

DONE BY B. G. S.

DUCTLESS SPLIT AIR CONDITIONING SYSTEM				PLAN SYMBOL						
SYS. NO.	MANUFACTURER	MODEL	INDOOR UNITS(S)			OUTDOOR UNITS(S)				
			UNIT NO.	MODEL	VOLTAGE	PHASE	UNIT NO.	MODEL	VOLTAGE	PHASE
1	DAIKIN	FX25R1VTL	AC-1	FX25R1VTL	115	1 PH	CU-1	FX25R	208	1 PH
2	DAIKIN	FX25R1VTL	AC-2A	FX25R1VTL	115	1 PH	CU-2	FX25R	208	1 PH
			AC-2B	FX25R1VTL	115	1 PH				
			AC-2C	FX25R1VTL	115	1 PH				

GENERAL NOTES FOR DUCTLESS SPLIT A/C SYSTEMS:
 1) ALL SYSTEMS TO INCLUDE CONDENSATE PANS FOR OPERATION DOWN TO 0°F.
 2) CONDENSATE PANS TO BE PROVIDED WITH 1/2" THICK POLYISOCYANURATE (PIR) INSULATION.
 3) ALL UNITS TO BE SUPPLIED WITH INTERNAL FACTORY INSTALLED CONDENSATE PUMP.

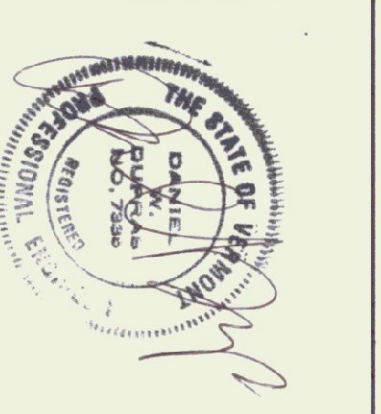
MATERIAL SPECIFICATION

CODES AND STANDARDS
 ALL WORK SHALL BE INSTALLED TO COMPLY WITH LATEST APPLICABLE EDITIONS OF THE BOCA CODE STATE OF VERMONT DEPARTMENT OF LABOR & INDUSTRY STANDARDS BOCA PLUMBING CODE ASHRAE STANDARD 157A UNDERWRITERS LABORATORY (UL) LISTED APPROVED PRODUCTS AND MATERIALS WHICH HAVE JURISDICTION IN EACH CASE CODES ARE MINIMUM REQUIREMENTS PAY FOR ALL PERMITS REQUIRED FOR THE WORK.
SUBSTITALS
 SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT AND ACCESSORIES FOR APPROVAL PRIOR TO CONSTRUCTION.
PIPING INSULATION
 INSULATE ALL EXISTING STEAM CONDENSATE PIPING IN THE PROJECT AREA WITH 1" THICK FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET USE WITH EQUIVALENT THICKNESS OF FIBERGLASS.
 INSULATE ALL CONDENSATE DRAINAGE PIPING WITH SAME INSULATION AS SPECIFIED ABOVE EXCEPT 1/2" THICK POLYISOCYANURATE (PIR) INSULATION ABOVE 1/2" THICK POLYISOCYANURATE (PIR) INSULATION.
PIPING
 COMPRESSED AIR PIPING SHALL BE TYPE L COPPER TUBING WITH SOLDER TYPE FITTINGS.
 DOMESTIC WATER PIPING SHALL BE TYPE L COPPER TUBING WITH SOLDER TYPE FITTINGS.
 CONDENSATE DRAINAGE PIPING SHALL BE TYPE M COPPER TUBING WITH SOLDER TYPE DRAINAGE PATTERN FITTINGS.
 FIRE PROTECTION PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH CAST OR WALLEDED IRON THREADED FITTINGS PER NFPA 13.
VALVES
 ALL VALVES FOR THIS PROJECT SHALL BE BRONZE BALL VALVES WITH BRONZE BODY AND STAINLESS STEEL BALL AND STEEL BODY VALVES SHALL BE SAME EXCEPT PROVIDE CORROSION WITH STEEL AND BRASS.
 ALL VALVES USED FOR FIRE PROTECTION SYSTEM SHALL BE FM LABELED AND APPROVED BY NFPA 13.
DUCTLESS SPLIT AIR CONDITIONING SYSTEMS
 FINISH AND INSTALL DUCTLESS SPLIT AIR CONDITIONING SYSTEMS AS MANUFACTURED BY DAIKIN, CARRIER OR SANYO EQUAL TO THE MODELS SCHEDULED.
 FINISH AND INSTALL REFRIGERANT LINES INCLUDING FILTER DRIER AND SILE GARD FOR EACH CONDENSER UNIT AND CHARGE ALL REFRIGERANT LINE SETS TO CORRECT REFRIGERANT CHARGE.
 INSULATE ALL LINE SETS WITH 1/2" POLYISOCYANURATE (PIR) INSULATION. ALL CONDENSATE DRAINAGE PIPING SHALL BE 1/2" THICK POLYISOCYANURATE (PIR) INSULATION.
 ALL UNITS SHALL BE PROVIDED WITH A PROGRAMMABLE HARD WHEED THERMOSTAT.
 ALL SYSTEMS SHALL BE PROVIDED WITH ANTI-SHOCK CYCLE THRESHOLD SPEED CONTROLS FOR CONDENSER OPERATION DOWN TO 0 DEGS F.
ELECTRIC BASEBOARD
 FINISH AND INSTALL ELECTRIC BASEBOARD RADIATION EQUAL TO BERKO MODEL BKO 250 PARTS PER FT 208 VOLT 1 PHASE PROVIDE BASEBOARD THERMOSTAT AND CORNER AND FILLER FITTED AS REQUIRED.
PLUMBING SPECIALTIES
 THERMOSTATIC MIXING VALVE FINISH AND INSTALL LAYVEX MODEL 311 E WATER CONTROLLER WITH ROUGH BRONZE FINISH WALL MOUNTING BRACKET AND THERMOMETER FOR DISCHARGE.
 HOSE BIBS EQUAL TO WOODFORD MODEL 24 WITH ANTI-SHOCK VACUUM BREAKER, BRASS FINISH.
FIRE PROTECTION WORKS
 FINISH AND INSTALL VENT SPRINKLER HEAD AND PIPING AND MODIFICATIONS TO EXISTING PIPING AS INDICATED ON THE DRAWINGS AND AS REQUIRED TO MEET NFPA 13. SPRINKLER HEADS IN SUSPENDED CEILING SHALL BE CHROME PLATED FINISH. DETECTOR HEADS AND SIDEWALL HEADS SHALL BE BRASS.
 ALL WORK SHALL BE IN ACCORDANCE WITH ALL CURRENT CODES AND STANDARDS BY A LICENSED MECHANICAL CONTRACTOR AND ALL CALCULATIONS REQUIRED BY THE STATE OF VERMONT FOR APPROVAL.

MECHANICAL MATERIAL SPECIFICATION AND DETAILS

BERLIN AOT
 RENOVATIONS
 BERLIN, VERMONT

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NO.	ISSUED FOR	DATE
1	BIDDING	6/24/02

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APPR.	DVD	DRAWN	BY	SCALE	AS NOTED	PROJ. NO.
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