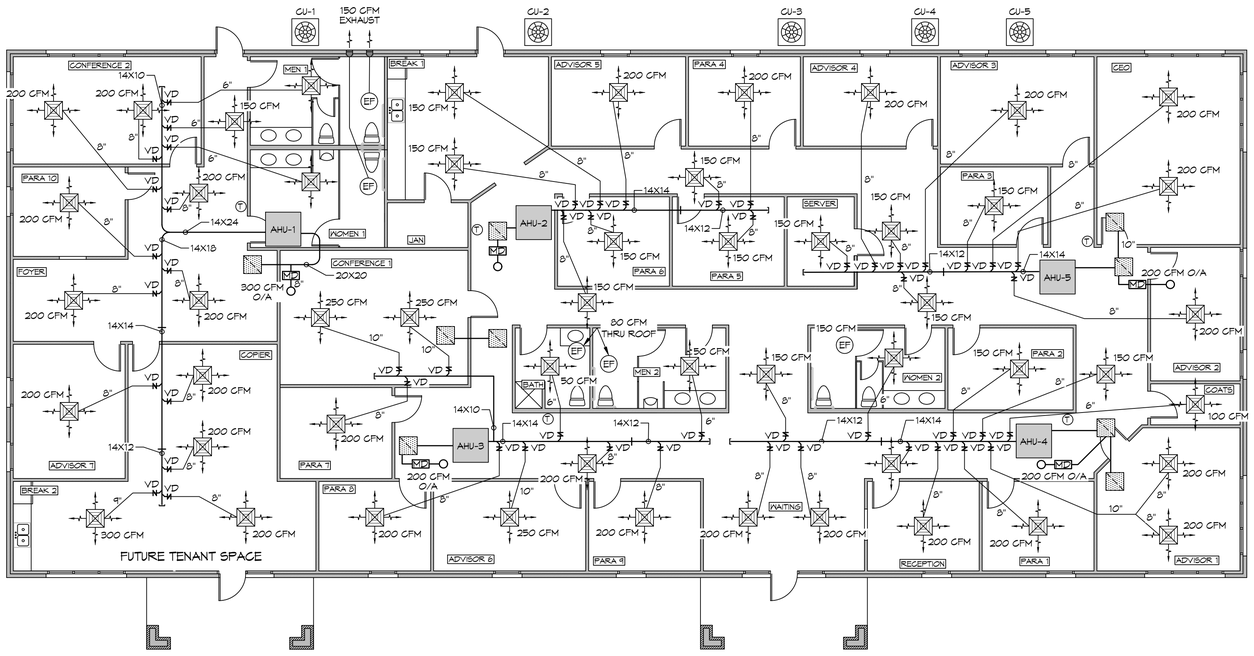
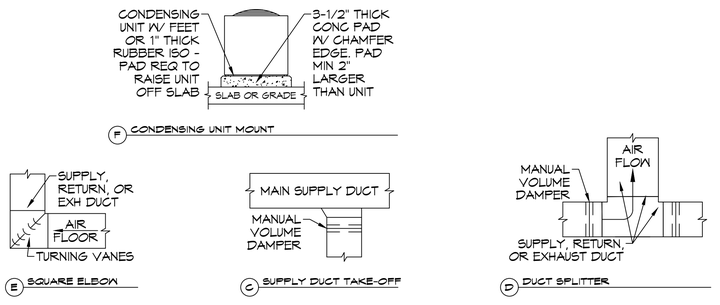
FILE NAME: J:_Offices\2413 - Mistich - Ozone Office Bldg\Drawings\Current\M101 - Mechanical Plan.pkg PLOT DATE & TIME: Thursday, March 16, 2023 11:09:48 AM

SPLIT SYSTEMS SCHEDULE

TAG	MAKE/MODEL	NOMINAL TONS	TOTAL CFM	OA CFM	COOLING TOTAL MBH	HEATING KW	POWER
CU-1/AHU-1	TRANE 4TTA	7.5	3,000	300	90,000	18.72	208/3/60
CU-2/AHU-2	TRANE 4TTA	5	2,000	200	60,000	11.71	208/3/60
CU-3/AHU-3	TRANE 4TTA	5	2,000	200	60,000	11.71	208/3/60
CU-4/AHU-4	TRANE 4TTA	5	2,000	200	60,000	11.71	208/3/60
CU-5/AHU-5	TRANE 4TTA	5	2,000	200	60,000	11.71	208/3/60



18 MECHANICAL PLAN
SCALE: 1/8" = 1'-0"



TYPICAL HVAC DETAILS
SCALE: NTS

FRESH AIR CALCULATIONS

IMC 2021 Tbl 403.3.1.1
Conference Rm

Vbz = Rp Pz + Ra Az
Rp = 5
Pz = 50 per 1000 ft2 = 15.0 people
Ra = 0.06
Az = 315.0 ft2 - 5 % for furniture = 299.25 ft2

Vbz = 92.77 cfm fresh air

Main Entry Lobies

Vbz = Rp Pz + Ra Az
Rp = 5
Pz = 10 per 1000 ft2 = 1.9 people
Ra = 0.06
Az = 186.0 ft2 - 0 % = 186.0 ft2

Vbz = 20.46 cfm fresh air

Office Spaces

Vbz = Rp Pz + Ra Az
Rp = 5
Pz = 5 per 1000 ft2 = 25.5 people
Ra = 0.06
Az = 5366.00 ft2 - 5 % furniture = 5,097.70 ft2

Vbz = 433.3 cfm fresh air

Total fresh air required = 546.5 cfm fresh air

Future Tenant Area

Office Spaces

Vbz = Rp Pz + Ra Az
Rp = 5
Pz = 5 per 1000 ft2 = 7.9 people
Ra = 0.06
Az = 1667.00 ft2 - 5 % furniture = 1,583.65 ft2

Vbz = 134.6 cfm fresh air

Total fresh air required = 134.6 cfm fresh air

GENERAL NOTES

1. ALL WORK AND MATERIAL SHALL CONFORM STRICTLY TO THE LATEST LOCAL CITY, PARISH, STATE AND NATIONAL GOVERNING CODES. MUST MEET IMC 2021 REQUIREMENTS.
2. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL WRAPED WITH FIBROUS GLASS DUCT WRAP WITH FSK VAPOR BARRIER, MIN R-6. INSTALLED PER SMACNA STANDARDS. DUCT WORK IMMEDIATELY DOWNSTREAM FROM RTU SHALL BE LINED FOR SOUND ATTENUATION.
3. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
4. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
5. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
6. IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72E IN THE RETURN DUCT DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN.
7. PROVIDE UL LISTED 125 °F. FIRESTAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
8. PROVIDE UL RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES AND EXHAUST FANS.
9. CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
10. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
11. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
12. EXHAUST FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
13. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
14. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS AT THE REGISTER.
15. LOCATE OUTDOOR UNITS AS SHOWN ON ARCHITECTURAL DRAWINGS.
16. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
17. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
18. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS 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-E8-14).
19. ALL MECHANICAL SYMBOLS ARE DRAWN DIAGRAMMATICALLY, CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
20. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
21. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
22. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHJS. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.

DRAWN DIAGRAMMATICALLY FOR CLARITY. FIELD VERIFY PLACEMENT OF ALL EQUIPMENT

MECHANICAL LEGEND

- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
- DAMPER CONTROL
- SUPPLY DUCT
- RETURN AIR DUCT
- EXHAUST DUCT
- EXHAUST FAN
- (T) THERMOSTAT

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REVISIONS

#	DESCRIPTION	DATE

SEAL:

NEW OFFICE BUILDING
TRU WEALTH ADVISORS LLC
Dawill Drive
Mandeville, La

JOB No: 2413 | DATE: 3-1-2023
DRAWN BY: TT | CHECKED BY: DPD

SHEET TITLE:
MECHANICAL PLAN

DRAWING NUMBER:
M101

SHEET No: