



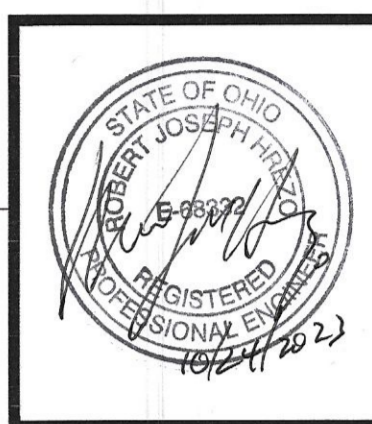
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RELEASE

EXHAUST SYSTEMS 10.24.23

TENANT RENOVATION FOR OHIO IMPLANT AND DENTURES
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PROJECT:

DATE: 10.10.23
DRAWN BY: MJF
CHECKED BY: PDH
APPROVED BY:
PROJECT #: MF10090(M03)

M-1
PARTIAL FLR. PLAN - MECHANICAL

HVAC LEGEND

- EXISTING DUCTWORK
- 8" NEW ROUND DUCTWORK AND SIZE
- 8" NEW CLASS 1 FLEXIBLE AIR DUCT AND SIZE
- EXISTING/RELOCATED 2' X 2' CEILING DIFFUSER
- EXISTING/RELOCATED 2' X 2' RETURN GRILLE
- 2' X 2' EGGRATE RETURN GRILLE
- EXISTING SUPPLY REGISTER - CEILING
- EXISTING RETURN GRILLE - SIDEWALL
- EXISTING CEILING DIFFUSER AND CFM
- EXISTING SUPPLY REGISTER AND CFM
- EXISTING RETURN GRILLE
- NEW RETURN GRILLE AND DUCT SIZE
- EXISTING SMOKE DETECTOR
- HEATING & COOLING THERMOSTAT
- UNDERCUT DOOR

NOTE: MAINTAIN MINIMUM CLEARANCE DISTANCE OF 10'-0" HORIZONTALLY OR 3'-0" BELOW CONTAMINANT SOURCE PER SECTION 401.4.1, 2017 OBC-MC FOR INTAKE AND EXHAUST TERMINATIONS. (TYPICAL OF ALL)

GENERAL NOTES

1. FURNISH ALL LABOR, MATERIAL AND APPURTENANCES NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM AS SHOWN OR REQUIRED.
2. ALL WORK SHALL CONFORM TO APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
3. WORKMANSHIP SHALL REPRESENT THE HIGHEST STANDARD OF THE INDUSTRY.
4. PERFORM ALL TESTS, ADJUSTMENTS, ETC. AS REQUIRED BY EQUIPMENT MANUFACTURERS OR AUTHORITIES HAVING JURISDICTION. BALANCE SUPPLY, RETURN AND OUTDOOR AIR QUANTITIES AS REQUIRED.
5. SHEETMETAL DUCTWORK SHALL BE GALVANIZED STEEL FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA AND CHAPTER 6, 2017 OBC-MC. ROUND OR RECTANGULAR DUCTWORK EQUAL TO SIZES SHOWN MAY BE INSTALLED AT THE CONTRACTOR'S DISCRETION.
6. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC, ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE SHOWN TO SCALE WHEREVER POSSIBLE.
7. HVAC CONTRACTOR SHALL COORDINATE THERMOSTAT LOCATIONS WITH ARCHITECT/OWNER BEFORE ROUGH-IN.
8. ALL NEW MATERIALS, METHODS AND EQUIPMENT SHALL BE IN STRICT ACCORDANCE WITH THE BUILDING STANDARDS AS APPROVED BY THE OWNER.
9. HVAC CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR COORDINATION OF DETAILS AS MAY EFFECT HIS OWN WORK.
10. ALL SUPPLY AND RETURN AIR DUCTWORK IN UNCONDITIONED AREAS SHALL BE INTERNALLY AND/OR EXTERNALLY INSULATED WITH NECESSARY MATERIAL TO ACHIEVE THE MINIMUM REQUIRED INSULATION VALUE FOR THE APPLICATION. FIBERGLASS DUCT WRAP, BUBBLE WRAP AND/OR LINER IS APPROVED. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
11. REFRIGERANT SUCTION & LIQUID LINE PIPING, PISTON & CONTROLS IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS & INSTALLATION INSTRUCTIONS.
12. BEFORE STARTING WORK THIS CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AS MAY EFFECT HIS OWN WORK. NO EXTRAS WILL BE ALLOWED FOR EXISTING CONDITIONS. THIS CONTRACTOR SHALL CONFIRM EXISTING EQUIPMENT & CONDITIONS, EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS TO SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF THE HVAC SYSTEM, MATERIALS, AND EQUIPMENT WITH OTHER CONTRACTORS TO AVOID INTERFERENCES AND CONFRONTATIONS.
13. THIS CONTRACTOR IS RESPONSIBLE FOR ALL MODIFICATIONS IN DUCT LAYOUT, STRUCTURE AND FRAMING LOCATIONS, COORDINATION WITH ELECTRIC AND PLUMBING SERVICES. PROVIDE CONTROLS AND ALL NECESSARY APPURTENANCES FOR MAKING A COMPLETE WORKING SYSTEM WHEN EQUIPMENT OTHER THAN BASE BID EQUIPMENT IS PROVIDED.

VENTILATION AIR SCHEDULE

MARK	ROOM NAME	ROOM NUMBER	OCCUPANCY CLASSIFICATION	AREA SQ FT	OCCUPANT DENSITY PEOPLE/SQ FT	REQUIRED OCCUPANTS	CFM PER OCCUPANT	CFM PER SQ. FT.	EXHAUST CFM PER FIXTURE	REQUIRED OA CFM	ACTUAL OA CFM	ACTUAL SA CFM	REQUIRED EA CFM	ACTUAL EA CFM	NOTES
RTU-1	WAITING	101	LOBBIES-PREFUNCTION	176	30/1000	6	7.5	.06	--	56	82	550	--	--	1
RTU-1	HYGIENE #1	103	MEDICAL PROCEDURE	98	20/1000	2	15	--	--	30	30	200	--	--	1
RTU-1	HYGIENE #2	103	MEDICAL PROCEDURE	98	20/1000	2	15	--	--	30	30	200	--	--	1
RTU-1	CORRIDOR (PARTIAL)	105	CORRIDORS	198	--	--	--	.06	--	12	30	200	--	--	1
RTU-1	TREATMENT #3	121	MEDICAL PROCEDURE	98	20/1000	2	15	--	--	30	30	200	--	--	1
RTU-1/EF-1	PATIENT R.R.	122	TOILETS-PUBLIC	--	--	--	--	--	70	--	8	50	70	70	1
RTU-1	CONSULTANT	123	MEETING ROOMS	72	50/1000	4	5	.06	--	25	30	200	--	--	1
RTU-1	BUSINESS OFFICE	125	OFFICE SPACES	102	5/1000	1	5	.06	--	12	30	200	--	--	1
RTU-1	NEW CT/PANO	126	WORKROOMS	44	10/1000	1	5	.12	--	11	30	200	--	--	1
RTU-2	CORRIDOR (PARTIAL)	105	CORRIDORS	198	--	--	--	.06	--	12	45	300	--	--	1
RTU-2	STORAGE	106	STORAGE ROOMS	32	--	--	--	.12	--	4	8	50	--	--	1
RTU-2	STERILIZATION	107	WORKROOMS	108	10/1000	2	5	.12	--	23	30	200	--	--	1
RTU-2/EF-4	LAB	109	WORKROOMS	49	10/1000	1	5	.12	--	11	30	200	--	--	1
RTU-2/EF-2	STAFF R.R.	112	TOILETS-PUBLIC	--	--	--	--	--	70	--	8	50	70	70	1
RTU-2	DENTAL MECH.	113	STORAGE ROOMS	48	--	--	--	.12	--	6	8	50	--	450	1
RTU-2	LAB	117	WORKROOMS	177	10/1000	2	5	.12	--	32	51	350	--	450	1
RTU-2	TREATMENT #6	118	MEDICAL PROCEDURE	98	20/1000	2	15	--	--	30	30	200	--	--	1
RTU-2	TREATMENT #5	119	MEDICAL PROCEDURE	98	20/1000	2	15	--	--	30	30	200	--	--	1
RTU-2	TREATMENT #4	120	MEDICAL PROCEDURE	98	20/1000	2	15	--	--	30	30	200	--	--	1
RTU-2	BUSINESS OFFICE	128	OFFICE SPACES	94	5/1000	1	5	.06	--	11	30	200	--	--	1
TOTAL CFM FOR REQUIRED AND ACTUAL O.S.A.										395	600				

NOTES:

1. OUTDOOR VENTILATION AIR BASED ON SECTION 403.2 & TABLE 403.3, 2017 OBC-MC.

EXISTING ROOFTOP UNIT SCHEDULE

MARK	MODEL	COOLING (MBH)		SUPPLY CFM	OUTSIDE AIR CFM	EXT. S.P.	HEATING (NAT. GAS)		ELECTRIC			NOTES
		TOTAL	SENSIBLE				INPUT MBH	OUTPUT MBH	MCA	MOCP	VOLTS	
RTU-1	EXISTING 5 TON	--	--	2000	300	--	--	--	--	--	--	1
RTU-2	EXISTING 5 TON	--	--	2000	300	--	--	--	--	--	--	1

NOTES:

1. SEVEN DAY PROGRAMMABLE THERMOSTAT.

EXHAUST FAN SCHEDULE

MARK	MODEL	CFM	EXT. S.P.	ELECTRIC			NOTES
				AMPS	VOLTS	PHASE	
EF-1	EXISTING	70	--	--	--	--	1
EF-2	EXISTING	70	--	--	--	--	1
EF-3	BROAN L500-L	450	0.25"	4.3	120	1	2, 4, 5
EF-4	GREASEMASTER GMDU33H	450	0.125"	1/3 H.P.	120	1	3, 6
EF-5	BROAN AE80B	70	0.25"	0.9	120	1	1, 4

NOTES:

1. CEILING FAN COMPLETE WITH GRILLE & BACKDRAFT DAMPER.
2. IN-LINE FAN COMPLETE WITH BACKDRAFT DAMPER INSTALLED ABOVE CEILING.
3. FAN & DUCTWORK FOR CONDENSATION REMOVAL ONLY.
4. OPERATED BY REVERSE ACTING THERMOSTAT.
5. MANUAL SPEED CONTROLLER.
6. ROOF MOUNTED FAN WITH CURB & BACK-DRAFT DAMPER.

CONDENSATE HOOD SCHEDULE

HOOD NO.	MODEL	LENGTH	EXHAUST CFM	RISER		HOOD CONSTRUCTION	FILTER TYPE	NOTES
				DIAMETER	S.P.			
H-1	GREASEMASTER 3624VGS-G	3'-0"	450	8"	-0.30"	430 SS	ALUMINUM MESH	1, 2

NOTES:

1. HOOD FOR CONDENSATION REMOVAL ONLY.
2. HOOD INSTALLED OVER STERILIZATION, WATER BATH MACHINE.

SMOKE DETECTORS

A SMOKE DETECTOR APPROVED FOR USE IN AIR DISTRIBUTION SYSTEMS SHALL BE LOCATED IN THE RETURN AIR UPSTREAM FROM FILTERS AND AHEAD OF ANY BRANCH CONNECTIONS. SUPERVISION SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 606.4.1 OF THE 2017 OBC-MC.

PARTIAL FLOOR PLAN - HVAC

SCALE: 1/4" = 1'-0"

