



FORCED ENTRY SOLUTIONS

**DESIGNING FOR FORCED-ENTRY RESISTANCE
WITH ASTM F3561-TESTED SYSTEMS**



As security requirements rise across education, healthcare, government, and other public-facing buildings, architects are increasingly being asked to specify systems that support forced-entry resistance without compromising design intent.

Kawneer's Forced Entry Solutions are a coordinated portfolio of ASTM F3561-tested storefront, entrance, and hardware configurations developed to support forced-entry resistance in high-security building applications.



DELIVERING SAFE SPACES

Applicable across education, healthcare, government, and other public-facing building types, our forced entry solutions support projects where enhanced security must be integrated with architectural performance, durability and design flexibility.

Adoption of the ASTM F3561 standard is expected to expand across multiple market sectors. In education specifically, new academic buildings are increasingly being designed to meet evolving forced-entry resistance standards for mitigating targeted threats. With approximately 50,000 US school buildings now more than 50 years old, demand for security upgrades is expected to remain strong in the years ahead.

THE ASTM F3561 STANDARD

ASTM F3561 provides a standardized method for evaluating the forced-entry resistance of fenestration assemblies in commercial, residential, educational, government, and other institutional applications. According to ASTM International, the standard was developed for applications where elevated forced-entry risk must be considered.

This product range applies the ASTM F3561 test methodology across select, validated storefront, entrance, and hardware configurations designed to support forced-entry resistance without sacrificing architectural performance, design flexibility, or aesthetics.



UNDERSTANDING ASTM F3561

Fenestration assemblies have long represented a critical vulnerability in forced-entry events, particularly when conventional glazing and framing are not designed to perform as a coordinated system. Recognizing this gap, the industry developed ASTM F3561-22, the first comprehensive standard for evaluating the forced-entry resistance of a fenestration system after a simulated active assailant attack. By testing glazing, framing, and hardware together as an assembly, the standard reflects the reality that system performance depends on the integrity of every component. The test method is structured in two phases. First, glazing is subjected to a defined ballistic pattern, with door lock cylinders also targeted where applicable. The assembly is then subjected to impact using a 100-lb. impactor dropped at increasing heights to simulate a physical breach attempt after ballistic damage has occurred. Together, these phases evaluate how well the system resists entry once compromised.

Performance is classified from Level 1 through Level 8, based on how the number of impacts the assembly withstands following the ballistic phase. This tiered structure makes ASTM F3561 especially practical for schools and other public-sector projects, because it allows architects to align system selection with security objectives, project conditions and budget considerations. Rather than implying absolute protection, the standard is intended to support delayed entry, helping provide occupants shelter and for emergency response procedures to begin.



STOREFRONT FRAMING	MIN. ASTM F3561 LEVEL *
Trifab® Versaglaze® 451/451T (Dry Glaze)	5
Trifab® Versaglaze® 601T (Dry Glaze)	4
IR 521T Framing System (Wet or Dry Glaze)	4

350/500 IR ENTRANCE SYSTEM WITH	MIN. ASTM F3561 LEVEL *
Kawneer 1686 CVR (Tape Glaze)	2
Kawneer 1686 CVR (Wet Glaze)	5
Von Duprin FER-99 RIM (Tape Glaze)	2
Von Duprin FER-99 RIM (Wet Glaze)	3
Sargent PE8800 RIM (Tape Glaze)	2
Sargent PE8800 RIM (Wet Glaze)	3

* Performance ratings may vary depending on glazing type, hardware configuration, and test unit size. Counterintuitively, larger test units often achieve higher performance levels. While minimum ratings are shown here, higher-performing configurations have been validated and are available upon request.