

UCSD Health Jacob Medical Center

LA JOLLA, CALIFORNIA

Owner

University of California San Diego
Health System
San Diego

Vitro Certified™ Fabricator

Northwestern Industries, Inc. (NWI)
Seattle

Architect/Designers

CannonDesign
Los Angeles and Chicago

Vitro Products

Solarban® 70XL Glass
on *Starphire Ultra-Clear® Glass*

Glazing Contractor

ENCLOS
Pomona, California

General Contractor

Kitchell Contractors, Inc.
San Diego

Façade Consultant

Simpson Gumpertz & Heger Inc.
Newport Beach, California

PROJECT BACKGROUND

Patient-first care is alive and well at Jacobs Medical Center, a 509,000-square-foot, 245-bed medical and surgical specialty hospital that innovatively fuses together modern technology, forward-thinking design and a healing environment to deliver world-class care.

The newest hospital in the University of California San Diego (UCSD) Health System, Jacobs Medical Center is distinguished by a gleaming, point-fixed structural glass façade—fabricated with *Solarban® 70XL* glass on *Starphire Ultra-Clear®* glass by Vitro Glass—and a striking curvilinear form that reinforces patient-centered care prominently throughout its 10 stories.



UCSD Health Jacobs Medical Center, La Jolla, California



CannonDesign specified abundant use of transparent solar control low-e glass to give patients clear, scenic views of the surrounding hills and ocean. These soothing vistas, combined with plenty of natural daylight and glare and noise control, help create the healing, relaxing atmosphere the architectural firm and hospital administrators desired.

Although it met all performance requirements, the glass specification had to be adjusted to achieve another design objective. That required close collaboration between Vitro Glass and Northwestern Industries, Inc. (NWI), a *Vitro Certified*™ fabricator.

“Part of what makes this project so unique is the whitish exterior look the architect wanted the building to have,” explained Frank Forgione of NWI. “We worked with Vitro’s technical team testing various glass samples and mock-ups that could meet this requirement and still maintain the desired performance. Ultimately, we put a customized silk-screened white frit on *Starphire Ultra-Clear*® glass, which we then laminated on the *Solarban*® 70XL glass.”

This configuration was used extensively, including the 11-foot, 8-inch floor-to-ceiling windows in all patient rooms; the front-glazed, unitized curtain wall system; and spandrel shadow-box glazing. All told, more than 100,000 square-feet of glass was installed.

To adequately handle this high volume and facilitate the timely shipment of glass orders to ENCLOS, the glazing contractor, NWI used the *Vitro Concierge Program*™, which provides logistics management and customized coordination for projects of this size. By providing priority access to the glass, the *Vitro Concierge Program*™ helped to ensure the project stayed on schedule. “We worked closely with ENCLOS to meet their scheduling requirements, and worked through the Concierge Program, which allowed us to stay on top of everything,” said Forgione. “It was a collaborative effort to make sure that glass was available from Vitro to us, and then from NWI to ENCLOS.”

While glass provided the natural, soothing element hospital executives demanded, other amenities were incorporated to ensure convenience and comfort. Patient rooms

were designed as private suites furnished with “smart” beds oriented for panoramic views of La Jolla and tablet computers that patients can use to control motorized solarshading, lighting and temperature, and see their treatment schedules and medical records.

This design, combined with advanced modeling, influenced the building’s curvilinear nature. The unitized curtain wall developed by ENCLOS showcases more than 40 radiused dimensions, including concave and convex surfaces.

As a result, the freeform style minimizes conventional right-angle corners and maximizes daylighting simultaneously, creating a natural flow and providing easier navigation for patient beds.

Since starting operations in November 2016, Jacobs Medical Center has passed its check-ups with flying colors. Groundbreaking research and education, advanced surgical technologies and a patient-first ethos in an architecturally significant setting haven’t just transformed the traditional hospital stay. They’ve ushered in a new era of health care.

UCSD Health Jacobs Medical Center, La Jolla, California

Formulated with the industry's most advanced triple-silver coating that is engineered for use on *Starphire Ultra-Clear*® glass, *Solarban*® 70XL glass has visible light transmittance (VLT) of 64 percent with a solar heat gain coefficient (SHGC) of 0.27 and a light-to-solar gain (LSG) ratio of 1.85. This high performance, combined with the silk-screened white frit on *Starphire Ultra-Clear*® glass, not only helped the architectural firm achieve its design objectives, it also enabled the facility to earn LEED® (Leadership in Energy and Environmental Design) certification at the Silver level.



To learn more about *Solarban*® 70XL glass or *Starphire*® glass by Vitro Architectural Glass, visit www.vitroglazings.com.

About the Vitro Concierge Program™

The Vitro Concierge Program™ is designed to help ensure supply-chain success for large or complex construction projects fabricated with products from Vitro Architectural Glass (formerly PPG glass). It's available at no cost to members of the Vitro Certified™ Network and their glazing contractor customers in the U.S. and Canada.

While most projects, even very large ones, can be handled effectively by Vitro Certified™ Network's normal supply chain approach and with standard Vitro inventory, some unique projects with atypical glass

configurations or non-standard glass components require extra production and logistics management. The Vitro Concierge Program™ provides customized coordination through a dedicated Vitro Concierge Program™ manager, who will align Vitro inventory and production schedules, even providing priority access and reserving inventory and glass production scheduling.

To learn more about the Vitro Concierge Program™, visit Concierge.VitroGlazings.com, call **412-820-8004** or email concierge@vitro.com.

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