MECHANICAL SYMBOLS LIST

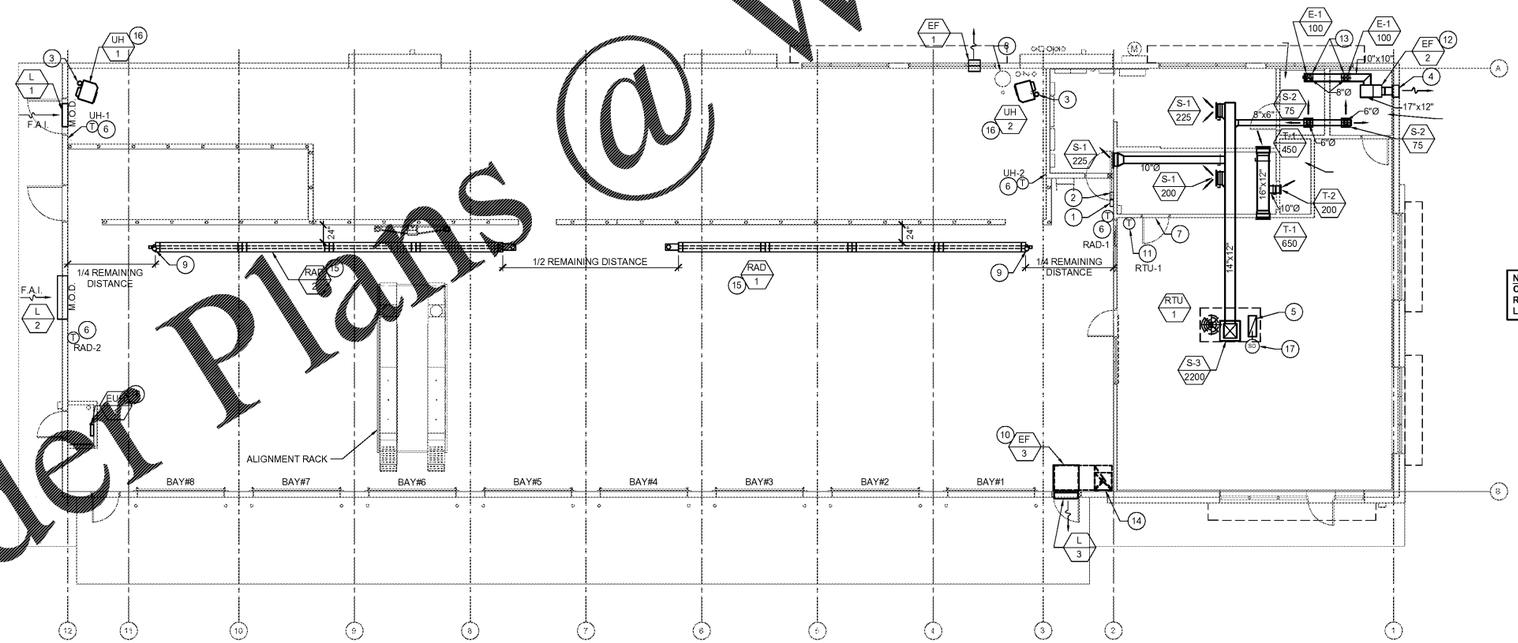
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SUPPLY DUCTWORK		MANUAL VOLUME DAMPER
	RETURN DUCTWORK	F.D.	FIRE DAMPER
	EXHAUST DUCTWORK	M.O.D. M	MOTOR OPERATED DAMPER
	SUPPLY DIFFUSER	F.A.I.	FRESH AIR INTAKE
			TURNING VANES IN ELBOW
	RETURN GRILLE		
	EXHAUST GRILLE		SMOKE DETECTOR
T	THERMOSTAT	*** ***	DIFFUSER TYPE / DIFFUSER AIR QUANTITY
UP	RISE IN DUCTWORK	*** ***	EQUIPMENT TYPE / EQUIPMENT TAG
DN	DROP IN DUCTWORK		

MECHANICAL GENERAL NOTES

1. PROVIDE TOXALERT, INC. VENTILATION CONTROL SYSTEM. COMPLETE WITH (1) CONTROL UNIT, MODEL (GVU-1) AND (1) CO SENSOR, MODEL (GVU-CO), (RANGE 0 TO 250 PPM). PROVIDE OPTIONAL AUDIBLE ALARM WITH SILENCE SWITCH FOR SECOND STAGE ALARM LEVELS AND LABELED LED INDICATORS ON FACE OF CONTROLLER (POWER ON, FAN ON AND POWER TO SENSOR). REMOTE SENSOR SHALL BE TEMPERATURE AND HUMIDITY COMPENSATED AND COMPLETE WITH LED'S INDICATING: NORMAL OPERATION, HIGH CO AND MALFUNCTION. CONTROL UNIT SHALL INCLUDE MEANS TO OPERATE EXHAUST FANS ON A TIME BASIS WITHOUT HIGH CO LEVELS.
2. VERIFY DIMENSIONS OF RADIANT HEATER LOCATION WITH MANUFACTURER BEFORE INSTALLATION AND COORDINATE WITH LIFT INSTALLER.
3. NO GOOSE NECK OR DOWNTURNS ON LOUVERS OR VENT COVERS TO BE USED.
4. VENTS, LOUVERS ETC. NOT TO CONFLICT WITH SIGN LOCATIONS. COORDINATE ALL PENETRATIONS WITH ARCHITECTURAL ELEVATIONS, SIGNAGE DRAWINGS AND GENERAL CONTRACTOR PRIOR TO ROUGH IN.
5. COORDINATE ALL VENT AND EXHAUST FAN PENETRATIONS THRU THE ROOF, WALLS AND FLOORS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
6. REFER TO FIXTURE PLAN SHEET FOR FINAL LOCATIONS AND QUANTITIES OF ALL OPERATIONS EQUIPMENT.
7. ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL SHEET METAL AND SHALL BE FABRICATED ACCORDING TO THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD OF METAL AND FLEXIBLE DUCTWORK. UNDER NO CIRCUMSTANCE SHALL DUCT BOARD BE ALLOWED.
8. ALL DUCTWORK DIMENSIONS SHOWN ON PLANS ARE CLEAR DIMENSIONS. WHERE INTERNAL DUCT LINER IS REQUIRED BY SPECIFICATIONS, CONTRACTOR SHALL ADJUST DUCTWORK SIZES ACCORDINGLY.
9. ALL INSULATION, JOINING MATERIALS, SEALER, ETC., SHALL BE A U.L. FLAME SPREAD CLASSIFICATION OF NO MORE THAN 25 AND A SMOKE DEVELOPMENT RATING NOT MORE THAN 50.
10. ALL EXPOSED DUCTWORK SHALL BE INTERNALLY LINED. REFER TO SPECIFICATIONS FOR DUCT LINER SPECIFIC REQUIREMENTS.

(#) KEYED PLAN NOTES - THIS SHEET

1. TOXALERT CONTROLLER. SEE MECHANICAL GENERAL NOTES FOR FURTHER INFORMATION.
2. TOXALERT CO SENSOR. MOUNT AT 6'-0" A.F.F. SET SENSOR AT 50 . SEE SPECIFICATIONS FOR FURTHER INFORMATION.
3. CONCENTRIC FLUE UP THRU ROOF. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DETAIL ON SHEET M2 FOR FURTHER INFORMATION.
4. MANUFACTURER SUPPLIED RESTROOM EXHAUST FAN LOUVERED BRICK VENT. COORDINATE LOCATION AND SIZE OF BRICK VENT WITH FLOOR PLAN, BUILDING STRUCTURE AND GENERAL CONTRACTOR PRIOR TO ORDERING AND INSTALLATION. VENT SHALL BE PRIMED FOR FIELD PAINTING.
5. ROUTE RETURN DUCT 6" BELOW DECK AND COVER WITH 1/2"x1/2" GALVANIZED HARDWARE CLOTH.
6. THERMOSTAT SUPPLIED BY MANUFACTURER WITH EACH PIECE OF EQUIPMENT. THERMOSTAT TO BE INSTALLED ON AN INSULATED SUBBASE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND MOUNTED SO THAT THE HIGHEST OPERABLE CONTROL IS NOT MORE THAT 48" AFF.
7. TRANSFER AIR GRILLE IN OFFICE AND "JANITOR CLOSET" DOOR. SEE DOOR SCHEDULE ON ARCHITECTURAL DRAWINGS.
8. ROUTE MANUFACTURER SUPPLIED WATER HEATER CONCENTRIC DUCT TIGHT TO WALL, UP THRU ROOF WITH FLUE PER MANUFACTURER'S INSTRUCTIONS AND PROVIDE REQUIRED CLEARANCES FROM WALL AND ROOF.
9. ROUTE 4"Ø FLUE SEPARATELY THRU ROOF FOR EACH RADIANT HEATER. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS AND DETAIL ON SHEET M2 FOR FURTHER INFORMATION. ROUTE FLUE AS REQUIRED TO PENETRATE ROOF ON BACKSIDE OF PARAPET. COORDINATE WITH ARCHITECTURAL ROOF PLAN.
10. SERVICE BAY EXHAUST FAN SHALL BE MOUNTED IN ELBOW OF DUCTWORK WITH THE FAN HAVING A BOTTOM INLET AND SIDE DISCHARGE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH LOUVER LOCATION SHOWN ON ELEVATIONS. FAN SHALL BE MOUNTED AS HIGH AS POSSIBLE. COORDINATE WITH ALL DISCIPLINES PRIOR TO INSTALLATION.
11. THE CONTRACTOR SHALL FURNISH HONEYWELL T7300 THERMOSTAT (OR EQUAL) WITH INSULATED SUBBASE. THERMOSTAT TO BE 7 DAY PROGRAMMABLE WITH 4 SETBACK PERIODS PER DAY. THERMOSTAT TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MOUNT THERMOSTAT SO THAT THE HIGHEST OPERABLE CONTROL IS NOT MORE THAT 48" AFF.
12. MOUNT RESTROOM EXHAUST FAN TO STRUCTURE AS HIGH AS POSSIBLE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. TRANSITION EXHAUST DUCT AS REQUIRED FROM FAN TO LOUVERED BRICK VENT ON EXTERIOR WALL.
13. ROUTE RESTROOM EXHAUST DUCT TIGHT TO WALL. TAP DUCT FROM EACH RESTROOM TO MAIN EXHAUST DUCT ABOVE.
14. DROP 24"x24" EXHAUST DUCT DOWN IN LOCATION SHOWN. INSTALL DUCTWORK TIGHT TO WALL AND TRANSITION AS REQUIRED TO FAN. TERMINATE AT 3" A.F.F., REFER TO DETAIL ON SHEET M2 FOR FURTHER INFORMATION.
15. MOUNT GAS FIRED RADIANT HEATER TO STRUCTURE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO DETAIL ON SHEET M2 AND SERVICE BAY SECTION ON ARCHITECTURAL DRAWINGS FOR FURTHER INFORMATION.
16. MOUNT GAS FIRED UNIT HEATER TO STRUCTURE AS HIGH AS POSSIBLE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO DETAIL ON SHEET M2 FOR ADDITIONAL INFORMATION.
17. RETURN AIR SMOKE DETECTOR. CONTRACTOR SHALL COORDINATE INSTALLATION AND WIRING REQUIREMENTS WITH FIRE ALARM DRAWINGS AND SPECIFICATIONS.
18. PROVIDE ELECTRIC UNIT HEATER AS SCHEDULED IN FIRE/SPRINKLER ROOM. MOUNT ELECTRIC UNIT HEATER AT 18" A.F.F IN UNOBSTRUCTED LOCATION. FIELD VERIFY EXACT LOCATION.



NOTE:
CONTRACTOR SHALL REFER TO SHEET A3 - ROOF PLAN FOR ACCEPTABLE APPROXIMATE LOCATIONS OF ROOF PENETRATIONS.

1 / M1 MECHANICAL PLAN
SCALE: 1/8" = 1'-0"

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MECHANICAL PLAN AND NOTES

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