



ROBERT JOHNSON
architects
1808 West Morehead St.
Charlotte, NC 28208
T 704 / 342.1058
F 704 / 342.3043

STAMPS



1/11/2020

CONSULTANT



WAVE ENGINEERING
1308 S. MAIN ST., SUITE 110
CHARLOTTE, NC 28203
(704) 772-7729
www.waveengineering.com
PROJ. NO: 20-027

ALBEMARLE
SHOPS

CHARLOTTE, NC

PROJECT NUMBER 1913
ISSUE DATE
FOR CONSTRUCTION ONLY 07.01.20

DRAWING DATA

DRAWN BY: BRD/MJS
CHECKED BY:

SHEET TITLE
MECHANICAL
SCHEDULES,
NOTES AND
LEGEND

This drawing is the property of ROBERT JOHNSON ARCHITECTS, INC. and is not to be reproduced or copied in whole or in part. It is loaned to you for the project and shall specifically identify therein and not be used on any other project. It is to be returned upon request.

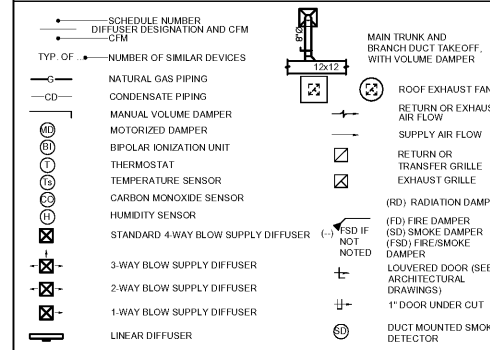
SHEET NUMBER

M-0.1

GENERAL MECHANICAL NOTES

- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT IN STRICT ACCORDANCE WITH APPLICABLE CODES AND STANDARDS, AND PER MANUFACTURER'S DIRECTIONS.
- THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS SHALL REVIEW AND BE FAMILIAR WITH ALL DRAWINGS ASSOCIATED WITH THIS PROJECT INCLUDING THE ARCHITECTURAL, CIVIL, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS. SPECIFIC REQUIREMENTS DEPICTED ON ONE DRAWING PAGE OR IN ONE PORTION OF THE DRAWINGS SHALL BE APPLICABLE TO ALL DRAWING PAGES AND ALL PORTIONS OF THE DRAWINGS SHOULD A CONFLICT OR DISCREPANCY BE DISCOVERED IN THE DRAWINGS DURING THE BIDDING OR NEGOTIATION PHASE. THE GENERAL CONTRACTOR, SUBCONTRACTOR OR MATERIAL SUPPLIER SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND REQUEST ADDITIONAL INFORMATION AND CLARIFICATION. FAILURE TO DO SO WILL NOT RELIEVE THE GENERAL CONTRACTOR, SUBCONTRACTOR OR MATERIAL SUPPLIER FROM THE REQUIREMENTS OF ALL PORTIONS OF THE DRAWINGS.
- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS, LICENSE, INSPECTIONS, APPROVALS, AND FEES.
- THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE THAT SHALL WARRANT ALL WORKMANSHIP AND MATERIALS FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER. ANY BREAKDOWN OCCURRING IN THE FIRST YEAR SHALL BE AT NO EXPENSE TO THE OWNER. ALL REFRIGERATION COMPRESSORS SHALL HAVE A FIVE YEAR (PARTS ONLY) WARRANTY, AND ALL NATURAL GAS HEAT EXCHANGERS SHALL HAVE A TEN YEAR (PARTS ONLY) WARRANTY.
- DRAWINGS ARE SCHEMATIC. NOT ALL RISES AND DROPS ARE SHOWN. DO NOT SCALE DRAWINGS FOR MEASUREMENTS. DRAWINGS THAT HAVE NOT RECEIVED PERMIT APPROVAL FROM AUTHORITY HAVING JURISDICTION SHOULD NOT BE USED FOR FINAL OR GUARANTEED PRICING. ANY PRICING BASED ON UNAPPROVED DRAWINGS SHOULD BE NOTED AS PROVISIONAL. CONTRACTOR ACCEPTS ALL RESPONSIBILITY FOR GUARANTEED PRICING BASED ON UNAPPROVED DRAWINGS.
- WHEN EXISTING EQUIPMENT IS REUSED CONTRACTOR SHALL ENSURE EQUIPMENT IS IN GOOD WORKING ORDER AND SHALL REPORT TO THE OWNER ANY REPAIRS REQUIRED TO BRING EQUIPMENT TO GOOD WORKING ORDER PRIOR TO TURN OVER.
- TRADES ARE TO COORDINATE THEIR WORK WITH ALL OTHER TRADES TO AVOID CONFLICTS. GENERALLY, DUCTWORK SHALL BE KEPT AS HIGH AS POSSIBLE. MECHANICAL CONTRACTOR SHALL REVIEW AND VERIFY SET OF CONTRACT DOCUMENTS INCLUDING BUT NOT NECESSARILY LIMITED TO ALL ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING AND ENTIRE PROJECT MANUAL. MECHANICAL CONTRACTOR SHALL FULLY COORDINATE MECHANICAL WORK WITH THE INSTALLATION OF WORK BY ALL OTHER TRADES AND MAKE NECESSARY FIELD ADJUSTMENTS AS REQUIRED TO ACCOMMODATE THE MECHANICAL INSTALLATION. ALL OF THE ABOVE SHALL BE INCLUDED IN THE SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO ORDERING ANY EQUIPMENT OR MATERIALS. ALL SUSPENDED MATERIALS AND EQUIPMENT SHALL BE INDIVIDUALLY SUPPORTED FROM THE BUILDING STRUCTURE. DO NOT SUSPEND ITEMS FROM THE CEILING OR ITS SUPPORT SYSTEM.
- CUTTING OR OTHERWISE ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER OF RECORD.
- CONTRACTOR SHALL KEEP A SET OF MARKED UP PRINTS WITH ANY FIELD CHANGES MADE DURING CONSTRUCTION TO CREATE AN "AS BUILT" SET OF PRINTS TO BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT. NOTE PER ENERGY CODE SECTION 3 DESIGN SET POINTS OF EQUIPMENT AT A MAXIMUM OF NO LOWER THAN 75° IN COOLING MODE AND HIGHER THAN HEATING MODE.
- IN THE EVENT CONTRACTOR SUBSTITUTES ALTERNATE MANUFACTURERS THEN CONTRACTOR SHALL COORDINATE ALL ASPECTS OF SUBSTITUTED EQUIPMENT WITH ALL TRADES INCLUDING BUT NOT LIMITED TO GAS SERVICE, ELECTRICAL SERVICE, STRUCTURAL LOADS AND OPENINGS, ETC.
- PROVIDE ACCESS PANELS IN CEILINGS AND WALLS TO ALLOW ACCESS TO VALVES, TRAPS, DAMPERS, EXHAUSTS, CONTROL VALVES, METER, MIMMUM ACCESS SIZE - 12"x12", UNLESS LIMITED BY PHYSICAL CONSTRAINTS.
- ALL CONDENSATE DRAIN PIPING SHALL BE TYPE L HARD DRAWN COPPER, ASTM B-88, WITH TYPE DWV FITTINGS, ASTM B-23, OR SCHEDULE 40 PVC, ASTM D1785, WITH TYPE DWV FITTINGS, ASTM D2027. COPPER DRAIN PIPE AND FITTINGS SHALL BE JOINED USING 90-95 SILVER SOLDER, AND PVC PIPE AND FITTINGS SHALL BE JOINED USING SOLVENT CEMENT. PROVIDE TRAP WITH CLEANOUT AND UNIONS. SLOPE CONDENSATE DRAIN LINES A MINIMUM OF 1/8" PER FOOT AWAY FROM THE MECHANICAL EQUIPMENT. PROVIDE AUXILIARY WATER LEVEL INDICATOR DEVICES PER SECTION 307.2.3. UNLESS OTHERWISE NOTED ROUTE CONDENSATE AT FULL SIZE OF EQUIPMENT CONNECTION FROM EQUIPMENT TO DRY WELL OR SITE STORM MAIN WHERE NEITHER IS AVAILABLE DISPOSE TO NEAREST MOP SINK OR UTILITY SINK. PROVIDE CONDENSATE PUMP AS REQUIRED BY FIELD CONDITIONS.
- SUBMITTALS: AS A MINIMUM, THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL ITEMS SCHEDULED ON THE DRAWINGS UNLESS DIRECTED OTHERWISE.
- MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- OUTSIDE AIR FOR AIR CONDITIONING UNITS SHALL BE A MINIMUM OF 3 FEET FROM EXHAUST AND EXHAUST OPENINGS AND PLUMBING VENTS.
- ALL DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS.
- ALL SUPPLY AND RETURN DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA AND ASHRAE STANDARDS. DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL FOR A PRESSURE RATING OF 1.2 PSI FOR RETURN AND 1.2 PSI FOR SUPPLY DUCTWORK. ALL EXHAUST DUCTWORK SHALL CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA AND ASHRAE STANDARDS. EXHAUST DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL FOR A PRESSURE RATING OF 1" WG IN EXCESS OF THE SYSTEM FAN TOTAL STATIC PRESSURE RATINGS AT DESIGN FLOW RATE, UNLESS NOTED OTHERWISE.
- SUPPORT DUCTWORK FROM EXISTING STRUCTURE IN ACCORDANCE WITH SMACNA STANDARDS.
- RADIUS OF DUCTWORK ELBOWS SHALL HAVE A CENTERLINE RADIUS OF 1.5 TIMES THE DUCT WIDTH (OR DIAMETER) UNLESS NOTED OTHERWISE.
- ALL MITERED ELBOWS (RECTANGULAR AND ROUND) SHALL HAVE DOUBLE THICKNESS TURNING VANES INSTALLED UNLESS NOTED OTHERWISE ON DRAWINGS.
- VERIFY ALL JOINTS LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK USING WELDOMENTS, MECHANICAL FASTENERS WITH SEALS OR GASKETS OR MASTICS, MESH AND MASTIC SEALING SEALS OR TAPES, TAPES OR MASTICS MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL181A OR UL181B.
- DUCT CONNECTIONS TO FANS AND OTHER AIR DISTRIBUTION EQUIPMENT SHALL BE MADE USING MECHANICAL FASTENERS WITH SEALS, MASTICS OR GASKETS. ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH PROTECTION FROM COLLISION BETWEEN EQUIPMENT AND BUILDING STRUCTURE.
- EXHAUST AIR AND RETURN AIR DUCTWORK SHALL BE INSULATED WITH A MINIMUM 2" THICK, 3/4 LB. PER CUBIC FOOT, FIBERGLASS DUCTWRAP, WITH FOIL FACED VAPOR BARRIER AND AN INSTALLED THERMAL RESISTANCE OF 6.0 (MAX). FLEXIBLE DUCT ROUNDUTS SHALL BE ROUND DUCTWORK REINFORCED WITH A WIRE MESH AND INSULATED WITH 1 1/2" THICK FIBERGLASS WITH A 6.0 "R" VALUE. MINIMUM COVERED WITH FLAMEPROOF VAPOR BARRIER OF ALUMINUM METALIZED POLYESTER FILM LAMINATED TO GLASS MESH. DUCT SHALL BE ATCS-UPC #306 VALUFLEx CLASS 3 AIR DUCT OR EQUAL. CONNECTIONS TO DUCT MAINS SHALL BE MADE WITH FITTINGS PROVIDED WITH TWIST RINGS, BUTTERFLY DAMPERS, LOCKING HAND QUADRANTS, AND INSULATION GUARDS.
- ALL DUCT INSULATION SHALL MEET THE MINIMUM REQUIREMENTS OF UL 181 FOR FLAME SPREAD AND SMOKE DEVELOPMENT, AND SHALL BE U.L. LISTED.
- TRANSFER DUCTS SHALL BE INTERNALLY LINED TO AID IN CANCELING NOISE TRANSFER.
- EXHAUST DUCTWORK SHALL BE INSULATED UNLESS NOTED OTHERWISE.
- EXPOSED DUCTWORK SHALL BE INTERNALLY LINED AND WHEN ROUND SHALL BE SPIRAL CONSTRUCTION. STANDING SEAM ROUND DUCT WORK SHALL NOT BE ALLOWED WHEN VISIBLE.
- COORDINATE LOCATIONS OF GRILLES, REGISTERS AND DIFFUSERS WITH ARCHITECTURAL REFLECTED CEILING PLAN. LOCATIONS SHOWN ARE APPROXIMATE, ADJUST LOCATIONS IN THE FIELD AS REQUIRED BY CONSTRUCTION CONSTRAINTS.
- PROVIDE EACH SUPPLY AIR OUTLET OR DIFFUSER WITH ITS OWN BALANCING DEVICE. DEVICES CAN BE LOCATED IN DUCTWORK OR SUPPLY AIR DEVICE ITSELF.
- ALL MANUAL BALANCING DAMPERS SHALL HAVE A LOCKING QUADRANT.
- FLEXIBLE DUCTWORK SHALL BE CLASSIFIED UNDER UL 181. PROVIDE A MINIMUM OF 3 FEET IN LENGTH AND A MAXIMUM OF 10 FEET IN LENGTH, SUPPORTED WITH 3" GALVANIZED SHEET METAL STRAPS AT 4 FEET CENTERS (MAX). FLEXIBLE DUCT ROUNDUTS SHALL BE ROUND DUCTWORK REINFORCED WITH A WIRE MESH AND INSULATED WITH 1 1/2" THICK FIBERGLASS WITH A 6.0 "R" VALUE. MINIMUM COVERED WITH FLAMEPROOF VAPOR BARRIER OF ALUMINUM METALIZED POLYESTER FILM LAMINATED TO GLASS MESH. DUCT SHALL BE ATCS-UPC #306 VALUFLEx CLASS 3 AIR DUCT OR EQUAL. CONNECTIONS TO DUCT MAINS SHALL BE MADE WITH FITTINGS PROVIDED WITH TWIST RINGS, BUTTERFLY DAMPERS, LOCKING HAND QUADRANTS, AND INSULATION GUARDS.
- CONTRACTOR SHALL FURNISH ROUTE, AND INSTALL CONTROL WIRING FOR ALL MECHANICAL SYSTEMS. FOR SYSTEMS WITH MULTIPLE COMPONENTS CONTRACTOR IS RESPONSIBLE FOR ALL WIRING BETWEEN COMPONENTS.
- INSTALL THERMOSTATS AT 4' 0" A.F.F. UNLESS NOTED OTHERWISE. THERMOSTAT LOCATIONS SHALL BE COORDINATED WITH FINAL LOCATIONS OF WALL MOUNTED ARCHITECTURAL AND ELECTRICAL EQUIPMENT. FINAL LOCATIONS MUST BE APPROVED BY THE ARCHITECT AND OWNER. THERMOSTATS SHALL NOT BE INSTALLED ON INTERIOR WALLS IF AVAILABLE WITHIN SPACE SERVED BY THERMOSTAT. SHOULD THE THERMOSTAT REQUIRE INSTALLATION ON AN EXTERIOR WALL AN INSULATED BACKING PLATE MUST BE PROVIDED TO PREVENT FALSE READINGS BY THE THERMOSTAT.
- MECHANICAL CONTRACTOR SHALL PROVIDE A COMPLETE TEST AND BALANCE REPORT OF THE HVAC SYSTEMS PREPARED BY AN INDEPENDENT TEST AND BALANCE CONTRACTOR. A COPY OF THE TEST AND BALANCE REPORT SHALL BE TRANSMITTED TO THE LOCAL CODE OFFICIALS AS REQUIRED. THE TEST AND BALANCE REPORT SHALL INCLUDE COIL LEAVING TEMPERATURE, OUTSIDE AIR TEMPERATURE, RETURN AIR TEMPERATURE, AND BOTH OUTDOOR AND INDOOR HUMIDITY READINGS.
- ALL PENETRATIONS THROUGH EXTERIOR WALLS & ROOF SHALL BE FLASHED & COUNTERFLASHED IN A WATERPROOF MANNER. (COLOR TO MATCH EXTERIOR).
- CONTRACTOR SHALL VERIFY LOCATION OF ALL PENETRATIONS FOR RELIEF HOODS, OUTSIDE AIR HOODS, LOUVERS, AND WALL CAPS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
- PENETRATIONS OF RATED WALLS, PARTITIONS AND FLOORS OF NON-COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH NONCOMBUSTIBLE MATERIALS. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814. CONTRACTOR SHALL COORDINATE PENETRATIONS WITH ARCHITECTURAL PLANS AND SHALL PROVIDE FIRE DAMPERS AT EVERY PENETRATION OF A RATED WALL AND SMOKE DAMPERS WHERE ARCHITECTURAL RATINGS REQUIRE INCLUDING THE PENETRATION OF CORRIDOR ENCLOSURES. WHERE BOTH A FIRE AND SMOKE DAMPER ARE REQUIRED A COMBINATION FIRE SMOKE DAMPER MAY BE PROVIDED. PROVIDE RADIATION DAMPERS FOR ALL AIR DEVICES PENETRATING A RATED CEILING. LISTING OF DAMPERS SHALL MEET OR EXCEED RATING OF ASSEMBLY WHEN INSTALLED.
- REFRIGERANT PIPING, NOT SHOWN ON PLANS, SHALL BE SIZED & INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTALLATION INSTRUCTIONS AND LOCAL CODES.
- CONTRACTOR SHALL PREPARE ALL EXPOSED DUCT, GRILLES, PIPING, AND UNITS FOR PAINTING. GC WILL BE RESPONSIBLE FOR PAINTING.
- AIR HANDLERS WITH AIRFLOWS GREATER THAN OR EQUAL TO 2000 CFM OR THAT SHARE A COMMON OUTSIDE AIR OR RETURN DUCT SHALL BE FURNISHED WITH SMOKE DETECTORS LOCATED IN THE SUPPLY AND RETURN SECTIONS FOR ALL UNITS.

MECHANICAL LEGEND



ENERGY REQUIREMENTS:
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE:

PERFORMANCE ENERGY COST BUDGET

CLIMATE ZONE	3A
THERMAL ZONE	
WINTER DRY BULB	23
SUMMER DRY BULB	91
INTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	70
SUMMER DRY BULB	75
RELATIVE HUMIDITY	50
BUILDING HEATING LOAD (MBH)	NA
BUILDING COOLING LOAD (MBH)	NA
MECHANICAL SPACING CONDITIONING SYSTEM UNITARY	
DESCRIPTION OF UNIT	SEE SCHEDULES
HEATING EFFICIENCY	SEE SCHEDULES
COOLING EFFICIENCY	SEE SCHEDULES
HEAT OUTPUT OF UNIT	SEE SCHEDULES
COOLING OUTPUT OF UNIT	SEE SCHEDULES
BOILER	NA
TOTAL BOILER OUTPUT IF OVERSIZED, STATE REASON	NA
CHILLER	NA
TOTAL CHILLER OUTPUT IF OVERSIZED, STATE REASON	NA
LISTEQUIPMENT EFFICIENCIES	SEE SCHEDULES
EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)	SEE SCHEDULES
MOTOR HORSEPOWER	SEE SCHEDULES
NUMBER OF PHASES	SEE SCHEDULES
MINIMUM EFFICIENCY	SEE SCHEDULES
MOTOR TYPE	SEE SCHEDULES
NUMBER OF POLES	SEE SCHEDULES
DESIGNER'S STATEMENT:	
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLES WITH THE MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT REQUIREMENTS OF THE ENERGY CODE.	
SIGNED: <i>Brandon R Dillard</i>	
NAME: Brandon R Dillard	
TITLE: Mechanical Engineer P.E.	

OUTSIDE AIR CALCULATIONS BASED ON TABLE 403.3

UNIT TAG	SPACE USAGE	CLASSIFICATION OF AREA SERVED PER TABLE 403.3	AREA (SQ. FT.)	VENTILATION EFFECTIVENESS (Ez)	NO. OF PEOPLE PER SQ. FT. (TABLE 403.3)	PEOPLE QUANTITY (TABLE 403.3)	AIRFLOW PER PERSON (TABLE 403.3)	AIRFLOW PER SQFT. (TABLE 403.3)	OUTSIDE AIR REQUIRED BY AREA SERVED (CFM)	TOTAL OUTSIDE AIR REQUIRED (CFM)	TOTAL OUTSIDE AIR PROVIDED (CFM)	
RTU-1/2	DINING	DINING ROOMS	2200	0.8	70	154	17.5	0.18	1938.8	1939.0	2000	
*FINAL OUTSIDE AIR VALUES TO BE CALCULATED BY UFPIT ENGINEER EQUIPMENT SELECTED BASED ON BRND'S STAFF NOTES										TOTAL	1938.8	1939.0

FAN SCHEDULE

TAG	MANUFACTURER & MODEL NO.	AREA SERVED	CFM	S.P. IN. WG.	FAN TYPE	MIN. RPM	MIN. EXT. S.P. (IN.WG)	MOTOR HP	ELECTRICAL V/PH/Hz	CONTROL METHOD	NOTES
EF-1	GREENHECK / G-060-VG	TOIL. FUTURE W/ RICHMONT	850	0.25	DIRECT	1725	DOWN BLAST	120/1/60	1/6	F	1-12
NOTES:											
1. SCREEN											
2. BACKSTOP DAMPER											
3. GRILLE TO BE SELED BY ARCHITECT											
4. INTEGRAL DISCONNECT SWITCH											
5. PROVIDE L.S. WITH VENTILATION											
6. DUCT SHALL BE U.L. LISTED PER MCA CERTIFIED.											
7. PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION											
8. PROVIDE UNIT WITH INSULATED HOUSING FOR SOUND ATTENUATION											
9. PROVIDE WITH MANUFACTURER'S PAIRED CURB											
10. PROVIDE MOTOR STARTER AS REQUIRED											
11. SPEED CONTROLLER NEAR FAN											
12. ACCEPTABLE EQUALS SHALL BE A.C.M.E., BREIDERT, CARNES, COOK, AND PENN.											
CONTROL METHOD:											
A) W/ ROOM LOC. B) W/ THERMOSTAT C) W/ SWITCH D) CONTINUOUS OPERATION E) W/ CLOCK F) BY UFPIT ENGINEER											

AIR CURTAIN SCHEDULE

TAG	MANUFACTURER & MODEL NO.	LOCATION	LENGTH	MOTOR HP	V/PH	WEIGHT (LB)	NOTES
AC-1	BERNER / GL08-1006A	BACK DOOR	36"	1@1/5	120/1	41	1-4
NOTES:							
1. INTEGRAL DISCONNECT SWITCH							
2. INTEGRAL SPEED CONTROLLER							
3. COORDINATE COLOR WITH ARCHITECT.							
4. CONTROL WITH DOOR SWITCH							

PACKAGED DX COOLING/GAS HEATING ROOF TOP UNIT SCHEDULE

TAG	MANUFACTURER/MODEL NO.	SUPPLY - FAN DATA						COOLING CAPACITY				HEATING CAPACITY				ELECTRICAL DATA				EFF. EER	EFF. SEER	AFUE	UNIT WEIGHT (LBS)	NOTES
		SUPPLY (CFM)	OA (CFM)	MIN. EXT. S.P. (IN.WG)	MOTOR HP	FAN RPM	NORMAL TONNAGE	TOTAL (MBH)	SENS. (MBH)	INPUT (KW)	OUTPUT (KW)	V/PH	MCA (A)	MOCAP (A)	V/PH	MCA (A)	MOCAP (A)							
RTU-1	TRANE / YHC120R3RM	4000	900	1	1750.0	15.0	114.0	84.1	200	180	208/0	45.1	80.0	12.4	15.2	80	1300	1-13						
RTU-2	TRANE / YHC120R3RM	4000	900	1	1750.0	10.0	114.0	94.1	200	180	208/0	45.1	80.0	12.4	15.2	80	1300	1-13						
RTU-3	TRANE / YHC240R3RM	1600	200	1	5	1075.0	4.0	49.9	40.0	60	80	208/0	26	35.0	13.2	15.0	80	800	1-13					

NOTES:

- COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210: 290 AT 95 DEGREE FAHRENHEIT AMBIENT OUTDOOR AIR TEMPERATURE, 80 DEGREE FAHRENHEIT DRY BULB, AND 67 DEGREE FAHRENHEIT WET BULB ENTERING AIR TEMPERATURE. AND NORMAL AIR QUANTITY LISTED.
- PROVIDE NEW FILTER IN EACH UNIT AT TURNOVER TO OWNER.
- PROVIDE MANUFACTURER'S 7-DAY PROGRAMMABLE AUTOMATIC CHANGE-OVER HEAT/COOL THERMOSTAT WITH O2 SENSING. PROGRAM FAN SETTING TO BE IN "ON" POSITION DURING PERIODS OF OCCUPATION.
- PROVIDE FACTORY ROOF CURB AND COMPARATIVE ENTHALPY AIR SIDE ECONOMIZER SECTION WITH BAROMETRIC RELIEF DAMPER FOR EACH UNIT.
- PROVIDE FACTORY INSTALLED DIRTY FILTER SWITCH, BLOWER PROOFING SWITCH, AND WATER LEVEL MONITORING DEVICE PER NMC 307.2.3.1.
- ELECTRICAL CONTRACTOR SHALL PROVIDE SMOKE DETECTORS ON THE RETURN DUCT DISCHARGES TO BE INSTALLED BY MECHANICAL CONTRACTOR. IF BUILDING HAS FIRE ALARM SYSTEM SMOKE DETECTORS SHALL BE BY FIRE ALARM CONTRACTOR.
- PROVIDE 1 YEAR PARTS AND LABOR WARRANTY. PROVIDE 5 YEAR PARTS WARRANTY ON COMPRESSORS. PROVIDE 10 YEAR PARTS WARRANTY ON HEAT EXCHANGERS.
- PROVIDE UNIT WITH THRU-BASE PROVISION AND FACTORY FURNISHED NON-USED DISCONNECT. PRIOR TO ORDERING EQUIPMENT COORDINATE CONSTRUCTION WITH TENANT CONSTRUCTION DOCUMENTS.
- PROVIDE UNIT WITH TOOLLESS ACCESS PANELS. PROVIDE UNITS WITH POWERED EXHAUST.
- HEATING CAPACITY BASED ON NATURAL GAS AT 1000 BTU PER CUBIC FOOT AND 0.8 SPECIFIC GRAVITY. PROVIDE PRESSURE REGULATOR TO REDUCE PRESSURE TO 7" W.C. AS NEEDED.
- MECHANICAL CONTRACTOR SHALL PROVIDE A START UP CHECKLIST CONFIRMING ALL UNITS HAVE BEEN PROPERLY STARTED AND CONFIRMED RUNNING PROPERLY.
- CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF UNIT DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY UNITS. INFORMATION ON ALTERNATE UNITS PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD'DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT UNIT (OR THE ALTERNATE PACKAGE AS A WHOLE).
- ACCEPTABLE ALTERNATE MANUFACTURERS: LENNOX.

Order Plans