

Case Study



RETROFIT



SUSTAINABLE



OFFICE

The Midtown Exchange Tower

MINNEAPOLIS, MN

Owner

Ryan Companies U.S. Inc.
The Lander Group-Sherman Associates,
Inc. Partnership

Architect/Designers

Collaborative Design Group
Minneapolis, MN

DJR Architecture
Minneapolis, MN

Elness Swenson Graham Architects, Inc.
Minneapolis, MN

Perkins & Will
Minneapolis, MN

Vitro Products

Solarban® 60 solar control low-e glass
Sungate® 500 low-e glass

Window Fabricator

St. Cloud Window, Inc.
Minneapolis, MN

PROJECT BACKGROUND

The Midtown Exchange Tower in Minneapolis is the culmination of a Sears Tower on the city's Lake Street into a thriving, mixed use development.

The building, which features more than 1.2 million square feet of leasable space, was developed through Midtown Community Works, a coalition of neighborhood groups, local government and private sector leaders in urban Minneapolis.

One of nine major mail-order and retail centers erected by Sears Roebuck & Company between 1910 and the start of the Great Depression in 1929, the 17-story structure remains the largest building in Minneapolis.



The Midtown Exchange Tower | Minneapolis, MN

Today, the building contains more than 360,000 square-feet of office space; a Global Marketplace of ethnic businesses and entrepreneurs, which occupies more than 75,000 square feet; a 128-room full-service hotel and an eclectic mix of townhomes, condominiums and rental apartments geared to a wide range of income-earners.

Because the renovation project involved the use of federal funds, the Midtown Exchange Tower was required to adhere to guidelines established by the National Historic Preservation Act of 1966. The use of products from Vitro Architectural Glass and Vitro Alliance Partner, PPG Industrial Coatings, was instrumental in helping the developers maintain the building's historic character, while enhancing its energy efficiency and environmental sustainability.

During the Midtown Exchange Tower's exterior refurbishment, more than 15 percent of the building's steel-framed original windows were returned to use. Five percent were re-glazed with *Sungate*® 500 clear glass while the remaining 10 percent combined the building's original glass with an additional lite of *Sungate*® 500 glass to form double-glazed insulating glass units. Many of the restored steel windows were outfitted on the inside with new interior aluminum storm windows. These aluminum frames were coated with DURANAR® coatings by PPG (UC51733 Hartford Green).



Above: Architectural glass by Vitro enabled developers of the Midtown Exchange Tower, a former Sears Tower in Minneapolis, to retain its original historic character while enhancing the building's energy efficiency and environmental sustainability.

The remaining 85 percent of the windows were replaced with new casements fabricated from *Solarban*® 60 solar control low-e glass and aluminum frames coated with DURANAR coatings. With the help of high-performance architectural glass by Vitro and metal coatings from PPG, St. Cloud Window, the window manufacturer for the Midtown Exchange Tower, was able to fabricate windows that not only perform to contemporary environmental

standards, but also earned the approval of both the National Historic Renovation Society and the National Parks Department.

Just as important, from an architectural and aesthetic standpoint, St. Cloud Window reports that there is no discernable difference in appearance between the old windows on the Midtown Exchange Tower and the new windows.

To learn more about Vitro Alliance Partners, *Solarban*® glass, *Sungate*® glass and other *Cradle to Cradle Certified*™ architectural glasses by Vitro Glass, visit vitroglazings.com, or call 1-855-VTRO-GLS (887-6457).