

National Gallery of Canada  
Chooses 3M™ Scotchshield™  
Safety & Security Window Film

C A S E H I S T O R Y



**PROBLEM**

The National Gallery is a visual arts museum of international stature. It houses Canada's collection of historic and contemporary art within a creative building consisting of many windows and skylights to cast natural daylight upon the nation's treasures.

With the United States Embassy less than 300 meters away, the Gallery is placed in a high security risk area. Propelled by the forces of a terrorist bomb, flying glass fragments were just one of the wicked elements that attributed to 220 deaths and approximately 4,000 injuries when terrorist bombs exploded at U.S. Embassies in Kenya and Tanzania two years ago. Both RCMP and Ottawa-Carleton Regional Police recommended the implementation of a "comprehensive window protection system" for exposed areas of glass.

In addition to the technical security demands there were also concerns about maintaining the aesthetic impact of the Gallery. The architect, Moshe Safdie, was concerned about the visual effects film may have on the transmission of visible light into the Gallery.

**SOLUTION**

Seven major North American companies were invited to bid on the project. The contract award was determined by using international technical standards developed with the assistance of Barry Weaymouth, an international security and safety consultant who provides security and safety consulting services for the Parliamentary Precinct and Building Projects in Canada.

After rigorous testing and application of film samples, authorized 3M distributor Convenience Group, along with Ottawa-based Lindian Enterprises Ltd, were awarded the contract to install clear 3M Scotchshield Ultra High

Performance Safety and Security Window Film on more than 5,000 of the gallery's window surfaces.

Installation began in May 2000 and was completed in November of the same year.

**RESULTS**

By strengthening the window surfaces, the film (with Ultraflex anchoring) will substantially reduce the effects of flying shards of glass in the event of a terrorist bomb attack on the embassy.

**THE 3M DIFFERENCE**

"A building's weak link during an explosive event or attempted vandalism is typically the glazed surfaces or windows," says Ron Phelps, Project Supervisor, 3M Window Film Solutions, Specified Construction Markets. "The unique, tear resistant micro-layered structure of 3M Scotchshield™ greatly reduces the threat of serious injury by holding the broken pieces of glass together."

3M invented window film in 1966 and continues to be an industry leader in the development of products and solutions for safety and security needs around the globe.

**PROJECT SUMMARY**

3M Dealer: Lindian Enterprises Ltd.  
Convenience Group, Inc.

Installation Date: 2000

Area Covered: 125,000 square feet

Installation Time: 7 months

Type of Film: 3M™ Scotchshield™ Safety  
and Security Window Film  
SCLARL400 with Ultraflex

Project Notes: All companies bidding on the project were required to install a sample of their film on a designated surface to allow the architect to judge the merits of the film on the glazed surface.

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