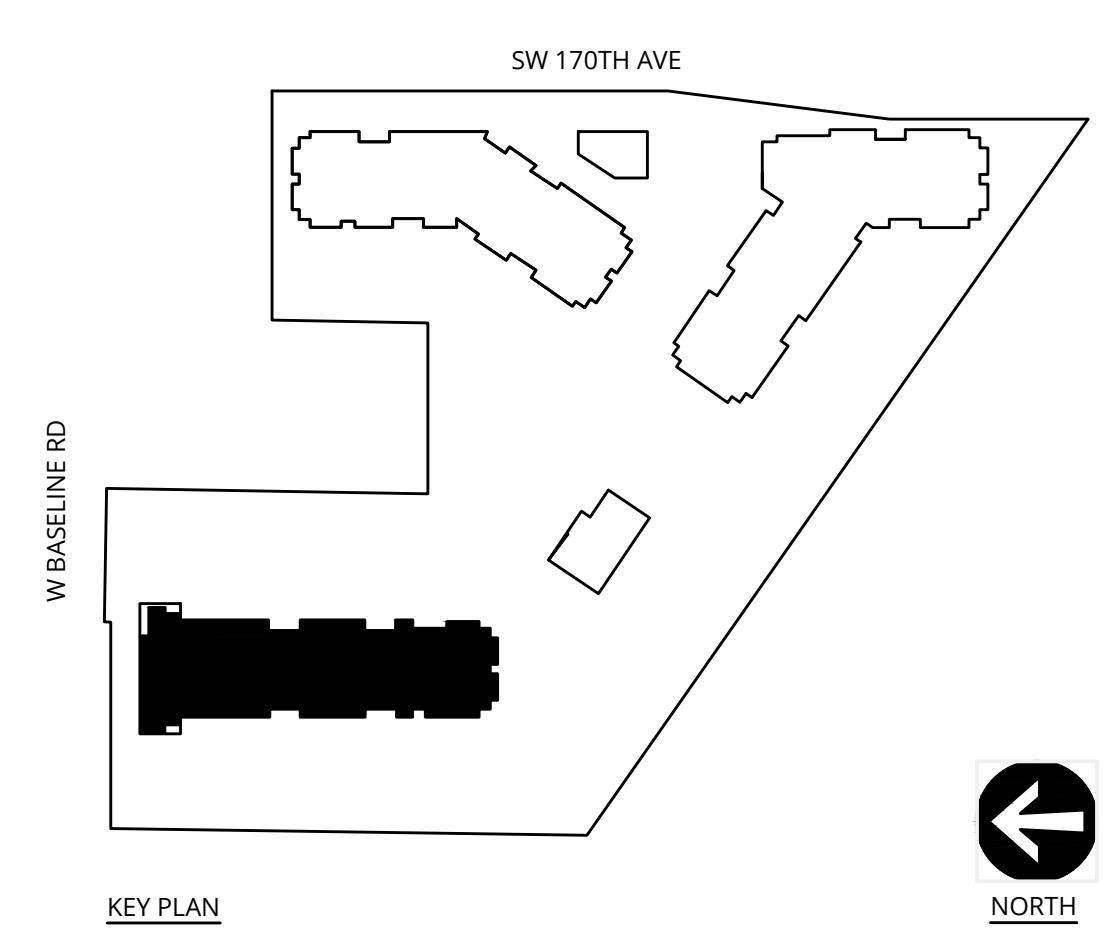
1 BUILDING 1 - LEVEL 4 - MECH PLAN
M2.04 SCALE: 1/8" = 1'-0"

KEY NOTES:

- (A) - SUPPLY DUCT FROM RTU, SEE BELOW
- (B) - SUPPLY AIR OR RETURN GRILLE, SIZED FOR BOTH FREE AREA AND FOR ACTUATOR ACCESS, SEE (7) FOR GRILLE INSTALLATION, AND SEE (8) FOR TYPICAL F/S INSTALLATION, AND CONTROLS.
- (C) - PANASONIC WHISPERGREEN CEILING FAN WITH 4" DUCT TO ROOF OR EXTERIOR WALL TERMINATION VIA SOFFIT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO FAN, FAN TO OPERATE AT LOW SPEED CONTINUOUS (30 CFM) AND INCREASE TO 80 CFM WHEN BUILT-IN MOTION SENSOR IS ACTIVATED. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. SEE (3) EF (1)
- (D) - CONDENSING DRYERS - NO VENTING REQUIRED -
- (E) - FOR ERV DETAILS, SEE (2) ERV (1) 6" OA, 6" EXH, & 6" SA
- (F) - 6" HOOD DUCT TO ROOF TOP DOGHOUSE VIA SOFFIT(S) AND SHAFT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO HOOD. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. HOOD FAN TO OPERATE INTERMITTENTLY
- (G) - X KW WALL(SEE PLANS) HEATER QMARK AHW4404F OR EQUAL. EQUIPMENT BY ELECTRICAL CONTRACTOR. SHOWN FOR REFERENCE ONLY.
- (H) - DUCTED FAN COIL DETAIL, SEE (6) (M6.01)
- (I) - EXTERIOR EXHAUST - SEE (2) MAINTAIN 36" CLEAR TO OPERABLE WINDOWS AND DOORS.
- (J) - SUPPLY/EXHAUST FOR ERV, CFM AND GRILLE SIZE SEE (9) (M6.01)
- (K) - FIRE PENETRATION DETAILS, SEE (1) (M6.02)
- (L) - PTHP (PACKAGED TERMINAL HEAT PUMP) WITH FACTORY WALL SLEEVE, CONDENSATE DRAIN KIT, AND 42X16 ALUMINUM ARCHITECTURAL GRILLE AT EXTERIOR. INSTALL GRAVITY CONDENSATE DRAIN KIT, PLUMBING CONTRACTOR TO MAKE CONNECTION AT DRAIN KIT AND CONTINUE DRAIN LINE TO AN APPROVED LOCATION. SEE (4) (M6.01)
- (M) - REFRIGERANT LINE SETS FROM CONDENSING UNITS TO FAN COILS ON LEVEL 1.
- (N) - COVE STYLE WALL HEATERS FOR LIVING UNITS, 1125 W (94" LONG) FOR 1&2 BEDROOM LIVING UNITS. INSTALL AT 90° AFF.

| FLOOR | SUPPLY AIR | CFM | RETURN AIR | CFM | UNIT |
|-------|------------|------|------------|------|-------|
| ATTIC | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 5TH | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 4TH | 24 X 16 | 1920 | 24 X 16 | 1920 | RTU-1 |
| 3RD | 24 X 16 | 1440 | 24 X 16 | 1440 | RTU-1 |
| 2ND | 24 X 12 | 960 | 24 X 12 | 960 | RTU-1 |
| 1ST | 24 X 12 | 480 | 24 X 12 | 480 | RTU-1 |

VENTILATION CALCULATIONS:
 DWELLING UNIT >500SQ FT, VENTILATED BY MECHANICAL VENTILATION WITH ERV'S. DWELLING UNIT <500SQ FT, VENTILATED BY MECHANICAL VENTILATION, VIA PTHP (SIZED PER ASHRAE 62.2).
 HALLWAYS ARE VENTILATED BY RTU'S SIZED TO EXCEED THE MINIMUM 0.06 CFM/SQ FT REQUIREMENT.
 SEE VENTILATION SCHEDULES FOR OTHER UNITS.



ELMONICA STATION APARTMENTS BUILDING 1
SW 170TH AND W BASELINE
REMBOLD PROPERTIES

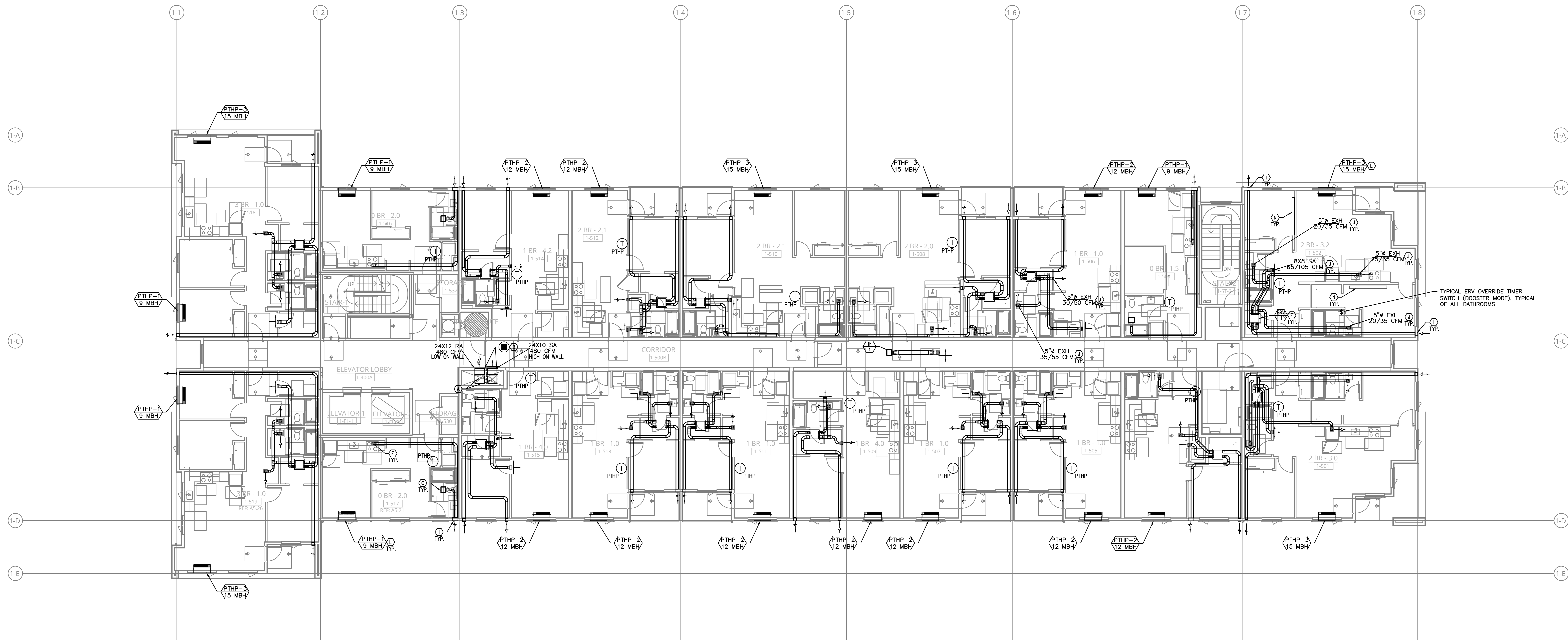
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MECHANICAL PLAN - LEVEL 4

PERMIT SET

DATE 09/23/2022 PROJECT NUMBER 215390

M2.04-1



1 BUILDING 1 - LEVEL 5 - MECH PLAN
 SCALE: 1/8" = 1'-0"

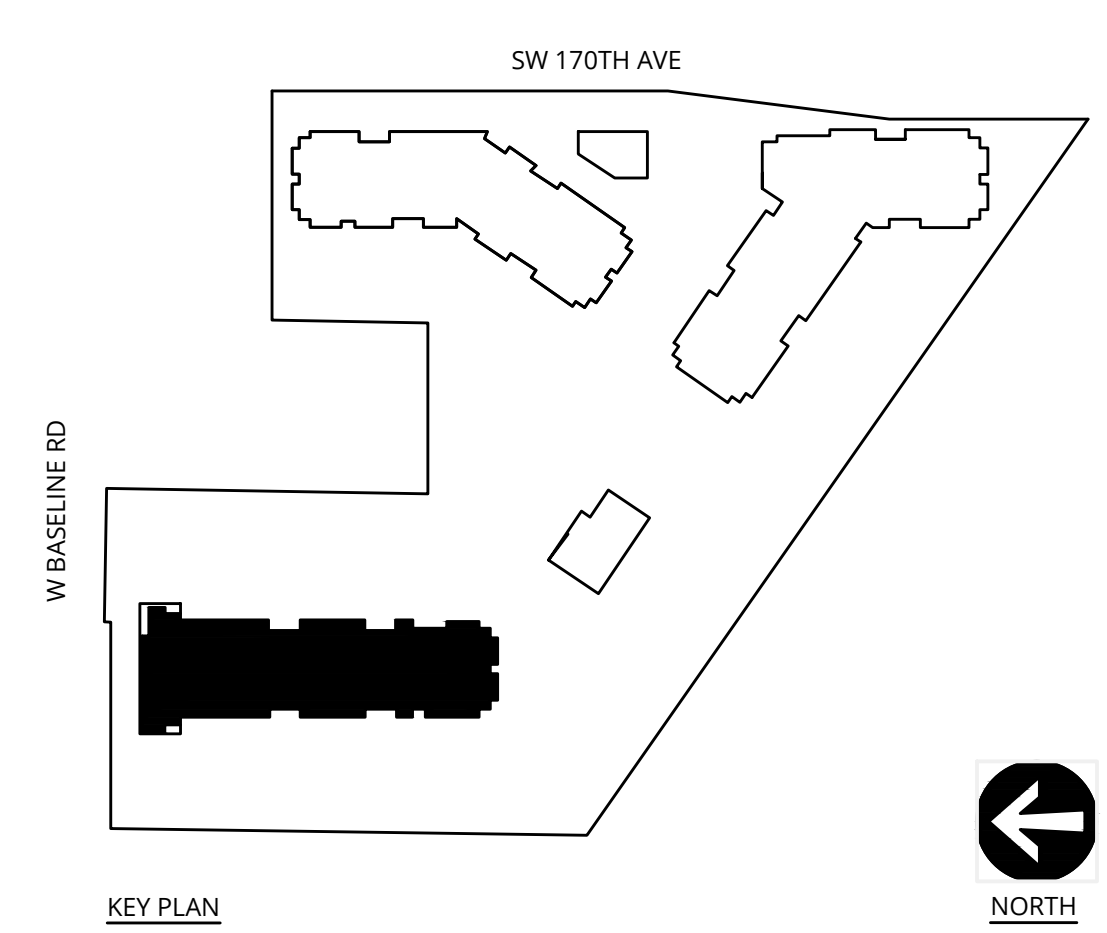
KEY NOTES:

- (A) - SUPPLY DUCT FROM RTU, SEE BELOW
- (B) - SUPPLY AIR OR RETURN GRILLE, SIZED FOR BOTH FREE AREA AND FOR ACTUATOR ACCESS, SEE 2 FOR GRILLE INSTALLATION, AND SEE 3 FOR TYPICAL F/S INSTALLATION, AND CONTROLS.
- (C) - PANASONIC WHISPERGREEN CEILING FAN WITH 4" DUCT TO ROOF OR EXTERIOR WALL TERMINATION VIA SOFFIT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO FAN, FAN TO OPERATE AT LOW SPEED CONTINUOUS (30 CFM) AND INCREASE TO 80 CFM WHEN BUILT-IN MOTION SENSOR IS ACTIVATED. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. SEE 3 EF 1
- (D) - CONDENSING DRYERS - NO VENTING REQUIRED -
- (E) - FOR ERV DETAILS, SEE 2 ERV 1 6" OA, 6" EXH, & 6" SA
- (F) - 6" HOOD DUCT TO ROOF TOP DOGHOUSE VIA SOFFIT(S) AND SHAFT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO HOOD. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. HOOD FAN TO OPERATE INTERMITTENTLY
- (G) - X KW WALL(SEE PLANS) HEATER QMARK AHW4404F OR EQUAL. EQUIPMENT BY ELECTRICAL CONTRACTOR. SHOWN FOR REFERENCE ONLY.
- (H) - DUCTED FAN COIL DETAIL, SEE 6 M6.01
- (I) - EXTERIOR EXHAUST - SEE 2 MAINTAIN 36" CLEAR TO OPERABLE WINDOWS AND DOORS.
- (J) - SUPPLY/EXHAUST FOR ERV, CFM AND GRILLE SIZE SEE 9 M6.01
- (K) - FIRE PENETRATION DETAILS, SEE 1 M6.02
- (L) - PTHP (PACKAGED TERMINAL HEAT PUMP) WITH FACTORY WALL SLEEVE, CONDENSATE DRAIN KIT, AND 42X16 ALUMINUM ARCHITECTURAL GRILLE AT EXTERIOR. INSTALL GRAVITY CONDENSATE DRAIN KIT, PLUMBING CONTRACTOR TO MAKE CONNECTION AT DRAIN KIT AND CONTINUE DRAIN LINE TO AN APPROVED LOCATION. SEE 4 M6.01
- (M) - REFRIGERANT LINE SETS FROM CONDENSING UNITS TO FAN COILS ON LEVEL 1.
- (N) - COVE STYLE WALL HEATERS FOR LIVING UNITS, 1125 W (94" LONG) FOR 1&2 BEDROOM LIVING UNITS. INSTALL AT 90° AFF.

SHAFT DUCT SIZES

| FLOOR | SUPPLY AIR | CFM | RETURN AIR | CFM | UNIT |
|-------|------------|------|------------|------|-------|
| ATTIC | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 5TH | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 4TH | 24 X 16 | 1920 | 24 X 16 | 1920 | RTU-1 |
| 3RD | 24 X 16 | 1440 | 24 X 16 | 1440 | RTU-1 |
| 2ND | 24 X 12 | 960 | 24 X 12 | 960 | RTU-1 |
| 1ST | 24 X 12 | 480 | 24 X 12 | 480 | RTU-1 |

VENTILATION CALCULATIONS:
 DWELLING UNIT >500SQ FT, VENTILATED BY MECHANICAL VENTILATION WITH ERV'S. DWELLING UNIT <500SQ FT, VENTILATED BY MECHANICAL VENTILATION, VIA PTHP (SIZED PER ASHRAE 62.2).
 HALLWAYS ARE VENTILATED BY RTU'S SIZED TO EXCEED THE MINIMUM 0.06 CFM/SQ FT REQUIREMENT.
 SEE VENTILATION SCHEDULES FOR OTHER UNITS.



ELMONICA STATION APARTMENTS BUILDING 1
 SW 170TH AND W BASELINE
 REMBOLD PROPERTIES

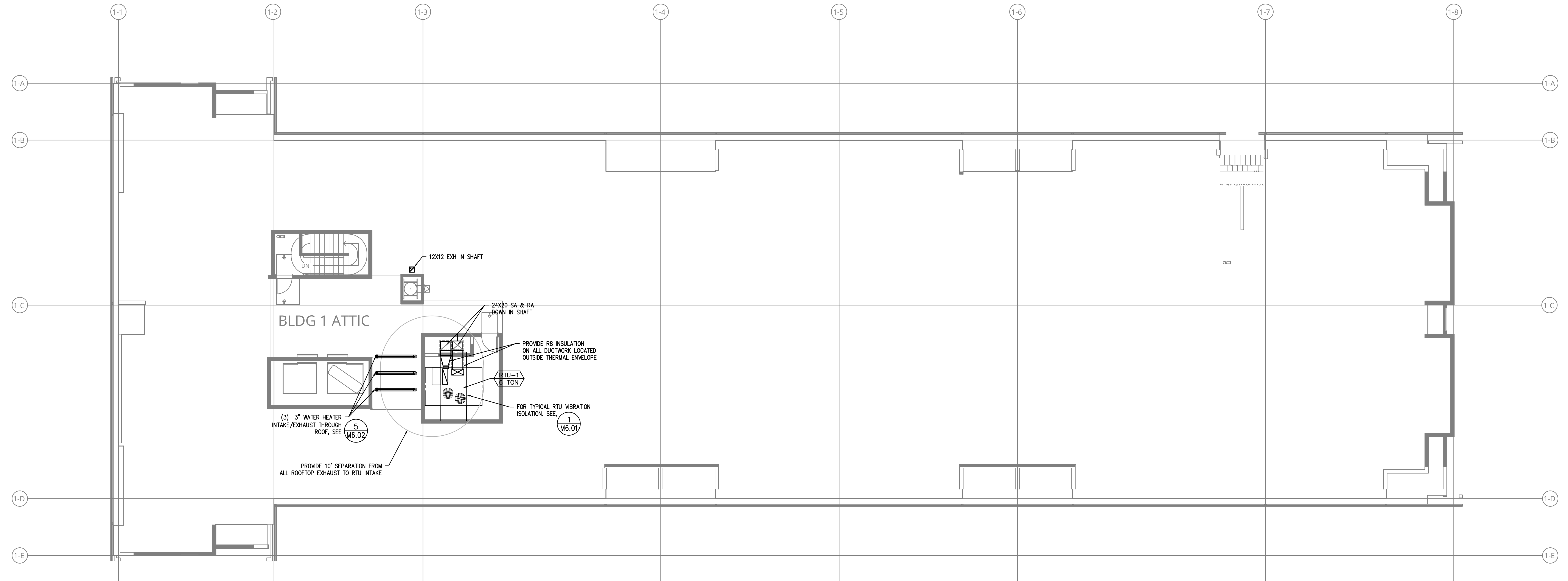
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MECHANICAL PLAN - LEVEL 5

PERMIT SET

DATE: 09/23/2022 PROJECT NUMBER: 215390

M2.05-1



1 BUILDING 1 - ATTIC - MECH PLAN
 M2.06 SCALE: 1/8" = 1'-0"

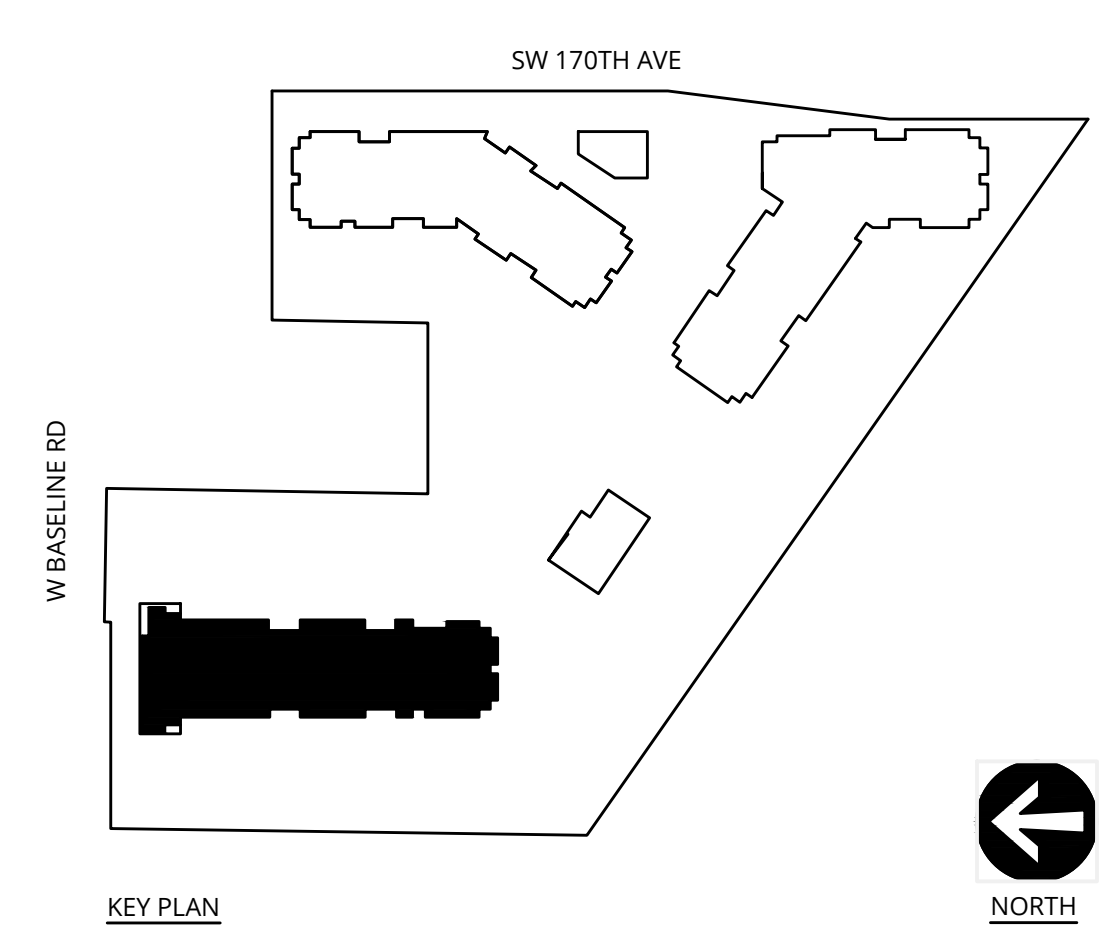
KEY NOTES:

- (A) - SUPPLY DUCT FROM RTU, SEE BELOW
- (B) - SUPPLY AIR OR RETURN GRILLE, SIZED FOR BOTH FREE AREA AND FOR ACTUATOR ACCESS, SEE 2 (ME.02) FOR GRILLE INSTALLATION, AND SEE 3 (ME.01) FOR TYPICAL F/S INSTALLATION, AND CONTROLS.
- (C) - PANASONIC WHISPERGREEN CEILING FAN WITH 4" DUCT TO ROOF OR EXTERIOR WALL TERMINATION VIA SOFFIT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO FAN, FAN TO OPERATE AT LOW SPEED CONTINUOUS (30 CFM) AND INCREASE TO 80 CFM WHEN BUILT-IN MOTION SENSOR IS ACTIVATED. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. SEE 3 (ME.01) EF 1
- (D) - CONDENSING DRYERS - NO VENTING REQUIRED -
- (E) - FOR ERV DETAILS, SEE 2 (ME.02) ERV 1 6" OA, 6" EXH, & 6" SA
- (F) - 6" HOOD DUCT TO ROOF TOP DOGHOUSE VIA SOFFIT(S) AND SHAFT(S) PROVIDED. BACK DRAFT DAMPER INTEGRAL TO HOOD. INSULATED FINAL 5' OF DUCTWORK. NO DUCTWORK SHALL PENETRATE RATED ASSEMBLY. HOOD FAN TO OPERATE INTERMITTENTLY
- (G) - X KW WALL(SEE PLANS) HEATER QMARK AWH4404F OR EQUAL. EQUIPMENT BY ELECTRICAL CONTRACTOR. SHOWN FOR REFERENCE ONLY.
- (H) - DUCTED FAN COIL DETAIL, SEE 6 (ME.01)
- (I) - EXTERIOR EXHAUST - SEE 2 (ME.01) MAINTAIN 36" CLEAR TO OPERABLE WINDOWS AND DOORS.
- (J) - SUPPLY/EXHAUST FOR ERV, CFM AND GRILLE SIZE SEE 9 (ME.01)
- (K) - FIRE PENETRATION DETAILS, SEE 1 (ME.02)
- (L) - PTHP (PACKAGED TERMINAL HEAT PUMP) WITH FACTORY WALL SLEEVE, CONDENSATE DRAIN KIT, AND 42X16 ALUMINUM ARCHITECTURAL GRILLE AT EXTERIOR. INSTALL GRAVITY CONDENSATE DRAIN KIT, PLUMBING CONTRACTOR TO MAKE CONNECTION AT DRAIN KIT AND CONTINUE DRAIN LINE TO AN APPROVED LOCATION. SEE 4 (ME.01)
- (M) - REFRIGERANT LINE SETS FROM CONDENSING UNITS TO FAN COILS ON LEVEL 1.
- (N) - COVE STYLE WALL HEATERS FOR LIVING UNITS, 1125 W (94" LONG) FOR 1&2 BEDROOM LIVING UNITS. INSTALL AT 90° AFF.

SHAFT DUCT SIZES

| FLOOR | SUPPLY AIR | CFM | RETURN AIR | CFM | UNIT |
|-------|------------|------|------------|------|-------|
| ATTIC | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 5TH | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 4TH | 24 X 16 | 1920 | 24 X 16 | 1920 | RTU-1 |
| 3RD | 24 X 16 | 1440 | 24 X 16 | 1440 | RTU-1 |
| 2ND | 24 X 12 | 960 | 24 X 12 | 960 | RTU-1 |
| 1ST | 24 X 12 | 480 | 24 X 12 | 480 | RTU-1 |

VENTILATION CALCULATIONS:
 DWELLING UNIT >500SQ FT, VENTILATED BY MECHANICAL VENTILATION WITH ERV'S. DWELLING UNIT <500SQ FT, VENTILATED BY MECHANICAL VENTILATION, VIA PTHP (SIZED PER ASHRAE 62.2).
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ELMONICA STATION APARTMENTS BUILDING 1
 SW 170TH AND W BASELINE
 REMBOLD PROPERTIES

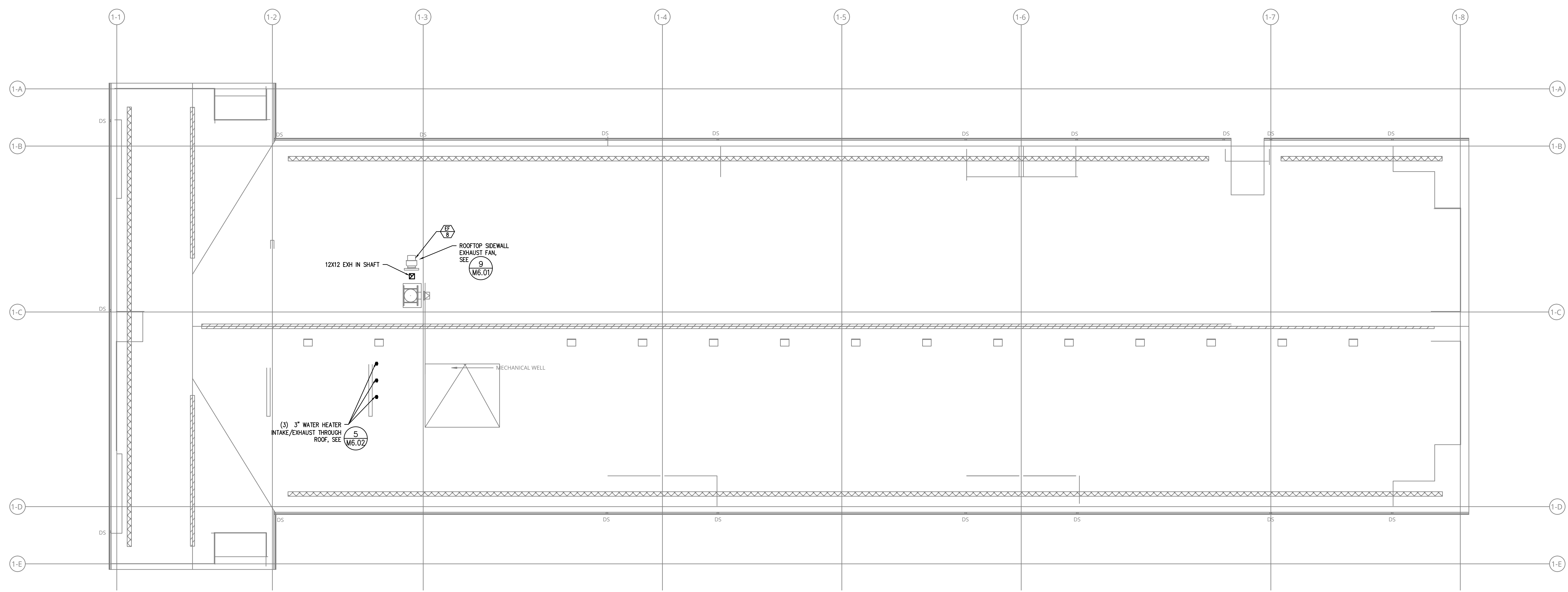
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MECHANICAL PLAN - ATTIC

PERMIT SET

DATE: 09/23/2022 PROJECT NUMBER: 215390

M2.06-1



1 BUILDING 1 - ROOF - MECH PLAN
 M2.07 SCALE: 1/8" = 1'-0"

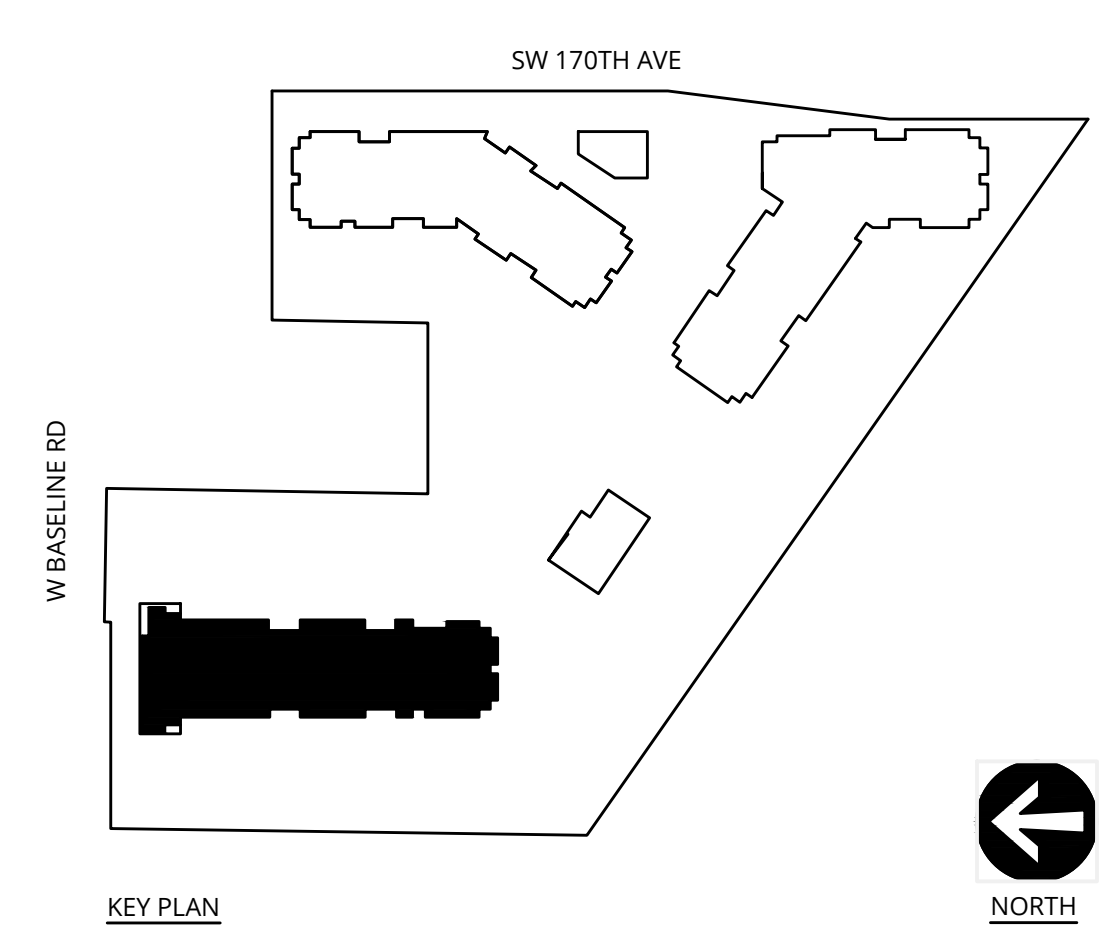
KEY NOTES:

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- (B) - SUPPLY AIR OR RETURN GRILLE, SIZED FOR BOTH FREE AREA AND FOR ACTUATOR ACCESS, SEE 2 FOR GRILLE INSTALLATION, AND SEE 3 FOR TYPICAL F/S INSTALLATION, AND CONTROLS. M6.01
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- (I) - EXTERIOR EXHAUST - SEE 2 MAINTAIN 36" CLEAR TO OPERABLE WINDOWS AND DOORS. M6.01
- (J) - SUPPLY/EXHAUST FOR ERV, CFM AND GRILLE SIZE SEE 9 M6.01
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- (M) - REFRIGERANT LINE SETS FROM CONDENSING UNITS TO FAN COILS ON LEVEL 1.
- (N) - COVE STYLE WALL HEATERS FOR LIVING UNITS, 1125 W (94" LONG) FOR 1&2 BEDROOM LIVING UNITS. INSTALL AT 90° AFF.

SHAFT DUCT SIZES

| FLOOR | SUPPLY AIR | CFM | RETURN AIR | CFM | UNIT |
|-------|------------|------|------------|------|-------|
| ATTIC | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 5TH | 24 X 20 | 2400 | 24 X 20 | 2400 | RTU-1 |
| 4TH | 24 X 16 | 1920 | 24 X 16 | 1920 | RTU-1 |
| 3RD | 24 X 16 | 1440 | 24 X 16 | 1440 | RTU-1 |
| 2ND | 24 X 12 | 960 | 24 X 12 | 960 | RTU-1 |
| 1ST | 24 X 12 | 480 | 24 X 12 | 480 | RTU-1 |

VENTILATION CALCULATIONS:
 DWELLING UNIT >500SQ FT, VENTILATED BY MECHANICAL VENTILATION WITH ERV'S. DWELLING UNIT <500SQ FT, VENTILATED BY MECHANICAL VENTILATION, VIA PTHP (SIZED PER ASHRAE 62.2).
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ELMONICA STATION APARTMENTS BUILDING 1
 SW 170TH AND W BASELINE
 REMBOLD PROPERTIES

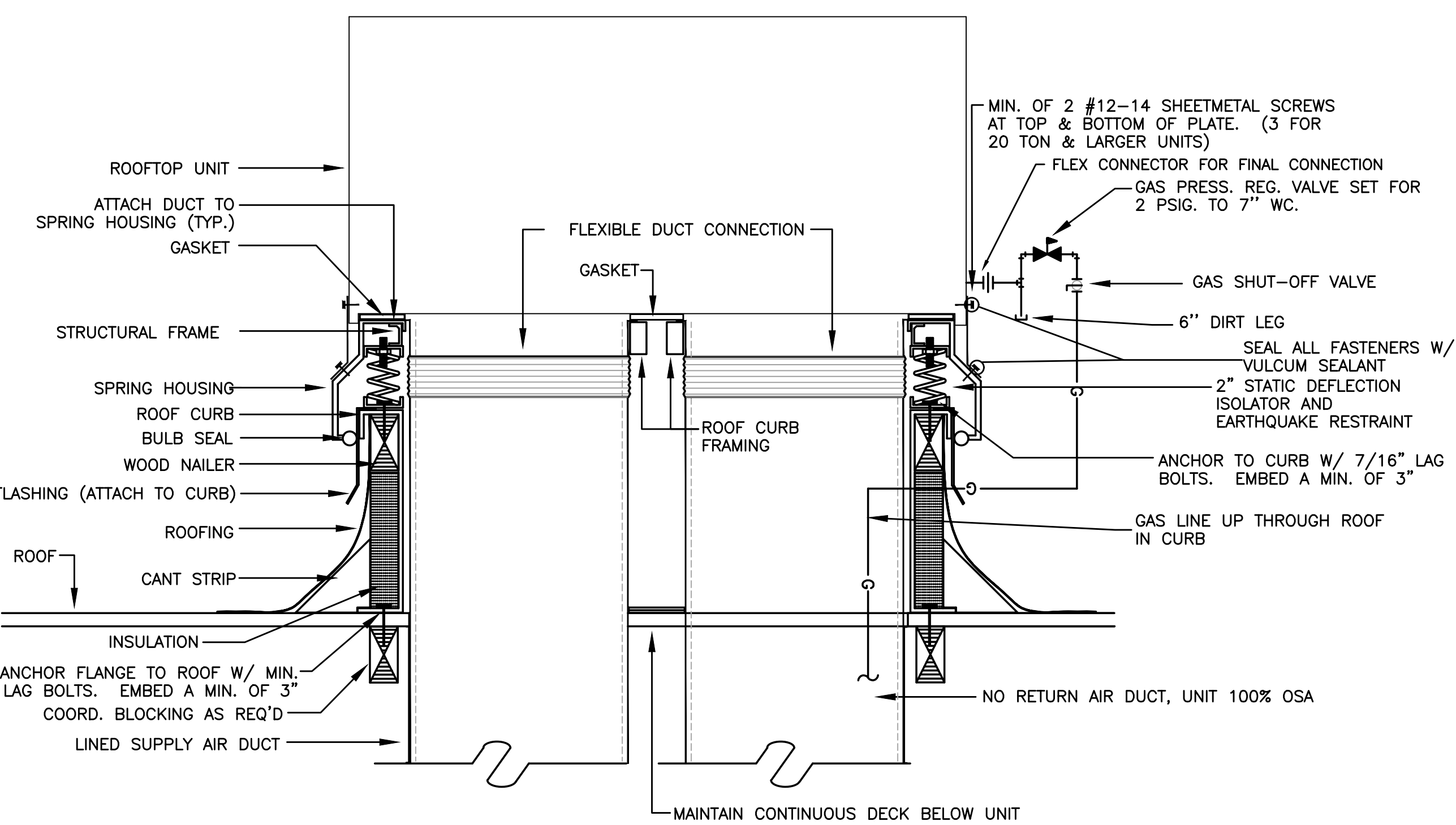
| REVISION | DATE | REASON FOR ISSUE |
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MECHANICAL PLAN - ROOF

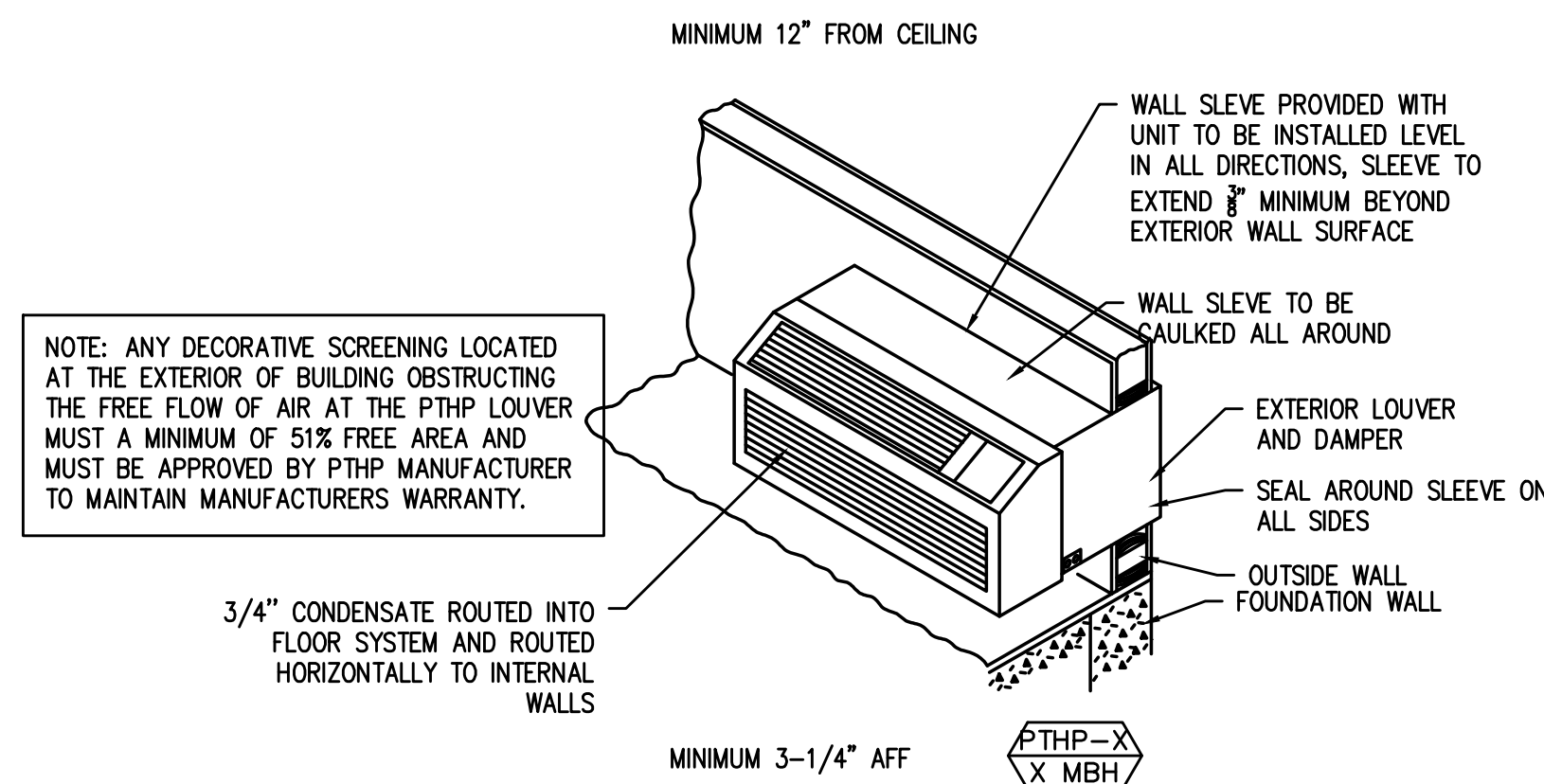
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DATE: 09/23/2022 PROJECT NUMBER: 215390

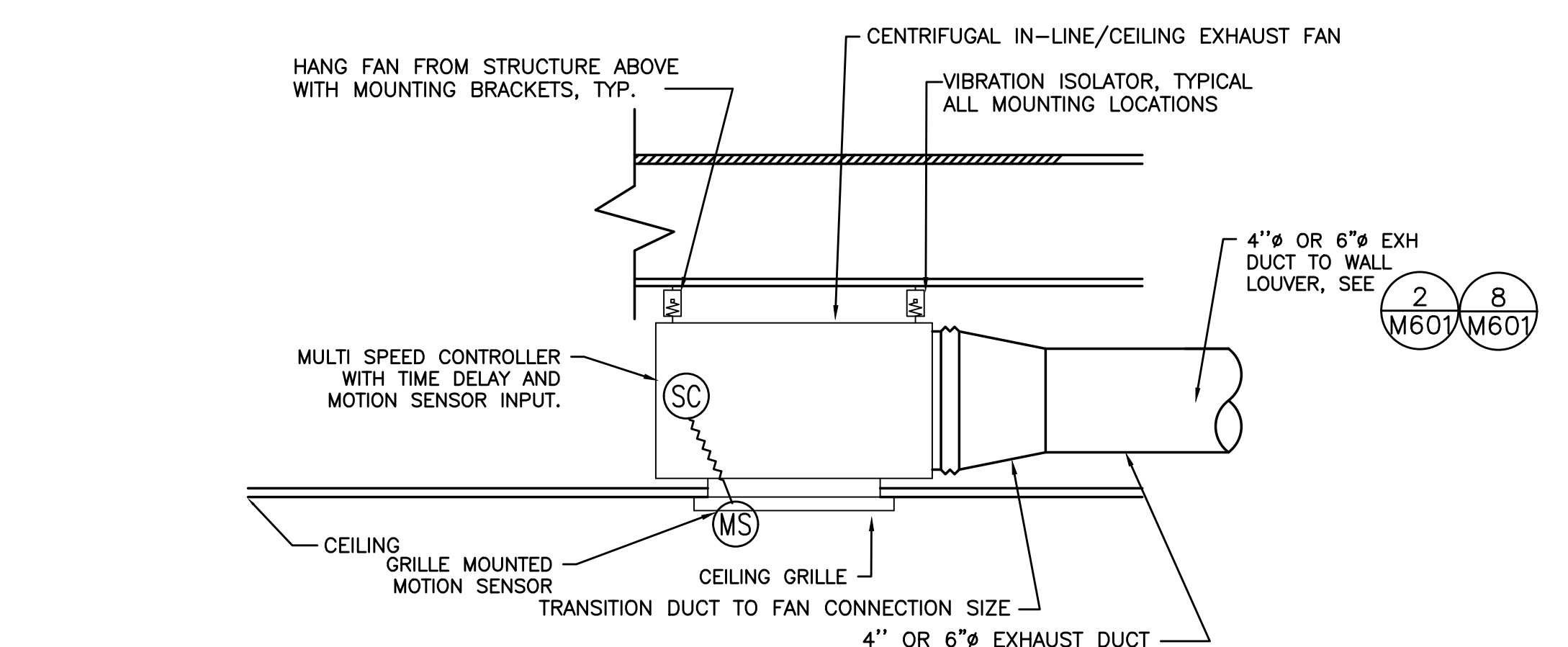
M2.07-1



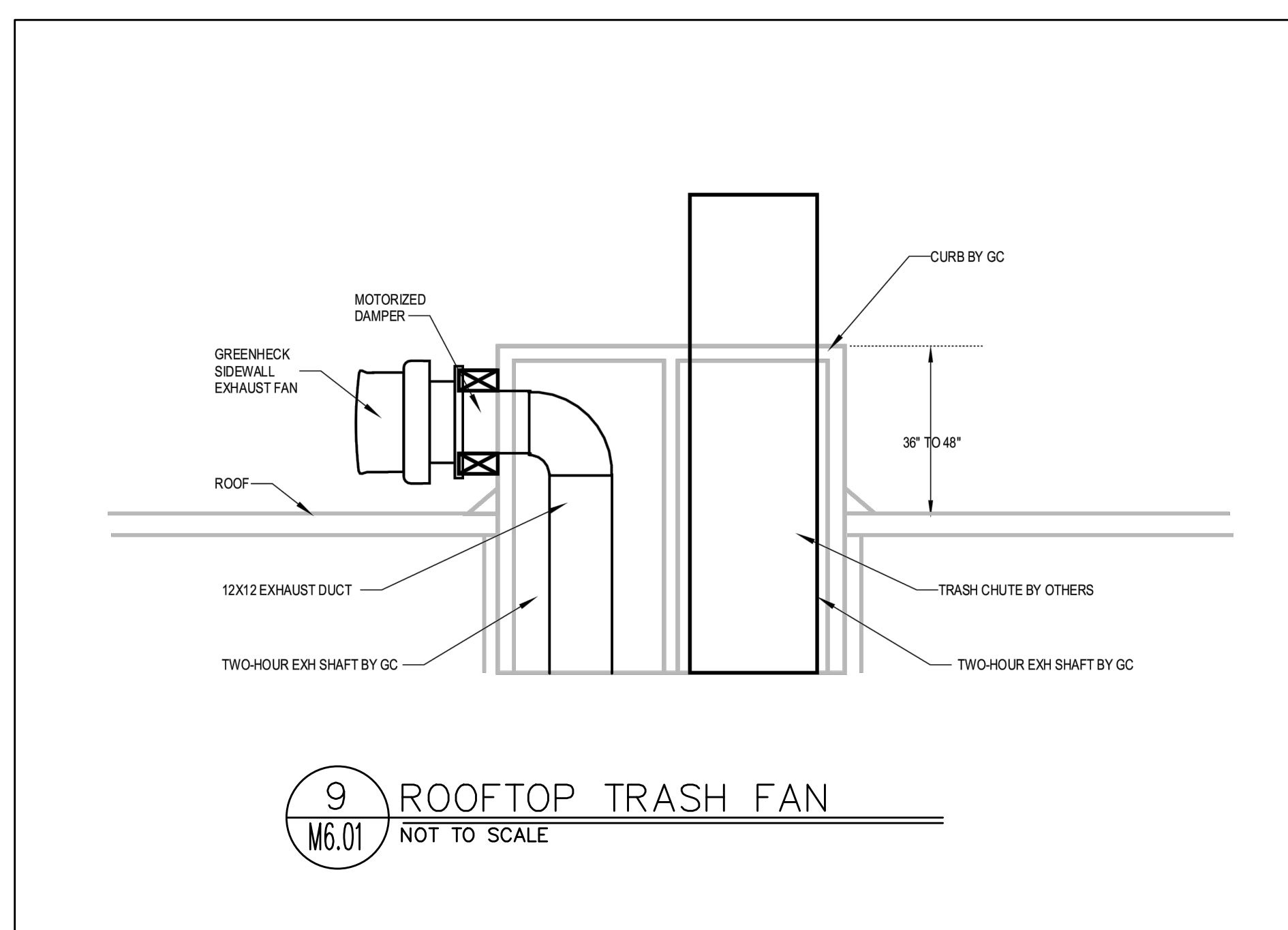
1 ROOF TOP UNIT W/ VIBRATION ISOLATION CURB
SCALE: DETAIL



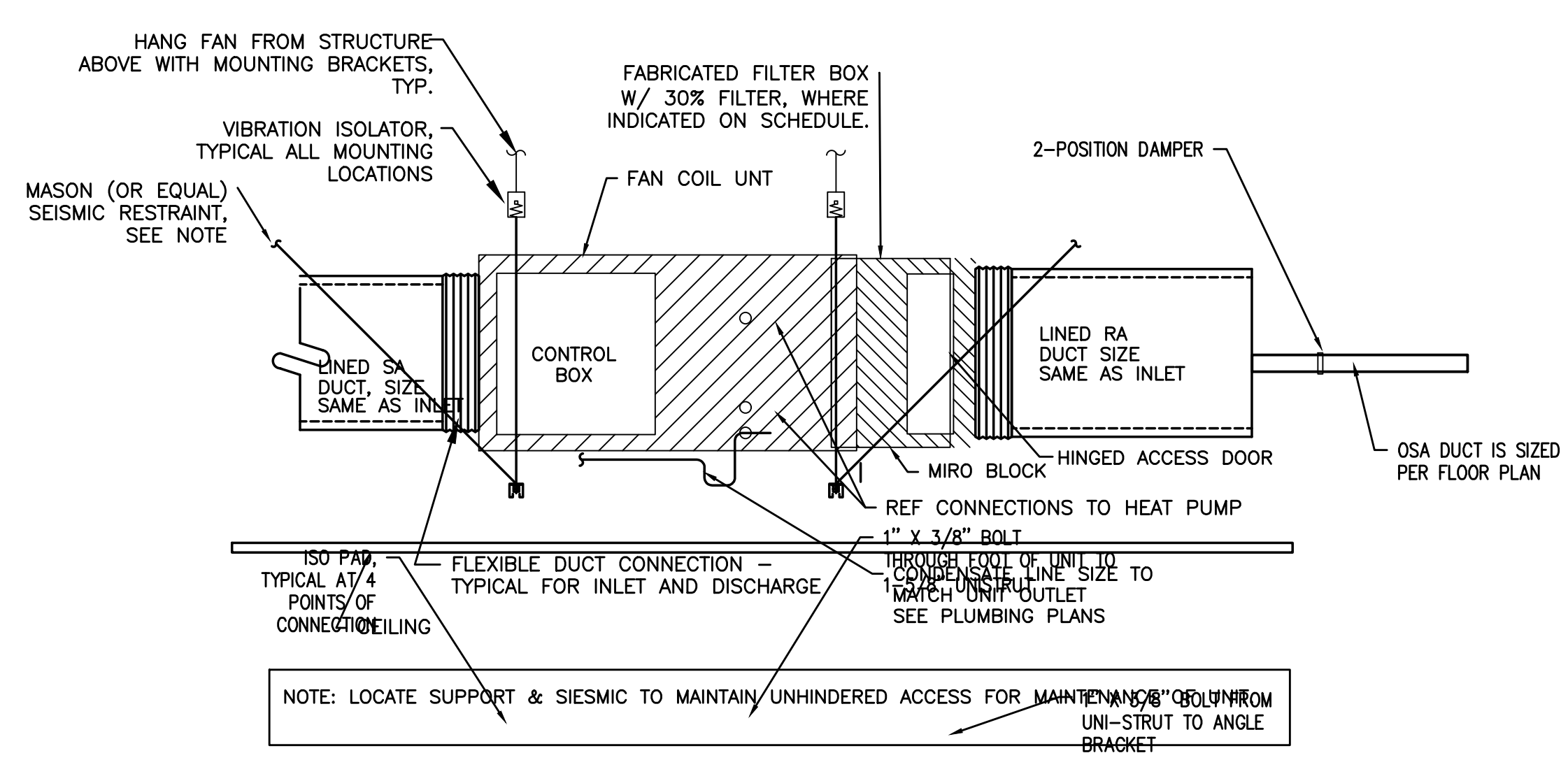
4 TYPICAL PTHP DETAIL
NOT TO SCALE



3 CEILING EXHAUST FAN
SCALE: DETAIL

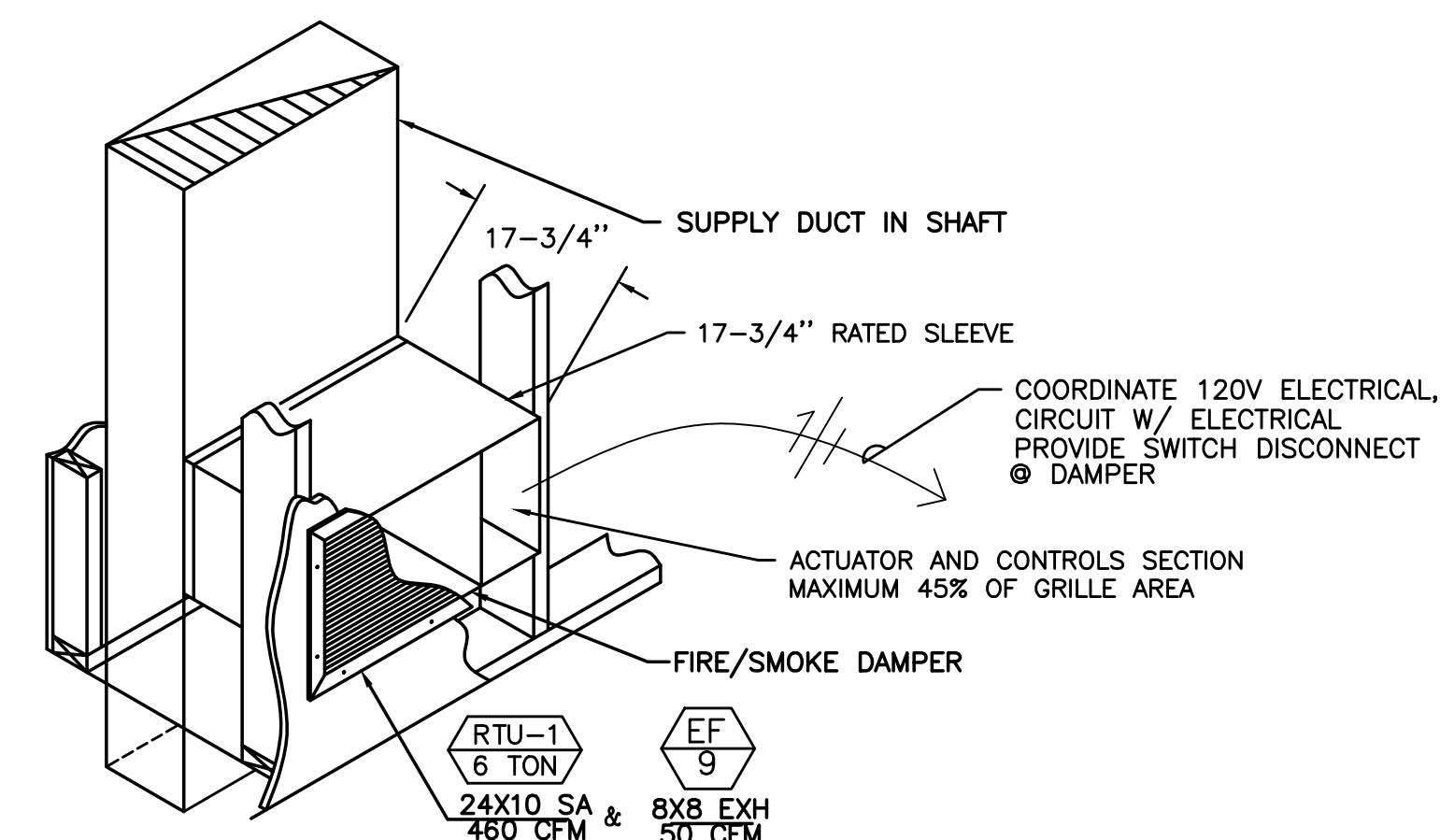


9 ROOFTOP TRASH FAN
NOT TO SCALE

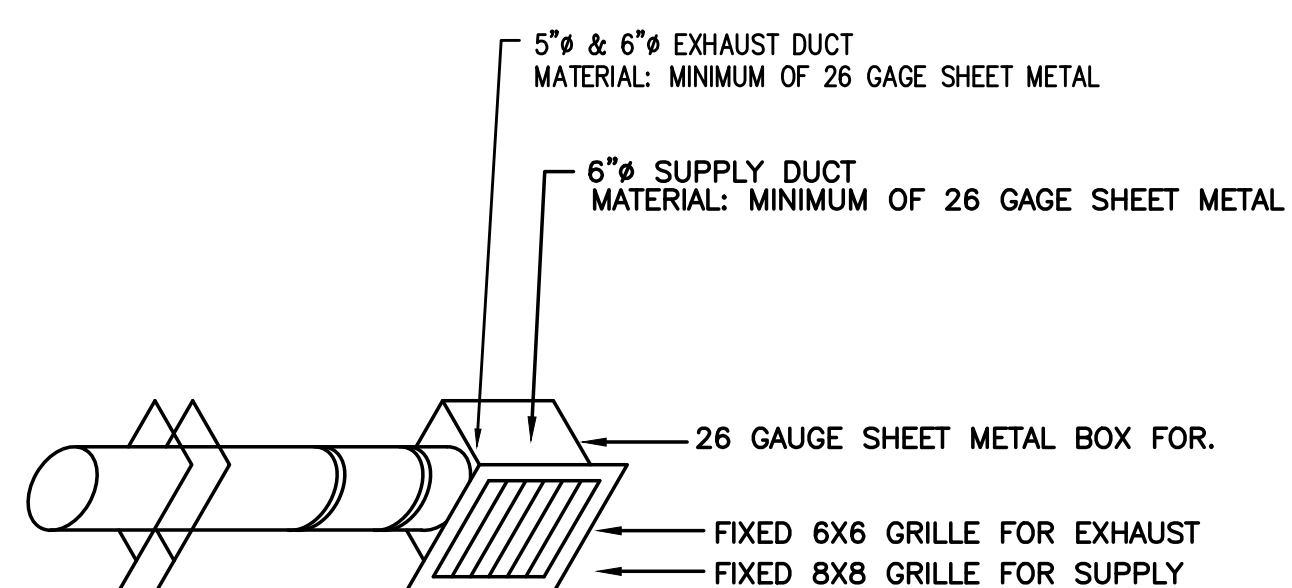


6 DUCTED FAN COIL
SCALE: DETAIL

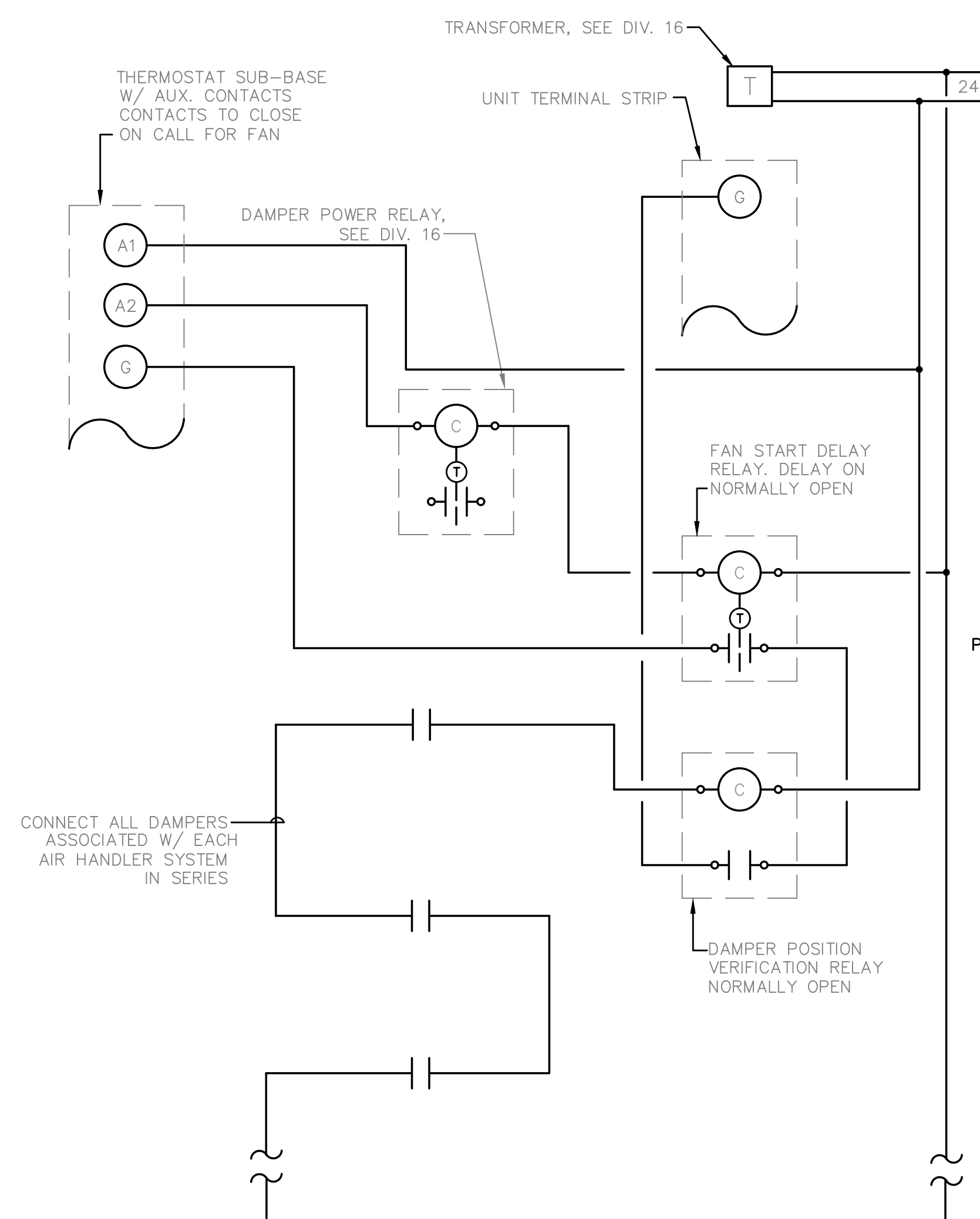
| 2 BATHROOM UNITS | | SUPPLY | | KITCHEN | |
|------------------|--|--------|--|---------|--|
| BATHROOM(S) | | 6\"/> | | | |



7 HIGH SUPPLY W/ FIRE/SMOKE DAMPER
SCALE: DETAIL



9 CEILING SUPPLY/EXHAUST - DWELLING UNITS
NOT TO SCALE



8 FIRE/SMOKE DAMPER W/SMOKE DETECTOR
NOT TO SCALE

ESU-153

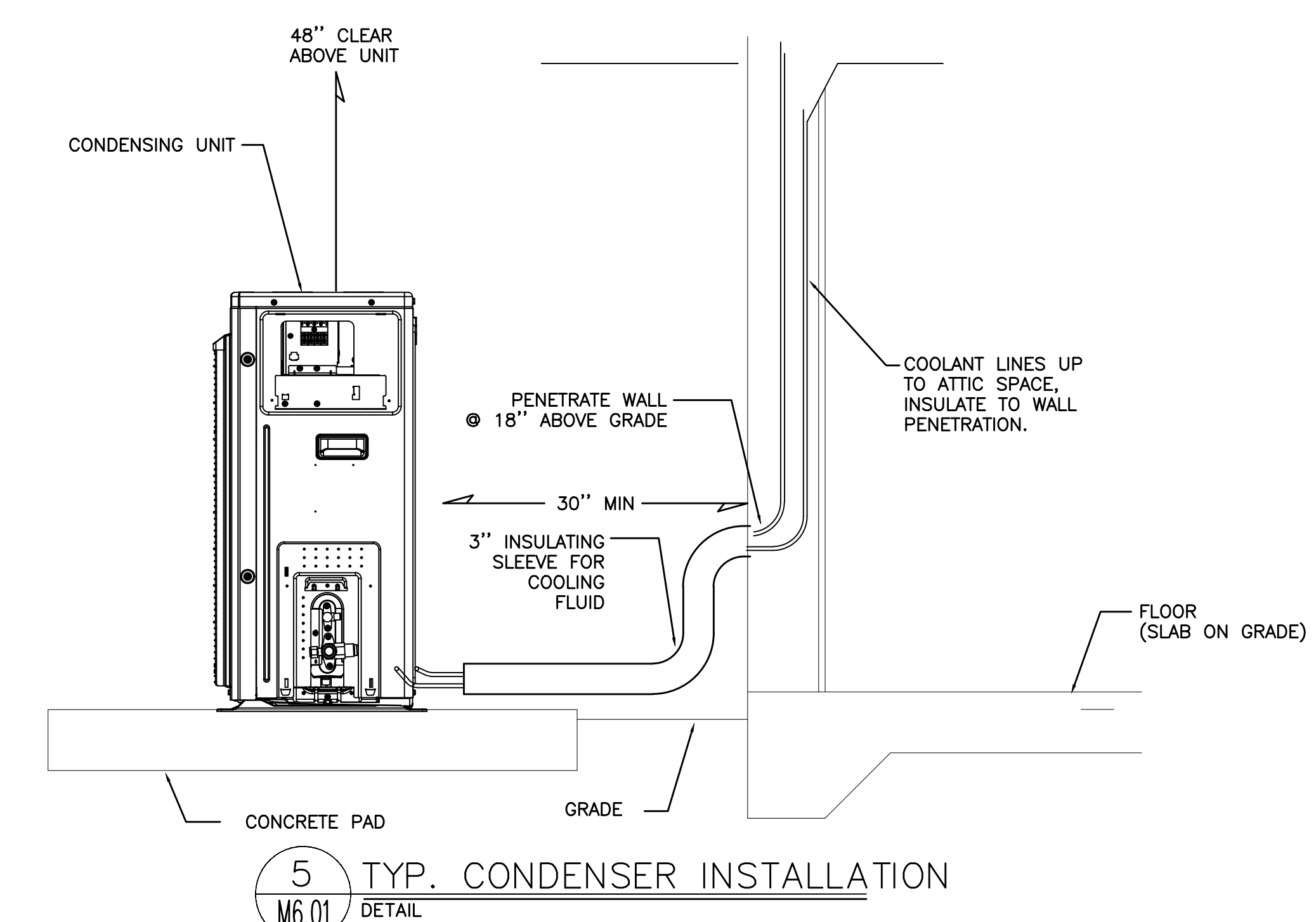
Thinline Louver Thinline Blade

Application and Design
ESU-153 is a thinline stationary louver commonly used for interior or exterior applications where high free area and low airflow resistance is required. The narrow depth makes this product ideal for installation into curtainwalls, windows, or as air conditioning grilles.

Standard Construction
Frame Heavy gauge aluminum, 1 1/2 in. x 0.063 in. nominal wall thickness
Blades Thinline style, heavy gauge aluminum, 0.050 in. nominal wall thickness, positioned at 30° angles on approximately 1/4 in. centers
Construction Mechanically fastened
Birdscreen 3/4 in. x 0.015 flattened expanded aluminum in removable frame, inside mount (not)

Options (at additional cost)
• A variety of bird and insect screens
• Anchor brackets
• Extended sill
• Flanged frame
• Gazing adaptor
• Kyral paint
• Baked enamel paint
• Clear anodize
• Integral color anodize

2 SIDEWALL EXHAUST TERMINATION
NOT TO SCALE



5 TYP. CONDENSER INSTALLATION
DETAIL

ACCESS AND IDENTIFICATION:
ACCESS POINTS SHALL BE PERMANENTLY IDENTIFIED ON THE EXTERIOR BY A LABEL HAVING LETTERS NOT LESS THAN 1/2" IN HEIGHT AND READING: "SMOKE DAMPER" OR "FIRE DAMPER".

NOTE:
PROVIDE ALL REQUIRED CONTROL WIRING TO ACCOMPLISH:
FIRE/SMOKE DAMPER - FIRE/SMOKE DETECTOR FOR OPERATION OF LOCAL FIRE/SMOKE DAMPER ONLY, COORDINATE WITH DIV. 16
EXHAUST DUCTS/FANS - FIRE/SMOKE DAMPER TO CLOSE UPON SHUTDOWN OF ASSOCIATED EXHAUST FAN.
SUPPLY OR RETURN DUCTS/FANS - FIRE/SMOKE DAMPER TO CLOSE UPON SHUTDOWN OF ASSOCIATED AIR HANDLING UNIT.

GENERAL NOTES:
PROVIDE ACCESS IN CEILING OR WALL FOR DAMPER AND SMOKE DETECTOR
SEE ELECTRICAL DRAWINGS FOR WIRING INSTALLATION SW 170TH AVE

06-07-22
54,607
DATE 11, 2006
EXPIRES: 3/16/23

38 NORTHWEST DAVIS, SUITE 300
PORTLAND, OR 97209
T 503.245.7100

1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
T 206.376.1600

1014 HOWARD STREET
SAN FRANCISCO, CA 94103
T 415.252.7063
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Consulting Engineers
3007 3rd Ave. S.W.
Portland, OR 97214
PH: (503) 234-0548
FAX: (503) 234-0077
INC. WWW.JACOBS-ENG.COM
CONTACT: MATT AUBRY

ELMONICA STATION APARTMENTS BUILDING 1
SW 170TH AND W BASELINE

REMBOLD PROPERTIES

| REVISION | DATE | REASON FOR ISSUE |
|----------|------|------------------|
| | | |
| | | |
| | | |

MECHANICAL DETAILS

PERMIT SET

DATE: 09/23/2022 PROJECT NUMBER: 215390

M6.01-1

