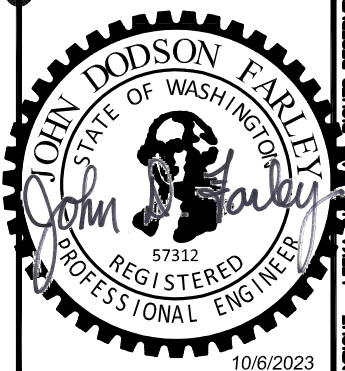


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GENERAL NOTES

REFERENCED CODES INCLUDE 2019 WASHINGTON MECHANICAL CODE AND 2019 WASHINGTON STATE ENERGY CODE.

WHERE EQUIPMENT AND COMPONENTS REQUIRING SERVICING ARE LOCATED WITHIN 10 FEET FROM THE ROOF EDGE, RAILINGS OR FALL ARREST/RESTRAINT ANCHORAGE CONNECTOR DEVICES SHALL BE PROVIDED.

MAINTAIN 10 FEET BETWEEN EXHAUST AND AIR INTAKE.

PROVIDE MANUAL VOLUME DAMPERS AT EACH AIR SUPPLY AND RETURN DEVICE FOR BALANCING. WHERE DIFFUSER OR GRILLE IS INSTALLED IN GYPSUM CEILING, PROVIDE OPPOSED BLADE DAMPER IN DIFFUSER/GRILLE.

2018 WASHINGTON STATE ENERGY CODE INSULATION REQUIREMENTS FOR CLIMATE ZONE 4C TABLE C403.10.1.1: OUTDOOR AIR DUCTWORK INSULATION: SUPPLY AIR OR RETURN AIR OUTSIDE THE BUILDING EXPOSED TO WEATHER R-8; SUPPLY OR RETURN AIR DUCT IN UNCONDITIONED SPACE NOT IN THE BUILDING CONDITIONED ENVELOPE R-6; SUPPLY OR RETURN DUCT IN UNCONDITIONED SPACE WHERE THE DUCT CONVEYS AIR THAT IS WITHIN 15F OF THE AIR TEMPERATURE OF THE SURROUNDING UNCONDITIONED SPACE R-3.3; SUPPLY OR RETURN DUCT LOCATED IN THE BUILDING ENVELOPE ASSEMBLY R-16; SUPPLY DUCT WITHIN CONDITIONED SPACE THAT THE DUCT DIRECTLY SERVES WHERE THE SUPPLY DUCT CONVEYS AIR THAT IS LESS THAN 55F OR GREATER THAN 105F NONE; SUPPLY DUCT WITHIN CONDITIONED SPACE WHERE THE SUPPLY DUCT CONVEYS AIR THAT IS 55F OR GREATER AND 105F OR LESS NONE; RETURN OR EXHAUST DUCT WITHIN CONDITIONED SPACE DOWNSTREAM OF AN ENERGY RECOVERY MEDIA, UPSTREAM OF AN AUTOMATIC SHUTOFF DAMPER R-8; RETURN OR EXHAUST DUCT WITHIN CONDITIONED SPACE, DOWNSTREAM OF AN ENERGY RECOVERY MEDIA, UPSTREAM OF AN AUTOMATIC SHUTOFF DAMPER R-12; RELIEF OR EXHAUST DUCT IN CONDITIONED SPACE AND DOWNSTREAM OF AN AUTOMATIC SHUTOFF DAMPER R-16.

WSEC REQUIRES AIR ECONOMIZERS ON ALL NEW COOLING SYSTEMS EXCEPT THOSE WITH DEDICATED OUTDOOR AIR SYSTEMS THAT INCLUDE ENERGY RECOVERY AND DON'T INCLUDE MECHANICAL COOLING.

WSEC REQUIRES DEDICATED OUTSIDE AIR SYSTEMS IN ALL OCCUPANCY B CLASSIFICATIONS NOT SPECIFICALLY EXEMPTED. THE DOAS SHALL INCLUDE ENERGY RECOVERY VENTILATION WITH 60 PERCENT MINIMUM SENSIBLE RECOVERY EFFECTIVENESS OR 50 PERCENT ENTHALPY RECOVERY EFFECTIVENESS. FOR DOAS HAVING A TOTAL FAN SYSTEM MOTOR NAMEPLATE HP LESS THAN 5 HP, TOTAL COMBINED FAN POWER SHALL NOT EXCEED 1 WCFM OF OUTDOOR AIR.

WSEC MINIMUM EFFICIENCY REQUIREMENTS FOR ELECTRICALLY OPERATED APPLIED HEAT PUMPS TABLE C403.3.2(2): AIR COOLED < 65,000 BTU/H SPLIT SYSTEM 14.0 SEER.

WSEC MINIMUM EFFICIENCY REQUIREMENTS FOR ELECTRICALLY OPERATED UNITARY AIR CONDITIONERS AND CONDENSING UNITS TABLE C403.3.2(1): AIR COOLED < 65,000 BTU/H SPLIT SYSTEM 13.0 SEER.

WSEC REQUIRES SYSTEMS SERVING OFFICES TO HAVE A TOTAL SYSTEM PERFORMANCE RATIO (TSPR) GREATER THAN OR EQUAL TO THE HVAC TSPPR OF THE STANDARD REFERENCE DESIGN AS CALCULATED ACCORDING TO APPENDIX D, CALCULATION OF HVAC TOTAL SYSTEM PERFORMANCE RATIO. EXCEPTIONS INCLUDE BUILDINGS WITH CONDITIONED FLOOR AREA LESS THAN 5,000 SQUARE FEET AND HVAC SYSTEMS MEETING ALL THE REQUIREMENTS OF THE STANDARD REFERENCE DESIGN HVAC SYSTEM IN TABLE D602.11, STANDARD REFERENCE DESIGN HVAC SYSTEMS.

HIGH OCCUPANCY ZONES (25 PEOPLE OR MORE PER 1,000 SF) 500 SF AND LARGER REQUIRE OCCUPANCY SENSORS TO SHUT OFF VENTILATION WHEN ZONE IS UNOCCUPIED AS REQUIRED BY 2018 WSEC.

KEYED NOTES

- 1 PROVIDE SEISMIC SUPPORT FOR EQUIPMENT AS REQUIRED BY AHJ. REFERENCE STRUCTURAL ENGINEERING DRAWINGS AND SPECIFICATIONS.
- 2 ROUTE CONDENSATE DRAINS FROM FCU TO MOP SINK IN JANITOR CLOSET. PROVIDE 1% SLOPE ON HORIZONTAL SECTIONS OF DRAIN PIPE. MINIMUM.
- 3 PROVIDE DUCTED HORIZONTAL FAN COIL UNIT IN APPROXIMATE LOCATION SHOWN. LOCATE CORRESPONDING REMOTE CONDENSING UNIT / HEAT PUMP ON ROOF. INSTALL PER MANUFACTURERS INSTRUCTIONS. HANG FROM STRUCTURE AND PROVIDE VIBRATION ISOLATION. REFERENCE EQUIPMENT SCHEDULES.
- 4 PROVIDE DUCTLESS FAN COIL UNIT FOR IT ROOM COOLING. LOCATE REMOTE CONDENSING UNIT ON ROOF. INSTALL PER MANUFACTURERS INSTRUCTIONS. REFERENCE EQUIPMENT SCHEDULES.
- 5 PROVIDE ROOF MOUNTED HEAT PUMP / CONDENSING UNIT FOR CORRESPONDING INDOOR FAN COIL UNIT. ROUTE REFRIGERANT PIPING BETWEEN FAN COIL UNIT AND HEAT PUMP / CONDENSING UNIT AND INSTALL PER MANUFACTURERS INSTRUCTIONS.
- 6 PROVIDE DUCTLESS FAN COIL "CEILING CASSETTE" FOR HEATING & COOLING OF VOCATIONAL ROOMS. PROVIDE WITH PROGRAMMABLE THERMOSTAT. ROUTE REFRIGERANT PIPING TO BRANCH CIRCUIT BOX. SUPPORT FROM MEZZANINE STRUCTURE. ALLOW ACCESS FOR MAINTENANCE BY REMOVING CEILING TILES.
- 7 PROVIDE ACCESS PANEL IN GYPSUM CEILING FOR ACCESS TO MANUAL VOLUME DAMPER FOR AIR BALANCING.
- 8 PROVIDE BRANCH CIRCUIT SELECTOR BOX. INSTALL PER MANUFACTURERS RECOMMENDATIONS. LOCATE WHERE IT'S EASILY ACCESSIBLE AND NOISE IS NOT A CONCERN. MAINTAIN RECOMMENDED REFRIGERANT PIPING LENGTH BETWEEN BS BOX AND OUTDOOR UNIT AS WELL AS ALL INDOOR UNITS. REFERENCE EQUIPMENT SCHEDULE.
- 9 PROVIDE LINEAR SLOT DIFFUSER IN VESTIBULE. REFERENCE EQUIPMENT SCHEDULE. BALANCE TO CFM INDICATED.
- 10 PROVIDE AND INSTALL PRESSURE INDEPENDENT AIRFLOW BALANCING VALVE AT THIS LOCATION. REFERENCE EQUIPMENT SCHEDULE.
- 11 PROVIDE AND INSTALL 1" DUCT LINING ON ALL DUCT USED FOR TRANSFER AIR BETWEEN ROOMS FOR SOUND ATTENUATION. PROVIDE RECTANGULAR DUCT IN LIEU OF ROUND DUCT WHERE NECESSARY TO ALLOW FOR DUCT LINING.

1 MECHANICAL FLOOR PLAN NEW WORK
M2.10 Scale 1/8"=1'-0"

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