

MECHANICAL VENTILATION BY ZONE CLASSIFICATION												
OCCUPANCY CLASSIFICATION	CONDITION AREA (SQFT)	CFM PER SQFT	MIN CFM BY AREA	OCCUPANT DENSITY (#/1000 SQFT)	OCCUPANTS	CFM PER OCCUPANT	MIN CFM BY OCCUPANT	TOTAL CFM	EFFECTIVENESS CFM (Ez=0.8)	EXHAUST RATE (CFM PER FIXTURE/SQFT)	FIXTURES	MIN EXHAUST CFM
SALES	320	0.12	38	15	5	8	38	76	95	0.0	0	0
DINING ROOM	722	0.18	130	70	51	8	383	512	641	0.0	0	0
PREP AREA	373	0.18	67	10	4	5	20	87	109	0.0	0	0
OFFICE	34	0.06	2	5	1	5	5	7	9	0.0	0	0
STORAGE	315	0.12	38	0	0	0	0	38	47	0.0	0	0
CORRIDOR	43	0.06	3	0	0	0	0	3	3	0.0	0	0
RESTROOM	89	0.00	0	0	0	0	0	0	70.0	2	140	
TOTALS	1896	-	278	-	-	-	445	723	904	-	-	140

FAN SCHEDULE											
MARK	SERVICE	CFM	E.S.P. "WG	RPM	MOTOR HP	VOLTS/PH	MANUFACTURER	MODEL	TYPE	WEIGHT	NOTES
TEP-1	PUBLIC RESTROOM	75	0.25	1000	56.2 W	115/1	LOREN COOK	GC-142	CEILING CABINET FAN	15	1.2,3
TEP-2	PUBLIC RESTROOM	75	0.25	1000	56.2 W	115/1	LOREN COOK	GC-142	CEILING CABINET FAN	15	1.2,3

NOTES: (NOT ALL MAY APPLY)

- ELECTRICAL CONTRACTOR SHALL INTERLOCK WITH RESPECTIVE RESTROOM LIGHT SWITCH FOR SIMULTANEOUS OPERATION.
- INSTALL COMPLETE WITH FACTORY AVAILABLE GRAVITY BACKDRAFT DAMPER.
- FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.

AIR DEVICE SCHEDULE (NOT ALL SHOWN ON PLAN)										
MARK	PICTURE	FACE SIZE	TYPE	MOUNTING TYPE	MAXIMUM N.C.	DIRECTION	MANUFACTURER	MODEL	NOTES	
CD1		24X24	SUPPLY	LAY-IN	30	4-WAY	TITUS	TMS	1.2,3,4	
CD2		12X12	SUPPLY	LAY-IN SURFACE	30	4-WAY	TITUS	TMS	1.2,3,4	
CD3		18"Ø	SUPPLY	SUSPENDED	30	4-WAY	TITUS	TMRA	1.2,3	
SD1		10X6 DUCT 8X6	SUPPLY	DUCT MOUNTED	30	DOUBLE DEFLECTION	TITUS	300RL	1.2,3,5	
RG1		24X24	RETURN	LAY-IN	30	1-WAY	TITUS	PAR	1.2,3,4	
RG2		SEE PLAN	RETURN	WALL MOUNTED	30	1-WAY	TITUS	350RL	1.2,3,4	

NOTES: (NOT ALL MAY APPLY)

- PROVIDE NECESSARY MOUNTING HARDWARE AND ACCESSORIES AS REQUIRED FOR INTENDED INSTALLATION.
- AIR DEVICE(S) SHALL HAVE MANUFACTURER APPLIED PRIMER FINISH SUITABLE FOR FINAL PAINT FINISH (BY OTHERS). REFER TO ARCHITECTURAL DRAWINGS FOR COORDINATION.
- AIR DEVICE(S) SHALL BE FACTORY FINISHED WHITE.
- AIR DEVICE(S) SHALL BE INSTALLED WITH MANUFACTURER AVAILABLE MOLDED INSULATION BACKING. FIELD FABRICATED INSULATION BACKING IS NOT ALLOWED (UNLESS FIRST APPROVED BY THE OWNER'S CONSTRUCTION MANAGER).
- FRONT BLADES TO BE LONG

LOUVER AND DAMPER SCHEDULE				
MARK	FIXTURE	QTY	ROUGH-IN SIZE	DESCRIPTION/REMARKS
LV-1	LOUVER	1	18"X24"	GREENHECK #FDS-402, FABRICATED STEEL STATIONARY LOUVER WITH DRAINABLE BLADES, INSECT SCREEN, AND BEGINNING POINT OF WATER PENETRATION (BPWP) OF 1056 FPM FREE AREA VELOCITY.
LV-2	LOUVER	1	18"X24"	GREENHECK #FDS-402, FABRICATED STEEL STATIONARY LOUVER WITH DRAINABLE BLADES, INSECT SCREEN, AND BEGINNING POINT OF WATER PENETRATION (BPWP) OF 1056 FPM FREE AREA VELOCITY.
RD-1	BAROMETRIC RELIEF DAMPER	1	DUCT SIZE	GREENHECK #BR-30, VERTICAL MOUNT HORIZONTAL AIRFLOW BAROMETRIC RELIEF DAMPER. SET SELECTABLE START OPEN TO MINIMUM SETTING (0.05" W.G.).
MCD-1	MOTORIZED CONTROL DAMPER	1	14"X14"W	GREENHECK #VCD-23, CLASS I LOW LEAKAGE CONTROL DAMPER. PROVIDE WITH ELECTRIC ACTUATOR. INTERLOCK WITH (N) AHU-2

SPLIT SYSTEM SCHEDULE			
AIR HANDLING UNITS			
UNIT MARK	(E) AHU-1	(N) AHU-2	
MANUFACTURER	UNKNOWN	CARRIER	
MODEL NO.	UNKNOWN	FB4CXP081L	
OPERATING WEIGHT (LBS)	EXISTING	200	
FAN SECTION			
MOTOR HP	EXISTING	3/4	
RATED CFM	2400	2000	
MIN. OUTDOOR AIR (CFM)	600	425	
E.S.P. (IN W.G.)	0.6	0.6	
AIR HANDLING UNIT ELECTRIC DATA			
ELEC HEAT INPUT (KW)	UNKNOWN	0.0	
VOLTS/PH/Hz	208/3/60	208/1/60	
MIN. CIR. AMPS	EXISTING	7.5	
MCCP	EXISTING	15	
AIR COOLED CONDENSING UNITS			
UNIT MARK	(E) CU-1	(N) CU-2Z	
MANUFACTURER	TRANE	CARRIER	
MODEL NO.	2TAA0072A3	25HCE480C	
NOMINAL CAPACITY (TONS)	6.0	5.0	
OPERATING WEIGHT (LBS)	EXISTING	232.5	
SEER/COEF	EXISTING	14.0/3.7	
MIN. COOLING PERFORMANCE			
ENTERING DBWB (°F)	80/67	80/67	
AMBIENT DB (°F)	95	95	
TOTAL CAP. (MBH)	EXISTING	53.5	
SEN CAP. (MBH)	EXISTING	41.6	
MIN. HEATING PERFORMANCE			
INTG. CAP. (MBH)	NONE	59.1	
OUTSIDE AIR, °F	-	44.2	
LEAVING AIR, °F	-	95.0	
CONDENSING UNIT ELECTRIC DATA			
VOLTS/PH/Hz	208/3/60	208/1/60	
MIN. CIR. AMPS	EXISTING	32.5	
MCCP	EXISTING	60	

NEW UNIT NOTES: (NOT ALL MAY APPLY)

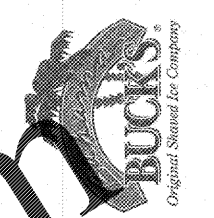
- PROVIDE WITH MANUFACTURER'S REMOTE TEMPERATURE SENSOR AND PROGRAMMABLE 24/7 THERMOSTAT CAPABLE OF AUTOMATIC COOLING/HEATING CHANGEOVER. SENSORS AND LOW VOLTAGE CONTROL WIRING SHALL BE INSTALLED BY THE MECHANICAL CONTRACTOR.
- PROVIDE FACTORY AVAILABLE SUPPLY AIR SMOKE DETECTOR, CAPABLE OF SHUTTING DOWN THE UNIT UPON ACTIVATION.
- PROVIDE CONDENSING UNITS WITH COIL COATING AND DRASTAL SERVICE TUBES.
- UNIT SELECTIONS ARE BASED ON R-410A REFRIGERANT AND STANDARD EFFICIENCY OPERATION.

AIR BALANCE SCHEDULE			
MARK	SALES (CFM)		
	S/A	O/A	E/A
(E) AHU-1	2,400	800	-
TU-2	2,000	425	-
TF-1	-	-	75
TF-2	-	-	75
TOTAL	4,400	1,025	150

SALES PRESSURIZATION (O/A) - (E/A) = +875 CFM

MECHANICAL LEGEND		
SYMBOL	ABBR.	DESCRIPTION
	CD	CEILING DIFFUSER - SUPPLY
	CD	CEILING DIFFUSER BELOW DUCT - SUPPLY
	SAD	RISER - SUPPLY AIR DUCT
	SAD	DROP - SUPPLY AIR DUCT
	CR	CEILING REGISTER - RETURN
	CR	CEILING REGISTER BELOW DUCT - RETURN
	RAD	RISER - RETURN AIR DUCT
	RAD	DROP - RETURN AIR DUCT
	CE	CEILING REGISTER - EXHAUST
	CE	CEILING REGISTER BELOW DUCT - EXHAUST
	EAD	RISER - EXHAUST AIR DUCT
	(L)	LINED DUCTWORK
	VD	MANUAL VOLUME DAMPER
	PC	POINT OF CONNECTION
		NEW DUCT
		AIR DEVICE DESIGNATION
	TSTAT	PROGRAMMABLE THERMOSTAT
	SESS	REMOTE TEMPERATURE SENSOR
	SD	SMOKE DETECTOR
	POC	POINT OF CONNECTION
	CFM	CUBIC FEET PER MINUTE
	S/A	SUPPLY AIR
	O/A	OUTSIDE AIR
	E/A	EXHAUST AIR
	S.P.	STATIC PRESSURE
	FDH	FRONT OF HOUSE
	BOH	BACK OF HOUSE
	CWS	COLD WATER SUPPLY
	HWR	HOT WATER RETURN

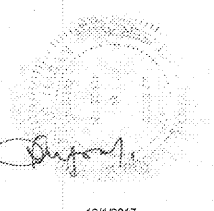
MECHANICAL GENERAL NOTES	
1.	FOR THE PURPOSE OF CLARITY AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZES AND LOCATIONS OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR SHALL MAKE USE OF ALL DATA THROUGHOUT THE CONTRACT DOCUMENTS AND VERIFY THIS INFORMATION PRIOR TO ORDERING, FABRICATING OR INSTALLING ANY MATERIALS.
2.	THE MECHANICAL CONTRACTOR SHALL PROVIDE COMPLETE INFORMATION AND COOPERATE WITH THE OTHER CONTRACTORS AND TRADES AS REQUIRED FOR THE COMPLETION AND COORDINATION OF THE COMPLETE PROJECT.
3.	THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADMINISTERING ALL WARRANTIES ON EQUIPMENT WHICH HE FURNISHES AND INSTALL. PROVIDE WRITTEN WARRANTY TO REPLACE ALL FAULTY MATERIALS AND/OR LABOR, AT NO COST TO TENANT, FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER. WARRANTIES SHALL BE ON THE DATE OF SUBSTANTIAL COMPLETION.
4.	THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND OTHER TRADES ALL REQUIRED OPENINGS AND PENETRATIONS. ALL REQUIRED OPENINGS IN FOUNDATIONS, FLOORS, WALLS AND ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STRUCTURE WITH CURBS, CURBS, ETC. CURBS AND PARTS SHALL BE HELD TO A MINIMUM.
5.	THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL DUCT AND REGISTER LOCATIONS WITH SPRINKLER PIPING, SPRINKLER INSTALLATION AND FIRE ALARMS.
6.	PROVIDE VENTILATION ISOLATION DEVICES AND FLEXIBLE DUCT/PIPING CONNECTIONS TO ALL MOVING MACHINERY NOT INTERNALLY ISOLATED.
7.	ALL RISERS PROJECTING THROUGH THE ROOF SHALL BE FLASHED THROUGH CURBS OR PIPE SEALS A MINIMUM OF 12" ABOVE THE ROOF. THE PIPE CURBS AND SEALS SHALL BE INSTALLED BY THE ROOFING CONTRACTOR. ENSURE THAT AMPLE BOOT OPENINGS ARE PROVIDED TO ACCOMMODATE ANY ELECTRICAL CONDUIT PENETRATIONS REQUIRED FOR POWER.
8.	ALL OUTDOOR AIR INTAKES BY MECHANICAL EQUIPMENT SHALL HAVE A MINIMUM 10'-0" HORIZONTAL CLEARANCE FROM THE DISCHARGE OF ANY EXHAUST FAN, COMBUSTION EXHAUST OR PLUMBING VENT.
9.	HVAC UNITS SHALL BE SET TO RUN IN "FAN CONTINUOUS" MODE DURING OCCUPIED HOURS. DURING NIGHT SET-BACK HOURS, THE HVAC UNITS SHALL RUN IN "FAN AUTO" MODE.
10.	MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL 4" HIGH BLACK OVER WHITE LAMINATE NAMEPLATE WITH 2" LETTERS VISIBLE ADJACENT TO DISCONNECT SWITCH FOR HVAC UNITS AND FANS.
11.	ANY FLEXIBLE DUCTS SHALL BE INSTALLED IN CONCEALED SPACES ONLY. THE MAXIMUM ALLOWABLE LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0". ALL FLEXIBLE DUCTS SHALL BE CONNECTED TO BRANCH RUNS AND FITTINGS WITH A PANDUIT-TYPE BAND, AND SHALL NOT BE ATTACHED DIRECTLY TO THE AIR DEVICE COLLAR.
12.	SUPPLY, RETURN, RESTROOM EXHAUST DUCT CONSTRUCTION SHALL BE GALVANIZED STEEL. GAUGES, SWAY BRACING AND SUSPENSION SHALL CONFORM TO SMACNA STANDARDS. SEAL ALL SEAMS AND JOINTS AIR AND WATERTIGHT. FLEXIBLE ALUMINUM DUCTWORK OR FIBERGLASS DUCTBOARD IS NOT ALLOWED (UNO).
13.	ALL HVAC SUPPLY AND RETURN EXPOSED DUCTWORK SHALL BE INTERNALLY LINED AND PINNED WITH MINIMUM R-6, 1-1/2" INSULATION WITH VAPOR BARRIER PER THE 2010 FLORIDA MECHANICAL CODE WITH LOCAL AMENDMENTS. INSULATION SHALL HAVE MAXIMUM RATINGS OF 25 FLAME SPREAD, 50 SMOKE DEVELOPED. REFER TO ARCHITECTURAL DRAWINGS FOR DUCT PAINT OR COLOR SPECIFICATION.
14.	ALL HVAC SUPPLY AND RETURN CONCEALED DUCTWORK TO BE EXTERNALLY WRAPPED AND SECURED WITH MINIMUM R-6, 2" INSULATION WITH VAPOR BARRIER PER THE 2010 FLORIDA MECHANICAL CODE WITH LOCAL AMENDMENTS. INSULATION SHALL HAVE MAXIMUM RATINGS OF 25 FLAME SPREAD, 50 SMOKE DEVELOPED.
15.	ALL PENETRATIONS IN FIRE RATED WALL ASSEMBLIES SHALL BE SEALED WITH UL LISTED FIRE STOPPING MATERIAL.
16.	ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
17.	ALL RECTANGULAR, ROUND, AND FLEXIBLE DUCTWORK SHALL BE SIZED AS SHOWN ON THESE DRAWINGS, AND SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MOST RECENTLY PUBLISHED SMACNA STANDARDS. ALL JOINTS, SEAMS, AND CONNECTIONS MUST BE SECURELY FASTENED & SEALED BY APPROVED METHODS.
18.	THERMOSTAT(S) SHALL BE LOCATED AT 5' A.F.F. EXACT LOCATIONS SHALL BE FIELD COORDINATED TO AVOID INTERFERENCE WITH WALL-MOUNTED WORK OR PROXIMITY TO HEAT PRODUCING EQUIPMENT.
19.	ROOF CURBS FOR EXHAUST FAN(S) SHALL BE FACTORY FABRICATED OF FULL WELDED STEEL CONSTRUCTION WITH WOOD NAILER, AND FURNISHED WITH THE HOOD AND FAN PACKAGE. VERIFY REQUIREMENTS FOR THE ROOF CURBS WITH THE EQUIPMENT SUPPLIER. THE GENERAL CONTRACTOR SHALL FLASH ROOF CURBS AND SHIM DEAD LEVEL. COORDINATE EXACT SIZE AND LOCATION OF ROOF OPENINGS WITH THE STRUCTURAL FRAMING. CUTTING OF STRUCTURAL MEMBERS IS NOT PERMITTED.
20.	A FULL CERTIFIED MECHANICAL AIR TEST AND BALANCE REPORT SHALL BE PERFORMED BY A CONTRACTOR APPROVED BY THE TENANT AT THE TENANT'S EXPENSE. PROVIDE A COPY TO THE LANDLORD AND ENGINEER.
21.	PER THE 2010 FLORIDA MECHANICAL CODE WITH CITY AMENDMENTS WHEN REQUIRED, EACH SINGLE SYSTEM PROVIDING HEATING OR COOLING AIR IN EXCESS OF 2000 CUBIC FEET PER MINUTE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF. AUTOMATIC SHUTOFF SHALL BE ACCOMPLISHED BY INTERRUPTING THE POWER SOURCE OF THE AIR MOVING EQUIPMENT DEVICES WHICH WILL DETECT PRODUCTS OF COMBUSTION OTHER THAN HEAT, AND WHICH COMPLY WITH THE BUILDING CODE. SHALL BE LABELED BY AN APPROVED AGENCY FOR AIR DUCT INSTALLATION AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. SUCH DEVICES SHALL BE COMPATIBLE WITH THE OPERATING VELOCITIES, PRESSURES, TEMPERATURES AND HUMIDITIES OF THE SYSTEM WHERE FIRE DETECTION OR ALARM SYSTEMS ARE PROVIDED FOR THE BUILDING. SMOKE DETECTORS SHALL BE SUPERVISED BY SUCH SYSTEMS.
22.	THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE AIR FILTERS AT THE AIR HANDLING UNITS WITH 2" THICK PLEATED MERV 7 THROW AWAY TYPE AIR FILTERS AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO AIR BALANCE AND STORE TURNOVER.
23.	MECHANICAL CONTRACTOR SHALL BE ON SITE AND PRESENT AT THE DATE OF STORE TURNOVER.
24.	GC SHALL PROVIDE ROOF WALK BOARDS FROM ACCESS POINT TO ROOF TOP ITEMS.



THE DIMENSION GROUP

ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING • PLUMBING

1005 BARKHILL ROAD • DALLAS, TEXAS 75201 • TEL: 972.561.9700 • FAX: 972.561.9701



12/1/2017

ABACOA TOWN CENTER
1209 MAIN STREET
UNIT 116
JUPITER, FLORIDA

REVISIONS:	

DRAWN BY: CS CHECKED BY: JH
PROJECT NUMBER: 17-598

DATE: 10-24-2017

MECHANICAL SCHEDULES

M2.0

Order Plans @