GLASS & METAL ALLIANCE

SEI INVESTMENTS - BUILDING 12 | OAKS, PA

SageGlass® supports energy efficiency and aesthetics.

By: Amanda Gibney Weko

CASE STUDY

GMA Glazier

Hutt's Glass Co., Inc.
Bechtelsville, Pa.

Team

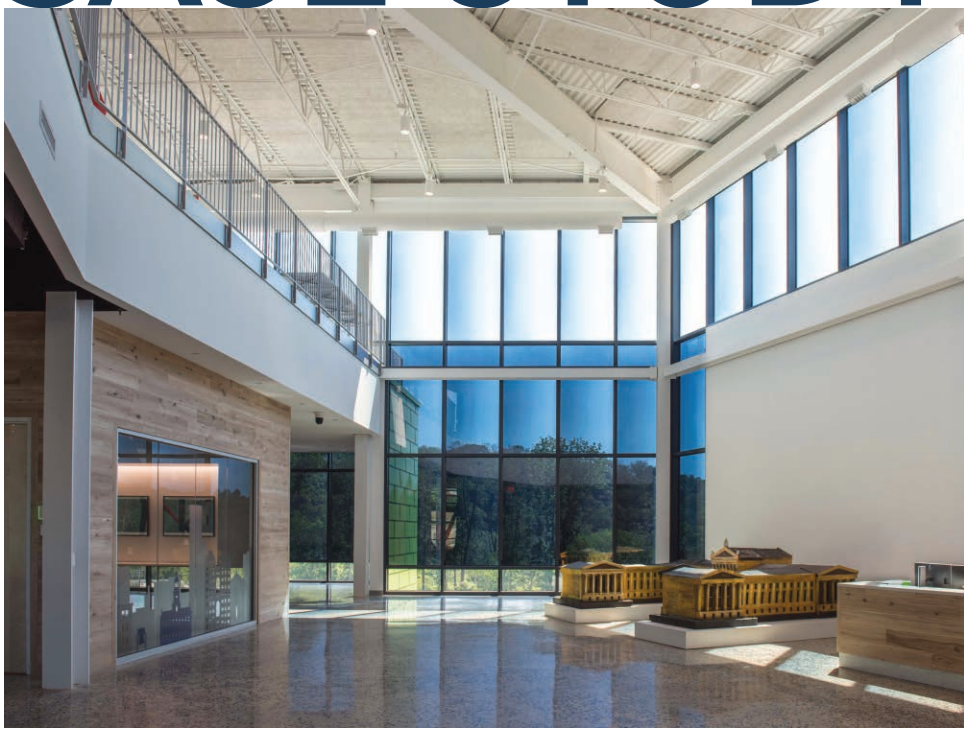
GC/CM: Blue Rock Construction
Architect: MSR Design
Electrical Subcontractor: Ace Electric

Scope

Exterior curtain wall with electrochromic glazing; interior storefront and custom glass for 107,000-square-foot office building

Completion

December 2020



Lobby with central panes of electrochromic SageGlass set to shade (all photos © Joe Garvin)

INTRODUCTION

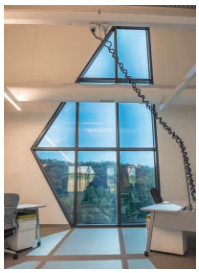
Founded in 1968, SEI Investments Company (NASDAQ: SEIC) is a leading global provider of investment services, managing or administering approximately $1 trillion in assets. SEI holds membership in Climate Action 100+, an investor-led initiative of companies whose businesses and operations have an opportunity to mitigate climate change and support a low-carbon economy. As part of its sustainability goals, SEI incorporates environmentally responsible design into its Oaks, Pa., headquarters campus. For its latest project, Building 12, electrochromic SageGlass® provides enhanced thermal control of the exterior envelope.

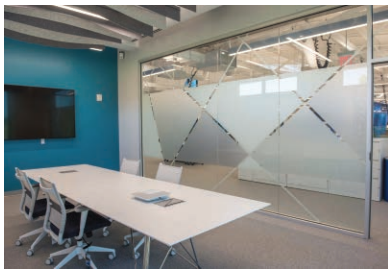
SMART GLASS

Electrochromic glass is a type of "smart glass" capable of altering its light transmittance and solar heat through the application of a small voltage. SageGlass pioneered this dynamic product, which was later added to the Saint-Gobain global portfolio along with other smart glass technologies. By dynamically changing tint in response to the sun, SageGlass increases occupant comfort and maintains views without the need for blinds or shades. In full-tint mode, SageGlass blocks 99 percent of visible light, offering intelligent daylight management and protection from solar heat and glare.

SEI OBJECTIVES

SageGlass supports sustainability at SEI. MSR Design of Minneapolis, Minn., master- planned the 90-acre campus with buildings designed to enhance employee productivity, minimize operational costs, and maximize environmental benefits. The three-story, 107,000-square-foot Building 12 features "The Shards," a series of open meeting areas and private conference rooms, along with a first floor gathering space and cafeteria. MSR Design Principal Paul Mellblom, FAIA, LEED AP BD+C, explained the architecture "takes advantage of contemporary design tools to make the building as sustainable and healthy as possible."





SEI had three main objectives for the building's glazing: support energy efficiency, preserve campus views, and present a clean aesthetic. According to SEI Vice President of Facilities and Services Greg Gettinger, SageGlass ticked all the boxes. "In other buildings, you have shades that might block glare but still let in solar load. We liked the fact that SageGlass allows views to outside but reduces solar load for energy efficiency." Gettinger noted that SEI wanted to avoid the irregular appearance of some shades pulled up, down, or halfway. "With SageGlass, we have a clean, uniform look on the interior and exterior."

TEST RUN

A longtime service provider on the SEI campus, GMA member Hutt's Glass Co., Inc. of Bechtelsville, Pa., performed the glazing scope at Building 12. Vice President Todd Eddy oversaw the Hutt's team, which included Estimator Greg Garnett, Project Manager Frank Kourt, and Field Foreman Nate Hacker.

Before the project began, Hutt's undertook a preliminary SageGlass installation in another SEI building. This test site enabled the team to understand the benefits of SageGlass in a real setting. The value of darkening the room for presentations or brightening it for luncheons – while preserving the wooded view and supporting energy efficiency – validated the use of SageGlass in a large-scale application.

For Hutt's, the test run offered a learning opportunity, on how to clearly label and protect the electrical wires that run through the system and how to handle the expensive glass. "I wanted my field foreman and project manager to clearly understand how the system worked to support it properly," explained Eddy. The Hutt's team carefully reviewed product documentation and a SageGlass representative demonstrated product installation on site.

GLAZING SCOPE

Building 12 involved a comprehensive interior and exterior scope. For the exterior, Hutt's fabricated Tubelite 400TU Ultra-Thermal curtain wall with SageGlass and clear Solarban 70XL glass, along with Tubelite thermal entrances. Hutt's also fabricated and installed Tubelite E4500 interior storefront with McGrory interior all-glass partitions and entries, custom tempered interior glass, and custom glass backsplashes. The interior glass features various shapes and angles. Field verification and careful transfer of data into AutoCAD was critical to ensuring proper fabrication.

TEAMWORK

Senior Vice President Kevin Kelly of Blue Rock Construction led construction management for the project. "The Hutt's team was terrific. They were very attentive. For the trial run, Hutt's worked hand-in-hand with the electrical contractor. We were very happy with the performance."

The close working relationship with Ace Electric began during the test project and continued to Building 12. When installing SageGlass, Eddy explained, "Maintaining a great working relationship with the electrician makes everything easier." Once Hutt's completed its scope, Ace could follow behind and test and connect the wiring.

SEI plans to bring tour groups through the building, in order to emphasize the winning combination of smart design, smart glass, and effective teamwork.