

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.

ASSA ABLOY eBook

StormPro Hurricane and Tornado Shelter Impact Protective Systems

About This eBook...

This eBook is intended to provide an overview of the StormPro Hurricane and Tornado Shelter Impact Protective Systems UL listed to ICC 500.

StormPro Doors: CECO DOOR and CURRIES

Locking Hardware: CORBIN RUSSWIN and SARGENT

Door Accessories: MARKAR, McKINNEY, NORTON, PEMKO, RIXSON, ROCKWOOD, SECURITRON and ASSA ABLOY ACCENTRA

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Common Applications

- K-12
- College and University
- Worship Centers
- Community Centers
- Healthcare and government facilities
- Community shelters and safe rooms
- 911 call stations, emergency operation centers
- Fire rescue, ambulance and police stations
- Enhanced Hurricane Protection Areas (EHPA)
- Any shelter in hurricane and tornado prone areas



Test Methods and Standards

- StormPro Hurricane and Tornado Shelter Impact Protective Systems are UL classified to the below standards and test methods
- FBC:
 - The Florida Building Code (FBC) has designated certain areas within the FBC including K-12 and Florida college educational facilities to provide emergency shelters known as Enhanced Hurricane Protection Areas (EHPA). Openings in these areas are required to be ICC 500 opening protectives.
- ICC 500:
 - The International Code Council (ICC) 500-2014 is a referenced standard in the 2015 International Building Code® (IBC) and the 2015 International Residential Code® (IRC). Buildings or spaces designated for use as a shelter from tornadoes and/or hurricanes within the scope of the IBC and IRC must conform to the requirements in ICC 500.
- FEMA P-361, Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms



Code and
Certifications

StormPro
Assemblies

Doors &
Frames

MultiPoint
Lock

Exit
Devices

Hinges

Accessories

Value
Proposition

Tools



What are StormPro Hurricane and Tornado Protective Systems?

- StormPro is the ASSA ABLOY product designation for all shelter protective systems including doors, frames and hardware that are designed to withstand debris from hurricane and tornado force winds and help save lives.
- The extra heavy duty StormPro Hurricane and Tornado Protective Systems help fortify the opening to withstand extreme wind speeds of up to 250 miles an hour during a hurricane or tornado.
- StormPro Protective Systems are listed to ICC 500 standard, as required by the International Building Code and approved by the Florida Building Code (**FL# 40296**) for use on shelters in hurricane and tornado prone areas.

*Assemblies may not comply with domestic government sourcing regulations, trade agreements or acquisition policies



StormPro Hurricane and Tornado Door Construction

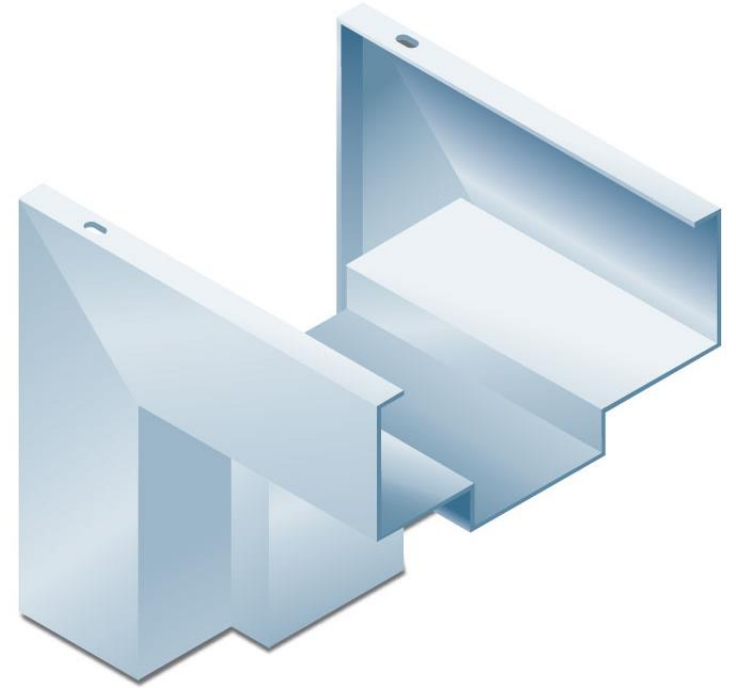


- Includes 3rd party (Underwriters Laboratories) classification label to ICC 500 and approved Florida Building Commission (FBC) FL# 40296
- Construction
 - 1- 3/4" thick door flush only
 - 14 Gauge (12 gauge optional) galvanized or cold rolled steel face sheets
 - Steel stiffened and fiberglass filled core
 - 14 gauge end channels and welded top cap
- Assemblies fire rated up to and including 3 hours by UL
- Design pressures up to +/- 227 psf
- Order Codes
 - Ceco: SP/HUL in certification field in EDGE
 - Curries: T1 in certification field in EDGE
 - Order code must be used to receive correct label, pricing and product configuration



StormPro Frame Construction and Anchoring

- 14 Gauge (12 gauge optional) galvanized or cold rolled steel frames
- Jamb depths 4" – 14"*
- Knock down or welded corners
- 4" face head available
- 4 sided frames available
- Majority of assemblies fire rated up to 3 hours by Underwriters Laboratories
- Single and pair communicating frames available for Multi-Point locks
- Anchoring options include: existing opening, masonry wire, and masonry T anchors
- Frames can also be used in pour in place walls and can be welded to the building structure
- See tech sheets for specific construction and anchoring details on each assembly



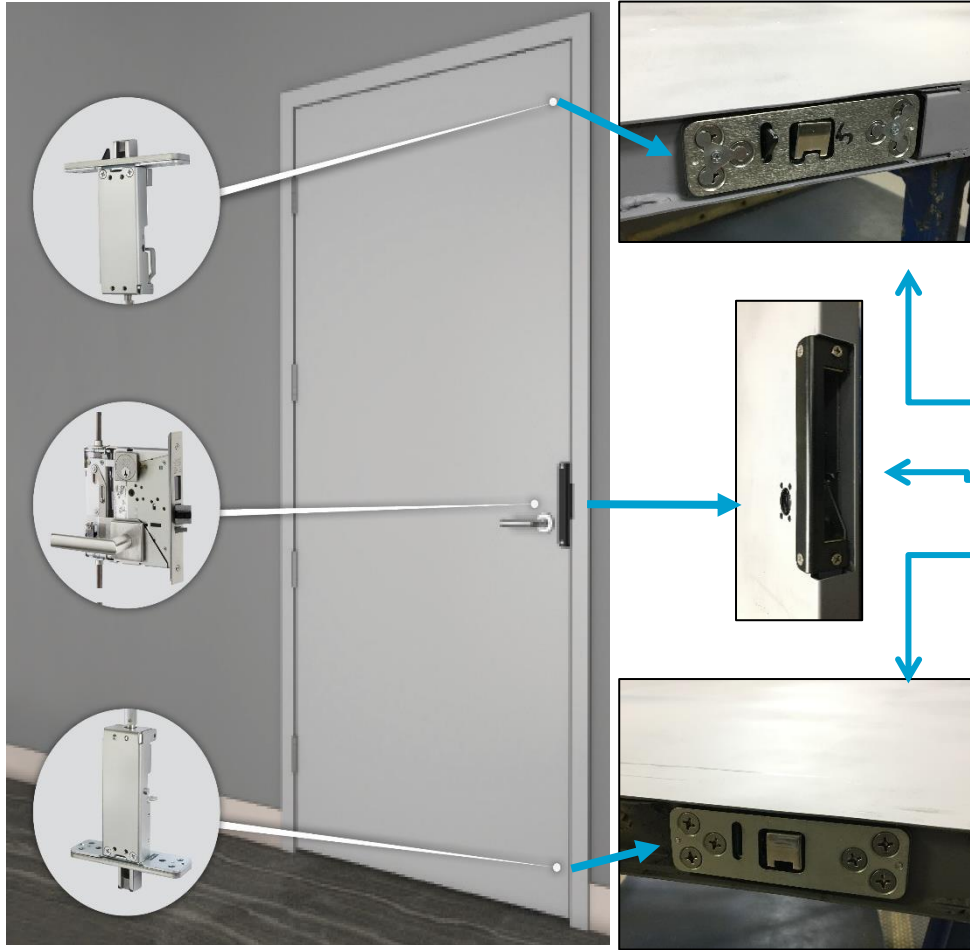
Multi-Point Lock Standard Features

- Single or paired openings: Inswing and outswing
 - Min single: 2'8" x 6'8" Min pair: 5'4" x 6'8"
 - Max single: 4'0" x 8'0" Max pair: 8'0" x 8'0"
- SARGENT FM7300 Series and CORBIN RUSSWIN FE6600 Series utilize a mortise lock, engineered to provide a full range of mechanical and electromechanical functions and options
- Fire rated up to three hours
- Three latch points project automatically; Fourth latch point with a single motion
- Concealed vertical rods for additional security and dogging option allows device to operate as standard mortise lock with a single latch point
- Available with Muséo and Studio Collection levers and optional MicroShield™ antimicrobial coating
- SARGENT 998 Series or CORBIN RUSSWIN 988CR surface bolts for inactive doors
- 3/8" door undercut
- 4 Sided frame option and communicating frame option (singles and pairs) inswing only



Multi-Point Lock

Factory Installed Concealed Vertical Rod Assembly



- Current order process does not change. Doors and frames are ordered through the door brands and hardware is ordered through the hardware brands as usual
- Concealed vertical rods, top and bottom bolts, and mortise lock body cassette must be factory installed in a CECO or CURRIES StormPro door
- Top rod latch assembly
- Mortise lock body cassette
- Bottom rod latch assembly
- All other hardware components are shipped directly from SARGENT or CORBIN RUSSWIN and must be installed by a factory trained installer
- **IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES FROM DOOR OR FRAME UNTIL MORTISE LOCK IS READY TO BE INSTALLED**

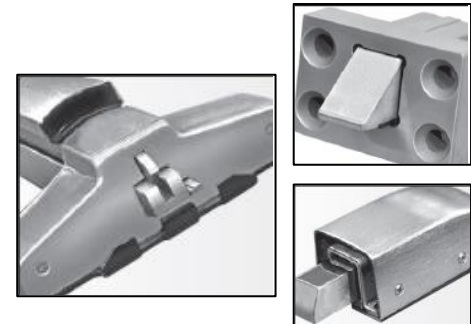


Exit Device Standard Features

- Single or paired openings: Outswing only
 - Min single: 3'0" x 6'8" Min pair: 6'0" x 6'8"
 - Max single: 4'0" x 8'0" Max pair: 8'0" x 8'0"
- SARGENT FM8700 Series and CORBIN RUSSWIN FE5400S Series utilize specially machined rails and internal components to make it sturdier and more robust than standard products
- SARGENT FM8700 Series adjustable two point latching device with optional mullion
- CORBIN RUSSWIN FE5400S Series adjustable 3 point latching device with CORBIN RUSSWIN hardware mullions FE707A or FE708A series are required
- Fire rated up to 3 hours
- Available with Muséo and Studio Collection levers and optional MicroShield™ antimicrobial coating
- 3/8" undercut with SARGENT 655 strike – SARGENT FM8700 only
- 5/8" undercut with SARGENT 653 strike – Both exit devices



FM8700



FE5400S



Hinges

Product Type	Manufacturer	Model/Series
Hinges	MARKAR*	FM300WT Wide Throw Continuous Hinge FS301 and FS302 Continuous Hinge - Outswing Only HS303 Continuous Hinge - Outswing Only HM304 Continuous Hinge - Outswing Only HG305 Continuous Hinge HG305WT10 Wide Throw Continuous Hinge HG306 Continuous Hinge - Outswing Only FS/SC309 Swing Clear Continuous Hinge - Outswing Only HG310 and HG311 Swing Clear Continuous Hinge - Outswing Only HG315 Continuous Hinge FS321 Continuous Hinge - Outswing Only HG322 Continuous Hinge FM/SC325 Swing Clear Continuous Hinge HG326 Swing Clear Continuous Hinge HG329 Swing Clear Continuous Hinge FM344 Continuous Hinge FM600 Continuous Hinge FM3500 Continuous Hinge FS3501 and FS3502 Continuous Hinge - Outswing Only HG3505 Continuous Hinge
	MCKINNEY	Model SP3786 Butt Hinges (4-1/2"x4-1/2", 4-1/2"x5", 4-1/2"x6", 4-1/2"x7", 4-1/2"x8", 5"x4-1/2", 5"x5", 5"x6", 5"x7", & 5"x8" with or without NRP or QC option) Model SP3386 Butt Hinges (4-1/2"x4-1/2", 4-1/2"x5", 4-1/2"x6", 4-1/2"x7", 4-1/2"x8", 5"x4-1/2", 5"x5", 5"x6", 5"x7", & 5"x8" with or without NRP or QC option)

*With or without CEPT, ETAP, EL, PoE, HT, Welded End Pin, Security Stud, or Tamper-proof Fastener options (where available).



Accessories

Product Type	Manufacturer	Model/Series
Door closer	SARGENT	281 Series – Thru-bolt mounting of body to door only 2409 Series – Thru-bolt mounting of body to door only 351 EHT – Thru-bolt mounting of body to door only 2900 Series Closer/Holder – Threat side mounting only
	CORBIN RUSSWIN	DC8000 Series – Thru-bolt mounting of body to door only
	NORTON	7100SZ Series Closer/Holder – Threat side mounting only 7200 Series Closer/Holder – Threat side mounting only 7500 Series – Thru-bolt mounting of body to door only 7700PT Series – Thru-bolt mounting of body to door only
	ASSA ABLOY ACCENTRA	4400 Series – Thru-bolt mounting of body to door only
Perimeter seals	PEMKO	Model S773 Perimeter Seal Model 305 Perimeter Seal Model 346 Rain Drip – Threat side mounting only Model 345 Door Bottom Sweep – Threat side mounting only
Astragals	PEMKO	305_N Split Astragal – Threat side mounting only S771 Astragal S772 Astragal
Thresholds	PEMKO	1715 threshold – FM8700 and FE5400S only 1716 threshold – FM8700 and FE5400S only 1717 threshold – FM8700 and FE5400S only 1718 threshold – FM8700 and FE5400S only 1719 threshold – FM8700 and FE5400S only 2715 threshold – FM7300 and FE6600 only 2716 threshold – FM7300 and FE6600 only



Accessories

Product Type	Manufacturer	Model/Series
Electronic Transfer	SECURITRON	CEPT ICPT
Door Position Switches	SECURITRON	DPS-M - 3/4" or 1" diameter hole in edge or top of door and frame (not bearing the UL Mark)
Door Holders	RIXSON	980M - Electromechanical Thru-bolt mounting only 990M - Electromechanical Thru-bolt mounting only 991M - Electromechanical Thru-bolt mounting only 996M - Electromechanical Thru-bolt mounting only 997M - Electromechanical Thru-bolt mounting only 998/998M - Electromechanical Thru-bolt mounting only 999M - Electromechanical Thru-bolt mounting only
		1560 - Electromechanical Thru-bolt mounting only 1561 - Electromechanical Thru-bolt mounting only 1562 - Electromechanical Thru-bolt mounting only
		ROCKWOOD 491S - Mechanical 494S - Mechanical
Door Overhead Stop/Holder	RIXSON	9 Series - Mechanical
Door Viewers	ROCKWOOD	620 622
Protection	ROCKWOOD	BFLG1050 Rod Guard K1050 Kick Plate (For fire rated assemblies, must be screw applied)
Door Coordinators	ROCKWOOD	576 - Outswing Only 1700 - Inswing Only 2600 Series (with or without 2601 Brackets or 1100 Carry Open Bar option) - Inswing Only



Value Proposition

Benefits

- StormPro Hurricane and Tornado Impact Protective Systems
 - Help to shield occupants in a hurricane and/or tornado shelter from flying debris
 - All assemblies are third party classified by Underwriters Laboratories with listings to meet ICC 500 and Florida Building Code (FBC) with certification labels applied to each assembly
- Multi-Point Hardware
 - Innovative designs ensures rod engagement during installation; Dogging option with indicator available
 - Multiple functions available including classroom, electrified and access control applications
 - Factory installed concealed vertical rod assembly in CECO or CURRIES doors for trouble free operation
 - Sectional trim with wide variety of decorative levers, rose and trim combinations
 - 4 latch points provides maximum protection
 - Communicating frame option is designed for non-classified doors to be used daily with StormPro doors held open in non-threatening conditions then StormPro doors can be closed with severe weather



Value Proposition

Benefits

- Exit Device Hardware
 - FM8700 is one of the only 2-point latching exit device in the industry UL approved to ANSI standards to comply to FEMA P-361 guidelines
 - FE5400S Series is a robust three-point latching system engineered to help protect lives by securing community shelter entries
 - Specially machined rail and internal components make both devices sturdier and more robust than standard products
 - Mullion is optional for FM8700
 - Electrified trim options available



Tools

- Promotional Materials
 - CECO DOOR
 - [Fast Facts](#)
 - [Promotional Sheet](#)
 - [Infographic](#)
 - CORBIN RUSSWIN
 - [FE6600 Series](#)
 - [FE5400S Series](#)
 - CURRIES
 - [Fast Facts](#)
 - [Promotional Sheet](#)
 - [Infographic](#)
 - SARGENT
 - [FM7300 Series](#)
 - [FM8700 Series](#)
 - [Architectural Accessories](#)
- Catalogs/Technical Resources
 - CECO DOOR
 - [Technical Data](#)
 - [Anchoring and Accessories](#)
 - CORBIN RUSSWIN Catalogs
 - [FE6600 Series](#)
 - [FE5400S Series](#)
 - CURRIES
 - [Technical Data](#)
 - SARGENT Catalogs
 - [FM7300 Series](#)
 - [FM8700 Series](#)
- Contacts
 - Code questions
 - [David Stammen](#) – 704.454.8296
 - Hardware questions
 - [Mia Merrel](#) – 203.498.5668
 - Door and frame questions
 - [Nelson Kraschel](#) – 641.423.1334





Thank you
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