FIRE-RATED GLASS GIVES NEW YORK FIREFIGHTERS A HAND AT ENGINE COMPANY 239, BROOKLYN, NEW YORK

Project:  New York Fire Department, Engine Co. 239 Firehouse
Location:  Brooklyn, NY
Architect:  Beyhan Karahan
Products:  Pilkington Pyrostop® glass firewall and Fireframes® Heat Barrier Series frames
Providing Fire and Life Safety While Preserving Historic Beauty

The historic 7,000 square-foot Brooklyn Engine Company 239 fire station is part of the largest municipal fire department in the United States. Built in 1895, its decorative brick and sculptural limestone exterior has provided more than a century of shelter and service to New York firefighters. For Brooklyn’s residents, the fire station on busy Fourth Avenue has become an icon of safety and a beautiful landmark.

Recognizing the need to modernize the station to meet the fire-fighting requirements of the twenty-first century, the Department of Design and Construction (DDC) hired Beyhan Karahan & Associates of SoHo New York to renovate the longstanding building while preserving its historic character. The architects were asked to restore and upgrade the station’s interior, including an apparatus room for fire engines, dormitory, kitchen and lounge area, as well as refresh the building’s detailed exterior.

“Our goal was to honor as much of the original house as possible,” says Michael Siano, Senior Associate, Beyhan Karahan. “It’s a building with a legacy and we wanted all aspects of the renovation, whether aesthetic, performance or code-related, to enhance that legacy.”

One challenge the architects faced was how to provide adequate fire and life safety protection between the main staircase and the apparatus area where the fire-trucks are housed, as well as between the main staircase and the upper floors where the firefighters live. The architects desired to keep the main staircase open as in the original house, yet needed to meet strict fire and life safety codes. They also wanted to maintain visibility around each of the building’s fire poles, while providing a barrier against falls and protection against fire.

The architects found the solution with Pilkington Pyrostop® glass from Technical Glass Products (TGP). Pilkington Pyrostop is a UL-listed glazing system that is fire-rated for up to two hours and meets the impact safety requirements of CPSC 16CFR1201 Category I and II.

Not only does the system block the spread of fire and smoke, as well as protect against the transfer of radiant and conductive heat – essential to protecting firefighters and sensitive equipment in the firehouse – it is also an excellent alternative to solid walls. The transparent wall panels bring in large amounts of light, which helped the architects re-create the open environment found in the station’s original staircase design. They also allow for clear sightlines from inside the staircase and fire pole enclosures to the ground, which helps firefighters maneuver quickly and safely as they exit the building during fire calls.

“We needed a proven glazing system that would meet the durability requirements of a firehouse application,” adds Siano. “Pilkington Pyrostop is just that – a reliable system with strong fire-ratings and a clear, aesthetic quality.”

For more information on Pilkington Pyrostop, along with TGP’s other specialty fire-rated and architectural glass and framing, visit www.fireglass.com.

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