

CENTRAL TEXAS - BALCONES CHAPTER PROJECT PROFILE



RONALD McDONALD HOUSE CHARITIES AUSTIN, TEXAS

63% modeled energy cost savings

32% potable water use reduction

30,000 lbs of CO₂ emissions offset annually by solar array

LEED® Facts

Ronald McDonald House Charities Austin, TX

LEED for New Construction
Certification awarded May 1, 2008

Platinum	55*
Sustainable Sites	12/14
Water Efficiency	4/5
Energy & Atmosphere	12/17
Materials & Resources	7/13
Indoor Environmental Quality	15/15
Innovation & Design	5/5

*Out of a possible 69 points

The information provided is based on that stated in the LEED® project certification submittals. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.

RONALD McDONALD HOUSE CHARITIES OF AUSTIN AND CENTRAL TEXAS

BUILT GREEN FOR HEALTHY CHILDREN

RMHC shows responsible design helps heal more than just the environment

PROJECT BACKGROUND

The Ronald McDonald House project, part of the larger redevelopment of the former Mueller airport in Austin, Texas, provides a “home away from home” for families of seriously ill or injured children receiving treatment at the adjacent Dell Children’s Medical Center of Central Texas. It serves as a temporary residence near the medical facility where family members can sleep, eat, relax and find support from other families in similar situations. The Ronald McDonald House at Mueller includes guest rooms, shared kitchen and living space, exercise and recreation areas, as well as administrative offices and meeting space.

STRATEGIES AND RESULTS

The Ronald McDonald House incorporates energy conservation measures across the design disciplines to achieve an energy cost reduction of approximately 63% from code, according to modeled simulations. A photovoltaic system contributes onsite renewable energy. High efficiency lighting works in concert with daylighting to reduce energy use while fixed building shades prevent heat gain in Austin’s long cooling season. Air energy recovery, variable frequency drive technology, as well as high efficiency boilers and other equipment, maximize energy savings in the building’s mechanical systems. In addition, the project purchases chilled water from the Mueller Energy Center, an efficient district cooling, heating, and power (CHP) plant.

Through a high-efficiency irrigation system using 100% non-potable (reclaimed) water and the installation of low-flow plumbing fixtures, the building significantly reduces potable water use. Reclaimed water for irrigation is purchased from the City of Austin. Though the supply available to the project is “unlimited,” the project acts as a responsible steward of this water resource through water-saving techniques including native/adapted plant species and high efficiency drip irrigation components. Peak summer irrigation water use is thereby reduced by more than 67,000 gallons from a conventional case. Inside the building, potable water use is reduced by more than 32% from a baseline scenario thanks to low-flow fixtures, particularly significant in the water-intensive hospitality context.

A comfortable indoor environment for guests, including high indoor air quality, is a priority. Smoking is prohibited, and janitor closets are well-exhausted and isolated with deck-to-deck partitions; walk-off mats are positioned at the two main entries to capture pollutants before they enter the building. Outside air is provided to the building to exceed code minimums by more than 30%. Temperature and humidity are carefully controlled and monitored, and a high degree of control of temperature and lighting is provided from zone to zone within the building. Further, a daylight factor of 2% is achieved in 88% of regularly occupied spaces according to simulations, and views to the outdoors are provided for occupants in 90% of regularly occupied spaces.

“By implementing LEED Platinum guidelines, we have created a building that best enables us to meet our mission. Thoughtful design and conscientious construction practices have created a building that becomes a significant component in the overall healing process of our children and their families. Our new House is not just where healing happens, it helps make healing happen”

Kent Burress
CEO, Ronald McDonald House Charities of Austin and Central Texas



Architect: Eckols & Associates AIA
Owner: Ronald McDonald House Charities of Austin and Central Texas
Civil Engineer: Bury + Partners
Commissioning Agent: SuperSymmetry USA, Inc.
Contractor: The Beck Group
Landscape Architect: TBG Partners
LEED Consultant: Center for Maximum Potential Building Systems
Lighting Designer: Tom Green & Co. Engineers
MEP Engineer: Tom Green & Co. Engineers
Structural Engineer: Structures PE, Ltd.
Photography: Ronald McDonald House Charities of Austin and Central Texas

Project Size: 30,000 sq ft

ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council’s website to learn more.



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