



CASE STUDY

Courthouse Hardening For a Historic Building

The Conrad B. Duberstein U.S. Bankruptcy Courthouse in Brooklyn, N.Y., engaged TSS to design, engineer, fabricate, and install a custom ballistic barrier entry system to manage access control. Within one week, TSS installed a curtain wall checkpoint and secured the guard booth and reception area with glass-clad polycarbonate tested to UL 752, protecting courthouse staff and visitors from common gun violence threats while respecting the architectural integrity of the historic building.

THE PROBLEM:

BULLETPROOFING A HISTORIC BUILDING

Implementing physical security upgrades in government buildings like this historic courthouse involves unique challenges.

Owned and managed by the U.S. General Services Administration, the federal courthouse is more than 130 years old, designed in the Romanesque Revival style with granite walls, high arches, intricate iron and woodwork and marble floors. That meant working with uneven surfaces, irregular marble cut-outs and historic masonry that couldn't be drilled.



Any security elements, such as [ballistic glass](#), needed to fit the building's aesthetics and meet historic building guidelines to maintain the courthouse's standing on the National Register for Historic Places. Any bullet-resistant barriers had to be custom designed to precisely fit existing door and window openings and be freestanding.

In addition to being a key part of the federal judiciary, the building houses postal services as well as the U.S. Trustee and offices of the U.S. Attorney. Because of the facility's highly public nature, installation needed to be completed quickly and with minimal disruption to court staff, judges, jurors, and the public. The team needed to consider court proceedings, existing security measures, and other factors.

[Learn more best practices for incorporating security into courthouse planning.](#)

PROJECT CONSULTING

Securing the courthouse entrance from potential threats was top priority. The TSS team worked closely with the project's architect to assess the courthouse layout and determined the best way to design a freestanding barrier system that would stop bullets without impacting traffic flow. The team recommended glass-clad polycarbonate tested to UL 752. This option also reduces spall, or chipping and fragmentation from the impact of stopping a bullet, while offering a high level of visibility. [Aluminum framing](#) tested to the same UL 752 standard was also essential to ensure the frame could hold the weight of the glass.



How do you know which level of protection do you need? Watch this short video to learn more.

DESIGN & ENGINEERING

The team encountered several unexpected challenges during the design phase. Because of the age of the building and how the foundation had settled, the entryway floor had significant sloping. To address this, they built elevated "curbs" to level out the sloped marble floors and used custom fillers to match the existing materials

FABRICATION & ASSEMBLY

Total Security Solutions fabricated and assembled the elements at their headquarters in Fowlerville, Michigan, ensuring control over quality, fit, finish, and logistics. They spent significant time measuring and preparing these materials, including performing custom woodwork off-site to speed up installation time.

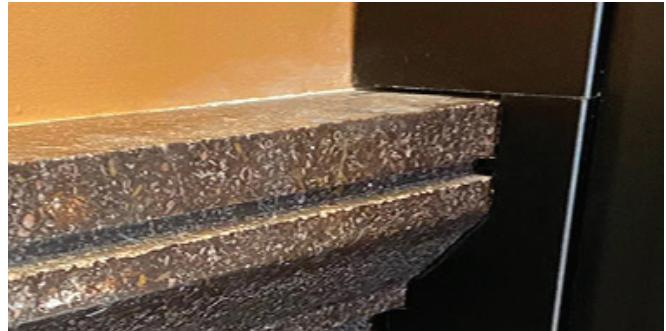
"A project like this really shows off what I like about our teams: precise and accurate measurements on site, good communication, having the right machines, and the right people here in Fowlerville to fabricate pieces to that precision, and coordinating all of that so that a filler cut in mid-Michigan perfectly fits a 130-year-old piece of marble on a wall in Brooklyn," TSS CEO Jim Richards said. "Everyone on the team makes it their business to make sure the fit is precise so that the system comes together smoothly, keeps people safe, and looks good."

DELIVERY & INSTALLATION

Working around court operations and coordinating with security personnel and contractors, the installation team completed work within one week. The result was a secured checkpoint that funnels visitors through metal detectors, a dedicated guard booth for monitoring and alarm systems, and a separate secured reception area and security booth.

"When all the effort that goes into coordination comes together and a talented team of installers comes on site with everything they need, it really demonstrates how things are supposed to be done."

Anton Levchenko
Design-Build Project Manager, DCM Architecture & Engineering

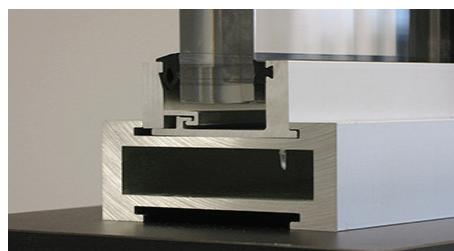


BULLETPROOF COMPONENTS USED

Taking a systems approach to courthouse security is essential. This requires a combination of the right products working together to achieve a solution that fits both security and aesthetics.



BULLETPROOF GLASS



BALLISTIC FRAMING



BULLETPROOF GUARD BOOTH

ONE MORE GOVERNMENT FACILITY, SECURED

If you are responsible for securing federal agencies, local government buildings, or any site requiring elevated government security systems, access control, and ballistic-level barrier integration, TSS can help. Using the proven process we've developed over more than 20 years and 30,000 buildings, we'll assess your threats, plan and design a custom solution, fabricate it and deliver and install it with the industry's fastest lead times.



ABOUT TSS

Founded in 2004, TSS' purpose is simple: to be the industry leader in protecting people and property from physical attacks. Our professional in-house design, manufacturing, and installation teams enable us to deliver total security solutions that are customized to your needs with the fastest speed to completion and an exceptional customer experience. Today, with staff and locations nationwide, we have secured tens of thousands of buildings, ensuring daily Physical Security for What Matters Most™.



REQUEST A CONSULTATION

Whether you're designing a new building or retrofitting a historic place, our team can provide the guidance and resources you need to succeed. Request a consultation and learn how we can help you protect public spaces from evolving threats.

[REQUEST A CONSULTATION](#)