



Saving Energy: A Window of Opportunity

A recent upgrade at the David Suzuki Foundation (DSF) building in Vancouver, British Columbia included a 3M™ Window Film solution to achieve the organization's objectives of reducing energy consumption, reducing its ecological footprint and improving comfort.

While windows allow natural daylight inside office buildings and homes, they also allow excess heat in during the summer and heat loss during the winter. The results are higher energy costs and discomfort to occupants due to hot and cold spots within the building.

Windows also allow high levels of damaging ultraviolet rays into the rooms causing premature fading of furnishings and flooring. This reduces the useful life expectancy of furnishings causing ecological concerns of sending the items to landfill sites earlier than necessary. The DSF could have purchased new windows, but this option was quickly dismissed due to the high cost of window replacement.

Deteriorated Drapes
UV light damages interior furnishings, like drapes, sending them to landfill sites before their time. Extend the useable life of your belongings by installing 3M Window Films.



“Although energy efficiency was a primary concern during our renovations, we knew there had to be a more environmentally friendly solution than just replacing the windows,” said Siobhan Aspinall, DSF. **“As a non-profit organization, we need to keep our costs down while upholding all of the founding principles of The David Suzuki Foundation.”**

Enhancing for Efficiency

While investigating solutions, the foundation discovered 3M's energy control solutions called Prestige Sun Control Window Films provided by Doug Ritch, president of Titan Window Films, a local 3M dealer/applicator.



“When I heard the DSF was interested, we reviewed the options that would meet its requirements,” says Ritch. “The DSF's critical concerns were to ensure its window appearance was maintained allowing the maximum amount of natural daylight.”

The DSF decided to upgrade the existing glass with a Prestige film that was professionally applied to the room side of their windows by Titan Window Films in late 2009.

In harmony with the DSF's environmental focus, the selected film was actually inspired by nature. 3M Prestige uses the latest concept of multi-layer optical film, an idea from a rare and beautiful South American butterfly called the Blue Morpho.



Although its stunning colour is blue, its wings are not a true blue. Like all butterflies, Morphos have tiny overlapping scale-like coverings which selectively reflect mostly blue light. This inspired 3M's nanotechnology to selectively filter the infrared heat, but not the light.

As a science-based organization, the DSF supports the use of leading environmental technologies such as Prestige film.



“This optically clear proprietary nanotechnology contains over 200 layers of film that selectively block up to 97 per cent of infrared heat from the sun,” said Ron Phelps, 3M Canada Technical Specialist, Renewable Energy Division. “This intelligent film allows more heat in during the winter while blocking more heat in the summer.”



The film also blocks 99.9 per cent of the UV radiation from striking furnishings and flooring while providing a more comfortable environment for those inside, whether they're the DSF's employees or home owners.



Before and After

The left window was upgraded with 3M Prestige film to show how it improves people's view by reducing glare and back reflection while allowing lots of natural daylight into the room. No film was applied on the right window. This is one of the reasons why the DSF chose 3M Window Films for its recently renovated office in Vancouver.

The Right Choice



Making smart energy choices can help the environment and budgets too. By installing 3M Prestige Window Film, the foundation expects to reduce its energy costs by up to 10 per cent while improving comfort at a fraction of the cost to glass replacement.

As a leader in climate change reduction through conservation and efficiency improvements for homes and office buildings, the DSF is committed to educating others on making environmentally sound choices.

By upgrading its existing glass with film, the DSF is proving that it is not just about teaching others, it is leading the way by example.



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