

LEED for Homes Overview

The Leadership in Environmental and Energy Design (LEED) for Homes rating system is a voluntary green building certification program that recognizes and rewards the nation's top green homebuilders in terms of environmentally sound construction. Like other LEED standards, the LEED Homes program contains four levels (Certified, Silver, Gold, and Platinum). The program was developed by the United States Green Building Council (USGBC) with input from building professionals across the country using a consensus based open process.

Davis Energy Group (DEG) serves as LEED for Homes Provider in California and Nevada. DEG is an engineering firm specializing in green design consulting, energy modeling, product development, and market transformation. DEG has been involved in numerous market transformation programs including the Energy Star, Building America, and Zero Energy Homes programs. DEG also offers the GreenPoint Rated (GPR) and Environments for Living (EFL) programs to its clients, as well as expertise in residential grEEn® design.

LEED for Homes uses eight different resource categories to measure the overall performance of a home. The Location and Linkages (LL) category includes the placement of homes in environmentally responsible ways in relation to the larger community, such as in proximity to public transit. Included in the Sustainable Sites (SS) category is the use of the entire property so as to minimize the projects impact on the site. The Water Efficiency (WE) category includes the water conservation practices (both indoor and outdoor) built into the home. Incorporated in the Energy and Atmosphere (EA) category is the improvement of energy efficiency particularly in the building envelope and heating and cooling design. The Materials and Resources (MR) category includes the efficient utilization of materials, selection of environmentally preferable materials, such as those produced locally and minimization of waste during construction. The Indoor Environmental Quality (IEQ) category consists of the improvement of indoor air quality by reducing possible air pollution. The Innovation and Design Process (ID) category includes several types of innovation measures including: special design methods, unique regional credits, measures not currently addressed in the rating system, and exemplary performance levels. Lastly, the Awareness and Education (AE) category comprises the education of homeowner, tenant, and building manager (as appropriate in larger multifamily buildings) about the operations and maintenance of the green features of their LEED home.

The LEED for Homes program targets the top 25% of new homes based on performance and environmental responsibility, including both mainstream production and custom builders. By recognizing sustainable design, construction, and operations practices in homes nationwide, LEED for Homes helps builders to differentiate their homes as some of the best homes in their markets using a recognized national brand. Furthermore, home buyers will be able to readily identify high quality green homes

simply by selecting LEED homes. As of April 2008, there were 2,675 active housing units registered with the program in California and Nevada and 10,250 registered nationwide.

The administration and implementation the LEED for Homes program is divided between three different roles: the Provider, Project Representative, and Project Rater. The **Provider** is responsible for the oversight of the program, supervision and training of Reps and Raters, and acts as a funnel for the certification of housing units by the USGBC. Davis Energy Group acts as Provider for the program in California and Nevada. The **Project Representative** is responsible for plan reviews, all communication with the builder and Rater, the preliminary and final checklist meetings, and oversees the certification submittal package. Lastly, the **Rater** is responsible for HERS and Energy Star testing along with visual on-site LEED verifications. Mandatory tests which the Rater must perform include a thermal envelope test, duct leakage test, and a refrigerant charge test. Optional tests include an outdoor air flow test, exhaust air flow test, and a supply air flow test.

The LEED for homes verification process entails five steps. The first step is a plan review conducted by the Representative. Following the plan review the Representative meets with the builder and design team. Once construction has begun, the Rater conducts intermediate inspections and testing. Following the building's completion the Rater conducts the final rating, and ultimately the Provider completes the rating process with the USGBC.

Davis Energy Group and Build It Green have a memorandum of understanding in place to promote the LEED for Homes and the GreenPoint Rated programs. There are numerous similarities between the two programs. Both programs require performance across different categories as verified by a third party rating. Also, both programs require at least 15% energy savings above Title 24 and both encourage builders to improve performance over time. Each program has been created to serve a full range of residential new construction in California. However, there are also a number of differences between the two programs. Because of more participation requirements, the LEED for Homes program serves to differentiate the greenest of builders while GPR serves as an accessible yet credible starting point, offering maximum flexibility. The LEED for Homes program was developed by stakeholders across the country while the GPR program was developed by only California stakeholders, thus it only references CA codes and building conditions, while LEED serves as a national environmental award.

The similarities between the two programs enable the opportunity for dual branding. Qualifying projects are able to receive both brands. Because of the stricter standards, all LEED certifiable homes should qualify as GreenPoint rated while only some GreenPoint rated homes will be able to qualify for LEED for Homes.

To get started contact the LEED for Homes Administrative Manager at LEED@davisenergy.com or call (530)753-1100 ext. 11. For information on the GreenPoint Rated program contact GreenPointRated@builditgreen.org or call (510) 845-0472 ext.111.