Bright and natural light - without the glare.

3M[™] Daylight Redirecting Window Film

Commercial Building — San Francisco, CA

Project Scope

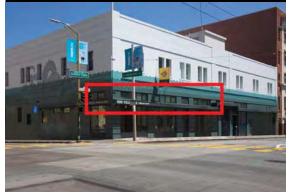
826 Valencia is a nonprofit organization dedicated to supporting under-resourced students ages six to eighteen with their creative and expository writing skills, and to helping teachers inspire their students to write. Since the opening in 2015, 826 Valencia has served over 300 students through partnerships with six local organizations.

The location spans over 5,200 square feet and is home to a retail store of the student's work, a writing lab and administrative offices.

⁶⁶ You could tell the difference immediately. The students and staff could work in the creative space without the distraction of bright lights. ⁹⁹

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— Bita Nazarian, Executive Director, 826 Valencia



*Red box indicates window film placement.

► Situation

The building is lined with large windows to let in light in, creating a warm and inspiring environment. Janice Cavaliere, Design Director with Gensler Architects, said that creating an open and fun environment, with clear visibility into the space was important for the program. However, the windows also create significant amounts of glare, making it difficult, if not impossible, to see computer screens for hours at a time.

"The outside light became too strong and bright, impacting the work of staff and students," stated Bita Nazarian, Executive Director at 826 Valencia.

Solution

It was important to the program not to shut out the light and reduce visibility. For these reasons, 3M[™] Daylight Redirecting Film was suggested as a solution. The Daylight Redirecting Film was installed in the upper portions of the window. Made of micro-structured prisms, the film optically redirects over 80% of daylight upward and diffuses it for even distribution. The film also allows natural light to penetrate deeper into the building as it redirect the light deeper into the building to increase the daylighting penetration

► Result

"The 3M window film has helped greatly. It allows us to work throughout the day and the natural light that's redirected to the ceiling is great," said Meghan Ryan, Design Director for 826 Valencia. She said she liked how the film reduced the glare, but left the space bright. An added benefit is that the natural light helps with the design team's color matching and trimming work, making it more accurate and effective. Ryan also noted that because the windows aren't blacked out from the exterior, the space looks alive and welcoming.

"You could tell the difference immediately," Nazarian shared. "The students and staff could work in the creative space without the distraction of the bright lights."

Case Study Summary

Challenge: Reduce the blinding glare while not shutting out the building's visibility.

Product Selection: 3M Daylight Redirecting Film.

Benefits: Noticeably improved glare reduction, brighter spaces with natural light.

Superior performance through 3M Science.

How 3M Daylight Redirecting Film works

Studies show that buildings with abundant natural light helps improve student test scores, shorten patient recovery times and boost retail sales. In offices, sunlight has been shown to help increase employee productivity, improve office atmosphere and decrease rates of absenteeism.

So naturally, windows have become larger and larger in order to bring in more light. But, larger windows invite more direct sunlight, which can be intense and uncomfortable. As a result, occupants often close blinds, blocking out daylight. Additionally, most of the natural light is limited to the perimeter of the building.

So, how can more natural light be brought into the building?

The solution is 3M Daylight Redirecting Film. A simple, effective daylighting solution which comfortably brings natural light deeper into the building.

Here's how it works: Daylight Redirecting Film is installed in the upper portion of the window.

The film is made up of micro structured prisms which optically redirects over 80 percent of the daylight upward toward the ceiling. The daylight is then diffused to more evenly distribute the light and increase comfort. The film allows natural light to penetrate deeper into the building.

The results are dramatic.

3M Daylight Redirecting Film helps increase occupant comfort, reduces artificial light, and can result in increased energy savings. Compared to existing light reflecting strategies, 3M Daylight Redirecting Film is easily integrated into new or existing windows.



*Red box indicates window film placement.

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