

3M Science.
Applied to Life.™

Decreasing glare while
keeping the natural light.

3M™ Daylight Redirecting Window Film

Commercial Building — San Francisco, CA

► Project Scope

Hamilton + Aitken Architects is an architectural firm located in the South of Market neighborhood of San Francisco, California. Headquartered in the penthouse of a four-story building, with glass on three sides, the offices get plenty of light. The 12-foot long transom windows help bring in even more light.

“The 3M window film bounces the light up to the ceiling, giving nice and even light—and best of all, the glare is gone.”

— Susan Aitken, Managing Partner
Hamilton + Aitken Architects



*Red box indicates window film placement.

► Situation

The building's occupants discovered that there is such a thing as too much light. The direct glare was causing issues with computer screens and eye discomfort. Office workers were taping brown paper over the windows until blinds and permanent shades were installed. The issue then was that the blinds and shades were limiting natural light.

► Solution

3M™ Daylight Redirecting Film was installed as a trial in two of the transom panes. "It was really quite remarkable," said Susan Aitken, Managing Partner of Hamilton + Aitken Architects. "We showed it to the owner of the building and he was impressed."

3M Daylight Redirecting Film was then installed on the transom windows in the problem areas of the West and Northwest sides of the offices.

► Result

"It really worked," Aitken said. "The 3M window film bounces the light up to the ceiling, giving nice and even light—and best of all, the glare is gone."

An added benefit is being able to leave the lights by the windows off, helping to save on energy costs.

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.

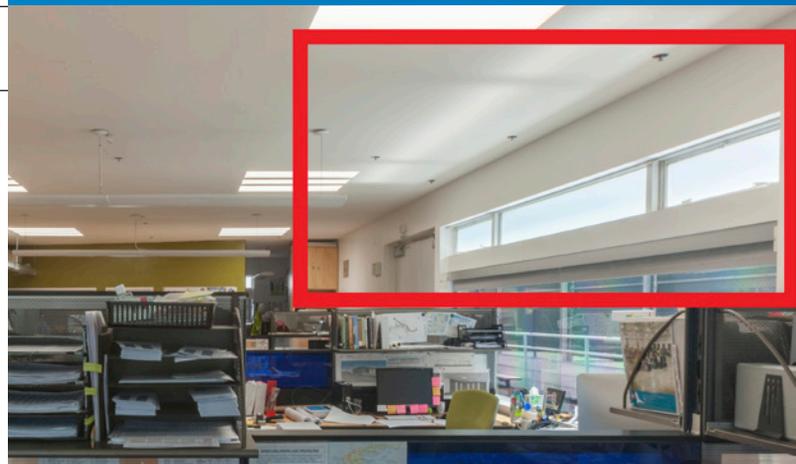
3M Daylight Redirecting Film helps increase occupant comfort, reduces artificial light, and can result in increased energy savings. Compared to existing light reflecting strategies, 3M Daylight Redirecting Film is easily integrated into new or existing windows.

Case Study Summary

Challenge: Decrease the glare and keep the natural light.

Product Selection: 3M Daylight Redirecting Film.

Benefits: Impressive glare reduction, improved natural light and potential energy cost savings.



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3M Commercial Solutions Division
3M Center, Building 220-12E-04
St. Paul, MN 55144-1000
3M.com/daylighting

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