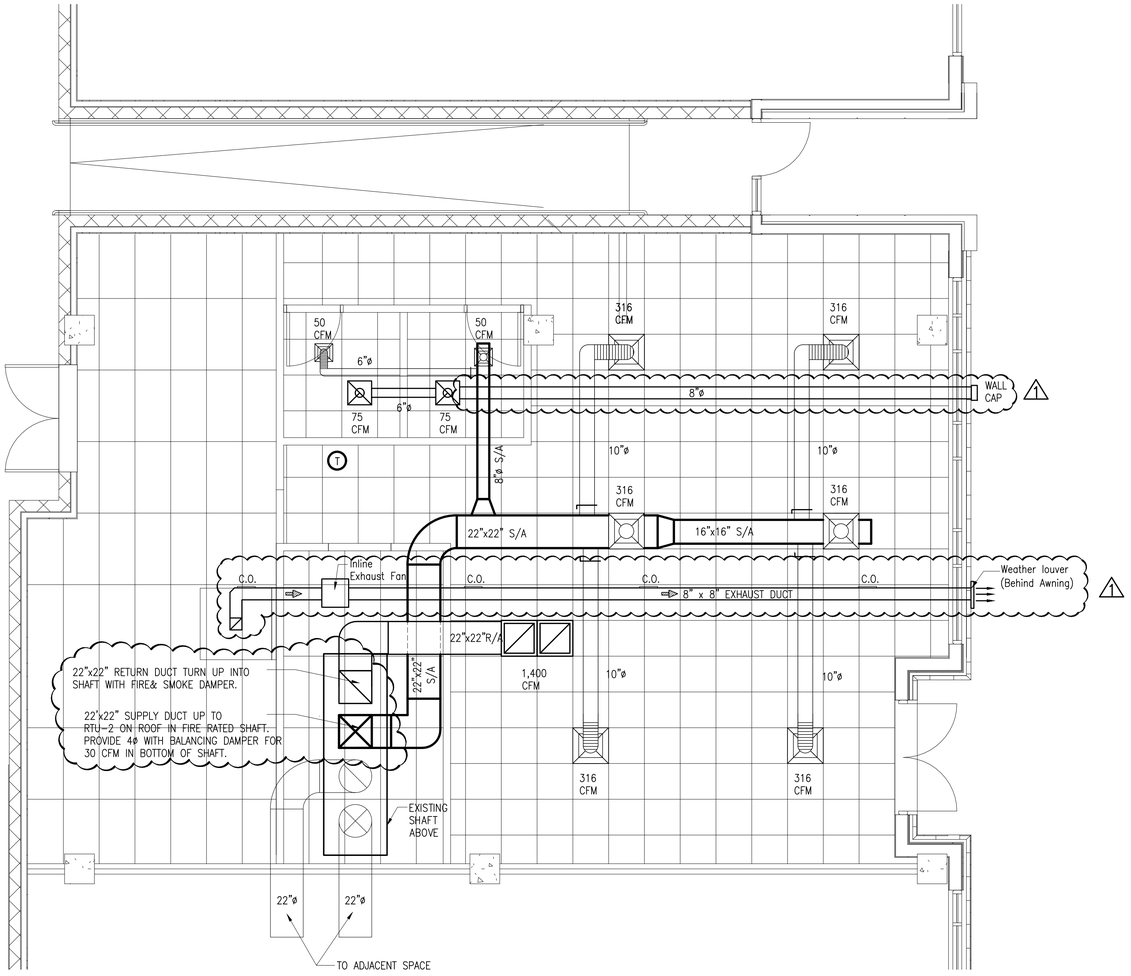


HVAC PLAN

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

LEGEND

- S/A — HVAC SUPPLY AIR GRILL
- R/A — HVAC RETURN AIR DIFFUSER
- FLEXIBLE AIR DUCT
- (T) — PROGRAMMABLE TYPE THERMOSTAT

AIR DISTRIBUTION DUCT		
ø	FROM (CFM)	TO (CFM)
10"	221	400
12"	401	680

NOTE:
EXHAUST FAN SHALL BE 10' AWAY OR 36" ABOVE ANY INTAKE AIR FAN

NOTE:
UPON ACTIVATION, THE SMOKE DETECTORS SHALL SHUT DOWN THE AIR DISTRIBUTION SYSTEM. AIR DISTRIBUTION SYSTEMS THAT AREA PART OF A SMOKE CONTROL SYSTEM SHALL SWITCH TO THE SMOKE CONTROL MODE UPON ACTIVATION OF A DETECTOR.

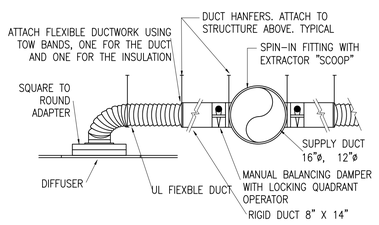
MECHANICAL NOTES

1. THE CONTRACTOR SHALL EXAMINE ALL OTHER SPECIFICATIONS, DRAWING AND ALL OTHER FEATURES OF BUILDING CONSTRUCTION WHICH MAY AFFECT HIS WORK AND BE GOVERNED BY THESE SPECIFICATIONS, INCLUDING THE GENERAL CONDITIONS AND PARTICULAR INSTRUCTIONS TO ALL BIDDERS AND SUPPLIERS.
2. ALL WORK SHALL BE EXECUTED AND INSPECTED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND/ OR STATE CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS APPLICABLE TO THIS PARTICULAR CLASS OF WORK, AND EACH CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL SERVICE CHARGES, FEES, PERMITS, ROYALTIES, TAXES, AND OTHER SIMILAR COST IN CONNECTION THEREWITH.
3. PRIOR TO FABRICATION OF DUCTWORK, CONTRACTOR SHALL EXAMINE AND VERIFY ALL CONDITIONS ABOVE AND BELOW THE CEILING WHICH MAY INTERFERE WITH THE DUCT SYSTEM AND NOTIFY THE ARCHITECTS OF ANY CONFLICT ENCOUNTERED. CONTRACTOR SHALL PROVIDE ALL OFFSETS ETC. WHICH MAY BE REQUIRED, WITHOUT ADDITIONAL COST TO THE TENANT.
4. ALL SHEET METAL CONSTRUCTION OR FIBER GLASS DUCT BOARD SHALL BE IN STRICT ACCORDANCE WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS.
5. TURNING VANES SHALL BE INSTALLED IN ALL BENDS EXCEED 30 DEGREES.
6. ALL DUCTS SHALL BE SUPPORTED WITH 1" WIDE, 16 GAUGE GALVANIZED STEEL BANDS.
7. ALL OF THE HVAC DUCT MATERIAL SHALL BE "OWENS CORNING (R) DUCT BOARD WITH R VALUE OF 6.5 OR MORE", AND SHALL COMPLY WITH COVERNING ENERGY EFFICIENCY REQUIREMENTS.
8. ALL DUCT DIMENSIONS SHOWN ON PLANS ARE SHEET METAL DIMENSIONS. ALLOWANCE HAS BEEN MADE FOR LINER.
9. CONTRACTOR SHALL COORDINATE LOCATION OF ALL SUPPLY AND RETURN AIR REGISTERS, DUCT, GRILLES, AND DIFFUSERS WITH LIGHTS AND CEILING PATTERNS.
10. SUPPLY AIR DIFFUSERS SHALL BE KRUEGER MODEL 1104 WITH OPPOSED BLADE DAMPERS AND FRAME 23 FOR LAY-IN CEILING.
11. MOUNT THERMOSTAT AT 48" MAXIMUM ABOVE THE FINISHED FLOOR.
12. PROVIDE U.L.F.D. AT ALL DUCT OR AIR DISTRIBUTION PENETRATIONS OF RATED WALLS, FLOORS. OR CEILING ASSEMBLES W/ ACCESS.
13. PROVIDE CONDENSATE DRAIN W/ TRAP AT UNITS WITH DRAIN TO OPN'G BY PLUMBING CONTRACTOR COORDINATE W/ PLBG. CONTRACTOR.
14. MECHANICAL CONT'R SHALL CONFER W/ ELECTRICAL CONT'R & COORDINATE ALL POWER REQUIREMENTS, POINTS, OR CONNECTION ETC.. COORDINATE W/ PLBG. CONTRACTOR TO INSURE PROPER CONDENSATE DRAINS.

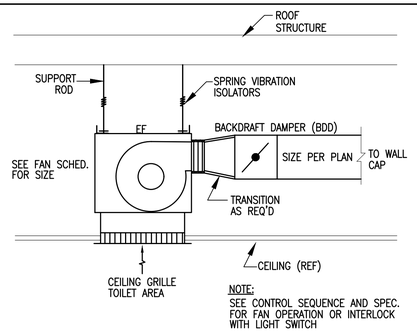
ROOFTOP UNIT (HEAT PUMP) SCHEDULE

TAG	MANUFACTURER	MODEL	AREA SERVED	SYSTEM TYPE	AIRFLOW (CFM)		MAX. MOTOR HP	ESP (IN WC)	NET COOLING							HEATING								MERVRATING	WEIGHT (LBS)	ACCESSORIES
									CAPACITY (MBH)			EAT(°F)		EFFICIENCY		INTEGRATED CAPACITY				EAT(°F)	SUPPHEAT					
					TOTAL	OUTSIDE AIR			NOM TONS	TOT	SENS	DB	WB	EER/IEER	SEER	CAP(MBH)	OA AMB (°F)	EFFICIENCY			KW	NO. STAGES				
																		COP	HSPF							
RTU-2	TRANE	WSC060	SUITE C	CV	2,000	500	1	1.5	5.0	64.9	43.7	80	67	–	13.0	58.5	47.0	2.3	8.0	64	13.1	2.0		8	700	1 THUR 7

DUCT CONNECTION DETAIL



TOILET EXHAUST FAN DETAIL



NOTE:
SEE CONTROL SEQUENCE AND SPEC. FOR FAN OPERATION OR INTERLOCK WITH LIGHT SWITCH

OUTSIDE AIR CALCULATION PER 2012 IMC TABLE 403.3

AREA	OCCUPANT LOAD			OUTDOOR AIR (cfm/person)		OUTDOOR AIR (cfm/sq. ft.)		EXHAUST AIRFLOW RATE CFM/SQ.FT	TOTAL OUTDOOR AIR (cfm)
	SQ. FT.	MAXIMUM OCCUPANT LOAD, PERSON PER 1,000 SQ. FT.	TOTAL OCCUPANT LOAD	OUTDOOR AIR PER PERSON		OUTDOOR AIR PER SQ. FT.			
DINING AREA	580	70	41	7.5	308	0.18	104		412
CIRCULATION AREAS (VESTIBULE, CORRIDOR)	702					0.0600	42		42
TOTAL									454
TOTAL OUTDOOR AIR REQUIRED	0.8 (AIR DISTRIBUTION EFFECTIVENESS FACTOR)								568
TOTAL OUTDOOR AIR PROVIDED									600

REVISIONS

09/06/2018 Landlord's Review	1

1830 CUMBERLAND AVE.
SUITE C (#105)
KNOXVILLE, TN 37916

POKE BROS.
FRESH FISH HAWAIIAN STYLE

CRAIG MICHAEL DIXON
REGISTERED ARCHITECT
STATE OF TENNESSEE

craig m. dixon
& associates
architects

Date: 08/15/2018
Scale: 1/4"=1'-0"
Drawn: LG
Job: C18-023
Sheet:

M-1

HVAC PLAN NOTES & DETAILS