



RONALD TUTOR
Campus Center
 LEED OVERVIEW

The Ronald Tutor Campus Center has been designed and built to meet LEED certification for construction and design. LEED is a nationally accepted benchmark for the design, construction and operation of high performance green buildings. The project is registered under the LEED for New Construction Rating System v.2.2 and when certified will be the first LEED certified project for USC on the University Park Campus.

Design & Construction Team

Architect:	AC Martin Partners
MEP Engineer:	Glumac
Lighting Designer:	Ann Kale
Landscape Architect:	Fong Hart Schneider
Civil Engineer:	Brandow & Johnson
Commissioning Agent:	CTG Energetics
Sustainability Consultant:	Brightworks
General Contractor:	Tutor Saliba

Sustainable Sites

- Integration of building into master planned campus setting allows for clustering of buildings and shared resources
- Promotes use of alternative transportation: USC has a very robust transportation management plan that greatly exceeds the requirements set forth in the LEED Rating System.
 - Ronald Tutor Campus Center is within ¼ mile of bus lines and within ½ mile of 3 stops on the future Expo light rail line
 - Ample bike parking for faculty and visitors to Campus Center
 - Preferred parking for low emitting and fuel efficient vehicles
 - No new parking has been designed as part of this building. The project is served by existing parking structures/parking pool at the university.
 - Carpooling, vanpooling, incentives and subsidies for public transportation, Zipcars, Campus Cruisers, etc.
- Reduces Urban Heat Islands: Parking at USC is structured and centralized thereby reducing urban heat island effect. The stacked parking allows for more open space, and reduces impervious area, etc.
- Reduces Urban Heat Islands: The roofing materials for Campus Center have a high Solar Reflectance Index.
 - About 40% of the area in the LA basin is covered by buildings and roads which could realistically be made 30% more reflective during their next resurfacing. If this were done, summer temperatures in LA at 3 p.m. on August 27 could become 5 to 9°F (or 3 to 5°C) lower. Then LA would consume 1/2 to 1 GW less in peak power, energy worth at least \$100,000 per hour. Most areas would also have improved air quality, and the population-weighted average predicts an ozone reduction of 10 to 20% overall.

Source: Lawrence Berkeley Labs <http://eetd.lbl.gov/HeatIsland/LEARN/LAIsland/>

- Treats stormwater falling on the site reducing the amount of pollutants in stormwater run off.

Water Efficiency

- The landscape design reduces the potable water demand by 50% when compared to a typical landscape and fixtures.
- High efficiency plumbing fixtures (1/8 GPF urinals, .5 GPM lavatories, 1.0 GPM sinks, 1.28 GPF) water closets have been specified that will result in over 40% reduction in water use.

Energy Efficiency

- A third party review of the energy related systems was conducted during the design and all of these systems will be commissioned to ensure that all equipment has been designed, installed and calibrated as intended.
- 31.15% energy cost savings when compared to baseline standard ASHRAE 90.1-2004 (deemed equivalent to Title 24 by USGBC).

Materials & Resources

- Campus will continue recycling program for building occupants
- Materials with a high percentage of post-consumer recycled content from local sources will be specified.
- Materials such as the brick are manufactured within a 500 mile radius.
- A construction waste management plan was developed implemented and a goal to divert 95% of demolition & construction waste was achieved.

Indoor Environmental Quality

- A Construction Indoor Air Quality Management Plan has been developed and implemented to protect the well being of construction workers and future occupants.
- Low or no VOC adhesives, sealants, paints or coatings will be applied in the interior of the building.

Kitchen Operations

- Utilization of Ultra Violet exhaust hoods which burn off the cooking produced grease particulates within the hood prior to exhausting through the ductwork and into the atmosphere
- Food waste to be processed through waste pulping systems, reducing waste by 80%
- All refrigeration systems and ice machines are water cooled, utilizing the building chilled water system. With this, the heat load released by the compressors into the atmosphere is reduced to a minimum.
- The use of Parallel Refrigeration Systems consists of singular scroll compressors providing cooling to multiple refrigerated units throughout the building in lieu of individual compressors for each unit. This type of system greatly reduces the number of compressors and provides ongoing energy savings over the life of the facility.
- Utilization of energy efficient fluorescent lights within the hoods and walk-ins provides ongoing energy savings over the life of the facility.
- Induction burners are used at multiple display serving stations. These only operate when pans are in use on the units thus saving ongoing energy costs.
- All product will be served in recycled, recyclable or biodegradable containers. Used/recyclable product will be collected in the kitchens and the food service areas and diverted from landfills.
- All kitchen and fryer grease will be collected and diverted to vendors that process it for bio-fuel and animal feed.