

NOTES

- ECONOMIZERS/MOISTURE MIZER: GC TO SUBMIT ALTERNATE PRICE FOR ECONOMIZER AND MOISTURE MIZER TO BE ADDED AT OWNER'S OPTION
- THIS DESIGN DESCRIBES PLENUM RETURN WHERE PLENUM RETURN IS USED THEN MATERIALS EXPOSED WITHIN THE RETURN AIR PLENUM SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND SMOKE DEVELOP RATING OF NOT MORE THAN 50 PER UMC 601.3. THIS INCLUDES ALL WIRING, PIPING, INSULATION, ETC.
- FIBERBOARD DUCTS ARE NOT PERMITTED
- PROVIDE FOR MANUAL EMERGENCY SHUT DOWN OF HVAC UNITS
- PROVIDE DUCTS AS INDICATED OR EQUIVALENT ROUND OR RECTANGULAR DUCTS
- PROVIDE 120V 20A GFCI WEATHERPROOF OUTLET AT ROOF TOP HVAC UNIT
- PROVIDE 6X6X3/8" STEEL ANGLE SUPPORT ALL 4 SIDES OF HVAC UNIT VERIFY WITH TENANT - ADDITIONAL STRUCTURAL DESIGN TO BE PROVIDED BY LANDLORD'S STRUCTURAL ENGINEER
- HVAC UNITS TO HAVE NON-FUSED DISCONNECT AND BE INTERCONNECTED FOR SMOKE DETECTION AND SIMULTANEOUS SHUT-DOWN AS REQUIRED BY CODE. OUTSIDE AIR SHALL BE BROUGHT IN BY 25% FRESH AIR DAMPERS ON ROOF TOP HVAC UNITS
- NOTE: 2000CFM HVAC UNIT OR GREATER TO HAVE DUCT MOUNTED SMOKE DETECTOR IN RETURN AIR DUCT TO DE-ENERGIZE AND INDICATOR LIGHT AS REQUIRED BY CODE. OUTSIDE AIR SHALL BE BROUGHT IN BY 25% FRESH AIR DAMPERS ON ROOF TOP HVAC UNITS
- ALL ROOF PENETRATIONS: TENANT'S GC IS RESPONSIBLE FOR THE COORDINATION AND USE OF LL'S REQUIRED ROOFER. ALL PENETRATIONS ARE AT TENANT EXPENSE.
- NOTE: UNDERCUT TOILET ROOM DOORS 1"

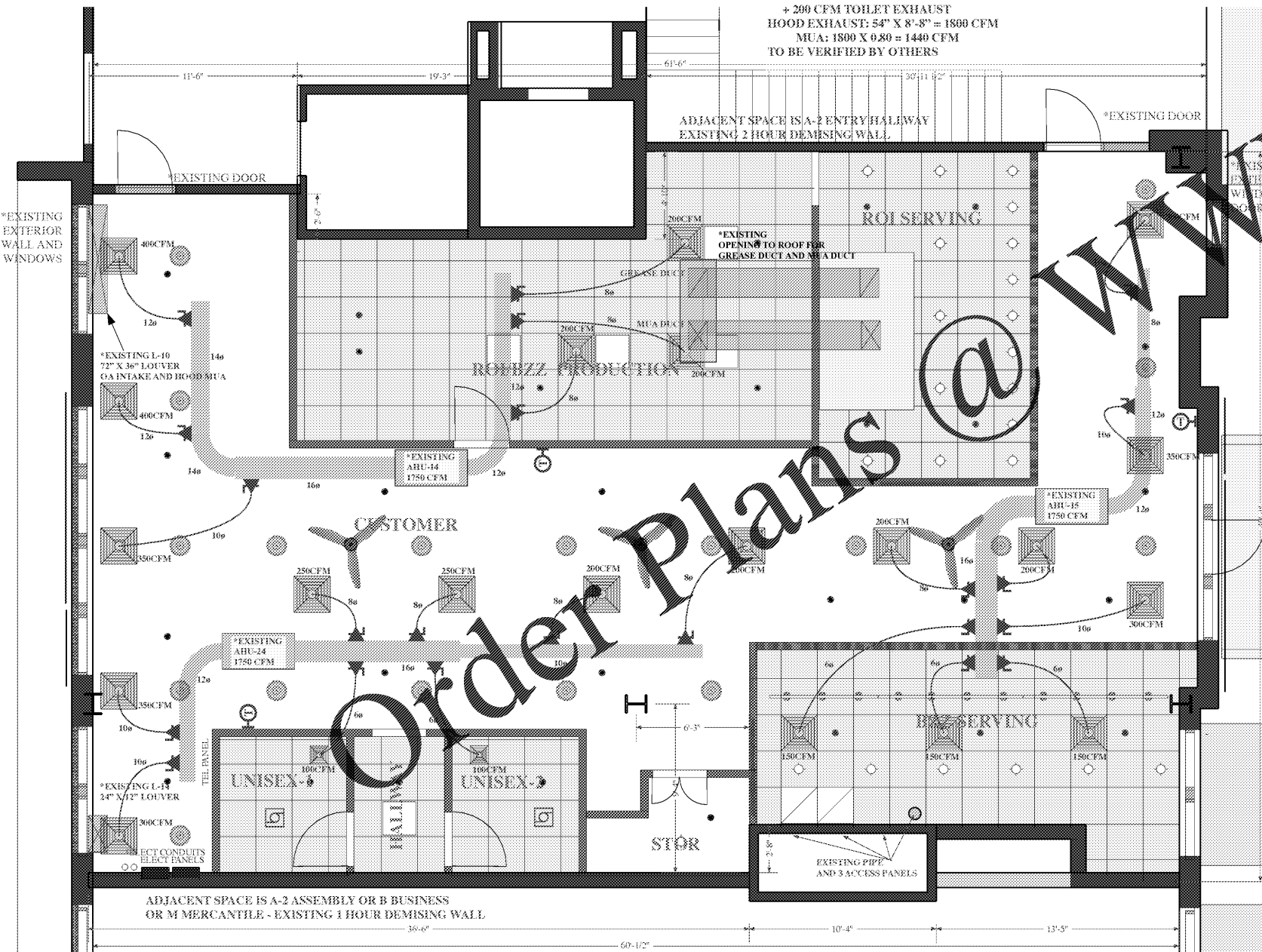
MECHANICAL GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CITY BUILDING CODE INCLUDING ALL SUB CODES IN EFFECT IN THE STATE AND ALL OTHER AUTHORITIES HAVING JURISDICTION
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AT THE JOB BEFORE STARTING THE WORK AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER IMMEDIATELY
- THE CONTRACTOR SHALL REMOVE CUT PATCH AND REFRAME WALLS, PARTITIONS, FLOORS, FRAMES, DOORS MOLDINGS, PIPES, FIXTURES AND CONDUIT AS REQUIRED FOR THIS WORK. REPAIRED FINISHES SHALL MATCH THOSE OF ADJACENT SURFACES
- THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS AND EQUIPMENT AS REQUIRED TO COMPLETE THE WORK
- THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO STARTING HIS WORK
- THE CONTRACTOR SHALL COMPLETE A PERFORMANCE TEST OF THE EXISTING EQUIPMENT AND SHALL REPLACE BELTS AND MISCELLANEOUS COMPONENTS REQUIRED TO RETURN THE EQUIPMENT TO GOOD WORKING ORDER. THE PACKAGED ROOFTOP UNITS SHALL BE RECHARGED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS
- THE SUPPLY RETURN AND EXHAUST AIR DUCTWORK SHALL BE MODIFIED TO ACCOMMODATE THE NEW REFLECTED CEILING PLAN. UPON COMPLETION OF THE DUCTWORK AND APPUR TENANCES THE CONTRACTOR SHALL BALANCE THE SYSTEM IN ACCORDANCE WITH THE NOTES ON THESE DRAWINGS
- THE CONTRACTOR SHALL REMOVE ALL EXISTING INSULATION FORM DUCTWORK AND RE-INSULATE THE ENTIRE AIR DISTRIBUTION SYSTEM IN ACCORDANCE WITH THE NOTES ON THESE DRAWINGS
- THE CONTRACTOR SHALL FURNISH AND INSTALL A DUCT MOUNTED SMOKE DETECTOR AS SHOWN ON THE PLAN. WHEN THE DUCT MOUNTED DETECTOR IS ACTIVATED, AC SHALL BE AUTOMATICALLY SHUT DOWN AND AN AUDIBLE ALARM SHALL BE SOUNDED. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONTROL DEVICES, CONDUIT AND WIRING REQUIRED TO ACCOMPLISH THE FUNCTIONS DESCRIBED ABOVE.

LL STRUCTURAL ENGINEER SHALL PROVIDE ADDITIONAL STRUCTURAL DESIGN AT TENANT'S COST.

ALL ROOFING PENETRATIONS ARE BY LL ROOFING CONTRACTOR, COORDINATED BY TENANT'S GC AND PAID FOR BY THE TENANT
 DUCT SMOKE DETECTORS ARE REQUIRED WHEN CFM EXCEEDS 2000 CFM
 HVAC SYSTEM SHOWN USES EXISTING HVAC UNITS AND NEW MAIN TRUNKS
 BRANCHES SHOWN ARE MODIFIED TO CONFORM WITH NEW DIFFUSERS AND RETURN LOCATIONS

HVAC 5250 CFM (1150 CFM OA)
 +MUA = 1440 CFM
 HVAC RETURN = 5250 CFM
 + 200 CFM TOILET EXHAUST
 HOOD EXHAUST: 54" X 8"-8" = 1800 CFM
 MUA: 1800 X 0.80 = 1440 CFM
 TO BE VERIFIED BY OTHERS



FLOOR PLAN

OUTSIDE AIR REQUIREMENTS

ROOM	AREA F12 AZ	AREA OUTDOOR AIR RATE PER IMC TABLE 403.3 RA	AREA OUTDOOR RaAz	LOAD RATE PER IMC TABLE 403.3 (PEOPLE/1000 FT2)	OCCUPANCY C/F/1000 FZ	OCCUPANT OUTDOOR AIR RATE PER TABLE 403.3 Rp	OCCUPANT OUTDOOR AIR RpPz	BREATHING ZONE OUTDOOR AIR Vbz-RpPz + RaAz	ZONE AIR DISTRIBUTION EFFECTIVENESS Ez	ZONE OUTDOOR AIR Voz+Vbz/Ez	SUPPLY AIR DESIGN Vpz	OUTDOOR AIR FRACTION ZP+Voz/Vpz	
CUSTOMER PRODUCTION*	1198/864	0.18/0.18	215/156	70/5	84/4	7.50/10.00	627/43	842/199	0.80/0.80	1053/248	4212/994	0.80/0.19	
CFM IN HVAC SYSTEM								3286		1301	5206	0.88	
TOTAL REQUIRED OUTSIDE PERCENTAGE OF OUTSIDE								1313					

TOTAL CFM	OA CFM	COOLING CAPACITY EAT	COOLING CAPACITY LAT	COOLING CAPACITY TSH MBH	COOLING CAPACITY GTH MBH	HEATING MBH	I D FAN HP	O D FAN HP	COMPRESSOR HP
5250	1313	81.5/88.5	64/60	98	154	196.875	2	0.82	13

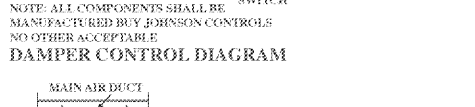
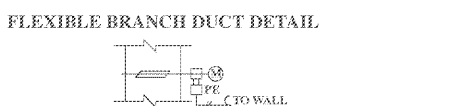
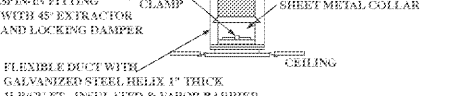
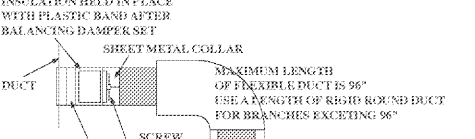
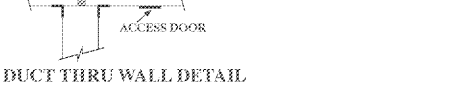
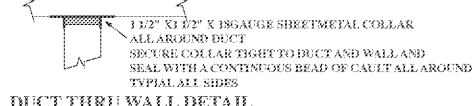
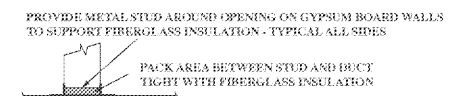
LOAD FACTORS

- ASSEMBLY STANDING* 55SF/OCCUPANT - 113SF/5-23*
- ASSEMBLY SEATING* 155SF/OCCUPANT - 450/15-30*
- PRODUCTION / SERVING* 200SF/OCCUPANT - 864/200-5*
- UNOCCUPIED SPACE 996 SF

TOTAL OCCUPANCY 58 BY USE * EACH SPACE ADDED

MARK	AREA SERVED	AIR UNIT			COOLING CYCLE						REMARKS	
		CFM	ESP (R/WC)	OA CFM	HEAT CAPACITY (KW)	TOTAL CAPACITY (BTU/HR)	SENSIBLE CAPACITY (BTU/HR)	DB (°F)	WB (°F)	AMBIENT AIR TEMP (°F)		MR SEER
AHL-14HP-14	SUITE 210	1750	0.8	525	15	60,500	45,375	80	87	85	13	1, 2, 3, 4, 5, 6
AHL-15HP-15	SUITE 210	1750	0.8	525	15	60,500	45,375	80	85	85	13	1, 2, 3, 4, 5, 6
AHL-24HP-24	SUITE 210	1750	0.8	525	15	60,500	45,375	80	87	85	13	1, 2, 3, 4, 5, 6

LENNOX AHO - CBX-32-MV-60-230
 2.0 VOLT/1PH/4W/60HZ - 20A BREAKER



MECHANICAL LEGEND

- R166CFM AIR QUANTITY CFM NEW RETURN/EXHAUST GRILLE
- DUCT MOUNTED DIFFUSER
- 166CFM AIR QUANTITY CFM TITUS FIXED BLADE NEW OR RELOCATED CEILING DIFFUSER
- THERMOSTAT - VERIFY EXACT LOCATION
- SMOKE DETECTOR WITH REMOVE INDICATOR & CEILING GRID MARKING IF DUCT SMOKE ABOVE
- SMOKE DETECTOR - ONLY IF CFM>2000 CFM/UNIT
- RETURN EXHAUST DUCT EXISTING
- RETURN/EXHAUST DUCT NEW
- HVAC DUCT EXISTING
- HVAC DUCT NEW
- SPRINKLER HEAD - NEW OR RELOCATED EXISTING - SEE AE-430 FINAL LAYOUT TO BE PROVIDED BY LANDLORD'S SPRINKLER CONTRACTOR IF REQUIRED

VENTILATION FAN/LIGHT: PANASONIC #FV-11VQL3 OR EQUAL

STATIC PRESSURE (inches w.g): 0.1" / 0.25
 AIR VOLUME (CFM): 100 / 92
 NOISE (sones): 1.2 / NA
 POWER CONSUMPTION (Watts): 25.5 / 25.2
 ENERGY EFFICIENCY CFM/WATTS: 4.3 / 3.7
 SPEED (RPM): 1141 / 1300
 ENERGY STAR RATED: YES
 WASHINGTON STATE VIAQ CODE: YES

ANY NEW RETURN ON THE ROOF SHALL BE SCREENED

HVAC CONTRACTOR TO PROVIDE SHOP DRAWINGS INCLUDING CALCULATIONS SHOWING ANY VARIATIONS IN THE DESIGN SHOWN HERE

EXHAUST HOOD AND MUA TO BE PROVIDED BY OTHERS CLEARANCE FROM HVAC INTAKE ON ROOF TO ALL EXHAUSTS TO BE MINIMUM 10" HORIZONTALLY - GC TO VERIFY SEE NOTE ON EXHAUST SYSTEM DRAWINGS RE: MUA UNIT ALL TO BE IN CONFORMANCE WITH LOCAL MECHANICAL CODE AND IMC

NOTE: 5 SHUNT TRIP REQUIRED FOR EXHAUST HOOD, ANSUL PANEL AND CONVECTION OVEN

KITCHEN EXHAUST HOOD EXTINGUISHING SYSTEM SHALL BE INTERCONNECTED WITH THE FIRE ALARM SYSTEM AS A SEPARATE SYSTEM ADDRESS

*UNISEX - 4" EXHAUST AND AIR INTAKE BY PLUMBING CONTRACTOR. TERMINATE FLUE AND VENT THRU ROOF WITH 45° FITTINGS AND BUG SCREENS

MECHANICAL PLAN / DETAILS - M-1 AE-0700
 SCALE 1/4" = 1'-0"
 243 SF
 *INDICATES EXISTING