WINE CELLAR GUIDE

From Vigilant, The Industry Experts





Are you dreaming of your own wine cellar or wine room but aren't sure where to start? Vigilant is here to help you build your dream wine storage in any size space, on any budget. Our Wine Cellar Guide outlines top considerations, key construction tips, and best wine storage practices. Whether you are just beginning the process of planning or you are ready to build, our sales and design experts are ready to answer any questions and help you achieve the wine storage solution of your dreams!

CONTENTS

Choosing a Location	<u>2</u>
Determining Size	
Cooling Systems	
Vapor Barriers	
Flooring & Ceiling	
Wine Cellar Entry Door	
Bottle Dimensions	
Racking	
Stain and Finishes	
Lighting	
Wall Treatment	
Grapes to Grapes	
Vigilant Process	
Design Resources	
Contact Us	<u>21</u>



WHY VIGILANT

At Vigilant, we take pride in our work and we're dedicated to bringing you the highest quality products.







100% Satisfaction





Sustainable materials A+ Better Business Rating



Expert design



Best industry warranty



Choosing a Location

One of the most important considerations when building a wine cellar is the location.

A wine cellar can be located anywhere in the home. You can convert a closet, space under the stairs, or in the basement.







Need more inspiration? Check out our galleries!

ONLINE GALLERIES



Location Considerations

The location chosen determines many other factors affecting the cost of building and maintaining the cellar. The ideal temperature and humidity for a wine cellar is in the 55°F and 60% relative humidity range. If you select a cooler, more humid location, the cooling system will not need to work as hard so a smaller cooling system may be adequate. This may translate to lower energy costs. Conversely, a warmer location means the cooling system will run more frequently and a larger system may be required. Construction cost may also increase as additional insulation may be required.



The Ideal Storage Environment

Once you've decided to build a wine cellar, do you know what you need to do to properly store wine so it ages to perfection? Here's some key information on how to store your precious wine collection.



Light

Ultraviolet (UV) light can wreak havoc on a bottle of wine, especially when exposure extends for long periods of time. UV rays destroy the tannins in wine. Tannins play an important role in preventing oxidation which can prematurely age wine.



Heat

Heat can ruin the flavor of a bottle of wine if it is exposed to it for long periods of time. Early French winemakers discovered that wine stored cool damp cellars actually improved with age. The cool temperatures slow the aging process and allow the wine to acquire beneficial characteristics over time. Evidence suggests that the wine aging process may stop altogether when temperatures fall below 45 degrees F.



Vibration

The production of solids and sediment is a natural part of the wine aging process. Vibration of the wine may upset the liquid-to-solid balance and artificially accelerate the production of solids. Take care to make sure your wine is not subjected to vibrations from household mechanical systems such as cooling units, laundry equipment or the like.



Odor

Strong, sustained odors can negatively alter the flavor of wine. This is particularly true for corked wine, which remains the most popular capping method. Wine in bottles with a mechanical screw top are essentially immune to outside odors. The most common harmful odors come from the presence of such things as aromatic woods like Western Red Cedar, household chemicals, strong spices or even garlic. Every effort should be made to keep any odor-producing compounds isolated from your wine.



Cold Temperatures

Wine should not be subjected to very cold temperatures. White wine serving temperatures in the low 40 degree F range should be the absolute lowest temperature for long term wine storage for reds or white wines. Freezing temperatures will ruin all wines.



Improper Humidity

Humidity and temperature are equally important in maintaining the best wine storage environment. Corked wine is particularly vulnerable to dry conditions while wine stored in bottles with mechanical screw caps is more protected. Ideal humidity should fall in the 60-65% range at 55 degrees F. Humidity levels above 65% at 55 degrees F can be equally dangerous for wine and wine labels.



Determine The Size Of Your Cellar

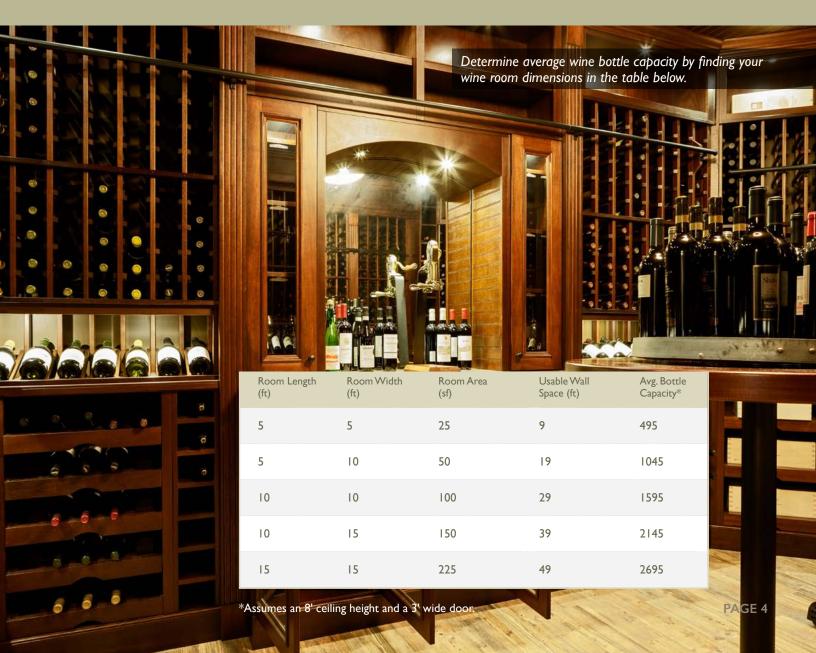


Will your wine cellar simply be for functional long term storage or more of a showcase for your wine?

How many wine bottles can I fit into my space?

What types of wine will you be storing?

Knowing the answer to these questions will help you determine the wine cellar size that will meet your needs.







Choosing a Wine Cellar Cooling System

What are the Benefits of an Actively Conditioned Wine Cellar?

The enemies of wine are lurking everywhere. In most cases it will be necessary to build either a room or cabinet equipped with a mechanical cooling unit to achieve the ideal wine storage environment.

Wine cellars installed above ground will require active conditioning to achieve the ideal environment. Should you choose to actively cool your wine cellar using a wine cooling system, you need to follow the proper wine cellar construction guidelines for building a wine cellar or wine room. Failure to properly follow these guidelines may result in cooling system failure and moisture damage to areas surrounding the wine storage space.

Your wine storage space should be placed in the coolest, most humid area in your home. The closer the wine room is to an ideal wine cellar temperature of 55° F and 60-65% Relative Humidity, the more efficient the cooling system will be. Any warmer and your wine will age faster; any cooler and your wine will age slower.

The location and size of the wine cellar will determine what cooling system is going to work best for the space. Some wine cellar cooling systems have strict requirements for installation. For example, a through the wall cooling system cannot vent directly into living space. So if your wine cellar is in the center of your living space, this system would not be a fit for you.

A ducted or ductless system would be a better choice. The selection of and planning for a wine cellar cooling system should done prior to the wine cellar framing stage.

If you invest in fine wine, you know the importance of storing it in optimal conditions. Our comprehensive line of wine cooling systems fit every application. There are many variables involved in choosing the correct system so start the process early on in your project. Our experts can help you select a wine cooling system that fits your needs and budget, and allows your fine wine to age gracefully.

Today's systems are designed to be quieter and more efficient, too. So if you have an older cooling system, consider scheduling a free consult to see if an upgrade can improve your cellar's ambience and lower your energy bill!

SCHEDULE A CONSULT

LEARN MORE

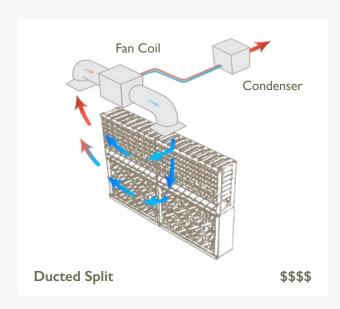


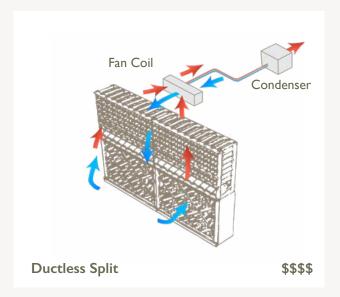
Vigilant Cooling Systems

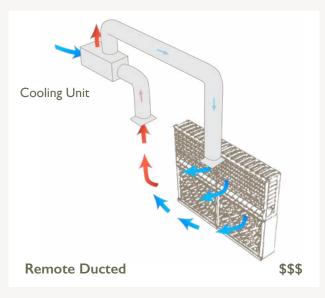
Protect your passion and investment by installing a reliable climate-control system in your wine cellar. Cooling systems are a key component in ensuring your wine is stored in the perfect environment at a consistent, year-round temperature of 55°F with a relative humidity level of 60-65%.

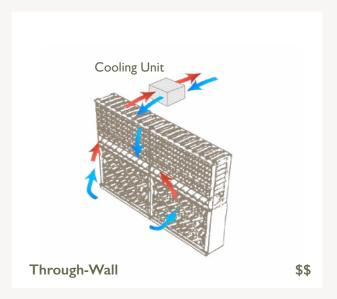
Our complete line of cooling systems use the latest technology and are suitable for every application including ducted, through-wall, and ducted and ductless split systems. With years of experience, we're happy to recommend the best system for your space.

LEARN MORE











Choosing a Vapor Barrier

The application of a vapor barrier is critical to maintaining the correct environment and preventing moisture from forming inside your wine cellar walls. The method used will depend on what insulation material is being used.

If traditional batting or rigid foam is to be installed, then you must wrap the walls and ceiling with a 6mil poly vapor barrier so the room is completely sealed.

If the cellar is not in a basement, you will need to install the vapor barrier and insulate the floor as well. Be sure to tape all of the joints of poly with moisture resistant tape and be sure to seal all outlets and lighting fixtures that penetrate the barrier.

Insulation Considerations

Insulation isolates your wine cellar from exterior elements and helps to maintain a cool, moist environment for your wine. It will keep your passive cellar from becoming too warm and will help to conserve energy for a wine room that is actively cooled by a system.

Non-cement floors with living or crawl spaces below must be insulated with rigid foam, spray-in insulation-preferably closed cell, or traditional fiberglass batting. A vapor barrier must also be applied on these surfaces (excluding a closed cell) as well.

Walls must be insulated with a minimum value of R-19 and ceilings must be insulated with a value of R-30. R-value indicates the ability of the insulation to restrict heat flow — a higher R-value indicates better insulation.

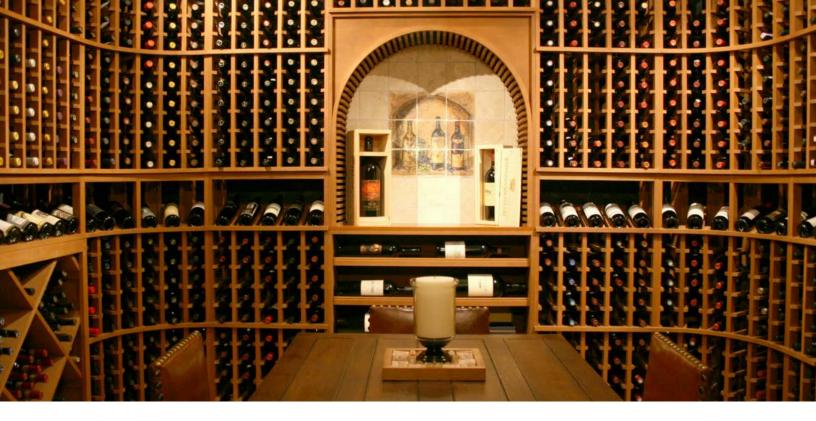
When applying traditional fiberglass batting, make sure to orient the paper or foil barrier toward the warm side of the wine cellar wall. Seal all joints with a foilbacked tape.

When insulating your wine cellar, more is always better. Standard fiberglass rolls or batting provide an R-value of approximately 3 per inch.

Construction Material Thicknesses and R-Values

This chart shows the relationship of insulation values for sample wall thickness and material types. We recommend a minimum R-value of R-19 in the wine cellar walls and R-30 in the ceilings.

Wall Frame Thickness	4"	6"	10"
Insulation wThickness	3.5"	5.5"	9"
R-Value Fiberglass Battting	R-II	R-19	R-30
R-Value Rigid Foam	R-25	R-39	R-65



Framing

Frame all cellar walls (even concrete walls) using standard 2×4 or 2×6 studs. Keep in mind the thicker the wall depth, the more insulation and higher R value can be achieved. Ceilings must be insulated and you may have to insulate the floor, depending on your substrate materials. Once the framing is complete, you will want to run the electrical and plumbing for lighting and your cooling system prior to insulating.

If you are using spray in closed cell foam insulation, this acts as a vapor barrier as well as an insulator so the 6 mil poly step in the vapor barrier process is not necessary.

Electrical Considerations

Upon completion of the wall framing, run all electrical wiring for lighting, outlets and your wine room cooling system.

Cooling systems normally require a dedicated circuit, so check the manufacturer's instructions and voltage requirements.

Light switches with dimmers, if desired should be placed near the wine cellar door and should control all the lighting in the wine cellar. Switches with timers or motion detectors are a nice feature that can turn the lights off for you when your hands are full. This is the time to start thinking about what kind of lighting fixtures you would like and to have the wires run for them. Consider sconces, chandeliers, recessed lighting, can lighting and track lighting.

Wine Cellar Construction Reference Chart

Construction Step	
Wall Framing	2" X 6 @ I6" on center
Ceiling Framing	2" x 8" @ 16" on center
Vapor Barrier	6 mil polyethylene on warm side of walls and ceilings. Check your local building codes.
Wall Insulation	R-19 minimum
Ceiling Insulations:	R-30 minimum
Sheathing	DensArmor Plus® Interior Drywall is our recommended sheathing. You can also use 1/2" mositure resistant green board with mildew resistant paint or a tongue and groove wood paneling like mahogany.
Flooring	Moisture resistant material such as brick, tile, stone, or hardwoods.

This chart summarizes our recommended construction specifications for building your wine cellar.

Determining Your Materials

After the cellar is framed, sealed, and insulated and all electrical and plumbing has been roughed in, you will choose your wall, ceiling, and flooring materials.

Floors

Tile and Stonework

Most wine cellars use either ceramic tile or stonework on the floor. All are functional. The choice should be based on the look you are trying to achieve in your wine room.

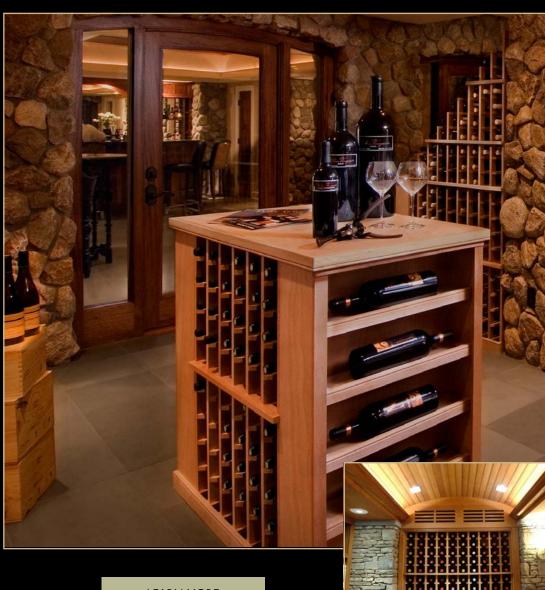
Earth tones are always a great choice, as they allow the eyes to travel away from the floor and up to your amazing wine collection.

Wooden Floors

Wood floors are a great design element in a wine cellar. They look natural and warm and will hold up well. Be sure to use rot-resistant hard-wood like mahogany, and it's critical that you leave a gap between the floor and the wall to allow for expansion of the floor material. The gap can be easily concealed with baseboard molding after your wine racking is installed.

Ceilings

Vaulted ceilings and wood ceilings are other optional design elements that can add a unique look to your finished wine cellar. Both tongue & groove and bead board are great options for wood ceilings and can be finished to match your wine racking and wine cellar elements.



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Walls

A moisture-resistant drywall/plywood material is fine for walls and ceilings. We recommend DensArmor Plus® Interior Drywall. You can also use 1/2 moisture-resistant gypsum wallboard or green board is the most common and cost-effective wall material. This wall board must be painted with moisture-resistant paint.

Choosing Your Entry Door

Your wine cellar entry door is the first chance to make a first impression. It should be both functional and beautiful. Because the wine cellar is a conditioned space, you want to ensure that the entry door is an exterior grade with weather stripping for a tight seal. In the case of glass doors, make sure the wine cellar door includes high R-Value glass panels. Our Classic and Value Classic doors are the perfect solution.









Value & Classic Full Glass Doors

Tuscan Glass Doors

Rustic Wood Doors

Provincial Glass Doors

Before ordering your door you must determine its swing; in or out, and left or right. It is preferable to have your door swing into the wine cellar, making sure that its swing path does not interfere with your wine racks. The positive pressure in a conditioned wine room will push the in-swinging door against the jam and weather stripping, creating a superior seal.

When choosing a door with a glass panel, make sure that the panel

is dual-paned, insulated glass. The higher the R-value, the better. All Vigilant glass doors include Argon-filled, insulated, tempered glass panels that offer twice the R-value as standard insulated glass. If adding windows or sidelights to your wine room be sure they meet all of the same performance specifications as your wine cellar door.

MORE DOORS

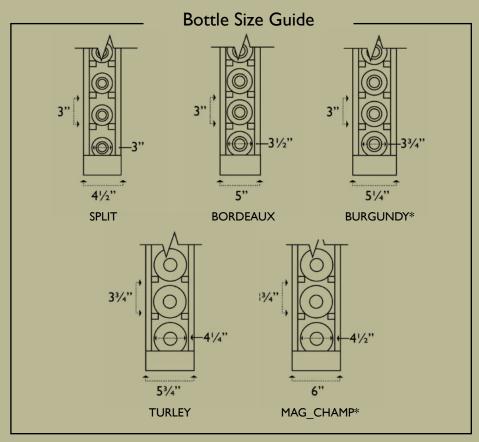




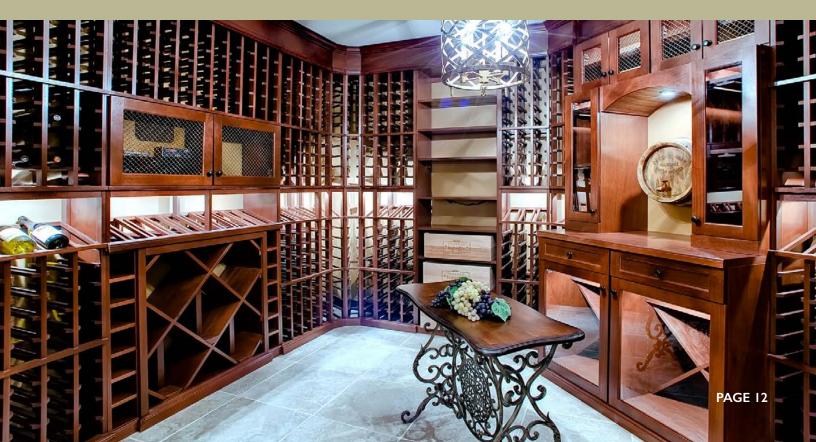
Bottle Dimensions & Rack Opening Sizes

Wine bottle dimensions and shapes vary, with typical measurements being 3-3.2" in diameter and 12" in height. Champagne bottles are slightly larger, at 3.5" in diameter and closer to 12.5" tall in 750-milliliter amounts. Therefore certain wine racking styles work better for certain wine bottle sizes. Consider your personal preferences and requirements when planning bottle storage. We've created this bottle sizing chart to help you learn which wine racks best fit your collection.

Our wine bottle sizing guide doesn't cover 100% of bottle dimensions on the market, but represents industry averages. Every company, brand, and bottle is unique and this chart is reflective of most bottles you are likely to store.



*Burgundy and Mag-Champ size openings available in our kit wine racks.



Bottle Dimensions Chart





PICCOLO

Piccolo means "small" in Italian. These bottles are also known as a quarter bottle, pony, snipe or split and are typically used for a single serving of Champagne.



SIZE

1/4 Bottle 187 ml (6 oz) 7" x 2 - 21/2" (178 x 50 mm)



Diamond Bins Diamond Cubes Modular Cabinets Solid Rectangular Bins Wine Cubes

CUSTOM RACKS

Bins & Cases Cabinetry Cascades Half Heights Quarter Rounds Split

DEMI

"Half" in French. Also known as a half bottle. Slimmer bottles. Typically used for dessert wines.



1/2 Bottle 375 ml (13 oz) 91/2" x 21/4" (241 x 57 mm) Diamond Bins
Diamond Cubes
Modular Cabinets
Solid Rectangular Bins
Wine Cubes

Bins & Cases Cabinetry Cascades Half Heights Quarter Rounds

BORDEAUX

Standard wine bottle size for most distributed wines.w



I Bottle 750 ml (25 oz) II½ -13" x 3 - 3¾" (292 x 75 mm) Diamond Bins
Diamond Cubes
Modular Cabinets
Solid Rectangular Bins
Wine Cubes
Curved Corner

Bins & Cases Cabinetry Cascades Half Heights Quarter Rounds Curved Corner Individuals

BURGUNDY

Considered a wide-bodied bottle that has sloped shoulders compared to the standard wine bottle. They are usually much wider at the bottle's bottom.



I Bottle 750 ml (25 oz) II'/4 -12'/4" x 3 - 3³/₄" (292 x 75 mm) Diamond Bins Diamond Cubes Modular Cabinets Solid Rectangular Bins Wine Cubes Cascades Bins & Cases Cabinetry Cascades Half Heights Quarter Rounds

MAGNUM

Larger sized bottles requiring special wider (Magnum) wine racking.



Champagne = I Bottle Magnum = 2 Bottles I.5 liters (50 oz) I3½" x 4 - 4½" (343 x I02 mm)

Diamond Bins
Diamond Cubes
Modular Cabinets
Solid Rectangular Bins
Wine Cubes
Magnum

Bins & Cases Cabinetry Cascades Half Heights Quarter Rounds Magnum Vertical Display

JEROBOAM

Also known as 'double magnum'. Larger sized bottle of wine used for entertaining lots of friends.



(Sparkling Wine) = 4 Bottles 3 liters (100 oz) 18" x 5" (457 x 127 mm)

(Still Wine) = 6 Bottles 4.5 liters (152 oz)19.5"x 5" (500 x 127 mm) Diamond Bins Diamond Cubes Modular Cabinets Solid Rectangular Bins Wine Cubes

Bins & Cases Cabinetry Vertical Display

SHOP NOW

DESIGN REQUEST

Choosing Your Racking

Traditional wooden wine racks, stunning metal wine racks and innovative complete cellar systems can bring endless design possibilities to your new space.

Our Standard wine racking kits are offered in two wood species and two heights, providing the largest kit selection in the industry. These beautiful, durable half-height and full-height racks can accommodate thousands of bottles to just a few.

Our Custom line allows you to use more traditional storage components like ladder racking while tailoring your wine cellar to your specific needs like wood species and custom heights and depths.

Want premium elements such as casework, solid panels, and more decorative-end design elements? Vigilant will work with you to bring you the high-quality, bespoke wine storage solution of your dreams!

Regardless of what you choose, all of our wine cellar offerings can be mixed and matched together to meet your aesthetic and budgetary needs.

What is a modular wine system?

A modular wine storage system, like your kitchen cabinets, is made up of individual units that are grouped together to form a storage system. Because no two spaces are identical, modular racking is designed to fit together in a way that allows you to optimize your space without the added expense and lead times associated with a custom racking product.

Bottles			
500	\$2000	\$4000	\$6000
1000	\$4000	\$8000	\$12000
1500	\$6000	\$12000	\$18000
2000	\$8000	\$16000	\$24000
2500	\$10000	\$20000	\$30000
3000	\$12000	\$24000	\$36000
3500	\$12000	\$28000	\$42000



Stains and Finishes

Two major factors to consider when you are deciding on the appearance of your racking are the wood stain and the wood species.

On their own, wooden wine racks are already beautiful. Unfinished mahogany, for example, will reveal its unique quality as it ages over time. But its beauty can be further enhanced when a stain is applied. Generally, wine rack stains come in

a wide array of options. We offer Harvest, Chestnut, Espresso, or Ebony stains. Our lacquer top coat is a satin finish that increases durability and adds a gentle shine. This can be added to any stain option. As a general rule, we do not recommend unstained products with lacquer only. Our experience shows that lacquer accentuates a wood grain's inherent tone variations too strongly for most people's tastes.

Don't see the exact finish you'd like? We specialize in a wide variety of custom wood species and finishes. Contact us to discuss how we can accommodate your unique specifications.

REQUEST WOOD SAMPLE



*Shown on Mahogony with stain and lacquer. Espresso and Ebony unavailable on Pine



Primary Wood Species

Mahogany is the primary wood of choice here at Vigilant. It is our standard across most of our product lines and is resistant to rot, decay, and infestation. It is known for its durability, beauty, overall quality and sustainability.

New England Pine is used for our value wine racking and it also will create a durable, beautiful wine cellar. It is locally harvested here in New England and is backed by our great warranty.



Choosing Your Lighting

Lighting is one of the most important aspects in wine cellar construction. The right lighting system will dramatically highlight your collection and determine your cellar's mood and tone. Choosing the wrong type of lighting may also put your wine collection at risk.

The lighting in your wine cellar should be both functional and decorative and should provide ample light for reading wine labels without exposing your wine to excessive heat and ultraviolet light. Putting all of your lighting on wall switches with dimmers will give you the flexibility to raise and lower light levels for the appropriate task. Switch timers or motion detectors are a great feature and will prevent the lights from being left on inadvertently.

Whatever your style, whether it's traditional, rustic, modern, or contemporary, decorating with elements you love can help you achieve your unique custom-looking wine cellar.



Display lighting can highlight an arch, a display row, cabinetry, and other decorative or functional items anywhere within your wine cellar or wine room.



Ceiling-mounted, recessed cans

are the best solution for wine cellar lighting. They are unobtrusive, and their specialized fixtures allow you to aim the light to areas where it is most needed.



Track lighting can be used as an alternative or in addition to recessed cans. Track lights are flexible and provide good light. As with recessed cans, make sure all tracks are at least 18" off your walls so as to avoid contact with the wine racking.

Arches and More

Vigilant offers the opportunity to accessorize and personalize your space, transforming it into a wine cellar of your dreams. Choose accents such as paneling, and lighting to achieve a unique look that will match your current decor.

Vigilant arches pair beautifully with our half-height base wine racks to add aesthetic appeal to your wine cellar.



Made from solid mahogany wood, our Tuscan tasting tables come with a solid wood or wood framed glass top.





Choosing Wall Treatments

We've focused on the flooring, lighting, and other elements, but don't forget the walls!

Decorate your wine room with artwork and murals, etched mirrors, painted tile, mosaics, custom trim, and stained glass. Paint colors also set the tone for your wine cellar. Regardless of your design direction, choose deep or dark colors for the walls. Dark walls allow the racking and wine casework to blend into the wall and provide the design with a more uniform and smooth flow.

If you have chosen moisture resistant gypsum wall board for the wall material, it will need to be painted with moisture resistant paint.

Stonework can be a great addition to walls. Filling the void corners of the wine cellar with stone columns provides a natural, old-world appearance.

Also, try tinting your ceiling with the wall color! It can soften the look while still providing reflective light.

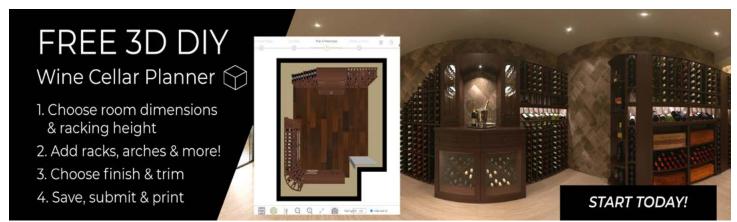
Need Some Inspiration?

Check out our sample wine cellar plans, including custom designs and DIY kit wine racks.

These PDFs show multiple elevations of sample design plans for home, retail, and hospitality spaces.

SAMPLE PLANS

Design the wine room of your dreams with our free wine cellar planning tool!





Comparing Grapes to Grapes

THE BEST...

If you're like most people, you think that wine racks, wine cellar designers, and wine storage companies are pretty much the same and that price is the only differentiating factor. Think again!

Whether you're a serious collector ready to invest in a custom wine cellar that can house thousands of bottles, or a wine lover who simply needs some entry-level pieces, there are lots of manufacturers out there and you need to know you're comparing apples to apples, or as we say in the wine biz, GRAPES TO GRAPES!

Depending on your needs, there can be much more to it, and we've outlined some of those factors here.

THE REST...













Tallest Wine Racks



Others





Unlike other companies, we do not stack our racks to gain height. Instead we offer two standard height options: a Classic series at 77.5" an Estate series at 92.5".

True Curved Corners



Others



Our curved corner racks use continuous radius wood spacer bars and moldings STANDARD. Competitors' corner racks are not true radius curves – they use single columns segmented around corners with miter cut straight miter cuts.

Raised Bottom Row



Others





All our wine racks are raised 2.5" off the ground safely storing your bottles of wine, while our competitors' racks have your precious wine resting on the floor.

Decorative Archtops







Our full height archtops have supportive solid sides, come in many styles and sizes, and offer optional display lighting. Competitors require a separately purchased tabletop to align the arch with adjacent wine racking; OURS INCLUDES ONE!

Modular Cabinetry



Others





Only Vigilant offers a line of standard, stackable modular cabinetry. These functional, cabinets seamlessly integrate with our Classic and Estate wine rack kits.

Industry Leading Service







At Vigilant, we're committed to professionalism and making your buying experience the best it can be. From project kickoff to completion, we're here every step of the way.

Limited Lifetime Warranty



Others





A limited lifetime warranty covers all wine racks manufactured by Vigilant.

Made in America



All our products are handcrafted on-site in our Dover, NH manufacturing facility. We are a full service millwork company using time-tested woodworking techniques.

The Vigilant Process



DESIGN

Define your aesthetic and functional requirements & specifications.

We'll work with you to ensure we understand the project requirements, including: budget, capacity, installation challenges, architectural integrations, cooling system selection, and customization



PRICING & DRAWINGS

Pricing is presented, along with design drawings and specifications.

For more than one revision, a design deposit is required to receive additional drawings.



PROJECT APPROVAL

Project finalized and added to production schedule.

Once your project is approved, documents are signed, and a 50% deposit is received, your project is placed in our production schedule.



FABRICATION

Built-to-order based on your project documentation.

Our skilled production team gets to work on your project! Once in our production queue, you will receive an estimated lead time from our service team.



DELIVERY

Your order is carefully packaged and shipped with detailed installation instructions.

Once complete, your order is packaged, palletized, and shipped. If needed, we're happy to consult with you or your contractor to ensure successful installation.



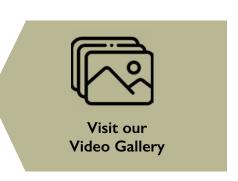


We've been protecting your passions for over 25 years. Schedule a free consultation and a dedicated expert will help provide you with a free, personalized proposal.

Book time with a Pro!



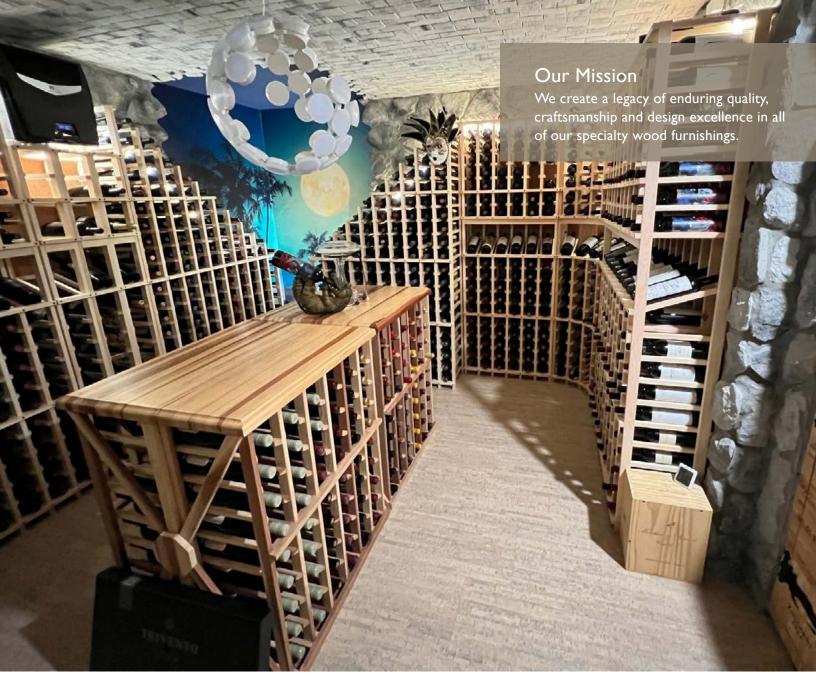
Our ever-growing gallery helps you along in the decision process. It includes photos from our flagship projects, installation videos, competitor comparisons and more.





Submit a simple form in order to help us best design your wine cellar. We'll contact you to discuss and answer any questions you have.

Plan your custom cellar



More Than Beautiful Wine Cellars...

With years of experience in the design of fine wine and cigar storage solutions, our experts are happy to consult on all aspects of your standard or custom wine cellar project, including how best to display your wine collection. We also offer wine racking and accessories, custom doors, and premium electronic humidors.

Showroom Visits and Tours

Our showroom features custom wine racking, cigar humidors and wine cabinetry. Call to schedule a visit today!

Vigilant Guarantee

Our products are handcrafted with the best materials to deliver complete customer satisfaction. As the industry leader, we offer a 100% satisfaction guarantee on all our standard products. If for any reason you are not satisfied, return your purchase in good condition within 30 days to receive a refund or replacement, your choice.



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