

3M[™] Sun Control Window Film Prestige Series

Computaleta - Onehunga, Auckland, NZ

Background

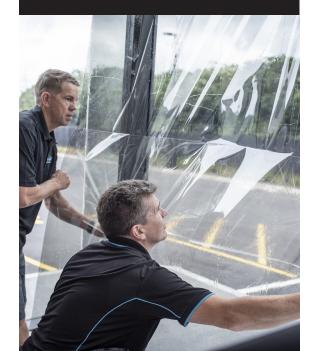
3M Distributor, Computaleta recently moved into a new facility In Auckland. As with many modern building developments, copious amounts of glass envelope the structure. Whist a glazed front delivers a bright light and airy workspace; it can also raise the internal temperature of the building and create lots of glare.

Computaleta have a mixture of office and factory staff based at their Onehunga branch. The comfort of their employees and visitors is paramount, so maintaining a comfortable temperature is a priority.

Controlling the internal temperature of the building is costly. It has an environmental impact that Computaleta are keen to mitigate. Hence, anything they can do to lower the temperature without an overreliance on air conditioning is top of their list.

"Lots of glass lets in lots of light but also increases the internal temperature. Thankfully with the increased performance of the 3M Prestige & glass, we now have improved energy efficiency, lower peak temperatures and drastically reduced glare"

-Arlette Farland - Director Computaleta New Zealand



Situation

The Onehunga Computaleta brand is lucky to have a generous amount of glazing at the front of the building, letting in profuse amounts of daylight. However, this creates a dilemma as light produces heat and glare, and Computaleta wants to offer a comfortable space without the need for excessive air conditioning or installing window coverings.

▶ 3M Solution

Computaleta turned to 3M™ to help solve their climate control dilemma. After conducting application tests, 3M were able to confidently recommend 3M™ Sun Control Window Film Prestige Series using data to emphasise the films benefits.

The 3M[™] Prestige Series Film is developed using non-metalised, multi-layer optical film and nanotechnology.

- Enhanced comfort and protection The spectrally selective film is designed to reflect in the near-infrared range where the sun intensity is highest. Thus helping keep interiors cooler and more comfortable.
- Unsurpassed capabilities What sets 3M[™] Prestige apart is the precision with which light waves are controlled as they pass through or reflect off hundreds of layers of film. Compared to other films, 3M[™] Window Films increase performance at a faster rate as the sun's angle increases, meaning more protection and comfort when you need it the most.
- Enhanced views and aesthetics Films with low interior and exterior reflectivity enhance views while maintaining the exterior appearance of the glass. Prestige Series Films have highly visible light transmission providing excellent aesthetics meaning the same visual clarity, inside and out.
- No corrosion and no signal interference Being nonmetalised, Prestige Series Films aren't susceptible to corrosion in humid environments and they don't interfere with electronic device signals.



Superior Performance through 3M Science.

Let the light in. Not the heat.



"3M Window Films reduced the peak internal temperature by 7.4°C."

Results

The results were dramatic; samples that were taken before and after the installation revealed a reduction in average temperature by 2.2°C, a maximum temperature deduction of 7.4°C and reduced the thermal energy entering the windows by 18 BTU/Hr/ft2 or 102 W/m2. There was also a noticeable reduction in glare.

This makes the Onehunga facility a more environmentally friendly and comfortable place in which to work.

Case Study Summary

Challenge: Keeping the views and positive attributes of the sunlight but reducing the unwanted heat. Keeping the building cool without over reliance on air conditioning or covering the windows.

Product Selection: 3M[™] Sun Control Window Film Prestige Series

Benefits: By applying 3M[™] Sun Control Window Film Prestige Series to the windows, a significant reduction in heat was achieved. This delivered a marked improvement in customer comfort and reduced use of air conditioning.

To learn more, contact your 3M Authorised Installer.

3M