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WILMINGTON CHRISTIAN ACADEMY
1401 NORTH COLLEGE ROAD
WILMINGTON, NC

INITIAL DATE: 2/01/01
COMPLETED: 2/16/01
DRAWN BY: [Signature]
CHECKED BY: [Signature]

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DRAWING: MECHANICAL SCHEDULES
SHEET: M2
OF: TWO

WILMINGTON CHRISTIAN ACADEMY
1700 MECHANICAL SPECIFICATIONS

- 1701 GENERAL
- CODES, REGULATIONS AND STANDARD INSTALLATION ARE TO COMPLY WITH THE LATEST EDITION OF THE NORTH CAROLINA STATE BUILDING CODE, VOLUME I AND VOLUME X, NFPA 90A, AND ALL OTHER APPLICABLE LOCAL AND NATIONAL CODES. IN THE CASE OF CONFLICT BETWEEN VARIOUS CODES, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENCE.
 - FEES AND PERMITS: PROVIDE ALL LICENSES, FEES, PERMITS, INSURANCE, ETC., REQUIRED FOR THE EXECUTION OF THIS WORK.
 - THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL MATERIALS, PERFORM ALL WORK AND TEST AND PAY ALL FEES NECESSARY TO MAKE THE HEATING, AIR CONDITIONING AND VENTING SYSTEM OPERABLE AND READY FOR USE BY THE OWNER.
 - GUARANTEE: ALL EQUIPMENT, MATERIALS AND INSTALLATION SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF WORK OR IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD GUARANTEE. IF LONGER, ALL COMPRESSORS SHALL HAVE A FIVE (5) YEAR GUARANTEE STARTING AFTER FINAL ACCEPTANCE OF WORK.
 - IT IS UNDERSTOOD AND AGREED THAT THESE PLANS AND SPECIFICATIONS SHALL BE FULFILLED IN THEIR TRUE SPIRIT AND INTENT SO THAT ANY MINOR MATERIALS OR DEVICES ESSENTIAL TO PROPER AND CONVENIENT OPERATION, REQUIRED OR IMPLIED, SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR WITHOUT EXTRA CHARGE, EVEN THOUGH NOT SPECIFICALLY CALLED FOR.
 - INSTALLATION SHALL COMPLY WITH OSHA STANDARDS.
 - IN CASE OF CONFLICT BETWEEN THE PLANS OR IN THE SPECIFICATIONS, THEN THE MOST RESTRICTIVE INFORMATION PRESENTED ON THE PLANS OR IN THE SPECIFICATIONS, SHALL TAKE PRECEDENCE.
 - THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THIS OWN CLEAN UP AND REMOVAL OF SCRAP FROM THE JOB SITE. THE MECHANICAL CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE WORK AREA.
 - DIVISION 1 SHALL BECOME A PART OF THESE SPECIFICATIONS BY REFERENCE.
- 1702 SCOPE
- WORK SHALL INCLUDE BUT NOT BE LIMITED TO:
- PROVIDE AND INSTALL ROOF TOP PACKAGE HEAT PUMPS, DUCT AND REGISTERS.
 - PROVIDE AND INSTALL SPLIT SYSTEM HEAT PUMP SYSTEM, DUCT AND REGISTERS.
 - PROVIDE AND INSTALL VENT FANS AND DUCT.
 - PROVIDE AND INSTALL ALL CONTROLS AND DUCT DETECTORS.
 - PROVIDE ALL INCIDENTAL MATERIALS AND EQUIPMENT FOR A COMPLETE AND FUNCTIONING HVAC SYSTEM.
- 1703 MATERIALS
- AIR CONDITIONING DUCT SHALL BE:
 - HEATING AND COOLING MAIN SUPPLY AND RETURN DUCT SHALL BE GALVANIZED SHEET METAL WITH DUCT LINER, UL LABELED FOR CLASS I AIR DUCT MEETING NFPA 90 FLAME SPREAD AND SMOKE GENERATION REQUIREMENTS. DUCT INSULATION SHALL COMPLY WITH ALL VOLUME X REQUIREMENTS AND HAVE AN R-VALUE OF 5.0 MINIMUM. DUCT LINER SHALL BE NOT LESS THAN 1/4" THICK (UNLESS SPECIFICALLY CALLED FOR ON THE PLANS). INSULATION SHALL MEET ALL CODE REQUIREMENTS. DUCTBOARD OR SHEET METAL DUCT WITH 2" MINIMUM OF FOIL BACKED FIBERGLASS INSULATION MEETING THE ABOVE REQUIREMENTS SHALL BE ALLOWED. DUCTBOARD THICKNESS SHALL BE 1 1/2" MINIMUM.
 - FLEX RUNOUTS SHALL BE FLEX DUCT BY ATCO OR EQUAL AND SHALL BE UL LABELED FOR CLASS I AIR DUCT MEETING NFPA 90 FLAME SPREAD AND SMOKE GENERATION REQUIREMENTS. MAXIMUM LENGTH SHALL BE 10'-0".
 - RIGID RUN OUTS SHALL BE GALVANIZED SHEET METAL WITH 2" MINIMUM FIBERGLASS WRAP WITH FOIL BACKING.
 - PROVIDE SINGLE THICKNESS TURNING VANES IN MAIN SUPPLY AND RETURN DUCT AT TEES AND 90° ELBS.
 - FRESH AIR MAKE-UP SHALL BE CLASS I DUCT WITH 2" MINIMUM OF EXTERIOR INSULATION.
 - VENT DUCT SHALL BE 26 GA. MINIMUM GALVANIZED SHEET METAL WITHOUT INSULATION.
 - THERMOSTAT CABLE SHALL BE UL APPROVED FOR THE APPLICATION.
 - CONDENSATE PIPE SHALL BE 1" PVC WITH 1/2" ARMAFLEX TYPE INSULATION FOR INTERIOR RUNS.
 - ALL RUNOUT SUPPLY DUCTS SHALL HAVE BALANCING DAMPERS.
 - REFRIGERATION TUBING SHALL BE SIZED AND INSULATED AS PER MANUFACTURER'S RECOMMENDATIONS AND STATE BUILDING CODE REQUIREMENTS.
 - ALL SUPPLY AND RETURN GRILLES SHALL HAVE FULLY INSULATED BACK UNLESS NOTED OTHERWISE.
- 1704 EXECUTION
- ALL HOLES SHALL BE DRILLED OR CUT, DO NOT BREAK HOLES.
 - THE MECHANICAL CONTRACTOR SHALL DO ALL CUTTING, PATCHING, AND PAINTING NECESSARY TO INSTALL ALL EQUIPMENT AS REQUIRED UNDER THIS CONTRACT, AND SHALL ESTABLISH ALL FINISHES WHEN CUTTING AND PATCHING OCCUR TO THEIR ORIGINAL CONDITION. QUALIFIED WORKERS SHALL DO ALL CUTTING AND PATCHING WORK (I.E. DRY WALL CUTTING AND PATCHING SHALL BE DONE BY QUALIFIED DRY WALL CRAFTSMEN).
 - CONTRACTOR SHALL BALANCE THE AIR CONDITIONING SYSTEM AS SHOWN ON THE PLANS WITHIN 10% OF THE NUMBER SHOWN. CONTRACTOR SHALL SUBMIT A BALANCING REPORT SHOWING THE ACTUAL CFM READINGS OF ALL SUPPLY REGISTERS TO THE ARCHITECT AT THE COMPLETION OF THE PROJECT. REFER TO THE INSIDE DIMENSIONS OF FREE AIR SPACE FOR SIZING DUCT.
 - CONTRACTOR SHALL SUPPLY ALL HANGERS AND SUPPORTS NECESSARY TO SUSPEND DUCT WORK AND EQUIPMENT AS PER GOOD INSTALLATION PRACTICE.
 - ALL DUCT SHALL BE CONSTRUCTED, SUPPORTED AND REINFORCED PER SMACNA STANDARDS.
 - MECHANICAL CONTRACTOR SHALL PROVIDE ALL THERMOSTATS, CONTROL, RELAY, STARTERS ETC., FOR A COMPLETE CONTROL SYSTEM FOR THE HEAT PUMP UNITS.
 - MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR PENETRATIONS AND PATCHING.
 - MECHANICAL CONTRACTOR SHALL PROVIDE ALL DUCT DETECTORS AND COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR AHJ SHUTDOWN CONNECTIONS AND SIGNAL CONNECTIONS FOR THE DUCT DETECTORS. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL CODE REQUIRED SHUTDOWN SWITCHES.
 - PROVIDE ACCESS DOOR TO ALL DUCT DETECTORS.
 - MECHANICAL CONTRACTOR SHALL PROVIDE CONDENSATE PUMPS WHERE GRAVITY DRAINAGE OF CONDENSATE IS NOT POSSIBLE WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
 - INSTALLATION SHALL COMPLY WITH ALL N.C. STATE BUILDING CODE, VOLUME X, REQUIREMENTS.
 - ALL REFRIGERATION PIPING AND CONDENSATE PIPING SHALL BE PROPERLY SUPPORTED AS PER MANUFACTURER'S RECOMMENDATIONS, N.C. BUILDING CODE, AND GOOD PIPING PRACTICES. PROPER DRAINAGE OF CONDENSATE LINES SHALL BE MAINTAINED.
 - ALL MATERIALS AND EQUIPMENT SHALL BE PROPERLY INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND GOOD PRACTICE.
 - THERE WILL BE MINIMUM 10' CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND ALL BUILDING EXHAUSTS AND PLUMBING VENTS.
- 1705 ELECTRICAL CONNECTIONS
- ELECTRICAL CIRCUIT SIZES AND NUMBER ARE BASED ON THE MANUFACTURER OF THE EQUIPMENT SPECIFIED, AND IT SHALL BE THE RESPONSIBILITY OF THE HEATING AND AIR CONDITIONING CONTRACTOR TO CHANGE ANY AND ALL ELECTRICAL WORK IN ORDER TO FIT EQUIPMENT OTHER THAN THAT SPECIFIED. THE HEATING AND AIR CONDITIONING CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR AND THE OWNER TO ASSURE THAT ALL UNITS ARE PROPERLY CONNECTED AND SHALL CHECK THE WIRING PRIOR TO STARTING UNITS. TERMINATION OF ELECTRICAL POWER WILL BE AS FOLLOWS:
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND CONNECT ALL POWER TO THE MECHANICAL EQUIPMENT.
 - MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL THE CONTROL AND THERMOSTAT SYSTEMS FOR THE HEATING, AIR CONDITIONING SYSTEMS.
 - MECHANICAL CONTRACTOR SHALL PROVIDE THE EMERGENCY SHUTDOWN CONTROLS AND COORDINATE WITH THE ELECTRICAL CONTRACTOR ON DUCT DETECTOR INSTALLATION AND AIR HANDLING UNIT SHUTDOWN.
 - MECHANICAL CONTRACTOR SHALL PROVIDE ANY REQUIRED ELECTRICAL CONNECTIONS FOR CONDENSATE PUMPS WITHOUT ADDITIONAL COST TO THE OWNER.
- 1706 TESTS
- ALL HEATING COOLING AND VENTILATION EQUIPMENT, UPON COMPLETION, SHALL BE TESTED FOR AT LEAST ONE (1) DAY AND SHALL BE SHOWN TO BE IN SATISFACTORY CONDITION ON BOTH HEATING AND COOLING.
 - CONTRACTOR SHALL SUPPLY ALL NECESSARY LABOR AND EQUIPMENT FOR THE TEST.
- 1707 SUBSTITUTION
- ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE SHOWN OR SPECIFIED AND SHALL BE OF THE VERY BEST QUALITY AS SPECIFIED.
- REQUESTS TO SUBSTITUTE OTHER MATERIALS OR PRODUCTS FOR THOSE SPECIFIED SHALL BE SENT IN WRITING TO THE OWNER. REQUESTS SHALL BE ACCOMPANIED BY ENGINEERING DATA, SPECIFICATION SHEETS, ETC., AS NECESSARY TO FULLY IDENTIFY AND APPRAISE THE PRODUCTS.
- APPROVAL OF EQUIPMENT WILL NOT RELIEVE THE CONTRACTOR OF NONCOMPLIANCE WITH THE SPECIFICATIONS EVEN IF SUCH APPROVAL IS MADE IN WRITING, UNLESS THE ENGINEER IS CALLED TO THE NONCONFORMING FEATURES BY LETTER ACCOMPANYING THE SUBMITTAL DATA.
- 1708 VISIT TO SITE
- ALL BIDDERS ON THIS WORK SHALL VISIT THE SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS BEFORE SUBMITTING THEIR BIDS. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.
- 1709 SHOP DRAWINGS
- AS SOON AS POSSIBLE (AND NOT MORE THAN 30 DAYS) AFTER CONTRACT IS SIGNED, THE CONTRACTOR SHALL SUBMIT FIVE (5) COPIES OF SHOP DRAWINGS OF HEAT PUMPS, REGISTERS, FANS, ANY SPECIAL EQUIPMENT WHICH HE INTENDS TO USE. FOUR (4) COPIES OF THIS DATA WILL BE RETURNED BY THE ENGINEER WHO WILL INDICATE APPROVAL OR OTHERWISE.
- 1710 FIRE RATED WALLS, FLOORS & CEILINGS
- CONTRACTOR SHALL DETERMINE LOCATION OF ALL FIRE AND SMOKE RATED WALLS, FLOORS AND CEILINGS FROM ARCHITECTURAL DRAWINGS. PIPING PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE AS REQUIRED BY N.C. BUILDING CODE, WITH APPROVED AND APPROPRIATELY RATED UL FIRESTOP SYSTEMS AT ALL PENETRATIONS. ALL DUCT PENETRATIONS SHALL BE PROPERLY PROTECTED WITH RADIATION OR FIRE DAMPERS WITH ALL INSTALLATION STRICTLY AS PER MANUFACTURER'S RECOMMENDATIONS.
- 1711 PLACING IN SERVICE
- UPON COMPLETION OF THE ENTIRE SYSTEM, THE MECHANICAL CONTRACTOR SHALL INSTALL NEW AIR FILTERS AND LEAVE ENTIRE SYSTEM CLEAN AND READY FOR OPERATION.
- THE MECHANICAL CONTRACTOR SHALL DEMONSTRATE THE PROPER FUNCTION OF THE ENTIRE SYSTEM. THE MECHANICAL CONTRACTOR SHALL ACQUAINT THE OWNERS REPRESENTATIVE WITH THE PROPER OPERATION OF THE ENTIRE SYSTEM.

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE							AIR HANDLER																
SYMBOL	COOLING CAP	ELECTRIC				MANUF.	MODEL	SYMBOL	TYPE	ELECTRIC				STAGES		MANUF.	MODEL	FAN CFM	FRESH AIR INTAKE (CFM)	ESP (IN OF H2O)	SEER HSPF	DUCT DETECTOR	REMARKS
		VOLT	PHASE	MCA	FUSE					STRIP (kW)	VOLT	PHASE	FUSE	HEAT	COOL								
AHU-1	3	240	1	25	40	TRANE	TWR-036	AHU-1	HORZ	7.68	240	1	45	1	1	TRANE	TWE-036	1200	120	.5	10.0 6.8	YES	-

- NOTES A/C UNITS:
- PROVIDE GALVANIZED DRIP PANS AT EACH UNIT WITH PAN DRAINS TO OUTSIDE BUILDING.
 - PROVIDE EMERGENCY SHUT-OFF SWITCH AT EACH THERMOSTAT PER STATE CODE.
 - INCLUDE AUTOMATIC CROSSOVER THERMOSTAT SET AT 5'-0" AFF. PROVIDE PROGRAMMABLE THERMOSTATS. PROVIDE LOCKABLE COVER.
 - ALL CODE REQUIRED DUCT DETECTORS SHALL BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO INSURE THAT THE DUCT DETECTOR WILL BE COMPATIBLE WITH AND WILL CONNECT TO THE FIRE ALARM SYSTEM. PROVIDE ALL DOORS FOR THE DUCT DETECTORS.
 - PROVIDE CONCRETE PAD FOR COMPRESSORS.
 - ALL INTAKE DUCTS SHALL HAVE ALUMINUM WEATHER CAPS, TO PREVENT THE INTAKE OF RAIN. INTAKE DEVICE SHALL BE APPROVED BY THE ENGINEER. PAINT INTAKE THE SAME COLOR AS THE ROOF.
 - CONTRACTOR SHALL BALANCE SYSTEM. CONTRACTOR SHALL PRESENT BALANCING REPORT TO ARCHITECT AT FINAL INSPECTION.
 - CONTRACTOR SHALL CONSTRUCT FILTER HOUSING AND PROVIDE FILTERS AT EACH AHU. FILTER SHALL BE SIZED PER MFG. RECOMMENDATIONS.
 - PROVIDE FRENCH DRAINS PER N.C. STATE CODE VOL. 111 FOR CONDENSATE DISCHARGE.
 - PROVIDE MANUFACTURER RECOMMENDED CLEARANCES AROUND ALL INDOOR AND OUTDOOR UNITS.
 - CONSULT WITH COMPRESSOR MANUFACTURER FOR THE CORRECT SIZING OF REFRIGERANT LINES.
 - PROVIDE LOW AMBIENT CONTROLS FOR FREEZE PROTECTION.
 - PROVIDE OUTSIDE THERMOSTAT TO CONTROL TEMPERATURE AT WHICH AUXILIARY ELECTRIC HEAT SHALL BE ALLOWED TO COME ON.

PACKAGE HEAT PUMP SCHEDULE																				
SYMBOL	COOLING CAP (TONS)	CFM	ELECTRIC				AUXILIARY HEAT	STAGES	DIRECTION	MANUF.	MODEL	EER	SEER	FRESH AIR INTAKE (CFM)	ESP (IN OF H2O)	COP	HSPF	DUCT DETECTOR	REMARKS	
			VOLT	PHASE	MCA	BREAKER														
RTU-1	12.5	5000	2	480	3	59	60	18	1	DOWNFLOW	TRANE	WCD150	9.1	-	750	1.0	2.01/3.0	-	YES	-
RTU-2	15	5250	2	480	3	91	100	36	2	DOWNFLOW	TRANE	WCD180	9.0	-	750	1.0	2.01/3.0	-	YES	-
RTU-3	10	3500	2	480	3	57	60	18	1	DOWNFLOW	TRANE	WCD120	9.2	-	500	1.0	2.02/3.04	-	YES	-
RTU-4	10	3500	2	480	3	57	60	18	1	DOWNFLOW	TRANE	WCD120	9.2	-	500	1.0	2.02/3.04	-	YES	-
RTU-5	3	1200	1	480	3	18.8	20	6.0	1	DOWNFLOW	TRANE	WCD036	-	10.5	50	.67	-	6.8	YES	-

- NOTES A/C UNITS:
- PROVIDE EMERGENCY SHUT-OFF SWITCH AT EACH THERMOSTAT PER STATE CODE.
 - INCLUDE AUTOMATIC CROSSOVER THERMOSTAT SET AT 5'-0" AFF. PROVIDE PROGRAMMABLE THERMOSTATS. PROVIDE LOCKABLE COVER.
 - ALL CODE REQUIRED DUCT DETECTORS SHALL BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO INSURE THAT THE DUCT DETECTOR WILL BE COMPATIBLE WITH AND WILL CONNECT TO THE FIRE ALARM SYSTEM. PROVIDE ALL DOORS FOR THE DUCT DETECTORS.
 - PROVIDE CURBS FOR ROOF MOUNTED PACKAGE UNIT.
 - CONTRACTOR SHALL BALANCE SYSTEM. CONTRACTOR SHALL PRESENT BALANCING REPORT TO ARCHITECT AT FINAL INSPECTION.
 - CONTRACTOR SHALL PROVIDE FILTERS AT EACH ROOF TOP UNIT. FILTER SHALL BE SIZED PER MFG. RECOMMENDATIONS.
 - PROVIDE FRENCH DRAINS PER N.C. STATE CODE VOL. 111 FOR CONDENSATE DISCHARGE.
 - PROVIDE MANUFACTURER RECOMMENDED CLEARANCES AROUND ALL UNITS.
 - PROVIDE LOW AMBIENT CONTROLS FOR FREEZE PROTECTION.
 - PROVIDE OUTSIDE THERMOSTAT TO CONTROL TEMPERATURE AT WHICH AUXILIARY ELECTRIC HEAT SHALL BE ALLOWED TO COME ON.
 - PROVIDE HUMIDITY CONTROL PACKAGE FOR UNITS RTU-2, RTU-3 AND RTU-4.

REGISTER SCHEDULE									
SYMBOL	DESCRIPTION	NECK	RUN OUT	DAMPER AT REGISTER	MAT'L	COLOR	MFG.	MODEL	REMARKS
A	2' x 2' LAY-IN DIFFUSER	6"φ	6"φ	YES	STEEL	WHITE	PRICE	SCD	-
B	2' x 2' LAY-IN DIFFUSER	6"φ	7"φ	YES	STEEL	WHITE	PRICE	SCD	-
C	2' x 2' LAY-IN DIFFUSER	6"φ	8"φ	YES	STEEL	WHITE	PRICE	SCD	-
D	2' x 2' LAY-IN DIFFUSER	10"φ	10"φ	YES	STEEL	WHITE	PRICE	SCD	-
E	2' x 2' LAY-IN DIFFUSER	12"φ	12"φ	YES	STEEL	WHITE	PRICE	SCD	-
F	2' x 2' LAY-IN DIFFUSER	12"φ	12"φ	YES	STEEL	WHITE	PRICE	SCDA	-
G	2' x 2' LAY-IN DIFFUSER	15"φ	14"φ	YES	STEEL	WHITE	PRICE	SCDA	-
H	2' x 2' LAY-IN DIFFUSER	15"φ	16"φ	YES	STEEL	WHITE	PRICE	SCDA	-
I	CEILING	10"x4"	6"φ	YES	STEEL	WHITE	PRICE	520	-
J	SIDEWALL DIFFUSER	10"x6"	-	YES	STEEL	WHITE	PRICE	520	-
K	SURFACE CEILING	8"φ	8"φ	YES	STEEL	WHITE	PRICE	SCD	12"x12" FACE
RA	2' x 2' LAY-IN RETURN	22"x22"	-	NO	STEEL	WHITE	PRICE	535	-
RB	SIDE WALL	20"x20"	-	NO	STEEL	WHITE	PRICE	535FF	FILTER GRILLE

FAN SCHEDULE											
SYMBOL	DESCRIPTION	CFM	SP	VOLT	PHASE	HP	AMPS	MOUNTING	MANUFACTURER	MODEL	REMARKS
F-1	JANITOR VENT	98	0.25	110	1	-	1.14	CEILING	GREENHECK	SP-7	-
F-2	BATH VENT	257	0.25	110	1	-	.72	CEILING	GREENHECK	SP-226	-

- NOTES:
- BACKDRAFT DAMPER.
 - INDIVIDUAL SWITCH.

VOLUME - X COMPLIANCE SCHEDULE - MECHANICAL

METHOD OF COMPLIANCE	PRESCRIPTIVE
ENERGY COST BUDGET	
THERMAL ZONE	II
EXTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	22° F
SUMMER DRY BULB	88° F
INTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	70° F
SUMMER DRY BULB	75° F
RELATIVE HUMIDITY	50%
BUILDING HEATING LOAD	246, 208 BTUH
BUILDING COOLING LOAD	609, 480 BTUH
MECHANICAL SPACING CONDITIONING SYSTEM	
UNITARY	
DESCRIPTION OF UNIT -	
HEATING EFFICIENCY -	SEE EQUIPMENT SCHEDULE
COOLING EFFICIENCY -	
HEAT OUTPUT OF UNIT -	
COOLING OUTPUT OF UNIT -	

BOILER	
TOTAL BOILER OUTPUT (IF OVERSIZED STATE REASON)	N/A
CHILLER	
TOTAL CHILLER CAPACITY	N/A
LIST EQUIPMENT EFFICIENCIES	SEE EQUIPMENT SCHEDULE
EQUIPMENT SCHEDULES WITH MOTORS	
(MECHANICAL SYSTEM)	
MOTOR HORSEPOWER	N/A
NUMBER OF PHASES	N/A
MINIMUM EFFICIENCY	N/A
MOTOR TYPE	N/A
# OF POLES	N/A

DESIGNER STATEMENT
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE MECHANICAL SYSTEMS, SERVICE SYSTEMS, AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE, VOLUME X-ENERGY.

SIGNED: [Signature]
NAME: ROBERT E. ENGLISH, PE
TITLE: ENGINEER

NOT FOR CONSTRUCTION

Δ	01/09/02	GEN REVISION	REE
symbol	date	description	by
		REVISIONS	