

Bullet Resistant Assemblies



Pioneer bullet resistant door and frame assemblies provide protection to meet stringent UL standards

Pioneer bullet resistant door and frame assemblies, supplied with the appropriate listed hardware, will meet most job requirements for security and protection. Bullet assemblies offer 10 levels of bullet-resistant protection. This cost-efficient, readily available solution protects against assault and vandalism at vulnerable door openings such as isolated utility buildings, cashier islands, currency exchanges, or box offices.

Technical Options

- Made with a proprietary ballistic core
- Certified and third-party tested in accordance with UL752 and NIJ standards
- Bullet-protection ratings for UL752 levels 1-10 (levels 1-3 handguns, levels 4-10 rifles)
- Available with welded seamless door edge; continuously welded frames
- Standard gauge; A60 galvanized steel (stainless available) frames
- Fire rated assemblies tested to UL 10C are available
- UL 752 levels 4-8 wood doors available

Testing

Bullet resistant doors and frames are fabricated with the finest UL listed armor panels that meet or the UL 752 Standard for bullet resistant materials in addition to NIJ standards.

All doors and frames are designed to provide the best practical protection for threat levels 1 through 10.

UL 752 Bullet Protection Ratings	
Level 1	9 mm (3 shots)
Level 2	.357 Magnum (3 shots)
Level 3	.44 Magnum (3 shots)
Level 4	.30 Caliber Rifle (1 Shot)
Level 5	7.62 mm Rifle (1 shot)
Level 6	9 mm (5 shots)
Level 7	5.56 mm Rifle (5 shots)
Level 8	7.62 mm Rifle (5 shots)
Level 9	.30-06 caliber rifle, steel core, lead point filler, FMJ (APM2)
Level 10	.50 caliber rifle, lead core FMCJ Military Ball (M2)



Bullet Resistant Speaker Port and Deal Tray

- Level 3 bullet resistant stainless steel speaker port
- Glass is factory prepped to receive the speaker port
- Speaker port is installed flush with the glass surface
- Stainless steel deal tray is bullet resistant up to level 8

111 Kero Road
 Carlstadt, NJ 07072
 Phone: 201-933-1900
 pioneerindustries.com

ASSA ABLOY, the global leader
 in door opening solutions

Blast Resistant Assemblies



Pioneer has developed Blast Resistant Opening Solutions to meet US Government, Military, and Embassy safety and security objectives for blast resistance. Providing extra protection against explosions and excessive force, our blast resistant openings meet or exceed the stringent manufacturing and performance requirements of the Department of Defense, Department of State, Department of Homeland Security and other regulatory groups.

Pioneer is able to provide Blast Resistant doors and frames with a number of options including glazed doors, borrowed lites, transoms, and pairs with increased requirements to meet UL Government, Military, and Embassy safety and security objectives for blast resistance.

Blast Assemblies

Blast resistant up to 100+ psi.

Options

- Singles and pairs
- Seated and unseated assemblies
- Fire ratings up to 3 hours
- Vision lights within doors (factory glazed)
- Sidelights, transoms and borrowed lights
- Hardware recommendations and inclusions available upon request

Advantages

- Meets stringent performance requirements from governing agencies
- Available in stainless steel finishes
- Optional sound ratings available
- Bullet resistant ratings available

Blast Test Standards

Third-Party tested (or calculated) to the following criteria:

- Categories I, II and III
- ASTM 1642 & ASTM 2927
- UFC 4-010-01 ver. 2012 DoD Minimum Antiterrorism Standards for Buildings
- GSA TS-01 Level C & D
- US Department of Veterans Affairs
- PIP STC 01018

Blast products are designed to meet project specific requirements. Contact the factory for details.

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

STC Acoustical Assemblies



Using the latest revolutionary technology, patented designs, and utilizing lightweight sound absorbing techniques, Pioneer developed acoustical assemblies to solve the noise problem for any facility.

High Sound Transmission Class (STC) ratings are typically needed to create sound resistant rooms for the government and military, airports, school band rooms, and to isolate performance halls from exterior noise. Relatively lower STC ratings will usually suffice for less-demanding applications, such as solving a noise problem in a hotel or office building. These acoustical solutions cover the low to high STC range allowing them to be the solution for almost any application.

Advantages of STC Doors:

- Eliminates ambient noise in schools
- Provides an effective and durable solution
- Provides security for military
- Maintains privacy for healthcare
- 3 Hour maximum fire rating on most models
- Proper seals and threshold provided with each assembly
- Economic solution for acoustic openings
- All STC values are operable assemblies
- Third party tested

STC Ratings - Operable

Hollow Metal

- Single Flush - up to STC 66
- Single Glazed - up to STC 52
- Pairs Flush - up to STC 49
- Pairs Glazed - up to STC 47
- Single Embossed - up to STC 48

Laminate

- Single Flush Laminate - up to STC 66
- Single Glazed Laminate - up to STC 52

Wood

- Single Flush Wood - up to STC 53
- Single Glazed Wood - up to STC 51

Testing

Pioneer assemblies are third party independently tested. The Sound-Tech Xpress product line is tested under the ASTM E90, ASTM E1332, ASTM E2235, ASTM E413, SDI 128 and HMMA 865 criteria.

Door Options

Up to 4'0" x 8'0" on singles and 8'0" x 8'0" on pairs

3 Hour fire ratings by UL and ITS on most models. Call for larger non-fire rated sizes. See Architectural tech data manual for details.

Hardware Options

- Locks: Cylindrical, mortise, mortise deadlocks, military
- Hinges: Standard weight 4-1/2", 5", continuous, and cam lift - specific hinges may be required depending on the STC rating
- Exit Devices: Surface vertical exit devices
- ElectroLynx™ option available for electrified hardware

Frame Requirements

Some STC assemblies can be used with a standard Pioneer single or double rabbet frame with welded corners. Frames need to be backfilled with appropriate sound deadening material.

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

Forced Entry Bullet Resistant Assemblies



Image from actual forced entry testing

The Forced Entry Bullet Resistant Assembly from Pioneer combines ballistic and forced-entry resistance with advanced materials to provide an elevated threat protection solution compliant and third party tested per stringent Department of State Standard SD-STD-01.01 Rev. G (Amended).

The FEBR assembly is tested to withstand up to 60 minutes of simulated “mob” attack and resistant to 5.56 M193, 5.56 M855 and 7.62 M80 ballistic rounds.

Forced Entry Bullet Resistant Assemblies safeguard mission critical buildings, executive offices, guard houses, control rooms, and anywhere the highest level of protection and durability are important considerations.

Assembly Construction

- Multiple sizes and configurations available including singles, pairs and glazed openings
- Forced entry bullet resistant up to 60 minutes of attack and level 8 bullet resistance
- Many hardware variations available depending on the level of attack including factory installed options

Additional:

- 5 or 15 windows and borrowed lights
- 60 minute louvers
- 60 minute escape/roof hatch

Locking:

- Manual forced entry locks
- 3 and 5 point exit device electrified. Fire egress.
- Fire rated up to 3 hours
- Blast criteria options

Test Methods and Standards

- Forced Entry and Ballistic Resistance of Structural Systems: Doors were tested per DoS ST-STD.01.01 shot with 5.56 and 7.62 rounds and then attacked by a six man Concentrated Assault Team up to 60 minutes on the lock edge, 60 minutes on hinge edge, 60 minutes on the center of the door

- UL 752: Standard for Bullet-Resisting Equipment
- ANSI/BHMA A156.1: Butts and Hinges
- ASTM F3038-14: Standard test method for timed evaluation of Forced Entry Resistant Systems
- Complies with Department of State SD STD-01.01 Rev G (amended) and HMMA 862-13 standards as tested by certified 3rd party independent laboratory

Certified:

- 5, 15 and 60 minute singles and pairs,
- 5 or 15 minute glazing options, full, half or double
- 5 or 15 minute stainless steel

Applications

- Government Facilities
- Guard Houses
- Control Rooms
- Executive Offices

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

Forced Entry Bullet Resistant Assemblies

Frequently Asked Questions

Q. What is a forced entry test?

A. A Forced Entry test and certification was developed to provide guidance in the specification of commercial security hollow metal doors and frames where protection from vandalism, forced entry, theft, and firearms attack is of concern. As such, it is typically combined with a Ballistic test and certification (FEBR).

Q. What is the ASSA ABLOY Forced Entry Bullet Resistant Assembly certified to?

A. The ASSA ABLOY Forced Entry Bullet Resistant Assembly is capable of resisting 15 minutes of forced entry assault and defeating multiple impacts of 7.62mm NATO and 5.56mm projectiles as defined by applicable U.S. government standards.

Q. Is there a governing specification that this meets?

A. Yes, it meets the HMMA 862-03 classification 1, 2, and 3 (15 minute Forced entry portion) and meets the requirements of UL752 level 8 bullet resistance.

Q. Does this meet any GSA requirements?

A. Yes, the FEBR door and frame meet State Department Standard SD-STD-1.01, Rev. G.

Q. Is this assembly tested with GSA witness?

A. No, it is a non-witnessed assembly tested by an independent third party certified test lab.

Q. Does the FEBR assembly have to be sold as an assembly or can it be sold as components?

A. FEBR certification requires the doors, frames, and hardware to be sold as an assembly.

Q. Does this assembly require special hardware?

A. Yes, our assembly was tested with specific GSA listed forced entry 3 point latching exit device from Securitech and custom Pemko continuous hinge.

Q. Is hardware supplied and factory installed by ASSA ABLOY with the package?

A. Yes, for ease of installation and functionality all hardware will be preinstalled on this opening.

Q. What sizes or configurations are available?

A. The current assembly is a 3'0" x 7'0" opening but more testing will be done for more sizes and configurations.

Q. Are these available with a fire rating?

A. No, but the assembly will be fire tested in the future.

Q. Are these available as seated or unseated, or both?

A. Our assembly has been tested in the seated position only.

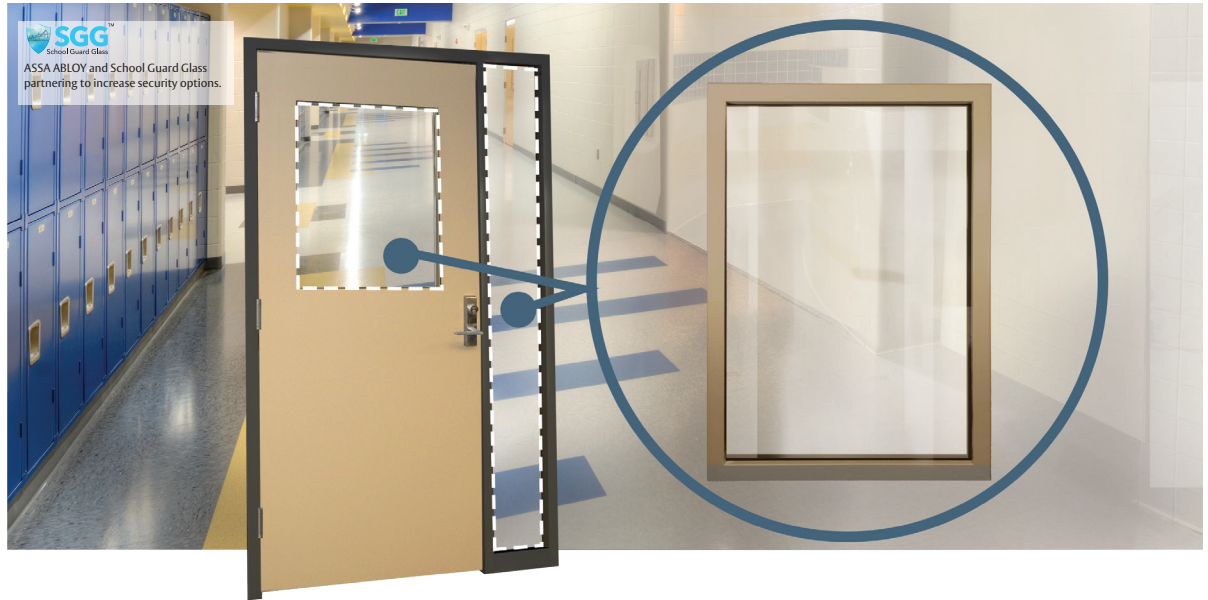
Q. Is there a warranty available for this product?

A. Yes, a one year warranty is available for this product. Please see our website for more details.

Q. What are the best applications for this new door assembly?

A. You would see this product be used on any facility that does not require Department of State witnessing.

Attack Resistant Retrofit Kits and Glazing



Pioneer is pleased to partner with School Guard Glass™ to offer Attack Resistant Retrofit Kits in standard and custom sizes to replace glazing in existing hollow metal and wood doors to enhance security and to delay access from intrusion.

The Attack Resistant Retrofit Kit which includes a Pioneer Type 2 (metal door) or Type 10 (wood door) light kit, SG5™ glass, plus the supplied glazing compound and tape has been third party tested to withstand a brutal physical attack from an intruder for over 4 minutes and shot 30 times in a 6"x6" area. Although bullets will penetrate the SG5 glass it will remain in place to prevent access.

This extra time helps to keep occupants safe until first responders can neutralize the threat. Replacing glazing or glazing with film in existing wood or metal doors with the Attack Resistant Retrofit Kit is an easy and affordable solution to enhance the security of any opening especially in schools.

Pioneer Attack Resistant Retrofit Kits, School Guard Attack Resistant Glass and installation components are third party tested per HPW 5-aa10; however, please be aware that existing doors, frames, or hardware may not have been tested to this standard.

Attack Resistant Retrofit Kits

Light Kit and Glass Sizes:

- Type 2 light kit for existing hollow metal doors
- Type 10 light kit for existing wood doors
- Several standard sizes in vision, narrow light and half glass configurations

Vision	Narrow Light	Half Glass
10x10	3x33 6x16	23-13/16x28 (3068)*
12x12	4x24 6x24	23-13/16x32 (3070)*
	4x25 6x30	23-13/16x34 (3072)*
	5x20 6x36	

*Type 2 kit sizes shown

- Custom sizes available (min of 3 sq. ft.)

Glass and glazing

- School Guard Glass SG5 attack resistant glass
- Dow 995 silicone glazing compound (10.3 oz tube)
- Tremco 440 butyl tape to be applied to the glass kit interior and exterior sides

Installation instructions

- School Guard glass will provide RetroFit Kit installation instructions with each glass shipment

Attack Resistant Glass for Existing Sidelights and Borrowed Lights

Sidelights

- 6" x 10" – 47" x 92-3/4"

Borrowed Lights

- 3" x 10" – 95" x 47" glass horizontal oriented
- 3" x 10" – 47" x 95" glass vertical oriented
- Custom sizes available (3 sq ft min)

Test Methods and Standards:

- 5-aa10 - Certification Standards for Reinforcing and Testing of Standard Wood and Hollow Metal Doors, Frames, Glass and Hardware – 30 shots (7.62 mm) fired at glass and kit in a 6"x6" area. Although bullets penetrated the SG5 glass it remained in place to prevent access after 4 minutes of attack by single assailant using hand tools of various types as allowed in test.
- ASTM C1036 - Standard Specification-Flat Glass
- ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass
- ANSI Z97.1 Safety Materials Used in Buildings
- UL 972 Standard for Burglar Resistant Glazing Material

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

Attack Retrofit Kit and Glazing Frequently Asked Questions

Q. What are Attack Resistant Retrofit Kits?

A. Utilizing Type 2 (hollow metal) or Type 10 (wood) light kits for existing wood or metal doors and School Guard Glass™ SG5™ creates a robust retrofit glazing solution to delay access from intrusion. SG5™ Glass for retrofitting existing sidelights and borrowed light are also available.

Q. What standards has this product been tested to?

A. This product has been tested according to the HPW 5-aa10 certification standard based on the FBI's Active Shooter Report to set standards for reinforcing and testing of standard wood and hollow metal doors, frames, glass and hardware. However, please be aware that existing doors, frames, or hardware may not have been tested to the same standard.

Q. What types of existing doors can the Attack Resistant Retrofit Kits be installed into?

A. Attack Resistant Retrofit Kits can be installed into any existing wood or hollow metal doors as a security upgrade to the opening.

Q. What comes with the Attack Resistant Retrofit Kit?

A. The Attack Resistant Retrofit Kit includes the following:

- Primed Type 2 light kit (metal doors) or primed Type 10 light kit (wood doors)
- School Guard SG5™ glass, Tremco 400 tape and Dow 995 silicone glazing compound shipping from a separate location
- Light kits, glass and glazing are field installed by others
- Installation instructions will be provided with each glass and glazing shipment

Q. Is the Attack Resistant Retrofit Kit bullet resistant?

A. No, the Attack Resistant Retrofit Kit is not bullet resistant as neither the SG5™ glass or kit will stop a bullet from penetrating. However, the Attack Resistant Retrofit Kit has passed ballistic testing per HPW 5-aa10 so that after being shot, the Retrofit Kit and SG5™ glass does not weaken and will stay intact throughout the 4 minute physical attack.

Q. Is there an Attack Resistant Retrofit Kit for sidelight or borrowed light frames?

A: Yes, SG5™ Attack Resistant Glass can be ordered and shipped loose for field installation by others into existing side lights and borrowed light frames. SG5™ Glass installation instructions will also be provided.

Q. What sizes and configurations are available for Attack Resistant Kits?

A. Many standard and custom sizes are available. (Visible glass sizes shown below)

- Vision: 10"x10" and 12"x12"
- Narrow light: 3"x33", 4"x24", 4"x25", 5"x20", 6"x16", 6"x24", 6"x30" and 6"x36"
- Half glass: 23-13/16"x28", 23-13/16"x32" and 23-13/16"x34" (Type 2 kit sizes shown)
- Sidelight glass: 12"-47" x 12"-92-3/4"
- Borrowed Light glass: 12"-95" x 12"-47" (horizontal), 12"-47" x 12"-95" (vertical)

Q. Is there a warranty available with this product?

A. Yes. Type 2 and Type 10 light kits are warranted for 1 year. School Guard glass is warranted against delamination for 10 years.

Q. What is the difference between School Guard Glass and Security Film?

A: School Guard Glass™ SG5™ is a laminate with glass on both sides that is designed to withstand intruder attack for 4+ minutes, even after bullets go through the glass. Security film is an externally applied plastic that was designed for blast purposes to keep glass from becoming shrapnel, it has not been proven to provide attack resistance for more than 5 seconds.

Q. How do you clean School Guard Glass?

A: Use a water and soap solution with a squeegee or soft towel.

Q. Does School Guard Glass look different than standard Tempered Glass?

A: No, they look the same. Both School Guard Glass™ and standard glass are 98% optically clear. School Guard Glass™ SG5™ for Attack Resistant solutions is typically only 7/16" thick.

Lead-Lined Assemblies



Achieve effective radiation protection with Pioneer's full line of high quality lead lined doors and frames. These openings accomplish the important task of reliably containing radiation in sensitive areas.

Features

- Lead sheets, available in 1/32" to 1" thickness, integrated into door and frame for strength and vandal resistance (lead thicknesses beyond 1/4" available upon request)
- Vertically steel stiffened doors for added strength and durability
- Consult factory for available fire ratings
- Standard 1-3/4" thick doors accommodate standard hardware
- Continuously welded, seamless door edge and lead lined frame
- Standard 16-gauge steel; 14-12 gauge available
- Fire rated assemblies tested to UL 10C available
- Wood doors available with 1/32" - 1/8" lead thicknesses
- Sound ratings, RF Shielding and Stainless steel options available

Applications

- Aerospace facilities - microwave transmission rooms
- Airports
- Defense, military, and security environments
- Healthcare - X-ray and imaging rooms
- Medical schools
- Nuclear power plants

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

RF Shielding Assemblies

Commercial, Industrial, and Governmental Facilities



Commercial and industrial radio frequency shielding in a commercial or government application is critical in controlled environment testing. As the testing is in a contained environment, the RF shielded enclosure allows for accuracy in equipment function, procedures and results. The RF shielded enclosure prevents outside interference, thus allowing for accurate test data. Pioneer RF Shielding Solutions help ensure sensitive and confidential information is contained.

The Pioneer RF opening has been third party tested in accordance with NSA-94-106, providing greater than 40 decibels (dB) shielding attenuation for electric fields over the 10 kHz to 10 GHz frequency range. Conductive perimeter seals, Pemko threshold and caulk are included with each assembly.

Applications

- Business Offices
- Test Labs
- Emergency Call Centers
- Sensitive Electronic Installations
- Computer Data Processing Security Centers
- Government - Military Security Centers
- Financial Centers
- RFID Scanning Areas

Additional Options

- Sound rating up to STC 50
- Bullet rating to level 8
- Blast openings
- Lead Lined

Assembly Includes

Door, frame, conductive perimeter seals, copper primer, threshold and conductive caulk and primer.

Standard Options

- 2'6" x 6'8" up to 4'0" x 8'0"
 - Flush only
 - Single swing
 - Standard frame anchors
- Consult factory for available fire ratings

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

RF Shielding Assemblies

Healthcare Facilities



Radio frequency shielding is necessary for preventing unwanted interference from anything emitting radio frequencies such as cell towers, radio stations and computers. These signals and frequencies interfere with the magnetic field used in magnetic resonance imaging by distorting the quality of the image. This results in a picture that is not as clear as it should be to accurately see and diagnose potential health issues.

A critical part of the RF shielding of an MRI room is the door. The Pioneer RF Shielded Opening is the safe and easy RF door solution.

Pioneer RF openings have been third party tested in accordance with NSA-94-106, providing greater than 40 decibels (dB) shielding attenuation for electric fields over the 10 kHz to 10 GHz frequency range. Conductive perimeter seals, Pemko threshold and caulk are included with each assembly.

Applications

- Business Offices
- Test Labs
- Emergency Call Centers
- Sensitive Electronic Installations
- Computer Data Processing Security Centers
- Government - Military Security Centers
- Financial Centers
- RFID Scanning Areas

Additional Options

- Sound rating up to STC 50
- Bullet rating to level 8
- Blast openings
- Lead Lined

Assembly Includes

Door, frame, conductive perimeter seals, copper primer, threshold and conductive caulk and primer.

Standard Options

- 2'6" x 6'8" up to 4'0" x 8'0"
- Flush only
- Single swing
- Standard frame anchors

Consult factory for available fire ratings

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

RF Shielding

Frequently Asked Questions

Q. What is RF shielding?

A. Radio frequency (RF) shielding is electromagnetic shielding that blocks radio frequency electromagnetic radiation. The shielding can reduce the coupling of radio waves, electromagnetic fields and electrostatic fields.

Q. How does RF shielding work?

A. A conductive enclosure is used to block electrostatic fields. Also known as a “Faraday Cage”, this cage blocks static and non-static electric fields from passing through the barrier. The Faraday cage was invented by Michael Faraday in 1836.

Q. What materials are used for RF shielding?

A. Copper is used for RF shielding because it absorbs radio and magnetic waves. A commonly used shielding method is to coat a surface with a material loaded with a suitable material, typically copper, silver or nickel in the form of very small particles.

Q. Why are RF shielded openings important?

A. RF shielded openings help ensure sensitive and confidential information is contained in commercial and government buildings. Also, RF shielding is necessary in healthcare facilities for preventing radio interference with medical equipment.

Q. Where are RF shielded openings used?

A. Medical facilities, business offices, test labs, computer data processing, security centers, financial centers, government - military facilities.

Q. Why are RF shielded openings needed?

A. RF shielding is used to help avoid computer crashes, compromise confidential information, interference from local RF transmitters: radio towers, TV broadcast, production welders, airport radar and MRI test equipment.

Q. Is there a RF shielding test standard or criteria to follow?

A. Yes. Pioneer's RF openings have been third party tested in accordance with NSA-94-106, providing greater than 40 decibels (dB) shielding attenuation for electric fields over the 10 kHz to 10 GHz frequency range. Conductive perimeter seals, Pemko threshold and caulk are included with each assembly.

Q. What are the available opening sizes?

A. 2'6" x 6'8" up to 4'0" x 8'0".

Q. Can the RF shielded openings be fire rated?

A. Not at this time.

Q. What accessories are supplied with the assembly?

A. Conductive perimeter seals, Pemko threshold and caulk.

Q. Can the RF shielded openings be ordered with other specialty requirements?

A. Yes, sound ratings up to STC 50, bullet ratings up to level 8, multiple blast levels, among other hybrid options are available with the RF shielded openings.

Q. What hardware can be used?

A. All ASSA ABLOY branded hardware can be used.

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

Flood Resistant Assemblies



Factory Mutual Global studies have shown that flooding costs companies an average of \$2-\$3 billion in losses annually worldwide making it the most costly natural hazard globally. Because of this staggering figure, Pioneer is proud to add a Flood Resistant Opening to our specialty product line. This dry flood proofing system is intended to be used in environments where a facility is at risk for flooding. The opening is designed and tested to keep flood water depths up to 36" from entering critical buildings and limiting interior damage.

The Pioneer Flood Resistant Opening has been tested to the American National Standard for Flood Abatement Equipment ANSI/FM Approvals 2510-2014 section 4.3.3. This is a passive system that can protect against flood waters at any time while closed. Flood openings should be installed in a seated position (water pressure against the pull side of the door).

Flood Resistant Opening Features:

- Tested for water depths up to and including 36" to standards set forth by ANSI/FM Approvals 2510-2014 (section 4.3.3.) not exceeding maximum allowable water
- Up to and including 3'0"x7'0" size openings
- Passive flood assembly consists of flood resistant door, frame and perimeter seal system and 1 year warranty

Door:

- Single flush steel stiffened with continuously welded edge seams
- 16 - 12 gauge face sheets with A60 steel standard or G90 steel optional
- Optional stainless steel construction also available
- 10" x 10" vision light available

Frame:

- 4 sided continuously welded
- 14 - 12 gauge frames with A60 steel standard or G90 steel optional
- Stainless steel also available
- Must be fully grouted and caulked by others

Hardware/Seal System:

- Tested with cylindrical lock and three heavy weight hinges. Other hardware preps are available. Hardware by others
- EDPM adjustable rubber perimeter seal system with retainer clips included with the assembly

Applications:

- Pump rooms
- Mechanical and electrical rooms
- Flood prone areas
- Metro transit
- Marinas
- Aquariums
- Waste water treatment

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

Flood Resistant Assemblies

Frequently Asked Questions

Q. Where should a flood resistant opening be used?

A. Flood Resistant openings are intended to be used in environments where a facility is at risk for flooding in buildings like pump rooms, mechanical / electrical rooms, metro transit, marinas, aquariums or waste water treatment just to name a few.

Q. What is the purpose of a flood resistant assembly?

A. The tested assembly is designed to minimize water damage in the case of a flood.

Q. How does an ASSA ABLOY flood resistant opening work?

A. Using a continuously welded watertight door and four sided frame with perimeter seals the ASSA ABLOY flood resistant door is designed to keep flood water depths up to 36" from entering critical buildings and limiting interior damage. It is also important to note that the foundation walls that form the enclosed areas should be designed to meet the requirements of ACI 530/ASCE5/TMS 402 for masonry walls or ACI 318 for concrete walls.

Q. Was the ASSA ABLOY flood resistant opening tested?

A. Yes, the opening was tested to the American National Standard for Flood Abatement Equipment ANSI/FM Approvals 2510-2014 section 4.3.

Q. What is included in the ASSA ABLOY flood resistant opening assembly?

A. Door, 4 sided frame, anchoring method specified and perimeter seal system.

Q. Does the assembly allow for leakage?

A. The tested assembly does not exceed the allowable leakage as outlined by the test procedure. This assembly is designed to minimize water damage in the case of a flood.

Q. Are fire ratings available?

A. Not at this time.

Q. What hardware is allowed?

A. Any hardware where the prep, in both the door and frame, is completely above the expected waterline is acceptable. However, if application is in a corrosive environment where it may be exposed to direct saltwater or salt spray, all connectors and fasteners can be ordered stainless steel or hot dipped galvanized.

Q. Is stainless steel construction available?

A. Yes, stainless steel construction is available.

Q. Are thresholds required?

A. Since this is a four sided frame, a threshold is not required.

Q. Will the integrity of the door be compromised after a flood?

A. Due to the door and its components heavy duty construction, the integrity of the door will stay intact.

Q. What is the difference between dry and wet flood proofing?

A. A Dry flood proofing opening remains impermeable to the passage of floodwater while wet flood proofing allows flood waters pass through protected area. An example of wet flood proofing is an elevated structure that is designed to allow flood waters to flow below the building without collapsing the building supports. Pioneer flood resistant assemblies should be used where dry flood proofing is required.

Q. What is the difference between an active and passive system?

A. An active system requires something to be done to achieve flood resistance, such as sand bagging or moving temporary barriers into place.

Q. Is this considered an active or passive system?

A. This is a passive system. No additional action is required to achieve the flood resistance once the door and frame are properly installed.

Q. Why is a passive system preferred?

A. One of the most common reasons for flood damage with active systems is the system does not get put in place in time to provide flood resistance. A passive system is always ready if properly installed and maintained.

Q. Why is water even allowed to leak into the building?

A. FEMA's goal is to have buildings and structure's be "substantially impermeable" to flood waters.

Q. Are there specific FEMA design requirements for flood protection?

A. FEMA has stated that there should be no more than a 4" water depth inside the structure in a 24 hour period.

Water Resistant Assemblies



For specialized applications, Pioneer offers a custom sanitary and watertight solution to meet job-specific requirements. Doors are tested and designed so that either a heavy wash-down or pressure washing can be performed without compromising the interior construction of the door. Hardware reinforcements in doors and frames are provided in a sealed condition, allowing for cleaning fluids to drain.

Features

- Sealed door core
- Welded seamless door edge
- Custom sanitary door vision lights available
- 14 gauge through 16 gauge door face sheets and frames
- Continuously welded frames
- 14 gauge through 16 gauge frames available
- Factory prime paint
- Pest resistant
- Easy wipe-down and cleaning
- Maximum corrosion resistance
- Long term strength and durability
- Penetration resistant
- Superior adhesion of finish coat

Applications

- Chemical storage areas
- Clean room environments
- Food processing plants
- Hospitals
- Laboratories
- Marine areas, piers, berths
- Swimming pool areas
- Waste water treatment plants

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions

Stainless Steel Assemblies



Pioneer offers a full line of stainless steel doors and frames for a wide range of applications: from highly corrosive or clean room environments such as waste water treatment plants, laboratories, hospitals and food processing plants to aesthetically appealing building lobbies. A variety of sizes and configurations are available.

Stainless Steel Benefits:

- Clean finished appearance
- Long term durability
- Design flexibility
- Maximum corrosion resistance
- Ease of facility maintenance

Door Features

- 14 gauge through 18 gauge face sheets
- 304 and 316 stainless steel with:
 - #4 brushed satin
 - #6 fine satin
 - #8 mirror
 - 2B mill (paint grade)
 - XLB XL blend
- Polystyrene, polyurethane, and steel stiffened cores
- Stainless steel internal components
- Seamless edge design

Frame Features

- Welded frames
- 12 gauge through 16 gauge frames
- Custom frame elevations (sidelights, borrowed lites, transom units)
- 304 and 316 stainless steel with:
 - #4 brushed satin
 - #6 fine satin
 - #8 mirror
 - 2B mill (paint grade)
 - XLB XL blend

111 Kero Road
Carlstadt, NJ 07072
Phone: 201-933-1900
pioneerindustries.com

ASSA ABLOY, the global leader
in door opening solutions