

# GREEN SPEAK

**GREEN**  
BUILDING  
ALLIANCE

**GREEN BUILDING ALLIANCE MEMBER NEWS**

*Spring, 2005*

The Green Building Alliance is a group of local architects, engineers, landscape architects, interior designers, contractors, and other professionals—many with award-winning credentials—who are committed to the design and building of environmentally sustainable projects.

We are continually expanding by introducing new members and utilizing the latest in Green Building methods and materials. We remain on the cutting edge of the increasing shift toward sustainability in construction.

The following are some of the many current projects by GBA members:

**RPM Architects** is currently constructing the Horvath Residence in Santa Ynez: a small straw bale house on Baseline Ave.

**Allen Associates** is nearing completion of the Burns residence, a new 2,800 sq. ft. home. Its stained concrete slabs function as finish floors. The slab and all foundation concrete contain 50% fly-ash mix. Walls and roof are structural insulated panels (SIPs). All remaining lumber is FSC certified. Roofing is recycled content metal standing seam metal with high percentage recycled content. Orientation and window/door placement integrates passive solar heating and natural cooling. Window glazing is low E squared. Domestic hot water and backup space heating is provided by a solar thermal batch water heater combined with a Trinity on-demand water heater. The Trinity unit has a built-in heat exchanger for the space heating. Photovoltaic panels, wheatboard cabinets, bioswales, pervious paving everywhere outside and low/zero VOC finishes and adhesives are some of the other green features. Architect: **Thompson-Naylor Architects**. Structural Engineer: **Mike Gones**.

**Kent Mixon Architect** is currently working on an 800 square foot guest house in Toro Canyon. Some of the features are an on-demand water heater for water and space heating, Structural Insulated Panels for the exterior walls and roof, energy efficient windows all in a minimalist architectural style with exposed concrete floor and no extraneous finishes or materials.

**Thompson Naylor Architects, Mike Gones**, civil engineer, and **Allen Associates** are working together on a new "off-grid" house in the coastal foothills of Ventura County near Malibu. The house will be powered by wind generators and solar photovoltaic panels, with battery backup. The water is supplied by private well, and waste disposal is by grey water and an alternative septic system. The foundation will have high fly ash content concrete, and walls and roof will be structural insulated panels. Heating will be passive solar and radiant floor heat.

**Allen Associates** has completed the Burt Art Studio, a 1,800 sq. ft. straw bale structure which has integral color natural lime plasters on interior and exterior walls. The roof is made from SIP panels with recycled content standing seam roofing. A Rinnai on-demand water heater provides domestic hot water and backup radiant floor space heating. A stained concrete slab serves as the finish floor. The bathroom has a composting toilet. The crowning glory was a dying walnut tree on site that was milled into planks for bookcases and shelving.

**John D. Kelley, Architect** has completed remodeling his home on the Mesa. The project started in July '04 with deconstruction focused on salvaging materials for reuse. The home has been redesigned to incorporate daylighting, natural ventilation and high performance windows. Energy upgrades include encapsulated fiberglass insulation, on-demand water heating and energy star appliances, as well as a photovoltaic electric system with reverse metering, designed by **Renewable Energy Concepts**.

**Contact the Green Building Alliance at 805.654.4169 or visit [www.gballiance.com](http://www.gballiance.com)**

**Jessica Helgerson Interior Design** helped to select interior materials including sustainable bamboo flooring and non-toxic finishes. New landscaping designed and installed by **CommonGround** will utilize native and drought resistant planting, edible and medicinal planting, a water-efficient irrigation system, permeable mulch pathways, and recycled hardscape materials.

**Allen Associates** has recently completed its new office headquarters. This 2,000 sq. ft. tenant remodel has good daylighting and natural ventilation that was enhanced by adding windows, skylights, and French doors. Cabinets are from wheatboard with a variety of countertop materials: Richlite, Slatescape, sunflower seed hull board, and wheatboard using whey glues. Artificial lighting is fluorescent and halogen with dual control switching. Toilets were changed to dual flush EcoQuantum units. The conference room table is made from a local Black Acacia tree that was slated for firewood and the display cabinets are from Lyptus, a sustainably grown Brazilian hardwood. Flooring throughout is bamboo. A 5 kilowatt photovoltaic solar system has been installed on the roof. In addition, the company has instituted a transportation policy which partially subsidizes the purchase of high mileage vehicles (45 miles/gallon and higher) by key company personnel. It also sponsors a monthly "clean commuter" cash drawing for people who bike, walk, carpool, take the bus, telecommute, or ride a scooter to work. Plants and irrigation installed by **Grace Design Associates**.

**CommonGround** has completed a design/build landscape for a San Roque residence. The landscape features native and drought resistant planting, a variety of natural and permeable stone paving, dry-stack stone walls with planted joints, organic herb and vegetable gardens, compost bins, and a lovely dry creek bed, as well as an outdoor shower and children's play area.

**Allen Associates** is in mid-phase construction of the Calder Remodel/Addition. This project incorporates a batch solar thermal heater with two Rinnai on-demand units for back up using a Metlund distribution system. Four 400 gallon tanks located under the front deck capture rainwater for garden irrigation. In addition, there is a greywater system. Granite countertops, low VOC paints & finishes, dual flush toilets, low flow faucets, and photovoltaic panels on the roof are some of the other green features. Architect: **Poirier & David /Architects**.

Long on imagination but low on funds, Donna Mrotek, director of a small pre-school called in **Grace Design Associates** to design and build a stimulating and child-friendly landscape which is currently under construction. Salvaged block, concrete, stone and brick materials are being used to create playful walls, walks, and child-friendly planters. Severe drainage problems are being remediated by sculpting and grading the on-site soil. The resultant mounds and terraces create distinct play spaces while eliminating the need to truck out material. All rainwater will be kept on site in a low lying area planted with high water use/low water demand plants. Plantings on site will be reused. Other plantings will be scavenged from the students' gardens and donated to the school. New plants will be bought small and grown in place, reducing use of resources at the nursery and in trucking. No lawn is planned. Drip irrigation on a timer will minimize water use. Children will augment the irrigation with hand carried clean wastewater.

**Allen Associates** is scheduled to break ground in June 2005 to construct the Tipton Meeting House at Sedgwick Natural Reserve. All foundation and slab concrete will use a 50% fly-ash mix. Stained and scored concrete functions as finish flooring. Structural insulated panels (SIPS) are used for most of the walls and roof area. The exterior walls are covered with cementitious panels; the pitched roof is covered with standing seam metal roofing. The flat one is a living green roof. All rain water is retained on site. Some is collected in a 6,000 gallon tank and used in the dual flush toilets. There are also going to be waterless urinals. All kitchen and mechanical equipment is Energy-Star rated or better. Natural ventilation is the primary cooling. This 7,000 sq. ft. building is powered 100% by photovoltaics. Richlite countertops, bamboo cabinets, acoustic fabric wall coverings, zero VOC paints by Sherwin-Williams and recycled content glass tiles are some of the other green products.

Architect **Dennis Thompson**, general contractor **Allen Associates** and the landscape design-build group **Grace Design Associates** are working in collaboration to design and build the Rockne-Andreas Residence in Santa Barbara, a new contemporary house and artist's studio on the upper eastside. The clients are committed to creating a cutting-edge, "fully green" project. The floors will be high fly ash content concrete, and the building will be built of factory-cut structural insulated panels. The

heating will be passive solar and radiant floor heating. Water conservation will be achieved with a cistern and a grey water system. The roof will be a single-ply membrane, and the walls will be integral color plaster. **Mike Gones** will provide structural and civil engineering; **Allen Associates** will be the builders. The landscaping will incorporate permeable pavings, drought tolerant plantings, systems for harvesting and distributing dew and rainwater, high-recycled content materials, recycled mulches (wood, glass and stone), salvaged materials (plants, stones, concrete, metal gates and plank doors), tree placement for climate control and maximum air movement benefits.

**CommonGround** is working on an ongoing design/build landscape for a 24-acre hilltop estate near Toro Canyon. To date, the work has included a full inventory and analysis of the site, soils testing and landscape design for the area surrounding the proposed main residence. An acre of avocados on a steep hillside and a half-acre of miscellaneous orchard trees and berry vines have been refurbished. All trees were placed on an automatic irrigation and organic fertilizing system and basins were constructed around all trees to maximize water efficiency and nutrient intake. An efficient yet portable irrigation system was assembled to provide water for newly planted areas to help them get established, without having to dig many long trenches to provide irrigation. A deep watering and fertilization system was installed to help large redwood and pine trees that were suffering. Recycled vegetation (mulch) has been installed over several bare acres to begin soil preparation for future planting, reduce weeds, retain soil moisture and mitigate erosion. Also, grading and drainage work has been done onsite and work has ensued with neighboring property owners to mitigate landslides and erosion.

Building plans are being completed by **John D. Kelley, Architect** for a major upgrade to a home in San Roque. The project includes a second story addition, new kitchen and bathrooms and new finishes inside and out. Green features will include high performance windows, formaldehyde-free insulation, fiber cement siding and roofing, an on-demand water heater, a solar photovoltaic electric system and healthy, low-impact materials and finishes. General Contractor is **Allen Associates**.

Architect **Dennis Thompson**, general contractor **Allen Associates** and the landscape design-build group **Grace Design Associates** recently completed the renovation of the Freidberg Residence in Santa Barbara. Green landscape features include: minimizing demolition of existing landscape features, (existing patios were resurfaced; major portions of the irrigation system were reused; plants were salvaged from on site); 90% of new plantings, including the lawn area are drought tolerant; planting areas are watered with drip irrigation and heavily mulched with recycled green waste. Blocks, concrete walks and stone demolished to make way for the new landscape were exported to the Mrotek residence, a quarter mile away, to build a garden for a pre-school.

**Allen Associates** has completed the new Secord residence. This project incorporates a Copper Heart batch solar thermal water heater with two Takagi on-demand water heaters for space heating and domestic hot water; bamboo flooring; bioswale for rain runoff; recycled content structural steel; a lot of engineered lumber; environmentally-friendly SBS roofing, zero VOC paints and finishes; radiant floor heating in the master bath; reverse osmosis water purifier; natural stone countertops, flooring, and walkways; low voltage lighting; and HEPA-filtered FAU.

Laguna Cottages for Seniors, a low-cost housing project by **Thompson Naylor Architects** and **Mike Gones**, civil engineer, in the historic district of Santa Barbara, will be on this year's Parade of Green Building. The 11-unit complex features radiant floor heat and solar domestic hot water, daylighting, cross ventilation, low-VOC paints and cabinets.

Construction is starting on a new 1,620 sq ft residence near Moab, Utah designed by **John D. Kelley, Architect**. The structure of the building uses a recycled timber frame from a barn in concert with structural insulated panels (SIP's) for the walls and roof to create an energy efficient building envelope with a lot of character. A grid-tied solar photovoltaic system will provide a portion of the electrical energy and hot water will be provided by an on-demand water heater.

**Allen Associates** is in the final stages of construction on the Hill house. This is a 1,200 sq. ft. prefab Built-To-Ship structure, located in Calistoga, California. The foundation and slab utilize a 50% fly-ash mix. The walls are covered with Hardi cementitious siding. Standing seam metal roofing covers the top. An on-demand water heater, formaldehyde free, encapsulated insulation, and low VOC paints are other green elements.

**CommonGround** has completed a landscape re-design for a residence in Los Angeles; utilizing the existing configuration of

pool and spa, which was refurbished. Also, natural stone, drought resistant planting, semi-permeable paving materials, and an outdoor shower were installed, as well as a gathering space with fountains, a built-in BBQ and gas fire pit. The project is nearing completion.

**Allen Associates** has recently completed a remodel for the Gresser Residence. This project features a radiant floor heating system with warmboard subfloors and a high efficiency boiler that also provides domestic hot water. Other green features are cabinetry and shelving out of Medite composite board, bamboo flooring, Energy Star appliances, Caroma dual flush toilets, copper countertops in the kitchen, low/zero VOC paints, finishes, and adhesives, and recycled existing doors into the remodel.

**John D. Kelley, Architect** and **Jessica Helgerson Interior Design** are remodeling two houses at Rancho San Augustine in Hollister Ranch. Green features include high performance windows; on-demand water heaters for space and water heating, certified lumber; recycled wood siding; reclaimed wood flooring, beams and cabinetry; and non-toxic interior finishes and materials. A photovoltaic electric system for the ranch has been installed by **Renewable Energy Concepts** and the houses will have drought-tolerant landscaping designed by **Isabelle Greene and Associates**.

**Allen Associates** is about to begin construction on the Klein property for a new main residence. It is using the Insteel structural system to optimize the passive solar design. It also includes a hydronic radiant floor system for backup heat, FSC certified lumber, low VOC paints, finishes, and adhesives, and Energy Star appliances.

**CommonGround** and **Thompson Naylor Architects** have designed an addition and remodel for a Goleta tract house. The landscape will feature recycled concrete paving, grass pavers, and other permeable paving, a citrus screen and vegetable/herb garden, as well as drought resistant planting, and an efficient drip irrigation system. The additional bedroom will have a radiant barrier in the attic, and the house will be retrofitted with a whole house fan. **Allen Associates** is the general contractor.

**Allen Associates** is starting construction on an addition to the Murdoch residence in Montecito. The new space will have radiant floor space heating and on-demand water heating. The space will have extensive daylighting and cross ventilation. The floors will be bamboo, and the roof will be a cold-applied membrane. **Thompson Naylor Architects** were the designers.

**Thompson Naylor Architects** is designing a new guesthouse on a ranch in Cuyama. It will be built of an exposed concrete slab and structural insulated walls and roofs and finished in an adobe style to match the main house. Roof overhangs, trellises, and cross ventilation will be carefully designed to mitigate the severe summer temperatures; a wood stove will supplement passive solar gain in the winter.

**John D. Kelley, Architect** recently completed an addition and remodel to a home in Samarkand. The project replaced the old, inefficient tank-type water heater with new on-demand water heaters and added insulation in ceilings and walls for comfort and energy efficiency. Finishes were selected with an emphasis on non-toxic, low environmental impact materials.

**Allen Associates** has nearly completed the Klein Guest House. This project achieved a Target 3 rating under SB County's Innovative Building Review Program. It is designed to use 59.2% of the energy of its standard equivalent. R-30 attic insulation, low E squared windows, a combined hydronic system for water heating and space heating, passive cooling with venting skylights and ceiling fans, outdoor lighting with motion detectors, and high efficiency appliances. Other green features are 100% recycled cotton insulation, fiber cement siding and roofing, 50% fly-ash concrete for all foundations and slabs, drip irrigation with native plants, low and zero VOC paints by SafeCoat, and tile floors throughout. Features will include new energy efficient windows, Bamboo flooring, on demand water system and a high efficiency FAU or hydronic heating.