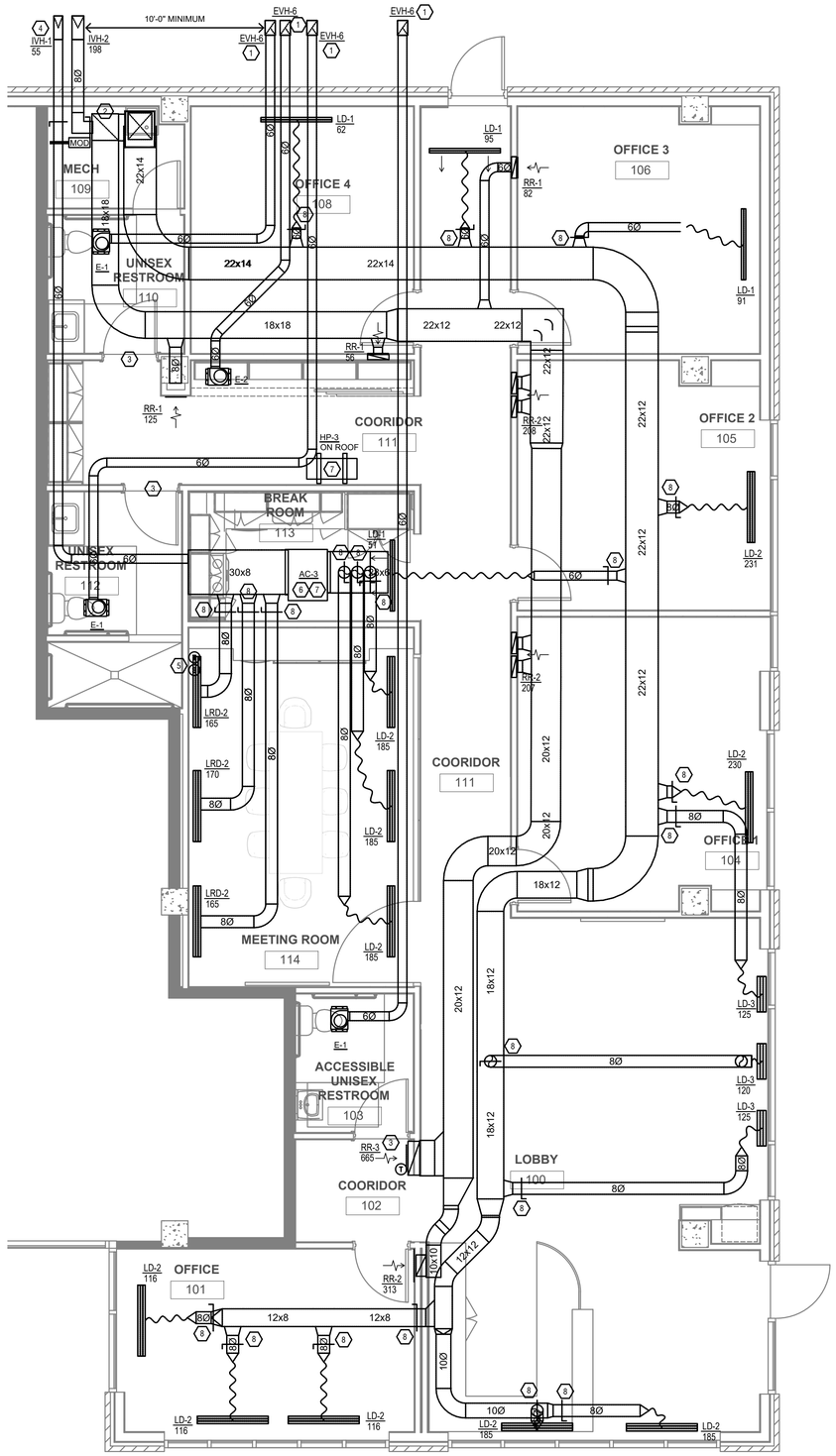

N

1 M100 MECHANICAL FLOOR PLAN

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

SYMBOLS LEGEND – HVAC	
T	THERMOSTAT
S	CO2 SENSOR
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
14x10	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT

MECHANICAL SCOPE OF WORK (PLAN REVIEW ONLY)

MECHANICAL SCOPE OF WORK IS TO PROVIDE DUCT WORK, AND EXHAUST FOR TO EXISTING HVAC IN COMMERCIAL SPACE FIT OUT. MECHANICAL CONTRACTOR SHALL REFERENCE ALL DISCIPLINE DRAWING, ETC. TO REVEAL FULL SCOPE OF WORK. REFER TO MECHANICAL SPECIFICATIONS FOR ADDITIONAL DETAILS.

CODES REFERENCED

- 2015 IMC
- 2018 KBC (2015 IBC)
- 2012 IECC

HVAC DESIGN CONDITIONS

COOLING	HEATING
OUTDOOR: 93 DB / 75 WB	OUTDOOR: 0 DB
INDOOR: 75	INDOOR: 70

GENERAL NOTES

A. FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.

B. COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.

C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.

D. INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.

E. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.

F. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.

H. PROVIDE AN APPROVED THROUGH PENETRATION FIRESTOP FOR ALL PIPING INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E814 OR UL 1479. FIRESTOP SHALL HAVE A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCHES OF WATER AND SHALL HAVE AN F RATING OF NOT LESS THAN THE REQUIRED FIRE-RESISTANCE RATING OF THE WALL OR FLOOR PENETRATED.

I. MAINTAIN CODE REQUIRED CLEARANCE TO COMBUSTIBLES FOR ALL GAS-FIRED EQUIPMENT.

(#) KEYED SHEET NOTES

1. ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A VENT IN THE SOFFIT. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
   1.1. 3' FROM PROPERTY LINE.
   1.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
   1.3. 10' FROM MECHANICAL AIR INTAKE
2. BALANCE EXISTING INDOOR UNIT TO AIRFLOW LISTED ON THE DRAWINGS. MAKE SURE AIR BALANCE IS PROVIDED ONCE A CLEAN FILTER HAS BEEN INSTALLED.
3. UNDERCUT DOOR 1" ABOVE FINISHED FLOOR FOR RETURN AIR.
4. ROUTE FRESH AIR INTAKE TO SOFFIT VENT. MAINTAIN 10' FROM ALL EXHAUST.
5. PROVIDE CO2 SENSOR IN SPACE THAT WILL MODULATE THE OUTSIDE AIR DAMPER TO MINIMUM POSITION (10% DESIGN AIRFLOW) WHEN CO2 SPACE CONCENTRATIONS ARE BELOW 1,000 PPM (ADJUSTABLE). WHEN LEVELS EXCEED THIS DAMPER SHALL OPEN TO POSITION ASSOCIATED WITH DESIGN OUTSIDE AIRFLOW. REFER TO VENTILATION SCHEDULE FOR DESIGN AIRFLOW.
6. ROUTE 3/4" CONDENSATE TO NEAREST FLOOR DRAIN. TERMINATE WITH INDIRECT CONNECTION. PROVIDE CONDENSATE PUMP IF REQUIRED. NEARBY DRAIN LOCATIONS ARE EITHER IN THE BREAK ROOM (MUST COORDINATE WITH PLUMBING CONTRACTOR) OR MOP SINK IN MECHANICAL ROOM. ALL CONDENSATE PIPING MUST BE SLOPED A MINIMUM OF 1/8" PER FOOT AWAY FROM THE APPLIANCE.
7. ROUTE LINESET FROM INDOOR UNIT TO HEAT PUMP ON ROOF. COORDINATE EXACT ROUTING OF LINESET IN THE FIELD. SIZE PER MANUFACTURER'S REQUIREMENTS.
8. WHERE DAMPER IN DUCTWORK IS NOT ACCESSIBLE, PROVIDE METROPOLITAN AIR TRANSFER (MAT) MODEL RT-250 SERIES CABLE ACTUATED DAMPER DRIVE SYSTEM, OR APPROVED EQUAL

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

CALLOUT	DESCRIPTION	FACE SIZE (IN)	INLET SIZE (IN)	MODEL	NOTES
EVH-6	UNDEREVE VENT	10x7	10x7	DEFLECT-O EVE/6	BACKDRAFT DAMPER/INCH INSECT SCREEN.
IVH-1	SOFFIT UNDER EAVE VENT	6x16	6x16	FAMCO VS616	
IVH-2	SOFFIT UNDER EAVE VENT	8x16	8x16	FAMCO VS816	
LD-1	LINEAR SLOT DIFFUSER, ONE SLOT, 3/4" SLOT WIDTH, STEEL DEFLECTORS	48x3	6Ø	TITUS ML38	BLACK PATTERN CONTROLLERS, INSULATED SUPPLY PLENUM.
LD-2	LINEAR SLOT DIFFUSER, TWO SLOTS, 3/4" SLOT WIDTH, STEEL DEFLECTORS	48x5	8Ø	TITUS ML38	BLACK PATTERN CONTROLLERS, INSULATED SUPPLY PLENUM.
LD-3	LINEAR SLOT DIFFUSER, TWO SLOTS, 1" SLOT WIDTH, STEEL DEFLECTORS	24x6	8Ø	TITUS ML39	BLACK PATTERN CONTROLLERS, INSULATED SUPPLY PLENUM.
LRD-2	LINEAR SLOT DIFFUSER, TWO SLOTS, 3/4" SLOT WIDTH, STEEL DEFLECTORS	48x5	8Ø	TITUS MLR38	BLACK PATTERN CONTROLLERS, INSULATED PLENUM.
RR-1	STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	14x8	12x6	TITUS 350RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
RR-2	STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	22x8	20x6	TITUS 350RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
RR-3	STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	18x18	16x16	TITUS 350RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.

NOTES FOR ALL AIR DEVICES:
1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR MOUNTING TYPE
2. DUCT RUN-OUT SAME SIZE AS NECK UNLESS NOTED OTHERWISE
3. PLASTER FRAME WHERE LOCATED IN GYPSUM CEILING
4. PAINT DUCTWORK THAT IS VISIBLE BEHIND AIR DEVICES MATTE BLACK
5. AIR DEVICES SHALL BE ALUMINUM IN HIGH MOISTURE AREAS. (BARRISTA, BOH, AND RESTRROOMS
6. DO NOT CONNECT AIR DEVICE DIRECTLY TO DUCT. PROVIDE FULL SIZE TAKE-OFF WITH BALANCING DAMPER AND 45 DEGREE FLARED OUT CONNECTION TO MAIN OR BRANCH DUCT.
7. WHERE AIR DEVICES ARE LOCATED IN A FIRE RATED ASSEMBLY, PROVIDE CEILING RADIATION DAMPERS, FIRE DAMPER, FIRE RATED INSULATION, AS REQUIRED PER CODE.
8. WHERE DAMPER IN DUCTWORK IS NOT ACCESSIBLE, PROVIDE METROPOLITAN AIR TRANSFER (MAT) MODEL RT-250 SERIES CABLE ACTUATED DAMPER DRIVE SYSTEM, OR APPROVED EQUAL.
9. PROVIDE SAMPLE AIR DEVICES STYLE AND COLOR, FOR OWNER'S REPRESENTATIVE APPROVAL, BEFORE ORDERING FINAL AIR DEVICES.
10. ADD INSULATION TO THE BACK OF ALL AIR DEVICES WHERE DUCTWORK ALSO REQUIRES INSULATION.

Bachman's HVAC SOLUTIONS
ROD BACHMAN
PRESIDENT
4058 CLOUGH WOODS DR.
BATAVIA, OH 45103
PHONE: (513) 943-5300
FAX: (513) 943-5310
OHIO LIC. #16857
KY LIC. #M02378
JOB #: 22-0693

ISSUANCES

NO	DESCRIPTION	DATE
1	PERMIT	2022-09-16

Bisbe Capital Office

1 HIGHLAND AVENUE
FORT THOMAS KY 41075 - SUITE F

SUITE F - INTERIOR BUILD OUT

STATE OF KENTUCKY
SCOTT SEVERT STILKEY
28710
LICENSED PROFESSIONAL ENGINEER

PR-9793

ENGINEERED BUILDING SYSTEMS INC.
Shared Success Through Collaboration and Efficiency
515 Monmouth Street, Suite 204
Newport, KY 41071 (859) 261-0585
MEP Consulting Services, Inc. in OH

DRAWN BY	CHECKED BY
KRM	SSS

SCALE:AS NOTED

JOB #: 09793

DRAWING TITLE
MECHANICAL FLOOR PLAN

SHEET NO.
M100

MECHANICAL SPECIFICATIONS

1. General
   a. Refer to architectural drawings, general notes, instructions to bidders, general conditions, supplementary general conditions, base building specifications and drawings, shop drawing manuals and as-built plans, except as noted herein, which apply in all respects to this section. The contractor shall visit the site and familiarize himself with all existing conditions prior to bidding the work
2. Use of Drawings And Specifications
   a. EBS drawings and specifications are intended to convey design intent only. All means and methods sequences, techniques, and procedures of construction as well as any associated safety precautions and programs, and all incidental and temporary devices required to construct the project, and to provide a complete and fully operational mechanical system are the responsibility of the mechanical contractor.
3. Standards
   a. Equipment and materials shall conform with appropriate provisions of AGA, ARI, ASME, ASTM, CISPI, UL, NEMA, ANSI, SMACNA, ASHRAE, NFPA, NEC, as applicable to each individual unit or assembly. All equipment must bear UL label.
4. License / Experience
   a. Contractor must be licensed by the state to install HVAC systems/equipment. Contractor must also have a minimum of 5 years of experience and have installed at least (5) successful project installations of similar size and scope. References must be provided upon request.
5. Codes
   a. All work shall be performed in strict accordance with all applicable state and local codes and ordinances. The mechanical contractor shall satisfy code requirements at a minimum without any extra cost to the owner. In case of conflict between the drawings/specifications and the codes and ordinances, the highest standard shall apply.
6. Permits and Fees
   a. The mechanical contractor shall procure and pay for all permits, fees, taxes, and inspections necessary to complete the mechanical work. Furnish certificate of approval for work from inspection authority to owner before final acceptance for work. Certificate of final inspection and approval shall be submitted with the contractor's request for payment. No final payment will be approved without this certificate.
7. Site Examination
   a. The mechanical contractor shall thoroughly examine all areas of work where equipment, ductwork, and piping will be installed and shall report any condition that, in his opinion, prevents the proper installation of the mechanical work prior to bid. Contractor shall also examine the drawings and specifications of other branches of work, making reference to them for details of new or existing building conditions. No extras will be allowed for failure to include all required work in bid.
   b. All work shall be done at times convenient to the owner and only during normal working hours, unless specified otherwise.
   c. Mechanical contractor shall take their own measurements and be responsible for them.
   d. Access panels are not shown on drawings. During site examination, contractor shall identify all areas where access panels are required, and report to general contractor. Designation of who furnishes and who installs access panels must be coordinated with general contractor prior to starting work.
8. Contractor Coordination
   a. Coordination drawings showing system and component installation layout, routing, details, etc. Shall be produced by the mechanical contractor and under the supervision of the general contractor/construction manager, or appropriate party as applicable.
   b. All systems installed by each sub-contractor shall be coordinated with one another and approved by general contractor/construction manager, etc. prior to installation and/or fabrication.
   c. If questions concerning design intent arise during coordination, EBS can assist where appropriate.
   d. The architectural drawings shall take precedence over all other drawings. Do not scale distances off the mechanical drawings; use actual building dimensions.
9. Testing
   a. All mechanical systems shall be tested for proper operation.
10. Fire Stopping
    a. Provide fire stopping at all penetrations through rated separations per local codes & regulations & per UL recommendations for assemblies encountered in project.
    b. The fire stopping material shall meet the integrity of the fire rated wall, floor, ceiling & roof being penetrated. Refer to architect's drawings for wall, floor, ceiling & roof fire ratings prior to bidding work.
    c. Refer to architect's drawings for wall, floor, ceiling, and roof fire ratings prior to bidding work.
11. Access Panels
    a. Provide ceiling and wall access panel quantities & locations to the general contractor prior to bidding. Access panels are required for all concealed appliances, controls devices, heat exchangers and HVAC system components that utilize energy. Where access panels are used, the access panel should be sized to allow accessibility for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances, venting systems or any other piping or ducts not connected to the appliance being inspected, serviced, repaired or replaced. There shall be no extras for having to add access panels after bids are awarded.
12. Cutting and Patching
    a. Neatly do all cutting as required and patch all cut surfaces to match building construction. The contractor shall employ and pay a trade trained and qualified to perform the required patching work. All surfaces disturbed shall be restored with like materials to the satisfaction of the owner. All penetrations through roof shall be made by bonded roofer. Mechanical contractor shall pay all fees required.
13. Flashing & Counterflashing
    a. Roof flashing shall be furnished and installed by the roofing contractor. Roof counterflashing shall be furnished and installed by the mechanical contractor. Coordinate work with roofing contractor and pay all fees.
    b. Obtain approval from general contractor, construction manager, owner and/or roofing contractor prior to making any penetrations so that warranties are not compromised or voided.
14. Warranty
    a. The mechanical contractor shall unconditionally warrant all work to be free of defects in equipment, material and workmanship for a period of one (1) year from the date of final acceptance by owner. The mechanical contractor will repair or replace any defective work promptly and without charge to the owner.
    b. Restore any other existing work damaged in the course of repairing defective equipment, materials and workmanship.
15. Mechanical Work
    a. The mechanical contractor shall provide new hvac equipment, fans, ductwork, piping, air devices, controls as indicated on drawings and as specified. Startup and 1st year parts and labor warranty shall be included and manufacturer's extended warranties. Equipment and appliances shall be installed as required by the terms of their approval, in accordance with the conditions of the listing, the manufacturer's installation instructions, and the applicable code.
16. Owner's Instructions
    a. Provide two sets of complete operating and maintenance instructions with drawings, typewritten instructions and operating sequences and descriptive data sheets. Assemble each set in a hard-bound cover. Provide pdf files of all documentation.
17. Finale
    a. Put all equipment in service and demonstrate that all conditions of the contract have been fulfilled. Remove all tools, debris, etc. occasioned by work under this contract. Submit all warranties, test reports, operating and maintenance manuals for HVAC systems, log sheets and charts, and guarantees as previously specified. Provide all reports, forms, etc. required by inspectors to the satisfaction of the owner. Provide as-built record drawings (in Autocad 2007 or later) showing an accurate account of the final installed systems. Systems including but not limited to all equipment and associated controls, ductwork/piping, air devices, etc.
18. Sheetmetal Ductwork
    a. All sizes of ducts shown on the drawings are interior duct dimensions. All ductwork shall be rigid sheetmetal constructed from galvanized sheet steel in accordance with SMACNA low velocity duct construction standards. All exposed ductwork shall be round, spiral, or rectangular lock-seam type, as shown on HVAC drawings. Assemble and install ductwork in accordance with recognized industry practice for achieving air tight (5% leakage) and noiseless (no objectionable noise) systems, capable of performing each indicated service. Furnish all required dampers, transitions, offsets, connections to air devices, and other accessories necessary for a complete operating system. Flexible ductwork shall not exceed 8'-0" long.
19. Adhesives and Sealants
    a. Seal all longitudinal and transverse duct joints with a UL 181A or 181B non-hardening, non-migrating mastic or liquid elastic sealant of a type recommended by the manufacturer for sealing joints and seams in sheet metal ductwork. Cover all field joints, joints around spin-in fittings and fastening screws with mastic. All sealants and gaskets shall have surface-burning characteristics with a maximum flame-spread index of 25 and a maximum smoke-developed index of 50 when tested according to UL 723.
    b. Exposed Ductwork: trim duct sealants flush with metal. Create a smooth and uniform exposed bead. Do not use two-part tape sealing system.
20. Duct Supports
    a. Furnish and install hot-dipped galvanized steel fasteners, hangers, anchors, rods, straps, trim, and angles for support of ductwork.
21. Flexible Connections
    a. Furnish and install neoprene flexible duct connections at the inlet and discharge of units and fans.
22. Duct Manual Volume Dampers
    a. Furnish and install opposed-blade, leak-proof volume control dampers where indicated on drawings and locations in supply, return and exhaust ducts where branches are taken from larger ducts or at each individual duct register in order to achieve system air balance quantities. Balancing devices must be provided in accordance with IMC 603.18. All manual volume dampers must be shown on coordination drawings when submitted for review.
23. Duct Access Doors
    A. Furnish and install conveniently located duct access doors of ample size and quantity for servicing the dampers.
24. Diffusers, Grilles and Registers
    A. Diffusers, grilles and registers shall be manufactured by titus, price, or engineered approved equal and shall be furnished and installed by the mechanical contractor. Diffusers shall be installed as indicated on the drawings and schedules. The mechanical contractor shall provide all miscellaneous items necessary for a complete and proper installation in the type of ceiling and walls used in this project.
25. Exhaust Fan
    A. Fan manufacturer shall be Broan, Cook, Greenheck, or engineered approved equal. Refer to drawings and schedules for unit location, technical data, and any applicable accessories.
26. Piping Supports (Metal Pipe)
    A. Furnish and install hot-dipped galvanized steel fasteners, hangers, anchors, rods, straps, trim and angles for support of piping.
27. Piping Supports (Plastic Pipe)
    A. Furnish and install hangers for plastic piping per manufacturer's requirements.
28. Temperature Controls and Control Wiring
    A. The mechanical contractor shall provide all control wiring necessary for the complete and proper operating temperature control system. Programmable thermostats shall be provided with equipment packages unless otherwise noted.
    B. Exposed wiring: All wiring exposed to the space shall be run in conduit. Coordinate requirements with architectural drawings.
29. Testing, Balancing, and Adjusting
    A. The air balance contractor shall accurately balance the systems to provide air quantities as indicated on the drawings and in the schedules/specifications, operate automatic control systems, and verify set points during balancing.

FAN SCHEDULE

TAG	TYPE	AREA SERVED	MANUFACTURER	MODEL	DRIVE	CFM	ESP	WATTS	RPM	VOLT/PHASE	MOUNTING	WEIGHT	NOTES
E-1	EXHAUST	REFER TO DRAWING	GREENHECK	SP-B80	DIRECT	70	0.15	54	900	115/60/1	CEILING	11	1,2
E-2	HEAT EXTRACTION	SERVER	PANASONIC	FV-11VQC5	DIRECT	110	0.15	24	950	115/1	CEILING	12	1,3

1. INTEGRAL BACKDRAFT DAMPER.
2. CONTROLLED FROM WALL SWITCH.
3. CONTROLLED FROM REVERSE ACTING THERMOSTAT IN SERVER CLOSET.

DUCT INSULATION SCHEDULE (R-VALUE REQUIRED)

EQUIPMENT TAG	AIR DISTRIBUTION TYPE: SA	SA (EXPOSED)	RA	OA	ADDITIONAL NOTES
	R6	N/A	-	R6	-

DUCT INSULATION REQUIREMENTS ARE BASED ON SECTION C403.2.7 OF THE 2012 INTERNATIONAL ENERGY CONSERVATION CODE (IECC). PER THIS SECTION, ALL SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND A MINIMUM OF R-8 INSULATION WHERE LOCATED OUTSIDE THE BUILDING.

MECHANICAL EXHAUST SCHEDULE - IMC 2015

Fort Thomas Multifamily Space F

UNIT NUMBER	ROOMNAME	OCCUPANCY CLASSIFICATION	AREA (ft2)	EXHAUST AIRFLOW RATE (CFM/ft2)	FIXTURES: EXHAUST RATE PER FIXTURE (CFM)	LOWER CONTINUOUS RATE?	HIGHER INTERMITTENT RATE?	QTY. OF FIXTURES	TOTAL EXHAUST AIRFLOW REQ. (CFM)	TOTAL EXHAUST AIRFLOW ACT. (CFM)
103	UNISEX RESTROOM	PUBLIC SPACES - TOILET ROOM	-	-	50/70	NO	YES	1	70	70
110	UNISEX RESTROOM	PUBLIC SPACES - TOILET ROOM	-	-	50/70	NO	YES	1	70	70
112	UNISEX RESTROOM	PUBLIC SPACES - TOILET ROOM	-	-	50/70	NO	YES	1	70	70

VENTILATION SCHEDULE - 2015 IMC

		ROOM NUMBER	ROOMNAME	OCCUPANCY CLASSIFICATION	OCCUPANCY DENSITY (PEOPLE/ft2)	RATE Rp (CFM/person)	PEOPLE Pz	TOTAL Rp*Pz (CFM)	RATE Ra (CFM/ft2)	AREA (ft2)	TOTAL Ra*Az (CFM)	BREATHING ZONE OUTDOOR AIRFLOW Vbz (CFM)	ZONE OUTDOOR AIRFLOW Voz (CFM)	TOTAL
EQUIPMENT	EXISTING FURNACE	100	LOBBY	MAIN ENTRY LOBBIES	10	5	7	35	0.06	605	36	71	71	194
		101	OFFICE	OFFICE	5	5	1	5	0.06	178	11	16	16	
		102	CORRIDOR	CORRIDORS	N/A	0	0	0	0.06	38	2	2	2	
		104	OFFICE	OFFICE	5	5	1	5	0.06	229	14	19	19	
		105	OFFICE	OFFICE	5	5	1	5	0.06	196	12	17	17	
		106	OFFICE	OFFICE	5	5	1	5	0.06	188	11	16	16	
		108	OFFICE	OFFICE	5	5	1	5	0.06	174	10	15	15	
		111	CORRIDOR	CORRIDORS	N/A	0	0	0	0.06	374	22	22	22	
		113	BREAK ROOM	OFFICE	5	5	2	10	0.06	92	6	16	16	
	AC-3	114	MEETING	CONFERENCE/MEETING	50	5	8	40	0.06	257	15	55	55	55

Split System Schedule

Unit Tag	Manufacturer	Outdoor Unit: Outdoor Tag	Model Number	Nominal SEER	HSPF	Nominal Tons mbh	Out DB °F	Stages	Volts	Phase	MCA Amps	MOCP Amps	Indoor Unit: Indoor Tag	Model Number	Type	CFM	ESP	Cooling Performance at Nominal AHRI Conditions: EAT DB/WB (°F)	LAT DB (°F)	Total Cooling Capacity (MBH)	Sensible Cooling Capacity (MBH)	Heating Performance @ 47°F OA Ambient: EAT DB (°F)	LAT DB (°F)	Total Capacity (MBH)	Refrigerant Pipe Dimensions (inch)	Maximum Refrigerant Line Length (ft)	Weight (lb)	Accessories
SYS-03	Carrier	HP-3	38MARBQ18AA5	19.6	11.0	1.5	95	Var.	208/230	1	16	25	AC-3	30MBDQ18---3	Ducted	557	0.4	80/67	55.9	18.9	13.7	70.0	99.0	16.8	1/2 / 1/4	98	54.0	

Notes &
Options:
1 Nominal cooling capacities are based on indoor air temperature of 80°F DB / 67°F WB, outdoor air temperature of 95°F (DB)
2 Nominal heating capacities are based on indoor air temperature of 70°F DB, outdoor air temperature of 47°F DB / 43°F WB
3 VRF Efficiency values for EER, IEER, and COP are for mixed ducted and non-ducted indoor units based on AHRI 1230 test method.
4 Ductless and Single-Phase VRF Heat Pump Efficiency values for EER, SEER, and HSPF are for mixed ducted and non-ducted indoor units based on AHRI 210/240 test method.
5 Preliminary Additional Field Charge is calculated based on software inputs; Final Additional Field Charge must be calculated based on final "as-built" piping dimensions.
6 Indoor Unit Powered by Outdoor Unit

Accessories:
1 Wired Remote Controller - 7 Day Programmable
2 Low Ambient Cooling

Bachman's HVAC SOLUTIONS
ROD BACHMAN
PRESIDENT
4058 CLOUGH WOODS DR.
BATAVIA, OH 45103
PHONE: (513) 943-5300
FAX: (513) 943-5310
OHIO LIC. #16857
KY LIC. #M02378
JOB #: 22-0693

ISSUANCES

NO	DESCRIPTION	DATE
1	PERMIT	2022-09-16

Bisbe Capital Office
1 HIGHLAND AVENUE
FORT THOMAS KY 41075 - SUITE F
SUITE F - INTERIOR BUILD OUT

STATE OF KENTUCKY
SCOTT SEVERT STILKEY
28710
LICENSED PROFESSIONAL ENGINEER

PR-9793

ENGINEERED BUILDING SYSTEMS INC.
Shared Success Through Collaboration and Efficiency
515 Monmouth Street, Suite 204
Newport, KY 41071 (859) 261-0585
MEP Consulting Services, Inc. in OH

DRAWN BY	CHECKED BY
KRM	SSS

SCALE:AS NOTED

JOB #: 09793

DRAWING TITLE
MECHANICAL SCHEDULES AND SPECIFICATONS

SHEET NO.
M200