The ASSA ABLOY Group is the global leader in access solutions. Every day we help people feel safe, secure and experience a more open world.



Specialty & Integrated Solutions eBook

This eBook is designed to provide an overview of Specialty and Integrated Solutions from Ceco Door and Curries.

All specialty openings in this eBook can meet the Federal Government's typical domestic sourcing/procurement requirements including Buy America, Buy American Act, Trade Agreement Act, and American Iron and Steel provisions.

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To advance to a different section, click on the desired product below or box at the bottom of the page.



Acoustical / STC



Attack Resistant



Blast Resistant



Bullet Resistant



Flood Resistant



Forced Entry **Bullet Resistant**



Lead-Lined



RF Shielding



Specialty Wood & PLAM



Stainless Steel



Windstorm Resistant



Multi-Solution Opening

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Acoustical / STC

Noise can adversely affect people's daily activities. Acoustical assemblies eliminate ambient noise and shields people from common distractions. These assemblies also provide confidentiality in areas of sensitivity and security.

Available in steel, stainless steel and wood options. Seals, thresholds, and door bottoms (when required) ship with acoustical doors. Many applications including:

- Government / Military: Courthouses, interrogation rooms, barracks, sensitive compartmented information facilities (SCIF)
- Healthcare: Exam rooms, patient rooms, bereavement and consultation rooms
- Education: Band rooms, classrooms, libraries, auditoriums, theaters

- Adhesive or compression seals available (depending on rating)
- 1-3/4" doors up to STC 66 (communicating)
- 3-hour fire rating (UL) and (WH/ITS) available, though ratings vary based on configuration. Always refer to tech data pages for details.
- Design options: Solid wood doors, PLAM veneers, embossed and applied moldings
- Multi-Solution options: RF-shielding, bullet resistant, stainless steel and blast resistance
- Acoustical assemblies are third-party, independently tested under the ASTM E90, ASTM E1332, ASTM E2235, ASTM E413, SDI 128, and HMMA 865 criteria

Acoustical Door Assembles				
НМ	Wood	Laminate		
Up to 66	Up to 53	Up to 66		
Up to 52	Up to 51	Up to 52		
Up to 57				
Up to 54				
Up to 48				
Up to 49				
Up to 47				
	Up to 66 Up to 52 Up to 57 Up to 54 Up to 48 Up to 49	Up to 66		





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Attack Resistant

Designed with the education market in mind, attack resistant solutions will delay an attacker long enough until first responders are able to arrive. (Based on FBI's Active Shooter Report). These solutions harden schools and keep people safe, economically.

- Complete Solution: Combines specific standard doors, frames and hardware products with School Guard Glass[™] designed for protection including 90 minute fire ratings.
- Retrofit Solution: Utilizing specific light kits for existing wood or metal doors and School Guard Glass[™] creates a robust retrofit glazing solution to delay access from intrusion. Glass for retrofitting existing sidelights and borrowed light are also available.

Features and Options 2019 Secure Campus award winner!

- Tested according to the 5-aa10 forced entry test standard based on the FBI's Active Shooter Report.
- Will not stop a bullet, but will also not weaken! Door and glass will stay intact if shot and physically attacked for at least 4 minutes.
- Economically priced compared to bullet resistant openings
- Complete opening includes factory installed glazing for accordance to test standards
- Retrofit Kits are shipped with all required materials and installation instructions for installment into existing openings
- School Guard Glass is 98% optically clear with a thickness of just 7/16"





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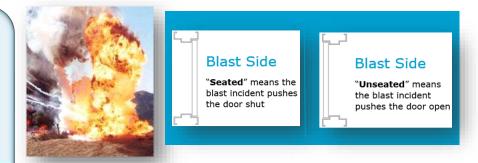
Value Solution Proposition



Blast Resistant

Providing extra protection against explosions and excessive force, our blast resistant openings meet or exceed the stringent manufacturing and performance requirements of many applications including:

- Government / Military: Barracks, embassies, courthouses, police and fire stations
- **Healthcare:** Hospitals, laboratories, pharmaceutical facilities
- Critical Infrastructure: Energy, transportation, communication, financial facilities etc.



Features and Options

- Blast resistant Openings up to 43 psi. Additional ratings available
- Single swings, pair swings, vision doors, borrowed lights, transoms and side light frames
- Design options: PLAM veneers and applied moldings
- Multi-Solution options available including: Bullet resistance, sound ratings, stainless steel finishes
- Fire ratings available up to 3 hours
- Seated and unseated conditions available
- Hardware recommendations and inclusion are available upon request
- Blast assemblies are third-party, independently tested (or calculated) under the ASTM 2927, ASTM 1642, UFC 4-010-01 and GSA TS-01 criteria

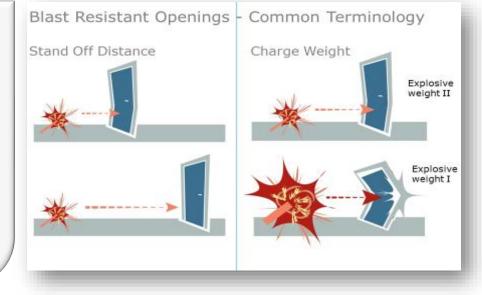


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Bullet Resistant

Bullet Resistant Openings are made with UL listed armor panels that meet or exceed the UL 752 Standard. All doors and frames are designed to provide bullet resistance for threat levels 1 through 10.

Certified and third-party tested in accordance with UL752 and NIJ standards

- **Government / Military**: Boarder patrol, banks, embassies, courthouses, police stations
- **Healthcare:** Hospital waiting rooms and emergency rooms, pharmacies
- Education: Classrooms, school offices, admissions, sensitive material storage, safe rooms
- Critical Infrastructure: Energy, transportation, communication, financial facilities

Features and Options

- Bullet resistant ratings for UL752 levels 1-8 (levels 1-3 handguns, levels 4-8 rifles) including glazed openings up to level 8
- Fire rated single and pair assemblies tested to UL 10C are available
- Design options: Solid wood, PLAM veneer and applied moldings
- Multi-Solution options including: Stainless steel, blast resistance and acoustical ratings
- Bullet resistant speaker ports and deal trays available
- Hardware recommendations available upon request





UL 752 LEVEL				
<u>Level</u>	Ammunition		<u>Shots</u>	
1		9 MM	3	
2	.357	Magnum	3	
3	.44	1 Magnum	3	
4		.30 Cal	1	
5		.308 Cal	1	
6		9 MM	5	
7		.223 Cal	5	
8		.308 Cal	5	

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Flood Resistant

The Flood Resistant Assembly is a dry flood proofing system, intended to be used where a facility is at risk for flooding. Designed and tested to keep flood water depths up to 36" from entering

As a passive system, it can protect against flood waters at any time once installed into flood resistant wall.

- Pump rooms or mechanical and electrical rooms
- Flood prone zones and areas
- Metro transit and waste water treatment
- Marinas and aquariums

Features and Options

- Up to and including 3'0" x 7'0" single openings
- 10" x 10" visible glass light is available at standard location
- Assembly consists of flood resistant door, frame and adjustable perimeter seal system
- A dry flood proofing system designed to keep flood waters out of the building structure saving property and clean up time
- Assembly integrity will not be compromised after a flood with its corrosion resistant construction and flood resistant core
- Tested to the American National Standard for Flood Abatement Equipment ANSI/FM Approvals 2510-2014 section 4.3.3.









Bullet



Forced Entry Bullet Resistant (FEBR)

Forced Entry Bullet Resistant Assembly (FEBR) combines ballistic and forced entry resistance to provide an elevated threat protection solution, compliant and third party tested per stringent Department of State standards.

FEBR Assemblies safeguard buildings where high level of protection are important considerations.

- **Government / Military:** Mission critical buildings, quard houses, control rooms, executive offices, safe rooms
- **Petroleum and Chemical Facilities**

Features and Options

- Multiple sizes and configurations available including singles, pairs and glazed openings
- Force entry resistance up to 60 minutes bullet resistance up to level 8
- Many hardware variations available depending on attack level:
 - Certified: 5, 15, 60 minute singles and pairs, 5, 15 glazing options, full, half, double 5, 15 stainless steel 4'0" x 8'0"
 - Adders: 5, 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 hr. Blast criteria options
- Complies with Department of State SD STD-01.01 Rev G (amended), ASTM F3038 and HMMA 862-13 standards as tested by certified 3rd party independent laboratory







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Lead-Lined

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

Lead-Lined applications include:

- **Government / Military:** Security environments including microwave transmission rooms
- Healthcare: X-ray and imaging rooms
- **Critical Infrastructure:** Airports and nuclear power plants

Features and Options

- 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)
- Wood doors available to match most design requirements with 1/32" 1/8" lead thicknesses
- Standard 1-3/4" thick doors accommodate standard hardware
- Vertically steel stiffened construction for added strength and durability
- Design options: PLAM veneers
- Multi-Solution options available including: Bullet resistance, PLAM veneers, sound ratings, blast ratings and RF shielding
- Fire rated assemblies tested to UL 10C available





Radio Frequency Shielded Openings (RF)

Many government and healthcare facilities mandate RF shielded solutions to minimize the risk of interference or unauthorized surveillance of sensitive electronic data. Rated for sound transmission applications.

Healthcare facilities: MRI Areas

- **Data Processing Centers**
- Government / Military: Sensitive Compartmented Information Facility (SCIF)

Features and Options

- Prevents interference with sensitive equipment and processes from similar equipment in adjacent spaces within a facility
- Includes: Door, frame, conductive perimeter seals, copper primer, threshold and conductive caulk and primer
- Multi-Solution options including: Sound ratings to STC 50, bullet ratings to level 8, blast resistance and lead lined
- 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, ASTM 1851 and IEEE 299







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Specialty Wood & Plastic Laminate

True wood and plastic laminate over steel doors for specialty applications offer a more decorative look over standard steel doors. These products are available with fire-rated, lead-lined, bullet resistant and acoustical capabilities with the highest industry ratings.

Government / Military

Healthcare

Education

Office

Hospitality

Transportation

Specialty Wood

- True wood doors available in the following specialty products:
 - Acoustical (Up to STC 53)
- Singles and pairs with glazing of various sizes including full lite options
- Various species, stains and finishes
- 20 through 90-minute fire ratings available



Specialty Plastic Laminate

- Can be applied to majority of specialty steel door products: Acoustical (STC), Blast, Bullet, Lead Lined, etc.
- Any laminate type/model available from WilsonArt, Pionite, Nevamar, Formica
- Expands fire rating capabilities beyond true wood doors
- Applied to both faces and edges of door
- Custom widths and heights



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Stainless Steel

Stainless steel doors and frames give architects and designers a sleek aesthetic option to satisfy today's style preferences. Stainless steel is also ideal for clean room environments, areas susceptible to moisture

- Healthcare
- **Education**
- **Transportation**

- **Research Laboratories**
- **Chemical and Pharmaceutical Plants**
- Office

Features and Options

- Available in 304 and 316 steel for highly corrosive environments
- Many sizes and configurations including seamless construction and up to 10' tall
- Available with polystyrene, steel stiffened or Multi-Solution options: Lead lined, blast, bullet, water resistant
- 3-Sided frames, sidelights, transoms, borrowed lights with standard or custom profiles
- Decorative glass options available including frosted, tinted and mirrored
- Available finishes:
 - No. 4 (Brushed Satin)
- No. 2B (Mill)
- No. 6 (Fine Satin)
- XLB (XL Blend)

No. 8 (Mirror)





Windstorm Resistant

ASSA ABLOY offers a complete line of hurricane and tornado resistant openings

All windstorm resistant assemblies have been tested and 3rd party certified to all required codes and standards

- **Hurricane**: For exterior openings in any commercial building in hurricane prone areas
- Tornado: For tornado shelters in commercial and residential applications in tornado prone areas

Hurricane Resistant

- Sizes: from 2'8" x 6'8" singles to 8'0" x 8'0" pairs
- Design pressure: from +/_ 50 psf to +/_ 150 psf
- Water infiltration: from +/- 50 psf to +/- 60 psf
- Third party tested and certified the following test standards: TAS 201, 202, 203, ASTM E330, E1886, E1996, ANSI A250.13
- Multiple cores, features, options available including: Glazing options, single openings, paired openings, sidelight openings and transom options

Tornado Resistant

- Sizes: Up to 4'0"x8'0" singles and 8'0"x 8'0" pairs
- Available in an inswing or out swing design
- Single or paired openings
- Design pressure up to +/- 284 psf
- UL classified to ICC 500-2014
- Optional 10" x 10" factory installed glazing available with 90 minute fire rating
- Assemblies are UL certified for up to and including 3 hour fire ratings
 - Single and paired shutter options with three or four sided frames available





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Multi-Solution Opening: Blast and Hurricane Resistant

Providing extra protection against explosions and excessive force and hurricane winds our Multi-Solution Blast and hurricane resistant opening meet or exceed the stringent manufacturing and performance requirements of many applications including:

- **Critical Infrastructure:** Energy, transportation, communication, financial facilities etc.
- **Government / Military**: Barracks, embassies, courthouses, police and fire stations
- Hurricane Environments: Mainly areas off the Atlantic coast line and the Gulf of Mexico

Features and Options

- Single Blast 6.16 psi Category I (no damage) / Hurricane 150 psf and 50 fps
- Single Blast 9.74 psi Category II (damaged but operable) / Hurricane 150 psf and 50 fps
- Pair Blast 6.84 psi Category II (damaged but operable) / Hurricane 150 psf and 50 fps
- Flush only in a seated condition
- SARGENT BL7300 Series and Corbin Russwin BL6600 Series multi-point locks (factory installed components into the door)
- Meets UFC 4-010-01 DoD Minimum Anti-terrorism standards and ASTM 2927-12 Response Categories 1 and 2 following a blast
- Certified by Underwriters Laboratories (UL) for compliance with hurricane resistance test standards including: ANSI A250.13, ASTM E330, ASTM E1886, ASTM E1996, TAS-201, TAS-202, TAS-203- Large missile impact

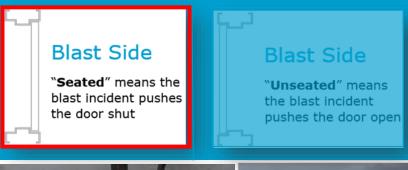




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Compliant Sourcing

ASSA ABLOY offers a full range of specialty openings that can meet the Federal Government's typical domestic sourcing/procurement requirements including Buy America, Buy American Act, Trade Agreement Act, and American Iron and Steel provisions.

Acoustical / STC

Acoustical openings come in a variety of hollow metal and wood styles that are lead free and help create a quiet atmosphere that promotes learning, healing and security up to STC 66. Multi-Solution options include: Solid wood doors, PLAM veneers, embossed and applied moldings.

Attack Resistant

Designed to delay access to an attacker and suppressing unauthorized entry until first responders are able to arrive. The door or glass will not stop a bullet but the opening or glass will not weaken and will stay intact if shot at and physically attacked for at least 4 minutes.

Blast Resistant

These openings meet U.S. government and military safety and security objectives for blast resistance Unified Facilities Criteria (UFC) and are available to 100+ psi. Multi-Solution options available including: Bullet resistance, PLAM veneers, sound ratings, stainless steel finishes and applied moldings.



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Bullet Resistant

Certified and third-party tested in accordance with UL752 and NIJ standards meeting DoD, GSA, VA, Homeland Security and Anti-Terrorism Force Protection ATFP regulations. Bullet-protection ratings for UL752 levels 1-10 (levels 1-3 handguns, levels 4-10 rifles, wood doors 4-8). Multi-Solution options including: Solid wood, PLAM veneer, stainless steel, applied moldings, blast resistance, acoustical ratings.

Flood Resistant

The opening is designed and tested to keep flood water depths up to 36" from entering critical buildings and limiting interior damage. The opening can protect against flood waters at any time once the assembly is installed into a flood resistant wall.

Forced Entry Bullet Resistant

Combining ballistic and forced entry resistance with advanced materials, FEBR openings provide an elevated threat protection solution compliant and third party tested per stringent Department of State and HMMA standards up to 60 minutes of attack and level 8 bullet resistance.

Lead-Lined

These openings accomplish the important task of reliably containing radiation in sensitive areas for many environments including healthcare, government and industrial facilities. Multi-Solution options available including: Bullet resistance, PLAM veneers, sound ratings, blast ratings and RF shielding.

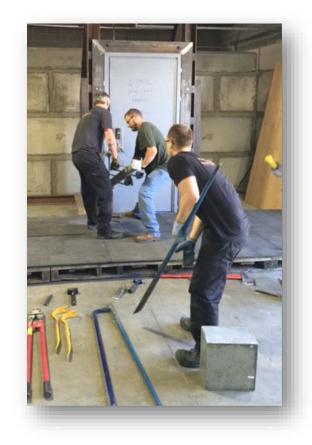


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RF Shielding

Government and healthcare facilities mandate RF shielded solutions to minimize the risk of interference or unauthorized surveillance of sensitive electronic data. Other options available including acoustical, blast and bullet resistant ratings. Multi-Solution options available including: Sound ratings to STC 50, bullet ratings to level 8, blast resistance and lead lined.

Specialty Wood & PLAM

Perfect application when a wood door look is needed in specialty applications involving, bullet, blast, acoustical (STC) and lead-line doors. Many wood species, stains and finish choices available.

Stainless Steel

Stainless steel doors and frames give architects and designers a sleek aesthetic option to satisfy today's style preferences. Available in 304 and 316 steel for highly corrosive environments along with many decorative finishes, sizes and designs.

Windstorm Resistant

Hurricane and Tornado resistant assemblies are designed to help save lives and are available in many configurations and sizes. All windstorm resistant assemblies have been tested to all required codes and standards plus approved or classified by 3rd party governing bodies or agencies.

Multi-Solution Opening

Offers multiple solutions in the same door opening featuring Blast and Hurricane Resistant Opening meeting UFC 4-010-01 DoD Minimum Anti-terriorism standards and Underwriters Laboratories (UL) for compliance with hurricane test standards.





Tools and Resources

- **Specialty Brochures**
 - Ceco Door
 - Curries
- **Acoustical / STC**
 - Ceco Door
 - Curries
- **Attack Resistant**
 - Ceco Door Opening & Retrofit Kit
 - Curries Opening & Retrofit Kit
 - Video
- **Blast Resistant**
 - Ceco Door
 - **Curries**
 - Video
- **Bullet Resistant**
 - Ceco Door
 - Curries

- **Flood Resistant**
 - Ceco Door
 - Curries
- **Forced Entry Bullet Resistant**
 - Ceco Door
 - <u>Curries</u>
 - Video
- Lead-Lined
 - Ceco Door
 - Curries
- **RF Shielding**
 - Ceco Door
 - Curries
- **Specialty Wood & PLAM**

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 - Curries
- **Hurricane Resistant**
 - Ceco Door
 - Curries
- **Tornado Resistant**
 - Ceco Door
 - Curries
 - Video
- **Multi-Solution Opening: Blast** and Hurricane Resistant
 - Ceco Door
 - **Curries**



Tools and Resources

Who can help?



Specialty Questions

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Specialty Wood & PLAM Stainless Steel Windstorm Resistant Multi-Solution

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