

FIRE-RATED, FORCED ENTRY & BULLET-RESISTANT GLASS HELPS MEET DEMAND FOR SAFER SCHOOLS

Recent school tragedies have reinforced the need for more secure education facilities, leading to an increase in forced entry and bullet-resistant glazing. A challenge is many of these products don't protect against the spread of fire, which building codes require in areas of egress. To meet this demand, Technical Glass Products (TGP), a brand of Allegion, and The LTI Group are working together to provide a multifunctional fire-rated and forced-entry glass solution—Pilkington Pyrostop® laminated to School Guard Glass®.

Pilkington Pyrostop®



Why do I need a multifunctional fire-rated and forced-entry glass solution?

Many forced entry and bullet-resistant glass products use composite layers made of thermoplastic or polycarbonate. The problem is the combination of glass and plastic may generate tremendous amounts of flames and smoke during a fire, potentially causing further life injury and property damage. This wouldn't be cause for great concern if school fires were rare. However, NFPA data show there are a large number of school fires annually (an average of 3,230 school structure fires per year between 2014 and 2018). So, while building professionals may be solving one problem with forced entry glazing, they may be creating another by reducing fire safety in schools. This isn't the case with a multifunctional fire-rated glazing product, like Pilkington Pyrostop laminated to School Guard Glass. It ensures building professionals can improve security levels without compromising areas of life safety.

What factors should I consider when using a multifunctional product?

The most important factor to consider when selecting a multifunctional fire-rated glass and security product is to verify it is classified and labeled with a credible, third-party testing agency, such as Underwriters Laboratories, Inc (UL). This helps ensure the product meets all necessary performance criteria, and isn't prioritizing security over fire safety, and vice versa. It is also crucial to evaluate whether the selected product will last the lifespan of the building. For instance, some current fire-rated glazing offerings rely on a surface-applied film to provide impact safety. The problem is schools are more prone to abuse, and even the toughest films can be marred, cut or peeled. To preserve the integrity and lifespan of products in educational facilities—which are expected to operate for many years—it is essential to select a product that is able to withstand the frequent movement of students throughout the day.

Why should I use Pilkington Pyrostop laminated to School Guard Glass?

Pilkington Pyrostop laminated to School Guard Glass is a fire-rated, forced entry and bullet-resistant transparent wall panel. The product does not use highly flammable composite layers, and is tested as a complete, integrated system to fire-rated, forced entry and bullet-resistant performance standards. Furthermore, it is UL-classified and labeled. This ensures it provides critical defense against fire, and in the event of an intruder attack, gives students and staff the upper hand by taking away the element of surprise at access points and delaying ingress. Slowing intruders also allows more time for first responders to arrive.

How does the product achieve its high level of defense?

Pilkington Pyrostop is a fire- and impact safety-rated glazing material that blocks radiant heat, helping protect people and valuables on the non-fire side of the glass where heat transfer might be a concern. It does not rely on a window film to provide impact safety. School Guard Glass is a laminated glass product with a security strengthened substrate core that is designed to slow down intruders in an active shooter event. By combining these two proven products, the result is a multifunctional glazing solution that helps keep fire and intruders at bay.

What are the product's features and benefits?

- ✓ Fire-resistance rated
- ✓ Level III bullet-resistance rating
- ✓ Withstands 12+ minute forced entry attacks
- ✓ Meets CPSC 16CFR1201 Category I and/or Category II impact safety requirements
- ✓ Available for interior/exterior use
- ✓ UL classified and labeled

Where should I use Pilkington Pyrostop laminated to School Guard Glass?

Pilkington Pyrostop laminated to School Guard Glass is an ideal solution for areas of a school with fire-rated and security requirements. Consider corridors, vestibules and areas of egress, which can play a key role in delaying an intruder during a forced entry attack, but may still be required to provide a path for occupants to safely exit during a fire.

What building codes should I be aware of?

While building codes require the use of fire-rated glazing in specific applications, they do not currently mandate the use of security glazing in educational facilities. However, the industry is working to tighten regulations. According to the National Council for State Legislatures, since 2017, over 2,205 school safety state bills were introduced in the United States with 19.41% adopted or enacted. Districts are spending millions of dollars to "harden" schools with improved security measures. By thinking ahead and considering products like Pilkington Pyrostop laminated to School Guard Glass for critical doors and openings, educational facility teams can do their part to ensure schools are safe, secure and code-compliant now—and in the future.

Ready to use multifunctional glass solutions to create safer schools?

sales@fireglass.com

800.426.0279