SANTA CLARA - A LEED CERTIFIED HOME

ABSTRACT
Santa Clara, a residence located in Dana Point, California, has been designed as a LEED Certified home. LEED, Leadership in Energy and Environmental Design, is a certification program for green building. There are various ratings that can be earned for homes including Certified, Silver, Gold and Platinum. In order to gain certification, a minimum of forty points must be obtained using the LEED V4 Homes and Multi-Family Midrise scorecard. This scorecard has eight categories, including: Location and Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation, and Regional Priority. Each category consists of prerequisites that are required as well as credits that can be obtained to earn points. The purpose of fulfilling these credits is to create a home that has better air quality, uses less energy and has less impact on the environment. An added benefit of having a LEED Certified home means lower utility bills for the homeowner.

The site for Santa Clara is located at Lot Forty-One in the Strand Point community. Landscaping, including a pool and spa, are important to the homeowner. This must be considered while choosing LEED credits to obtain. The largest categories affected by the landscaping and pool are the Water Efficiency and Sustainable Sites. There are steps that can be taken to use less water even with the use of a pool and spa. The home’s main entrance is within a ½ mile walking distance from the building entrance of 8 other buildings specified under the Uses and Use Categories of LEED V4. This includes:
- Grocery Store (Rushmore Superfoods)
- Other Food Store (Purley Pomegranate Inc.)
- Services (Gym at The Strand)
- Restaurant (Arc’ Bar at The Strand)
- Public Park (Strand Vista Park)
- Medical Clinic (Practical Hospital Services)
- Family Entertainment Center (The Strand Golf Course)
- Community Center (Strand Beach Club)

WHAT IS LEED?
LEED, or Leadership in Energy and Environmental Design, is the most widely used green building rating system in the world. Available for virtually all building, community and home project types, LEED provides a framework to create healthy, highly efficient and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement.

THE CERTIFICATION PROCESS
The process is designed to inspire project teams to seek innovative solutions that support public health and our environment, while saving building owners money over a project’s lifetime. Based on the number of points achieved, a project then earns one of four LEED rating levels:

- Basic (equal to 0-19 points)
- Silver (equal to 20-39 points)
- Gold (equal to 40-59 points)
- Platinum (equal to 60-88 points)

The certification process involves several key elements:

- Location and Transportation:
- Sustainable Sites:
- Water Efficiency:
- Energy and Atmosphere:
- Materials and Resources:
- Indoor Environmental Quality:
- Innovation:
- Regional Priority:

For Santa Clara, the following credits were obtained to achieve LEED Bronze certification:

- Certification:
- Prerequisite:
- Credit:
- Regional Priority:
- Enhanced Compartmentalization:
- Enhanced Garage Pollutant Protection:
- Material Efficient Framing:
- HVAC Start-Up Credentialing:
- Contaminant Control:
- Noninvasive Plants:
- Energy Metering:
- No Invasive Plants:
- Water Metering:
- Radon-Resistant Construction:
- Environmental Tobacco Smoke:
- Silver:
- Gold:
- Platinum: