

HOW TO BUILD A WINE CELLAR

The following information is provided as a guide for the creation of the proper environment in which to properly build your own Dream Wine Cellar.

Wall & Ceiling Framing:

Wine cellar walls are built using standard 2" x 4" or 2" x 6" construction methods and ceiling joists, following the guidelines of local and state codes in your area. The general rule for a wine cellar is the thicker the walls, the better the insulation factor, and the better the cellar remains at a consistent temperature.

Vapor Barrier:

A vapor barrier is **REQUIRED** on all wine cellars. 6 mm plastic sheeting is applied to the hot side of the cellar walls. The vapor barrier must be either applied to the outside walls and ceiling. If it is impossible to get to the outside, then the plastic must be applied from within the cellar. The most common method is to wrap the entire interior, leaving the plastic loose in the stud cavity, so the insulation can be placed between each stud. All walls and ceiling must be wrapped in plastic for a complete vapor barrier.

Insulation:

Insulation is **REQUIRED** when using a climate control cooling unit. The R-value or thickness of insulation is determined by the thickness of the walls and ceiling. For example, fiberglass insulation of R13 is designed to be used in a 2" x 4" wall and R19 is used in a 2" x 6" wall. It is important to use the correct insulation. A minimum of R13 should be applied to the walls of a cellar. R19 to R30 is recommended in the ceiling. Standard "Fiberglass" or "Rigid Foam" insulation is normally used in cellar construction, or in some cases, blown in insulation may be used. It is very important that all walls and ceiling be insulated to keep the cellar temperature as consistent as possible during the summer and winter months.

Wall & Ceiling Coverings:

The interior wall and ceiling covering is determined by the decor theme of the cellar. Often times, drywall (green board) is applied, then painted (always use latex paint) to match a color theme of the cellar. Cedar or redwood (depending of the racking materials) tongue and groove material is the most common used wood, applied to the walls and ceiling. This T&G 1" x 4" paneling is the same wood species as the racking material, which makes for a very uniform look, throughout the cellar. Stone or granite is also used, as a wall covering material.

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Cellar Doors:

An exterior grade (1¾") door must be installed, as a cellar door. It is very important that weather stripping is attached to all 4 sides of the doorjamb. A bottom "sweep" or threshold is also required. The door must have a very good seal, to keep the cool cellar air from escaping out of the cellar. One of the most common problems, with cooling units running continually, is due to poor or no sealing of the door. Solid core doors or doors with a full glass insert are most often used. Glass doors must have at least double pane-tempered glass.

Flooring:

All types of flooring are used in cellars. Most commonly used is slate, tile, marble, or vinyl. NEVER USE CARPET. Carpet will mold and mildew in the cool, damp climate conditions, of a cellar. As with the case of wall coverings, flooring is normally chosen to match the overall decor colors of the cellar. The flooring should be applied to a level surface. It is best not to apply base trim or moldings to the walls behind the racking.

Lighting:

Lighting a wine cellar is an important part of the overall cellar decor. "Air Lock" recessed ceiling lights are the most popular. These should be put on dimmer switches to control brightness. In most cases, these are used as the main lights within the cellar. Also popular are various display lights to accent different areas of the cellar. Some cellar contractors offer display "rope" lighting that is specially designed and built to fit into the display angle of individual bottle racking. Different types of spotlights are used to highlight picture openings, table areas, or large format display bottles. It is recommended that all lighting is installed with a timer system, to insure lights are turned off. Lights cause excess heat and will cause the cooling equipment to over work itself.

Climate Controlled Systems:

If a climate controlled cellar is required, provide cooling equipment to properly keep the cellar at a temperature of about 53-57 degrees and relative humidity of 50-70%.