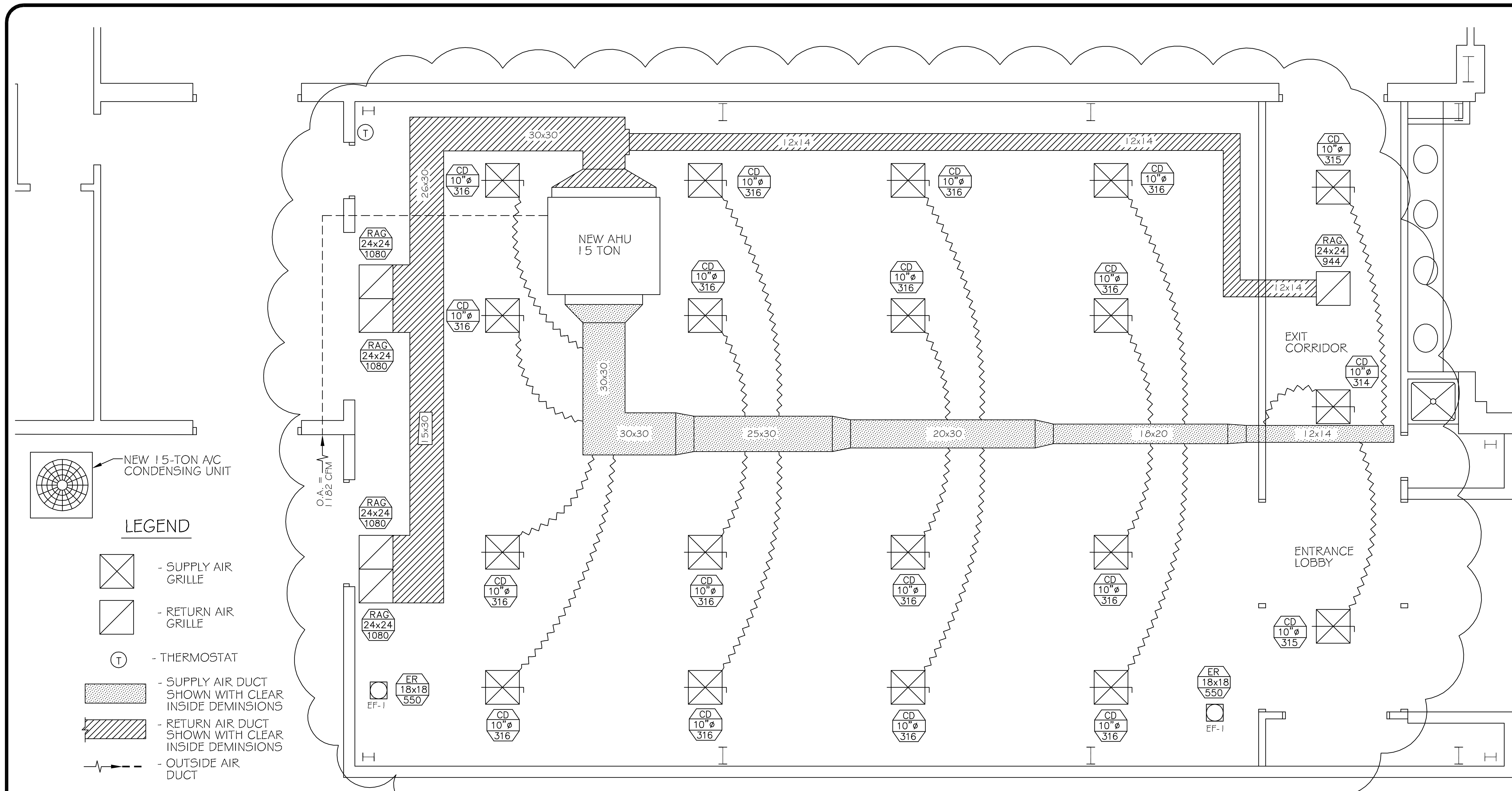
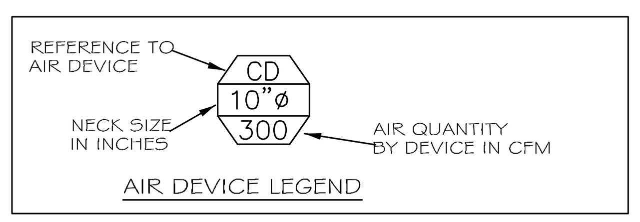


MECHANICAL PLAN

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

LEGEND

- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
- THERMOSTAT
- SUPPLY AIR DUCT SHOWN WITH CLEAR INSIDE DEMINSIONS
- RETURN AIR DUCT SHOWN WITH CLEAR INSIDE DEMINSIONS
- OUTSIDE AIR DUCT
- DAMPER CONTROL
- EXHAUST GRILLE FOR FAN, PROVIDE BACK DRAFT DAMPER AT GRILLE.
- ROUND FLEX DUCT, MAX. LENGTH 14'-0", MIN. R-6. PROVIDE MAN. DAMPER AT DIFFUSER CONNECTIONS, DUCT SIZE AS FOLLOWS:
  250CFM TO 350CFM = 10"
  200CFM TO 250CFM = 9"
  150CFM TO 200CFM = 8"
  100CFM TO 150CFM = 6"



AIR DEVICE LEGEND

MECHANICAL NOTES

1. CONTRACTOR SHALL VERIFY THAT ALL EQUIPMENT, AS SHOWN ON THESE DRAWINGS, WILL NOT CONFLICT WITH ANY DRAINS, SCUTTLES, JOINTS, ETC.
2. ALL ROOF MOUNTED EQUIPMENT AND PENETRATIONS SHALL BE FLASHED A MINIMUM OF 12" ABOVE THE ROOF VIA ROOF CURBS AND PIPE SEALS. PROVIDE AMPLE SUPPLY OF PIPE SEALS FOR ELECTRICAL PENETRATIONS.
3. ALL OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" FROM ANY EXHAUST FAN OR PLUMBING VENT. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER TO SHUT WHEN SYSTEM IS NOT RUNNING.
4. MECHANICAL SYMBOLS SHOWN ON THESE DRAWINGS ARE DRAWN DIAGRAMATICALLY, CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
5. REFER TO STRUCTURAL DRAWINGS TO COORDINATE LOCATION(S) & MOUNTING OF MECHANICAL EQUIPMENT.
6. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADMINISTERING ALL WARRANTIES ON EQUIPMENT, WHICH HE INSTALLS. THIS INCLUDES ALL CONDENSERS, REFRIGERANT LINES, AND OTHER ITEMS FURNISHED BY OTHERS AS WELL AS THOSE FURNISHED BY HIM.
7. CONDENSATE & OVERFLOW DRAIN LINES SHALL BE PVC SCH 40 AND SHALL BE INSTALLED COMPLETELY SEPARATE. DRAINS TO BE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
8. PROVIDE VIBRATION ISOLATION DEVICES AND FLEXIBLE CONNECTIONS TO ALL MOVING MACHINERY.
9. DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACA STANDARDS. LINE WITH NEOPRENE COATED 1.0", 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION.
10. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS I, AIR DUCT MATERIALS AND BE INSULATED WITH A MINIMUM "R" VALUE OF 6.
11. ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. DUCTS SHALL BE SIZED TO LIMIT MAIN DUCTS TO 1000 FPM & SECONDARY DUCTS TO 800 FPM.
12. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS.
13. THE CONTRACTOR SHALL PROVIDE COMPLETE INFORMATION AND COOPERATION TO THE OTHER CONTRACTORS AND TRADES AS REQUIRED FOR COMPLETION AND COORDINATION OF THE COMPLETE PROJECT.
14. THIS CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND ALL OTHER TRADES FOR ALL REQUIRED OPENINGS IN FOUNDATIONS, FLOORS, WALLS AND ROOF. CUTTING AND PATCHING SHALL BE HELD TO A MINIMUM.
15. TEMP. SENSORS SHALL BE LOCATED GENERALLY AS SHOWN BUT THEIR EXACT LOCATION SHALL BE FIELD COORDINATED TO AVOID INTERFERENCE WITH WALL MOUNTED ITEMS. MOUNT SENSORS IN COMPLIANCE WITH ADA AG CODE SECTION 4.27. ALL THERMOSTATS SHALL BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
16. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
17. CONTRACTOR TO INSULATE BACKSIDE OF ALL DIFFUSERS WITH 2" MINIMUM OWENS-CORNING FIBERGLASS ALL SERVICE FACED DUCT WRAP.
18. CONTRACTOR TO FABRICATE ALL DUCTWORK TRANSITIONS AS REQUIRED TO ATTACH DUCTWORK TO HVAC EQUIPMENT AND AIR DEVICES.
19. ALL ROUND DUCT AND FLEX DUCT RUN OUTS SHALL BE THE SAME DIAMETER AS DIFFUSER NECK UNLESS NOTED OTHERWISE.
20. PROVIDE RECTANGULAR TO ROUND TRANSITIONS FOR ALL DIFFUSERS AS NEEDED.
21. VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO BEGINNING WORK.
22. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
23. COORDINATE CEILING AIR DEVICE LOCATIONS WITH LIGHTING PLAN AND ARCHITECT'S REFLECTED CEILING PLAN.
24. RETURN DUCTWORK SHALL BE LINED WITH 1-INCH ACOUSTICAL INSULATION.
25. IN ALL SYSTEMS OVER 2,000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 90A IN THE SUPPLY DUCT DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS, TO AUTOMATICALLY STOP THE FAN. IN ALL SYSTEMS UNDER 2,000 CFM PROVIDE U.L. LISTED 125 F FIRESHOT IN RETURN AIR OF EACH SYSTEM TO SHUT DOWN FAN IN THE EVENT OF FIRE.
26. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHJ'S. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR
27. PROVIDE U.L. RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES.
28. PROVIDE AND INSTALL WATER PROOF GRILLE VENT ON ROOF FOR TOILET EXHAUST.
29. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
30. INSTALL FIRE DAMPER WHERE S.A. AND R.A. DUCTS PENETRATE 1 HR. CONSTRUCTION.
31. ALL ELECTRICAL, MECHANICAL AND PLUMBING PENETRATING FIRE PARTITIONS SHALL BE FIRE CAULKED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E814.)

AIR DEVICE SCHEDULE

MARK	DESCRIPTION	BASIS OF DESIGN	REMARKS
CD	CEILING DIFFUSER	TITUS TMS-AA	FRAME STYLE 3 FOR 24"x24" LAY-IN MODULE, OFF WHITE FINISH, ALL ALUMINUM CONST. ROUND NECK & SQUARE FACE, PROVIDE WITH OPPOSED BLADE DAMPER. NECK SIZE, AND CFM AS INDICATED
ER	EXHAUST REGISTER	TITUS 50 FF	FRAME STYLE 1 FOR SURFACE MOUNT, OFF WHITE FINISH, ALL ALUMINUM CONST. SIZE AND CFM AS INDICATED.
RAG	RETURN AIR GRILLE	TITUS 50 FF	FRAME STYLE 3 FOR 24"x24" LAY-IN MODULE, OFF WHITE FINISH, ALL ALUMINUM CONST. SIZE AND CFM AS INDICATED.

1. THROW PATTERNS FOR CEILING DIFFUSERS ARE 4-WAY UNLESS OTHERWISE INDICATED
2. PROVIDE PLASTER FRAMES FOR LAY-IN DEVICES IN GYP. BOARD CEILINGS
3. PROVIDE FILTER FOR ALL EXHAUST REGISTERS AND RETURN AIR GRILLES.

A/C UNIT SCHEDULE

TOTAL BTU	EER	ELECTRICAL VOLTAGE	ELECTRICAL MCA	ELECTRICAL CKT BRKRS	COMMENTS
180,000 BTU (15 TON) NEW AC #1	12.0	240V,3Ø	66.3	P6 - 1,3,5	NOTE: ALL A/C TO BE SPLIT-SYSTEM HVAC (TRANE OR EQUAL)

AHU UNIT SCHEDULE

TOTAL BTU	CFM	O.A.	HEAT (KW)	ELECTRICAL VOLTAGE	ELECTRICAL MCA	ELECTRICAL CKT BRKRS	COMMENTS
180,000 BTU (15 TON) NEW AHU #1	6,000	1182	29.92	240V,3Ø	101.5	P6 - 2,4,6	NOTE: ALL A/C TO BE SPLIT-SYSTEM HVAC (TRANE OR EQUAL) THIS SYSTEM REQUIRED TO CONTROL 2 EXHAUST FANS.

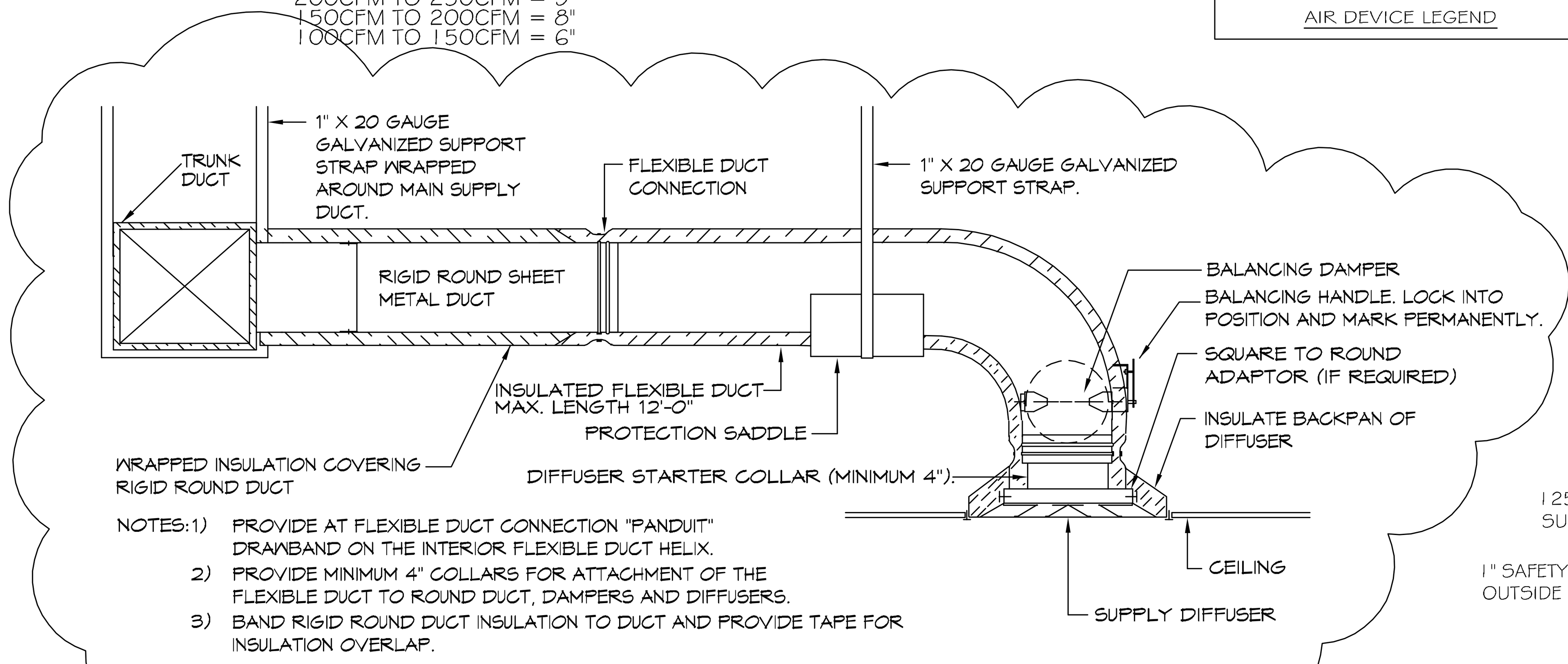
FAN SCHEDULE

MARK	AREA SERVED	CFM	T.S.P. IN WG	MOTOR DATA HP	MOTOR DATA RPM	MOTOR DATA V/Φ/HZ	CONTROLLED BY	BASIS OF DESIGN	REMARKS
EF-1	AUDITORIUM	600	0.25	1/10	1550	120/1/60	AHU	ACME PRN 100	1 2 3

1. PROVIDE FACTORY MATCHED ROOF CURBS, BACKDRAFT DAMPERS, BIRDSCREENS AND SOLID STATE SPEED CONTROLLERS WITH THESE FANS.
2. INSURE ROOF CURBS ARE FOR USE WITH TYPE ROOF BEING PROVIDED.
3. FURNISHED FAN AND CURB BY MECHANICAL CONTRACTOR

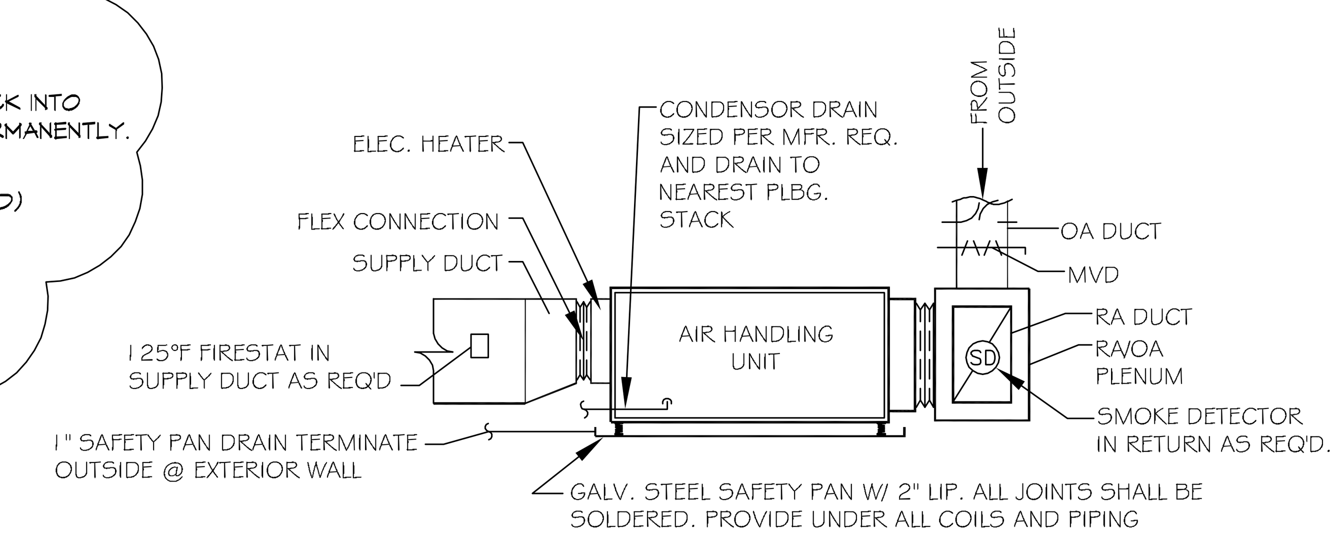
AIR BALANCE SCHEDULE

	AHU-1	EF-1
OUTSIDE AIR FLOW (CFM)	1182	
RETURN AIR FLOW (CFM)	4818	
SUPPLY AIR FLOW (CFM)	6000	
EXHAUST AIR FLOW (CFM)		550
BUILDING PRESSURE (CFM)	1182	-550
QUANTITIES	1	2
TOTAL PRESSURIZATIONS	1182	-1100
RESULTING BUILDING PRESSURIZATION (CFM) +82		



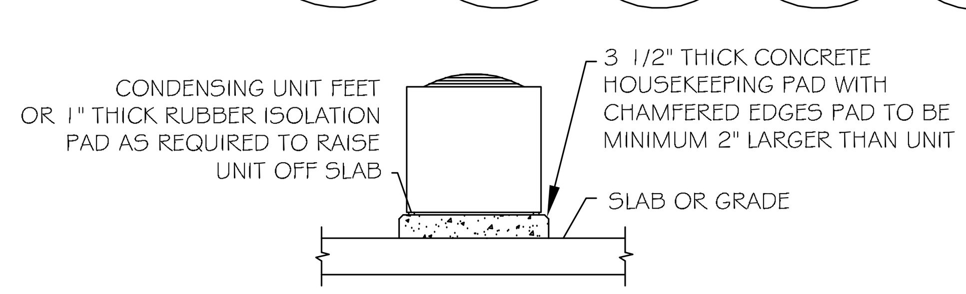
DIFFUSER CONNECTION DETAIL-FLEX DUCT

N.T.S.



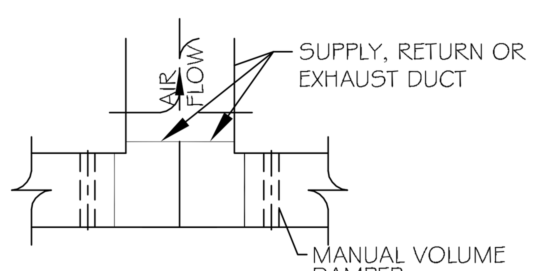
TYPICAL HORIZONTAL AHU DETAIL

SCALE: N.T.S.



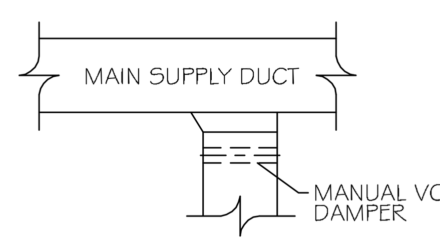
CONDENSING MOUNTING DETAIL

N.T.S.



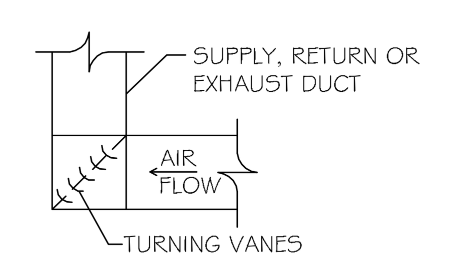
DUCT SPLITTER DETAIL

N.T.S.



SUPPLY DUCT TAKE-OFF DETAIL

N.T.S.



SQUARE ELBOW DETAIL

N.T.S.

in joint venture with:

DAMMON ENGINEERING, INC.
Architects & Engineers

Chief Architect: Kevin J. Kinchen, NCARB
Chief Engineer: Brian Mistich, PE
554 Old Spanish Trail
Slidell, LA 70458
www.dammonengineering.com
dammoneng@bellsouth.net
PH: 985.649.5832
F: 985.641.5950

REVISIONS	BY
9/22/14	JTL

FRANK E. GERARVE, JR., ARCHITECT, L.L.C.
A Professional Architectural Limited Liability Company
Designers Planners Engineers
9108 CHRETIEN POINT PLACE, Telephone: (504) 737-2821
RIVER RIDGE, LOUISIANA 70123 Fascilime: (504) 737-2822

Slidell Little Theatre

2024 Nellie Drive
Slidell, Louisiana 70458

DRAWN	J.T.L.
CHECKED	C.K.D.
DATE	9/19/14
SCALE	NOTED
JOB NO.	
SHEET	M-1
OF	SHEETS