



- ### MECHANICAL NOTES
- FURNISH ALL LABOR, MATERIALS, TOOLS EQUIPMENT, FEES, PERMITS, CERTIFICATE OF INSPECTION, ETC., NECESSARY OR REASONABLE, REQUIRED FOR THE COMPLETE INSTALLATION OF ALL AIR CONDITIONING WORK. THE WORK SHALL BE IN STRICT ACCORDANCE WITH ASHRAE GUIDE, AND ALL LOCAL AND STATE CODES, ORDINANCES AND REGULATIONS.
 - DUCTS SHALL BE FABRICATED OF PRIME GALVANIZED LOCK FORMING QUALITY STEEL SHEETS, OR A GAUGE IN ACCORDANCE WITH THE FOLLOWING TABLE:
 - DUCTS WITH LONGEST SIDE NOT MORE THAN 12" IN WIDTH.....26 GA
 - DUCTS WITH LONGEST SIDE 13" TO 30" IN WIDTH.....24 GA
 - DUCTS WITH LONGEST SIDE 31" TO 40" IN WIDTH.....22 GA
 - DUCTS WITH LONGEST SIDE OVER 40".....20 GA
 - PROVIDE RADIUS ELBOWS, TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES AND EXTRACTORS WHERE APPLICABLE.
 - DUCT SIZES SHOWN ARE "CLEAR INSIDE" DIMENSIONS.
 - PERFORM A TOTAL TEST AND BALANCE OF SYSTEM. TESTING COMPANY MUST BE CERTIFIED BY AABC OR NEBB. SUBMIT A CERTIFIED REPORT TO ARCH. 10 DAYS PRIOR TO C OF O WITH A COPY TO CITY INSPECTOR.
 - ALL DUCTWORK TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "ASHRAE GUIDE AND SMACNA OR IMC (2012) STANDARDS". SEAL ALL DUCTWORK, LONGITUDINAL AND LATITUDINAL JOINTS WITH DP-1010 SEALANT (PER 2012 IECC).
 - EXACT PLACEMENT OF DIFFUSERS AND REGISTERS TO BE COORDINATED WITH ARCHITECTURAL - REFLECTED CEILING PLAN.
 - CONTRACTOR TO VERIFY LOCATION OF ALL AIR EQUIPMENT SO THAT NO INTERFERENCE ARE ENCOUNTERED WITH OTHER EQUIPMENT OR WITH STRUCTURAL ELEMENTS.
 - MECHANICAL CONTRACTOR TO VERIFY THAT ALL DUCTWORK WILL FIT WHERE INDICATED WITHOUT INTERFERENCE.
 - CONTRACTOR AND ARCHITECT TO VERIFY T-STAT LOCATIONS.
 - THERMOSTATS MUST BE LOCATED 48" ABOVE FINISHED FLOOR. (TO CENTERLINE OF THERMOSTAT) T-STATS SHALL BE 7 DAY PROGRAMMABLE WITH SET-BACK CAPABILITIES (PER 2012 IECC).
 - MECHANICAL CONTRACTOR SHALL INSULATE ALL NEW SUPPLY AND RETURN AIR DUCTWORK LOCATED WITHIN AN ATTIC SPACE WITH MIN. R-6 INSULATION. ALL NEW SUPPLY AIR DUCTWORK LOCATED WITHIN A PLENUM SPACE WITH MIN. R-6 INSULATION AND/OR ANY DUCTWORK EXPOSED TO THE EXTERIOR WITH MIN. R-8 INSULATION (PER 2012 IECC). INSULATION NOT REQUIRED FOR SUPPLY/RETURN AIR DUCTWORK LOCATED WITHIN A PLENUM SPACE WHERE THE ENVELOPE INSULATION IS MIN. R-6 OR ANY EXHAUST DUCT.
 - HVAC CONTRACTOR SHALL REPLACE ALL FILTERS UPON COMPLETION OF CONSTRUCTION. THIS INCLUDES FILTERS AT ALL NEW UNITS AND FILTERS AT ALL EXISTING UNITS AFFECTED BY CONSTRUCTION.

MECHANICAL LEGEND

SINGLE	DOUBLE	ABBR.	DESCRIPTION
		o	RECTANGULAR DUCT (NEW)
		o	TRANSITION
		o	ROUND DUCT (NEW) (OR OVAL) RD OVAL
		o	RECTANGULAR DUCT (EXISTING)
		o	ROUND DUCT (EXISTING)
		o	45 DEG. TAP: USE AT BRANCH DUCTS ONLY
		o	DUCT SPLIT W/DAMPER: USE AT ELBOWS AND TEES: PROPORTION DUCT AREAS BY CFMS
		o	CURVED ELBOW-MIN. RADIUS R: 1.5 WIDTH
		o	90 DEG. ELBOW WITH SINGLE RADIUS TURNING VANES
		o	FLEXIBLE DUCT CONNECTION
		VD	VOLUME DAMPER W/LOCKING QUADRANT
		o	SPIN-IN FLEX DUCT TAKE-OFF W/DAMPER
		SA&Q	SPLITTER DAMPER WITH LOCKING QUADRANT
		SA	SUPPLY AIR
		EXH	EXHAUST AIR
		RA	RETURN AIR
		REL	RELIEF AIR
		OSA	OUTSIDE AIR
		o	NEW CONNECTION TO EXISTING
		TA	TRANSFER AIR
		ER	EXHAUST REGISTER
		ED	EXHAUST DUCT
		AFF	ABOVE FINISHED FLOOR
		BFF	BELOW FINISHED FLOOR
		NTS	NOT TO SCALE
		EH	EXHAUST HOOD
		T	THERMOSTAT
		F/S	COMBINATION FIRE/SMOKE DAMPER
		SD	SMOKE DUCT DETECTOR
		o	FIRE STAT SET AT 165°
		o	OUTSIDE AIR STAT
		o	SENSOR

FIELD VERIFICATION NOTES:

- THE HVAC CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO FIELD VERIFY ALL EXISTING CONDITIONS WHICH MAY AFFECT HIS BID. THE FOLLOWING ITEMS SHALL BE VERIFIED:
 - EXACT PLACEMENT, SIZE, CAPACITY, MANUFACTURER AND CONDITION OF ALL EXISTING HVAC EQUIPMENT WITHIN SCOPE OF WORK, WHETHER SPECIFICALLY SHOWN OR NOT.
 - SIZE AND LOCATION OF ALL EXISTING DUCTWORK.
 - SIZE AND LOCATION OF ALL EXISTING GRILLES REGISTERS AND DIFFUSERS.
 - SIZE AND LOCATION OF ALL EXISTING THERMOSTATIC CONTROL DEVICES.
 - SIZE AND LOCATION OF ALL EXISTING HYDRONIC PIPING.
- ALL REFERENCES ON THESE DRAWINGS TO EXISTING EQUIPMENT, DUCTWORK, DIFFUSERS, THERMOSTATS AND PIPING ARE FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL THESE ITEMS PRIOR TO BID AND INCLUDE IN HIS BID ANY AND ALL AMOUNTS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
- NO ALLOWANCES WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING CONDITIONS.
- ANY DISCREPANCIES WHICH MAY AFFECT THE CONTRACTORS BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT FOR DIRECTION.

GENERAL NOTES:

- ALL EXISTING EQUIPMENT, CONDENSATE AND CONTROLS TO REMAIN UNLESS OTHERWISE NOTED.
- RELOCATE EXISTING THERMOSTAT TO LOCATION SHOWN. EXTEND CONTROL WIRE AS REQUIRED. FIELD VERIFY EXTENT OF WORK PRIOR TO BID.
- CONTRACTOR TO INSPECT ALL DUCTWORK WITHIN SCOPE OF WORK AND REPAIR ANY/ALL DUCTWORK DAMAGE AND/OR LOOSE CONNECTIONS.
- CONTRACTOR TO ENSURE ALL FAN COILS HAVE FILTER RACKS INSTALLED. PROVIDE FILTER RACK AS REQUIRED.

DEMO KEY NOTES:

- REMOVE EXISTING EXHAUST FANS INCLUDING ASSOCIATED DUCT WORK. CAP AND SEAL DUCTWORK TO EXTERIOR, FOR FUTURE USE AS REQUIRED.
 - REMOVE EXISTING DRYER VENT DUCT WORK. CAP AND SEAL DUCTWORK TO EXTERIOR, FOR FUTURE USE AS REQUIRED.
- ### KEY NOTES:
- RELOCATE THERMOSTAT TO LOCATION SHOWN. EXTEND CONTROL WIRE AS REQUIRED. FIELD VERIFY EXISTING LOCATION.
 - EXISTING UNIT AND DUCT WORK TO REMAIN AS IS.
 - EXISTING UNIT TO REMAIN AS IS. CONTRACTOR TO FIELD VERIFY MAKE AND MODEL NUMBER OF UNIT AND NOTIFY ENGINEER OF FINDINGS.
 - RELOCATE DIFFUSER TO LOCATION SHOWN. EXTEND BRANCH DUCT AS REQUIRED. PROVIDE NEW SUPPLY DIFFUSER AND BRANCH DUCT TAKE-OFF AS REQUIRED.

OSA CALCULATION

NO CHANGE IN OCCUPANCY.
O.S.A. TO REMAIN BALANCED AS-IS

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CORNERSTONE
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SPEC SUITE 106

REVISIONS	DATE	BY	DESCRIPTION
11-7-19	FIELD COORD.		

MJW	DRAWN
MRH	CHECKED
6.15.19	DATE
	SCALE
1351.04	JOB NO.

MECHANICAL FLOOR PLAN