

MECHANICAL GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMATIC. ALL OFFSETS, FITTINGS, TRANSITIONS AND ACCESSORIES ARE NOT SHOWN. THE CONTRACTOR SHALL INCLUDE IN HIS BID DO NOT SCALE DRAWINGS FOR INSTALLATION.
2. ALL WORK SHALL BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER BY LICENSED CONTRACTORS.
3. THE CONTRACTOR SHALL OBTAIN AT HIS EXPENSE ALL NECESSARY FEES, PERMITS, AND TESTS.
4. ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES. NO CONTRACTOR SHALL BID UNLESS FAMILIAR WITH THESE CODES.
5. 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.
6. ALL WORK OF THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID ANY INTERFERENCES THAT MAY DELAY PROGRESS OF CONSTRUCTION.
7. 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.
8. EQUIPMENT SHALL BEAR A U.L. OR OTHER RECOGNIZED LABEL, NAMEPLATE, WIRING DIAGRAMS, AND ENERGY RATINGS AS APPLICABLE.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND ACCESSORIES TO BE READY ACCESSIBLE FOR SERVICING, TESTING, BALANCING, AND REPLACEMENT.
10. THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE AGAINST DEFECTS IN ALL MATERIALS AND WORKMANSHIP FOR ONE YEAR FROM ACCEPTANCE, WITH FOUR ADDITIONAL YEARS OF WARRANTY ON COMPLESSORS.
11. 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.
12. PROVIDE ALL CONTROLS, STARTERS, CONTROL WIRING, DISCONNECTS, AND OPERATIONAL SYSTEM.
13. 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.
14. PRIOR TO ACCEPTANCE BY THE OWNER THE SYSTEMS SHALL BE TESTED AND BALANCED BY THE CONTRACTOR. PROVIDE A WRITTEN REPORT.
15. SUPPLY AND INSTALL DUCT MOUNTED SMOKE DETECTORS AS REQUIRED.
16. COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH LIGHTS AND ARCHITECTURAL ELEMENTS.
17. ALL GRILLES TO BE TITUS OR METALAKE UNLESS OTHERWISE NOTED. SIZES AS SHOWN ON PLANS. ALUMINUM CONSTRUCTION.
18. ALL DUCT WORK SHALL BE BUILT AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS AND LOCAL BUILDING CODES.
19. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
20. ALL OUTSIDE AIR DUCTWORK SHALL BE SHEETMETAL WITH EXTERIOR R-6 INSULATION. PROVIDE BLANKET TYPE INSULATION IN CONCEALED SPACES, AND BOARD TYPE IN EXPOSED AREAS.
21. ALL EXHAUST AIR DUCT SHALL BE GALVANIZED SHEET METAL CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
22. FLEXIBLE DUCT, WHERE SHOWN, SHALL BE U.L. CLASS 1, R-6 INSULATION.
23. LOW PRESSURE SUPPLY AND RETURN RECTANGULAR DUCTWORK IS RIGID DUCTBOARD, 1 IN. THICK, R-4.2 INSULATION.
24. PROVIDE ELBOW TURNING VANES IN ALL RECTANGULAR DUCTS WHERE TURNS ARE GREATER THAN 45 DEGREES.
25. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST FANS.
26. VERIFY ALL THERMOSTAT LOCATIONS WITH THE LANDLORD.
27. CONDENSATE DRAIN PIPING SHALL BE ABOVE GRADE COPPER DRAIN, WASTE AND VENT FINISH INSULATE ALL CONDENSATE PIPING W/ 3/4" MIN. IMCOLOK PIPE INSULATION.

GENERAL DEMOLITION NOTES

1. UNLESS OTHERWISE NOTED, ALL EQUIPMENT AND DUCTWORK IN THE PROJECT AREA WHICH IS NOT INDICATED TO REMAIN, IS TO BE REMOVED. THE CONTRACTOR SHALL INVESTIGATE THE PROJECT AREA PRIOR TO BID TO DETERMINE ALL REQUIRED DEMOLITION.
2. EXISTING CONDITIONS SHOWN ON THIS DRAWING ARE TAKEN FROM ORIGINAL DRAWINGS AND FIELD INVESTIGATION. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN.
3. DEMOLITION WORK IS NOT SPECIFICALLY IDENTIFIED ON THESE PLANS, AND MAY BE DESCRIBED ON THE ARCHITECT'S PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED DEMOLITION WHETHER SHOWN ON THE PLANS OR NOT.
4. ALL MECHANICAL SYSTEMS SERVING OTHER SPACES OR FLOORS, THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION, SO AS NOT TO CAUSE ANY DISRUPTION TO THESE OTHER SPACES.
5. ALL ITEMS REMOVED UNDER THIS PROJECT SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AT THE OWNER'S DISCRETION.
6. PROPERLY REMOVE AND DISPOSE OF ALL HVAC DUCTWORK AND AIR DISTRIBUTION DEVICES WHICH ARE TO BE REMOVED. CONSULT WITH OWNER AND OBTAIN THE OWNER'S APPROVAL PRIOR TO DISPOSAL OF REMOVED MATERIAL.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PIPING AND DUCTS, NEW OR EXISTING, WITHIN THE PROJECT AREA, ARE PROPERLY SUPPORTED.
8. ALL OCCUPIED SPACES ARE TO REMAIN OPERATIONAL DURING BUSINESS HOURS THROUGHOUT THE DEMOLITION AND CONSTRUCTION PERIOD. COORDINATE ALL WORK AS DESCRIBED IN THE ARCHITECT'S DOCUMENTS.

HVAC CONTROLS NOTE

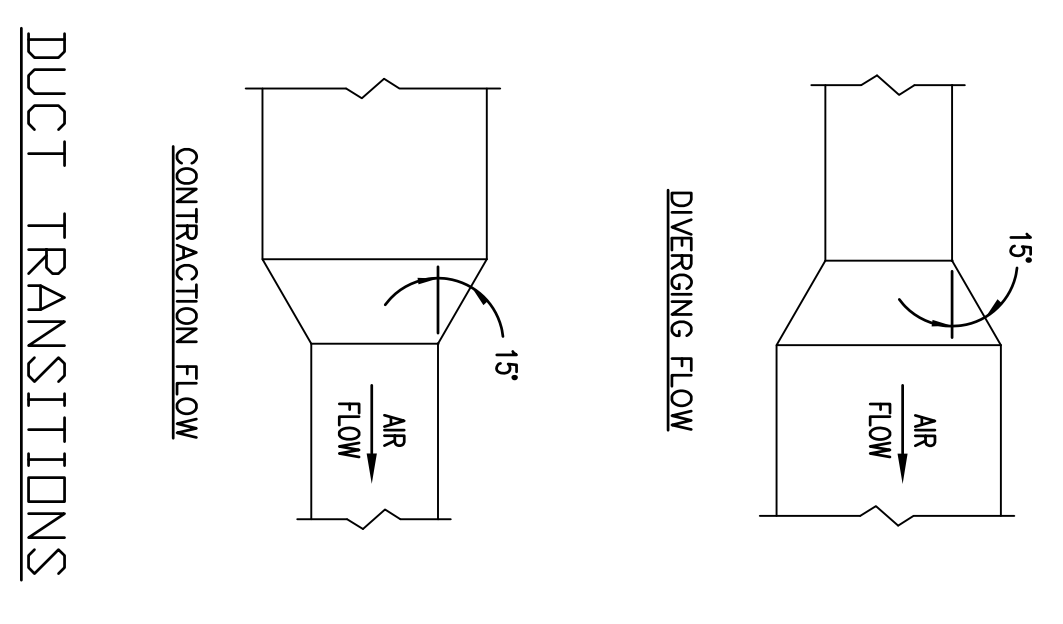
AIR CONDITIONING CONTRACTOR SHALL PROVIDE OR CAUSE TO BE PROVIDED ALL CONTROLS, CONTROL WIRING & CONDUIT, POWER WIRING & CONDUIT, AND ALL OTHER ITEMS NECESSARY FOR INSTALLATION AND CONTROL OF VARIABLE AIR VOLUME TERMINAL UNITS. IN ADDITION CONTRACTOR SHALL PROVIDE INTERFACE FOR THE EXISTING ENERGY MANAGEMENT SYSTEM (EMS). PROGRAMMING IS TO ALSO INCLUDE LAYOUT WITH ON SCREEN DISPLAYS THAT BE CONTROLLED BY THE EXISTING SYSTEM. THE AIR CONDITIONING SYSTEM, CONTROL BUILDING CONTROLS SERVICE CONTRACTOR SHALL VERIFY ALL THERMAL CONCEPTS FOR THE ENTIRE TENANT SPACE TO BE PROVIDED FOR THE ENTIRE TENANT SPACE. VERIFY WITH THERMAL CONCEPTS, ANY ADDITIONAL DETAILS WHICH MUST BE INCLUDED, PRIOR TO BID.

CONTRACTOR IS TO PROVIDE CONTROLS AS NOTED ABOVE FOR ALL VAV TERMINAL BOXES SHOWN ON THESE PLANS, INCLUDING ANY EXISTING BOXES.

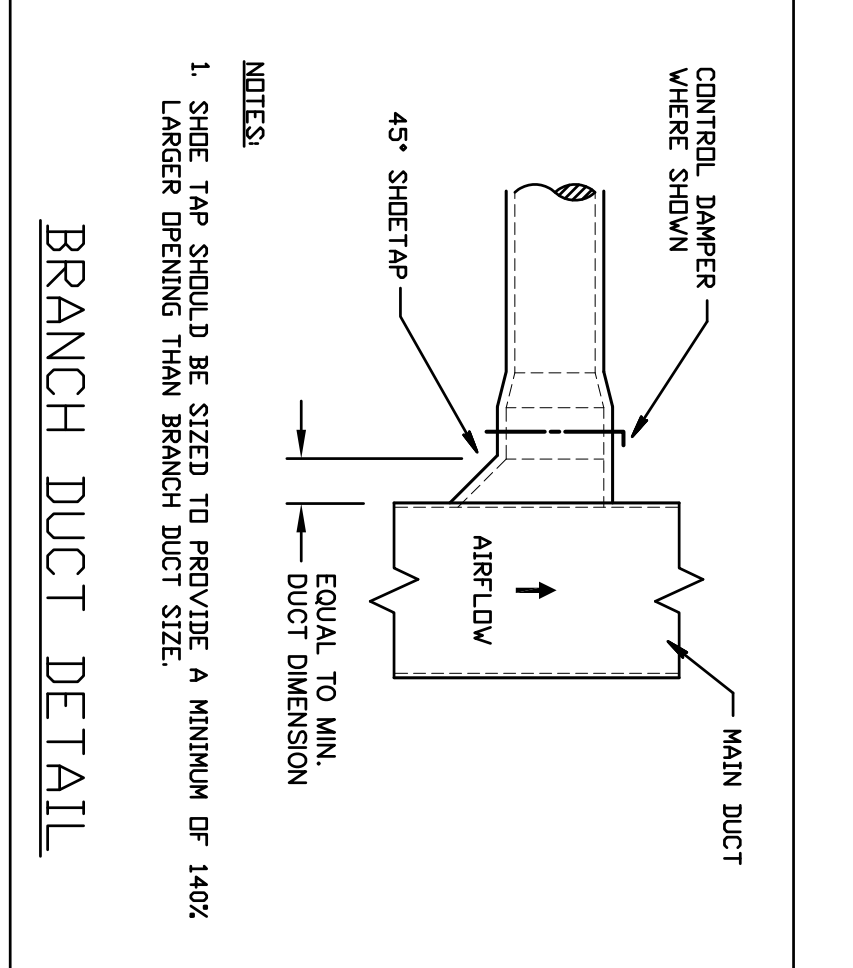
AIR DISTRIBUTION SCHEDULE

MARK	MAKE	MODEL	SIZE	NECK	MATERIAL	BORER TYPE	MOUNTING	DAMPER	THROW	FINISH	REMARKS
A	TTUS	PAS-AA	24X24	6"	ALUMINUM	3	LAV-IN	AG-100	4 WAY	WHITE	SEE NOTES
A1	TTUS	PAS-AA	24X24	6"	ALUMINUM	1	SURFACE	AG-100	1 WAY	WHITE	SEE NOTES
B	TTUS	PAS-AA	24X24	8"	ALUMINUM	3	LAV-IN	AG-100	4 WAY	WHITE	SEE NOTES
C	TTUS	PAS-AA	24X24	10"	ALUMINUM	3	LAV-IN	AG-100	4 WAY	WHITE	SEE NOTES
RA	TTUS	PAR-AA	24X24	22X22	ALUMINUM	3	LAV-IN	-	-	WHITE	SEE NOTES

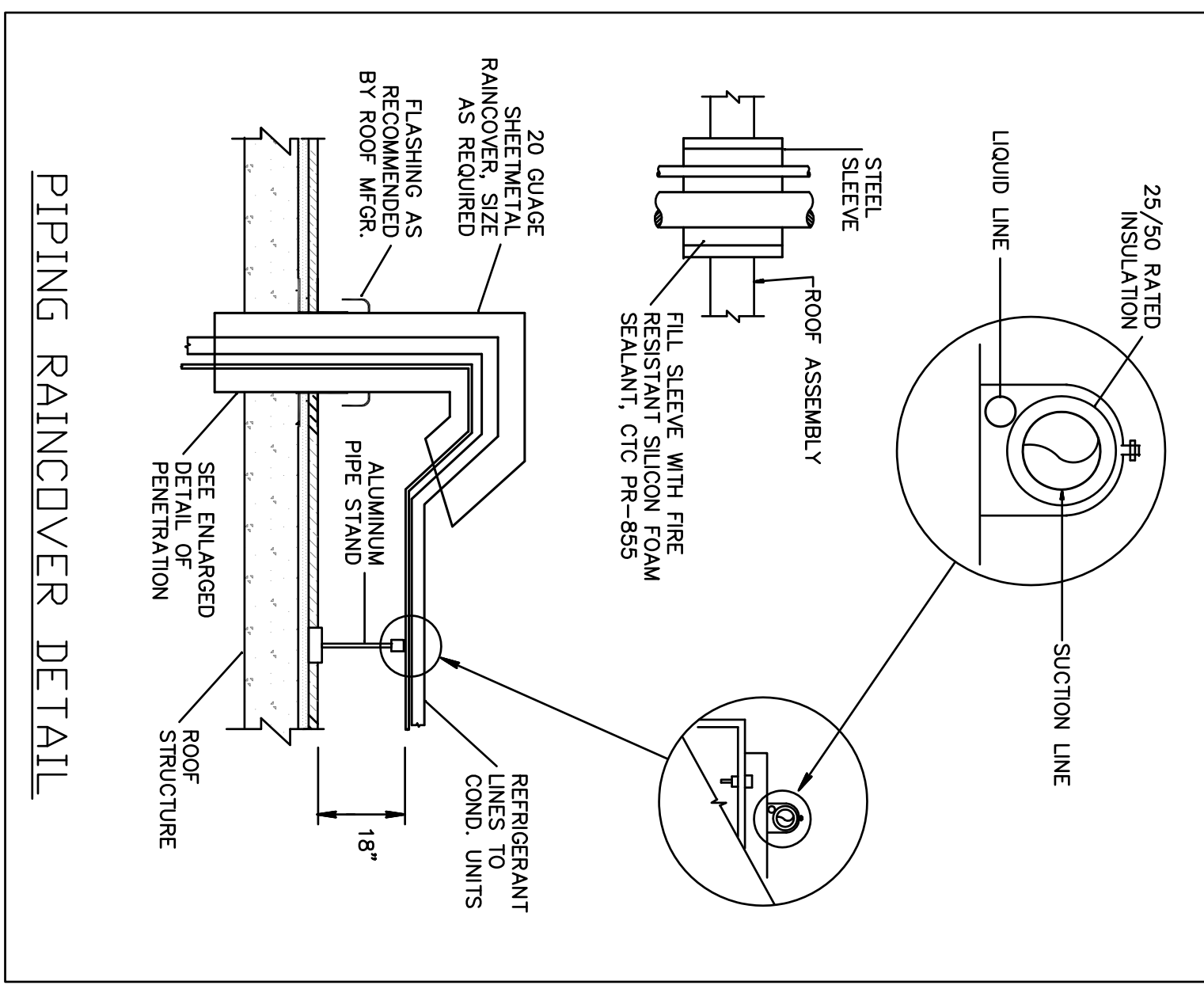
PROVIDE OFF-WHITE FINISH AND SUBMITTALS TO ARCHITECT FOR APPROVAL.
PROVIDE ROUND FLEXIBLE DUCT RUN-OUT SIZED TO MATCH S/A DIFFUSER NECK UNLESS NOTED OTHERWISE.
PROVIDE RETURN BOX ABOVE SUPPLY AND RETURN AIR GRILLES AS REQUIRED FOR DUCT CONNECTIONS. MINIMUM BOX HEIGHT IS 1/2" OF NECK WIDTH.
PROVIDE DAMPERS ONLY WHERE DAMPER IS NOT ACCESSIBLE AT DUCT TAKE-OFF ABOVE CEILING.



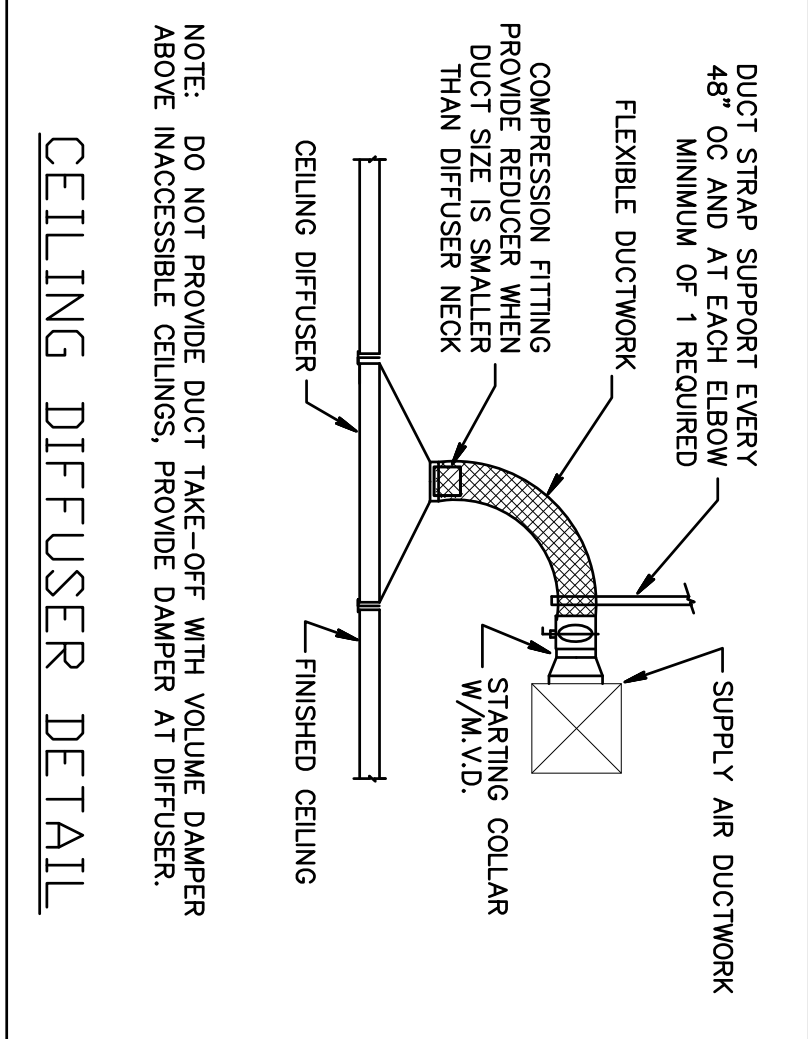
DUCT TRANSITIONS



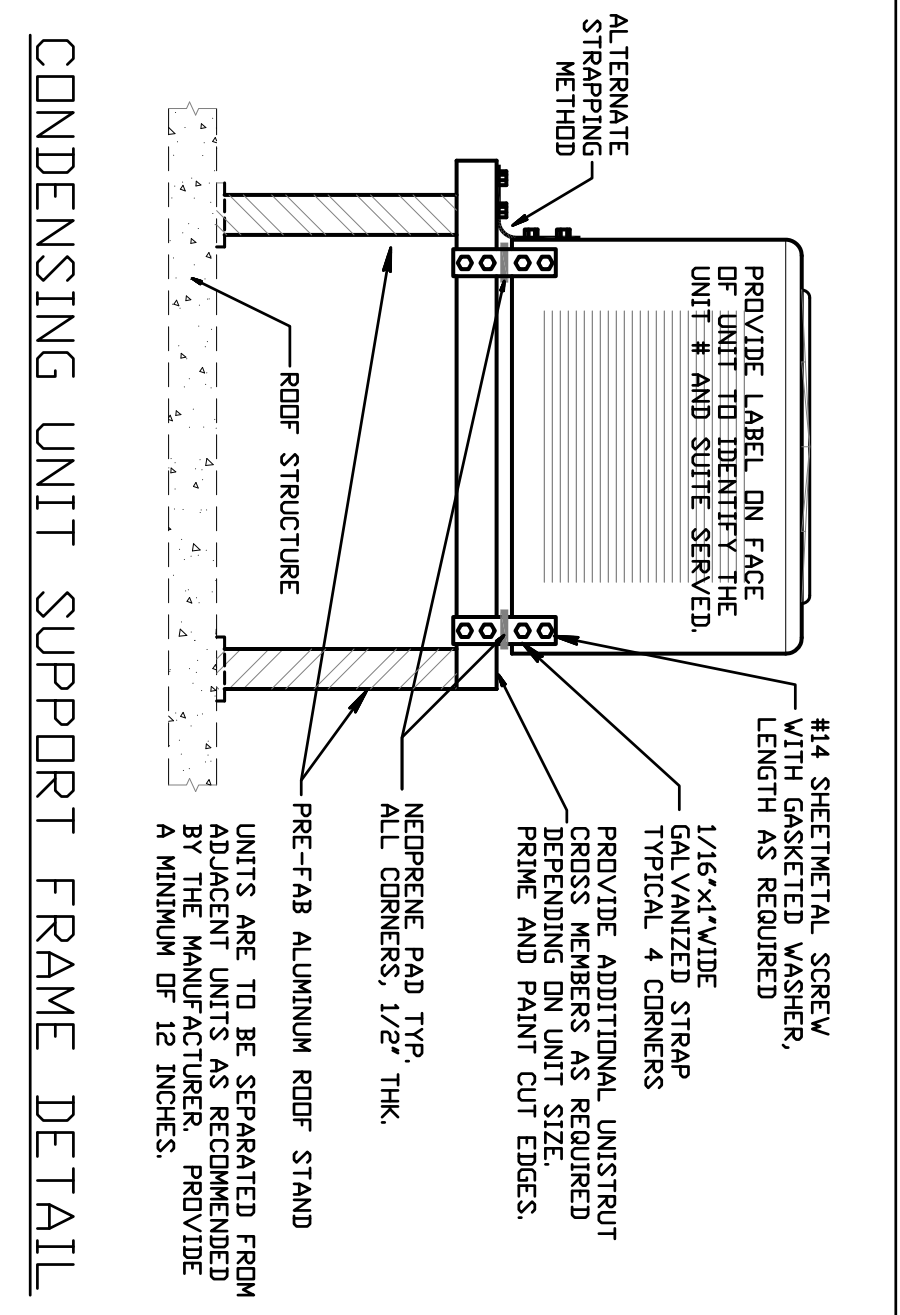
BRANCH DUCT DETAIL



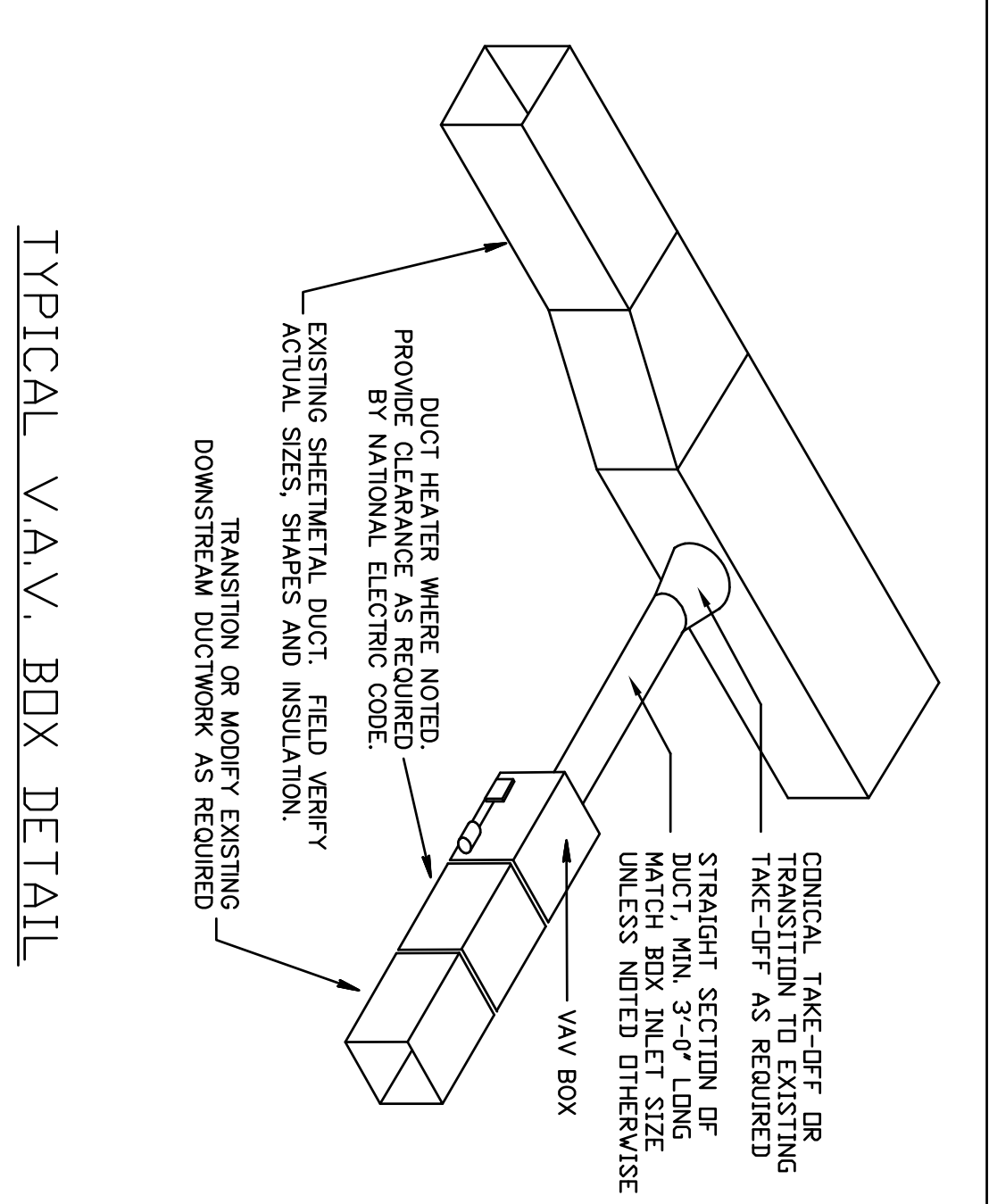
PIPING RAINCOVER DETAIL



CEILING DIFFUSER DETAIL



CONDENSING UNIT SUPPORT FRAME DETAIL



TYPICAL VAV BOX DETAIL

VAV TERMINAL BOX SCHEDULE

MARK	MANUF.	MODEL NO.	INLET SIZE	CFM MAX	CFM MIN	KW	HEAT STEP	VOLT-PH-HZ	REMARKS
V-3	TUTTLE & B.	SDV	10"	1350	350	3	1	208-1-60	NOTES 1 & 7
V-4	TUTTLE & B.	SDV	10"	1440	350	3	1	208-1-60	NOTE 7
V-5	TUTTLE & B.	SDV	10"	1350	350	3	1	208-1-60	NOTES 1 & 7
V-6	TUTTLE & B.	SDV	10"	1200	500	3	1	208-1-60	NOTES 1, 3, 4, 7
V-8	TUTTLE & B.	SDV	12"	1550	450	3	1	208-1-60	NOTES 3 & 7
V-94	TTUS	DESV	6"	350	150	-	-	120-1-60	NOTES 1 THRU 5
V-98	TTUS	DESV	8"	700	250	2	1	208-1-60	NOTES 1, 3, 7
V-99	TTUS	DESV	10"	650	300	3	1	208-1-60	NOTE 7

1. PROVIDE ROOM TEMPERATURE SENSOR WITH EXTERNAL SET POINT ADJUSTMENT.
2. PROVIDE FACTORY MOUNTED STAEFA-TALON DDC CONTROLLER.
3. TRANSITION AS REQUIRED FROM OUTLET SIZE TO DUCT SIZE SHOWN ON PLAN.
4. TRANSITION FROM INLET SIZE TO SUPPLY DUCT SIZE AS SHOWN ON FLOOR PLANS.
5. PROVIDE ROUND DUCT TO MATCH INLET SIZE UNLESS NOTED OTHERWISE.
6. OPTIMAL, 1" THICK MAT Faced INSULATION WITH STER-LOC LINER.
7. FACTORY 1 STAGE HEATER WITH COMPLETE CONTROL, MERCURY CONTACTORS, AND INTERLOCKING DOOR DISCONNECT SWITCH, U.L. LISTED AND LABELED.
8. EXISTING UNIT TO REMAIN. VACUUM CLEAN INTERIOR AND RE-BALANCE AS INDICATED.

PRIOR TO BID, CONTRACTOR IS TO VERIFY WITH OWNER IF THERE ARE ANY EXISTING SPARE VAV TERMINAL BOXES WHICH MAY BE RE-USED IN PLACE OF NEW BOXES SHOWN IN SCHEDULE ABOVE.
PRIOR TO BID, CONTRACTOR IS TO VERIFY WITH OWNER IF THERE ARE ANY EXISTING SPARE ROOM TEMPERATURE SENSORS WHICH MAY BE RE-USED IN PLACE OF NEW DEVICES INDICATED ABOVE.

SPLIT A/C SYSTEM SCHEDULE

MODEL #	MODEL #	MODEL #
40MVC018	40MVC018	40MVC018
026	026	026
620 @ 0.0	620 @ 0.0	620 @ 0.0
208/1/60	208/1/60	208/1/60
- / -	- / -	- / -
40	40	40
49X9X13	49X9X13	49X9X13
CU-6	CU-6	CU-6
38MVC018	38MVC018	38MVC018
15	15	15
7.3	7.3	7.3
0.8	0.8	0.8
208/1/60	208/1/60	208/1/60
11 / 20	11 / 20	11 / 20
116	116	116
33X14X27	33X14X27	33X14X27
CARRIER	CARRIER	CARRIER
135	135	135
180	180	180
75/63	75/63	75/63
130	130	130

SYSTEM

1. PROVIDE 5 MINUTE ANTI-SHORT CYCLE RELAY.
2. PROVIDE A/C UNIT MANUFACTURER'S PROGRAMMABLE THERMOSTAT.
3. SIZE AND RUN REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE VIBRATION ISOLATORS PER MANUFACTURER'S RECOMMENDATIONS.
5. INSULATE REFRIGERANT SUCTION LINE WITH 1" FIRE RETARDANT ARMATEX.
6. PROVIDE CONDENSATE DRAIN PIPING WITH 1" FIRE RETARDANT ARMATEX.
7. PROVIDE CONDENSATE PIPING WITH 1" FIRE RETARDANT ARMATEX.
8. PROVIDE LOW AMBIENT COOLING KIT FOR MINIMUM 30°F OA TEMPERATURE.

NOTES:

birse design inc.
5300 woodland lakes drive
palm beach gardens, fl 33418
phone 561-249-4001
fax 772-409-8684
AA26001615

Bol

ANTHEM
FAIRWAY OFFICE CENTER
7111 FAIRWAY DR #402
PALM BEACH GARDENS, FL
PROJECT NUMBER 711112

REVISIONS

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3	
4	
5	

DRAWN BY DR
CD
3-14-12

M-3

Gilman & Associates, Inc.
MECHANICAL & ELECTRICAL ENGINEERS
507 NORTH HILLCREST DRIVE
Lake Worth, FL 33460 CA *090978
(561) 582-0210 Fax (561) 582-8212
RONALD D. GILMAN P.E. *37933