

**COVER ALL HVAC DUCT SYSTEMS OPENINGS TO PROTECT FROM CONSTRUCTION DUST AND DEBRIS UNTIL CONSTRUCTION IS COMPLETE. IF HVAC SYSTEM IS OPERATED BEFORE CONSTRUCTION IS COMPLETE, PROVIDE MERV8 FILTERS AT ALL AIR INTAKES INSIDE THE BUILDING.**

**DUCT AND DIFFUSER PLAN** 1/4" = 1'-0" **A**

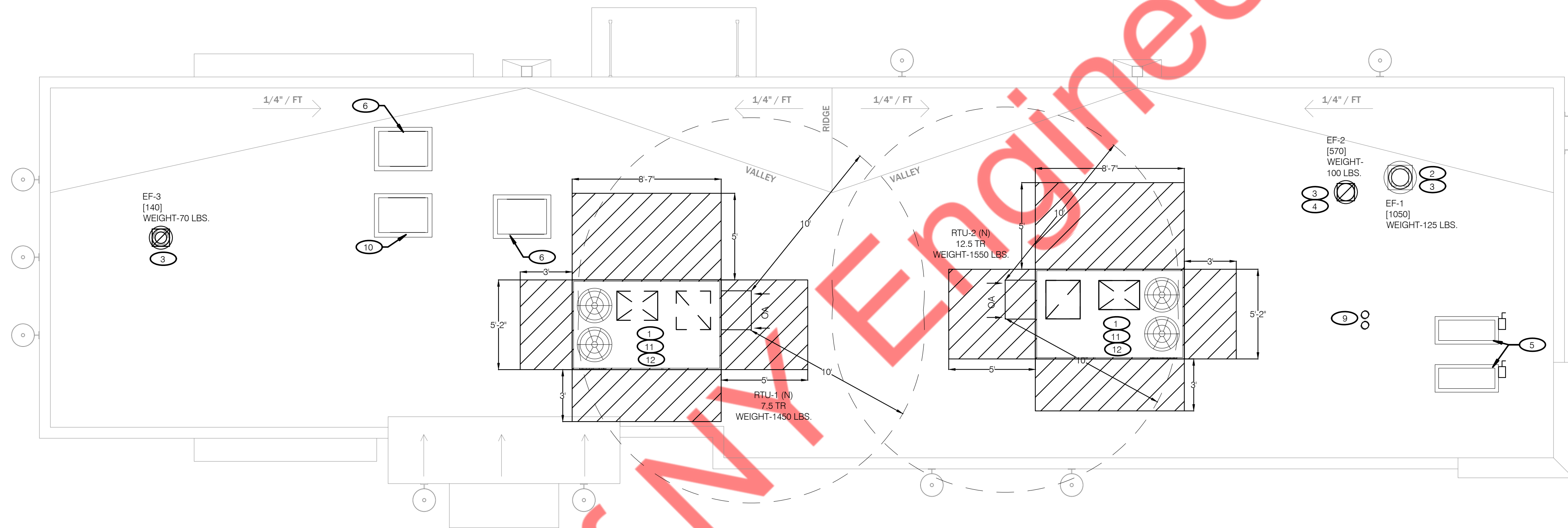
1. DINING ROOM LIGHT FIXTURE LOCATIONS ARE CRITICAL. COORDINATE DUCTWORK LOCATIONS WITH LIGHTING AND STRUCTURAL.
2. THERMOSTATS SHALL BE PROGRAMMABLE THERMOSTAT WITH SUBBASE AND REMOTE TEMPERATURE SENSOR (PROVIDED WITH RTU PACKAGE).
3. HUMIDITY SENSOR APPLICATION IS VARIABLE PER SITE SPECIFIC CONDITIONS. REFER TO HVAC UNIT SCHEDULE FOR APPLICATION CONDITIONS.

- 1 AIR DUCT UP TO UNIT.
- 2 SEE DETAIL 4 ON DRAWING M4.0 FOR SUPPLY AIR TAKE-OFF TO CEILING DIFFUSERS AND GRILLES.
- 3 FACTORY INSTALLED SMOKE DETECTOR MOUNTED IN ROOFTOP UNIT.
- 4 LOCATE THERMOSTAT CONTROLS ON WALL IN OFFICE AT 48" A.F.F. COORDINATE LOCATION WITH LIGHT SWITCHES AND OTHER WALL MOUNTED ACCESSORIES. RUN 24 VAC POWER AND SIGNAL CONDUCTORS IN TWO (2) SEPARATE TWO (2) CONDUCTOR CABLES, 18 AWG.
- 5 MOUNT THERMOSTAT REMOTE SENSOR AT 60" ABOVE FINISHED FLOOR. CONNECT TO THERMOSTAT WITH 18 AWG 2 CONDUCTOR CABLE PER MANUFACTURER INSTALLATION INSTRUCTIONS. ENSURE THAT TEMPERATURE SENSOR IN DINING AREA IS NOT LOCATED ON TILE WALL.
- 6 UNDERCUT RESTROOM DOORS MINIMUM 3/4" FOR MAKE-UP AIR.
- 7 PROVIDE SHOE TAP AT CONNECTION TO DUCT DROP FROM ROOFTOP UNIT.
- 8 RUN DUCT THROUGH OPEN WEBBING OF ROOF TRUSSES (WHERE POSSIBLE). COORDINATE WITH TRUSS DESIGN PRIOR TO DUCTWORK FABRICATION.
- 9 RUN DUCTWORK BETWEEN TRUSSES AS HIGH AS POSSIBLE UNDER ROOF JOISTS.
- 10 10'X10' EXHAUST AIR DUCT DOWN AND TRANSITION TO FIELD CUT EXHAUST CONNECTION AT HOOD.
- 11 EXHAUST DUCT SHALL RUN BETWEEN ROOF JOISTS TO CONNECT TO ROOF EXHAUST FAN EF-1. SEE HOOD DETAILS ON DRAWING M3.0. SEE DETAIL 10 ON SHEET M4.0 FOR FIRE PROTECTION OF DUCT WORK. SEE DETAIL 11 ON SHEET M4.0 FOR EXHAUST DUCT TRANSITION.

- 12 PROVIDE 3"x5" CONCENTRIC PVC KIT FOR WATER HEATER INTAKE AND FLUE VENT. TERMINATION ON ROOF. COORDINATE WORK WITH ALL TRADES.
- 13 PROVIDE SMOKE DETECTOR RESET SWITCH WITH KEY. RESET SWITCH SHALL BE "SYSTEM SENSOR" MODEL # RT5151 KEY. MOUNT NEXT TO THERMOSTATS @ 48" A.F.F. - INSTALL PER MANUFACTURERS REQUIREMENTS.
- 14 PROVIDE AIR CURTAIN IN LOCATION AS SHOWN ON PLAN. MOUNT AIR CURTAIN ON MULLION DIRECTLY ABOVE SERVICE OPENING DOORS AT DRIVE-THRU WINDOW. AIR CURTAIN SHALL BE BERNER MODEL DTU03-2026A, WITH 120V/1/60 POWER CONNECTION. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR MORE DETAILS.
- 15 HUMIDITY SENSOR (REMOTE) WHEN REQUIRED FOR HOT GAS REHEAT RTU OPTION. HUMIDITY SENSOR SHALL BE PLACED IN RETURN AIR DUCTWORK. RUN 24 VAC POWER AND SIGNAL CONDUCTORS IN TWO (2) SEPARATE TWO (2) CONDUCTOR CABLES, 18 AWG. SEE MANUFACTURERS INSTALLATION INSTRUCTIONS.
- 16 PROVIDE AIR CURTAIN IN LOCATION AS SHOWN ON PLAN. MOUNT AIR CURTAIN ON MULLION DIRECTLY ABOVE REAR DOOR. AIR CURTAIN SHALL BE BERNER MODEL CLC08-1048A, WITH 120V/1/60 POWER CONNECTION. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR MORE DETAILS.

**GENERAL NOTES - MECHANICAL** NTS **C**

**KEYNOTES - DUCT AND DIFFUSER** NTS **B**



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**MECHANICAL ROOF PLAN** 1/4" = 1'-0" **A**

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| <ul style="list-style-type: none"> <li>1 PROVIDE RTU IN LOCATION AS SHOWN ON PLANS. COORDINATE EXACT RTU LOCATION AND DUCT DROPS WITH STRUCTURAL TRUSS LAYOUT. MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND EXHAUST TERMINATIONS.</li> <li>2 PROVIDE TYPE I EXHAUST FAN IN LOCATION AS SHOWN PLANS. CONNECT 10"x10" EXHAUST DUCT FROM EXHAUST HOOD UP TO EF-1 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.</li> <li>3 COORDINATE EXHAUST FAN LOCATION WITH ROOFTOP UNIT. MAINTAIN ROOFTOP UNIT MANUFACTURERS REQUIRED CLEARANCE AND MINIMUM 10 FT TO ROOFTOP UNITS OUTSIDE AIR INTAKE.</li> <li>4 PROVIDE EXHAUST FAN IN LOCATION AS SHOWN ON PLANS. CONNECT 12"x12" EXHAUST DUCT FROM DRY STORAGE, RESTROOM EXHAUST GRILLES TO EF-2 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.</li> <li>5 CONDENSING UNIT SERVING WALK-IN COOLER/FREEZER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.</li> <li>6 CONDENSING UNIT SERVING ICE MAKER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.</li> <li>7 PLUMBING VENT. REFERENCE 1/P2.0.</li> <li>8 ROOF HATCH. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.</li> <li>9 PROVIDE MANUFACTURERS CONCENTRIC TERMINATION VENT KIT SERVING HOT WATER HEATER BELOW. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ENSURE AT LEAST 10'-0" DISTANCE BETWEEN OUTDOOR AIR INTAKES.</li> </ul> | <ul style="list-style-type: none"> <li>10 CONDENSING UNIT SERVING FROZEN BEVERAGE MACHINE. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.</li> <li>11 ALL UTILITY PIPING FOR RTU'S SHALL RUN UP THROUGH ROOF INSIDE EACH UNITS ROOF CURB.</li> <li>12 CONDENSATE DRAIN TO NEAREST ROOF DRAIN OR DOWN SPOUT.</li> </ul> |
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