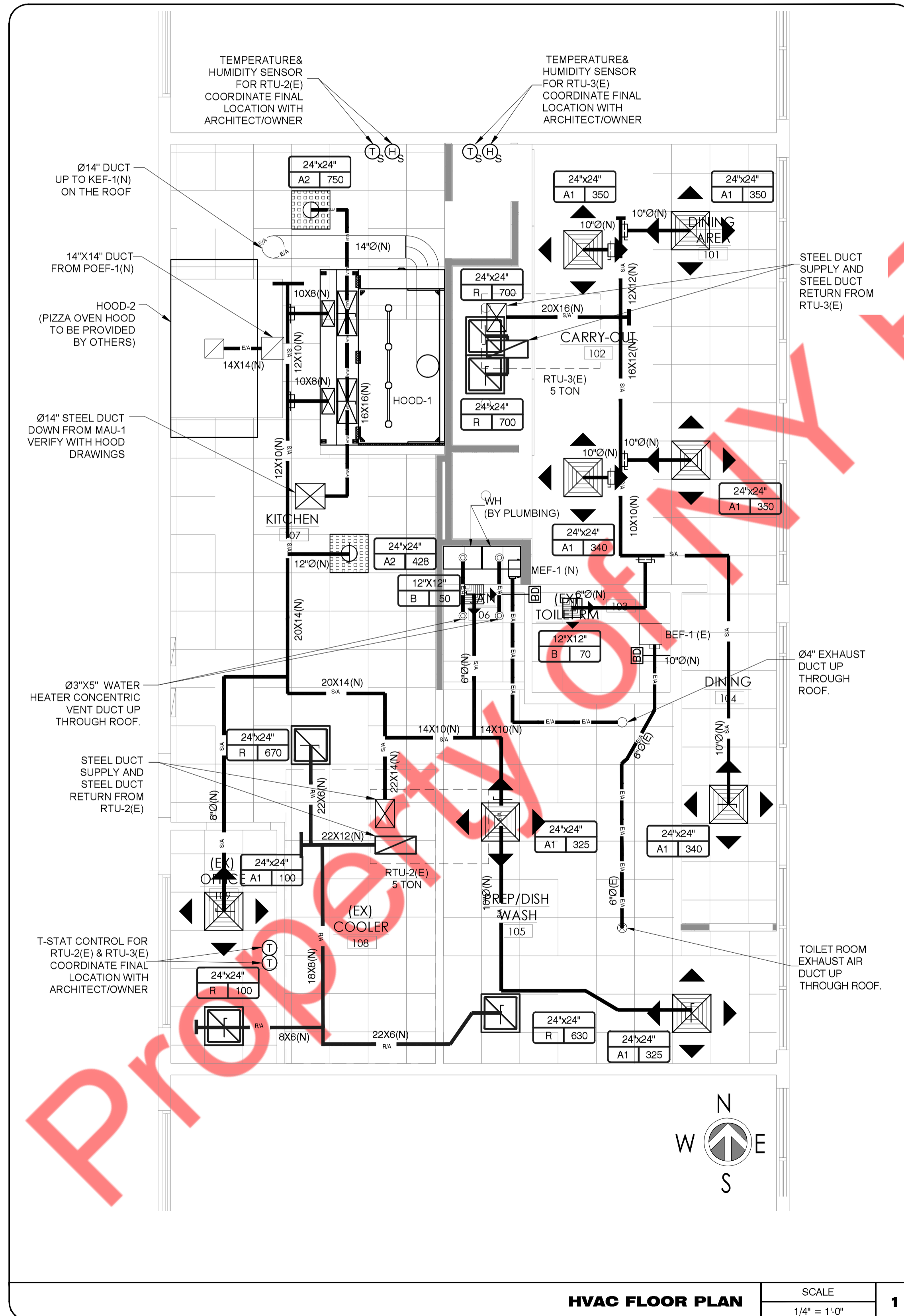


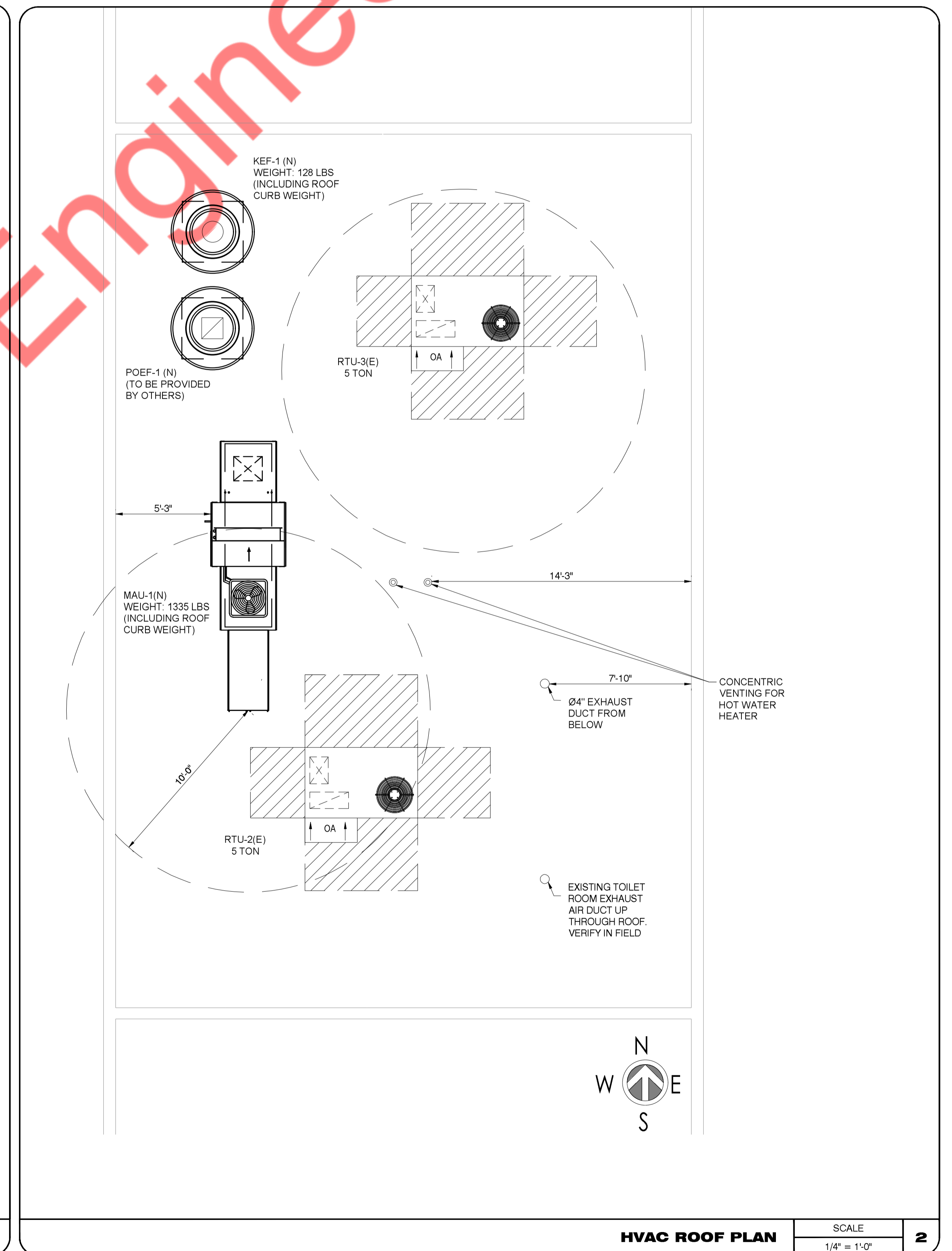
MECHANICAL PLAN NOTES

- A. USE EXISTING ROOF TOP UNITS. PROVIDE MODIFICATIONS TO DUCT SYSTEM AS SHOWN. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN AIR DUCT CONNECTIONS. INSTALL FIRE DAMPERS IN ANY FIRE WALLS AND BETWEEN FLOORS. TRANSITION TO DUCT SIZES SHOWN. PROVIDE DUCTWORK AND AIR DISTRIBUTION DEVICES AS INDICATED ON THE PLAN. EXISTING DUCTWORK MAY BE REUSED WHERE POSSIBLE. REFER TO RTU SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- B. FOR SYSTEM OVER 2,000 CFM CHECK FOR DUCT MOUNTED AIR SMOKE DETECTORS AND THAT MEET THE REQUIREMENTS OF U.L. 268A, INTERLOCKED TO SHUTDOWN RTU UPON DETECTION OF SMOKE. IF NECESSARY PROVIDE SMOKE DETECTOR WITH AN ANNUNCIATOR, ALARM AND POWER L.E.D.'S FOR VISIBLE AND AUDIBLE ALARM SIGNAL, AND VISIBLE TROUBLE SIGNAL. MOUNT ANNUNCIATOR ON ROOM SIDE OF CEILING.
- C. ALL DUCTS WILL MINIMUM 26 GAUGE SHEET METAL WITH EXTERNAL DUCT WRAP INSULATION. ALL DUCTS TO BE MANUFACTURED AND INSTALLED ACCORDING TO ASHRAE AND SMACNA METAL DUCT CONSTRUCTION STANDARD, LATEST EDITION. ALL MATERIALS WILL CONFORM TO NFPA 90A. NO DUCT BOARD ALLOWED.
- D. THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE TYPE. MOUNT THERMOSTAT 48" A.F.F. COORDINATE LOCATION OF THERMOSTAT.
- E. ALL INTERIOR AIR DUCTS WITH INSULATION SHALL HAVE A MINIMUM OF THICKNESS OF 1.5" R-8 INSULATION ACCORDING TO 2020 FLORIDA BUILDING CODE ENERGY CONSERVATION CODE. ALL SEAMS, JOINTS, ETC WILL BE SEALED TO MAKE AIR DUCT AIRTIGHT. PRESSURE SENSITIVE MATERIALS AND OTHERS APPROVED BY LATEST SMACNA. SEALING MATERIALS WILL BE USED.
- F. ALL EVAPORATOR UNITS SHALL HAVE A FLOAT SWITCH TO CONTROL OVERFLOW THAT WILL AUTOMATICALLY SHUT DOWN THE A/C SYSTEM. THE DEVICE SHALL BE ATTACHED TO THE SECONDARY DRAIN OUTLET ON THE UNIT.
- G. ALL A/C CONDENSATE DRAINS WILL BE COPPER FULL DIAMETER OF OUTLET AND WILL TERMINATE IN THE NEAREST ROOF DRAIN OR INDIRECT WASTE.
- H. ALL EQUIPMENT AND MATERIALS WILL BE INSTALLED ACCORDING TO THE MANUFACTURERS INSTRUCTIONS AND ACCORDING TO THE BEST PRACTICE.
- I. TESTING AND BALANCING SHALL BE DONE IN ACCORDANCE FLORIDA BUILDING CODE ENERGY CONSERVATION, SECTION C408.2.2. BALANCING PROCEDURES SHALL BE IN ACCORDANCE WITH THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (N.E.B.B.), THE ASSOCIATED AIR BALANCE COUNCIL (A.A.B.C) NATIONAL STANDARDS OR EQUIVALENT PROCEDURES.
- J. HANGER ATTACHMENTS TO THE STEEL STRUCTURE WILL BE RATED POWDER ACTUATED FASTENERS, "C" CLAMPS, WELDED STUDS, CLAMP HANGERS, JOIST CLAMPS OR OTHER METHODS RECOMMENDED BY SMACNA'S "METAL AND FLEXIBLE STANDARDS", CHAPTER 4. AND WILL HAVE A MINIMUM SAFETY MARGIN OF 4:1. SUSPENDED FROM TOP CHORD OF JOISTS, NOTHING FROM DECK OR CROSS BRACING.
- K. EXHAUST HOODS, DUCTS, CURBS, FANS AND CONTROLS TO BE SUPPLIED AND INSTALLED BY HOOD CONTRACTOR ACCORDING TO THE MANUFACTURERS INSTRUCTIONS, THE IBC, NEC AND NFPA 96.
- L. ALL HVAC CONTROLS AND CONTROL WIRING SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.
- M. CONTRACTOR TO FIELD VERIFY THAT THE LOCATION OF ANY EXHAUST SOURCE FROM ADJACENT TENANTS SHOULD BE ATLEAST 10' HORIZONTALLY OR 3' FEET VERTICALLY FROM RTU-2(E) & RTU-3(E).
- N. GUARDS SHALL BE PROVIDED WHERE VARIOUS COMPONENTS THAT REQUIRE SERVICE AND ROOF HATCH OPENINGS ARE LOCATED WITHIN 10 FEET OF A ROOF EDGE OR OPEN SIDE OF A WALKING SURFACE AND SUCH EDGE OR OPEN SIDE IS LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR, ROOF, OR GRADE BELOW. THE GUARD SHALL EXTEND NOT LESS THAN 30 INCHES BEYOND EACH END OF COMPONENTS THAT REQUIRE SERVICE. THE TOP OF THE GUARD SHALL BE LOCATED NOT LESS THAN 42 INCHES ABOVE THE ELEVATED SURFACE ADJACENT TO THE GUARD. THE GUARD SHALL BE CONSTRUCTED SO AS TO PREVENT THE PASSAGE OF A 21-INCH-DIAMETER SPHERE AND SHALL COMPLY WITH THE LOADING REQUIREMENTS FOR GUARDS SPECIFIED IN THE FLORIDA BUILDING CODE. ARCHITECT TO PROVIDE PERMANENT APPROVED MEANS OF ACCESS FOR THE EQUIPMENT AND APPLIANCES ON THE ROOF AS PER 2020 FBC, MECHANICAL SECTION 306.5.
- O. INTERLOCK BATHROOM EXHAUST FAN WITH RTU-3(E).
- P. RTU-2(E) SHALL BE INTERLOCKED WITH HOODS/KITCHEN EXHAUST FANS.



HVAC FLOOR PLAN

SCALE
1/4" = 1'-0"



HVAC ROOF PLAN

SCALE
1/4" = 1'-0"

THERMOSTATIC CONTROLS

A. GENERAL:
THE SUPPLY OF HEATING AND COOLING ENERGY TO EACH ZONE SHALL BE INDIVIDUALLY CONTROLLED BY THERMOSTATIC CONTROLS RESPONDING TO TEMPERATURE WITHIN THE ZONE. FOR THE PURPOSES OF SECTION 6.4.3.1, A DWELLING UNIT SHALL BE PERMITTED TO BE CONSIDERED A SINGLE ZONE.

B. DEAD BAND:
WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS SHALL BE CAPABLE OF PROVIDING A TEMPERATURE RANGE OR DEAD BAND OF AT LEAST 5°F WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS SHUT OFF OR REDUCED TO A MINIMUM.

EXCEPTIONS:
THERMOSTATS THAT REQUIRE MANUAL CHANGEOVER BETWEEN HEATING AND COOLING MODES.

C. SETBACK CONTROLS:
HEATING SYSTEMS LOCATED IN CLIMATE ZONES 2-8 SHALL BE EQUIPPED WITH CONTROLS THAT HAVE THE CAPABILITY TO AUTOMATICALLY RESTART AND TEMPORARILY OPERATE THE SYSTEM AS REQUIRED TO MAINTAIN ZONE TEMPERATURES ABOVE A HEATING SETPOINT ADJUSTABLE DOWN TO 55°F OR LOWER. COOLING SYSTEMS LOCATED IN CLIMATE ZONES 1B, 2B, AND 3B SHALL BE EQUIPPED WITH CONTROLS THAT HAVE THE CAPABILITY TO AUTOMATICALLY RESTART AND TEMPORARILY OPERATE THE SYSTEM AS REQUIRED TO MAINTAIN ZONE TEMPERATURES BELOW A COOLING SETPOINT ADJUSTABLE UP TO 90°F OR HIGHER OR TO PREVENT HIGH SPACE HUMIDITY LEVELS.

D. AUTOMATIC SHUTDOWN:
HVAC SYSTEMS SHALL BE EQUIPPED WITH AT LEAST ONE OF THE FOLLOWING CONTROLS THAT CAN START AND STOP THE SYSTEM UNDER DIFFERENT TIME SCHEDULES FOR SEVEN DIFFERENT DAY-TYPES PER WEEK, ARE CAPABLE OF RETAINING PROGRAMMING AND TIME SETTING DURING LOSS OF POWER FOR A PERIOD OF AT LEAST TEN HOURS, AND INCLUDE AN ACCESSIBLE MANUAL OVERRIDE OR EQUIVALENT FUNCTION, THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO TWO HOURS.

EXCEPTION:
RESIDENTIAL OCCUPANCIES MAY USE CONTROLS THAT CAN START AND STOP THE SYSTEM UNDER TWO DIFFERENT TIME SCHEDULES PER WEEK.

E. SETPOINT OVERLAP RESTRICTION:
WHERE HEATING AND COOLING TO A ZONE ARE CONTROLLED BY SEPARATE ZONE THERMOSTATIC CONTROLS LOCATED WITHIN THE ZONE, MEANS (SUCH AS LIMIT SWITCHES, MECHANICAL STOPS OR FOR DDC SYSTEMS SOFTWARE PROGRAMMING) SHALL BE PROVIDED TO PREVENT THE HEATING SETPOINT FROM EXCEEDING THE COOLING SETPOINT MINUS ANY APPLICABLE PROPORTIONAL BAND.

