FULL GOODS WAREHOUSE, PEARL BREWERY SAN ANTONIO, TEXAS

83% construction waste recycled

70% virgin wood sustainably harvested

44% original structure preserved

LEED® Facts

FULL GOODS WAREHOUSE,
PEARL BREWERY
SAN ANTONIO, TEXAS

LEED for Core and Shell
Certification awarded May 6, 2010

Gold	**34***
Sustainable Sites	7/15
Water Efficiency	1/5
Energy & Atmosphere	10/14
Materials & Resources	10/11
Indoor Environmental Quality	3/11
Innovation & Design	3/3

*Out of a possible 59 points

FULL GOODS WAREHOUSE, PEARL BREWERY REDEVELOPMENT

New Tricks for an Old Warehouse

PROJECT BACKGROUND

The Full Goods Warehouse is part of the Pearl Brewery Redevelopment project, which transformed a 26-acre abandoned industrial site into a vibrant mixed-use development in downtown San Antonio. Because this building is primarily rental space and the interiors are left unfinished for future tenants to complete, the developers were limited by what areas of green design and construction they could control. Despite these constrictions, the Full Goods design reflects a commitment to sustainablity and is recognized for sustainable site development, water conservation, energy efficiency, materials selections, and indoor environmental quality. The Full Goods Warehouse now serves as a learning laboratory for energy efficiency and environmental stewardship, leading the example of how developers can implement green strategies that indirectly benefit future tenants.

STRATEGIES AND RESULTS

As an adaptive reuse initiative, the Full Goods Warehouse illustrates how demolition waste can be recycled and reused to divert waste from landfills and conserve virgin resources. The design team preserved 44% of the original warehouse shell and structure, while the construction team recycled 83% of the construction waste generated. For example, portions of the pre-existing concrete foundation were crushed and reused for an adjacent river improvements project. Preference was also placed on using materials containing recycled components. Furthermore, materials that were either extracted or manufactured nearby were favored over materials shipped from far away.

As a reflection of Full Goods' industrial past, objects found and salvaged during demolition were retrofitted to accommodate new functions. Beer containers from the original Pearl Brewery warehouse were refurbished into cisterns, while the beer cans that clad the Studio doors were recovered from the crawl space of the brewery.

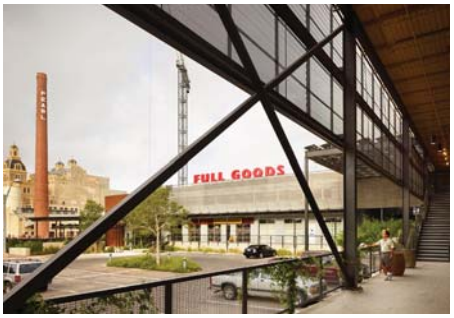
To reduce the number of pollutants in the interior air, the design team chose products with low VOC and off-gassing levels. During construction, extra care was taken to protect the building materials from moisture damage which could lead to mold or mildew problems. The Pearl Brewery Development uses 87 percent less potable water for irrigation though a landscape design of native plants and the implementation of a rain water collection system.

Several measures were also taken to reduce the energy demands of the Full Goods Warehouse. The structure's roof is comprised of a white membrane and galvanized metal, both of which reflect the radiated solar heat to reduce interior heat gain. The building's 200.6-kilowatt solar array, the largest roof-mounted PV array in Texas, provides for approximately 16% of the building's power requirement at full build out. These measures help reduce the energy consumption of Full Goods to 45 percent less than a comparable building. Furthermore, the project's central location, bicycle storage, showers and nearby bus stops encourage fewer single-passenger trips. Privileged parking is offered for low-emitting vehicles.

A Tenant "Design and Construction Guidelines" document provides descriptions of the sustainablity features of the Core & Shell project, information to coordinate with their tenant finish outs, and information on the LEED Green Building Rating System for Commercial Interiors and how core and shell contributes to the achievement of prerequisites and credits. Several tenants are in the process of certifying their finish out spaces through LEED. An interactive kiosk and website showcase the workings and benefits of solar energy and display the amount being generated in real time. The kiosk also highlights other sustainable features of Full Goods and Pearl. These measures facilitate awareness about sustainable issues, prompting the future tenants of Full Goods to design and inhabit its spaces with environmental stewardship.

"Pearl's significance extends beyond its own environs, serving as a rare example of dense mixed-use in a city of single family sprawl and exurban growth."

Vincent B. Canizaro, PHD
teacher at UTSA College of Architecture



Architect: Lake|Flato Architects; DHR Architects (architect of record)
Civil Engineer: Pape-Dawson Engineers, Inc.
Commissioning Agent: DBR
Contractor: Artistic Builders
Landscape Architect: Rialto Studio, Inc.
MEP Engineer: Triple R-Electric, Co
Structural Engineer: Danysh and Associates, Inc.
Project Size: 67,000 square feet (Full Goods Warehouse) 3,400 square feet (Il Sogno)
Total Project Cost: Withheld by owner's request
Cost Per Square Foot: Withheld by owner's request

Photographs Courtesy of: Casey Dunn Photography

ABOUT THE CENTRAL TEXAS-BALCONES CHAPTER

The Central Texas - Balcones Chapter of the U.S. Green Building Council (USGBC CT-B), founded in 2003, is a 501c3 non-profit comprising industry leaders from Austin, San Antonio and the surrounding communities of Central Texas. Members include building industry professionals, facility managers, property owners and others committed to accelerating growth in sustainable building and land development practices through innovation, advocacy and partnerships. The Chapter hosts Leadership in Energy & Environmental Design (LEED) Green Building Rating System™ workshops, holds educational sessions on sustainable technologies and applications, and offers networking events for green-building professionals in the region.

www.usgbc-centraltexas.org
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