



HVAC GENERAL NOTES

- ALL MECHANICAL WORK SHALL MEET ALL THE REQUIREMENTS OF THE 2014 FLORIDA BUILDING CODE, MECHANICAL.
- CONTRACTOR TO VISIT SITE AND VERIFY ALL CLEARANCES BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSET/ANGOR CLEARANCES TO MEET FIELD CONDITIONS AND COORDINATE WITH ELECTRICAL, PLUMBING AND FIRE PROTECTION SUBCONTRACTOR BEFORE ANY CONSTRUCTION WORK.
- SUPPLY AIR RETURN AIR, OUTSIDE AIR AND EXHAUST AIR DUCTWORK SHALL BE SHEET METAL CONSTRUCTION. DUCT SHALL BE INSTALLED SECURELY SUPPORTED, HUNG OR SUSPENDED FROM THE STRUCTURE. JOINTS SHALL BE SEALED WITH 3\"/>
- OUTSIDE AIR INTAKES (ROOF TOP UNITS, GRAVITY ROOF VENTS, LOUISERS) SHALL MAINTAIN A MINIMUM OF 12\"/>
- ALL TRANSFER DUCTWORK LEADING TO ROOF TOP UNITS SHALL HAVE A 2\"/>
- PROVIDE ALL MECHANICAL EQUIPMENT WITH MANUFACTURER'S RECOMMENDED SERVICE AREA CLEARANCES.
- ALL ROOF TOP UNITS SHALL BE CONSTRUCTED AND INSTALLED TO WITHSTAND LOCAL WIND LOAD PERIOD.
- SMOKE DETECTORS SHALL BE FURNISHED AND INSTALLED BY THE UNIT MANUFACTURER. WIRED TO THE KEY SWITCH BY THE MECHANICAL CONTRACTOR AND WIRED TO THE FIRE ALARM BY THE FIRE ALARM CONTRACTOR. SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72, NATIONAL FIRE ALARM CODE, NFPA 90A, STANDARD FOR INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS, 2014 FLORIDA BUILDING CODE, MECHANICAL AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE A VISIBLE ALARM NOTIFICATION PANEL. MAKE SYSTEM BEHINDER SILENT OR EQUAL. COMPATIBLE WITH BUILDING FIRE ALARM SYSTEM.
- PLANS AND DIMENSIONS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- HVAC CONTRACTOR IS RESPONSIBLE FOR ANY ADDED ELECTRICAL COSTS WHICH MAY RESULT FROM SUBSTITUTED EQUIPMENT.
- PROVIDE EXTERNAL DUCT INSULATION FOR SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK. DUCTWORK INSULATION SHALL BE POLY FIBERGLASS DUCT WRAP WITH A MINIMUM THERMAL RESISTANCE (R) OF 9.0. INSULATION SHALL HAVE VAPOR BARRIER. INSTALL PER MFR REQUIREMENTS.
- COORDINATE CEILING MOUNTED DIFFUSERS, REGISTER AND GRILLES AND OTHER CEILING MOUNTED EQUIPMENT WITH LIGHTING FIXTURES.
- TURNING VANES SHALL BE PROVIDED IN ALL SUPPLY DUCT REGULAR AIR BOWNS WITH ANGLE BETWEEN 15 DEGREES AND LESS THAN 45 DEGREES PER THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS MANUAL.
- DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- DUCTWORK, DIFFUSERS, REGISTER, GRILLES AND OTHER ITEMS ON CEILING SUSPENSION SYSTEM SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- UNLESS OTHERWISE NOTED, INSTALL DUCTWORK AS HIGH AS POSSIBLE TO BOTTOM OF STRUCTURE. COORDINATE DUCT ELEVATION WITH STORM LEADERS, WATER PIPING, SANITARY DRAINS AND MAJOR ELECTRICAL CONDUITS.
- CONTRACTOR TO PROVIDE ALL SUPPLEMENTARY STEEL REQUIRED TO SUPPORT MECHANICAL EQUIPMENT MATERIALS. INSTALLATION OF EQUIPMENT SHALL COMPLY WITH MANUFACTURER'S SPECIFICATIONS AND CLEARANCE REQUIREMENTS FOR SERVICING OF EQUIPMENT.
- VERIFY VOLTAGE WITH ELECTRICAL CONTRACTOR BEFORE ORDERING EQUIPMENT.
- PROVIDE A TRAP IN ALL CONDENSATE PIPING SERVING AIR HANDLING UNITS AND ROOF TOP UNITS. SLOPE CONDENSATE LINE 1/8\"/>
- TRAP DETAIL.
- GUARANTEE FOR ONE YEAR AFTER DATE OF ACCEPTANCE BY THE OWNER. ALL EQUIPMENT, MATERIALS AND WORKMANSHIP TO BE FREE FROM DEFECT.
- DO NOT CUT STRUCTURAL MEMBERS WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
- FLEXIBLE AND RIGID ROUND DUCT TAKE OFFS FOR DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 8\"/>
- CLASS 1 LISTED AND COMPLY WITH NFPA 65A AND NFPA 50B.
- ALL WALL MOUNTED TEMPERATURE, HUMIDITY, AND CO2 SENSORS SHALL BE INSTALLED AT AN ELEVATION OF 5\"/>
- TRACES FOR A NEW AIR HANDLING SYSTEM SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OR THEIR REPRESENTATIVE IN THE FIELD.
- PROVIDE FLEXIBLE REVERSE DUCT CONNECTORS ON THE DISCHARGE AND ENTERING SIDES OF ROOF TOP UNITS, AIR HANDLING UNITS, FANS AND OTHER VIBRATING EQUIPMENT TO WHICH DUCTWORK IS ATTACHED.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TRADES INSTALLATION SCHEDULES. COORDINATE WORK SCHEDULE WITH GENERAL CONTRACTOR.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL RELATED CONSTRUCTION DETAILS APPROPRIATE TO THE HVAC SYSTEM. CHASE AND WALL PENETRATIONS INTENDED FOR DUCTWORK AND PIPING SHALL BE VERIFIED WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION. PROVIDE FIELD VERIFICATION OF ALL LOCATIONS TO BE INSTALLED. FIELD MEASURE FINAL APPROXIMATE LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENT AS REQUIRED FIT TO DUCTWORK AND TO WITHIN THE AVAILABLE SPACE IN THE FIELD.
- VERIFY FINAL LOCATIONS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AND EQUIPMENT.
- WHEN THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS NOT CLEAR, OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUBMITTERS WILL BE BROUGHT TO THE ATTENTION OF ARCHITECTURE. ARCHITECTURE SHALL MAKE CORRECTION OR EXPLANATION IN WRITING.
- PLANS AND SPECIFICATIONS ARE INTENDED AS A GENERAL DESCRIPTION OF THE WORK TO BE PERFORMED. ALL ITEMS NOT SPECIFICALLY MENTIONED OR SHOWN, BUT NECESSARY FOR THE COMPLETION OF INSTALLATION, ARE TO BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. THIS CONTRACTOR SHALL THOROUGHLY ADJACANT HIMSELF WITH THE MECHANICAL, ARCHITECTURAL, STRUCTURAL AND ELECTRICAL PLANS BEFORE SUBMITTING HIS FINAL BID. NO ADDITIONAL VARIATION WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO FAMILIARIZE HIMSELF WITH THE PLANS.
- CONTRACTOR SHALL SUBMIT THE FOLLOWING EQUIPMENT FOR REVIEW (1 HARD COPY) PRIOR TO ORDERING AND INSTALLATION. CONTRACTOR TO ALLOW SUFFICIENT TIME (APPROXIMATELY 2 WEEKS) FOR EQUIPMENT REVIEW. ROOM AIR HANDLING UNITS AND AIR COOLED CONDENSERS, DIFFUSERS AND REGISTERS, EXHAUST FANS AND MAKE UP AIR FANS, DUCT INSULATION, DUCT CONSTRUCTION STANDARDS.

DESCRIPTION	CD-1	CD-2	CD-3	CD-4	D-1	D-2	G-1	G-2	G-3	G-4
MANUFACTURER										
SERVICE	SUPPLY	SUPPLY	SUPPLY	SUPPLY	FILTER RETURN	FILTER RETURN	FILTER RETURN	FILTER RETURN	FILTER RETURN	EXHAUST
DESCRIPTION	DIRECTIONAL DIFFUSER	DIRECTIONAL DIFFUSER	DIRECTIONAL DIFFUSER	VALVE	48\"/>					

MARK	AREA SERVED	NUMBAL TONS	FAN				ELECTRIC HEATER				UNIT POWER				COOLING CAPACITY				MFG	MODEL	NOTES
			CFM	O.A.	E.S.F. (W)	HP	VW @ UNIT VOLTAGE (LISTED)	CONTROL STAGES	VPH	MCA	MOCP	WEIGHT (LBS)	TC (INHG)	SC (INHG)	AMBIENT (°F)	ENTERING (°F)	EBER (FEET)				
RTU-1	RETAIL	7.5	2,650	450	1.0	2.0	16.5	2	208V	88.0	70	1,316	83.3	80.5	6679	7865		LENNOX	LCR02RHM	1-22	
RTU-2	FOOD SVC.	8.5	3,400	180	1.0	3.0	NONE	NA	208V	47	50	1,280	83.0	80.2	6679	7862	12.4 (14.0)	LENNOX	LCR102RHM	4-23	
RTU-3	RETAIL	7.5	2,500	250	1.0	2.0	16.5	2	208V	66.0	70	1,310	74.5	80.0	6679	7564	12.7 (14.0)	LENNOX	LCR02RHM	2-22	

MARK	SERVICE	CFM	EXT. STATIC PRESSURE (P.WATER)	FAN TYPE	DRIVE	SONES	HP	RPM	VPH	MANUFACTURER	MODEL	NOTES
EF-1	EXHAUST	460	0.25	DOWNBLAST	DIRECT	6.5	1.6	1307	1201	COOK	51C15D	1.2
EF-2	EXHAUST	50	0.25	INLINE	DIRECT	6.5	28 WATTS	685	1201	COOK	GA-148	2.3

MARK	AREA SERVED	MANUFACTURER	MODEL	NOZZLE CFM	FAN MOTORS	MOUNTING HEIGHT	NOTES
AC-1	STAGIONS	POWERED AIR	ACE-1-42	2563	(1) 1/2 120 1	7'-2"	1.2,3,4,5
AC-2	CORRIDOR 2	POWERED AIR	ACE-1-48	2555	(1) 1/2 120 1	7'-2"	1.2,3,4,5

AREA	DELT	CFM	PER PERSON	COMBINED O.A.	SYSTEM VENTILATION O.A.	TOTAL O.A.	TOTAL O.A. SUPPLIED
RETAIL	1.21	326	2.5	10	25	254	24
FOOD SVC	2.21	596	7.0	17	34	354	63
CORRIDORS	1.47	505	6.0	12	24	24	0
					RTU-1	436	450
					RTU-2	126	180

SYSTEM	CFM
AC-1	+450
AC-2	+180
AC-3	+250
EF-1	-460
EF-2	-50
BUILDING POSITIVE PRESSURE	+30

DRAWING INDEX	
SHEET NUMBER	TITLE
M1	HVAC FLOOR PLAN
M2	HVAC ROOF PLAN
M3	HVAC SCHEDULES, NOTES AND DETAILS

PROJECT NO: 2015002
 DATE: 01/20/2017
 FILE NO: 17-0000001-01
 FILE NO REVIEW SET: 07/20/2017
 DRAWING NO: 0000002017
 CLIENT: WAWA

PROJECT NAME: WAWA F85FB 2017.01 STORE #5294-CNY
 26508 U.S. 19 NORTH CLEARWATER, FL. 33761
 CLIENT NAME: WAWA
 260 WEST BALTIMORE PIKE
 WAWA, PENNSYLVANIA 19053
 SHEET TITLE: HVAC SCHEDULES, NOTES AND DETAILS
 SHEET NO: M3
 DATE: 01/20/2017
 FILE NO: 17-0000001-01
 FILE NO REVIEW SET: 07/20/2017
 DRAWING NO: 0000002017
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