HVAC FIRE SAFETY NOTES

FURNACES AND AIR HANDLERS SHALL BE EQUIPPED WITH DUCT MOUNTED SMOKE DETECTORS IN THE SUPPLY AND RETURN AIR PLENUM. THESE ITEMS SHALL BE FURNISHED BY THE FIRE ALARM CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR

FURNACES, FANS AND AIR HANDLERS SHALL BE EQUIPPED WITH FIRESTATS MOUNTED IN THE SUPPLY PLENUM. FIRESTATS SHALL HAVE MANUAL RESETS, BE ACCESSIBLE AND SHALL BE SET TO SHUT DOWN THE FANS WHEN THE TEMPERATURE REACHES 130 DEGREES F. THESE ITEMS SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR

THE HVAC EQUIPMENT CONTROLS SHALL BE ELECTRICALLY INTERLOCKED TO THE FIRE ALARM SYSTEM. THE MECHANICAL CONTRACTOR SHALL FURNISH RELAYS IN THE CONTROL CIRCUITRY TO SHUT DOWN FAN OPERATION IN THE EVENT OF INITIATION OF THE FIRE ALARM SYSTEM

FIRE SAFETY SHUTOFF DEVICES SHALL BE INSTALLED TO INTERRUPT THE OPERATION OF THE FANS REGARDLESS OF POSITION OF ANY CONTROLS OR SELECTOR SWITCHES

GENERAL MECHANICAL NOTES

THE MECHANICAL CONTRACTOR SHALL SURVEY THE PLANS AND SPECIFICATIONS AND PLACE THE EQUIPMENT IN SUCH A MANNER TO AVOID CONFLICT WITH OTHER TRADES AND SO THAT THE EQUIPMENT WILL BE SERVICEABLE AT THE CLOSE OF THE PROJECT

THE MECHANICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING AIR CONDITIONING TO THE RESPECTIVE UNITS AND OTHER EQUIPMENT

THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ALL EQUIPMENT IN SUCH A MANNER THAT THE INTAKES OF ALL EQUIPMENT DO NOT PICK UP WATER IN THE AIRSTREAM.

THE MECHANICAL CONTRACTOR SHALL EMPLOY SKILLED CRAFTSMEN IN THE AIR CONDITIONING TRADE AND SHALL HAVE AT LEAST FIVE YEARS EXPERIENCE IN THIS FIELD

ALL DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL AND SHALL BE IN COMPLIANCE WITH ALL CODES. THE SIZES SHOWN ON THE DRAWINGS ARE FREE AIR SIZES AND SHALL BE ADJUSTED TO ALLOW FOR DUCTLINER WHERE NECESSARY OR EMPLOY EQUIVALENT RECTANGULAR DUCT SIZES WHERE JOB CONDITIONS DICTATE

ALL DUCTWORK SHALL BE INSULATED USING 2" (R-6) FIBERGLASS FOIL SCRIM DUCTWRAP WITH ALL JOINTS IN THE INSULATION TAPED. THE DUCTWORK SHALL BE SEALED USING AN APPROVED MASTIC PRIOR TO INSULATION.

ALL GRILLES, REGISTERS AND DIFFUSERS SHALL BE TITUS, METALAIRE OR APPROVED EQUAL

ALL EQUIPMENT SHALL BE TRANE, BARD, CARRIER, LENNOX, OR APPROVED EQUAL

FANS SHALL BE MANUFACTURED AS SPECIFIED OR EQUAL MANUFACTURER PRIOR APPROVED.

ALL AIR HANDLERS SHALL BE EQUIPPED WITH AUXILIARY DRAIN PANS EQUIPPED WITH FLOAT TYPE CUTOFF SWITCHES TO PREVENT SPILLAGE ONTO CEILING. THE DRAINS SHALL BE 3/4" COPPER PIPE FROM BOTH THE UNIT AND THE AUXILIARY PAN

THE CONDENSATE DRAINS SHALL BE PITCHED 1/4" IN ONE FOOT TO A POINT OUTSIDE THE STRUCTURE

ALL AIR HANDLING EQUIPMENT SHALL BE SUSPENDED FROM THE STRUCTURE USING 1/2" MINIMUM THREADED ROD AND EITHER SPRING TYPE OR NEOPRENE IN SHEAR ISOLATORS TO PREVENT SOUND TRANSMISSION TO THE STRUCTURE. EQUIPMENT WHICH RESTS ON SURFACES INSIDE THE STRUCTURE SHALL BE SET ON NEOPRENE ISOLATORS FOR DAMPENING OF VIBRATION TRANSMISSION

THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF THE CONCRETE PADS FOR THE CONDENSING UNIT. PADS SHALL BE CONSTRUCTED OF 3000# PRIME CONCRETE AND SHALL BE 4" THICK. THE PADS SHALL SLOPE AWAY FROM THE BUILDING TO FACILITATE DRAINAGE.

ALL RETURN GRILLES & FRESH AIR INTAKE GRILLES SHALL BE FILTER GRILLES

THE MECHANICAL CONTRACTOR SHALL EMPLOY CANVAS FLEXIBLE DUCT CONNECTORS FOR ALL CONNECTIONS TO THE AIR HANDLERS. DUCT CONNECTIONS TO THE DIFFUSERS SHALL BE MADE USING 24" OF FLEX DUCT(MAX)

NO DUCTWORK SHALL BEAR ON THE CEILING

PERFORATED BANDING MATERIAL SHALL NOT BE ACCEPTABLE AS A HANGER MATERIAL

DUCTLINER SHALL BE MECHANICALLY ATTACHED TO THE DUCTWORK

ALL REFRIGERANT LINES SHALL BE CONSTRUCTED OF REFRIGERANT TUBING AND SHALL BE SIZED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS FOR EFFECTIVE LENGTH. THE TUBING SHALL ENTER THE WALL AT A POINT NO MORE THAN 12" ABOVE FINISHED GRADE AND NEVER BE EXPOSED ON OUTSIDE WALLS

COMPRESSORS SHALL BE EQUIPPED WITH 7 MINUTE TIME DELAYS TO PREVENT SHORT CYCLING

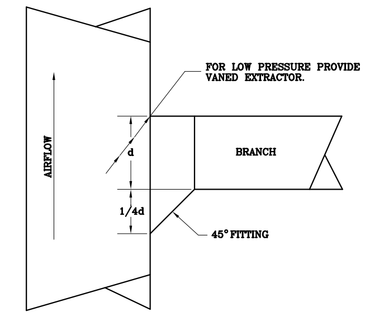
THERMOSTATS SHALL BE AS PROVIDED BY THE EQUIPMENT MANUFACTURER OR HONEYWELL, OR WHITE-ROGERS AND SHALL BE ELECTRONIC PROGRAMMABLE

ALL AUXILIARY DRAIN PANS SHALL BE ONE PIECE ALUMINUM WELDED SEAM UNITS WITH THREADED DRAIN OUTLET USE DIELECTRIC UNION FOR CONNECTION OF COPPER

ALL OUTSIDE GRILLES SHALL BE EXTRUDED ALUMINUM WITH ANODIZED BRONZE FINISH
ALL INTAKE GRILLES FOR AEX UNITS SHALL BE EQUIPPED WITH 45 DEGREE HOODS AS WELL AS DRAINABLE BLADES IN MATCHING COLORS

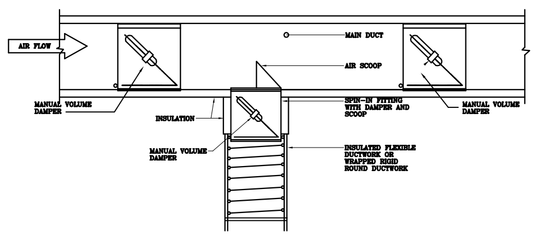
ALL GRILLES FOR SUPPLY AIR IN THE BUILDING SHALL HAVE VERTICAL AIRFLOW CAPABILITY AS WELL AS BALANCING DAMPER ADJUSTABLE FROM THE FACE

CU-1A – CARRIER OR EQUAL 2-1/2 TON HEAT PUMP CONDENSING UNIT – 208/1/60 HIGH EFF. EQUAL TO 15 SEER
CU-1B – CARRIER OR EQUAL 2-1/2 TON HEAT PUMP CONDENSING UNIT – 208/1/60 HIGH EFF. EQUAL TO 15 SEER
CU-2A – CARRIER OR EQUAL 2-1/2 TON HEAT PUMP CONDENSING UNIT – 208/1/60 HIGH EFF. EQUAL TO 15 SEER
CU-2B – CARRIER OR EQUAL 2-1/2 TON HEAT PUMP CONDENSING UNIT – 208/1/60 HIGH EFF. EQUAL TO 15 SEER



BRANCH FITTING DETAIL

AHU-1A – CARRIER OR EQUAL 2-1/2 TON AIR HANDLER W/100,000BTU/H 90% FURNACE – 120/1/60 HIGH EFF. EQUAL TO 15 SEER
AHU-1B – CARRIER OR EQUAL 2-1/2 TON AIR HANDLER W/100,000BTU/H 90% FURNACE – 120/1/60 HIGH EFF. EQUAL TO 15 SEER
AHU-2A – CARRIER OR EQUAL 2-1/2 TON AIR HANDLER W/100,000BTU/H 90% FURNACE – 120/1/60 HIGH EFF. EQUAL TO 15 SEER
AHU-2B – CARRIER OR EQUAL 2-1/2 TON AIR HANDLER W/100,000BTU/H 90% FURNACE – 120/1/60 HIGH EFF. EQUAL TO 15 SEER



BRANCH TAKE-OFF

NOTES
1. FRESH AIR SHALL BE SUPPLIED TO EACH AIR CONDITIONER AT A RATE OF 10% MINIMUM
2. NATURAL GAS SHALL BE SUPPLIED TO EACH FURNACE USING SCHEDULE 40 STEEL PIPE
3. PIPE FITTINGS SHALL BE 125# BLACK MALLABLE FITTINGS – NO CAST IRON FITTINGS
4. GAS PIPING SHALL BE TESTED PER LOCAL, STATE AND INTERNATIONAL CODE STANDARDS
5. GAS CONNECTION TO EACH UNIT SHALL HAVE 6" DIRT LEG, LUB. PLUG COCK AND GROUND JOINT UNION WITH NIPPLE INTO GAS VALVE.
6. CONTRACTORE SHALL INSTALL REGULATORS TO SUPPLY GAS AT PROPER PRESSURE FOR GAS VALVE OPERATION
7. ALL PIPING JOINTS SHALL BE SOAP TESTED UNDER WORKING PRESSURE
8. MECHANICAL CONTRACTOR SHALL FURNISH & INSTALL PROPER CLASS B VENTS TO ATMOSPHERE WITH FLASHINGS & CURBS
9. INSTALLATION OF ROOF VENTS SHALL NOT VIOLATE THE ROOF BOND

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GEORGIA REGISTERED No. 13779 PROFESSIONAL ENGINEER JAMES H CLARKSON

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MECHANICAL PLAN – SCHEDULES &NOTES

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