

The Butterfly House

The Butterfly House is an adaptive reuse of a heavy timber barn. The original pine beams and trusses were refurbished, reinforced and left exposed.

All that was salvaged from the existing barn were the structural slab and heavy timber columns and trusses. Approximately another 1000 square feet were added new to the refurbished barn structure.

The design incorporates passive solar energy techniques. The summer sun is blocked by the architecture and the winter sun is allowed to enter to help heat the spaces.

The Rain water collection system, using a custom build gutter system along with the butterfly roof design, captures rainwater and delivers it to a 10,000 gallon corrugated galvanized water tank. The rain water is mixed with well water and then treated in the Pump Room.

There are approximately 800 square feet of Covered massaranduba decking surrounding the Barn Studio and Office Loggia. The Outdoor Covered Living Areas surrounding the 2 structures provide additional living square footage. The Breezeway separating the 2 structures facilitates natural ventilation when the multiple sliding glass doors are open.

Both the Butterfly House and Office Loggia have exposed wood rafters and structural tongue and groove Douglas fir roof decking. The walls and roof plenum are insulated with foam insulation.

The flooring is burnished limestone. The custom cabinetry is white oak. The bedroom offers privacy with a 1/2' thick tempered contemporary sliding glass wall on stainless steel barn door hardware.

The dining Room glass is protected from the sun with a steel and ipe' brise-soleil. The exterior is clad with select cave stone stonework and conventional color impregnated stucco. The interior of the Bedroom has a full height wall of select cave stone.

The roofing is galvalume standing seam. There are large, 48" x 48" conventional masonry fireplaces in both the Butterfly House and Office Loggia.

The lighting schemes in both buildings are highly developed with track lighting, cable lighting and surface mounted canisters, all LED. There is an 8 foot diameter Big Ass fan in the Living Room and smaller Big Ass fans in the Kitchen, Breakfast and Dining rooms, as well as the Office Loggia.

The Ramada on the north side of the Butterfly House offers another place for outdoor dining.

The Office Loggia features electric solar shades for the two 9 foot tall sliding glass doors. There are two built in laminated maple desktops in addition to built in custom oak cabinetry for office work.

The compact Utility Room is off the Breezeway and accessible to both the Office Loggia and Butterfly House.

The views of the Sculpture Garden and Vineyard to the south and the Devil's Backbone and creek to the north are taken advantage of through the use of large expanses of glass in both buildings, as well as the covered outdoor areas. The driveway and Auto Court are custom designed to control surface rainwater and provide convenient parking; the surface being concrete strips and pea gravel.

The Auto Loggia is a 3 car carport with a Tool Room. Its butterfly roof collects rainwater and with a steel gutter and rain chain deposits it in a water trough for the wildlife. The Auto Loggia can also function as an Outdoor Living Pavilion and is approximately 1000 square feet covered. It features a galvalume standing seam metal roof, 12' thick board formed concrete walls, a large massaranduba barn door and structural steel beams and columns with concrete pedestals.