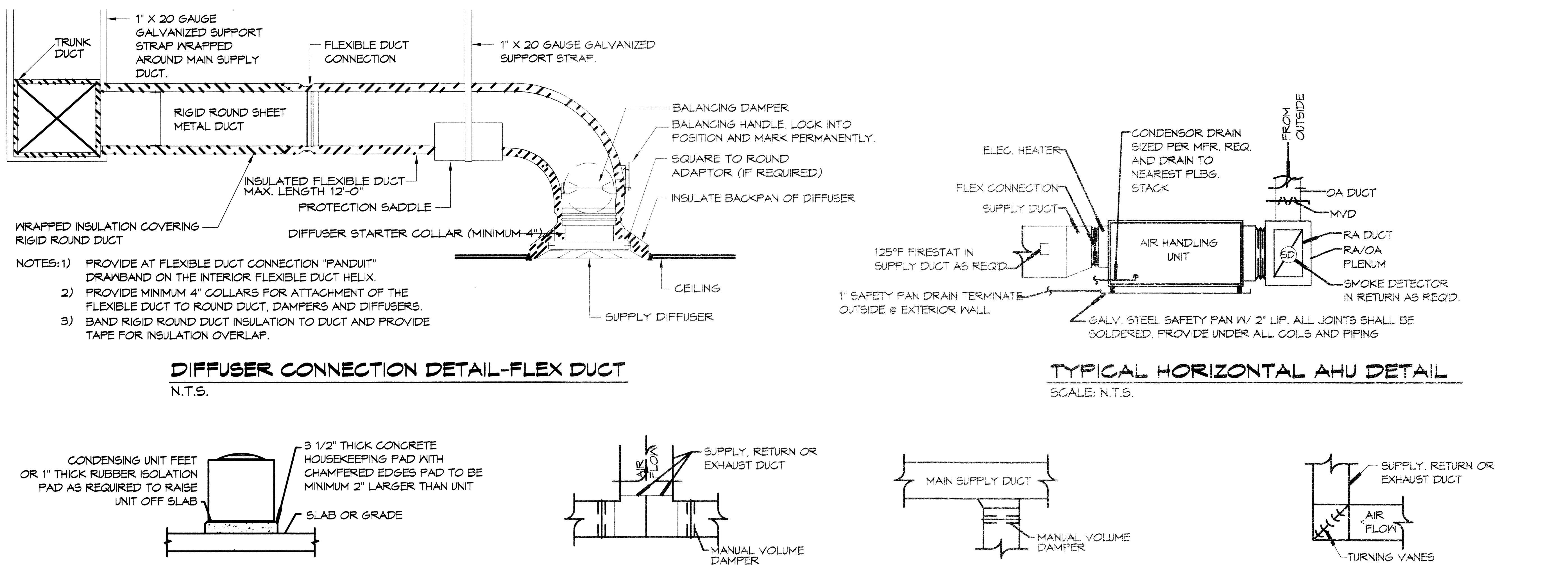


DIFFUSER CONNECTION DETAIL-FLEX DUCT
N.T.S.

TYPICAL HORIZONTAL AHU DETAIL
SCALE: N.T.S.

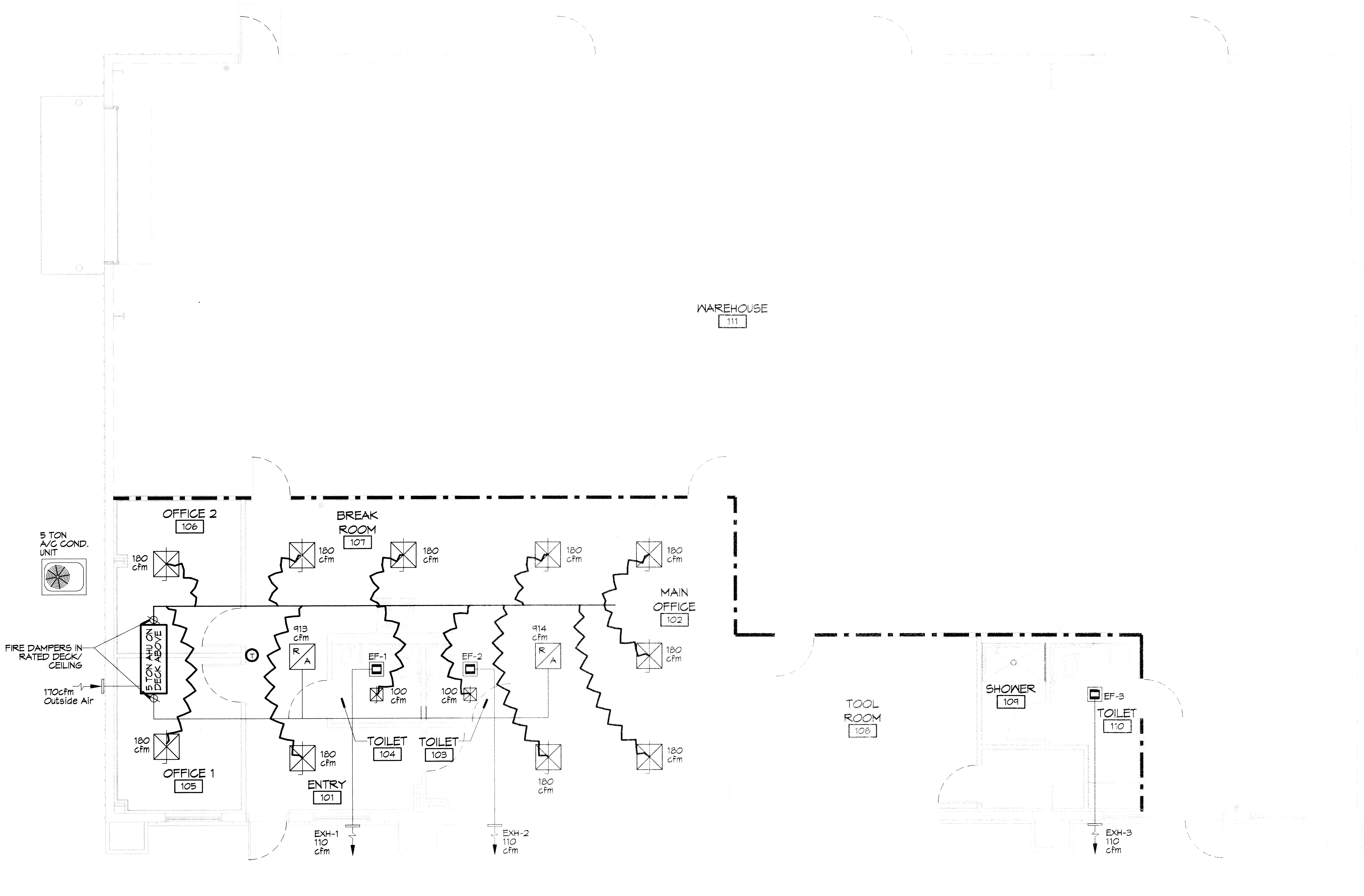
CONDENSING MOUNTING DETAIL
N.T.S.

DUCT SPLITTER DETAIL
N.T.S.

SUPPLY DUCT TAKE-OFF DETAIL
N.T.S.

SQUARE ELBOW DETAIL
N.T.S.

2 TYPICAL HVAC DETAILS
SCALE: NTS



LEGEND
- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
EF-? - EXHAUST FAN W/LIGHT
- THERMOSTAT
- SUPPLY AIR DUCT
- RETURN AIR DUCT
- FIRE DAMPER
- SUPPLY DAMPER CONTROL
- ROUND FLEX DUCT, MAX. LENGTH 14'-0", MIN. R-6. PROVIDE MAN. DAMPER AT TRUNK LINE. DUCT SIZES AS SHOWN

1 MECHANICAL PLAN
SCALE: 3/16"=1'-0

A/C UNIT SCHEDULE				
TOTAL BTU	ELECTRICAL			COMMENTS
	VOLTAGE	MCA	CKT BRKRS	NOTE: ALL A/C TO BE SPLIT-SYSTEM HVAC (TRANE OR EQUAL)
60,000 BTU (5 TON)	240V,1Φ	34.5	HP-1,3	

AHU UNIT SCHEDULE							
TOTAL BTU	CFM	O.A.	HEAT (KW)	ELECTRICAL			COMMENTS
				VOLTAGE	MCA	CKT BRKRS	NOTE: ALL A/C TO BE SPLIT-SYSTEM HVAC WITH SERVICE DISCONNECT FACTORY INSTALLED. TRANE OR EQUAL
60,000 BTU (5 TON)	2,000	150	9.6	240V,1Φ	56.0	HP-2,4	

EXHAUST FAN SCHEDULE

EXHAUST	LOCATION	CFM	VOLTAGE	TYPE	MANUFACTURER
EF-1,2,3	TOILETS	110	120	VENT	BROAN OR EQUAL

GENERAL NOTES

1. CONCEALED DUCTWORK TO BE UL-181, CLASS 1, FIBERGLASS DUCTBOARD. DUCTS SHALL BE SIZED TO LIMIT MAIN DUCTS TO 1000 CFM & SECONDARY DUCTS TO 800 CFM. TO BE INSTALLED PER SMACNA STANDARDS.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACA STANDARDS. LINE WITH NEOPRENE COATED 1.0," 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
4. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. 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.
6. PROVIDE U.L. LISTED 125 'F' FIRESTAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
7. PROVIDE U.L. RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES.
8. CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
9. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
10. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
11. EXHAUST FAN EQUAL TO BROAN MODEL NO. 100 CF. OR EQUAL. FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
12. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
13. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS.
14. LOCATE OUTDOOR UNITS AS SHOWN ON ARCH DWGS.
15. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
16. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
17. INSTALL FIRE DAMPER WHERE S.A. & R.A. DUCTS PENETRATE 1 HOUR RATED CEILINGS.
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 DIAGRAMATICALLY, CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
20. REFER TO STRUCTURAL DRAWINGS TO COORDINATE LOCATION(S) & MOUNTING OF MECHANICAL EQUIPMENT.
21. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 10'-0".
22. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
23. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
24. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHJ'S. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
25. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING. ALL THERMOSTATS MUST BE PROGRAMABLE. SEE SECTIONS 502.4.4 OR 503.2.4.3 OF THE 2006 INTERNATIONAL ENERGY CODE.

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#	DESCRIPTION	REVISIONS	DATE

SEAL:

1/15/15

OFFICE BUILDOUT FOR
KBR ENTERPRISES
176 STRAWBERRY STREET
SLIDELL, LOUISIANA 70460

JOB No:	2221	DATE:	01-07-15
DRAWN BY:	CAD	CHECKED BY:	KJK

462699
REVIEWED FOR
STATE FIRE MARSHAL
AS PER REVIEW LETTER
BY: WILLIAM D. JONES, ARCHITECT, CBO

SHEET TITLE:
MECHANICAL PLAN

DRAWING NUMBER:
M101