

# Case Study



## PROJECT CREDITS

### Owner

San Diego Community College District

### Architect/Designers

ARCHITECTS hanna gabriel wells  
San Diego, CA

### Vitre Products

Solarban® 70XL glass

### Glass/Curtain Wall Fabricator

Arcadia, Inc.  
Vernon, CA

### Glazing Contractor

Division 8  
El Cajon, CA

### Vitre Certified™ Fabricator

Trulite Glass & Aluminum Solutions  
Los Angeles, CA

Solarban® 70XL solar control low-e glass by Vitre Architectural Glass combines with DURANAR® fluoropolymer coatings (by Vitre Alliance Partner PPG Industrial Coatings) to complete the student services center's energy saving façade system.

## Mesa Community College Student Services Center

SAN DIEGO, CA

## PROJECT BACKGROUND

Built into a 50-foot hillside, the new Mesa Community College Student Services Center in San Diego incorporates Vitre Architectural Glass products and metal coatings by Vitre Alliance Partner, PPG Industrial Coatings, to help seamlessly integrate both the local landscape and 16 different academic departments into its open, airy and energy-efficient 85,000-square-foot space.

Designed by the award-winning firm ARCHITECTS hanna gabriel wells to earn LEED® Gold certification, the center features a series of terraced interior and exterior spaces that function as communal gathering hubs. An open four-story atrium adds wayfinding visibility and fosters interaction among students, faculty and administrators, as well as the school's academic departments.

Solarban® 70XL solar control low-e glass by Vitre and DURANAR® fluoropolymer coatings by PPG are vital to the center's performance, functionality and contemporary design.



## Mesa Community College Student Services Center

Despite being integrated into a hillside, “the goal was to make the building as light and bright as possible,” said architect Jim Gabriel. The solution is an open atrium that floods the middle of the structure with sunlight. A cascade of interior openings, terraces, overhangs and floor-to-ceiling windows works to optimize the site’s abundant natural light and mitigate glare.

Formulated with a proprietary triple-silver coating, *Solarban*<sup>®</sup> 70XL glass transmits 64 percent of the sun’s available light and blocks more than 70 percent of its heat energy in a standard 1-inch insulating glass unit (IGU). With a light-to-solar gain (LSG) ratio of 2.37, the glass is one of the highest-performing products on the market.

Gabriel said panels made from aluminum and stainless steel were selected for the building’s exterior because of their versatility, durability and ability to blend in with the school’s natural surroundings.

“Metal has the advantage of being able to be fabricated into numerous configurations and detail sets,” he said. “This allowed the design team to develop building skins with confidence, knowing that the chosen materials would be able to meet the needs of performance and design.”

Gabriel’s team specified DURANAR<sup>®</sup> coatings in three colors – Butternut, Compatible Cream and Kaffee – for the batten seam panels and large, flat fascia panels that highlight the center’s variegated metal exterior. They are complemented by Iron Mountain, a Colorweld<sup>®</sup> 500 finish for Reynobond<sup>®</sup> aluminum composite material (ACM) by ALCOA Architectural Products, which were used to fabricate 7,000 square feet of column covers.



Large windows fabricated from *Solarban*<sup>®</sup> 70XL glass provide ample natural light in the open atrium of the Mesa Community College Student Services Center.

“The aluminum panels were chosen for their non-corrosive nature, and finishing the material with DURANAR<sup>®</sup> coatings provided a long-lasting, low-maintenance skin,” Gabriel explained. “The colors also create the feel of natural wood while relating to the natural earth tones of the adjacent Tecolote Canyon.”

The solar control low-e glass is joined by aluminum panels to complete the student center’s energy-saving façade system.

The integrated glass-and-metal curtain wall helps make the Mesa Community College Student Services Center a high-energy performer. Despite the warm climate and vast openness of its interior space, the building performs 37 percent better than California’s stringent Title 24 energy-performance criteria.

For more information about Vitro Alliance Partners, *Solarban*<sup>®</sup> glass and other *Cradle to Cradle Certified*<sup>™</sup> architectural glasses by Vitro Glass, visit [vitroglazings.com](http://vitroglazings.com), or call 1-855-VTRO-GLS (887-6457).