

Case study: Mahoney Architects & Interiors designs a green remodel in Tiburon

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Durable, sustainable, beautiful. Built-to-last, energy-efficient, eco-friendly. Our clients wanted to remodel their 1970s home to take full advantage of their spectacular, unique, San Francisco Bay view. Their goals were to modernize the home with a simultaneously classic and contemporary look using only green materials. Sometimes we are fortunate enough to work with clients and projects that inspire us, helping us to tap into the depths of our creativity and challenging us to stretch our abilities. This is the story of such a client and a project.

The remodeling site has world-class views, including the San Rafael-Richmond Bridge, Angel Island and the Golden Gate Bridge. We could easily have torn it down and built a new home. Most homeowners would probably have chosen that path. However, the owners' sincere interest in being green strongly motivated all of us to keep the original home and to remodel instead. We retained the size of the home, the entry foyer, the majority of the structure, except for seismic upgrades, the rooflines, and the interior layout. In addition, the entire home received a facelift and a complete energy upgrade.

There were many issues. The old, grey T1-11, siding was battered and past usefulness. In addition, the siding dated the home, rather than providing the contemporary look that the homeowners desired. The majority of the exterior doors in the home were single, glazed aluminum sliding doors. The expansive eaves were very energy-efficient, but unattractive; they were enclosed with warping plywood. The decks had a worn membrane coating. The lighting and window coverings were inadequate and old-fashioned. The bathroom had laminate countertops with older fixtures. The main kitchen and adjoining breakfast room, as well as the lower-level guest kitchen, were small, dark and cut-off from the main living area in the home. The rooms did not properly showcase the views and were uninviting for guests.

This entire home remodel is a fine example of true teamwork. All of the tradespeople took great care in their work and created exemplary craftsmanship. Our clients led the team with their enthusiasm for quality work and with their dedication to energy efficiency and the usage of eco-friendly products.

Here are some of the solutions to the problems that we faced. Warm, earth tones were selected for materials throughout the house. Soft, grey-green coloring were chosen because they reflected the color of the Bay beyond the windows. We used taupe and warm golden tones against the backdrop of the outdoor native dry summer grasses surrounding the home. From the exterior cedar siding to the flooring, cabinetry and interior doors, all wood products are Forest Stewardship Council (FSC)-certified. The FSC is a non-profit organization devoted to encouraging the responsible management of the world's forests. Additionally, paints without Volatile Organic Compounds (VOCs) were used throughout the home. A few walls were highlighted with an earthen interior wall finish. Spectacular new Fleetwood sliding doors have a special coastal finish to provide durability and to protect against the high amounts of Ultraviolet (UV) rays that come from the bright sun reflecting off the water. The doors also have low-Emissivity (low-E) glazing, which means the finish on the doors is non-toxic and does not off-gas hazardous chemicals into the air. Purely stainless steel hardware accompanies them.

We also finished the decks. They are made of stone tiles and rest on pedestals above the roof. The pedestal system helps the deck to be completely level and to drain properly. All flashings and gutters are copper to maximize their lifespan above water. The gutters are the correct sizes to handle the flow of rainwater, collecting it in large cisterns for year-round, landscape irrigation.

Every aspect of this remodel is environmentally friendly and designed to the liking of our clients.