PROJECT PROFILE



TEPEYAC HAVEN PASCO, WASHINGTON



29% improvement of attic insulation heat resistance over state code

homes available for low-income families



PROJECT PROFILE

TEPEYAC HAVEN IN PASCO, WASHINGTON

Affordability Now and Into the Future

Tepeyac Haven's rents are low, and LEED ensures its utility bills will be, too

PROJECT BACKGROUND

When Pasco Family Housing, a project of Catholic Charities Spokane, set out to build its 44-unit affordable housing complex in Pasco, Wash., the organization had more than low rents in mind. For the two-, three- and four-bedroom homes to really benefit their residents, affordability would have to extend beyond the cost of housing and make a dent in the cost of living. Using the principles of LEED®, Pasco Family Housing found many ways to do that by building homes that will cost less to live in for years to come.

"Affordability was never a question," Catholic Charities Spokane executive director Dr. Robert J. McCann said. "The emphasis on energy efficiency during design and construction is directly intended to reduce resident and project operating expenses. In this way, the affordability of the project is beyond just rent levels and considers the total costs to the residents."

COMING HOME AFTER A LONG DAY'S WORK

Tepeyac Haven is intended for low-income workers in the farms and factories of southeastern Washington's Tri-Cities area of Pasco, Kennewick and Richland. A Tepeyac home comes stocked with a dishwasher, clothes-washer and dryer – all energy and water efficient – and the community includes playgrounds for the kids and easy walking access to everything from schools and play fields to shopping and a transit center. The homes were built on an infill site, making use of existing roads, utilities and other infrastructure. And innovative design methods kept the units small and the density high while maintaining livability.

The high density – 15 units per acre – reduces Tepeyac's literal footprint while also helping cut down its ecological footprint. The community's design leaves lawn areas relatively small, so less water is used. Water use is further reined in by the use of low-flow fixtures and a front-load ENERGY STAR® clothes-washer, aimed at dramatically cutting water bills for homes created specifically with large families in mind.

STRATEGIES AND RESULTS

In addition to the energy-efficient appliances, energy savings are also achieved through a number of strategies aimed at avoiding wasted energy through air leaks and poor insulation. Ventilation, ducting and air movements were carefully tested to ensure maximum efficiency. Builders used foamed-in-place insulation, resulting in an extremely tight building envelope. And attic insulation has a heat-flow resistance (R factor) of R-49, 29% better than the Washington State Energy Code requires.

Materials used for the home were carefully selected to be durable, healthy and environmentally friendly. Many building materials came from local sources, reducing the pollution and energy use that would have been required to ship the materials from farther away. Painters used low-VOC (volatile organic compounds) products, ensuring residents breathe safe air free of harmful chemicals and toxins. And Tepyac Haven's use of LEED Accredited Professionals ensured that everyone involved in the design and building process was capable of making the smartest, greenest, most inexpensive choices available.

ABOUT CATHOLIC CHARITIES SPOKANE

Catholic Charities Spokane is the largest sectarian social service organization between Seattle and Minneapolis, providing service to people of all religious faiths in the 13 counties of Eastern Washington. Catholic Charities administers 15 programs that provide food, shelter, clothing, education, counseling and support to those in need, regardless of creed. They include Childbirth & Parenting Alone (CAPA), Counseling, Housing, the St. Anne's Children and Family Center, the St. Margaret's Shelter and Senior Services. "In terms of site selection, the project could not be better – near schools, play fields, shopping and a transit center."

Dr. Robert J. McCann executive director, Catholic Charities Spokane



Architect: Zeck Butler Architects Contractor: M.C. Lundgren Engineering Consultants: Storhaug Engineering, L&S Engineering Associates Project Size: 53,101 square feet Total Project Cost: \$7,300,000 (built with federal affordability tax credits) Construction cost per square foot: \$96.52

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 web site at www.usgbc.org to learn more about how you can make LEED work for you.



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