

Cellar Preparation

Wall & Ceiling Framing

Build wine cellar walls using standard 2×4 or 2×6 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. 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 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 if a climate control cooling unit is going to be used. The R factor, 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 2×4 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 should be applied to the walls of a cellar. R19-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 is 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 Covering

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. Most commonly used is Western Red Cedar or All Heart Redwood (depending upon the racking materials) tongue and groove material applied to the walls and ceiling (consult with a Nason Ridge representative). This T&G 1×4 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.

Cellar Doors

An exterior grade (1 3/4") door must be installed as a cellar door. It is very important that weather stripping is attached to all three 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 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 can mold and mildew in the cool 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 can 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. Inviniti offers "LED" and "Rope" lighting that is specially designed and built to fit into the display angle of individual bottle racking. Different types of spot lights are used to highlight picture openings, table areas, or large format display bottles.

Climate Control Systems

If a climate controlled cellar is required, Inviniti can provide cooling equipment to properly keep the cellar at a temperature of about 55-60 degrees and humidity of 50-70%. For cellars less than 2,000 cubic feet in size, there are three main types of units, "Through-The-Wall" systems, one piece "ducted" system and "Split Systems." For larger cellars we provide commercial refrigeration equipment that must be installed by a certified refrigeration expert. Passive cellars are rooms that are built below ground level. The natural ground temperature will be consistent at about 55 degrees to protect your wine for long-term storage and no cooling equipment may be required.

Wine Racking System

Standard materials are either All Heart Redwood, clear, grade A Western Red Cedar, Premium Redwood, clear grade A Malaysian Mahogany or Sapele. Clients usually choose one over the other due to matching decor colors in the cellar design. Cedar is more of a brown tone and lighter in color, where redwood is a more reddish tone and darker. Inviniti will send wood samples at no charge. Other woods are available on a special order basis.