



Retaining Excellence™

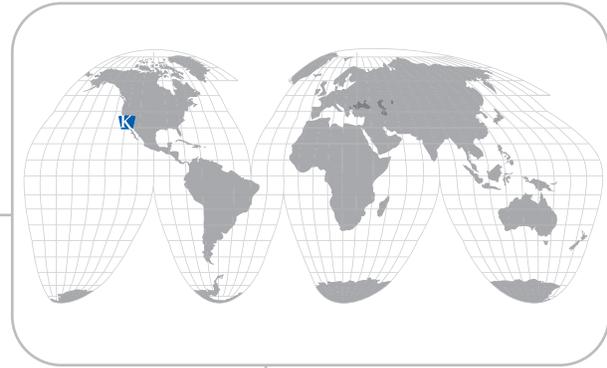
Sky Ranch

Santee, California

The Sky Ranch village in Santee, California is a collection of four premier communities located on “RattleSnake” Mountain in the northeastern suburb of San Diego. Along with a view overlooking the city, the mountain also provided developers with a challenging terrain consisting of 1.5 to 1 slope ratios, large-sized boulders and limited access points.

To create buildable land on the mountain, a customized Keystone Compac II Unit was selected for approximately 81,000 square feet of walls located throughout the development. The Keystone Compac II Unit allowed for design flexibility, efficient installation and a natural stone, random pattern aesthetic.

“Sky Ranch developers originally wanted a random pattern, natural stone aesthetic for the project, however the original plans were already drafted with cast-in-place and masonry walls. Geogrid, Inc. redesigned the project with Keystone



Project: Sky Ranch

Location: Santee, California

Keystone Product: Keystone Compac II Unit*
*Units were produced with a custom “Sky Ranch” mold design & color

Keystone Manufacturer: RCP Block & Brick

Wall Coverage: 43 walls; 81,592 total square feet
7,708 total linear feet

Project Owner: Lennar Homes

Wall Contractor: Geogrid, Inc.

Engineers: Red One Engineering, Inc. (walls)
Hunsaker & Associates (civil)
Leighton & Associates (soil)



CASE STUDY





retaining walls, featuring one size block and also suggested customizing the block to allow for the random pattern aesthetic. This resulted in maintaining the cost-savings of using a one-size block system,” said Ed McCaffrey, Chief Operating Officer and Project Manager, Geogrid, Inc.

RCP Block and Brick produced the customized Keystone Compac II Unit with a specially-created fluted mold design. The block also features a custom color. Along the customization of the Keystone Compac II Unit, the site’s location provided other significant challenges.

“The Keystone walls are designed to withstand a fairly aggressive combination of terrace walls with slopes (1.5 to 1 ratio) above them. Some of the walls required geogrid, reaching 35 feet in length, installed at every course,” said Matt Merritt, P.E., Red One Engineering.



The Keystone Compac walls vary in total heights ranging from 28-30 feet with exposed heights nearing 20 feet. The site’s remote location and limited access points required that several efforts including wall installation, delivery, grading and foundation efforts occur simultaneously in a confined working area. As a result, extensive and daily coordination between the numerous contractors, engineering consultants, subcontractors and developer was required to meet a tight construction timeline.



With its challenging terrain and critical aesthetic need, the Sky Ranch village project required a creative land development solution. A customized Keystone Compac II Unit provided a structural, aesthetic and cost-effective final solution for the premier residential development.

For more information on Keystone Compac II Unit or other innovative Keystone products, visit www.keystonewalls.com or call 800-747-8971. Keystone Retaining Wall Systems, Inc. is a subsidiary of CONTECH Earth Stabilization Solutions (ESS) Inc. (www.contechess.com).

