ROOF TOP UNIT SCHEDULE

UNIT ID	MFRG	MODEL	AREA SERVED	NOMINAL TONS	SUPPLY FAN						HEATING		COOLING					ELECTRICAL					EER	IEER	SEER	OPERATING WEIGHT
					TOTAL CFM	OUTSIDE AIR	EXT. ΔP	TOT. ΔP	RPM	HP	INPUT KW	OUTPUT KW	TOTAL MBH	SENS. MBH	AMBIENT DB	ENT. DB	ENT. WB	VOLTS	PHASE	FLA	MCA	MOCP				
RTU-1	TRANE	THC072	SALES	6	2160	525	0.39	0.64	670	1	27.0	20.3	67.5	46.9	95.0	79.1	67.0	208	3	75	76	80	12.6	14.5	-	1187

REQUIRED AC UNIT ACCESSORIES

MARK	ROOF CURB	SUPPLY FAN	ECONOMIZER	MOTORIZED DAMPER	MANUAL DAMPER	GRAVITY EXH. (BAROMETRIC)	POWER EXHAUST	THERMOSTAT	TIME OVERRRIDE BUTTON	HUMIDITY SENSOR	FACTORY INST. DISCONNECT	FACTORY INST. WP/GFI REC.	THRU-THE-BASE ELEC. & GAS	FRESH AIR TEMP. KIT	LOW AMBIENT COOLING	FACTORY INST. REHEAT COIL	SMOKE DETECTOR IN RETURN	FLUE EXTENSION KIT	COND. DRAIN PAN OVERFLOW SWITCH
RTU-1	14"	BELT	YES	NO	NO	YES, NOTE 4	NO	NOTE 6	PROVIDE W/ T-STAT	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES, NOTE 8

NOTES:

1. RTU-1 AND ALL ASSOCIATED ACCESSORIES SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
2. RTU'S SHALL BE PROVIDED WITH TWO SETS OF 2" DISPOSABLE FILTERS. ONE SET SHALL BE INSTALLED DURING CONSTRUCTION AND ONE SET SHALL BE INSTALLED BEFORE FINAL AIR BALANCE.
3. EXTERNAL STATIC PRESSURE INCLUDES SUPPLY AND RETURN AIR DUCTWORK. TOTAL STATIC PRESSURE INCLUDES EXTERNAL STATIC PRESSURE, WET COIL, ECONOMIZER, AND GAS HEAT EXCHANGER.
4. AN INTEGRATED ECONOMIZER IS REQUIRED FOR RTU-1 IN THIS PARTICULAR LOCATION. PROVIDE ECONOMIZER WITH DUAL ENTHALPY CONTROL AND BAROMETRIC RELIEF.
5. ANY SUBSTITUTION MUST BE APPROVED BY OWNER PRIOR TO INSTALLATION. PLEASE CONTACT JD HOWARD AT TRANE NATIONAL ACCOUNTS FOR ALL PRICING ON EQUPMENT AT 919-232-5729 OR JDHOWARD@TRANE.COM.
6. PROVIDE WITH COMPATIBLE TRANE PROGRAMMABLE NIGHT SETBACK TOUCHSCREEN THERMOSTAT.
7. RTU-1 SHALL BE PROVIDED WITH FACTORY INSTALLED SMOKE DETECTORS IN THE RETURN SIDE OF THE UNIT.
8. PROVIDE RTU-1 WITH FACTORY OPTION CONDENSATE DRAIN PAN OVERFLOW SWITCH.
9. PROVIDE RTU-1 WITH CONDENSER COIL HAIL GUARD.

FAN SCHEDULE

UNIT ID	MANUFACTURER	MODEL	CFM	TYPE	DRIVE	FAN RPM	S.P. (IN. W.G.)	MOTOR				SERVICE	CONTROLLED BY	NOTES/ACCESSORIES
								H.P.	FLA	VOLTS	PHASE			
EF-1	GREENHECK	SP-880	75	CABINET	DIRECT	900	0.125	-	0.16	115	1	RESTROOM	LIGHT SWITCH	1,2
EF-2	GREENHECK	SP-880	75	CABINET	DIRECT	900	0.125	-	0.16	115	1	RESTROOM	LIGHT SWITCH	1,2
EF-3	S&P	LCE-24	6820	PROPELLER	BELT	840	0.125	0.75	-	115	1	STOCKROOM	WALL SWITCH	1,3,4

NOTES / ACCESSORIES:

1. EQUIVALENT SUBSTITUTES ARE ACCEPTABLE.
2. VENT TO ROOF TOP AND PROVIDE SCREENED CAP.
3. ON/OFF SWITCH AT PANEL BOARD.
4. SUPPLY WITH S&P WALL HOUSING AND MOTORIZED DAMPER. INTERLOCK DAMPER TO OPEN WHEN FAN IS TURNED ON AND CLOSE WHEN FAN IS TURNED OFF.

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

UNIT ID	MANUFACTURER	MODEL	MODULE	NECK	TYPE	STYLE	FRAME TYPE	MATERIAL	OB DAMPER	FINISH	NOTES
A	PRICE	SCDA	24"x24"	PER PLAN	SUPPLY	LOUVERED	LAY-IN	STEEL	YES	WHITE	1,2,3,4
B	PRICE	10	26"x30"	24"x28"	RETURN	PERFORATED	SURFACE	STEEL	YES	WHITE	1,3,4
C	PRICE	SDGE	14"x10"	12"x8"	SUPPLY	DEFLECTION	DUCT	STEEL	YES	WHITE	1,2,3,4
D	PRICE	10	24"x24"	10"x10"	TRANSFER	PERFORATED	LAY-IN	STEEL	NO	WHITE	1,2,4

NOTES:

1. EQUIVALENT SUBSTITUTES ARE ACCEPTABLE.
2. CONTRACTOR SHALL PROVIDE SQUARE TO ROUND TRANSITION FROM DUCT SHOWN ON PLAN TO DIFFUSER AS REQUIRED.
3. PROVIDE OB DAMPER IF BRANCH DUCT IS NOT EQUIPPED WITH BALANCING DAMPER.
4. MOUNTING FRAME TYPE SHALL BE COORDINATED WITH CEILING/WALL CONSTRUCTION TYPE.

ELECTRIC UNIT HEATER SCHEDULE

EQUIP NO.	MFGR.	MODEL	CFM	HEATING (KW)	ELECTRIC					LOCATION
					FLA	MCA	MOCP	V/PH	HP	
UH-1	TRANE	UHEC	1550	40.0 KW	112.5	112.5	150	208/3	1/4	STOCKROOM
UH-2	TRANE	UHEC	1550	40.0 KW	112.5	112.5	150	208/3	1/4	STOCKROOM

NOTES:

1. EQUIVALENT SUBSTITUTES ARE ACCEPTABLE.
2. PROVIDE TWO STAGE WALL MOUNTED UNIT HEATER THERMOSTAT. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL LINE VOLTAGE WIRING FOR LINE VOLTAGE THERMOSTAT PER MANUFACTURERS RECOMMENDATIONS.
3. MOUNT UNIT HEATER WITHIN TRUSS BAYS AS HIGH AS POSSIBLE PER MANUFACTURERS RECOMMENDATIONS.

LOUVER SCHEDULE

UNIT ID	MFGR.	MODEL	FRAME DIMENSIONS	HOLE OPENING	FREE AREA (SF)	WEIGHT
L-1, 2	S&P	ACL36-F	35.5"x35.5"	36"x36"	3.67	38

NOTES / ACCESSORIES:

1. EQUIVALENT SUBSTITUTES ARE ACCEPTABLE.
2. PROVIDE WITH MOTOR KIT MTR-ACL. INTERLOCK WITH EF-3 TO OPEN WHEN EF-3 IS TURNED ON AND TO CLOSE WHEN EF-3 IS TURNED OFF. MOTOR REQUIREMENTS: 120V/1PH AND 2.5W. COORDINATE WITH ELECTRICAL CONTRACTOR.

HVAC SEQUENCE OF OPERATION

BUILDING AIRFLOW:

M.C. SHALL SET THERMOSTAT 'OCCUPIED' AND 'UNOCCUPIED' MODES TO OWNER'S OPERATION SCHEDULE. M.C. SHALL SET ALL THERMOSTATS IN 'AUTO' POSITION

NORMAL OPERATION (OCCUPIED):

THE TEMPERATURE SCHEDULE SET POINTS SHALL BE SPECIFIC FOR EACH RTU AND SHALL BE FIELD ADJUSTABLE.

SPACE TEMPERATURE SET POINTS:
RTU-1 = 74°F COOLING, 70°F HEATING
UH-1, UH-2 = 55°F HEATING

SPACE HUMIDITY SET POINTS:
RTU-1 = 60% RH

RTU-1 COOLING/HEATING SWITCHOVER SHALL BE AUTOMATIC BASED ON THE SPACE DEMAND. OUTSIDE AIR INTAKE ON ECONOMIZERS OR DAMPERS SHALL BE IN MINIMUM OPEN POSITION TO DELIVER CFM'S INDICATED IN AIR BALANCE SCHEDULE ON SHEET [illegible]

ECONOMIZER OPERATION (IF APPLICABLE)

THE RTU'S EQUIPPED WITH ECONOMIZ[illegible] (SEE UNIT [illegible]LE [illegible] SHEET) SHALL UTILIZE "FREE COOLING" AS THE [illegible]ST STAG[illegible] OF [illegible]OLING. [illegible]EN OUTDOOR AIR ENTHALPY IS LOWER THAN [illegible]E MIXE[illegible] A[illegible] ENTHALPY, [illegible] AIR INTAKE DAMPERS SHALL MODULATE F[illegible] MIN. [illegible] MAX. OP[illegible]N PO[illegible]ION AND SPACE RETURN AIR DAMPERS SH[illegible]LATE [illegible]ROM MAX[illegible] TO MIN. RELIEF DAMPERS SHALL BE CONTRO[illegible]ED RES[illegible]CTIVE[illegible] [illegible]GRAL RTU CONTROL. IF THE OUTSIDE AIR ALON[illegible] CANNOT [illegible]TISFY [illegible]ACE COOLING DEMAND, THE COMPRESSORS [illegible]LL [illegible]E ENERGI[illegible] IN STAGES. WHEN OUTDOOR [illegible] ENTHALPY [illegible]IGHER [illegible]N MIXED [illegible] ENTHALPY, OR WHEN THE [illegible] LIMI[illegible] [illegible]SOR [illegible]ATED IN [illegible]HARGE [illegible] REACHES ITS SET POINT (55[illegible] -ADJ.), TH[illegible] [illegible]UTDO[illegible] AIR AND [illegible] AIR DAMPERS SHALL BE SET T[illegible] DELIVER MINIM[illegible].A. C[illegible]s INDICATED IN THE AIR BALANCE SCHEDULE.

N[illegible]T SETBACK OPERATI[illegible] (UNOCC[illegible])

AL[illegible]'S SPACE TEMPER[illegible]URE SET POINTS: 85°F COOLING, 55°F HEATING

ALL R[illegible] EVAPORATO[illegible] FAN, COMPRESSORS AND HEATER SHALL RUN ON DEMAND ONLY. ANY MOT[illegible] [illegible]SIDE AIR DAMPERS SHALL BE IN CLOSED POSITION. M.C. SHALL VERIFY REQUIREMENT FOR AUTOMATIC SETBACK CONTROL WITH LOCAL AUTHORITIES AND COORDINATE WITH EQUIPMENT SUPPLIER.

EMERGENCY OPERATION:

EVAPORATOR FAN ON EACH RTU UNIT SHALL ALSO BE SHUT DOWN BY ITS SMOKE DETECTOR UPON DETECTING SMOKE.

AIR BALANCE SCHEDULE

UNIT	AREA SERVED	SUPPLY AIR	OUTSIDE AIR	RETURN AIR	EXHAUST AIR
RTU-1	SALES	2160 CFM	525 CFM	1635 CFM	-
L-1	STORAGE	-	6820 CFM	-	-
EF-1	RESTROOMS	-	-	-	75 CFM
EF-2	RESTROOMS	-	-	-	75 CFM
EF-3	STORAGE	-	-	-	6820 CFM
	TOTAL:	2160 CFM	7345 CFM	1635 CFM	6970 CFM
	BUILDING PRESSURE	....	375 CFM		POSITIVE

VENTILATION SCHEDULE

SYSTEMS	AREA	VENT./EXHAUST REQ'D.	MIN. REQUIRED VENT. (CFM)	TOTAL MIN. REQUIRED VENT. (CFM)	PROVIDED VENT. (CFM)	MIN. REQUIRED EXHAUST (CFM)	PROVIDED EXHAUST (CFM)
RTU-1	OFFICE	SEE 2015 IMC CALCS	15	518	525	-	-
	RESTROOMS	SEE 2015 IMC CALCS	-			140	150
	SALES	SEE 2015 IMC CALCS	503			-	-
EF/SF/UH	STORAGE	SEE 2015 IMC CALCS	512	512	6,820	-	6,820
	TOTALS		1,030	1,030	7,345	140	6,970

NOTES:

1. VENTILATION RATES PER 2012 NORTH CAROLINA MECHANICAL CODE.
2. OUTSIDE AIR QUANTITIES ARE SHOWN IN AIR BALANCE SCHEDULE.

2015 IMC VENTILATION CALCULATIONS

SALES

* SECTION 403.3.[illegible] - EQUATION 4-1 — Vbz=RpPz+RaAz

Rp= [illegible] CFM/PERSON (TABLE 403.3)
Pz= [illegible] PEOPLE (BASED ON 15 OCCUPANTS/1000 S.F. FROM TABLE 403.1)
Ra= 0.12 CFM/FT² (TABLE 403.3)
Az= 1730 FT²

Vbz= **402** CFM MIN. OUTDOOR AIRFLOW AT THE BREATHING ZONE

* SECTION 403.3.1.3 - EQUATION 4-2 — Voz=Vbz/Ez

Vbz= 402 CFM MIN. OUTDOOR AIRFLOW AT THE BREATHING ZONE
Ez= 0.80 ZONE AIR DISTRIBUTION EFFECTIVENESS (TABLE 403.3.1.2)

Voz= **503** CFM MIN. ZONE OUTDOOR AIRFLOW

OFFICE

* SECTION 403.3.1.1 - EQUATION 4-1 — Vbz=RpPz+RaAz

Rp= 5 CFM/PERSON (TABLE 403.3)
Pz= 1 PEOPLE (BASED ON 5 OCCUPANTS/1000 S.F. FROM TABLE 403.1)
Ra= 0.06 CFM/FT² (TABLE 403.3)
Az= 121 FT²

Vbz= **12** CFM MIN. OUTDOOR AIRFLOW AT THE BREATHING ZONE

* SECTION 403.3.1.3 - EQUATION 4-2 — Voz=Vbz/Ez

Vbz= 12 CFM MIN. OUTDOOR AIRFLOW AT THE BREATHING ZONE
Ez= 0.80 ZONE AIR DISTRIBUTION EFFECTIVENESS (TABLE 403.3.1.2)

Voz= **15** CFM MIN. ZONE OUTDOOR AIRFLOW

STORAGE

* SECTION 403.3.1.1 - EQUATION 4-1 — Vbz=RpPz+RaAz

Rp= 0 CFM/PERSON (TABLE 403.3)
Pz= 0 PEOPLE
Ra= 0.12 CFM/FT² (TABLE 403.3)
Az= 3410 FT²

Vbz= **409** CFM MIN. OUTDOOR AIRFLOW AT THE BREATHING ZONE

* SECTION 403.3.1.3 - EQUATION 4-2 — Voz=Vbz/Ez

Vbz= 409 CFM MIN. OUTDOOR AIRFLOW AT THE BREATHING ZONE
Ez= 0.80 ZONE AIR DISTRIBUTION EFFECTIVENESS (TABLE 403.3.1.2)

Voz= **512** CFM MIN. ZONE OUTDOOR AIRFLOW

2015 IMC EXHAUST CALCULATIONS

RESTROOMS

70 CFM/UNIT (TABLE 403.3)
2 UNITS

EXHAUST RATE= **140** CFM MIN. REQUIRED EXHAUST RATE

GENERAL NOTES

GENERAL CONSTRUCTION

1. ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL INSTALL SYSTEMS, EQUIPMENT AND COMPONENTS IN ACCORDANCE WITH MINIMUM REQUIREMENTS SHOWN IN THESE PLANS. ANY DEVIATION FROM THE DESIGN PLANS SHALL ONLY BE PERFORMED IF APPROVED BY THE OWNER REPRESENTATIVE OR DESIGN ENGINEER. ALL WORK SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF ALL APPLICABLE CODES AND STANDARDS. HOWEVER, ANY DEVIATION FROM THE DESIGN PLANS IMPLIED BY LOCAL CODES THAT SUGGESTS INSTALLATION OF LESS THAN THE REQUIREMENTS SPECIFIED IN THESE DESIGN PLANS SHALL NOT BE ALLOWED WITHOUT APPROVAL BY THE OWNER REPRESENTATIVE OR TH[illegible] DESIGN ENGINEER.
2. THE GENERAL CONTRACTOR SHALL PROVIDE ALL ROOF OPENINGS. THE G.C. SHALL VERIFY [illegible]ES AND LOCATIONS IN THE FIELD BEFORE ROOFING IS INSTALLED.

HVAC SYSTEMS & UNITS

3. THE RTU, ACCESSORIES, FILTERS, ALL DUCT, SUPPLY D[illegible]FUSERS, REGISTE[illegible] [illegible]TURN GRILLES, FANS, AND LOUVERS, ARE FURNISHED AND INSTALLED [illegible] THE MECHA[illegible]CAL [illegible]ACTOR UNLESS OTHERWISE NOTED ON PLANS. THE MECHANICA[illegible] [illegible]ONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AS REQUIRED PER PLAN INS[illegible]TIONS.
4. THE MECHANICAL CONTRACTOR SHALL [illegible]OVIDE AN OPERATION AND MAINTENANCE MANUAL AND COMPLETE AS-BUILT DRAWING[illegible] TO [illegible]E BUILDING OW[illegible] UPON COMPLETION OF THE JOB. THE MANUAL SHALL IN[illegible] BASIC [illegible]TA RELATIN[illegible] TO T[illegible] OPERATION AND MAINTENANCE OF NEW [illegible]VAC SYSTEMS [illegible] [illegible]PMENT [illegible] WELL AS [illegible]AMES AND ADDRESSES OF QUALIFIED SERVICE AGENCIES. [illegible]RED RO[illegible]E MA[illegible]CTIONS SHALL BE CLEARLY IDENTIFIED. HVAC CONTROL [illegible]MS, SCH[illegible]TICS, [illegible] SEQUENCE DESCRIPTIONS, AND CALIBRATION INF[illegible]MATION [illegible]L BE IN[illegible]ED. DESIRED OR FIELD DETERMINED SET POINTS MUST BE P[illegible]NENTLY [illegible]RDED ON [illegible]ROL DRAWINGS, AT CONTROL DEVICES, OR FOR DIGITAL CON[illegible] SYSTEM[illegible] [illegible]N PROG[illegible]MMING COMMENTS. THE MANUAL SHALL INCLUDE A COPY OF THE CONTR[illegible] SYSTEMS [illegible]TING REPORT AND A COPY OF THE AIR BALANCE REPORT.
5. THE MECH[illegible] CONTRACTOR SHALL INSTALL EQUIPMENT AND ALL ACCESSORIES IN ACCORDA[illegible] WITH INSTALLATION INSTRUCTIONS FURNISHED WITH THE EQUIPMENT, INCLUDING BU[illegible] NOT LIMITED TO:
   - ALL EXTERNAL DUCT WORK.
   - REMOVE ALL SHIPPING TIE-DOWN AND SHIPPING BLOCKS.
   - INSTALL ALL BLOWER BELTS AND ACCESSORIES.
   - INSTALL ALL EXTERNAL CONTROLLING DEVICES, SUCH AS THERMOSTATS AND DUCT SENSORS.
   - POWER, CONTROL WIRING AND FUEL PIPING TO BE PERMANENTLY INSTALLED AND CONNECTED TO THE EQUIPMENT.
   - ALL SPLIT SYSTEMS MUST BE PIPED AND CHARGED COMPLETELY (WHERE APPLICABLE).
   - ALL COMPRESSORS WHICH UTILIZE CRANKCASE HEATERS MUST HAVE HEATER ENERGIZED FOR 24 HOURS BEFORE STARTING EQUIPMENT.
   - COMPLETE START-UP, TEST AND RUN OF ALL UNITS AT LEAST 24 HOURS PRIOR TO THE E.O.C.
   - ALL FILTERS MUST BE INSTALLED AND CLEAN.
   - CHECK THAT ALL NEW RTU'S HAVE BEEN NUMBERED IN THE FIELD AS SHOWN ON PLANS (I.E. RTU#1, RTU#2 ETC.).
6. THE MECHANICAL CONTRACTOR SHALL NOT SCALE THE DRAWINGS FOR RTU AND FAN SIZES. THE MECHANICAL CONTRACTOR SHALL OBTAIN THE LATEST SHOP DRAWINGS FROM THE MANUFACTURER FOR EACH PIECE OF EQUIPMENT AND USE IT FOR ACTUAL DIMENSIONS.

DUCT INSTALLATION, GRILLES/DIFFUSERS AND AIR BALANCE

7. DUCTWORK LAYOUTS ARE ACTUAL. ALL RISES, DROPS, AND OFFSETS REQUIRED (EVEN IF NOT SHOWN) SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER. DUCTWORK DIMENSIONS ARE INSIDE "CLEAR" DIMENSIONS AND DO NOT INCLUDE INSULATION. WHERE STRUCTURAL OBSTRUCTIONS ARE ENCOUNTERED, DUCT DIMENSIONS MAY BE CHANGED TO PROVIDE DUCTS OF EQUAL AREAS WITH ASPECT RATIOS NO GREATER THAN 4 TO 1. IF THE ABOVE CRITERIA CAN NOT BE MET, THE CONTRACTOR OR OWNER'S REPRESENTATIVE SHOULD CONTACT THE ENGINEER TO WORK OUT AN ACCEPTABLE SOLUTION.
8. DUCTWORK SHALL HAVE RIGHT-OF-WAY OVER ALL PLUMBING PIPES AND ELECTRICAL CONDUIT ETC. DO NOT RELOCATE DUCTWORK BY BUILDING OFFSETS UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE AND THE ENGINEER. MECHANICAL CONTRACTOR SHALL FIELD MEASURE ALL CONDITIONS AND BE RESPONSIBLE FOR COORDINATION AND FIT. DO NOT SCALE DUCTWORK SIZES ON DRAWINGS.
9. THE MECHANICAL CONTRACTOR SHALL INSTALL G.C. PROVIDED RTU DUCTWORK SYSTEM MADE OF GALVANIZED SHEET METAL (RECTANGULAR AND/OR ROUND). ALL SHEET METAL DUCTWORK SHALL BE PER "SMACNA" STANDARDS. ALL FLEX DUCT SHALL BE INSULATED AND UL 181 LISTED CLASS I. METAL GAUGES, FITTINGS AND INSTALLATION SHALL BE PER SMACNA LATEST EDITION OF "HVAC METAL DUCT STANDARDS". KEEP A COPY OF THE "SMACNA" STANDARDS ON THE JOBSITE. ESPECIALLY REFER TO THE "SMACNA" STANDARDS FOR ELBOWS AND FITTINGS. SUPPORT DUCTS FROM THE STRUCTURE WITH STRAPS AT EACH JOINT PER "SMACNA" STANDARDS. ALSO REFER TO DETAILS AND SECTIONS IN THIS SET OF DRAWINGS WHICH TAKE PRECEDENCE.
10. INSTALL TURNING VANES IN SUPPLY DUCTWORK AT ALL SQUARE ELBOWS. PROVIDE BALANCING DAMPERS IN ALL DUCTS WHERE REQUIRED FOR SYSTEM BALANCING AND AT EACH AIR OUTLET OR DIFFUSER. DIFFUSERS SHALL BE INSTALLED WITH CONTRACTOR SUPPLIED SQUARE TO ROUND TRANSITION WHERE REQUIRED.
11. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK SHALL BE SECURELY SEALED USING WELDMENTS, MECHANICAL FASTENERS WITH SEALS, GASKETS OR MASTICS OR PRESSURE SENSITIVE TAPES. DUCTS SHALL BE CONNECTED TO FANS AND AIR DEVICES USING MECHANICAL FASTENERS WITH SEALS, MASTICS OR GASKETS. TAPES AND MASTICS MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B.
12. ALL RTU'S METAL SUPPLY AND RETURN AIR DUCTS SHALL BE THERMALLY INSULATED WITH R-6.0 (MIN.) EXTERNAL DUCTWRAP WITH VAPOR BARRIER (EXCEPT IF OTHERWISE NOTED ON DRAWINGS). NO THERMAL INSULATION IS REQUIRED ON EXHAUST DUCTS.
13. APPLY INSULATION ON RIGID METAL DUCTWORK PER MANUFACTURER SPECIFICATIONS WITH 2" (MIN.) OVERLAPPING FASTENED 6" O.C. WITH 1/2" (MIN.) STAPLES. SEAL ALL JOINTS WITH PRESSURE SENSITIVE FOIL TAPE. INSULATION ON DUCTS OVER 24" WIDE, SHALL BE SECURED TO THE BOTTOM OF DUCT TO PREVENT SAGGING. EXTERNAL INSULATION IS REQUIRED ON ALL CONCEALED DUCT, INTERNAL INSULATION IS NOT ACCEPTABLE.
14. THE MECHANICAL CONTRACTOR SHALL BALANCE BUILDING HVAC AIR FLOW AS SHOWN ON PLANS. THE MECHANICAL CONTRACTOR SHALL ADJUST AIR CFM AND FLOW PATTERNS AS INDICATED ON PLAN, SCHEDULES AND NOTES. HVAC SYSTEM COMMISSIONING SHALL BE PERFORMED BY N.E.B.B. CERTIFIED BALANCING AGENCY SERVING AS A BALANCING CONTRACTOR (B.C.). B.C. SHALL BE RESPONSIBLE FOR FINAL ADJUSTMENTS AND ENSURING AN OVERALL POSITIVE BUILDING PRESSURE WITH ALL EXHAUST, M.U. AIR FANS AND RTU EVAPORATOR FANS OPERATING. THE POSITIVE BUILDING AIR FLOW REQUIREMENT MUST NOT BE REDUCED. ADJUST EXISTING RTU OUTSIDE AIR QUANTITIES AS REQUIRED TO PROVIDE MIN. POSITIVE PRESSURE AS INDICATED.
15. ALL DIFFUSERS SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH VAPOR BARRIER PERMANENTLY ATTACHED TO THE DIFFUSER. DIFFUSERS SHALL BE INSTALLED WITH CONTRACTOR SUPPLIED SQUARE TO ROUND TRANSITIONS WHERE REQUIRED.

POWER & WIRING

16. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED (POWER) FIELD WIRING FOR PROPER OPERATION OF ALL MECHANICAL SYSTEMS.

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DRAWING: MECHANICAL SCHEDULES AND NOTES

Revisions

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