Case Study





St. Thomas More Hospital

CANON CITY, CO

Owner

Centura Health

Architect/Designers

RTA Architects Colorado Springs, CO

Vitro Products

Solarban® 70 glass

Glazing Fabricator

Oldcastle BuildingEnvelope® Denver, CO

Glazing Contractor

Binswanger Glass Pueblo, CO

PROJECT BACKGROUND

In 1937, six Benedictine sisters traveled from Yankton, S.D., to Canon City, Colo., to run a small rural hospital. Seventy years later, their tradition of excellence in patient care lives on at St. Thomas More Hospital, part of Colorado's statewide Centura Health care system.

This regional hospital, located 116 miles south of Denver, underwent a comprehensive \$17 million renovation and expansion in March 2006. Phase One added a new admissions and lobby area, surgical unit, intensive care unit, and upgraded imaging and emergency departments. A new 14,000 square-foot rehabilitation and occupational medicine center, and a 15,000 square-foot health and fitness center were included in Phase Two.

For phase one of the hospital expansion, RTA Architects of Colorado Springs specified *Solarban®* 70 (formerly *Solarban®* 70XL) glass for an enclosed ornamental curved stairway that leads to the surgical waiting area. The idea was to use the glass front as a "visual icon" to lead visitors to the hospital's main entrance, says John Hoelscher, AIA, principal at RTA, who oversaw the project.





St. Thomas More Hospital | Canon City, CO

"The product helped create a very successful visual statement to draw people into the hospital and the waiting areas," he says. "It is very inviting, and comfortable, and flooded with natural light."

Because the stairway, which faces east and south, receives a lot of direct sunlight, the architects wanted to specify a glass that not only transmitted light, but also helped mitigate the expense of cooling the area and ensure the comfort of its occupants.

Michael Malloy, the principal architect for the project, said that is what made *Solarban®* 70 glass such a great fit for the project. "I have been in there twice and felt very comfortable inside."

A revolutionary solar control low-e glass from Vitro Architectural Glass (formerly PPG glass), *Solarban®* 70 glass is the first to offer exceptional levels of solar control and visible light transmittance in a clear, color-neutral glass. Combined with traditional clear glass in a conventional 1-inch insulating glass unit, *Solarban®* 70 glass blocks up to 73 percent of the sun's solar energy, while transmitting more than 64 percent of its visible light. The result is an unprecedented light to solar gain (LSG) ratio of 2.37.

For cost-conscious building owners and architects, that means significant energy savings, both in upfront HVAC equipment costs and in on-going energy savings over the life of a building.

The architects also specified *Solarban®* 70 glass for Phase Two, in the front entry area of the hospital's new health and wellness center. A stand-alone building near the main hospital, the center features a high glass bay area leading to a rehabilitation gym. The glass bay, which faces north and west, gets a fair amount of late-day sun. Like the staircase in the main building, however, the space never feels uncomfortable, reports Malloy.

RTA Architects is committed to using energy-conscious design principles for all of their projects. "We use the LEED® guidelines as a checklist for every project on the boards," explains Malloy, who is in the process of gaining his LEED certification.

The firm's client base is beginning to come around to the benefits of using energy-conscious and sustainable building practices in their projects, he noted. "Although they spend more money upfront, it really pays off down the road."



Solarban® 70 glass sheds light on a curved stairway that leads visitors to the main entrance of St. Thomas More Hospital. The glass creates a beautiful visual icon and helps alleviate cooling costs.

Comments on the renovation from hospital staff and visitors have been overwhelmingly positive, say the architects. "Many visitors have said that this hospital is unexpectedly beautiful for a small, rural, regional hospital," notes Hoelscher.

Malloy also finds satisfaction in the performance of *Solarban*® 70 glass. "It's doing a great job," he says. "I would definitely use it again."

