

1 HVAC FLOOR PLAN
M1.0 1/4" = 1'-0"

2 HVAC SENSOR ELEVATION
M1.0 1/4" = 1'-0"

KEY NOTES:

- 1 REMOTE TEST STATIONS FOR SMOKE DETECTORS FOR RTU-1, 2 & 3. TEST STATIONS TO BE MOUNTED ON THE MANAGERS OFFICE WALL. SECURITY CONTRACTOR SHALL WIRE RTU FACTORY MOUNTED SMOKE DETECTORS TO SECURITY/FIRE ALARM PANEL. MECHANICAL CONTRACTOR SHALL PROVIDE TEST STATION AND WIRING BETWEEN COMPONENTS AS WELL AS WIRING TO SHUT DOWN THE A/C FAN UPON ACTIVATION OF THE SMOKE DETECTOR. G.C. TO TEST THE SMOKE DETECTOR FUNCTIONS WITH THE WVA PROJECT MANAGER.
- 2 WALL MOUNTED SENSORS FOR EACH MECHANICAL UNIT PER ROOF TOP UNIT SCHEDULE ON SHEET M3.0. G.C. SHALL INSTALL AND WIRE TO UNIT. BAS CONTRACTOR SHALL CONNECT TO MECHANICAL UNIT ONLY.
- 3 COORDINATE EXACT LOCATION OF EXHAUST FAN PENETRATION WITH ARCHITECTURAL ROOF PLAN. INSTALL GALVANIZED DUCTWORK DOWN FROM FAN INTO CEILING/ROOF SPACE AND CONNECT TO CEILING GRILLES.
- 4 REFER TO TYPICAL DUCT PLENUM DETAIL ON SHEET M3.0.
- 5 COORDINATE DUCT WITH STRUCTURE IN THIS LOCATION. COORDINATE TAKEOFF LOCATIONS WITH ANGELED WEB OPENINGS AND SUPPORT AT PANEL POINT.
- 6 PROVIDE SURFACE MOUNT ADAPTER FRAME TO ALLOW ACCESS TO CEILING ABOVE THROUGH DIFFUSER OPENING. SEE AIR DEVICE SCHEDULE.
- 7 ROUTE DUCT UNDER STRUCTURAL MEMBERS AT THIS LOCATION.
- 8 DUCTWORK TO RUN WITHIN JOIST SPACING. MECHANICAL CONTRACTOR TO COORDINATE MECHANICAL WORK WITH ALL TRADES PRIOR TO INSTALLATION.
- 9 DUCT TAKEOFF WITH DAMPER FROM BOTTOM OF MAIN DUCT.
- 10 TRANSFER AIR DUCT ASSEMBLY.
- 11 DUCT TAKEOFF TO COME OFF THE TOP OF MAIN DUCTWORK.
- 12 NOT USED.
- 13 NOT USED.
- 14 NOT USED.
- 15 EXHAUST DUCT TO ROOF MOUNTED EXHAUST FAN. SEE ROOF PLAN FOR CONTINUATION.

PERMITTING NOTE:

ALL REFRIGERATION EQUIPMENT INCLUDING WALK-IN COOLERS AND REFRIGERATORS WILL BE SUBMITTED UNDER A SEPARATE PERMIT.

SHEET GENERAL NOTE:

A MECHANICAL CONTRACTOR SHALL ADJUST ALL LINEAR SLOT DIFFUSERS TO A GENERALLY VERTICAL FLOW ADJUSTMENT SHALL BE MADE SO AS TO AVOID AIRFLOWS ON SENSORS, REFRIGERATION CASES, OR OPEN FOOD REFRIGERATION EQUIPMENT.

HVAC LEGEND	
SYMBOL	DESCRIPTION
	NEW RECTANGULAR OR ROUND DUCT
	FLEXIBLE DUCT
	SUPPLY AIR DUCTWORK UP THROUGH PLAN
	RETURN AIR DUCTWORK UP THROUGH PLAN
	EXHAUST AIR DUCTWORK UP THROUGH PLAN
	90° ELBOW WITH TURNING VANES
	MANUAL AIR VOLUME CONTROL DAMPER
	4 WAY SUPPLY DIFFUSER
	2 WAY OPPOSED SUPPLY DIFFUSER
	2 WAY CORNER SUPPLY DIFFUSER
	1 WAY SUPPLY DIFFUSER
	RETURN AIR DEVICE
	EXHAUST AIR DEVICE
	AIR CURTAIN
	LINEAR SLOT DIFFUSER WITH PLENUM
	COMBINATION TEMPERATURE/HUMIDITY SENSOR
	TEMPERATURE SENSOR
	CO2 SENSOR
	TYPE MARK
	MECHANICAL EQUIPMENT TAG
	CONDENSATE PIPING
	INLINE MOUNTED EXHAUST FAN
	ROOF MOUNTED EXHAUST FAN
	PACKAGED ROOFTOP AIR CONDITIONER

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CLIENT NAME
WAWA
280 WEST BALTIMORE PIKE
WAWA, PENNSYLVANIA 18063

PROJECT NAME
WAWA #110 Q12 STORE #6305
US 1 BUS STOP
WAY CROSS, PA

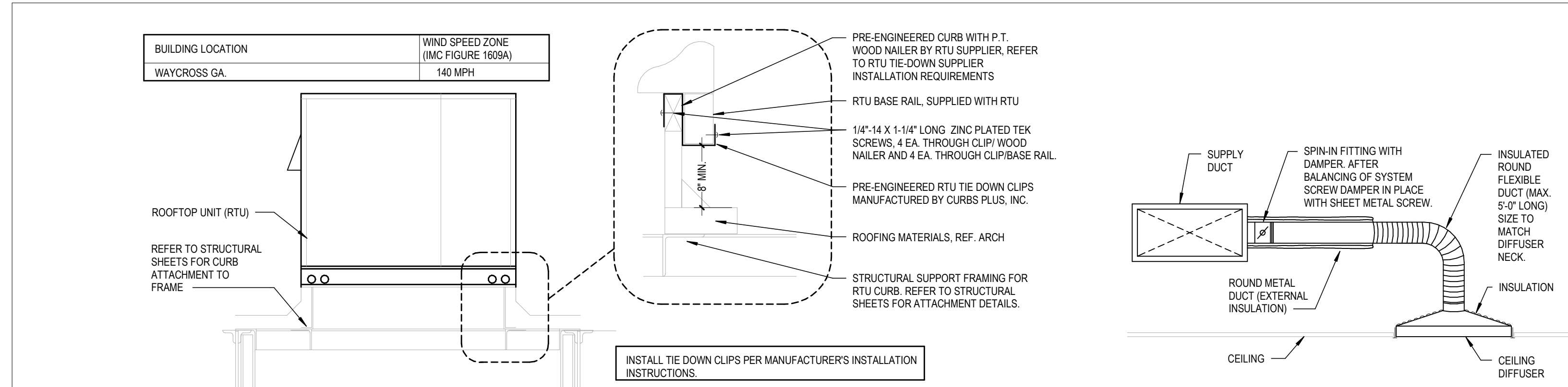
SHEET TITLE
HVAC FLOOR PLAN

10/15/2024

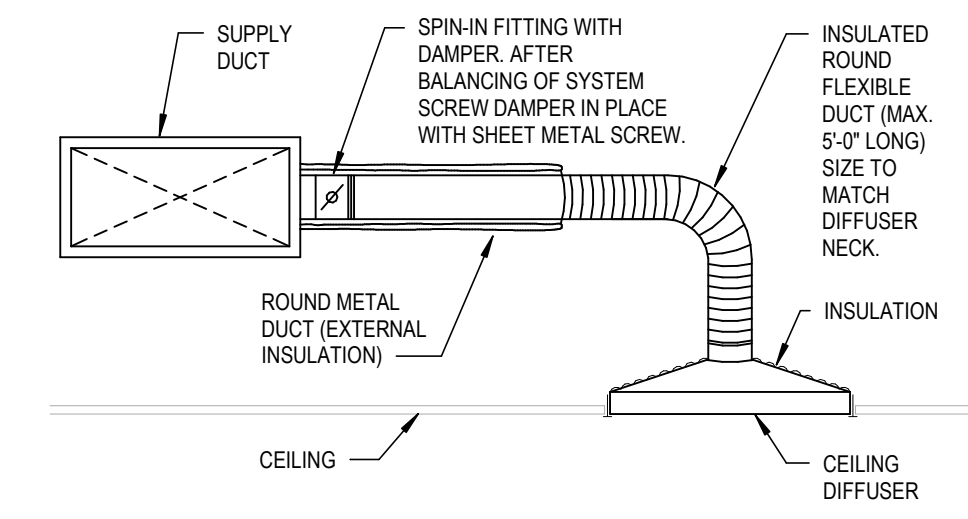
Revision Schedule	
No.	Description
1	PERMIT SET
2	PRELIMINARY SET
3	CONSTRUCTION SET

PROJECT NO.	DATE	DRAWN	CHECKED
2023028	11/25/2023	JZF	ESD

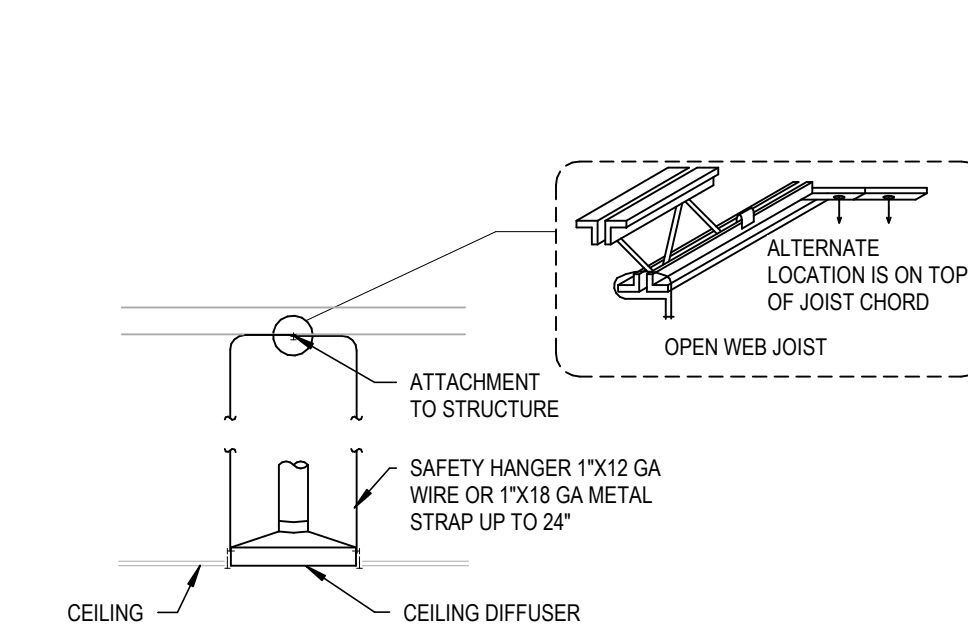
M1.0



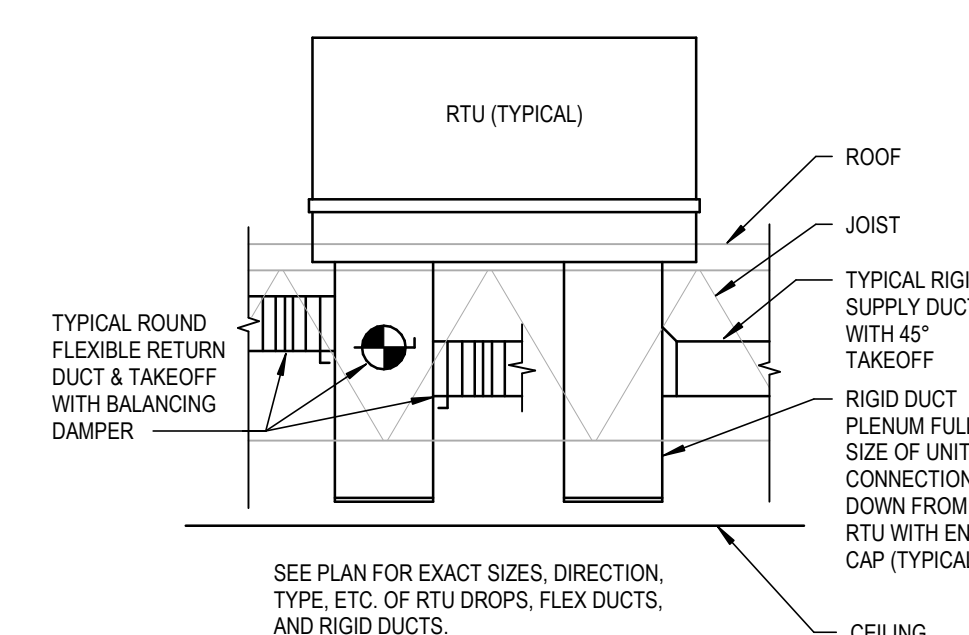
1 RTU TIE-DOWN DETAIL
M3.0 NOT TO SCALE



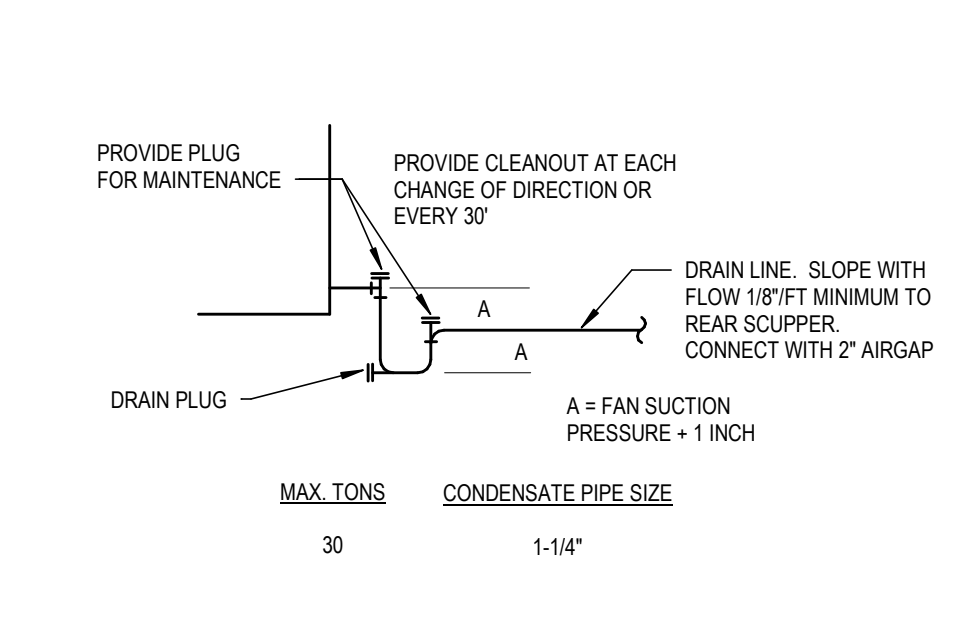
2 CEILING DIFFUSER RUNOUT DETAIL
M3.0 NOT TO SCALE



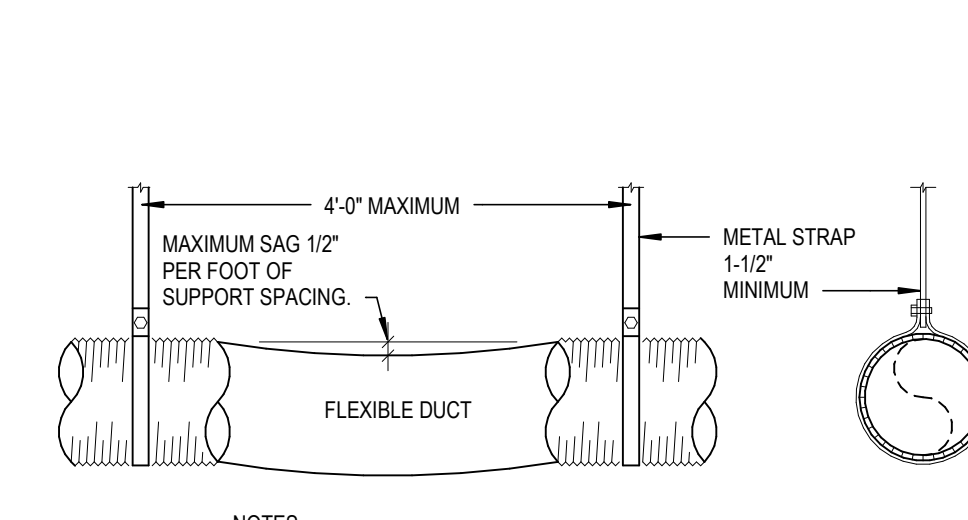
3 CEILING MOUNTED AIR DIFFUSER SUPPORT DETAIL
M3.0 NOT TO SCALE



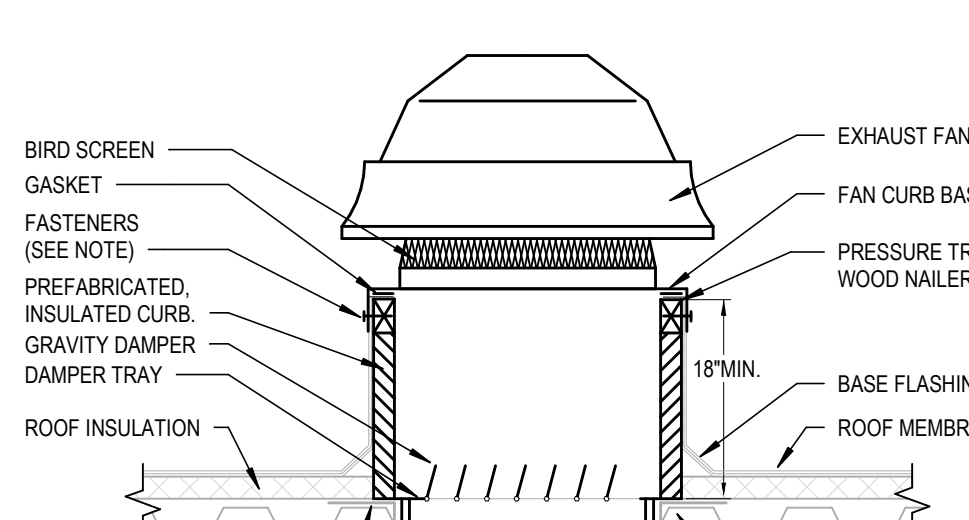
4 TYPICAL DUCT PLENUM DETAIL
M3.0 NOT TO SCALE



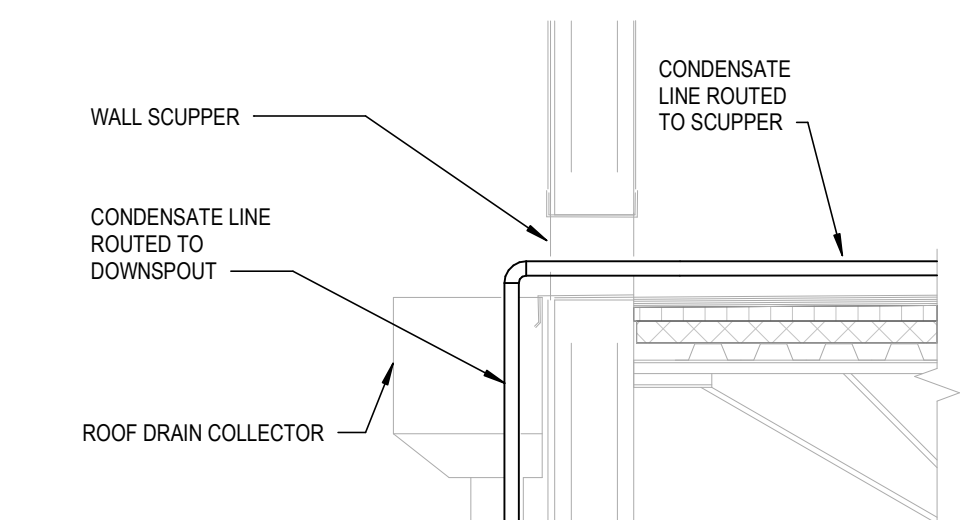
5 CONDENSATE DRAIN TRAP DETAIL
M3.0 NOT TO SCALE



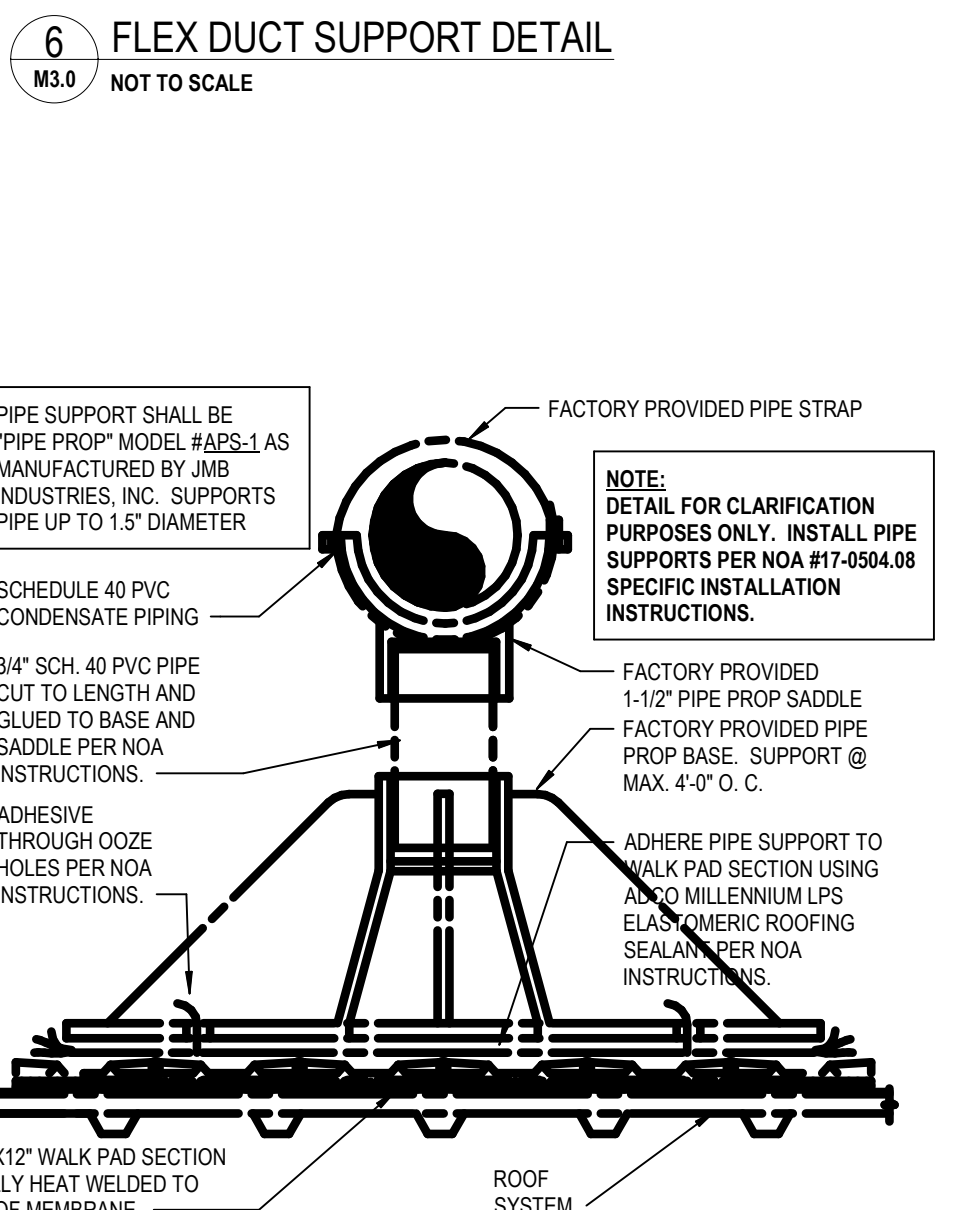
6 FLEX DUCT SUPPORT DETAIL
M3.0 NOT TO SCALE



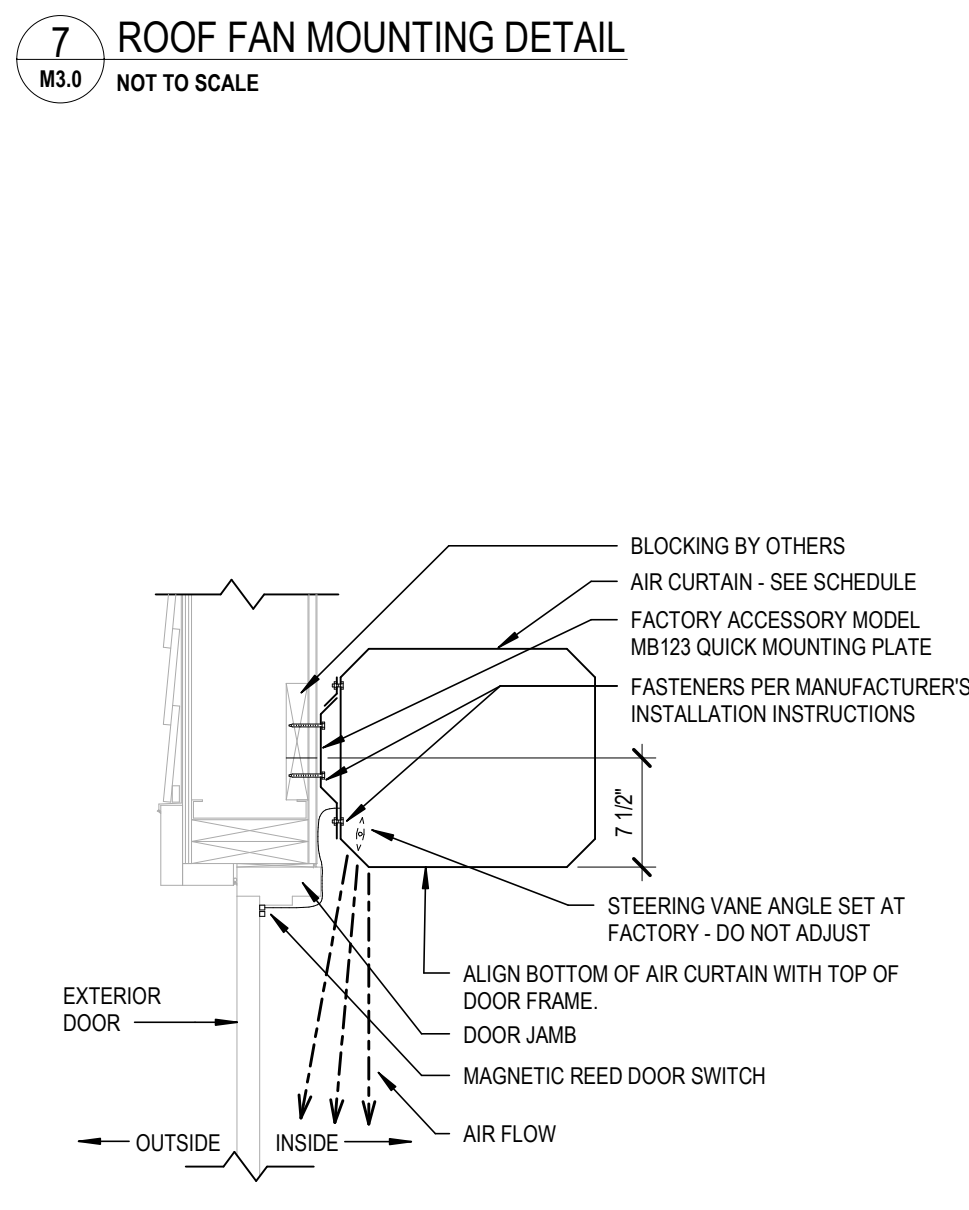
7 ROOF FAN MOUNTING DETAIL
M3.0 NOT TO SCALE



8 CONDENSATION TERMINATION DETAIL
M3.0 NOT TO SCALE



9 CONDENSATE PIPE ROOF SUPPORT DETAIL
M3.0 NOT TO SCALE



10 AIR CURTAIN INSTALLATION DETAIL
M3.0 NOT TO SCALE

RTU-1, 2, & 3 SEQUENCE OF OPERATION

SUPPLY AIR BLOWER SPEED
UNIT HAS FOLLOWING SUPPLY AIR BLOWER SPEED SETTINGS THAT PERTAIN TO THIS INSTALLATION:
• COOLING AIR BLOWER SPEED
• HEATING AIR BLOWER SPEED

COOLING MODE
• Y1 DEMAND: COMPRESSOR 1 OPERATES AND SUPPLY AIR BLOWER OPERATES AT COOLING SPEED.
• Y2 DEMAND: ALL COMPRESSORS OPERATE AND SUPPLY AIR BLOWER OPERATES AT COOLING SPEED.

DEHUMIDIFICATION MODE
• IF THE UNIT RECEIVES A CALL FOR DEHUMIDIFICATION, ECONOMIZER FREE COOLING IS LOCKED OUT (ON UNITS EQUIPPED WITH ECONOMIZER).
• CALL FOR DEHUMIDIFICATION, NO Y1, Y2 DEMAND: 1ST STAGE COMPRESSOR OPERATES, SUPPLY AIR BLOWER OPERATES AT COOLING SPEED, AND THE REHEAT VALVE IS ENERGIZED.
• Y1 DEMAND WITH A CALL FOR DEHUMIDIFICATION: ALL COMPRESSORS OPERATE, SUPPLY AIR BLOWER OPERATES AT COOLING SPEED AND THE REHEAT VALVE IS ENERGIZED.
• Y2 DEMAND WITH A CALL FOR DEHUMIDIFICATION: ALL COMPRESSORS OPERATE, SUPPLY AIR BLOWER OPERATES AT COOLING SPEED, AND THE REHEAT VALVE IS DE-ENERGIZED.

HEATING MODE (ELECTRIC HEAT)
• W1 DEMAND: 1ST STAGE ELECTRIC HEAT IS ENERGIZED AND THE SUPPLY AIR BLOWER OPERATES AT HEATING SPEED.
• W2 DEMAND: 2ND STAGE ELECTRIC HEAT IS ENERGIZED AND THE SUPPLY AIR BLOWER OPERATES AT HEATING SPEED.

MODULATING OUTDOOR AIR DAMPER
• THE MINIMUM DAMPER POSITION FOR 'OCCUPIED LOW BLOWER' AND 'OCCUPIED HIGH BLOWER' IS ADJUSTED DURING UNIT SETUP TO PROVIDE MINIMUM FRESH AIR REQUIREMENTS PER RTU SCHEDULE AT ALL SUPPLY AIR BLOWER SPEEDS.
• WHEN SUPPLY AIR BLOWER IS OFF, THE OUTDOOR AIR DAMPER IS CLOSED.
• WHEN UNIT IS IN OCCUPIED MODE AND SUPPLY AIR BLOWER IS OPERATING BELOW THE 'MIDPOINT' BLOWER SPEED, THE OUTDOOR AIR DAMPER IS AT MINIMUM 'LOW BLOWER' POSITION.
• WHEN UNIT IS IN OCCUPIED MODE AND SUPPLY AIR BLOWER IS OPERATING AT A SPEED EQUAL TO OR ABOVE THE 'MIDPOINT' BLOWER SPEED, THE OUTDOOR AIR DAMPER IS AT MINIMUM 'HIGH BLOWER' POSITION.
• NOTE: THE 'MIDPOINT' BLOWER SPEED IS AN AVERAGE OF THE MINIMUM AND MAXIMUM BLOWER SPEEDS (MINIMUM SPEED + MAXIMUM SPEED DIVIDED BY 2).

RTU-1, 2, & 3 TEST AND BALANCE NOTES

- TEST AND BALANCE CONTRACTOR TO OBTAIN INITIAL BALANCE OF COOLING CFM FOR RTU USING FAN SPEED ADJUSTMENT TO WITHIN +1% SCHEDULED COOLING CFM. PRODIGY CONTROLLER MAY BE USED FOR FINAL 5% TO OBTAIN COOLING CFM.
- SET MINIMUM OUTSIDE AIR DAMPER POSITION FOR COOLING AND VERIFY OUTSIDE AIR CFM PER RTU SCHEDULE.
- NOT USED.
- NOT USED.
- USING PRODIGY CONTROLLER, VERIFY HEATING CFM EQUALS COOLING CFM.
- ALL PRODIGY CONTROLLER SETTINGS OTHER THAN THOSE MENTIONED ABOVE SHALL REMAIN AS THEIR DEFAULT VALUE AS SET FROM THE FACTORY.
- VERIFY POSITIVE BUILDING PRESSURE.

HVAC GENERAL NOTES

- ALL MECHANICAL WORK SHALL BE IN STRICT ACCORDANCE WITH THE JURISDICTION'S LATEST ACCEPTED VERSION OF THE 2018 IMC WITH GEORGIA AMENDMENTS - MECHANICAL, SMANA, U.L. LOCAL CODES, MANUFACTURER'S RECOMMENDATIONS, AND ALL AUTHORITIES HAVING JURISDICTION.
- CONTRACTOR TO VISIT SITE AND VERIFY ALL CLEARANCES BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSET AND/OR CHANGES IN DUCT SIZES 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 SEPARATELY SUPPORTED, HUNG OR SUSPENDED FROM THE STRUCTURE. JOINTS SHALL BE SEALED WITH 3" WIDE GLASS FABRIC TAPE OR FOSTER 3030 MASTIC OR EQUAL. DUCT CONSTRUCTION, SEALING AND INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE JURISDICTION'S LATEST ACCEPTED VERSION OF THE 2018 IMC WITH GEORGIA AMENDMENTS - MECHANICAL AND THE JURISDICTION'S LATEST CODE ACCEPTED SMANA STANDARDS.
- OUTSIDE AIR INTAKES, ROOFTOP UNITS, GRAVITY ROOF VENTS, LOWERS SHALL MAINTAIN A MINIMUM OF 10'-0" FROM ANY EXHAUST OR SANITARY VENT.
- PROVIDE ALL MECHANICAL EQUIPMENT WITH MANUFACTURER'S RECOMMENDED SERVICE AREA CLEARANCES.
- ALL ROOFTOP UNITS SHALL BE CONSTRUCTED AND INSTALLED TO WITHSTAND LOCAL WIND LOAD DESIGN.
- SMOKE DETECTORS SHALL BE FURNISHED AND INSTALLED IN RTU BY THE UNIT MANUFACTURER, WIRED TO THE FIRE 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 96, STANDARD FOR INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS, THE JURISDICTION'S LATEST ACCEPTED VERSION OF THE 2018 IMC WITH GEORGIA AMENDMENTS - MECHANICAL, AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. A VISIBLY ACCESSIBLE NOTIFICATION PANEL, MAKE SYSTEM SENSOR 5548 OR EQUAL, COMPATIBLE WITH BUILDING FIRE ALARM SYSTEM.
- 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 FOLK FACED FIBERGLASS DUCT WRAP WITH A MINIMUM THERMAL RESISTANCE (R) OF 6.0. INSULATION SHALL HAVE VAPOR BARRIER, INSTALL PER MFR REQUIREMENTS.
- COORDINATE CEILING MOUNTED DIFFUSERS, REGISTERS, AND GRILLES AND OTHER CEILING MOUNTED EQUIPMENT WITH LIGHTING FIXTURES.
- TURNING VANES SHALL BE PROVIDED IN ALL SUPPLY DUCT RECTANGULAR ELBOWS WITH ANGLES BETWEEN 15 DEGREES AND LESS THAN 90 DEGREES PER THE SMANA HVAC DUCT CONSTRUCTION STANDARDS MANUAL.
- DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- DUCTWORK, DIFFUSERS, REGISTERS, GRILLES, AND OTHER ITEMS OF THE AIR HANDLING SYSTEM SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- UNLESS OTHERWISE NOTED, INSTALL DUCTWORK AS HIGH AS POSSIBLE, TIGHT 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 ROOFTOP UNITS. SLOPE CONDENSATE LINE 1/8" PER FOOT. CONDENSATE LINES SHALL BE PVC SCH. 40. ALL CONDENSATE DRAIN PIPING SHALL BE PROPERLY SUPPORTED. SEE 'CONDENSATE DRAIN TRAP' SET.
- 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 5'-0". FLEXIBLE DUCT SHALL BE THERMAX TYPE MKC OR EQUAL. FLEXIBLE DUCT SHALL BE INSULATED FIBERGLASS, R-6, CLASS 1, UL181 LISTED AND COMPLY WITH NFPA 96A AND NFPA 91B.
- ALL WALL MOUNTED TEMPERATURE, HUMIDITY, AND CO2 SENSORS SHALL BE INSTALLED AT AN ELEVATION OF 54" ABOVE FINISHED FLOOR TO THE TOP UNLESS OTHERWISE NOTED ON DRAWINGS. LOCATION OF THE WALL MOUNTED SENSORS SHALL BE COORDINATED WITH OTHER TRADES FOR A NEAT APPEARANCE. FINAL LOCATION OF SENSORS SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OR THEIR REPRESENTATIVE IN THE FIELD.
- PROVIDE FLEXIBLE NEOPRENE DUCT CONNECTORS ON THE DISCHARGE AND ENTERING SIDES OF PACKAGED ROOFTOP 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 AS APPLICABLE TO THE HVAC SYSTEM. CHASE AND WALL PENETRATIONS INTENDED FOR DUCTWORK AND PIPING SHALL BE VERIFIED WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.
- MECHANICAL EQUIPMENT, DUCTWORK AND PIPING IS SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK AND PIPING LOCATIONS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. FIELD VERIFY FINAL LOCATIONS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
- WHEN THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS NOT CLEAR, OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUCH MATTERS WILL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER IN WRITING BEFORE THE SUBMISSION OF BIDS. THE ARCHITECT/ENGINEER 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 THE INSTALLATION, SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MECHANICAL, ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL PLANS BEFORE SUBMITTING HIS FINAL BID. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO FAMILIARIZE HIMSELF HERSELF WITH THE PLANS.
- CONTRACTOR TO ALLOW SUFFICIENT TIME (APPROXIMATELY 2 WEEKS) FOR EQUIPMENT REVIEW. CONTRACTOR SHALL SUBMIT THE FOLLOWING EQUIPMENT FOR REVIEW (1 HARD COPY) PRIOR TO ORDERING AND INSTALLATION: ROOFTOP UNITS, AIR HANDLING UNITS AND AIR COOLED CONDENSERS, DIFFUSERS AND REGISTERS, EXHAUST FANS AND MAKE UP AIR FANS, DUCT INSULATION, DUCT CONSTRUCTION WITH GENERAL CONTRACTOR.
- AFTER THE HEATING AND AIR CONDITIONING SYSTEM INSTALLATIONS ARE COMPLETE, THE CONTRACTOR SHALL HAVE EACH SYSTEM TESTED, ADJUSTED, AND BALANCED BY AN INDEPENDENT TESTING AND BALANCING CONTRACTOR. SEE SPECIFICATIONS FOR TESTING AND BALANCING CONTRACTOR CERTIFICATIONS AND REQUIREMENTS. UPON COMPLETION OF TEST AND BALANCE OF ALL SYSTEMS, THE CONTRACTOR SHALL PRESENT THE OWNER AND ARCHITECT WITH A WRITTEN TEST AND BALANCE REPORT IN A TIMELY MANNER PER SPECIFICATIONS.

HVAC ROOFTOP UNIT SCHEDULE

MARK	AREA SERVED	SERV. TYPE	NOMINAL TONS	CFM	SUPPLY AIR FAN DATA			ELECTRIC HEAT CONTROL STAGES	VOLTAGE	PHASE	MCA	MOCP	WEIGHT (LBS. RTU ONLY)	TOTAL COOLING CAPACITY (MBH)	COOLING CAPACITY			EER (SEER)	MANUFACTURER	MODEL	NOTES
					OUTSIDE AIR	E.S.P. (IN)	HP								COOLING (MBH)	EDB (°F)	EWB (°F)				
RTU-1	CORE	8.5	3400 CFM	500	0.5	3.75	22.5	1	208V	3	70	70	1387	88.1	75.4	76.5	63.9	95/79	LENNOX ENLIGHT	LCT1024HE	1-20
RTU-2	DELI	12.5	5000 CFM	500	0.5	3.75	N/A	N/A	208V	3	64	80	1342	136	75.2	62.5	95/79	LENNOX ENLIGHT	LCT1504HE	2-20	
RTU-3	RETAIL	7.5	3000 CFM	275	0.5	3.75	22.5	1	208V	3	70	70	1380	91.8	68.7	76.1	63.5	96/79	LENNOX ENLIGHT	LCT0204HE	2-20

AIR BALANCE SCHEDULE

SYSTEM	CFM
RTU-1	-500
RTU-2	-500
RTU-3	-275
EF-1	-325
EF-2	-450
BUILDING POSITIVE PRESSURE	-500

OUTSIDE AIR CALCULATION

AREA SERVED	AREA (SQFT)	PEOPLE / 1000 SQFT	# PEOPLE	CFM / PERSON	PEOPLE O.A. (REQ'D)	CFM / PERSON	SOFT OUTSIDE AIR (CFM)	TOTAL CFM CALQ'ATED	CFM SUPPLIED
OFFICE	95	5	2	5	10	0.06	6	16	
HALLWAY	86	-	-	-	-	0.06	6	6	
DELIVERY	104	2	1	10	10	0.12	13	23	
RETAIL	1687	15	25	7.5	188	0.12	189	387	
							RTU-1	432	500
							RTU-2	267	500
							RTU-3	210	275
FOOD SVC	421	20	9	7.5	68	0.12	51	119	
BACKROOM	311	20	7	7.5	53	0.12	38	91	
WASHROOM	134	20	3	7.5	23	0.12	17	40	
STAGING	58	2	1	10	10	0.12	7	17	
								267	300
ASSOCIATES	60	5	2	5	10	0.06	4	14	
COFFEE	306	20	7	7.5	53	0.12	37	90	
RETAIL	439	15	7	7.5	53	0.12	53	106	
								210	275

HVAC EXHAUST FAN SCHEDULE

MARK	AREA SERVED	EXT. STATIC PRESSURE	FAN TYPE	DRIVE TYPE	SONES	HP	FAN RPM	VOLTAGE	PHASE	MANUFACTURER	MODEL	NOTES
EF-1	336 CFM	0.375 inwg	DOWNBLAST	DIRECT	7.5	110	120V	1	1	GREENHECK	G-900	1-2
EF-2	450 CFM	0.250 inwg	DOWNBLAST	DIRECT	5.2	110	120V	1	1	GREENHECK	G-900	1-2

HVAC AIR DEVICE SCHEDULE

MARK	TYPE	PRICE	AMT	SUPPLY	DESCRIPTION	MOUNTING TYPE	MATERIAL	NECK SIZE	FACE SIZE	NOTES
CD-1	PRICE	AMT	SUPPLY	LOUVERED FACE DIRECTIONAL DIFFUSER	LAY-IN	ALUMINUM	18"X18"	24"X24"	1.7	
CD-3	PRICE	AMT	SUPPLY	LOUVERED FACE DIRECTIONAL DIFFUSER	SURFACE	ALUMINUM	18"X18"	24"X24"	5.7	
CD-4	PRICE	AMT	SUPPLY	LOUVERED FACE DIRECTIONAL DIFFUSER	SURFACE	ALUMINUM	9"X9"	NECK-5"	5.7	
G-1	PRICE	AMT	SUPPLY	LOUVERED FACE DIRECTIONAL DIFFUSER	SURFACE	ALUMINUM	6"X6"	NECK-5"	6.7	
G-1	PRICE	630FF	RETURN/TRANSFER	LOUVERED FACE FILTER RETURN GRILLE	LAY-IN	ALUMINUM	20"X20"	NECK-3-3/4"	4	
G-2	PRICE	630FF	TRANSFER	LOUVERED FACE FILTER RETURN GRILLE	SURFACE	ALUMINUM	18"X18"	NECK-3-3/4"	4	
G-3	PRICE	630FF	EXHAUST	LOUVERED FACE FILTER RETURN GRILLE	SURFACE	ALUMINUM	6"X6"	NECK-3-3/4"	4	
LD-1	PRICE	TBDM	SUPPLY	48" INSULATED PLENUM W/ (4) 1" SLOTS	LAY-IN	ALUMINUM	SEE PLAN	NA	2.3	

HVAC AIR CURTAIN SCHEDULE

MARK	AREA SERVED	POWERED AIRE	MODEL	NOZZLE CFM	HP	VOLTAGE	PHASE	MOUNTING HEIGHT	NOTES
AC-1	STAGING	POWERED AIRE	BCE-142	2170 CFM	0.5	120V	1	7'-2"	1-4
AC-2	DELIVERY VESTIBULE	POWERED AIRE	BCE-148	2155 CFM	0.5	120V	1	7'-2"	1-4

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CUHACI PETERSON

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WAWA, PENNSYLVANIA 19063
US 1 CLUSEP
WAYCROSS, GA

PROJECT NO: 10/15/2024

Revision Schedule

No.	Description	Date
1	PERMIT SET	11/22/2023
2	PIE SET	06/20/2024
3	C CONSTRUCTION SET	10/15/2024

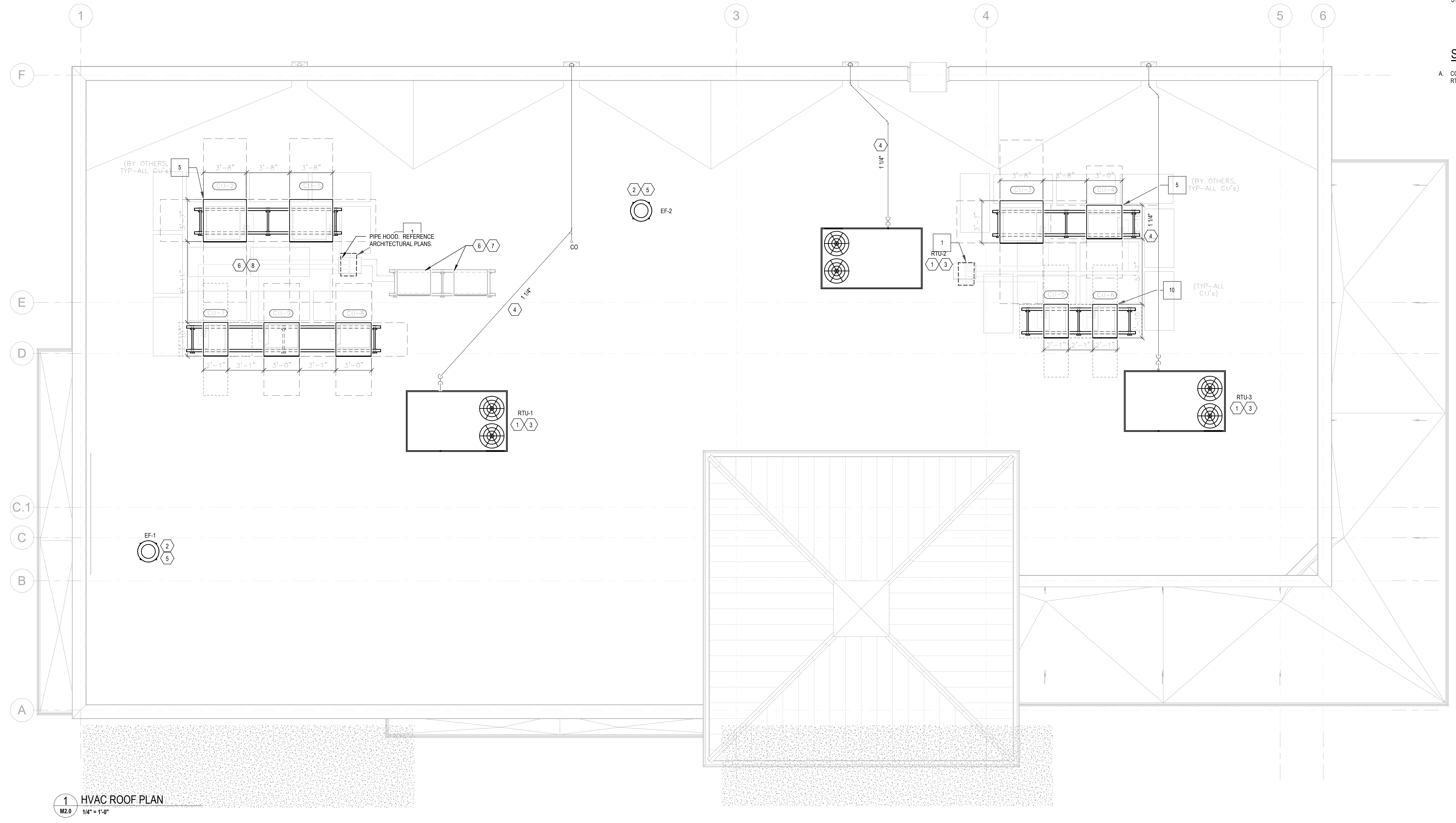
PROJ. USE: 10/2023

DATE: 11/25/2023

DRAWN: JZF

CHECKED: ESD

M3.0



1 HVAC ROOF PLAN
M2.0
1/4" = 1'-0"

KEY NOTES:

- 1 FACTORY INSTALLED SMOKE DETECTORS IN MAIN SUPPLY AND RETURN OF EACH ROOFTOP UNIT.
- 2 INSTALL ROOF MOUNTED EXHAUST FAN PER DETAIL ON SHEET M3.0. COORDINATE EXACT LOCATION OF FAN PENETRATION WITH ARCHITECTURAL ROOF PLAN. TRANSITION GALVANIZED DUCTWORK AS NECESSARY FROM FAN INTO CEILING/JOIST SPACE. SEE SHEET M1.0 FOR CONTINUATION.
- 3 PROVIDE FLEXIBLE CONNECTIONS BETWEEN ALL DUCTWORK AND MECHANICAL UNITS.
- 4 ROUTE SCH. 40 PVC CONDENSATE DRAIN PIPING ALONG ROOF. SUPPORT PIPING PER DETAIL ON SHEET M3.0.
- 5 MAINTAIN A MINIMUM 1' CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND EXHAUST TERMINATIONS ON ROOF.
- 6 FOOD SERVICE REFRIGERATION EQUIPMENT PROVIDED BY OTHERS.
- 7 FOOD SERVICE REFRIGERATION EQUIPMENT MOUNTED ON PRE-ENGINEERED RACK. REFER TO 'CONDENSING UNIT ROOFING SUPPORT DETAIL' ON ARCHITECTURAL SHEETS FOR FLORIDA PRODUCT APPROVAL INFORMATION.
- 8 FOR SPECIFIC WIND LOADING REQUIREMENTS NOT TO EXCEED 140 MPH, SEE STRUCTURAL DRAWINGS.

SHEET GENERAL NOTE:

- A. CONTRACTOR RESPONSIBLE FOR USING CURBS PLUS CLIPS ON ALL RTUS. CLIPS ARE DELIVERED TO SITE AS SEPARATE PACKAGE.

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CLIENT NAME
WAWA
280 WEST BALTIMORE PIKE
WAWA, PENNSYLVANIA 18063

PROJECT NAME
WAWA F110 Q12
STORE #6305
US 1 & US 62
WAY CROSS, GA

SHEET TITLE
HVAC ROOF PLAN

10/15/2024

Revision Schedule	
No.	Description
1	PERMIT SET
2	DATE SET
3	CONSTRUCTION SET

PROJECT NO. 2023028	DATE 11/25/2023	DRAWN JZF	CHECKED ESD
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M2.0

PROJECT NUMBER