



# McKEON

# SafeSpace<sup>TM</sup> 500

**WIDE SPAN OPENING PROTECTIVE FOR  
STORM SHELTERS & SAFE ROOMS**

- Tested to FEMA 361 & ICC 500 standards for tornado & hurricane protection
- Certified to wind speeds of up to 255 mph
- Certified to withstand the impact of wind-borne debris
- Protection for openings up to 16 feet wide



Creative Solutions  
Innovative Designs  
Proven Products



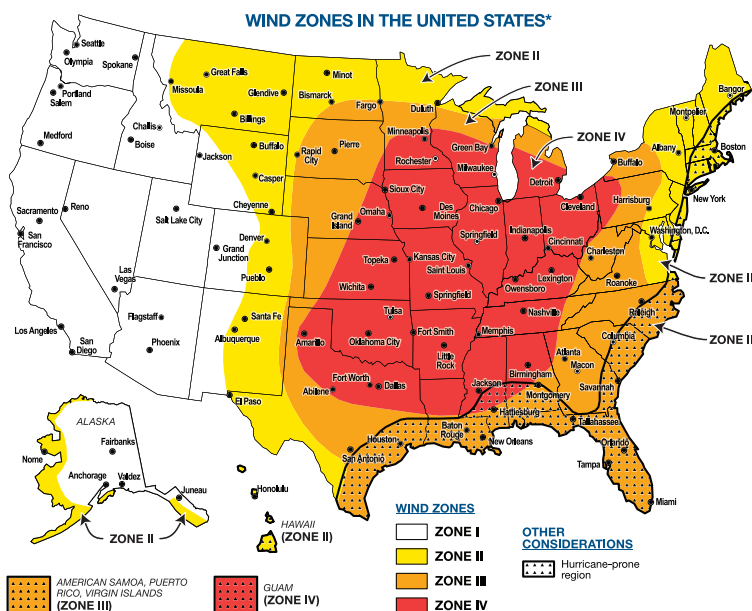


# SafeSpace<sup>TM</sup> 500

Safe rooms and storm shelters can be constructed to FEMA and ICC criteria ...



Satisfies tornado and hurricane requirements.



\* If you are uncertain of your location because of the level of detail and size of the map, or if you live on or near one of the delineation lines, use the highest adjacent wind zone.

ICC has adopted FEMA criteria for the design and construction of a safe room that provides near-absolute protection for occupants from wind and wind-borne debris.

The latest edition of the IBC, Section 423, Storm Shelters, requires Group E occupancies and emergency facilities within the 250 MPH tornado and hurricane zones to incorporate safe rooms and storm shelters. These areas of refuge and safety can be detached structures or rooms within buildings. Regardless, all must comply with ICC 500 which incorporates in large part FEMA 361.

The Wind Zones in the United States map appears as Figure 2-7 in the most recent edition of FEMA P-320 which can be found at [www.fema.gov/media-library/assets/documents/2009](http://www.fema.gov/media-library/assets/documents/2009).

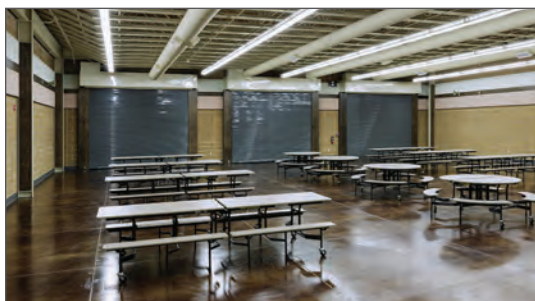
# SafeSpace<sup>TM</sup> 500

... without sacrificing natural light  
and multi-purpose use.



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## Protects openings up to 16 feet wide.



**Utilizing McKeon Door's wide span engineering capabilities, the SafeSpace 500 satisfies rigorous storm shelter or safe room opening protective requirements – without restricting the size of the openings for doors and windows.**

When Lincoln Elementary added on to their overcrowded facility they were able to realize two important goals at once – a new cafeteria that also functioned as a tornado safe room.

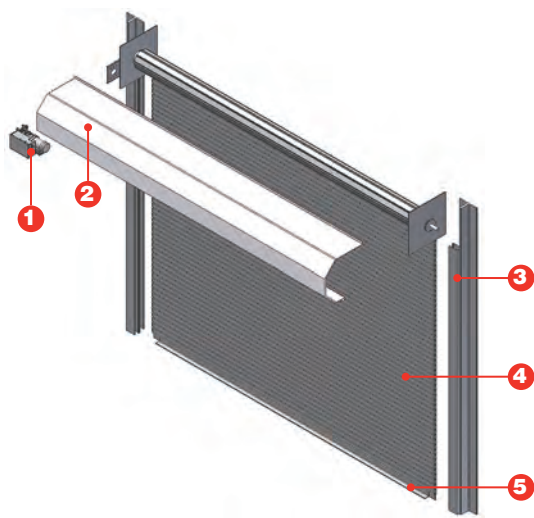


The cafeteria was moved out of the windowless gymnasium. Three SafeSpace 500 doors were installed behind the storefront windows and door to protect occupants from glass, wind and flying debris, creating a FEMA 361 compliant area of safe refuge for students during school hours and local residents after hours. The wide span openings allow abundant natural light into the space so it doesn't feel like a storm shelter, until it is necessary.



# Unique design, proven performance.

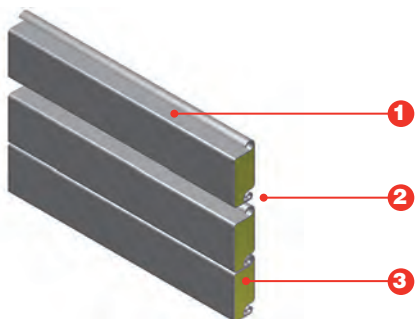
- 1 Motor operator
- 2 Hood assembly
- 3 Side guide assembly
- 4 Curtain assembly of interlocking slats
- 5 Bottom bar assembly



- 1 Side guides are custom fabricated to retain the curtain under the design wind pressures and impact forces specified



- 1 Curtain is formed of ID slat profile sections 3" wide by 1.5" deep
- 2 Interlocking steel slats
- 3 Polymeric core



## Ratings

**Wind Pressure.** Sustain a 240 psf wind pressure (1.2 times the design wind pressure of 200 psf) in accordance with ASTM E330

**Large Missile Impact.** Sustain a large missile impact test in accordance with ASTM E1886 for FEMA 361 assemblies

## Code Compliance

**ICC 500.** ICC 500/NSSA Standard for the Design and Construction of Storm Shelters

**FEMA 361.** FEMA Standard for the Design and Construction of Safe Rooms for Tornadoes and Hurricanes

## Operation

Power motor operation

## Size

Unlimited heights and widths to 16'

## Finishes

McKeon sterling gray, powder coat of color as selected, stainless steel



The missile impact test proves the ability to withstand wind-borne debris from a hurricane or tornado.



The SafeSpace 500 was subjected to both a positive and a negative 255 mph wind load.