



3M Authorized Prestige
Window Film Dealer

Buyer Beware

What Schools Need to Know About the Proper Installation of Breach-Resistant Security Film

Late last year, in response to the Uvalde school shooting tragedy, Texas Gov. Abbott charged the Commissioner of Education with developing a proposed rule ensuring existing school facilities are [held to heightened safety standards](#). A portion of the Safety Standards Rule components released by the TEA mandates that all school districts and open-enrollment charter schools in the state [must install entry-resistant film](#) or bulletproof glass on ground-level exterior windows that are adjacent to or near an exterior door, exterior glass doors not within a secured area, and windows that are adjacent to or near a door and are large enough to allow someone to enter if broken.

While the new safety rule provides options for compliance, the responsibility of selecting a compliant entry-resistant film and sourcing a qualified window film installer falls on the schools. To aid the school districts with this daunting task, here are critical “**Buyer Beware**” bullet points you need to know about coordinating the proper installation of breach-resistant security film.

Security Window Film versus Bullet-Proof Glass

The new school safety rule provides multiple options for hardening schools’ most vulnerable access points of windows and doors. These options include [bullet-proof glass](#) [OR entry-resistant security window film](#). Be aware – these are two completely different products with vastly different costs, installations, and completion timelines.

For starters, no window film is bullet-proof. Bullet resistance for small caliber handguns can be obtained using thick film layers applied to heavy glass at least ½” to 1” thick. The problem is that most buildings are constructed with an insulating glass (IG) unit, or two pieces of ¼ or 1/8-inch tempered glass, which is not the same as 1-inch glass. This means that the existing glass would need to be removed and NEW 1” or thicker glass installed. The cost of bullet-resistant glass averages around \$225 per square foot, in addition to the cost of removing the old glass.

Because most school districts do not have a budget for bullet-resistant glass, installing forced-entry-resistant security window film is the leading recommendation. When installed properly, premium-quality security window film protects occupants by keeping broken glass in place and acts to delay the shooter's entry. This delay in forced entry affords more time for first responders and more time for occupants to get to safety. Security window films such as the top-rated 3M S800 can run between \$18 - \$28 per square foot depending on the installation specifications.

In short, beware of window film vendors claiming their product is bulletproof or bullet resistant. This is a common marketing practice from unscrupulous vendors who do not disclose to customers that existing glass must be replaced to obtain this small-caliber bullet resistance.

All Security Window Films are Not Created Equal

Window films are made from polyester sheeting that can be specially coated to provide a variety of benefits. Standard window film is two millimeters thick, the same as the tinting you may have on your home or car. But safety and security films are much thicker, ranging from 4mm to 15mm. Generally, thicker films are better for forced entry in terms of penetration through the film. These clear, single-layer polyester films or micro-layered (3M Ultra 800) rely on thickness to provide additional security benefits.

The extra thickness makes cutting and installing safety and security film *extremely difficult*. 3M's Ultra S800 Window Film is a clear security film made of a highly specialized tear-resistant micro-layered polyester. It includes a special, thicker adhesive that holds broken glass together, hindering anyone trying to break and enter through a window. It also reduces the threat of flying glass in the event of a severe weather event or explosion. 3M's Ultra S800 security window film has been identified and utilized by thousands of schools in the US as one of the most cost-effective solutions for hardening vulnerable windows and doors against forced entry.

Security Window Film Attachment Systems are Critical

Security window film attachment systems are a critical component to achieving the maximum level of protection for schools. While the security window film is designed to hold glass together, the attachment system bonds the filmed glass to the frame preventing separation during impact. The top-rated 3M Ultra S800 security window film is applied first to existing glass. Then, 3M's Impact Protection Attachment (IPA) is applied as a silicone sealant or "wet glaze" to anchor the film to the frame.

This security window film plus impact protection attachment system provides a robust barrier between the active shooter and the building interior – delivering precious extra response time during an active shooter event.

Only Seek Trained Installers

The application of security window film is a complex, multi-layered process that requires specialized skills and tools. As mentioned earlier, security window film is much thicker than standard window film and ranges from 4mm to 15 mm, making cutting and installation difficult.

Security window film is installed using a water-based mounting solution with much longer dry times than standard window film. The extra thickness of the film and longer dry times often lead to issues with clarity and consistency when not installed by a trained security window film installer.

Additionally, installing the impact protection adhesive system (IPA) requires very specific processes and tools to ensure maximum performance. Many window film companies use inexperienced installers hired as temporary local support. These installers are often not trained in the highly specialized application process for security window film, instead relying on the same techniques used for standard home and car window tinting.

While the film application may 'look' ok, utilizing standard window film application processes creates deficiencies in the security film's ability to resist breaches and delay the entry of intruders. Unfortunately, these deficiencies appear after the window tinting company left, exposing the schools to unnecessary risks.

See the attached photos highlighting the differences between certified security window film installation processes and others.

Only Work With "Authorized 3M Dealers"

To become an authorized 3M™ dealer, one must "complete 3M's Authorized Window Films Dealer training, and acquire the technical knowledge required to confidently apply 3M window films, such as 3M solar, 3M security, and exterior products that defend from UV, heat gain, and physical intrusion."

Furthermore, dealers must be a 3M Authorized **Prestige** Dealer to sell and install 3M Ultra S800 security window film, a nationally-recognized standard for breach-resistant security film.

Ask for References & Warranty Information Before Contract

As stated earlier, many unscrupulous window tinting companies will market overstated claims about their film products and installation capabilities. As with any contract, it is always best to check references and warranty limitations before signing contracts. Many school districts have found themselves victims to these unscrupulous vendors and are now faced with unfortunate situations to protect their schools.

For more information on the TEA-mandated guidelines and requirements, please visit Epic Security Window Films at <https://epicsolarcontrol.com/school-safety-mandate-security-window-film>.

See also: [*Buyer Beware Fact Sheet Photo Addendum*](#)

About Epic

Epic is a premier 3M Authorized Prestige Dealer and Certified Security Window Film Expert. Epic's services include safety and security window films, window coverings, and decorative & privacy glass solutions for commercial properties, schools, hospitals & medical facilities, retail, and industrial. In addition to being a quality window tinting company, Epic is also a trusted service provider for the Presidential White House of the United States. As an authorized 3M Prestige Dealer, Epic is also trusted by many commercial and residential clients throughout North Texas and beyond. For more information, please visit www.epicsolarcontrol.com.