



A Summer Kitchen

A combination kitchen–wine room enhances a classic Hudson Valley farmhouse

by Kyle Diamond

A couple of years ago, a past client contacted our company, New Dimension Construction, with plans for an outdoor living project on his property. The homeowner—an architect—wanted to match the exterior of a late 19th-century farmhouse with a nearby guest house, both of which he owned with his wife. His idea was to build screened-in porches for both the main and guest houses with similar materials and provide outdoor stone patio areas with connecting walkways made from brick. Central to his plans would be an outdoor kitchen—the highlight of his ambitious project.

Having grown up in the Carolinas, our client’s material selection of brick, reclaimed hand-hewn timber, copper,

and open screening gave the project a mid-Atlantic, early Americana feel that blended in nicely with the farmhouse (see photo, above). His design called for a free-standing, 13½-foot-by-20-foot outdoor kitchen featuring a brick oven, grill, and plenty of storage space—everything you would need to whip up a summer meal for friends and family.

The structure was sited near the main house on a sloping grade steep enough to allow for a walk-out basement, which the homeowner was glad to put to good use. A wine lover, he had always wanted a wine cellar, but the home’s existing basement was not conducive to storing wine. The walk-out basement offered a perfect opportunity to locate a wine “cellar” below the kitchen.

Building the Structure

The kitchen’s foundation was a hybrid block-and-poured-concrete wall with brick veneer. On the upslope side, the mason subcontractor formed and poured concrete foundation walls with 6-inch stepped brick shelves on the side walls that followed the sloped grade. On the downslope side, the foundation wall was 8-inch block on the interior and 4-inch brick-shelf block on the exterior. Two-inch XPS rigid insulation was sandwiched between the inner and outer masonry wythes in the walk-out area (fit around the brick ties) and applied to the exterior face of the poured walls, which were backfilled.

With the structural part of the foundation completed, the masons began laying

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A sloping grade allowed for a walk-out basement wine “cellar.” Here, a mason installs brick veneer on the downslope block portion of the foundation over 2-inch XPS rigid insulation sandwiched between the brick and block (1). Beam pockets were made in the wall’s top course to let-in the 8x8 oak kitchen floor support beams (2).



Over the 8x8 oak beams, purlins are installed to support the cellar’s plank ceiling (3). Crew members build the structure’s moment frame out of engineered lumber and custom-fabricated steel brackets (4). The 2x12 Boral water table trim is capped with horizontal Boral trim beveled and kerfed with a drip edge for proper drainage (5).

up the brick veneer while we compacted the gravel base, installed a 10-mil vapor retarder membrane, and placed the 4-inch-thick basement slab.

The client planned to use the outdoor kitchen from late spring through mid-fall. The basement, however, would be storing wine year-round and was the building’s only conditioned space. So, our thermal envelope ran up the XPS-insulated foundation wall and horizontally in the insulated kitchen floor above. The target temperature for the wine room was a constant but relatively low 55°F, so we didn’t install sub-slab insulation (1, 2).

The floor assembly was fairly unique, given the structure’s design, use, and size. From the bottom up, we first installed 8x8 oak timbers, which run the width of building, in beam pockets 3 feet on-center. On top of the beams, we then ran 4x4 oak purlins 2 feet on-center the length of the building (3). Next, we installed rough-sawn 1-inch pine planking perpendicular to the purlins; the timber and planking gave the wine room’s ceiling a vintage, Old European look.

On top of the planking, we installed 2x4 joists 16 inches on-center across the width of the building. After filling the joist bays with 3 inches of polyiso rigid

foam, we glued and screwed a layer of 3/4-inch AdvanTech subflooring to the 2x4s. The resulting floor system was plenty rigid for the tile finish planned in the kitchen.

Moment frame. The kitchen’s exterior wall design called for mostly large louvers, windows, and doors with little sheathing, so a moment frame was needed to resist shear forces. We built the moment frame out of 5 1/4x5 1/4 PSL posts and triple 1 3/4x9 3/4 header stock and connected it together with custom-fabricated steel corner and T-shaped brackets (4). We lag-screwed the brackets into the posts and headers according to our



The exterior brickwork for the wood-fired pizza oven is a major feature on the building's north-facing façade. The wine cellar has an inswing door covered with a Craftsman-style copper roof, allowing sheltered access to wine during snowy Taconic mountain weather (6).



The custom-built windows and louvers are fitted with casement-window-style operable brass hardware. Here, hinge locations are routed out using a Porter-Cable hinge template (7). Porcelain tile that looks like hardwood flooring is dry fit over a Ditra uncoupling membrane (8).

engineer's specifications and secured the bottom of the posts with base connectors. Later, we trimmed out the moment frame's engineered lumber with Lifespan treated radiata pine (lifespan solidselect.com).

At the roof, we site-built a couple of trusses from salvaged hand-hewn timbers and installed them at intermediary column locations (at one-third points of the room); the trusses made a visual connection to the reclaimed timbers we installed on the main- and guest-house porches. We framed the roof around the two trusses with 2x8s at 16 inches on-center, then sheathed the roof with Zip System sheathing. Completing the

roof, we installed pressure-treated cedar shingles over a cedar breather membrane and capped the unvented roof off with a copper ridge.

The Kitchen

The focal point of the kitchen interior was the wood-fired oven. Manufactured by Mugnaini (mugnaini.com), the Prima-100 oven kit arrived on site in sections. The mason put together the precast pieces on a small reinforced concrete slab poured within the block and brick wall assembly, then applied refractory mortar over the joints. A metal flue manifold (later connected to a metal liner run through the brick chimney) was attached

to the arch with masonry screws, then the oven's core was wrapped with two layers of thermal insulation blanketing. The mason finished the interior masonry surround, then later the exterior brickwork of the chimney—a handsome feature in its own right (6).

The client wanted a "pilaster look" for both the exterior and interior façades. This was achieved by centering the louvers, windows, and doors between the radiata-pine-clad PSL columns. Starting on the exterior, we ran 2x12 Boral poly-ash water table trim around the perimeter and capped it off with horizontal Boral trim, which we beveled and kerf cut to drain (5). On top of the beveled

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Beadboard is installed between trusses made from salvaged hand-hewn timber (9). The wood-fired oven is the focal point of the interior, which also features Carrera marble countertops installed on base cabinets and custom-fabricated stainless steel shelving (10).



The wine-room walls are finished with a three-coat stucco finish (11). Designed by the architect-client, the wine shelving was built by NDC crew members using walnut-veneer plywood with walnut face frames (12).

cap trim, we installed 1½-inch-deep by 3-foot-high panels made with shiplap pine. We trimmed out the interior with primed finger-jointed pine.

The structure's large louvers, windows, and doors were custom-built off site out of mahogany. The client wanted the louvers and windows to open out like a casement, so we installed casement adjuster and locking hardware by Ives (iveshinges.com) to operate them. The solid brass ball-bearing hinges (deltana.net) were installed using a Porter-Cable hinge template and a router (7). A minor drawback to outswinging louvers and windows, of

course, is that our clients have to forego insect screening in order to operate them.

Fitting out the space. We installed porcelain tile that simulates hardwood strip flooring over a Schluter uncoupling membrane on the floor (8) and beadboard on the ceiling (9). After installing our finishes, we fit out the kitchen with a stainless steel built-in gas grill, a single propane burner, a pot sink, and a warming drawer, all by Viking. Custom-fabricated base cabinets and stainless steel open shelving support Carrera marble countertops (10).

The wine room. The foundation

walls were finished with a three-coat stucco finish (11). HVAC equipment needed to condition the wine room's air (a constant 55°F to 57°F with an average 60% relative humidity is required) was housed behind the wood storage box below the oven, with an AC condenser unit installed outside on a pad. Finishing up, we built the homeowner-designed wine shelving out of walnut-veneer plywood with walnut face frames (12). ❖

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