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Case Study

Calgary Central Library CALGARY, ALBERTA, CANADA

Owner: Calgary Public Library

Architects: Snøhetta; Oslo, Norway DIALOG; Calgary, Alberta, Canada

Vitro Architectural Glass Products: Solarban® 60 Glass Solarban® 72 Glass Starphire Ultra-Clear® Glass

Glass Fabricator: Oldcastle BuildingEnvelope; Calgary

Glazing Contractor: Ferguson Corporation; Calgary

PROJECT BACKGROUND

When it opened as one of Architectural Digest's most anticipated buildings of 2018, the Calgary Central Library in Alberta, Canada, already was being celebrated for its beauty as well as its brains, thanks in large part to an extraordinary glass-and-metal façade featuring Solarban® 60, Solarban® 72 and Starphire Ultra-Clear® glasses by Vitro Architectural Glass.

Variously described as resembling an open book, snowflakes, snowdrifts or ice cracking on a lake, the library's curved exterior surface is outfitted with a hexagonal pattern of alternating clear, glazed and ceramic-fritted glass and iridescent aluminum panels — an arrangement meant to convey the ideas of collective and community embodied in one of the city's most treasured assets.

A more functional purpose of the alternating panels, according to project architect Dennis Rijkhoff, is to diffuse light inside the building while preserving views outside.





Calgary Central Library, Calgary, Alberta, Canada

"The design process focused on providing a variety of conditions for people to enjoy in each space – the goal being that users can choose whether to sit in the sun or shade," he explained.

After studying how daylighting and views affected interior spaces and the overall composition of the façade, the architect settled on a mix of 60% insulating metal panels and 40% triple-pane insulating glass units (IGUs).

Oldcastle BuildingEnvelope (OCBE), a member of the Vitro Certified[™] Network, fabricated three different types of triple-pane IGUs for the project, each featuring a single lite of Starphire Ultra-Clear[®] glass sandwiched between individual panes of Solarban[®] 72 and Solarban[®] 60 glasses.

The finished IGUs were then supplied to Ferguson Corporation, which engineered, assembled and installed the library's curtainwall. A big part of that job included fabricating 462 uniquely shaped unitized panels, which were painted in three different colors for various interior and exterior surfaces and infilled with clear, glazed or fritted IGUs.

The panels, which took eight months to fabricate, were placed randomly around the building to create a consistent aesthetic and to enable each side to function as its front.

While the intricate design of Calgary Central Library is impressive on its own, the volume

of glass, the unusual nature of the building and the need to meet a complex delivery schedule made the project a perfect fit for the Vitro Concierge Program[™].

Julia Unitas, manager of the program, said the logistical details of the project required months of continuous oversight, including precise forecasting and production scheduling at Vitro Glass's Fresno, California and Salem, Oregon plants.

"We had to transfer *Starphire*" glass from Fresno to Salem for coating, and we needed to time it in a way that accommodated transfers and coating schedules to meet the contractor's draw rate," Unitas explained. "Which type of glass are they taking first? Are they taking multiple types simultaneously? If so, in what quantities? Those were just a few of the considerations we had to manage over an eight-month period while producing and delivering almost 200,000 square feet of glass."

Created for and provided exclusively by members of the *Vitro Certified™* Network, the *Vitro Concierge Program™* is designed to ensure supply-chain success for large or complex construction projects fabricated with Vitro Glass products.

Since its opening, Calgary Central Library has earned numerous accolades for its design, including the 2020 AIA Architecture Award and the national 2019 AIA/ALA Library Building Award, granted by the American Institute of Architects (AIA) and the American Library Association (ALA). More importantly, the building is fulfilling its mission to serve as an open and welcoming learning and community center, attracting more than 200,000 visitors in its first three weeks and nearly 1.75 million visitors in its first full year of operation.



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 Solarban[®] 60, Solarban[®] 72 and Starphire Ultra-Clear[®] glasses and the Vitro Concierge Program[™], or to find a member of the Vitro Certified[™] Network, visit **www.vitroglazings.com** or call **1-855-VTRO-GLS (887-6457).**



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