



GEORGIA GWINNETT COLLEGE LIBRARY LAWRENCEVILLE, GA

Owner: Georgia Gwinnett College

Architect: LEO A DALY, Atlanta

PPG *IdeaScapes*
Products: **Solarban**® 70XL **Starphire** Glass

Glass Fabricator: Oldcastle BuildingEnvelope™
Santa Monica, CA

Glazing Contractor: Glass Systems, Lithonia, GA



*The GGC Library, which was designed by LEO A DALY, Atlanta, features **Solarban 70XL Starphire** solar control, low-e glass by PPG and a curtain wall system by Kawneer. Both are **Cradle to Cradle**® Certified.*

PROJECT OVERVIEW:

Built as a “Knowledge Center,” the 90,000-square-foot *Georgia Gwinnett College (GGC) Library*, Lawrenceville, Ga., was designed to be the intellectual and social heart of a new college campus opened in 2006 — the first new four-year public college created in the nation in the 21st century. Architectural firm LEO A DALY chose to express that commitment to knowledge and openness with a brilliantly transparent façade, fabricated from **Solarban 70XL Starphire** glass by PPG, which also contributes to the building’s exceptional energy and environmental performance.

Jerry Voith, LEO A DALY principal-in-charge of the project, said the dual desire to promote openness and to earn LEED certification for the library helped inspire a design that maximizes daylight penetration into the building, while

taking full advantage of the outside scenery. In fact, the library’s signature design element is a large atrium that provides 90 percent open views to and from the central campus green and walks, and saturates 75 percent of the interior space with natural daylight.

Voith said LEO A DALY selected **Solarban 70XL Starphire** glass for the atrium and the rest of the building envelope because it provided the optimum balance of transparency and thermal performance. With Visible Light Transmittance (VLT) of 64 percent and Solar Heat Gain Coefficient (SHGC) of 0.27, **Solarban 70XL Starphire** glass achieves a Light to Solar Gain (LSG) ratio of 2.37, which remains among the highest in the industry more than five years after the product’s introduction.

In addition to extensive use of glass, the library's integrated sustainable design strategy encompassed the orientation of the building, layout of the windows and shading devices, mechanical and lighting systems that reduce energy consumption, and an under-floor air distribution system. According to Cecilia Cunningham, LEO A DALY'S LEED coordinator, these individual components combined to help produce a 32 percent drop in the library's energy consumption compared to the code baseline.



*The large atrium at the GGC Library provides 75 percent of the interior space with natural daylight. With VLT of 64 percent and SHGC of 0.27, **Solarban 70XL Starphire** glass achieves a Light to Solar Gain (LSG) ratio of 2.37.*

The GGC library also is notable because it is believed to be the first academic library to earn a LEED Innovation in Design credit at least in part for its use of **Cradle to Cradle**® (C2C)-certified products. The architects specified **Solarban 70XL Starphire** glass, a C2C-certified glass, as part of a curtain wall system by Kawneer that also is C2C-certified, enabling their combined cost to exceed the minimum building materials cost threshold needed to earn the LEED Innovation in Design credit.

Photography by AJS Studios, Inc.

C2C certification, which is awarded by MBDC (McDonough Braungart Design Chemistry), independently evaluates the total impact of environmentally focused products on human health and the environment throughout their life cycle. PPG is the first and only glass manufacturer to earn C2C certification for its entire collection of architectural glasses.

The intent of the Innovation in Design credit is to give design teams and projects the opportunity to be awarded points for exceptional performance above the requirements set by the LEED Green Building Rating System, or to implement innovative products or design strategies in green building categories that are not specifically addressed by LEED.

With a capacity for 300,000 volumes, the GGC Library contains 37 study rooms and houses the Academic Enhancement Center, Quiet Reading Room, Heritage Lecture Room and the Center for Teaching Excellence, in addition to a café on the main floor. It earned LEED Gold certification in 2010.



***Solarban 70XL Starphire** glass, featured here on the GGC Library, provides the optimum balance of transparency and thermal performance.*

To learn more about **Solarban 70XL Starphire** glass and PPG's full line of **Cradle to Cradle**-certified architectural glasses, visit www.ppgideascales.com or call 1-888-PPG-IDEA (774-4332).