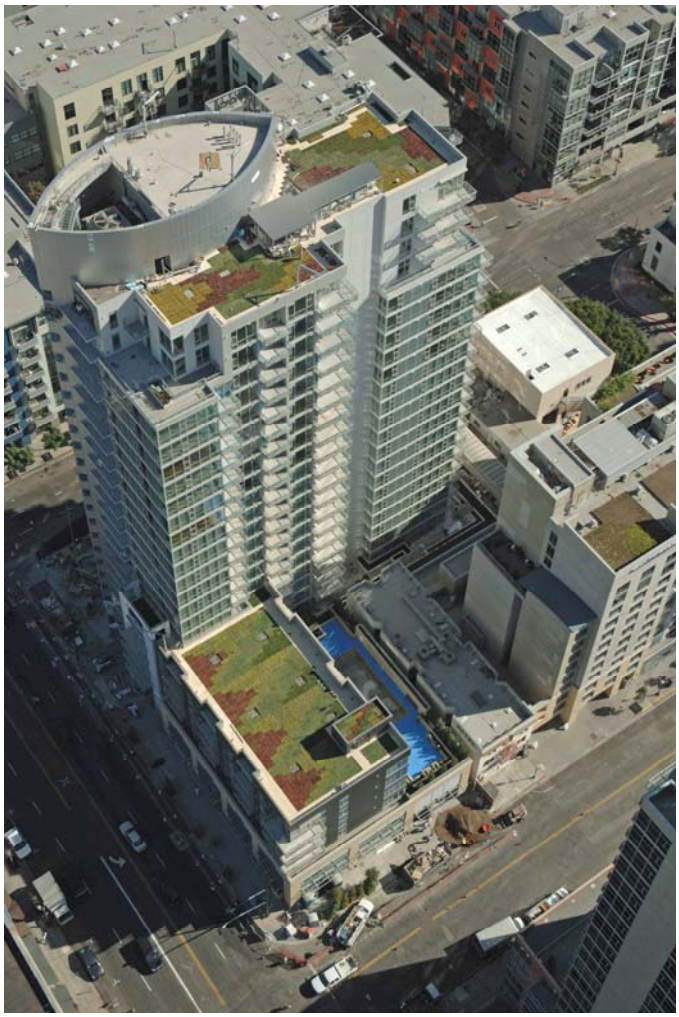
STRATA APARTMENTS – DOWNTOWN SAN DIEGO

Building Owner/Developer: The Hanover Company
Location: SW Corner Market & Tenth, San Diego
GreenGrid® Green Roofs Size: 7,000 ft^2
Installation Contractor: Executive Landscape, Inc.
Architect: Perkins & Company, San Diego
Green Roof Design: GWH Landscape Architects; Weston Solutions, Inc., GreenGrid®
Rooftop System: Extensive
Status: Completed, Nov. 2009



Project Summary

Strata Apartments, a 250,000 square-foot and 163-unit Apartment Complex with 6,400 square-feet Retail/Commercial Space, is located at the Southwest Corner of Tenth Avenue and Market Street in Downtown San Diego. This is one of the first building projects within the Centre City Development Corporation (CCDC) San Diego downtown district that intends to pursue LEED® Certified rating by the United States Green Building Council (USGBC). CCDC provided FAR Bonus for implementation of the 7,000 square-foot 'Eco-Roofs', based on CCDC's Eco-Roof Bonus Program, allowing the developer to build additional permitted space of 30,000 square-feet. The Hanover Company selected WESTON's GreenGrid® modular green roof system as part of the sustainable building design and in order to meet the CCDC requirements. The green roofs were integrated atop the 7th floor roof and 24th floor roof and both provide beautiful views of the greened roof areas to tenants from adjacent high-rise buildings (Photo: Courtesy The Hanover Company).

GWH Landscape Architects and Weston Solutions/GreenGrid® partnered in designing the 3,800 sf green roof on the 7th floor and the 3,200 sf green roof on the 24th floor. The two extensive (4-inch) GreenGrid® green roofs were pre-grown with drought-tolerant Sedum plants successfully trialed in the semi-arid Southern California climate and provided by Altman Plants. Twelve Sedum varieties were carefully selected to meet the green roof standards and aesthetic design features, including the color patterns ranging from blues and greens to reds and yellows.

The modular design of the GreenGrid® green roof system, containing pre-grown modules with engineered light-weight green roof growing medium, root barrier, stormwater retention and drainage system, allowed for easy installation atop the waterproofed roof areas. A water-efficient overhead spray technology with weather data input provides weekly irrigation to the drought-tolerant and adaptive plants. The GreenGrid® green roofs reduce "urban heat island effect," energy consumption and improve air quality. Green roofs installed in hot climates, can reduce average daily energy demand for cooling up to 50% compared to typical flat roofs (1-story building), due to its great shading, evapo-transpiration and insulating properties; this can also double the life span of the roof and reduce the size of air conditioning equipment. Additionally, stormwater runoff can be reduced by up to 70%, based on a 1-inch rain event, lowering the impact of buildings on the municipal storm drainage system and the surrounding watershed. Noise reduction is significant and very beneficial near airports. The GreenGrid® green roofs installed over more than 50% of the roof areas can assist in achieving 6+ LEED® points. The 7,000 square-foot GreenGrid® green roofs are currently the largest green roof installation in San Diego.