

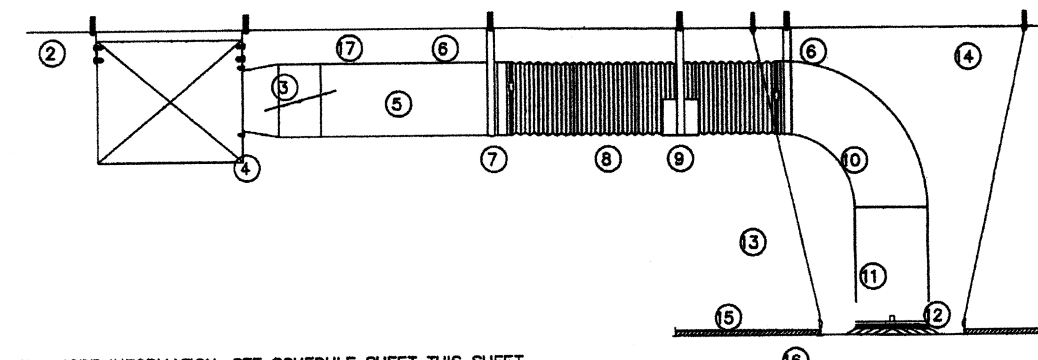
REVISIONS	BY

**ADDITION TO ZULU SOCIAL AID  
AND PLEASURE CLUB  
732 NORTH BOARD STREET  
NEW ORLEANS, LA 70119**

**JOSEPH F. SCHNEIDER JR., AIA  
ARCHITECT**

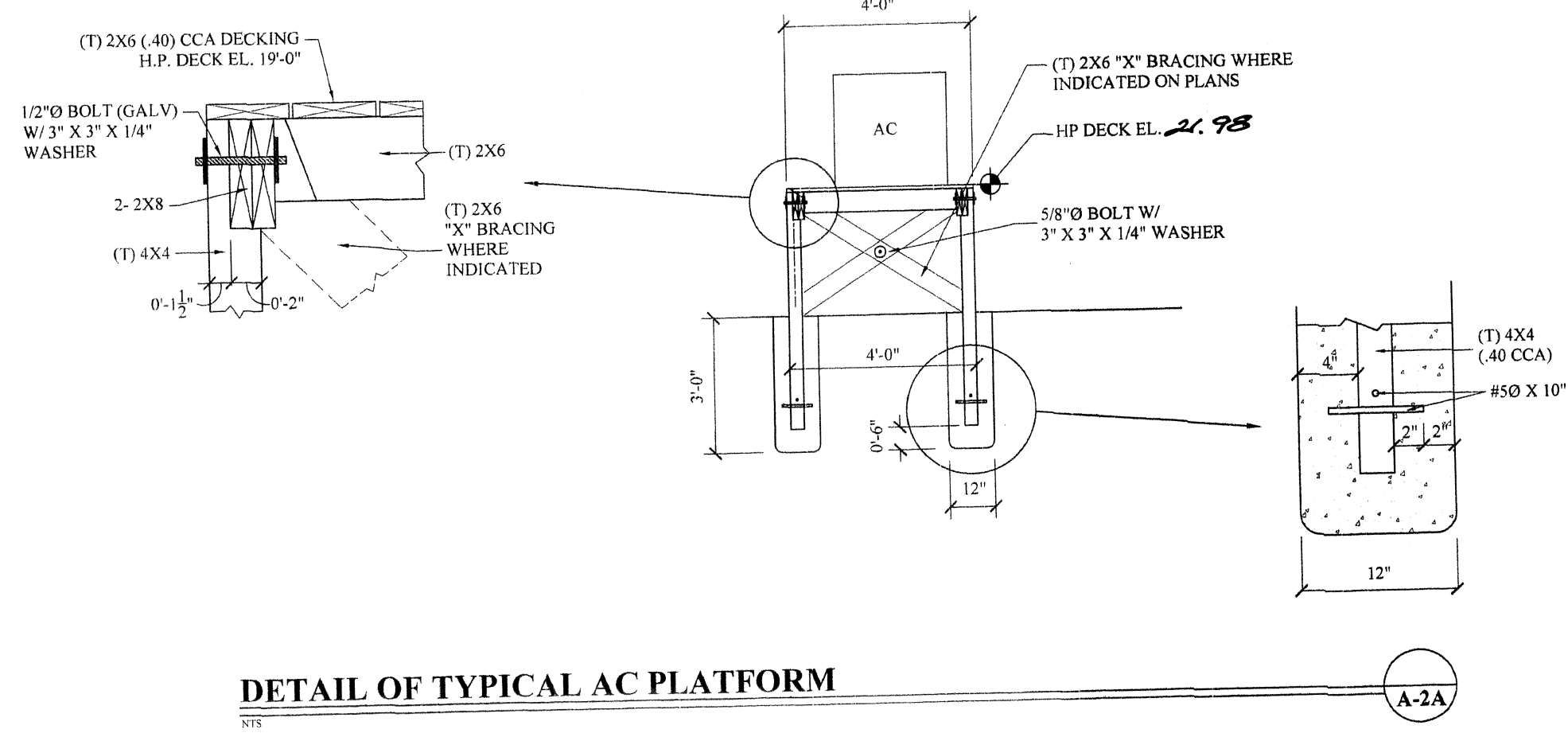
105 EVANGELINE DRIVE, SLIDELL, LOUISIANA 70460  
(985) 847-0714  
jfsarchitect@charter.net

DRAWN H. SCHNEIDER
CHECKED
DATE 11-06-2018
SCALE
JOB NO.
SHEET <b>M-2</b>
OF SHEETS



- FOR MORE INFORMATION, SEE SCHEDULE SHEET THIS SHEET.
- THIS DETAIL SHOWS TYPICAL AIR DEVICE INSTALLATIONS.
- SIZE THE ROUND TO THE AIR DEVICE THE SAME SIZE AS THE AIR DEVICE INLET AND RUN USING ROUND SPIRAL LOCK SEAM GALVANIZED DUCT AND FLEXIBLE DUCT, AS SHOWN.
- NORMALLY RUN HORIZONTAL DUCTWORK HIGH AS POSSIBLE, TIGHT TO BOTTOM OF BUILDING STRUCTURE.
- DUCT EXTERNAL AND DIFFUSER BACK PAN INSULATION AND DUCT LINING NOT SHOWN FOR CLARITY. SEE THE SPECIFICATIONS FOR DUCT INSULATION AND LINING REQUIREMENTS.
- NOT ALL DUCT SUPPORTS SHOWN. PROVIDE ALL DUCT SUPPORTS SIZED AND AS REQUIRED BY SMACNA AND AS SHOWN HEREIN. AT ALL ANCHOR POINTS TO BUILDING STRUCTURE, PROVIDE ANCHORS AS CONCRETE DRILL ANCHORS, BEAM CLAMPS, LAG SCREWS, ETC. OR AS SPECIFIED BY THE ARCHITECT. POWDER ACTUATED ANCHORS NOT ACCEPTABLE FOR WORK IN EXISTING BUILDINGS.
- 1 MAIN, OR BRANCH DUCT.
  - 2 STRAP DUCT HANGERS, TYPICAL. INSTALL AS REQUIRED BY SMACNA. ANCHOR FROM BUILDING STRUCTURE.
  - 3 SIDE TAKEOFF FITTING WITH DAMPER. FITTINGS SHALL HAVE SMACNA 45 DEGREE BRANCH TAKEOFF ENTRANCES. ALLOW MOUNTING TO RECTANGULAR DUCT THE SAME HEIGHT AS THE ROUND DUCT CONNECTION WITH MOUNTING FLANGE. USE OF SPRING IS NOT ACCEPTABLE.
  - 4 SCREW SIDE TAKEOFF FITTING TO DUCT AT EACH CORNER AND SIX INCH ON CENTER. SEAL SIDE TAKEOFF FITTING TO DUCT AIR TIGHT USING ADHESIVE GASKET AND HIGH PRESSURE DUCT SEALER. EXTERNALLY INSULATE SIDE TAKE OFF FITTING.
  - 5 ROUND EXTERNALLY INSULATED GALVANIZED SHEET METAL DUCT WITH SPIRAL LOCK SEAMS (HARD DUCT). USE LONG RADIUS ELBOWS AT EACH CHANGE OF DIRECTION. LIMIT THE TOTAL ANGLE OF THE CHANGES IN DIRECTION TO A MAXIMUM OF 180 DEGREES.
  - 6 IN ADDITION TO THE NORMAL ROUND DUCT SUPPORTS AS REQUIRED BY SMACNA, PROVIDE DUCT STRAP HANGERS ON EACH SIDE OF THE FLEXIBLE DUCT.
  - 7 MAKE ALL FLEXIBLE DUCT CONNECTIONS TO HARD DUCT USING STAINLESS STEEL SCREW CLAMPING BANDS AND SEAL AIR TIGHT WITH HIGH PRESSURE DUCT SEALER. SEAL FLEXIBLE DUCT VAPOR BARRIER TO HARD DUCT AND/OR ADJACENT INSULATION. NO EXPOSED FIBERGLASS SHALL BE VISIBLE.
  - 8 SIX (6) FOOT MAXIMUM SECTION OF FLEXIBLE DUCT WITH MINIMAL BENDS OR TURNS. LIMIT THE TOTAL ANGLE OF THE CHANGES IN DIRECTION TO A MAXIMUM OF 120 DEGREES.
  - 9 PROVIDE SIX-INCH LONG SADDLE SUPPORTS FOR FLEXIBLE DUCT AS REQUIRED TO PREVENT SAGGING AND AT CHANGES IN DIRECTION.
  - 10 HARD LONG RADIUS ELBOW - CONNECT TO VERTICAL DUCT OR AIR DEVICE NECK AS REQUIRED.
  - 11 HARD VERTICAL DUCT, LENGTH AS REQUIRED.
  - 12 AIR DEVICE - SUPPLY AIR DIFFUSERS. SEE AIR DEVICE SCHEDULE.
  - 13 AT THE FOUR CORNERS OF THE AIR DEVICE, SUPPORT THE LAY-IN CEILING GRID USING CEILING SUPPORT WIRE, ANCHORED TO BUILDING STRUCTURE.
  - 14 ANCHOR TO BUILDING STRUCTURE.
  - 15 LAY-IN CEILING.
  - 16 LAY-IN CEILING T-BARS.
  - 17 BUILDING STRUCTURE.

HVAC SYMBOL SCHEDULE	
①	THERMOSTAT
②	FIRE DAMPER
③	FIRE STAT
④	DUCT SMOKE DETECTOR
CD	CEILING DIFFUSER (NECK SIZE)
O.A.	OUTSIDE AIR
RAG	RETURN AIR GRILLE
BDD	BACK DRAFT DAMPER
⊗	SUPPLY AIR
⊠	RETURN AIR
⊕	SUPPLY AIR WITH DIRECTION OF FLOW
⊖	SPIN-IN FITTING W/ DAMPER
~	FLEXIBLE DUCT
▭	RIGID SHEET METAL DUCT
▭	RIGID ROUND SHEETMETAL DUCT
▭	MANUAL VOLUME DAMPER (MVD)



**DETAIL OF TYPICAL AC PLATFORM** A-2A

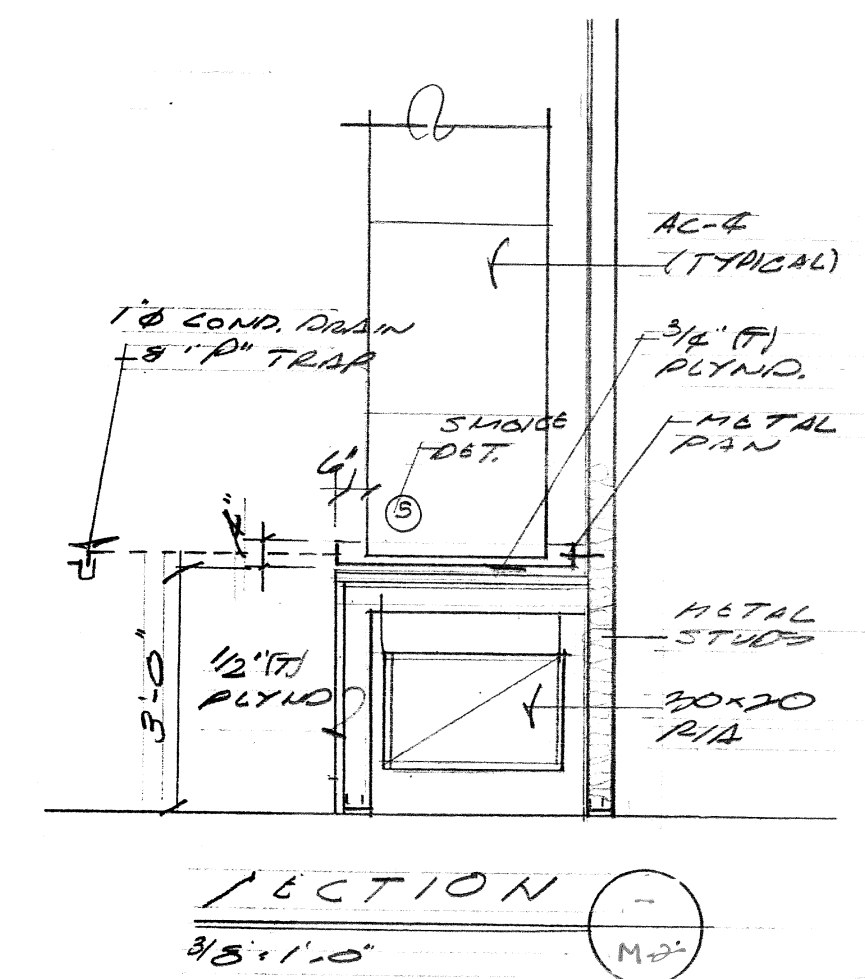
**AIR DEVICE CONNECTION DETAIL**  
N.T.S.

**GENERAL MECHANICAL NOTES:**

1. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE PROJECT SCOPE AND CONSTRAINTS, UTILITY CONNECTIONS, AND ALL BUILDING SERVICES, PRIOR TO SUBMITTING BID.
2. ALL DUCTWORK SHALL CONFORM TO THE MATERIALS AND CONSTRUCTION METHODS OF THE LATEST EDITION OF SMACNA, "HVAC SYSTEMS, DUCT DESIGN" AND TO THOSE REQUIREMENTS AS PRESCRIBED IN THE SPECIFICATIONS.
3. ALL DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS IN INCHES. REFER TO THE SPECIFICATIONS ON SHEET M-3 FOR INSULATION REQUIREMENTS.
4. MAJOR EQUIPMENT SHOWN ON THE PLANS ILLUSTRATE THE GENERAL ARRANGEMENT AND SPACE ALLOCATIONS. THE CONTRACTOR SHALL VERIFY THE SPACE REQUIREMENTS FOR EACH SYSTEM COMPONENT USING MANUFACTURER'S CERTIFIED SHOP DRAWINGS AND MAKE THE NECESSARY ADJUSTMENTS IN EQUIPMENT PLACEMENT AND CONNECTION IN ORDER TO ACCOMMODATE THE EXACT EQUIPMENT TO BE INSTALLED.
5. SUPPORTS, ANCHOR BOLTS, AND HANGERS FOR ALL EQUIPMENT SHALL CONFORM TO THE LATEST EDITION OF SMACNA, "HVAC SYSTEMS, DUCT DESIGN", MISCELLANEOUS STEEL BRACING SUPPORTS AND REINFORCING STEEL NEEDED TO SUPPORT EQUIPMENT SHALL BE FURNISHED AS PART OF THE MECHANICAL CONTRACTOR'S SCOPE OF WORK.
6. FIRE DAMPERS SHALL BE INSTALLED IN ALL DUCTWORK PENETRATIONS THROUGH FIRE-RATED WALLS OR CEILINGS. DAMPERS SHALL MEET THE REQUIREMENTS OF THE FIRE-RATED WALL OR CEILING AND SHALL BE "UL" LISTED. REFER TO ARCHITECTURAL DRAWINGS FOR THE LOCATIONS OF ALL FIRE-RATED WALLS OR FLOORS.
7. CEILING DIFFUSERS, REGISTERS AND GRILLES' LOCATIONS ON MECHANICAL DRAWINGS ARE APPROXIMATE. DIFFUSERS, REGISTERS AND GRILLES SHALL BE FURNISHED WITH MOUNTING FRAMES AND FEATURES IN ACCORDANCE WITH THE CEILING OR WALL TYPE.
8. SMOKE DETECTORS SHALL BE PROVIDED IN CONFORMANCE WITH NFPA, STANDARD MECHANICAL CODE, AND ALL OTHER REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
9. REFRIGERANT PIPING CONNECTIONS TO AIR HANDLING UNIT COILS AND MAJOR EQUIPMENT SHALL BE FABRICATED WITH ISOLATION VALVES, FLANGES, AND/OR UNIONS POSITIONED TO ALLOW REMOVAL AND SERVICING OF THE COMPONENT. CONTRACTOR SHALL COORDINATE WITH ARCHITECT PRIOR TO CUTTING ANY OPENING IN THE STRUCTURE.
10. COORDINATE ANY DEVICE REQUIRING AN ACCESS PANEL WITH THE ARCHITECT. PROVIDE ACCESS PANELS IN DUCTWORK AT ALL DEVICES REQUIRING MAINTENANCE AND/OR INSPECTION (I.E. DAMPERS, FANS, ETC.) PER SMACNA STANDARDS.
11. ALL PENETRATIONS THROUGH RATED WALLS, FLOORS, AND PARTITIONS MUST BE INSTALLED AND FIRESAFED TO MEET UL FIRE RESISTANCE LISTING DETAILS FOR THE PENETRATION.
12. OUTSIDE AIR INTAKES SHALL BE MINIMUM 10 FEET FROM EXHAUST FAN OUTLETS AND PLUMBING VENTS THROUGH ROOF.
13. CONTRACTOR SHALL PROVIDE ALL UNI-DIRECTIONAL SUPPLY AIR AND RETURN AIR DUCT ELBOWS WITH TURNING VANES.
14. CONTRACTOR SHALL VERIFY CLEARANCE REQUIREMENTS AND ROUTING OF DUCTWORK BEFORE FABRICATION BEGINS, AS DUCT RISES AND DROPS MAY BE NECESSARY DUE TO FIELD CONDITIONS.
15. DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH SITE CONDITIONS AND WITH WORK OF ALL OTHER TRADES.

**GENERAL NOTES:**

1. HOT WATER PIPE INSULATION SHALL BE 1" THICK FOR PIPING LESS THEN 1-1/2" THICK. FOR PIPING GREATER THEN 1-1/2" THICK PIPING INSULATION SHALL BE 2" THICK. COLD WATER PIPE INSULATION SHALL BE 1/2" THICK FOR PIPING LESS THEN 1-1/2" AND 1" FOR PIPING GREATER THEN 1-1/2" THICK.
2. LAVATORY FAUCET OUTLET TEMPERATURE LIMITED TO 110° F. IN PUBLIC RESTROOMS.
3. R-6 INSULATION FOR ALL SUPPLY DUCTWORK LOCATED OUTSIDE THE BUILDING, IN VENTILATED ATTICS AND IN NON-VENTED ATTICS ABOVE INSULATED CEILINGS R-3.5 FOR SUPPLY AIR DUCTS IN NON-VENTED ATTIC WITH ROOF INSULATION, UNCONDITIONED AND UNDERGROUND SPACES R-3.5 FOR RETURN AIR DUCTS LOCATED OUTSIDE THE BUILDING, IN VENTILATED ATTICS AND IN NON-VENTED ATTIC ABOVE INSULATED CEILING.
4. PROVIDE HVAC BALANCING REPORT TO OWNER AFTER HVAC IS COMPLETED.
5. PROVIDE METAL PAN AT HVAC ATTIC HORIZONTAL UNITS. PROVIDE "P" TRAP AND 1" O CONDENSE DRAIN LINE TO HOUSE WASTE LINE. PROVIDE WITH FLOAT SHUT-DOWN SWITCH AT PAN. PROVIDE SMOKE DETECTOR AT BOTH ATTIC AC UNIT AND RETURN AIR SIDE. PROVIDE WITH RE-SET SWITCH.
6. PROVIDE OVERFLOW PAN W 1" O DRAIN LINE AT ATTIC WATER HEATERS.
7. PROVIDE 3/4" PLYWOOD CLEAR AROUND ATTIC HVAC UNITS AND WATER HEATERS.
8. PROVIDE 220V/10 FOR EXTERIOR UNITS AND ELECTRIC HEAT. MECHANICAL CONTRACTOR TO PROVIDE LOAD CALCULATIONS TO VERIFY HEATING AND COOLING QUANTITIES AND COMPLIANCE TO LOCAL ENERGY CODES.
9. ALL LIGHTING AND POWER CIRCUITS IN THE SLEEPING AREA SHALL BE ARC FAULT PER IEC-2008.
10. MINIMUM PANEL WIRING SIZE:  
20A - #12 AWG  
30A - #10 AWG  
40A - #8 AWG  
60A - #6 AWG
11. ALL ELECTRICAL SWITCHES AND POWER OUTLETS LOCATED IN RATED FIRE PARTITIONS SHALL BE FIRE CAULKED PER UNDERWRITERS LABORATORY REQUIREMENTS.



**HVAC SCHEDULE**

- UNITS 1, 2, 3, & 4
- CONDENSER EQUAL TO RHEEM RAWL090CAZ - 7.5 TON 208V, 3 PHASE, 11.20 SEER, R-410 REFRIGERENT-2,800 CFM, 90,000 BTUH TOTAL CAPACITY.
- AIR HANDLER EQUAL TO RHEEM RHG090ZL, 7.5 TON, 208V, 3 PHASE, 11.20 SEER, R-410 REFRIGERENT-3,000 CFM, 330 POUNDS WEIGHT, 16"X25" FILTERS(4), 1725 RPM.
- ELECTRIC HEAT EQUAL TO RHEEM RXHEDE020CA, 208V, 3 PHASE, 20 KW.

1. MECHANICAL SUB-CONTRACTOR SHALL PROVIDE A DUCTWORK DESIGN FOR BOTH HVAC UNIT LAYOUTS. PROVIDE HVAC AT EQUIPMENT ROOM AND TOILET ROOM IN WAITING AREA. SUBMIT TO ARCHITECT SHOP DRAWING INDICATING ALL DUCTWORK, SIZE, CFM, AND OUTSIDE FRESH AIR INTAKES. ALL WORK SHALL COMPLY WITH LATEST INTERNATIONAL MECHANICAL CODE, ENERGY CODES, AND ASHRAE REQUIREMENTS AND RECOMMENDATIONS.
2. OUTDOOR VENTILATION AIR (OSA) SHALL CONFORM TO TABLE 403.3 OF IMC-2009