Window Films for Safety and Security

By Lou Kren

Last month, Properties Magazine discussed how window films can reduce energy costs, cut glare and dress up the exteriors and interiors of buildings. This month, we’ll focus on the safety and security benefits of these protective films, so named because while protecting from the harmful rays of the sun, they also protect against flying glass due to impacts from hard objects, wind or explosions.

Security film is specified for a number of reasons, says John Susnik, manager of Sunray Window Films LLC, an Independence-based authorized dealer of 3M window-film products for commercial, institutional and residential clients. “The film can provide protection against severe winds, earthquakes and bomb blasts, for example,” he says. “A lot of municipalities are installing these types of films to protect employees and visitors in areas with exposed glass. Also, airports across the United States are installing the films using federal funds.”

Installation aids security

Susnik’s company sells and installs 3M safety films and also provides an Ultraflex installation where the edges of the film are caulked and bonded to the framing structure. This provides enhanced protection in the event of an explosion outside the window, which can fragment and project the glass into the building at high speeds.

“The Ultraflex installation anchors the film to the frame unit so that the film flexes within the unit. With this installation, the film prevents glass from shattering and eliminates projectiles. In fact, 99% of the fragments are held within the film.”

The security film can be installed as clear and also tinted to act as a solar film, filtering light and enabling building managers and owners to lower energy costs.

3M recommends its Scotchshield Ultra Safety & Security window films for areas particularly susceptible to extreme weather or vulnerable to crime. The films have been tested for severe winds, bomb blasts and simulated break-ins.
films have been tested for severe winds, bomb blasts and simulated break-ins, and security cameras have filmed failed break-ins (due to the film) during actual attempts, according to company officials, noting that in all test cases, the film has significantly contained sharp-edged glass shards that are the primary cause of injuries. For severe windstorms and other violent weather, the Scotchshield Ultra films also help seal out water, the primary cause of property damage.

**How it works**

The 3M safety and security films sold and installed by Sunray Window Films adhere in a similar manner to energy-saving films. Installers place a film overlay on glass panes from the inside, and if Ultraflex installation is desired, the film is bonded to frame units. The film is available as rolls in widths to 72 inches and typically in lengths of 100 feet. Most films are installed as one piece, but if seams are required, they are most likely placed in the horizontal direction. If the film is installed correctly, says Susnik, seams should be practically invisible and will hold up throughout years of use. Installed film can be cleaned with any type of non-abrasive over-the-coun-

For more on window films for safety and security, visit www.sunrayfilms.com.

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