

FSJ TACTICAL ADVANCES BALLISTIC SECURITY WITH ADVANCED COMPOSITES



> CASE STUDY: THERMOBALLISTIC™ THERMOPLASTIC PANELS







REVOLUTIONIZING PERIMETER SECURITY WITH A COMPOSITE SOLUTION

THE CHALLENGE

As security concerns rise, especially in academic institutions, there is a growing need for effective ballistic protection. A leading educational district in Arizona sought a comprehensive security solution to protect its students and staff. The primary requirement was ballistic protection to meet stringent UL 752 Level 3 standards – protection against the penetration, fragmentation, and spalling from 3 shots of .44 magnum ammunition with velocity of 1,350 feet per second. The school district needed a protective wall system that could integrate seamlessly with existing glass film solutions, providing a cohesive and effective security system. However, traditional existing solutions, such as aramid fiber and steel, presented unique logistical challenges.

Key challenges included:

- Installation: aramid fiber panels are heavy and require installation between drywall layers, which could increase time and labor costs
- **Performance:** steel plates do not allow for projectile absorption; instead, they deflect the projectile

THE SOLUTION

FSJ Tactical, a leading provider of perimeter security solutions boasting the tagline "Saving Lives", turned to Avient's ThermoBallistic™ thermoplastic fiberglass reinforced ballistic resistant panels to create their WalShield™ panel solution. The primary need was a product that could be installed without requiring any special equipment or training for a smooth and efficient installation process.

The key benefits and advantages of the product over existing solutions include:

- Ease of installation: the lightweight and easy-toinstall nature of the panels makes them accessible to general contractors, saving time and labor costs, and simplifying the installation process as they can be applied directly over existing drywall, unlike aramid fiber panels
- Performance: the panels are developed to encapsulate projectiles, preventing harmful deflection and ricochet, which is a significant issue with steel plates

Coordination between FSJ Tactical and Avient's technical support team was key to the product development process. "The collaboration with Avient was the best we've had with any team," said Fernando Mendez, COO of FSJ Tactical. "Their technical support is top-notch, and they were always available to answer our questions and provide guidance."

THE IMPACT

Founded by career contracting experts with a deep understanding of ballistic resistance, FSJ Tactical has been at the forefront of delivering high-quality security solutions since 2020. Their expertise in systems design, customization, fulfillment, and installation has enabled them to provide comprehensive protection for schools, cities, counties, and state agencies. The WalShield™ system installed at this school district in Arizona is just one example of how it has successfully enhanced perimeter security for academic institutions, New Mexico Magistrate Courts, Sandoval County Buildings, and other entities across the country.

FSJ Tactical's commitment to quality is evident in their rigorous testing processes. They are so confident in the performance ability of their system that they host their signature live-fire demonstrations, which showcase the reliability and effectiveness of the WalShield™ systems. These demonstrations have consistently shown the product's ability to absorb bullets and prevent harmful deflection, a significant advancement over traditional materials like steel plates.

The key benefits of the ballistic panels, as highlighted by FSJ Tactical's testing and implementation, include exceptional durability, simplified installation without the need for specialized training, and improved performance for the safety of students and staff.

By leveraging Avient's innovative ballistic resistant panels, FSJ Tactical has been able to provide school districts and municipalities across the Southwest U.S. with a robust security solution that meets the stringent UL 752 Level 3 standards and installation requirements. This collaboration is a testament to FSJ Tactical's commitment to delivering peace of mind through effective perimeter safety solutions.