

Case Studies in Brief

Armstrong World Industries Campus Auditorium

Lancaster, Pennsylvania

Designer and manufacturer: Armstrong World Industries
Product: Tectum® Panel Art Walls

The Armstrong World Industries Campus Auditorium, located in Lancaster, Pennsylvania, is a 9,000-square-foot conference space used for company board meetings and lectures. Following countless noise complaints from presenters and audience members, Armstrong installed massive, 50-foot-long acoustic wall treatments on opposite sides of the space using Tectum Panels. Tectum Panel Art Walls, a product designed and manufactured by

Armstrong, have a noise reduction coefficient of up to 1.0, resulting in less echoing and rumbling in the auditorium. Each wall treatment comprises 196 triangular panels in 12 different colors that pinwheel around a central point. The eye-catching hues are inspired by Armstrong's brand colors, and the panels' beveled edges, black furring, and acoustic backing give each installation an expressive 3D look. Once the Tectum Panels were installed, visitors noticed a dramatic improvement in the sound quality of the space and found the colors uplifting and inspiring.



Book Tower

Detroit, Michigan

Architects: Kraemer Design Group and ODA
AV and acoustics: Arup
Civil engineer: Giffels Webster
Construction manager: Brinker/Christman Joint Venture
MEP: Buro Happold
Owner: Bedrock Real Estate
Window manufacturer: Quaker Windows & Doors
Window supplier: BlackBerry Systems
Product: Quaker H503 Single Hung Window

Designed in 1916 by Louis Kamper, Book Tower is one of the most renowned buildings in downtown Detroit. The 500,000-square-foot structure, once an Italian Renaissance-style office complex, is transforming into a massive

civic center along the city's bustling Washington Boulevard, complete with galleries, retail spaces, restaurants, and cafes.

The extensive exterior restoration, led by Kraemer Design Group, includes the historically accurate replacement of 2,483 windows. The newly installed H503 Single Hung Windows, manufactured by Quaker Windows of Philadelphia, were designed to meet the demanding specifications of the historical replication market. They have an impressive AW-50 structural rating, with strength and resistance to water and wind, as well as a thermally enhanced frame design. The H503 is one of Quaker's most popular products and has been used in dozens of historic projects across the country over the past five years.



Knoll Chicago Showroom

Chicago

Architect and designer: Gensler
Custom signage: Landmark Sign Group
General contractor: Clune Construction
Lighting consultant: Focus Lighting
MEP: WMA Consulting Engineers
Millwork: Parenti & Raffaelli
Project management: Conopco
Structural engineer: C.E. Anderson & Associates
Wall manufacturer: PK-30 System
Products: PK-30 System, PK-30 Fixed Panels, PK-30 Swing Doors

The Knoll Chicago Showroom is a 24,000-square-foot furniture store located in Fulton Market, one of Chicago's most thriving and energetic commercial areas. The space,

designed by Gensler and occupying the top three floors of an industrial brick building, is inspired by the raw yet refined character of Fulton. Large iron windows manufactured by PK-30 System frame 360-degree views of the city, bring in natural light, and connect visitors to the surrounding neighborhood. The PK-30 Fixed Panels and Swing Doors within the flagship store are also highly functional. For example, low-iron glass delivers the optimum interior daylighting, while 10-inch-high kickplates on the swing doors are ADA compliant. The wall system further encloses communal spaces adjacent to exterior views, drawing in clients and transforming Knoll into a public lounge for architects and designers.



Sterling Lofts

Attleboro, Massachusetts

Architect: The Architectural Team
Civil engineer: Vansasse Hangan Brustlin
Contractor: Keith Construction
Developer: WinnDevelopment
Electrical engineer: Engineered Building Systems
Energy consultant: CLEARresult
Glass manufacturer: Guardian Glass
Historic preservation: Epsilon Associates and Public Archaeology Laboratory
Landscape designer: RBLA Design
MEP: Peterson Engineering
Roofing consultant: Advanced Roof Management Associates
Structural engineer: Odoh Engineers
Telecommunications and security engineer: Cosentini Associates
Product: Guardian Glass

Initially built as a silversmithing factory in the 1890s, the Sterling Lofts complex in Attleboro, Massachusetts, has been preserved and reintroduced to the town as a site for modern and affordable apartment living. The renovation was completed by The Architectural Team, a design firm native to Massachusetts. The project posed several challenges, including the complex restoration of the building's exterior envelope and the replacement of more than 350 original window openings. The use of Guardian Glass allowed the design team to replicate the look and feel of the complex's historical arched and divided-lite windows, while integrating modern levels of performance and efficiency. The advanced glazing technology of Guardian Glass not only

improves the visual and thermal comfort of the residents of Sterling Lofts but also mitigates the energy consumption of the landmark building.

