

### AIR DISTRIBUTION SCHEDULE

MARK	MAKE	MODEL	SIZE	NECK	MATERIAL	BOBBER TYPE	MOUNTING TYPE	DAMPER	THROW	FINISH	REMARKS
A	TITUS	TDC-4A	9X9	6"φ	ALUMINUM	1	SURFACE	AG-75	1 WAY	WHITE	SEE NOTES
B	TITUS	TDC-4A	12X12	8"φ	ALUMINUM	3	LAY-IN	AG-75	4 WAY	WHITE	SEE NOTES
C	TITUS	TDC-4A	12X12	10"φ	ALUMINUM	3	LAY-IN	AG-75	4 WAY	WHITE	SEE NOTES
RA	TITUS	24X24	12X12		ALUMINUM	3	LAY-IN	AG-35	-	WHITE	SEE NOTES
RB	TITUS	3F	24X24	14X14	ALUMINUM	3	LAY-IN	AG-35	-	WHITE	SEE NOTES
RC	TITUS	3F	24X24	18X18	ALUMINUM	3	LAY-IN	AG-35	-	WHITE	SEE NOTES

PROVIDE SAMPLE WITH GFR-WHITE FINISH TO ARCHITECT FOR APPROVAL.  
 PROVIDE ROUND FLEXIBLE DUCT RUN-OUT SIZED TO MATCH S/A DIFFUSER NECK UNLESS NOTED OTHERWISE.  
 PROVIDE PLENUM BOX ABOVE SUPPLY AND RETURN AIR GRILLES AS REQUIRED FOR DUCT CONNECTIONS. MINIMUM BOX HEIGHT IS 1/2" OF NECK WIDTH.

### MECHANICAL GENERAL NOTES:

- THESE DRAWINGS ARE DIAGRAMMATIC. ALL OFFSETS, FITTINGS, TRANSITIONS AND ACCESSORIES ARE NOT SHOWN. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL ITEMS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM. DO NOT SCALE DRAWINGS FOR INSTALLATION.
- ALL WORK SHALL BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER BY LICENSED CONTRACTORS.
- THE CONTRACTOR SHALL OBTAIN AT HIS EXPENSE ALL NECESSARY FEES, PERMITS, AND TESTS.
- ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES. NO CONTRACTOR SHALL BID UNLESS FAMILIAR WITH THESE CODES.
- CORRECTION OF DEFECTS TO THIS WORK SHALL BE MADE PROMPTLY WITHOUT CHARGE TO THE OWNER. REPAIR AND REPLACEMENT FOR DAMAGE CAUSED BY THIS CONTRACTOR SHALL BE MADE PROMPTLY WITHOUT CHARGE TO THE OWNER.
- ALL WORK OF THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID ANY INTERFERENCES THAT MAY DELAY PROGRESS OF CONSTRUCTION.
- THE CONTRACTOR SHALL INCLUDE THE WORK OF ALL REQUIRED SUB-CONTRACTORS, SUCH AS ELECTRICAL, INSULATING, TEST & BALANCE, ETC., AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- EQUIPMENT SHALL BEAR A U.L. OR OTHER RECOGNIZED LABEL. NAMEPLATES, WIRING DIAGRAMS, AND ENERGY RATINGS AS APPLICABLE.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND ACCESSORIES TO BE READY ACCESSIBLE FOR SERVICE, TESTING, BALANCING, AND READJUSTMENT.
- IN ALL MATERIALS AND WORKMANSHIP FOR ONE YEAR FROM ACCEPTANCE.
- THE CONTRACTOR SHALL PROVIDE THREE COPIES OF SUBMITTAL DATA, SHOP DRAWINGS, AND AT COMPLETION OF THE PROJECT TWO SETS OF OPERATION AND MAINTENANCE MANUALS FOR ALL PROJECT ITEMS.
- PROVIDE ALL CONTROLS, STARTERS, CONTROL WIRING, DISCONNECTS AND OTHER ELECTRICAL EQUIPMENT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- THE HVAC CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, ON SITE, A DETAILED AS-BUILT PLAN SHOWING ACTUAL INSTALLATIONS. THE CONTRACTOR IS TO PROVIDE A NEATLY DRAWN COMPREHENSIVE AS-BUILT SET OF PLANS UPON COMPLETION, WHICH ARE SUITABLE FOR SUBMISSION TO THE BUILDING DEPARTMENT AND TO THE OWNER.
- PRIOR TO ACCEPTANCE BY THE OWNER THE SYSTEMS SHALL BE TESTED AND BALANCED BY THE CONTRACTOR. PROVIDE A WRITTEN REPORT.
- SUPPLY AND INSTALL DUCT MOUNTED SMOKE DETECTORS AS REQUIRED.
- COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH LIGHTS AND ARCHITECTURAL ELEMENTS.
- ALL GRILLES TO BE TITUS OR METALWARE UNLESS OTHERWISE NOTED. SIZES AS SHOWN ON PLANS. ALUMINUM CONSTRUCTION.
- ALL DUCT WORK SHALL BE BUILT AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS AND LOCAL BUILDING CODES.
- ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
- ALL OUTSIDE AIR DUCTWORK SHALL BE SHEETMETAL WITH EXTERIOR INSULATION. PROVIDE BLANKET TYPE INSULATION IN CONCEALED SPACES, AND BOARD TYPE IN EXPOSED AREAS. MATCH EXISTING CONDITIONS.
- ALL EXHAUST AIR DUCT SHALL BE GALVANIZED SHEET METAL STANDARDS, AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
- FLEXIBLE DUCT, WHERE SHOWN, SHALL BE U.L. CLASS 1, R-6 INSULATION.
- LOW PRESSURE SUPPLY AND RETURN DUCTWORK IS RIGID DUCTBOARD WITH VAPOR BARRIER, 1 IN. THICK, R-4.2 INSULATION, EXCEPT AS NOTED.
- PROVIDE ELBOW TURNING VANES IN ALL RECTANGULAR DUCTS WHERE TURNS ARE GREATER THAN 45 DEGREES.
- PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST FANS DUCTED TO EXTERIOR.
- THERMOSTAT TO BE 5-1-1, PROGRAMMABLE WITH HUMIDITY SENSOR AND VERIFY ALL THERMOSTAT LOCATIONS WITH THE LANDLORD.
- CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC.
- INSULATE ALL CONDENSATE PIPING.

### SPLIT SYSTEM SCHEDULE

AIR HANDLING UNIT										AIR COOLED CONDENSING UNIT										SYSTEM DATA						
MARK	MODEL	MANUF.	SUPPLY CFM	FAN FLA	HP	DM. (IN)	HWKVL	MCA	WCCP	ELECTRICAL	HEATER	WT	MARK	MODEL	DM. (IN)	HWKVL	COMPRESSOR	FAN	ELECTRICAL	MCA	FUSE	WT	CAPACITY	SEER	CONTROL	
AHU	NO.	TRAHE	CFM	FLA	HP	INCH	FEET	TONS	WCCP	PH-HZ	FM	LB	ACCU	NO.	INCH	FEET	TONS	FLA	QTY	FLA	QTY	QTY	LB	TAMB	SHR	(EER)
1	4TECF80	TRAHE	1700	7.6	1	24X22X8	44	45	208/1/60	5.8	155	1	47A3048A	33X37X34	1	4	14.6	1	1.3	208/3/60	20	30	219	47.0	35.0	14.0
2	4TECF18	TRAHE	600	1.6	1/4	21X22X4	2	15	208/1/60	-	111	2	47B3018A	33X30X33	1	1.5	6.4	1	0.7	208/1/60	9	15	192	18.8	13.4	13.2

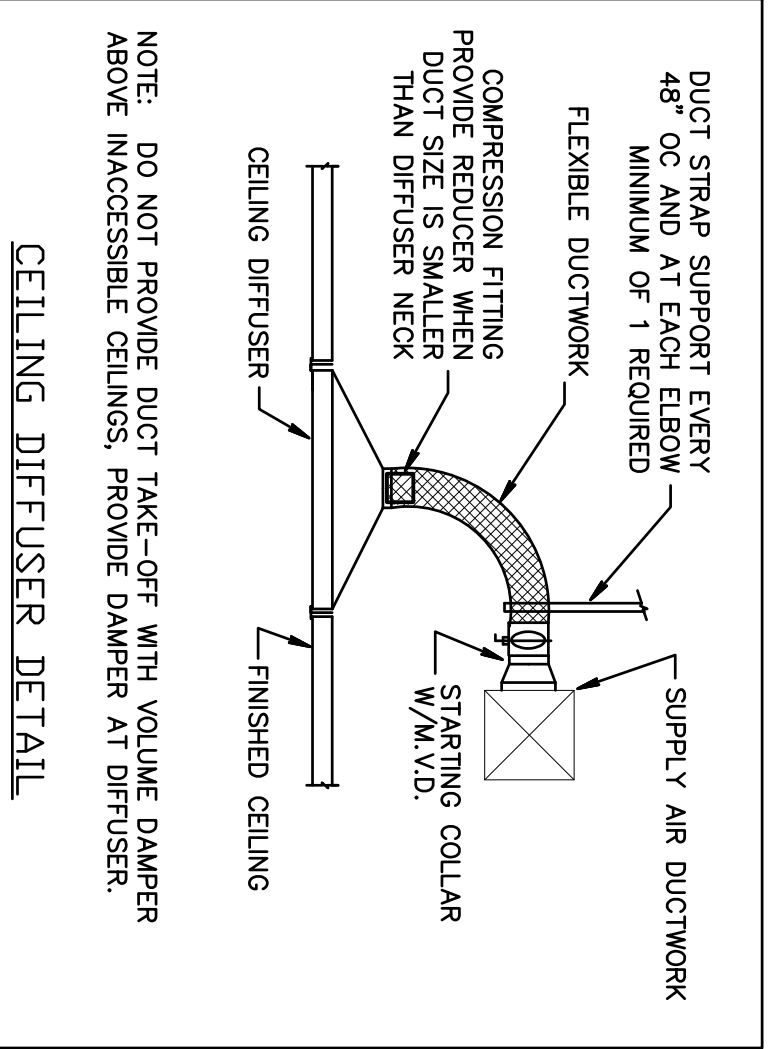
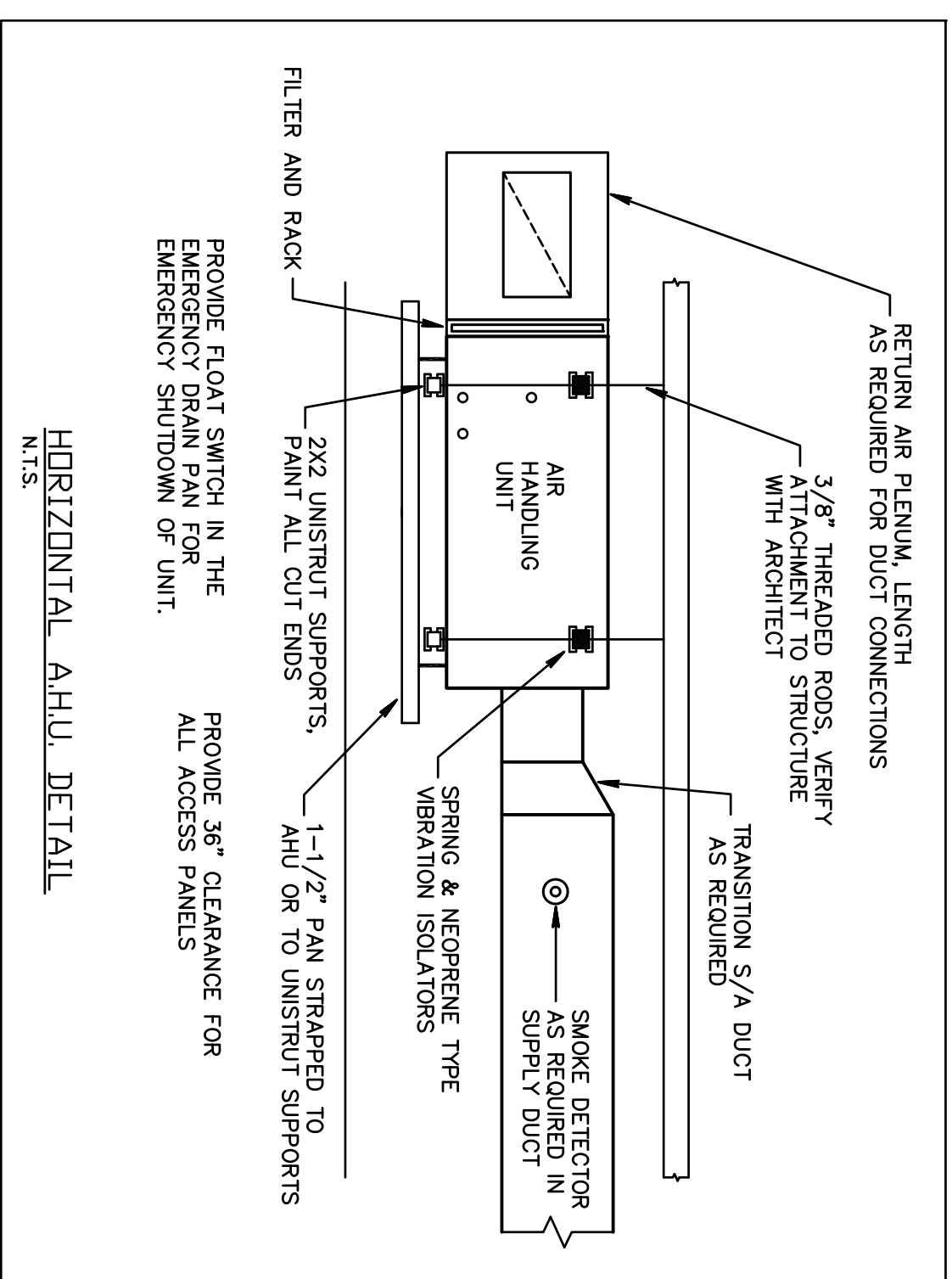
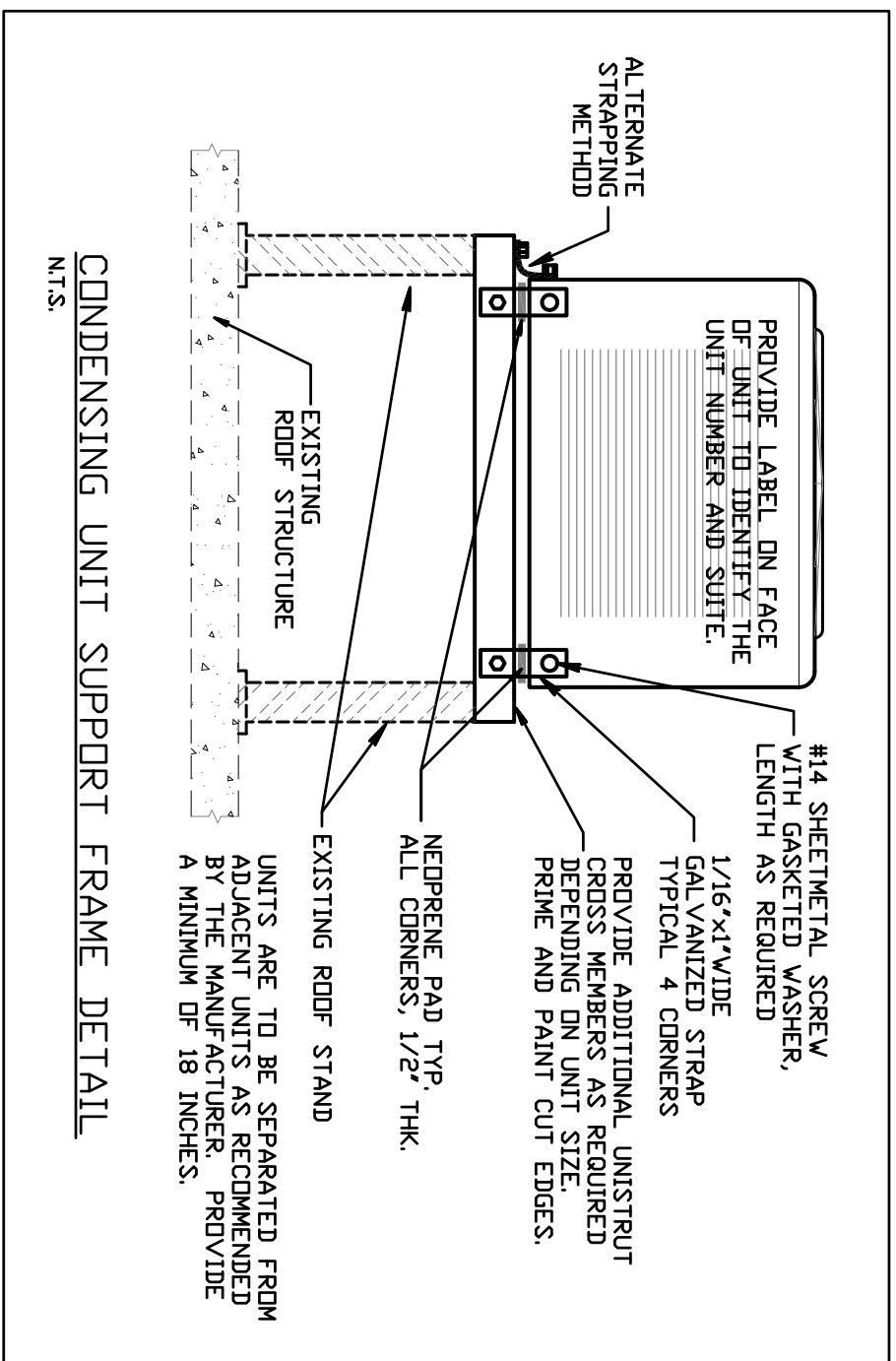
- SPLIT SYSTEM NOTES:**
- OUTSIDE AIR DESIGN CONDITIONS: 91TDB - 79FWB.
  - PROVIDE A/C UNITS WITH HEATING, COOLING & DEHUMIDIFYING.
  - WALL MOUNT CONTROLLER (SEE GENERAL NOTE 26).
  - PROVIDE BUILT-IN DISCONNECT WITH AIR HANDLING UNIT.
  - PROVIDE MANUFACTURERS STANDARD FILTER RACK UPSTREAM OF R/A OPENING FOR EASY FILTER REPLACEMENT.
  - INSULATE REFRIGERANT SUCTION LINE WITH 3/4" FIRE RETARDANT ARMAFLEX.
  - INSTALL CHEMICAL DRYER AND STRAINER IN REFRIGERANT LIQUID LINES.
  - PROVIDE BUILT-IN DISCONNECT WITH AIR HANDLING UNIT.
  - PROVIDE MANUFACTURERS STANDARD FILTER RACK UPSTREAM OF R/A OPENING FOR EASY FILTER REPLACEMENT.
  - PROVIDE MANUFACTURERS RECOMMENDATIONS TO ALL MANUFACTURERS RECOMMENDATIONS.

### ABBREVIATIONS

AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
S/A	SUPPLY AIR
R/A	RETURN AIR
O/A	OUTSIDE AIR
E/A	EXHAUST AIR
CFM	CUBIC FEET PER MINUTE
MWD	MANUAL VOLUME DAMPER (OPPOSED BLADE TYPE)
FD	FIRE DAMPER
EF	EXHAUST FAN
E	EXISTING

### LEGEND

<input checked="" type="checkbox"/>	SUPPLY AIR DIFFUSER AS NOTED
<input checked="" type="checkbox"/>	RETURN/TRANSFER GRILLE AS NOTED
---	HARD DUCTWORK - EXISTING
---	HARD DUCTWORK AS NOTED
⊖	PROGRAMMABLE THERMOSTAT/HUMIDISTAT
⤴	FLEXIBLE DUCT, U.L. CLASS 1
⤵	DUCT TRANSITION
⤴	FLEXIBLE DUCT FITTING WITH MWD
⤵	AIR DEVICE TYPE/CFM
⊕	STYLE B FIRE DAMPER CONNECTION TO EXISTING



NOTE: DO NOT PROVIDE DUCT TAKE-OFF WITH VOLUME DAMPER ABOVE INACCESSIBLE CEILING. PROVIDE DAMPER AT DIFFUSER.

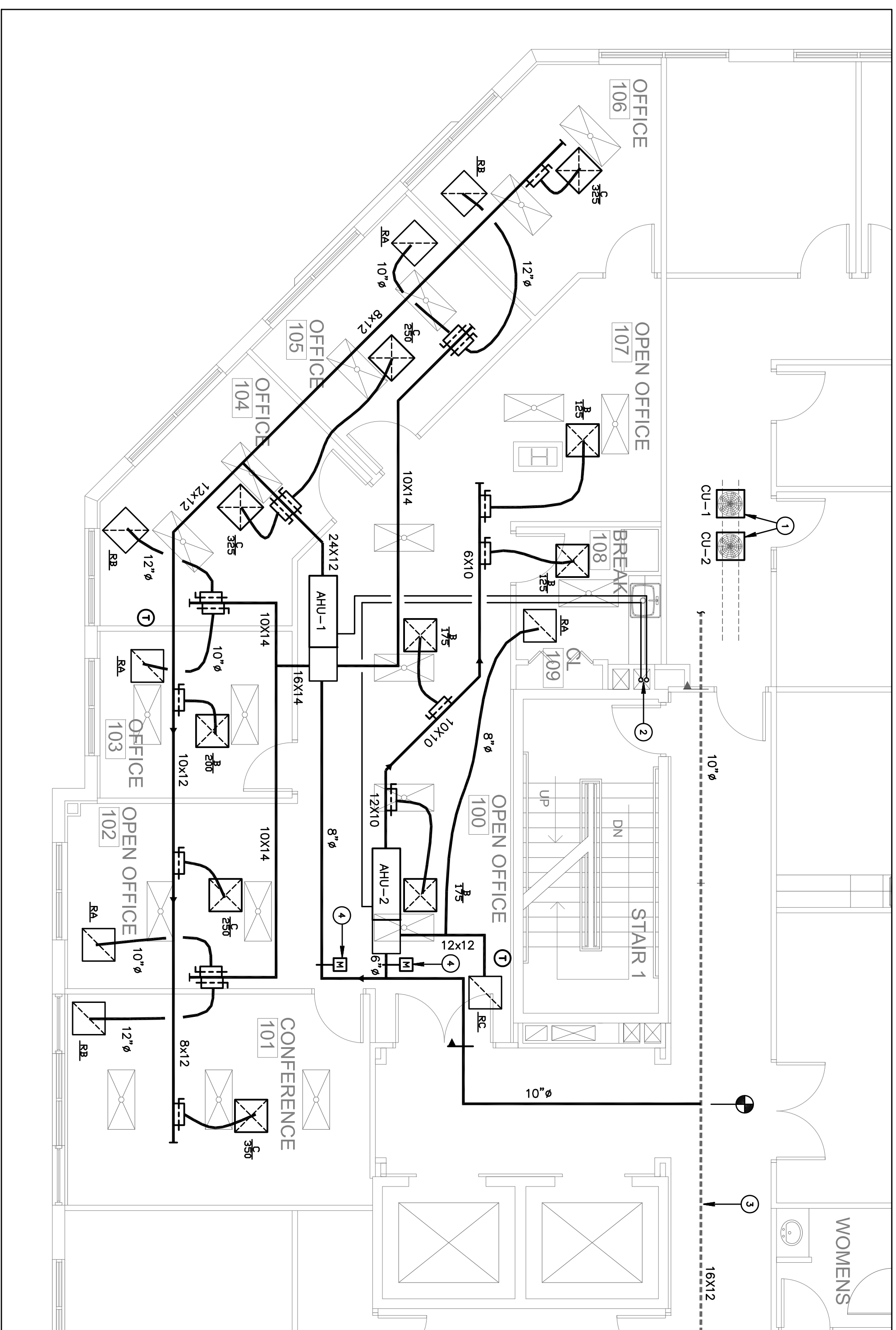
### OUTSIDE AIR CALCULATIONS

MARK	AHU-1	AHU-2
AREA TYPE	CONF. OFFICE	BREAK OFFICE
SQUARE FEET OF AREA	246	804
CFM/SQ.FT. REQUIRED	0.06	0.06
TOTAL OCCUPANTS	13	5
CFM/PERSON REQUIRED	5	5
ZONE CFM REQUIRED	80	88
SUBTOTAL VOA	168	15
Zp	0.23	0.07
Ev (FOR MAX Zp)	0.9	0.12
Voa	187	1.0

NOTES  
 1. ABOVE CALCULATIONS RATES PER ASHRAE 62.1, 2007.

### DRAWING KEYNOTES:

- CONDENSING UNIT ON EXISTING ROOF RACK. COORDINATE EXACT LOCATION WITH LANDLORD.
- REFRIGERANT PIPING UP TO ROOF THROUGH EXISTING CHASE. FIELD VERIFY CHASE LOCATION WITH LANDLORD.
- EXISTING OUTSIDE AIR DUCT IN CORRIDOR CEILING. FIELD VERIFY EXACT LOCATION.
- MOTORIZED/ADJUSTABLE DAMPER TO BE INTERLOCKED WITH AHU FAN MOTOR. DAMPER IS TO BE FIELD VERIFIED TO BE ADJUSTABLE O/A SETTINGS WHEN FAN RUNS.



### SPEC SUITE #210

GARDENS POINTE  
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 PALM BEACH GARDENS, FL 33410  
 PROJECT NUMBER GP11

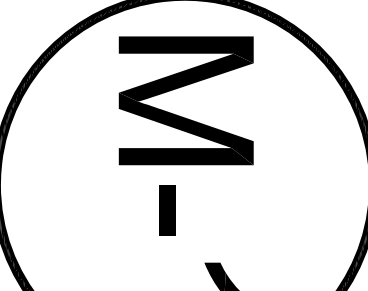
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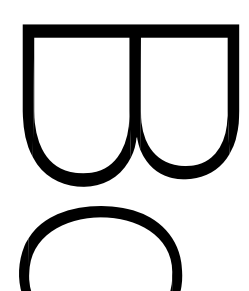
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