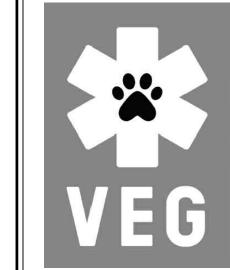


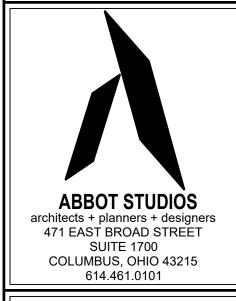
MECHANICAL GENERAL NOTES:

- MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL POWER AND VOLTAGE
- 2. THE MECHANICAL CONTRACTOR SHALL ACCURATELY COORDINATE THE SIZES AND LOCATION OF ALL DUCTWORK, PIPING AND EQUIPMENT WITH THE LOCATION OF LIGHTING FIXTURES, STRUCTURAL MEMBERS AND WORK OF ALL OTHER TRADES TO PREVENT CONFLICT. DUCTWORK CONFLICTING WITH LIGHTING FIXTURE LOCATIONS SHALL BE MOVED AT THIS CONTRACTOR'S EXPENSE.
- 3. ALL DUCTWORK DIMENSIONS NOTED ON PLAN REFERS TO THE CLEAR INSIDE OPENING REQUIRED.
- 4. ALL WALL, FLOOR AND ROOF CUTTING, PATCHING AND FLASHING REQUIRED TO INSTALL THE MECHANICAL SYSTEMS SHALL BE MADE BY THE MECHANICAL CONTRACTOR. ALL PATCHING IN RATED ASSEMBLIES TO MAINTAIN REQUIRED RATED SEPARATION.
- 5. HANGERS, ANCHORS AND SUPPORTS SHALL SUPPORT THE PIPING AND THE CONTENT OF THE PIPING. HANGERS AND STRAPPING MATERIALS SHALL BE OF APPROVED MATERIALS THAT WILL NOT PROMOTE
- 6. FLEXIBLE AIR DUCT SHALL BE TESTED IN ACCORDANCE WITH UL 181. FLEXIBLE DUCT SHALL NOT EXCEED 5
- 7. ALL DUCTWORK JOINTS SHALL BE SECURELY FASTENED AND SEALED WITH MASTICS.
- 8. DUCTWORK SHALL BE SUPPORTED AT MAXIMUM 8 FEET ON CENTERS.
- 9. REGISTERS, GRILLES AND DIFFUSERS SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MECHANICAL CONTRACTOR TO FURNISH AND INSTALL BALANCING DAMPERS AT BOTH THE DIFFUSER AND AT THE BRANCH DUCT.
- 10. DUCT INSULATION SHALL HAVE FLAME INDEX OF 25 OR LESS AND SMOKE INDEX OF 50 OR LESS. EXTERNAL DUCT INSULATION FACTORY INSULATED FLEXIBLE DUCT SHALL HAVE IDENTIFIED THE MANUFACTURER, R-VALUE, FLAME AND SMOKE INDEX.
- 11. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE, THE MECHANICAL CONTRACTOR SHALL INCLUDE ALL NEEDED OFFSETS, CHANGES IN DIRECTION, TRANSITIONS, ETC. NEEDED FOR COMPLETE AND OPERATIONAL
- 12. PERFORM ALL WORK IN ACCORDANCE WITH THE, RULES & REGULATIONS OF THE APPROPRIATE STATE AND LOCAL BUILDING CODES AND SUBTITLES.
- 13. QUESTIONS REGARDING THESE DRAWINGS SHALL BE ADDRESSED TO THE ENGINEER PRIOR TO THE AWARDING OF THE CONTRACT. OTHERWISE THE ENGINEER'S INTERPRETATION OF THE MEANING AND INTENT OF THE DRAWINGS SHALL BE FINAL.
- 14. MECHANICAL CONTRACTOR TO PROVIDE TO THE OWNER A (1) ONE YEAR SERVICE PLAN SEPARATE FROM THE (1) ONE YEAR EQUIPMENT WARRANTY, ON ALL MECHANICAL HVAC EQUIPMENT; TO INCLUDE FURNACES,
- 15. MECHANICAL CONTRACTOR TO ENSURE A MINIMUM OF 10' CLEARANCE BETWEEN FRESH AIR INTAKES AND EXHAUST VENTS, PLUMBING VENTS AND GAS FLUES.

MECHANICAL CODED NOTES:

- (1) MC TO EXTEND NEW SUPPLY AIR DUCTWORK AND CONNECT INTO EXISTING SUPPLY AIR DROP FROM LANDLORD PROVIDED UNIT. VERIFY EXACT LOCATION IN FIELD.
- (2) MC TO EXTEND NEW RETURN AIR DUCTWORK AND CONNECT INTO EXISTING RETURN AIR DROP FROM LANDLORD PROVIDED UNIT. VERIFY EXACT LOCATION IN FIELD.
- (3) EXISTING THERMOSTAT TO BE DISCONNECTED AND RELOCATED TO LOCATION SHOWN. IF EXISTING CONTROL WIRING IS FOUND TO BE DEFECTIVE OR INSUFFICIENT IN LENGTH, MECHANICAL CONTRACTOR TO PROVIDE NEW. VERIFY EXACT LOCATION OF EXISTING THERMOSTAT IN FIELD PRIOR TO START OF WORK.
- (4) GENERAL CONTRACTOR UNDERCUT DOOR 1".
- (5) ALL DUCTWORK AND DIFFUSERS THAT ARE CONFORMED TO BE PENETRATING SHIELDING PROTECTION FOR X-RAY ROOM SHALL BE PROVIDED WITH ADEQUATE MEANS OF PROTECTION PER REQUIREMENTS LISTED IN SHIELDING REPORT FOR THE ROOM, PROVIDED BY THE OWNER.
- (6) 6"Ø EXHAUST DUCT EXTENDING UP THRU ROOF IN PRE-FAB INSULATED ROOF CURB TO EXHAUST CAP. FINAL EXHAUST CAP LOCATION SHALL PROVIDE MINIMUM 10'-0" CLEARANCE FROM ALL FRESH AIR INTAKES.
- (7) MECHANICAL CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR FOR ALL ROOF AND WALL PENETRATIONS PRIOR TO INSTALLATION EQUIPMENT. SEAL ALL WALL AND ROOF PENETRATIONS AIR AND
- (8) MANUAL BALANCING DAMPER BY MECHANICAL CONTRACTOR (TYPICAL).
- (9) INSULATED FLEXIBLE DUCT MAXIMUM LENGTH OF 5'-0" (TYPICAL).
- (10) MECHANICAL CONTRACTOR TO ROUGH IN 4" DIAMETER SMOOTH INTERIOR FINISH ALUMINUM (MINIMUM .016" THICK) DRYER VENT FROM DRYER CONNECTION UP THROUGH WALL. DRYER VENT TO BE SUPPORTED AT 4' INTERVALS AND SECURED IN PLACE. DUCTS SHALL NOT BE JOINED WITH SCREWS OR SIMILAR FASTENERS THAT PROTRUDE INTO THE INSIDE OF THE DUCT. NOTE: MAXIMUM VERTICAL AND HORIZONTAL LENGTH SHALL NOT EXCEED 14' EQUIVALENT LENGTH, INCLUDING (2) 90° ELBOWS, 4" DIAMETER ALUMINUM DRYER VENT THRU ROOF WITH ROOF CAP. SEAL ROOF OPENING WEATHER TIGHT. NOTE: MAINTAIN MINIMUM 10 FEET FROM ANY INTAKES. PROVIDE TWO FANTECH DBLT-4 OR EQUAL LINT TRAPS. PROVIDE FANTECH DEDPV FAN TO ACCOMMODATE LINT TRAP. 120V/1PH. COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR INTERLOCKING WITH DRYER OPERATION OR PROVIDING PRESSURE SENSOR TO CONTROL FAN.
- (11) THE MECHANICAL CONTRACTOR TO FURNISH AND INSTALL DUCT MOUNTED SMOKE DETECTOR IN RETURN AIR DUCT OF THE EXISTING LANDLORD PROVIDED ROOFTOP UNITS (RTU-1, 12 & 13). THE EC TO FURNISH AND INSTALL ALL CONTROL WIRING AS REQUIRED TO INTERFACE SMOKE DETECTOR WITH HVAC UNIT AND ALARM SYSTEM. THE EC TO FURNISH AND INSTALL ALL POWER WIRING NEEDED. EC MAKE ALL FINAL CONTROL WIRING CONNECTIONS FOR A COMPLETE AND OPERABLE SYSTEM.
- (12) 10x8 EXHAUST DUCT UP THROUGH ROOF IN PRE-FABRICATED ROOF CURB TO EXHAUST FAN (EF-1, EF-2 & EF-3). TRANSITION AS NECESSARY TO MAKE CONNECTIONS TO FAN.
- (13) 6"Ø EXHAUST DUCT EXTENDING UP THRU 1 HR RATED SHAFT THRU ROOF IN PRE-FAB INSULATED ROOF CURB TO EXHAUST CAP. FINAL EXHAUST CAP LOCATION SHALL PROVIDE MINIMUM 10'-0" CLEARANCE FROM ALL FRESH AIR INTAKES.
- (14) INLINE EXHAUST FAN (EF-7) MOUNTED IN EXHAUST DUCT SERVING MEDICAL GAS ROOM. MOUNT WITH BRACKET PER MANUFACTURER'S RECOMMENDATIONS. EXTEND DUCT DOWN TO 12" A.F.F. AND LEAVE OPEN
- 15) THERMOSTAT TO BE MOUNTED ON WALL AT 48" AFF.
- (16) UNIT TO BE MOUNTED ON ROOF BASE RAILS BASED ON PATE. ENSURE UNITS ARE LEVEL AND SECURE.
- (17) EXTEND NEW REFRIGERANT SUCTION AND LIQUID PIPING FROM NEW HEAT PUMP UNIT ON ROOF (HP-1 & 2) TO NEW WALL CASSETTE (FC-1 & 2). PROVIDE PATE BOOT OR APPROVED EQUAL PIPE ROOF PENETRATION CURB ASSEMBLY. REFER TO DETAIL ON SHEET M2.01 FOR ADDITIONAL INFO. SIZE AND INSTALL PIPING PER MANUFACTURER'S RECOMMENDATION. INSULATE PIPING WITH 1" BLACK ARMAFLEX INSULATION.
- (18) WALL MOUNTED FAN COIL UNIT, MC TO INSTALL PER MANUFACTURER'S RECOMMENDATION AND GUIDELINES. ROUTE 1" CONDENSATE TO NEAREST FLOOR DRAIN AND TERMINATE W/ 2" AIR GAP. VERIFY EXACT LOCATION IN FIELD. IF NOT FLOOR DRAIN IS AVAILABLE, PROVIDE CONDENSATE PUMP AND DISCHARGE AT MOP SINK.
- (19) TRANSFER AIR DUCT (SIZE AS NOTED) COMPLETE WITH 1" THICK ACOUSTIC LINING.
- (20) INSTALL 1 HR RATED FIRE DAMPER WITH ACCESS DOOR AT DUCT PENETRATION OF 1 HR RATED ASSEMBLY. SEE DETAIL ON M2.01.
- (21) EXISTING LANDLORD PROVIDED RTU TO REMAIN AND BE REUSED. BALANCE TO SUPPLY AND OUTSIDE AIR QUANTITY SHOWN ON PLAN.
- (22) NEW DUCT HEATER TO BE MOUNTED IN SUPPLY DUCT OF RTU-12(E). DUCT HEATER IS TO SERVE AS A REHEAT COIL FOR ENHANCED DEHUMIDIFICATION CONTROL. DUCT HEATER TO BE WIRED AND CONTROLLED WITH T'STAT SERVING THIS RTU.
- (23) INSTALL CEILING RADATION DAMPER AT DIFFUSER IN FIRE RATED CEILING. SEE DETAIL ON SHEET M2.01.





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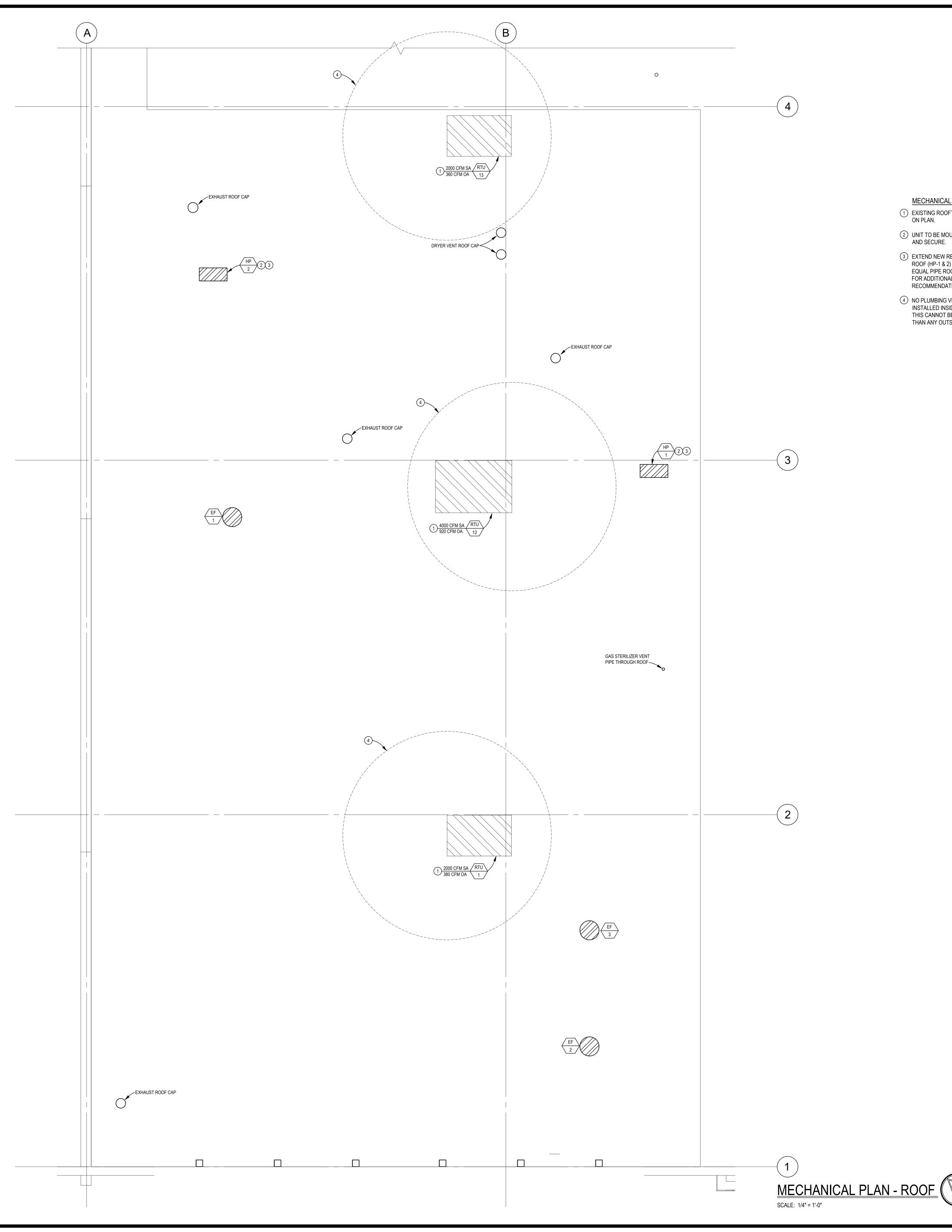
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4049-24-004

SHEET

M1.00

SEE ARCHITECTURAL DETAILS FOR EXACT LOCATIONS AND DIMENSIONS OF EQUIPMENT, FIXTURES, OPENINGS AND OUTLETS. COMMUNICATE





- EXISTING ROOFTOP UNIT TO REMAIN AND BE REUSED. BALANCE TO OUTSIDE AIR SHOWN ON PLAN.
- 2 UNIT TO BE MOUNTED ON ROOF BASE RAILS BASED ON PATE. ENSURE UNITS ARE LEVEL AND SECURE.
- 3 EXTEND NEW REFRIGERANT SUCTION AND LIQUID PIPING FROM NEW HEAT PUMP UNIT ON ROOF (HP-1 & 2) TO NEW WALL CASSETTE (FC-1 & 2). PROVIDE PATE OR APPROVED EQUAL PIPE ROOF PENETRATION CURB ASSEMBLY. REFER TO DETAIL ON SHEET M2.01 FOR ADDITIONAL INFO. SIZE AND INSTALL PIPING PER MANUFACTURER'S RECOMMENDATION. INSULATE PIPING WITH 1" BLACK ARMAFLEX INSULATION.
- 4 NO PLUMBING VENTS, WATER HEATER FLUES, EXHAUST OUTLETS, ETC. ARE TO BE INSTALLED INSIDE OF 10'-0" RADIUS OUTSIDE AIR HOOD CLEARANCE CIRCLES SHOWN. IF THIS CANNOT BE OBTAINED THEN THE VENTS, FLUES OR OUTLETS SHALL BE 3'-0" HIGHER THAN ANY OUTSIDE AIR OPENING WITHIN THE 10'-0" RADIUS.





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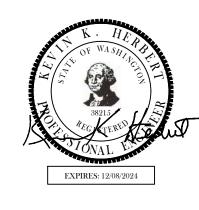
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4049-24-004 SHEET

M1.01

| | | | | | <u>VENTIL</u> | <u>ATION A</u> IF | REQUIRE | MENT | | | | |
|-----------|-----------------------|------------------------------------|------|---|---|---|---|--|---|---|---|---|
| HVAC UNIT | ZONE DESCRIPTION | ZONE FLOOR AREA (SQ. FT.) Az | RATE | PEOPLE OUTDOOR AIR RATE (CFM/PERSON) Rp | ZONE POPULATION (# OF PEOPLE) Pz | BREATHING ZONE OUTDOOR AIR FLOW (CFM) Vbz | ZONE AIR DISTRIBUTION EFFECTIVENESS Ez | ZONE OUTDOOR AIR FLOW (CFM) Voz | SYSTEM VENTILATION EFFICIENCY Ev | MINIMUM OUTDOOR AIR INTAKE FLOW (CFM) Vot | DESIGN OUTDOOR AIR INTAKE FLOW (CFM) | REMARKS |
| RTU-12 | 101 - Treatment | 2497 | 0.18 | 7.5 | 20 | 599.46 | 0.8 | 749.325 | 1 | 749.325 | 776 | |
| RTU-12 | 102 - Lab/Pharmacy | 190 | 0.18 | 7.5 | 2 | 49.2 | 0.8 | 61.5 | 1 | 61.5 | 69 | |
| RTU-12 | 103 - Pack/Prep | 128 | 0.18 | 7.5 | 4 | 53.04 | 0.8 | 66.3 | 1 | 66.3 | 75 | |
| TOTALS | | 2815 | | | 26 | 701.7 | | 877.125 | | 877.125 | 920 | |
| RTU-13 | 100 - Vestibule | 70 | 0.06 | 0 | 0 | 4.2 | 0.8 | 5.25 | 1 | 5.25 | 29 | |
| RTU-13 | 104 - Isolation | 124 | 0.18 | 7.5 | 2 | 37.32 | 0.8 | 46.65 | 1 | 46.65 | 48 | |
| RTU-13 | 105 - Quite Ward | 99 | 0.18 | 7.5 | 2 | 32.82 | 0.8 | 41.025 | 1 | 41.025 | 42 | |
| RTU-13 | 106 - X-Ray | 80 | 0.06 | 5 | 1 | 9.8 | 0.8 | 12.25 | 1 | 12.25 | 33 | |
| RTU-13 | 107 - Surgery | 159 | 0.18 | 7.5 | 3 | 51.12 | 0.8 | 63.9 | 1 | 63.9 | 76 | |
| RTU-13 | 108 - Restroom | 77 | 0 | 0 | 0 | 70cfm/fixture | 0.8 | 70cfm/fixture | 1 | 70cfm/fixture | 10 | Quantities shown are for exha 70 cfm |
| RTU-13 | 109 - Exam #1 | 94 | 0.06 | 5 | 2 | 15.64 | 0.8 | 19.55 | 1 | 19.55 | 33 | |
| RTU-13 | 110 - Exam #2 | 94 | 0.06 | 5 | 2 | 15.64 | 0.8 | 19.55 | 1 | 19.55 | 33 | |
| RTU-13 | 111 - Exam #3 | 94 | 0.12 | 7.5 | 2 | 26.28 | 0.8 | 32.85 | 1 | 32.85 | 38 | |
| RTU-13 | 112 - Exam #4/RAD | 99 | 0.12 | 7.5 | 2 | 26.88 | 0.8 | 33.6 | 1 | 33.6 | 38 | |
| TOTALS | | 990 | | | 16 | 219.7 | | 274.625 | | 274.625 | 380 | |
| RTU-1 | 113 - Exam #5/EUTH. | 115 | 0.12 | 7.5 | 2 | 28.8 | 0.8 | 36 | 1 | 36 | 36 | |
| RTU-1 | 114 - Small Mtg. Room | 118 | 0.06 | 5 | 4 | 27.08 | 0.8 | 33.85 | 1 | 33.85 | 36 | |
| RTU-1 | 115 - Restroom | 97 | 0 | 0 | 0 | 70cfm/fixture | 0.8 | 70cfm/fixture | 1 | 70cfm/fixture | 10 | Quantities shown are for exha 70 cfm |
| RTU-1 | 116 - Storage/Utility | 611 | 0.06 | 5 | 2 | 46.66 | 0.8 | 58.325 | 1 | 58.325 | 108 | |
| RTU-1 | 117 - Staff Breakroom | 397 | 0.06 | 5 | 8 | 63.82 | 0.8 | 79.775 | 1 | 79.775 | 108 | |
| RTU-1 | 119 - Med Gas | 88 | 0.06 | 5 | 0 | 5.28 | 0.8 | 6.6 | 1 | 6.6 | 14 | |
| RTU-1 | 120 - Hall | 345 | 0.06 | 5 | 0 | 20.7 | 0.8 | 25.875 | 1 | 25.875 | 48 | |
| TOTALS | | 1771 | | | 16 | 192.34 | | 240.425 | | 240.425 | 360 | |

ASHRAE 62.1-2010 ITEM 6.2.2.1 BREATHING ZONE OUTDOOR AIR FLOW (CFM) VBz = RpPz+RaAz x 1.00

WHERE: Az = ZONE FLOOR AREA Pz = POPULATION Rp = TABLE 6.1 OUTDOOR AIR PER PERSON Ra = TABLE 6.1 OUTDOOR AIR PER AREA

| | DUCTW | ORK SCH | <u>EDULE</u> | |
|---|-----------------------------|-------------------------|-----------------------|-----------------|
| DUCT SYSTEM | SMACNA PRESSURE CLASS | SMACNA SEAL CLASS | DUCT MATERIAL | INSULATION |
| CONCEALED SUPPLY AIR DUCTWORK | 2" W.C. | А | GALVANIZED STEEL | 2" DUCT WRAP |
| RETURN AIR DUCTWORK | 1" W.C. | А | GALVANIZED STEEL | 1" DUCT LINER |
| EXHAUST AIR DUCTWORK | 1" W.C. | А | GALVANIZED STEEL | NONE |
| NOTE: 1. ALL DUCTWORK SIZES 2. ALL DUCTWORK ROUT WITH A MINIMUM R-8 [| TED IN ATTIC SPA | | THERMAL ENVELOPE) SHA | LL BE INSULATED |

| <u>ISOL</u> | ATION ROOM 104 VENTILATION (ASHRAE 170) |
|--------------|--|
| REQUIREMENT: | -2 ACH OF OUTSIDE AIR FLOW -12 ACH OF TOTAL AIR FLOW |
| ROOM VOLUME: | 124 SF x 9 FEET = 1,116 FT ³ |
| OUTSIDE AIR: | $2 \text{ ACH} = \frac{(2) (1116)}{60} = 37 \text{ CFM OA REQUIRED}$ |
| _ | ► 48 CFM PROVIDED OF OA |
| TOTAL AIR: | 12 ACH = $\frac{(12)(1116)}{60}$ = 223 CFM OA REQUIRED |
| _ | ➤ 250 CFM PROVIDED |

| | <u>MECHANI</u> | CAL LEGEND | |
|--------|-----------------------|--------------|--|
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
| SA | SUPPLY AIR | EC | ELECTRICAL CONTRACTOR |
| EA | EXHAUST AIR | PC | PLUMBING CONTRACTOR |
| CD | CEILING DIFFUSER | EF | EXHAUST FAN |
| OA | OUTSIDE AIR | FC | FAN COIL UNIT |
| RA | RETURN AIR | HP | HEAT PUMP UNIT |
| RG | RETURN GRILLE | | FLEXIBLE DUCT (5'-0" MAX. LENGTH) |
| RTU | ROOFTOP UNIT | | FLEXIBLE DUCT CONNECTOR |
| MC | MECHANICAL CONTRACTOR | ==== | DUCT W/ INTERNAL LINING |
| GC | GENERAL CONTRACTOR | | MANUAL VOLUME DAMPER |
| T | THERMOSTAT | <u>I—-RI</u> | CHANGE IN ELEVATION RISE (R) OR DROP (D) |
| TOD | TOP OF DUCT | | ELBOW W/ DBL THICKNESS TURNING VANES |
| BOD | BOTTOM OF DUCT | | FRESH/RETURN/EXHAUST AIR DUCT |
| (TYP) | TYPICAL | \boxtimes | SUPPLY AIR DUCT |
| EDH | ELECTRIC DUCT HEATER | | UNDERCUT DOOR |

| | AIR BALANCE SCHEDULE | | | | | | | | | |
|-----------|----------------------|-------------|-----------------------------|-------|--|--|--|--|--|--|
| HVAC UNIT | OUTSIDE AIR | EXHAUST AIR | POSITIVE OR NEGATIVE CFM | NOTES | | | | | | |
| RTU-1 | 380 | - | +380 CFM | - | | | | | | |
| RTU-12 | 920 | - | +920 CFM | - | | | | | | |
| RTU-13 | 360 | | +360 CFM | - | | | | | | |
| EF-1 | - | 260 | -195 CFM | - | | | | | | |
| EF-2 | - | 475 | -350 CFM | - | | | | | | |
| EF-3 | - | 300 | -275 CFM | - | | | | | | |
| EF-4 | - | 70 | -70 CFM | - | | | | | | |
| EF-5 | - | 70 | -70 CFM | - | | | | | | |
| EF-6 | - | 50 | -50 CFM | - | | | | | | |
| EF-7 | - | 100 | -100 CFM | - | | | | | | |
| TOTAL | +1660 | -1325 | POS (+335 CFM) | | | | | | | |

| TAG | MANUFACTURER | NOMINAL | CFM | ESP | OUTDOOR | | COOLING | CAPACITY | , | | | HEATING CAPAC | ITY | | | | ELECTI | RIC DATA | • | | | REMARKS |
|--------|-------------------|--------------------|-------|-------|---------|--------------|------------------------|---------------|------|------|------|----------------------------|---------------|----------------------------|---------------|-----------------------|--------------------------|-----------|-----|------|-----------|-----------------------|
| TAG | & MODEL NUMBER | NOMINAL TONNAGE | CFIVI | (IN.) | AIR | EAT DB/WB | COOLING TC/SC (MBH) | AMB. TEMP. | IEER | EER | HSPF | HEATING @ 47°F DB (MBH) | COP @ 47°F | HEATING @ 17°F DB (MBH) | COP @ 17°F | S/A FAN HP VOLTAGE | AUXILIARY HTR COIL KW | VOLTAGE | MCA | MOCP | WEIGHT | |
| RTU 1 | TRANE WHC060H3 | 5.0 | 2000 | 0.8 | 380 | 80 67 | 61.1 49.1 | 95 | - | 13.0 | 9.0 | 57.0 | 3.6 | 34.4 | 2.3 | 1.5 HP 208V, 3PH | 12.0 | 208V, 3PH | 63 | 70 | 1200 LBS. | SEE NOTES 1 THRU 14 B |
| RTU 12 | TRANE WCH120H3 | 10.0 | 4000 | 0.8 | 920 | 80 67 | 123.6 96.3 | 95 | 15.5 | 11.5 | 8.2 | 118.0 | 3.6 | 61.0 | 2.25 | 2.75 HP 208V, 3PH | 27.0 | 208V, 3PH | 130 | 150 | 1600 LBS. | SEE NOTES 1 THRU 14 E |
| RTU 13 | TRANE WHC060H3 | 5.0 | 2000 | 0.8 | 360 | 80 67 | 61.1 49.1 | 95 | - | 13.0 | 9.0 | 57.0 | 3.6 | 34.4 | 2.3 | 1.5 HP 208V, 3PH | 12.0 | 208V, 3PH | 63 | 70 | 1200 LBS. | SEE NOTES 1 THRU 14 E |

| | | | | | Dl | JCTLESS | S SPLIT S | SYSTEM | UNIT SO | CHEDU | <u>LE</u> | | | | | | | |
|---|--|-------------------------|--|---|----------------|------------------|----------------|---------------|---------------|---------------------------|--------------------------------------|------------------------------------|---------------------|-------------|-------------|------|---------------|-----------|
| TAG | AREA | MANUFACTURER (| & MODEL NUMBER | NOMINAL | CFM | COOLING | | HEATING | CAPACITIES | 3 | | INDOOR UNIT | | OUTDOOL | RUNIT | | 1 | |
| 170 | SERVED | INDOOR UNIT | OUTDOOR UNIT | TONNAGE | SPEED | COOLING (MBH) | HIGH (47°F) | LOW (17°F) | COP (47°F) | COP (17°F) | HSPF | WEIGHT LBS | VOLTAGE | MCA | MOCP | SEER | WEIGHT LBS | REMARKS |
| FC HP 1 | 107 SURGERY | CARRIER 40MAHBQ12AA3 | CARRIER 38MARBQ12AA3 | 1.0 | 380 HIGH | 12.0 | 12.0 | 8.2 | 14.0 | 2.29 | 10.0 | 23 | 208/230V 1 PHASE | 15.0 | 15.0 | 25.5 | 75 | SEE BELOW |
| FC HP 2 | 119 MED GAS | CARRIER 40MAHBQ18AA3 | CARRIER 38MARBQ18AA3 | 1.5 | 635 HIGH | 18.0 | 18.0 | 4.35 | 11.37 | 2.22 | 9.6 | 28 | 208/230V 1 PHASE | 16.0 | 25.0 | 21.5 | 100 | SEE BELOW |
| FURNISH WITH THE FOL FAN COIL UNIT: 1. SINGLE POINT POL 2. THREE-SPEED FAL 3. WIRELESS THERI 4. WASHABLE FILTE 5. AUTOMATIC AIR SELECTION OF STYLES | DWER SOURCE COM AN MOTOR MOSTAT ER SWEEP AND MANUA | | CONDENSING UNIT: 1. LOW AMBIENT TEM 2. R-410A REFRIGERA 3. DC INVERTER-DRIV 4. INDOOR UNIT RECE THROUGH FIELD SU 5. WIND BAFFLE 6. SET ON EQUIPMENT | INT EN TWIN ROTARY EIVE POWER FROM JPPLIED INTERCO | I OUTDOOR UNIT | Г | | | | 2. INSU ARM 3. REVI | LATE REFRI STRONG AR EW EXTEND | GERANT PIPING P MACELL INSULATI | E PER MANUFACTURE | S INSTRUCTI | ONS WITH 1" | | ONS. | |

| TAG | MANUFACTURER & MODEL NUMBER | CFM | AIR PATTERN | NECK SIZE | FRAME STYLE | DAMPER | PANEL SIZE | MAXIMUM NC LEVEL | FINISH | MATERIAL | REMARKS |
|---------|--------------------------------|-------------|----------------|--------------|--------------------|---------------|---------------|---------------------|-------------------------|----------|---------------|
| CD A | PRICE SCD | AS NOTED | AS SHOWN | AS NOTED | LAY-IN CEILING | OPPOSED BLADE | 24x24 | 30 | WHITE POWDER COAT | STEEL | TAG NECK SIZE |
| CD B | PRICE PDN | AS NOTED | AS SHOWN | AS NOTED | LAY-IN CEILING | OPPOSED BLADE | 24x24 | 30 | WHITE POWDER COAT | STEEL | CFM |
| CD C | PRICE SCD | AS NOTED | AS SHOWN | AS NOTED | SURFACE MOUNTED | OPPOSED BLADE | 24x24 | 30 | WHITE POWDER COAT | STEEL | |
| CD D | PRICE PDN | AS NOTED | AS SHOWN | AS NOTED | LAY-IN CEILING | OPPOSED BLADE | 24x24 | 30 | BLACK | STEEL | |
| CD E | PRICE SCD | AS NOTED | AS SHOWN | AS NOTED | SURFACE MOUNTED | OPPOSED BLADE | 12x12 | 30 | WHITE POWDER COAT | STEEL | |
| RG A | PRICE PDDR | AS NOTED | RETURN | AS NOTED | LAY-IN CEILING | - | 24x12 | 30 | WHITE POWDER COAT | ALUMINUM | |
| RG B | PRICE PDDR | AS NOTED | RETURN | AS NOTED | SURFACE MOUNTED | - | 24x12 | 30 | WHITE POWDER COAT | ALUMINUM | |
| RG C | PRICE PDDR | AS NOTED | RETURN | AS NOTED | LAY-IN CEILING | - | 24x24 | 30 | BLACK POWDER COAT | ALUMINUM | |
| EG A | PRICE PDDR | AS NOTED | EXHAUST | AS NOTED | LAY-IN CEILING | - | 24x22 | 30 | WHITE POWDER COAT | ALUMINUM | |
| EG B | PRICE PDDR | AS NOTED | EXHAUST | AS NOTED | LAY-IN CEILING | - | 24x24 | 30 | BLACK POWDER COAT | ALUMINUM | |
| TG A | PRICE PDDR | AS NOTED | TRANSFER | AS NOTED | LAY-IN CEILING | - | 24x12 | 30 | WHITE POWDER COAT | ALUMINUM | |
| TG B | PRICE PDDR | AS NOTED | TRANSFER | AS NOTED | LAY-IN CEILING | - | 24x12 | 30 | BLACK POWDER COAT | ALUMINUM | |

| | | | | | EXHAL | JST FAN SC | HEDULE | | | | |
|----------------------|--|---|-------------------|------------|----------------------------------|------------------------------------|-------------|--|---|-----------------|--|
| TAG | MANUFACTURER & MODEL NUMBER | AREA SERVED | SERVICE | CFM | ESP | MOTOR HP & VOLTAGE | FAN RPM | FAN TYPE | MAX. SOUND LEVEL | WEIGHT (LBS) | REMARKS |
| EF 1 | GREENHECK G-095-VG | 101 TREATMENT | EXHAUST | 295 | 0.6" | 1/6 HP 120V, 1Ø | 1470 | DOWNBLAST | 9.5 | 38 | SEE NOTES 1, 2, 3, 5, 6, 7, 11 & 13 BELOW. |
| EF 2 | GREENHECK CUE-090-VG | 104 ISOLATION | EXHAUST | 475 | 0.6" | 1/10 HP 120V, 1Ø | 1646 | UPBLAST | 8.9 | 40 | SEE NOTES 1, 2, 3, 5, 6, 7, 11 & 13 BELOW. |
| EF 3 | GREENHECK G-080-VG | 105 QUITE WARD | EXHAUST | 300 | 0.6" | 1/10 HP 120V, 1Ø | 1725 | DOWNBLAST | 8.6 | 24 | SEE NOTES 1, 2, 3, 5, 6, 7, 11 & 13 BELOW. |
| EF 4 | GREENHECK SP-A110 | 108 RESTROOM | TOILET EXHAUST | 70 | 0.3" | 16 WATTS 120V, 1Ø | 939 | CEILING | 0.9 | 17 | SEE NOTES 1, 4, 7, 8, 9, 10 & 12 BELOW. |
| EF 5 | GREENHECK SP-A110 | 115 RESTROOM | TOILET EXHAUST | 70 | 0.3" | 16 WATTS 120V, 1Ø | 939 | CEILING | 0.9 | 17 | SEE NOTES 1, 4, 7, 8, 9, 10 & 12 BELOW. |
| EF 6 | GREENHECK SP-B90 | 116 STORAGE | EXHAUST | 50 | 0.3" | 19.7W 120V, 1Ø | 700 | CEILING | 2.0 | 12 | SEE NOTES 1, 4, 7, 8, 9, 10 & 13 BELOW. |
| EF 7 | FANTECH FR-100 | 120 MED GAS | EXHAUST | 100 | 0.5" | 20 WATTS 120V, 1Ø | 1833 | INLINE | 0.5 | 4.3 | SEE NOTES 1, 4, 5, 7, 13, 14 & 15 BELOW. |
| 1. V 2. I 3. I | PROVIDE WITH THE FOLLOW VIBRATION ISOLATION AT FAN DIRECT DRIVE BACKWARD IN ELECTRONICALLY COMMUNIC WOTOR-MOUNTED SPEED CONTRO | N AND MOTOR O CLINE FAN CATED MOTOR V NTROLLER | VITH | 6. 14 INCH | ROOF CURI ZE BACKDR GRILLE | D DISCONNECT S' 3 AFT DAMPER | 1 1 1 | 0. UL LISTING ANE 1. SPUN ALUMINU 2. FAN CONTROLI 3. FAN TO RUN CO 4. FULLY SEALED | IM CONSTRUC LED W/ LIGHT ONTINUALLY | SWITCH | 15. MOTOR SHALL BE A PERMANENTLY SEALED SELF-LUBRICATING BALL BEARING TYPE WITH AUTOMATIC RESET THERMAL OVERLOAD PROTECTION. |

| | CABINET | UNIT HE | ATER SO | HEDULE | | |
|----------|--------------------------------|--------------------|--------------------|-----------|------|--|
| TAG | MANUFACTURER & MODEL NUMBER | HEATING (WATTS | CAPACITY BTU/HR | VOLTAGE | AMPS | REMARKS |
| CUH 1 | QMARK AWH | 2000 | 6,824 | 208V, 3PH | 7.0 | WALL MOUNTED, INTEGRAL THERMOSTAT. COLOR TO BE WHITE |

SIMILAR MANUFACTURERS: COOK, BROAN & PENN FANS

| TAG | MANUFACTURER | CFM | DUCT SIZE | STAGES | HEATING | CAPACITY | RE | HEAT | VOLTAGE | REMARKS |
|-------|----------------|------|-----------|--------|---------|----------|------|------|--------------|----------------|
| | & MODEL NUMBER | | | | KW | BTU/HR | EAT | LAT | | |
| EDH 1 | INDEECO QUA | 4000 | 24x20 | 2 | 18.0 | 61,418 | 56°F | 70°F | 208V 3 PH | SEE NOTE BELOW |

BUILT-IN, SNAP ACTING, DOOR INTERLOCKED DISCONNECT SWITCH (CONFORM TO NEC REQUIREMENTS), 80% NICKEL AND 20% CHROMIUM HEATING ELEMENT, TYPE 'A' RESISTANCE WIRE, ALUMINIZED STEEL FRAME AND NEAM 1 TERMINAL BOXES, MANUAL RESET THERMAL CUTOUTS, TERMINAL BLOCKS FOR FIELD WIRING. DUCT HEATER TO BE WIRED INTO RTU HONEYWELL VISIONPRO T'STAT FOR REHEAT CONTROL FOR DEHUMIDIFICATION.



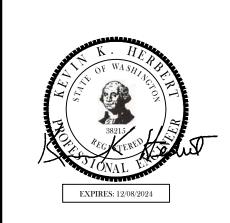
ENGINEER LOGO:

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9941 York Theta Drive North Royalton, Ohio 44133

440-230-1800 Fax 440-230-1831 cleveland@pointonedesign.com

SEAL/STAMP:



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4049-24-004 SHEET

M2.00

SEE ARCHITECTURAL DETAILS FOR EXACT LOCATIONS AND DIMENSIONS AND OUTLETS. COMMUNICATE
W / ARCHITECT ANY DISCREPANCIES.