



Wine Cellar Construction Methods

Wall & Ceiling Framing:

Build wine cellar walls using standard 2x4 or 2x6 construction methods. Ceiling joists are to follow the guidelines of local and state codes in your jurisdiction. The general rule for a cellar is the thicker the walls, the better the insulation value.

Vapor Barrier:

A Vapor barrier is REQUIRED if a climate control cooling system is installed. Six mill 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, or if not feasible on 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. Seams can be sealed with spray glue. Closed cell foam is a great insulator and vapor barrier in one application.

Insulation:

Insulation is REQUIRED if a climate control cooling system is to be used. The R factor, or thickness of insulation, is determined by the thickness of the walls and ceiling. Fiberglass insulation of R13 is designed to be used in a 2x4 wall. R19 is used in a 2.6 wall. It is important to use the correct insulation for the wall thickness. A minimum of R13 needs to be applied to the walls of a cellar. R19-R30 is recommended in the ceiling. Standard "Fiberglass" or "Rigid Foam" insulation is common. Blown in insulation can also be used. It is essential that all walls and ceiling be insulated to create a "sealed space".

Wall & Ceiling Covering:

The interior wall and ceiling covering is determined by the decor of the cellar. Drywall is most common with a painted (always use latex paint) to match a color theme of the cellar. Stone, ceramic or wood can also be used as a wall covering.

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Cellar Doors:

If a cooling system is installed, an exterior grade (1 3/4") must be installed for the cellar door. It is very important that weather stripping is attached to all four sides of the door jamb. A bottom "sweep" or threshold is also recommended. 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 not sealing the door properly. Solid core doors or doors with a full glass insert are most often used. Glass doors must have insulated tempered glass.

Flooring:

Many types of flooring can be used in cellars. Most commonly used is slate, tile, or vinyl. Wood floors work well also. NEVER USE CARPET. Carpet can mold and mildew in the cool climate conditions of a cellar. As with wall coverings, flooring is normally chosen to match the overall decor colors of the cellar. It is best not to apply base trim or moldings to the walls behind the racking. Never run radiant flooring into the cellar space.

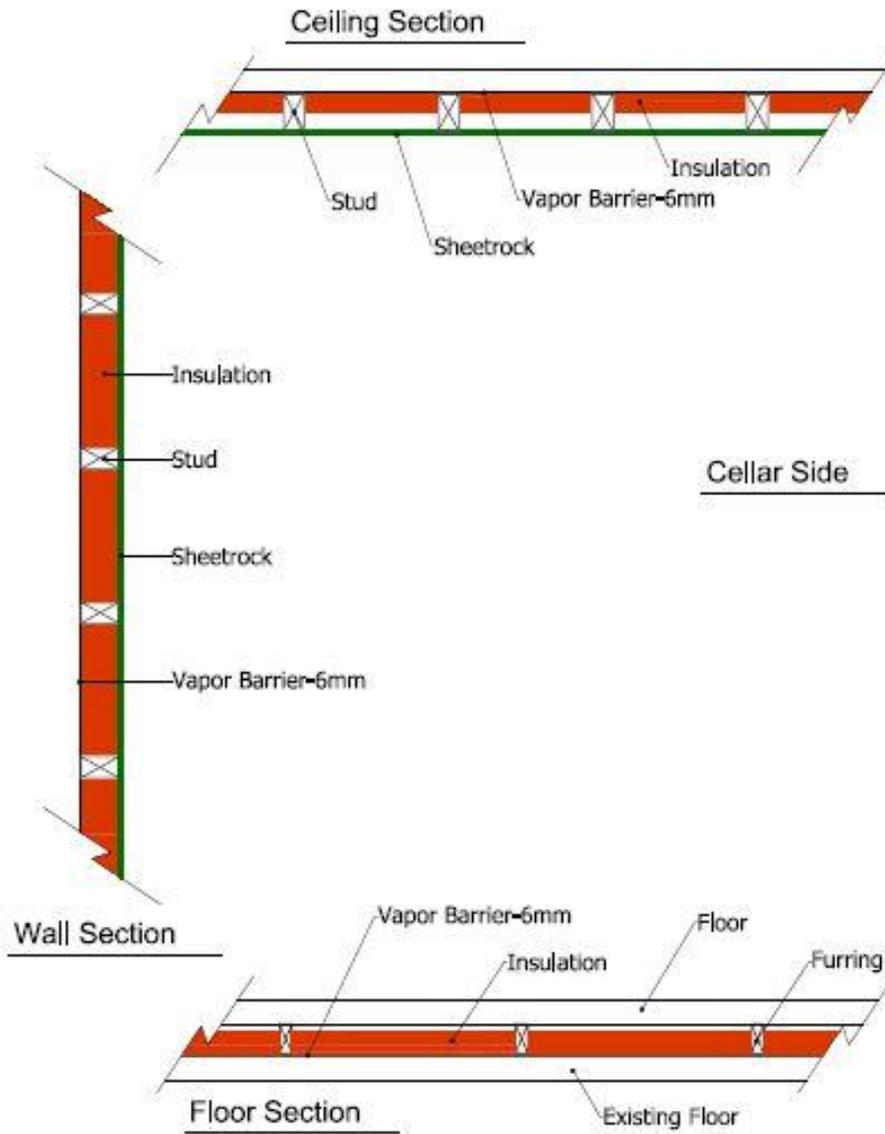
Lighting:

Lighting a wine cellar is an important part of the overall cellar decor. "Air Lock" recessed ceiling can fixtures are preferred to maintain the sealed integrity of the space. Dimmer switches to control brightness are a good idea. It is important to consider how many switches are appropriate. Give some thought to overhead lighting controls, bottle display control and arch light control. Nason Ridge offers "LED" and "Rope" lighting that is designed and built into the display angle of individual bottle racking. Spot lights can be used to highlight picture openings, table areas, or large format display bottles. We are happy to offer suggestions for layout.

Climate Control:

If a climate controlled cellar is required, Nason Ridge can provide cooling equipment to keep the cellar at a temperature range of 55-60 degrees. There are three main types of systems; "Through-The-Wall", "Ducted" and "Split System". Factors to consider when finalizing a system will be noise, presence in cellar, exhaust options, and budget. Passive cellars are rooms built below ground level. Passive cellars can work well if the space is below grade, on the north side of the house, has no direct sunlight and is not located next to a heat source (mechanical room).

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