

WINE COOLER CRITERIA

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STORAGE TEMPERATURE: 55 DEGREES
HUMIDITY REQUIREMENTS: 66 TO 70 RH (22 TO 18 TD)
EVAPORATOR TEMPERATURE: 35 DEGREES

WHEN BUILDING WINE COOLERS, YOU MUST KEEP IN MIND THAT IT IS A WALK IN COOLER AND IT MUST BE BUILT LIKE A WALK IN COOLER. THE MOST IMPORTANT FACTORS ARE INSULATION AND A VAPOR BARRIER. WOOD, CONCRETE, SHEET ROCK, AND OTHER SIMILAR HOME BUILDING PRODUCTS ABSORB MOISTURE AND HAVE LITTLE INSULATION VALUE. MOISTURE AND HEAT WILL PENETRATE THESE PRODUCTS LOOKING FOR THE COLDEST AREA (THE CONDITIONED SPACE).

BASIC REFRIGERATION EQUIPMENT CAN BE USED FOR MAINTAINING 60 TO 70% RELATIVE HUMIDITY CONDITIONS. THIS WILL PREVENT MOLD BUILDUP AND KEEP THE LABELS FROM PEELING OFF. IF TIGHTER CONTROL OF HUMIDITY IS REQUIRED, AN ARCHITECT OR ENGINEER SHOULD BE CONSULTED. THE BOTTLES SHOULD BE STORED ON THERE SIDE TO PREVENT THE CORKS FROM DRYING OUT. LONG TERM STORAGE, I.E., THE BOX IS NOT OPENED DAILY, IS THE NORM FOR THESE WINE COOLERS.

- 1: 2 X 4 STUD WALLS MUST BE INSULATED AND HAVE A VAPOR BARRIER (ON WARM SIDE). ALUMINUM FOIL, PLASTIC SHEETING, ETC., CAN BE USED.
- 2: CONCRETE FLOORS SHOULD BE PAINTED WITH WATER TIGHT SEALANT SUCH AS THE BRAND "DAM TITE" USED ON BASEMENT WALLS.
- 3: THE DOOR MUST BE AN INSULATED TYPE DOOR WITH GASKETS AND DOOR SWEEPS TO CREATE A VAPOR SEAL. HOLLOW TYPE WOODEN DOORS WILL NOT DO THE JOB.
- 4: A DEHUMIDISTAT CAN BE WIRED IN PARALLEL WITH THE THERMOSTAT. THIS WILL TURN THE REFRIGERATION SYSTEM ON IF THE HUMIDITY RISES DURING LONG OFF CYCLES. LONG TERM STORAGE WILL CREATE THIS CONDITION.
- 5: A SMALL PORTABLE HEATER CAN ALSO BE INSTALLED IN THE BOX TO HELP MAINTAIN THE TEMPERATURE WHEN THE UNIT IS BEING CONTROLLED BY THE DEHUMIDISTAT. THIS WILL PREVENT THE TEMPERATURE FROM DROPPING TOO LOW.
- 6: THE EVAPORATOR DRAIN PAN SHOULD BE SLOPED PROPERLY TO PREVENT MOISTURE FROM SETTLING IN THE PAN. DRAIN LINES SHOULD ALSO BE SLOPED PROPERLY FOR PROPER DRAINAGE AND THEY SHOULD EXIT THE BOX THE SHORTEST ROUTE.

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