

**Project:** Mill Brook Elementary School

**Location:** Concord, NH

**Architect:** HMFH Architects

**Glazing Contractor:** R & R Window Contractors

**Product:** Fireframes® Aluminum Series frames with Pilkington Pyrostop® glass firewall





## MILL BROOK ELEMENTARY SCHOOL COLORS OUTSIDE THE LINES WITH CREATIVE FIRE-RATED FRAMING SOLUTION

A core objective of the Mill Brook Elementary School renovation in Concord, New Hampshire, was creating an environment that promotes collaborative learning. HMFH Architects helped fulfill this vision by developing a multi-use “learning corridor” that brings education beyond the classroom.

The corridor weaves its way throughout the school’s shared spaces, incorporating areas for presentations, personal study and group projects. Vibrant colors evoke a playful, energetic ambiance to foster inter-grade learning, while easy access to technology and Wi-Fi support modern day curriculum needs and encourage interdisciplinary teaching methods.

Among the building elements contributing to the success of the elementary school’s public learning areas is a fire-rated stairwell that supports the school’s vision for collaboration. HMFH Architects designed the stairwell to be bright and open, reflecting the playful energy of students. They achieved this goal by pairing Fireframes® Aluminum Series fire-resistant frames with Pilkington Pyrostop® fire-resistant glass, both supplied by Technical Glass Products (TGP).

Rather than the bulky, wrap-around frames often associated with traditional fire-rated framing systems, the Fireframes Aluminum Series fire-rated frames have slender profiles that can be custom wet painted, anodized or powder coated in nearly any color. Custom aluminum face caps are also available for design teams seeking to create a unique look or maintain visual consistency with surrounding windows and curtain walls. In this application, the narrow fire-rated frames were powder coated a bright purple to match the interior color scheme—a key aesthetic benefit since learning areas are integrated into public spaces outside student classrooms.

The Fireframes Aluminum Series fire-rated frames also provided the design team with the flexibility to follow the stairwell’s custom corner angles and create a tall expanse of fire-rated glazing with minimal framing. These elements add to the assembly’s sleek design, and improve visibility for students using the stairway. As was the case in Mill Brook Elementary School, design professionals can use the Fireframes Aluminum Series in applications requiring a two-hour barrier to radiant and conductive heat transfer.

Pilkington Pyrostop is fire-tested as a wall assembly, allowing for unrestricted amounts of transparent glazing. In the elementary school stairwell, the clear glazed lites help draw daylight deep into the stairwell core and extend line of sight for students and faculty. Pilkington Pyrostop also meets the impact requirements of CPSC 16CFR1201 Category I and/or Category II – a critical performance benefit for glass used in busy stairwells.

Together, Fireframes Aluminum Series fire-resistant frames and Pilkington Pyrostop fire-resistant glass offer fire-ratings of up to two hours and block the transfer of radiant heat, providing essential protection should students need to exit a building during a fire. For more information on the products, along with TGP’s other specialty fire-rated and architectural glass and framing, visit [www.fireglass.com](http://www.fireglass.com).