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After 30+ years of manufacturing <u>Breezaire</u> cooling units for wine cellars we have found the biggest problem is not the units it's the wine cellar. It all goes back to the first day of deciding to build a wine cellar the selection of the unit's location and the construction of the wine cellar. Review the instruction and make sure your contractor has a copy to review.

Picking the location is usually based on the only empty area in the house maybe a closet or empty room under the staircase or the pantry that never gets used. Location will determine the size of the cooling unit how much wine can be stored. Picking the correct unit is based on the area that the unit will vent its Hot air. YES all unit must be ventilated there is a cold side and a hot side to all cooling units. Breezaire does have WKSL series which is used when all the walls are under ground or the unit cannot vent through. The cold side has an intake and a discharge the wine cellar air is taken in through the intake where it is cooled and then discharged into the wine cellar (most people think the outside air gets cold NOPE). A cooling unit should always be placed as close to the ceiling as possible because hot air rises and cold air falls. Breezaire units do come with modification that can be made if the unit must be placed near the floor please ask your dealer at time of purchase.

The hot side has an intake and a discharge also. The intake will take the air that the unit is mounted in such as an extra bedroom, other half of the basement and the preferred area directly outside. Better none as a "well ventilated area" where the inlet temperature will be 85-900 max. Remember that the discharge for the hot side is directly next to the intake (a grill provided will separate the air) so venting into a closet, laundry room or garage is not a well ventilated area. Small areas can overheat from the discharge air that maybe sucked in to the intake the hot air discharge must have a way to escape from the area some areas may need an additional fan.

HOW TO SIZE A UN	NIT FOR YOUR	WINE CELLAR	
Size of room to cool			
Width of room	X Depth	X Height	= Total Cubic Feet of Wine
Cellar	·	_	

SIZING GUIDE & SPECIFICATIONS

This sizing guide is to be used only for enclosures meeting the construction requirements list on the instruction. LINK to instructions

BREEZAIRE	Enclosure Volume	BREEZAIRE	Enclosure Volume
Model:	Cu Ft (Max)	Model:	Cu Ft (Max)
WKL 1060	140 cu ft Max	WKSL 2200	265 cu ft Max
WKL 2200	265 cu ft Max	WKSL 4000	1000 cu ft Max
WKL 3000	650 cu ft Max		
WKL 4000	1000 cu ft Max		
WKL 6000	1500 cu ft Max		
WKL 8000	2000 cu ft Max		

Constructing the wine cellar walls is the most important part in building a Perfect wine cellar. How you build the walls will determine how hard the units will works and how long the unit will last.

The cost of a new unit is a large investment and we have found those units will last 10-15 years if the wine cellar walls have been constructed correctly. Not getting into the whole construction there are a few thing the average customer should look for. When the wine cellar is bare and the only thing on the 4 walls and the ceiling are the studs we start with the <u>vapor barrier</u>, 5-6mm thick plastic sheets that will go in and out of the studs (this is the most important part of building a wine cellar correctly). The Vapor Barrier stops the ambient moisture from coming into the wine cellar that means the unit will not "leak water" please remember that all units cannot MAKE WATER the units take the extra moisture out of the air in the wine cellar so the relative humidity is at a perfect 50-70%. If you have not installed the Vapor Barrier in all 4 walls, ceiling and the floor then the ambient moisture will come in and make the unit work very hard (it takes 2x the BTU to take the moisture out of the air then it does to cool the air).







Insulating the walls with a minimum of R11 (R value) and the ceiling and floor with a minimum for R12 is what our instruction asks for. Please remember that these are min requirements you can use better insulation and get a higher R value and help the unit. Walls that have direct sun light or cold winter temperatures should have a greater insulation R value that way the wine cellar will have less change of temp in the room.

Please review our Installation Instruction for more wine cellar contraction information.