

TO THE BEST OF THE KNOWLEDGE OF THE ARCHITECT AND ENGINEER, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE BUILDING CODES AND THE APPLICABLE MECHANICAL AND ELECTRICAL CODES.

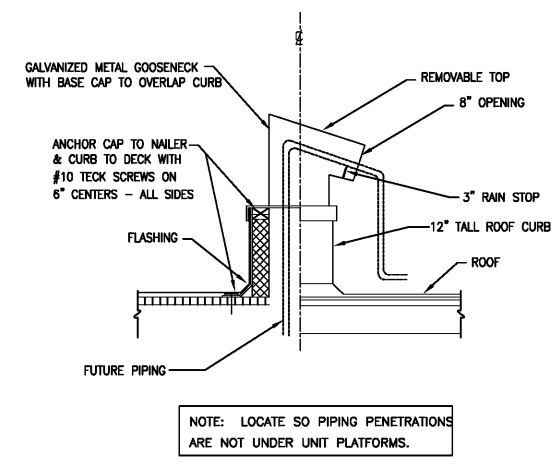
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STARBUCKS SHELL CONSTRUCTION
 2500 MONUMENT ROAD
 JACKSONVILLE, FL

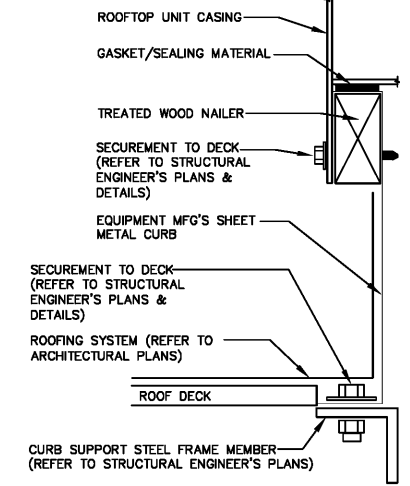
12.13.17
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MECHANICAL
 DETAILS &
 SCHEDULES

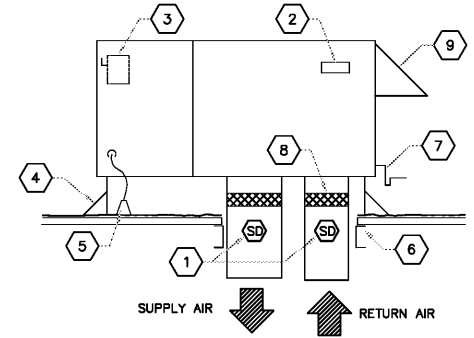
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ROOF PIPE CURB DETAIL
 SCALE: NONE

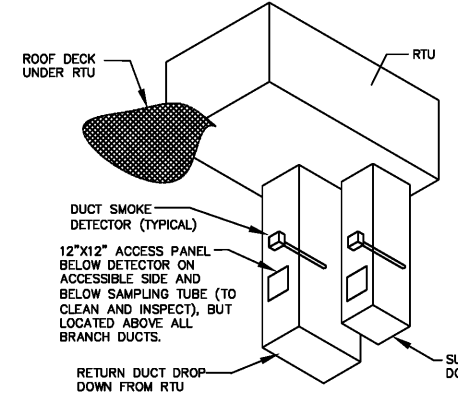


ATTACHMENT OF RTU AND FAN ROOFTOP CURBS
 SCALE: NONE

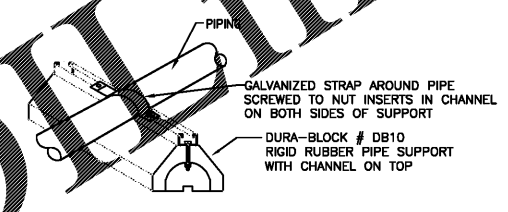


- 1 CONTRACTOR SHALL PROVIDE AND INSTALL AN APPROVED DUCT MOUNTED SMOKE DETECTOR FOR ALL RTU'S DELIVERING 2000 CFM OR MORE.
- 2 UNIT IDENTIFICATION PLATE SCREWED TO UNIT.
- 3 DISCONNECT SWITCH. DO NOT MOUNT HIGHER THAN UNIT.
- 4 PREFAB CURB.
- 5 PATE PIPING PLUG FOR CONTROL. DO NOT RUN IN POWER CONDUIT. DO NOT USE "PATE" PIPING PLUGS AS NOTED WHERE UNIT MANUFACTURER HAS PROVIDED OPENINGS INSIDE PERIMETER CURB.
- 6 CUT HOLE IN ROOF ONLY LARGE ENOUGH FOR DUCT & PROVIDE STRUCTURAL SUPPORT FOR DECKING.
- 7 CONDENSATE TRAP (REFER TO DETAIL). ROUTE CONDENSATE AS INDICATED ON DRAWINGS.
- 8 FLEXIBLE CONNECTION.
- 9 OUTDOOR AIR INTAKE.

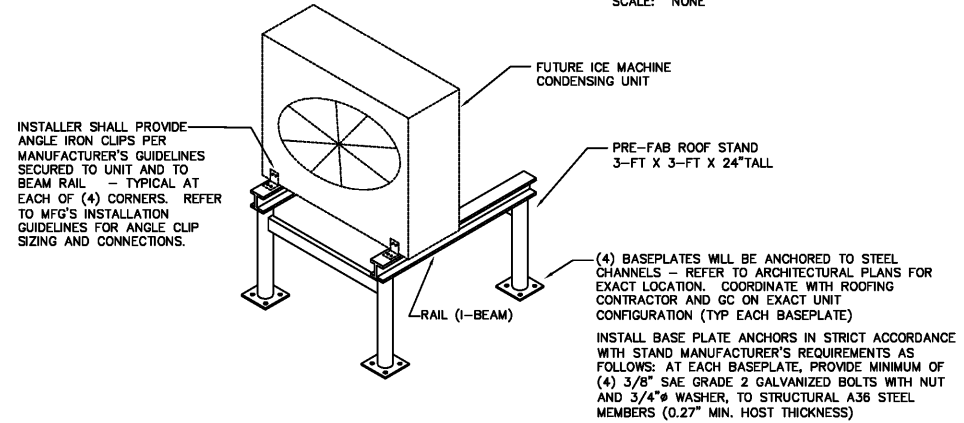
ROOFTOP UNIT DETAIL
 SCALE: NONE



RTU DUCT SMOKE DETECTOR ISOMETRIC DETAIL
 NOT TO SCALE

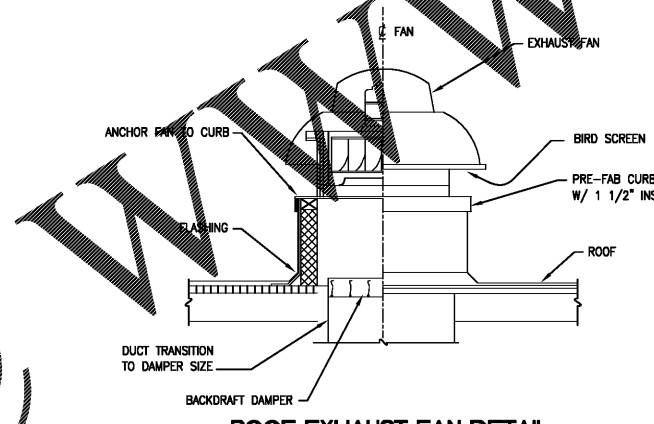


ROOF CONDENSATE PIPE SUPPORT DETAIL
 SCALE: NONE



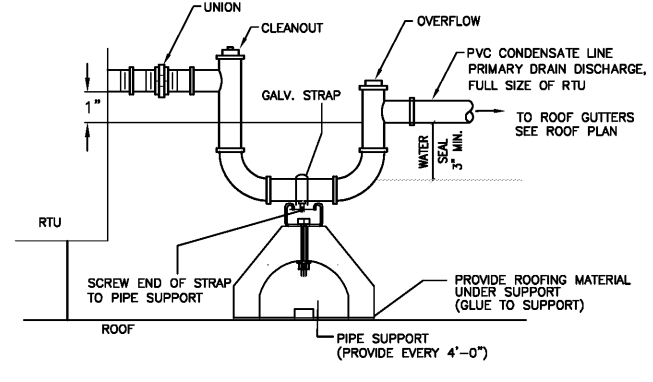
CONDENSER ROOF STAND DETAIL (FUTURE COOLER CONDENSER)
 SCALE: NONE

PRECISION ALUMINUM PRODUCTS "ALUMA-STAND" IS BASIS OF DESIGN (FL PRODUCT APPROVAL # 16921.2-R2) STAND SHALL BE LISTED FOR 150-MPH+ WIND LOADING & LOCAL WIND LOADING PER CODE. COORDINATE WITH ROOFING CONTRACTOR AND GC ON EXACT UNIT CONFIGURATION TO SUIT FIELD CONDITIONS (TYP EACH BASEPLATE) INSTALL ANCHORS IN ACCORDANCE WITH STAND MANUFACTURER'S GUIDELINES. IF REQUIRED, CONTRACTOR SHALL PROVIDE ADDITIONAL STEEL ANGLE SUPPORTS REQUIRED TO SPAN JOISTS AT NO ADDITIONAL COST.



ROOF EXHAUST FAN DETAIL
 SCALE: NONE

NOTE: INSTALL FAN 10 FEET FROM ANY SOURCE OF FRESH AIR INTAKE.



RTU CONDENSATE P-TRAP DETAIL
 SCALE: NONE

SEQUENCE OF OPERATIONS FOR HVAC EQUIPMENT

SUPPLY FANS: THE EVAPORATOR FAN WILL RUN CONTINUOUSLY DURING OCCUPIED HOURS, AND CYCLE ON/OFF WITH COOLING/HEATING WHEN IN UN-OCCUPIED MODE, ACCORDING TO THERMOSTAT PROGRAMMING, AND SUBJECT TO FIRE ALARM SHUTDOWN (DUCT SMOKE DETECTOR).

OUTSIDE AIR DAMPER: THE DAMPER CLOSES WHEN THE UNIT IS OFF. DAMPER SHALL OPEN FULLY WHEN SUPPLY FAN STARTS TO BALANCED (FIXED) POSITION AND STAY OPEN DURING OCCUPIED MODE (NO MODULATION).

COOLING COIL: THE COOLING COIL AND COMPRESSORS SHALL ENERGIZE TO MAINTAIN SPACE COOLING SETPOINT. (75°F, ADJUSTABLE).

DEHUMIDIFICATION: WHEN SPACE TEMPERATURE IS SATISFIED BUT SPACE HUMIDITY IS NOT MET, UNIT SHALL ENTER DEHUMIDIFICATION MODE, AND ENERGIZE COMPRESSOR AND COOLING COIL. WHILE ALSO ENERGIZING THE HOT GAS REHEAT COIL IN STAGES TO AVOID OVERCOOLING. UNIT SHALL REMAIN IN THIS MODE UNTIL HUMIDITY SETPOINT (55%RH, ADJUSTABLE) IS ACHIEVED OR THERE IS A CALL FOR COOLING.

HEATING COIL: THE GAS HEAT EXCHANGER WILL ENERGIZE IN CONTROL STAGES TO MAINTAIN SPACE HEATING SETPOINT. (68°F, ADJUSTABLE).

UNIT HEATING: THE ELECTRIC HEATING COIL WILL ENERGIZE IN CONTROL STAGES TO MAINTAIN SPACE HEATING SETPOINT. (60°F, ADJUSTABLE).

FANS: THE EXHAUST FANS WILL RUN WHEN THEIR RESPECTIVE RESTROOM IS OCCUPIED, BASED ON OCCUPANCY SENSOR CONTROL.

EXHAUST FAN SCHEDULE

MARK	GENERAL				CONSTRUCTION							NOTES
	CFM	SONES	ESP (IN-WG)	ELEC.	MOTOR	DRIVE	TYP. FAN	HANU.	MODEL	WEIGHT (lbs)		
EF-1	300	10.6	0.375	120V/1PH	1/25 HP	DIRECT	ROOF DRAST	GREENHECK	G-085	19	① ②	

NOTE: ① PROVIDE FAN WITH 18" TALL ROOF CURB, DOWNBLAST HOUSING, FAN SPEED CONTROLLER, AT FAN UNDER HOOD, AND BACKDRAFT DAMPER.
 ② DISCONNECT BY ELECTRICIAN. INTERLOCK FOR OPERATION BY FUTURE TENANT CONTRACTOR.

HIGH EFFICIENCY PACKAGED DX ROOF TOP UNIT SCHEDULE

MARK	CFM	T/O/A	ESP	N.W.G.	POWER	NOMINAL TONS	ARI EFFIC. EER	BLOWER		COOLING		COOLING CAP		HEATING CAP		POWER												
								HP	STATIC DRIVE	ENT AIR DB	WB	TOTAL MBH	SENS. MBH	INPUT kW	OUTPUT MBH	CONDENSER FAN QTY.	FLA	QTY.	RLA	LRA	MCA AMPS	MOCAP AMPS	AMBIENT TEMP.	FILTER TYPE	BASE WGT LBS	MFG.	MODEL	NOTES
RTU-1	3,400	34	0.8	0.8	208V/3#	8.5	12.5	2.75	STD	76.8	63.5	92.5	71.3	13.5	46.1	1	4.0	2	15.6/10.0	110/71.0	57.5	60	95°F	2"/30%	937	TRANE	THC102F3	①②③④⑤⑥⑦⑧⑨
RTU-2	3,000	500	0.8	0.8	208V/3#	12.5	11.0	3.00	STD	76.8	63.5	142.7	105.4	13.5	46.1	2	2.7	2	27.5/13.6	191/100	67.0	80	95°F	2"/30%	1,959	TRANE	THD150G3	①②③④⑤⑥⑦⑧⑨

NOTE: ① PROVIDE WITH 7-DAY WEEK PROGRAMMABLE THERMOSTAT, MEETING ALL CODE REQUIREMENTS (SEE SPECIFICATIONS). INCLUDE EXTRA LENGTH OF WIRING FOR TEMPORARY MOUNTING.
 ② PROVIDE MFG'S 4" TALL INSULATED ROOF CURB WITH SHIM KIT IF NEEDED FOR LEVEL UNIT INSTALLATION.
 ③ PROVIDE SINGLE POINT POWER TO UNIT (ALL SERVICE DISCONNECTS AND CONVENIENCE OUTLETS BY ELECTRICIAN - NOT FURNISHED WITH RTU)
 ④ PROVIDE MFG'S OPTIONAL BLACK EPOXY CONDENSER COIL COATING.
 ⑤ PROVIDE WITH A SECONDARY (AUXILIARY) OVERFLOW DRAIN FLOAT SWITCH IN CONDENSATE PAN, INTERLOCKED WITH FAN MOTOR FOR SHUTDOWN.
 ⑥ PROVIDE HOT GAS REHEAT - DEHUMIDIFICATION SYSTEM AND REMOTE HUMIDITY SENSOR / CONTROL AND EXTRA LENGTH OF WIRING FOR TEMPORARY MOUNTING BY T'STAT.
 ⑦ INSTALL DUCT SMOKE DETECTOR IN SUPPLY & RETURN DUCT DROP BELOW UNIT (FURNISHED & WIRED BY ELECTRICIAN)
 ⑧ PROVIDE WITH LOW AMBIENT COOLING AND # COOLING CIRCUITS PER SCHEDULE.
 ⑨ FINAL UNIT COOLING CAPACITY, HEATING CAPACITY AND LOCATIONS MUST BE APPROVED BY TENANT AND LANDLORD, PRIOR TO BID.

NOTE ON PLAN INTENT AND SUBSTITUTIONS:

ANY SUBSTITUTION REQUESTS FOR MANUFACTURER, MATERIALS, EQUIPMENT, OR ACCESSORIES, MUST BE PROVIDED FOR TENANT, LANDLORD, AND ENGINEER/ARCHITECT REVIEW DURING BID PROCESS. NO SUBSTITUTIONS REQUESTS WILL BE ALLOWED AFTER THE BID PRICING IS COMPLETED. THIS INCLUDES ROUND AND RECTANGULAR DUCT SIZES SHOWN AND QUANTITY AND CAPACITY OF AIR DISTRIBUTION, ALONG WITH MFG'S.