inBALANCE Green Consulting

CASE STUDY

Century Center Towers

Project Information:

- San Jose, CA
- 422,863 SF Multi-Family Residential
- LEED-NC Certified

Services:

- LEED Certification
- Energy Modeling
- Daylight Study

Project Team:

- Architecture: Swenson
- Construction: Swenson
- Civil: Kier & Wright
- Mechanical: Emerald City Engineers
- Electrical: Emerald City Engineers
- Landscape: The Guzzardo Partnership

Overview:

A total of 422,863 SF, this multi-family high rise infill project is adjacent to mass transit and includes energy efficiency and materials conservation. The project comprises two 12-story residential towers over commercial space, with a podium-level pool and gym.

The project achieved LEED certification through a variety of sustainable construction strategies, including: use of local/regional building materials, water- and energy-efficient design, daylighting, and connectivity.

Connectivity:

- Century Center Tower's location helps reduce carbon emissions from transportation.
- Situated near bus lines, light rail, and the airport, it also provides ample bike storage for residents and visitors.
- Eight EV-charging stations have been installed in the parking structure for those zero-emissions vehicles.

Materials:

- Over 30% of the materials used in the project are local/regional (produced within 500 miles).
- Over 90% of construction waste was diverted from landfills.

Water Reduction and Reuse:

- Through the use of water-efficient landscaping and xeriscaping, the project was able to reduce outdoor water use by 61%.
- Indoor water savings were 22% over baseline.

Energy Efficiency:

- Century Center Towers uses 34% less energy than a similar typical residential tower.
- A cool roof and light colored pavers on the podium help reduce Heat Island effect (helpful around that pool!).
- All systems have been commissioned to ensure that they are working at optimal performance.

Daylighting:

- Just about every square foot of the spaces (91%) enjoy natural daylighting, providing a great environment for productivity and healthy living.

Lessons Learned:

- Waste diversion is challenging on a zero-lot line site because space for separate waste bins is limited. We needed direct communication with the hauling subcontractors and clear labeling of the bins to help meet the recycling target.
- Products changed over the 2 ½ years of construction and we almost lost a low-emitting point due to a sub-contractor's use of a higher VOC product late in the process. Fortunately there were many no-VOC products used that offset the higher product, and good indoor air quality was maintained throughout.