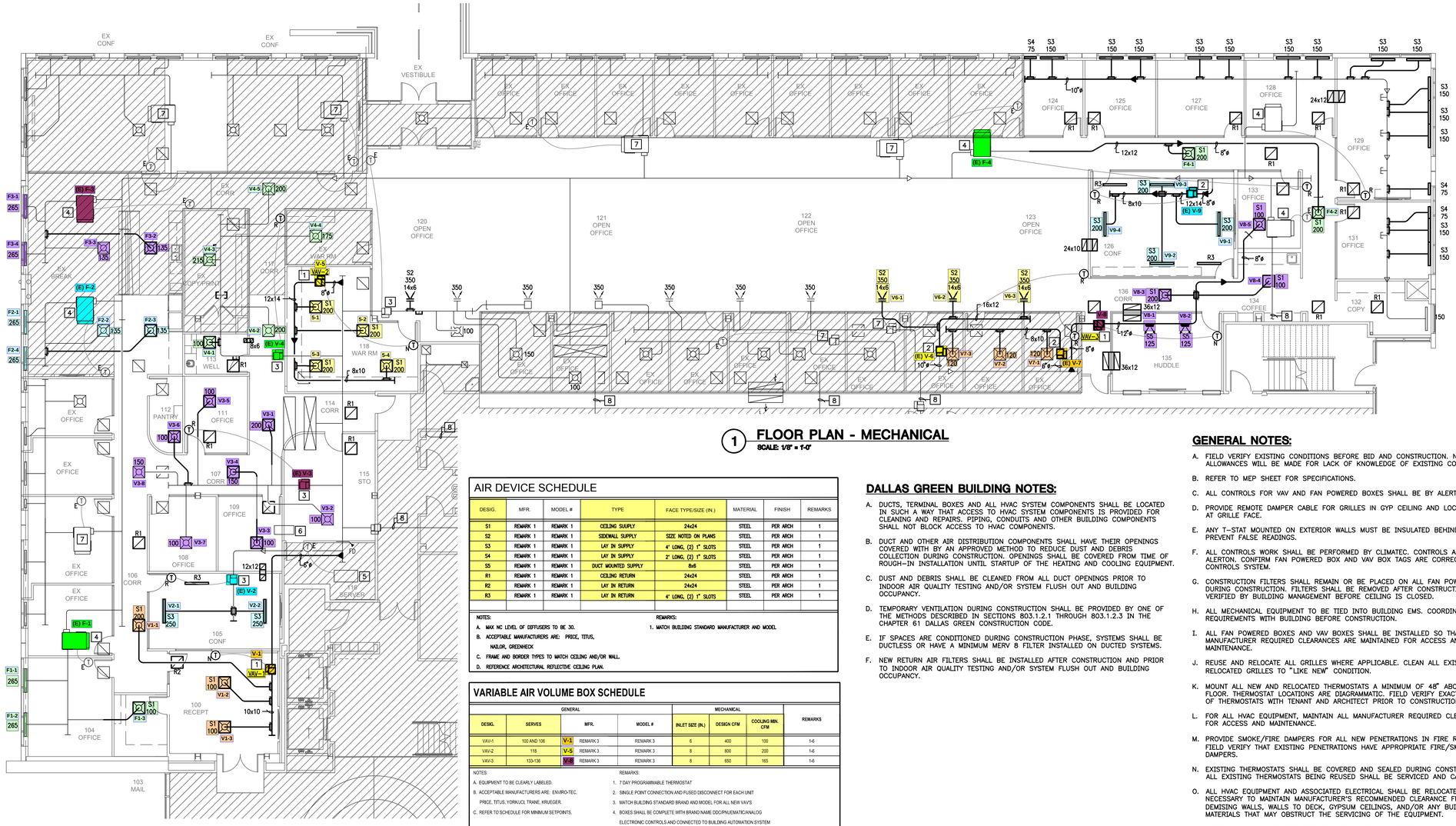


1 FLOOR PLAN - MECHANICAL

SCALE: 1/8" = 1'-0"

AIR DEVICE SCHEDULE

DESIG.	MFR.	MODEL #	TYPE	FACE TYPE/SIZE (IN.)	MATERIAL	FINISH	REMARKS
S1	REMARK 1	REMARK 1	CEILING SUUPLY	24x24	STEEL	PER ARCH	1
S2	REMARK 1	REMARK 1	SIDEWALL SUPPLY	SIZE NOTED ON PLANS	STEEL	PER ARCH	1
S3	REMARK 1	REMARK 1	LAY IN SUPPLY	4" LONG, (2) 1" SLOTS	STEEL	PER ARCH	1
S4	REMARK 1	REMARK 1	LAY IN SUPPLY	2" LONG, (2) 1" SLOTS	STEEL	PER ARCH	1
S5	REMARK 1	REMARK 1	DUCT MOUNTED SUPPLY	8x8	STEEL	PER ARCH	1
R1	REMARK 1	REMARK 1	CEILING RETURN	24x24	STEEL	PER ARCH	1
R2	REMARK 1	REMARK 1	LAY IN RETURN	24x24	STEEL	PER ARCH	1
R3	REMARK 1	REMARK 1	LAY IN RETURN	4" LONG, (2) 1" SLOTS	STEEL	PER ARCH	1

NOTES:
A. MAX NC LEVEL OF DIFFUSERS TO BE 30.
B. ACCEPTABLE MANUFACTURERS ARE: PRICE, TITUS, NAILOR, GREENHECK
C. FRAME AND BORDER TYPES TO MATCH CEILING AND/OR WALL.
D. REFERENCE ARCHITECTURAL REFLECTIVE CEILING PLAN.

REMARKS:
1. MATCH BUILDING STANDARD MANUFACTURER AND MODEL

VARIABLE AIR VOLUME BOX SCHEDULE

GENERAL				MECHANICAL			
DESIG.	SERVES	MFR.	MODEL #	INLET SIZE (IN.)	DESIGN CFM	COOLING MIN. CFM	REMARKS
VAV-1	100 AND 106	V-1 REMARK 3	REMARK 3	6	400	100	1-6
VAV-2	118	V-5 REMARK 3	REMARK 3	8	800	200	1-6
VAV-3	133-136	V-8 REMARK 3	REMARK 3	8	650	165	1-6

NOTES:
A. EQUIPMENT TO BE CLEARLY LABELED.
B. ACCEPTABLE MANUFACTURERS ARE: ENVIRO-TEC, PRICE, TITUS, YORK/JCI, TRANE, KRUEGER.
C. REFER TO SCHEDULE FOR MINIMUM SETPOINTS.

REMARKS:
1. 7 DAY PROGRAMMABLE THERMOSTAT
2. SINGLE POINT CONNECTION AND FUSED DISCONNECT FOR EACH UNIT
3. MATCH BUILDING STANDARD BRAND AND MODEL FOR ALL NEW VAV'S
4. BOXES SHALL BE COMPLETE WITH BRAND NAME DDC/PNUEMATIC/ANALOG ELECTRONIC CONTROLS AND CONNECTED TO BUILDING AUTOMATION SYSTEM
5. PROVIDE 120V TO 24V CONTROL TRANSFORMER
6. INLET DUCT SIZE SHALL MATCH THE BOX SIZE AS SCHEDULED, INSTALLED MAXIMUM OF 5' OF FLEXIBLE DUCTWORK AT THE PRIMARY INLET OF THE BOX

DALLAS GREEN BUILDING NOTES:

A. DUCTS, TERMINAL BOXES AND ALL HVAC SYSTEM COMPONENTS SHALL BE LOCATED IN SUCH A WAY THAT ACCESS TO HVAC SYSTEM COMPONENTS IS PROVIDED FOR CLEANING AND REPAIRS. PIPING, CONDUITS AND OTHER BUILDING COMPONENTS SHALL NOT BLOCK ACCESS TO HVAC COMPONENTS.

B. DUCT AND OTHER AIR DISTRIBUTION COMPONENTS SHALL HAVE THEIR OPENINGS COVERED WITH BY AN APPROVED METHOD TO REDUCE DUST AND DEBRIS COLLECTION DURING CONSTRUCTION. OPENINGS SHALL BE COVERED FROM TIME OF ROUGH-IN INSTALLATION UNTIL STARTUP OF THE HEATING AND COOLING EQUIPMENT.

C. DUST AND DEBRIS SHALL BE CLEANED FROM ALL DUCT OPENINGS PRIOR TO INDOOR AIR QUALITY TESTING AND/OR SYSTEM FLUSH OUT AND BUILDING OCCUPANCY.

D. TEMPORARY VENTILATION DURING CONSTRUCTION SHALL BE PROVIDED BY ONE OF THE METHODS DESCRIBED IN SECTIONS 803.1.2.1 THROUGH 803.1.2.3 IN THE CHAPTER 61 DALLAS GREEN CONSTRUCTION CODE.

E. IF SPACES ARE CONDITIONED DURING CONSTRUCTION PHASE, SYSTEMS SHALL BE DUCTLESS OR HAVE A MINIMUM MERV 8 FILTER INSTALLED ON DUCTED SYSTEMS.

F. NEW RETURN AIR FILTERS SHALL BE INSTALLED AFTER CONSTRUCTION AND PRIOR TO INDOOR AIR QUALITY TESTING AND/OR SYSTEM FLUSH OUT AND BUILDING OCCUPANCY.

GENERAL NOTES:

A. FIELD VERIFY EXISTING CONDITIONS BEFORE BID AND CONSTRUCTION. NO ALLOWANCES WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS

B. REFER TO MEP SHEET FOR SPECIFICATIONS.

C. ALL CONTROLS FOR VAV AND FAN POWERED BOXES SHALL BE BY ALERTON.

D. PROVIDE REMOTE DAMPER CABLE FOR GRILLES IN GYP CEILING AND LOCATE ACCESS AT GRILLE FACE.

E. ANY T-STAT MOUNTED ON EXTERIOR WALLS MUST BE INSULATED BEHIND T-STAT TO PREVENT FALSE READINGS.

F. ALL CONTROLS WORK SHALL BE PERFORMED BY CLIMATEC. CONTROLS ARE BY ALERTON. CONFIRM FAN POWERED BOX AND VAV BOX TAGS ARE CORRECT WITH CONTROLS SYSTEM.

G. CONSTRUCTION FILTERS SHALL REMAIN OR BE PLACED ON ALL FAN POWERED BOXES DURING CONSTRUCTION. FILTERS SHALL BE REMOVED AFTER CONSTRUCTION AND VERIFIED BY BUILDING MANAGEMENT BEFORE CEILING IS CLOSED.

H. ALL MECHANICAL EQUIPMENT TO BE TIED INTO BUILDING EMS. COORDINATE EXACT REQUIREMENTS WITH BUILDING BEFORE CONSTRUCTION.

I. ALL FAN POWERED BOXES AND VAV BOXES SHALL BE INSTALLED SO THAT MANUFACTURER REQUIRED CLEARANCES ARE MAINTAINED FOR ACCESS AND MAINTENANCE.

J. REUSE AND RELOCATE ALL GRILLES WHERE APPLICABLE. CLEAN ALL EXISTING AND RELOCATED GRILLES TO "LIKE NEW" CONDITION.

K. MOUNT ALL NEW AND RELOCATED THERMOSTATS A MINIMUM OF 48" ABOVE FINISHED FLOOR. THERMOSTAT LOCATIONS ARE DIAGRAMMATIC. FIELD VERIFY EXACT PLACEMENT OF THERMOSTATS WITH TENANT AND ARCHITECT PRIOR TO CONSTRUCTION.

L. FOR ALL HVAC EQUIPMENT, MAINTAIN ALL MANUFACTURER REQUIRED CLEARANCES FOR ACCESS AND MAINTENANCE.

M. PROVIDE SMOKE/FIRE DAMPERS FOR ALL NEW PENETRATIONS IN FIRE RATED WALL. FIELD VERIFY THAT EXISTING PENETRATIONS HAVE APPROPRIATE FIRE/SMOKE DAMPERS.

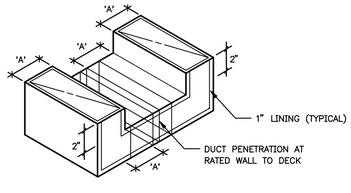
N. EXISTING THERMOSTATS SHALL BE COVERED AND SEALED DURING CONSTRUCTION. ALL EXISTING THERMOSTATS BEING REUSED SHALL BE SERVICED AND CALIBRATED.

O. ALL HVAC EQUIPMENT AND ASSOCIATED ELECTRICAL SHALL BE RELOCATED IF NECESSARY TO MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE FROM ALL DEMISING WALLS, WALLS TO DECK, GYPSUM CEILINGS, AND/OR ANY BUILD OUT MATERIALS THAT MAY OBSTRUCT THE SERVICING OF THE EQUIPMENT.

P. VERIFY ALL WALLS CONSTRUCTED TO DECK WITH ARCHITECTURAL DRAWINGS BEFORE BID AND CONSTRUCTION. VERIFY PROPER RETURN AIR PATH IS PROVIDED WITH OPENINGS AND RETURN AIR TRANSFER DUCTS IN WALL TO DECK. SIZE AS NECESSARY TO MAINTAIN MAXIMUM AIR VELOCITY OF 500 FPM. BUILD ALL WALLS AROUND EXISTING AND NEW DUCTWORK AS NECESSARY TO MAINTAIN WALL TO DECK AND AVOID INTERSECTION OF DUCTWORK.

KEY NOTES:

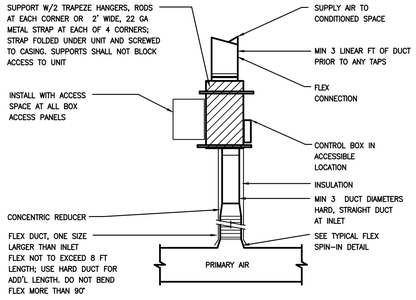
1. PROVIDE AND INSTALL A NEW VARIABLE AIR VOLUME BOX PER THE VARIABLE AIR VOLUME BOX SCHEDULE SHOWN ON SHEET M1.01. MAINTAIN ALL MANUFACTURER REQUIRED CLEARANCES FOR MAINTENANCE AND ACCESS.
2. RELOCATED VARIABLE AIR VOLUME BOX. CONTRACTOR TO RELOCATE ALL ASSOCIATED ELECTRICAL, CONTROLS, AND WIRING TO NEW LOCATION.
3. EXISTING VARIABLE AIR VOLUME BOX TO REMAIN AS IS. RELOCATE AS NECESSARY TO AVOID ANY NEW WALLS TO DECK. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
4. EXISTING FAN POWERED BOX TO REMAIN AS IS. RELOCATE AS NECESSARY TO AVOID ANY NEW WALLS TO DECK. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
5. EXISTING LIEBERT INDOOR UNIT TO REMAIN AS IS. CONTRACTOR TO VERIFY UNIT IS IN PROPER WORKING CONDITION. REPAIR AND REPLACE AS NECESSARY. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
6. EXISTING LIEBERT OUTDOOR CONDENSING UNIT TO REMAIN AS IS. CONTRACTOR TO VERIFY UNIT IS IN PROPER WORKING CONDITION. REPAIR AND REPLACE AS NECESSARY. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
7. EXISTING FPB/VAV AND ASSOCIATED DUCTWORK/GRILLES TO REMAIN. REPORT ANY DEFICIENCIES TO AOS ENGINEERING.
8. HVAC CONTINUATION OUT OF SCOPE OF WORK. EXISTING TO REMAIN.



PROVIDE FIRE/SMOKE DAMPER AS REQUIRED.

4 RETURN AIR TRANSFER

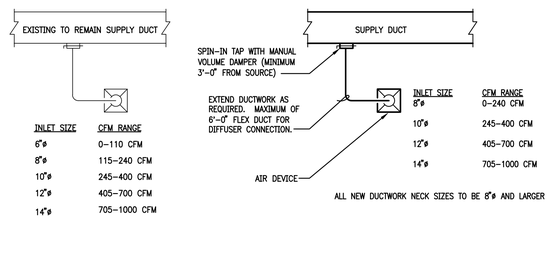
SCALE: NONE



3 VAV BOX DETAIL

SCALE: NOT TO SCALE

NOTE: CONTRACTOR TO VERIFY EXISTING TAP SIZES AND NOTIFY LANDLORD IF REPLACEMENT IS REQUIRED. REFER TO SCHEDULE BELOW. CAP ALL UNUSED TAPS FLUSH.



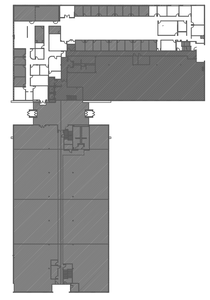
INLET SIZE	CFM RANGE
6"ø	0-110 CFM
8"ø	115-240 CFM
10"ø	245-400 CFM
12"ø	405-700 CFM
14"ø	705-1000 CFM

INLET SIZE	CFM RANGE
6"ø	0-240 CFM
10"ø	245-400 CFM
12"ø	405-700 CFM
14"ø	705-1000 CFM

ALL NEW DUCTWORK NECK SIZES TO BE 8"ø AND LARGER

2 SUPPLY DIFFUSER CONNECTION DETAIL

SCALE: NOT TO SCALE



FIRST FLOOR KEY PLAN

SCALE: N/A

CONTRACTOR SHALL COORDINATE MEP DRAWINGS WITH ALL OTHER DISCIPLINES

bha | studio
3141 HOOD STREET
SUITE 420
DALLAS, TEXAS 75219
214.521.8500
WWW.BHA.STUDIO

MERITAGE HOMES

8840 CYPRESS WATERS BLVD. SUITE 125 DALLAS, TEXAS 75019

ISSUE DATE	MAY 29, 2024
PROJECT NUMBER	23082
USABLE SQUARE FOOTAGE	+/- 15,999 SF
RENTABLE SQUARE FOOTAGE	
SHEET NUMBER	M1.01

GROUND LEVEL FLOOR PLAN - MECHANICAL

AOS ENGINEERING
Texas Registered Engineering Firm F-9218
5020 Tennyson Parkway - Plano, TX 75024
Dallas / Fort Worth 214.432.3030
Houston 832.532.2007

AOS JOB #: 1418-014-24