



CASE STUDY H-E-B AT MUELLER

GREEN BUILDING RATING:
★ ★ ★ ★



© Ray Briggs

“Austin Energy Green Building not only confirmed the environmental sustainability of the H-E-B at Mueller project, but became a member of the integrated and collaborative project team. The AEGB rating is well known and respected, and of particular significance to the communities served by the store, and Austin as a whole.”

— Sheila Morales,
H-E-B, Architect, LEED® AP BD+C / Team Leader





CASE STUDY H-E-B AT MUELLER

GREEN BUILDING RATING:
★★★★

TOP FEATURES:

- » 23% energy savings and 46% peak demand savings from HVAC and refrigeration systems using chilled water, efficient envelope design, and daylighting integrated with computer automated LED lighting
- » Innovative propane refrigeration system with zero ozone depletion potential and very low global warming potential allows for 95% less refrigerant than conventional systems
- » Roof-mounted solar photovoltaic system (169 kW, 11,000 sq. ft.) powers all the store's lighting
- » Reclaimed water is used for landscape irrigation and restroom flush fixtures, and is combined with air conditioning condensate for cooling tower make-up water
- » Building materials contain 26% recycled content and 54% Texas-sourced content by value. More than 84% of construction waste was diverted from the landfill

PROJECT DESCRIPTION:

H-E-B at Mueller, an 83,600 sq. ft. retail store and fresh food market, includes a pharmacy, café, and community meeting space. It is located in the Mueller neighborhood, a mixed-use urban village with excellent access to public transportation, open space and bike routes. Input from the 16 surrounding neighborhoods informed the design which showcases a number of sustainable design innovations. As a result, H-E-B at Mueller achieved significant energy and potable water use reductions and has been awarded an AEGB 4-Star Rating, as well as LEED® (Leadership in Energy and Environmental Design) Gold certification.

ENVIRONMENTAL FEATURES:

H-E-B set out to push the sustainable building practices of the company and the retail industry as a whole. The project addresses retail stores' unique energy challenges through an advanced refrigeration/cooling system, integrated daylighting, computer automated LED lighting, efficient equipment, and careful building design -- resulting in an estimated 23% energy savings.

The building's north-facing glazing maximizes daylighting with minimal heat gain. A two-story vestibule reduces intrusion of outside air. The sloped roof shades the façade while its ceramic coating reflects heat. Alternating height roofs facilitate clerestory windows for daylighting while preserving roof space for the 169 kW solar array.

H-E-B is the first retailer in North America to use a propane refrigeration system. Chilled water is used to remove heat from the food display cases and coolers, and to provide underfloor radiant heating and cooling. Doors on the refrigerated cases reduce their energy use by more than 60%.

Low flow fixtures, efficient kitchen equipment, refrigerated displays (instead of ice) and careful landscape plant selection reduce water demand and city-provided reclaimed water is used for non-potable needs. Annually, the facility is expected to save about 845,000 gallons of water.

The project features sustainably-sourced materials that protect occupant health by being low-emitting and free of harmful chemicals, preserve natural resources, and bolster the local economy. In addition, the site offers excellent connectivity, extensive bike parking, and electric car charging stations encouraging alternative transportation.



© Ray Briggs

PROJECT PROFILE

Zip Code » 78723
Neighborhood » Mueller
Building SF » 83,600 sq ft
Rating Date » 2014

Owner » H-E-B
Design Architect » Lake|Flato Architects,
H-E-B Design + Construction
Architect of Record » Selser Schaefer
Architects
MEP Engineer/Sustainability » Arup
General Contractor » SpawGlass Contractors
Civil Engineer » Bury
Landscape Architect » Coleman & Associates
Sustainability for Contractor » Studio D
Consulting + Design
Commissioning » Henderson Engineers

LEED BD+C Retail Gold

Austin Energy Green Building is leading the building industry to a sustainable future with green building ratings and educational/professional development services.

Location » 811 Barton Springs Rd., Suite 400
Austin, TX 78704
Mail » 721 Barton Springs Rd., Austin, TX 78704
Phone » 512.482.5300
E-mail » greenbuilding@austinenergy.com
Web » greenbuilding.austinenergy.com
Facebook » facebook.com/aegreenbuilding
Twitter » twitter.com/aegreenbuilding