

Case Study



Mesa Community College Student Services Center

SAN DIEGO, CA

Owner

San Diego Community College District

Architect/Designers

ARCHITECTS hanna gabriel wells
San Diego, CA

Vitro Products

Solarban® 70 glass

Glass/Curtain Wall Fabricator

Arcadia, Inc.
Vernon, CA

Glazing Contractor

Division 8
El Cajon, CA

Vitro Certified™ Fabricator

Trulite Glass & Aluminum Solutions
Los Angeles, CA

PROJECT BACKGROUND

Built into a 50-foot hillside, the new Mesa Community College Student Services Center in San Diego incorporates Vitro Architectural Glass products and metal coatings by Vitro 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.



Photo © HGW Photography

Solarban® 70 solar control low-e glass by Vitro Architectural Glass combines with DURANAR® fluoropolymer coatings (by Vitro 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

Solarban[®] 70 (formerly *Solarban*[®] 70XL) solar control low-e glass by Vitro is vital to the center's performance, functionality and contemporary design.

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*[®] 70 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[®] 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[®] 500 finish for Reynobond[®] aluminum composite material (ACM) by ALCOA Architectural Products, which were used to fabricate 7,000 square feet of column covers.

"The aluminum panels were chosen for their non-corrosive nature, and finishing the material with DURANAR[®] 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.

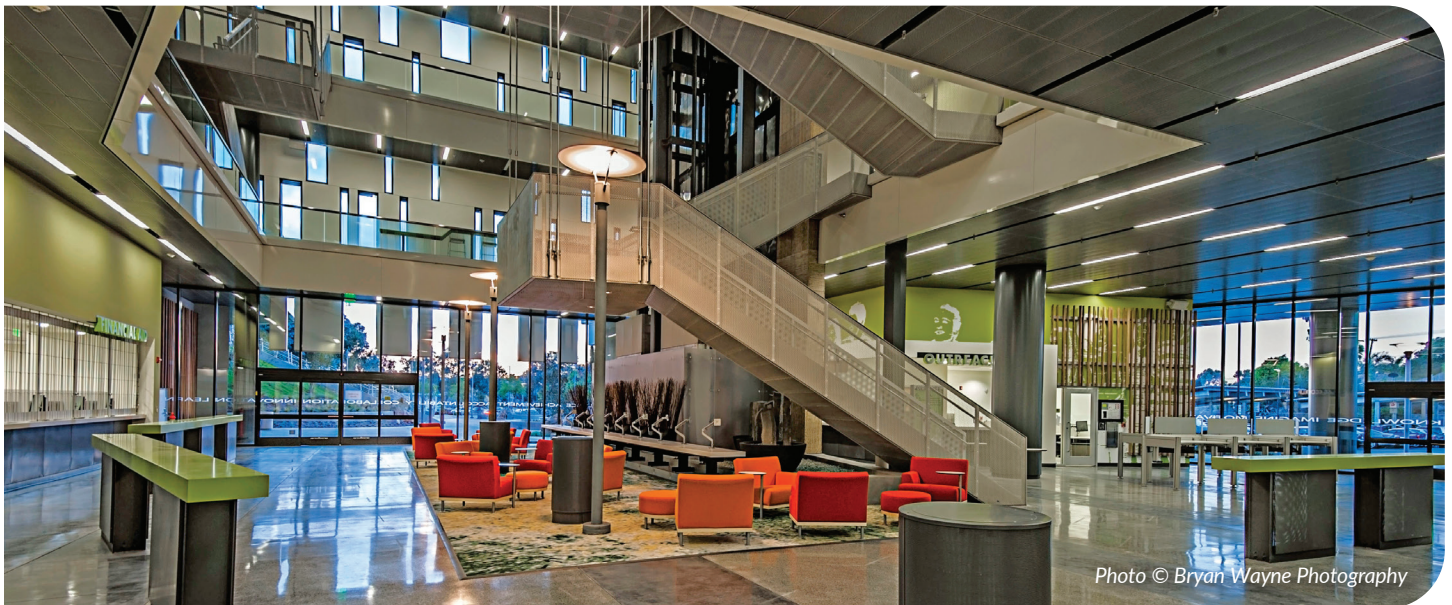


Photo © Bryan Wayne Photography

Large windows fabricated from *Solarban*[®] 70 glass provide ample natural light in the open atrium of the Mesa Community College Student Services Center.

To learn more about Vitro Alliance Partners *Solarban*[®] 70 and other high-performance glass products by Vitro Glass, visit vitroglazings.com or call 1-855-VTRO-GLS (887-6457).

©2022 Vitro Architectural Glass. All rights reserved. *Solarban*[®] is a registered trademark owned by Vitro. *Vitro Certified*[™] is a trademark owned by Vitro. LEED—an acronym for Leadership in Energy and Environmental Design—is a registered trademark of the U.S. Green Building Council. DURANAR[®] is a registered trademark owned by PPG Industries, Inc. (11/22)

