

PROPER WINE CELLAR ROOM CONSTRUCTION

“Building it right the first time”

By DOUG SMITH,

I can't tell you how many times I've talked with wine collectors over the years who cut corners during the construction phase and had problems with the function of their cellar soon after they put their first bottles into the racks. They all wished they had "built it right the first time". The common theme is either they never spent the time to research how to prepare the cellar, or they simply refused to listen to the advice of a qualified wine cellar consultant, often not wanting to spend the extra money. In most cases to fix the problem requires removal of all your wine, then the racking that is attached to the walls, and finally the drywall or wood paneling to get into the walls to repair the problem. The result is spending far more money to do it twice than doing it correctly just once.

Wine Cellars are not everyday products that are installed into homes. Architects and builders just do not have enough experience to fully understand the fine construction details needed to make sure your valuable wine collection is properly stored. It is always recommended that you hire a qualified wine cellar consultant, such as one from Apex Wine Cellars, to make sure you are doing it right. To give you some basic assistance, below are some useful tips to make sure the cellar is built right.

WALL & CEILING FRAMING:

Build wine cellar walls 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 cellar is the thicker the walls, the better the insulation factor, the better the cellar remains at a consistent temperature.

VAPOR BARRIER:

Vapor barrier is **REQUIRED** if a climate control cooling unit is installed to keep the cellar at the correct temperature. 6-mill plastic sheeting is applied to the **HOT** side of the cellar walls. All walls and ceiling must be wrapped in plastic for a complete vapor barrier.

INSULATION:

Insulation is **REQUIRED** on the walls and ceiling of a cellar. Standard "Fiberglass" or "Rigid Foam" insulation is normally used in cellar construction. Blown-in insulation or liquid foam that hardens can also be used. It is very important that all walls and the 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. Oftentimes drywall (green board) is applied, and then painted (always use latex paint) to match a color theme of the cellar. It is also very common to apply wood paneling material to the walls and/or ceiling of a cellar. This paneling is normally the same wood species as the racking material that makes for a very uniform look throughout the cellar. Stone or granite is also used as a wall covering material.

CELLAR DOORS:

An exterior grade (1 %") door must be installed as a cellar door. It is very important that weather stripping is attached to all 4 sides of the door jamb. A bottom "sweep" or threshold is also needed. 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 causing cooling units to run continually is not sealing the door properly. Solid core doors or doors with a full glass insert are most often used. Glass doors must have at least double pane-tempered glass.

CLIMATE CONTROLLED SYSTEMS:

All the room preparations described above are very important. You can follow these instructions to the last detail, but if you do not choose the proper cooling equipment your cellar will not maintain the proper temperature and humidity levels. Thus your valuable wine collection could be permanently harmed. A cellar must keep a temperature of about 53-58 degrees and humidity of 50-70%. There are several types of cooling equipment. Some of the criteria we use to determine which cooling equipment to use is size and layout of your cellar, the number of bottles to be stored, your geographic region of the country, direction of the sun hitting exterior walls, glass doors or window, etc. You will need to consult with your cellar consultant to assist with specifying the correct cooling system because there is no simple way to size units yourself.