

Project: Johnson & Wales University Center for Physician Assistant Studies

Location: Providence, RI

Architect: DBVW Architects

Glazing Contractor: Cherry Hill Glass Co.

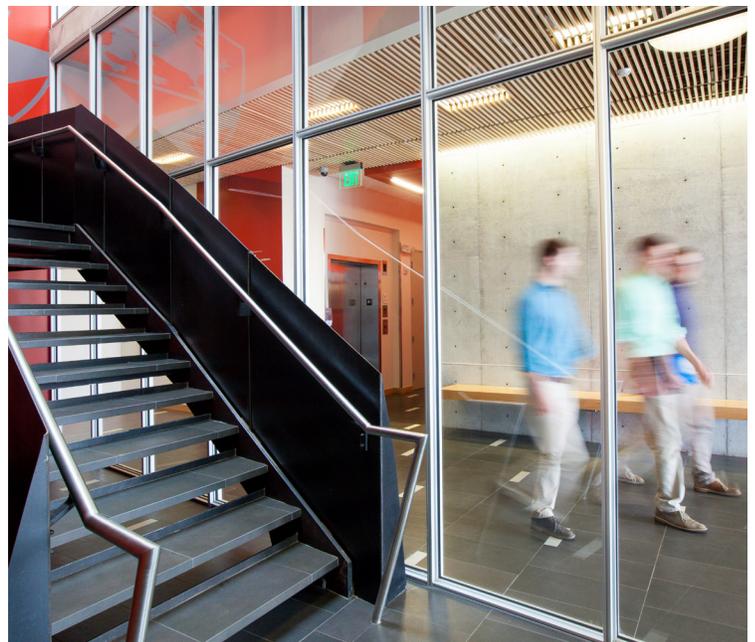
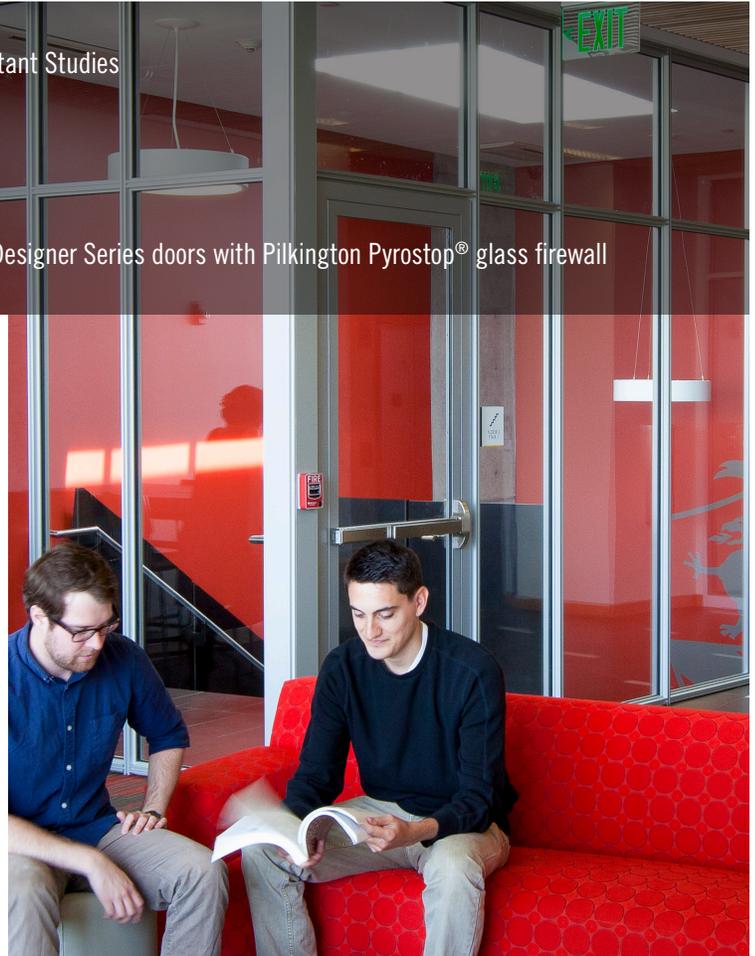
Product: Fireframes® Aluminum Series frames and Fireframes Designer Series doors with Pilkington Pyrostop® glass firewall

A key component of DBVW Architects' plans to turn a historic jewelry factory into a high-tech facility for Johnson & Wales University physician assistant students was creating an open, vibrant atmosphere. The original building had tall ribbon windows, which transferred light across its wide floor plate. However, since the window sills were five feet above the floor, they restricted visibility. Building occupants were unable to see the city streets, and pedestrians could not see in. In addition, the existing structure's opaque form held little visual stopping power at the street level.

The building's lack of openness and accessibility to the street was a concern for the design team. "The original main entrance to the building was not handicap accessible and not as grand as we envisioned for Johnson & Wales' new Physician Assistant Program," explains Sean Redfern, associate principle for DBVW Architects. "You entered into the building through a nondescript concrete block staircase. There was no sense of arrival, or of the importance of the building."

To achieve the desired transparency, the firm opened up the building's exterior walls along the southeast street, and developed a new, porous entry with floor-to-ceiling glass. The first floor of the entry features a lounge and lobby, with a prominent staircase leading up to the second floor.

For the lobby and stairs to successfully work together to create a clear circulation path for people coming into the building, the firm faced the challenge of finding a fire-rated glazing system that satisfied building codes while also supporting transparency to the entry. DBVW Architects found the solution by combining Fireframes® Aluminum Series fire-rated frames with Pilkington Pyrostop® transparent fire-rated glazing, both supplied by Technical Glass Products (TGP).



FIREFRAMES®

DESIGNER SERIES FIRE-RATED DOORS
COMPLEMENT RENOVATED AESTHETIC

Adding to the openness and accessibility of the fire-rated glass stair enclosure in Johnson & Wales University Center for Physician Assistant Studies, Technical Glass Products' Fireframes® Designer Series fire-rated doors accelerate the space's desired transparency. Featuring slender steel profiles, the sophisticated, hardworking doors help maintain clear lines of sight throughout the entire entry. Paired with Pilkington Pyrostop® fire-rated glass, they welcome incoming daylight and promote visual communication amongst occupants.

Unlike traditional hollow metal steel frames, Fireframes Designer Series doors' narrow, extruded steel profiles better resemble the look of non-rated door systems. In fact, they can closely match the shape of aluminum profiles while still offering all the performance advantages of steel—a key benefit for DBVW Architects, as the doors were integrated within TGP's sleek Fireframes® Aluminum Series fire-rated framing system. Creating a more complete visual match, the doors were powder coated at the factory to align with nearby aluminum framing systems.

Today, the center's previous nondescript doors are now illuminated with modern fire-rated doors that provide around-the-clock protection while successfully inviting occupants to the open, vibrant renovation.

"The entry is the only area in the building where people can look into the building from the outside and sense what's happening inside," says Redfern. "Together, the thin profile design of TGP's Fireframes Aluminum Series fire-rated frames and clear Pilkington Pyrostop fire-rated glass helped us achieve the transparency and fire protection we were looking for in the space."

The precision engineering of TGP's Fireframes Aluminum Series creates narrow profiles and crisp sightlines, providing an attractive, modern alternative to traditional hollow metal frames for fire-rated applications. The flexibility to use custom aluminum face caps allowed the design team to further match the building's clean, open aesthetic. DBVW Architects selected custom, H-shaped aluminum cover caps, creating a framing system with sleek, linear profiles. 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 unrestricted amounts of transparent glazing. The product offers fire-ratings of up to two hours, and blocks the transfer of radiant heat, providing essential protection should students need to exit the building during a fire. 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.

"Using fire rated glass for an entire exit stair enclosure isn't something you see every day," adds Redfern. "But the openness that TGP's fire-rated frames and glass created fit well with our design aspirations."

Today, Johnson & Wales University Center for Physician Assistant Studies houses a gross anatomy lab, clinical skills practice lab, lecture hall and classrooms within its collaborative layout. Finished in 2014, the building has received LEED Gold certification.

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

