

2018 Storm Shelter Conference

Lead Sponsor: National Storm Shelter Association

November 14-15 | Chicago, Illinois



DOWNTOWN CHICAGO, ILLINOIS

Announcing the 2018 Storm Shelter Conference, presented by the National Storm Shelter Association. [Register here](#) for the conference. This event will feature technical sessions, committee meetings and a social event the first night.

A preliminary schedule of events and a list of the technical presentations can be [found here](#).

The conference will focus on NSSA/ICC 500-2014 requirements for tornado shelters which are required by the 2015 and 2018 International Building Codes in schools and first response centers over a region that affects 23 states, including Illinois. Many of these sessions will present challenges in applying the current provisions of the NSSA/ICC 500-2014 standard, methods of overcoming those challenges, recommendations for guidelines, and proposed changes to the standard. Each session is recognized by AIA as 1.25 HSW Learning Units.

The second day of the conference, the NSSA Design Practices Committee will be meeting. Developing and publishing guidelines on how to apply NSSA/ICC 500-2014 to Community Tornado Shelters will be a priority of

the Design Practices Committee. That afternoon, NSSA will kick off the Impact Protective System Database Project.

In addition, the official 2018 NSSA Annual Meeting will occur during a box lunch the second day. At this lunch, NSSA Board Members will be nominated/elected and there will be a presentation/discussion on NSSA's strategic plan that was developed this summer. There will also be an introduction of new leaders as Dr. Kiesling approaches retirement.

Last year, 130 people attended this event, including staff from public schools (facilities, emergency planning, maintenance, etc...), building officials, police and fire departments, architects, structural engineers, mechanical engineers, peer reviewers, contractors, shelter manufacturers, impact-protective systems manufacturers, and more!

If your firm is interested in sponsoring and/or exhibiting during the first day of the conference and the reception, please submit the form [attached here](#).



FOUR POINTS BY SHERATON

EVENT LOCATION

The event will be held at Four Points by Sheraton at 10249 West Irving Park Road, Schiller Park, Illinois, 2.8 miles from the Chicago O'Hare International Airport (ORD).

HOTEL

Hotel accommodations can be made at the Four Points by Sheraton at 10249 West Irving Park Road, Schiller Park, Illinois by calling 847-671-6000 or [going online](#) and using the group code, "NSSA." Special group rates have been arranged for those who identify themselves as a 2018 NSSA Annual Storm Shelter Conference attendee: \$119/night for Single Rate or Double Rate. The cut-off date for reserving rooms in the Room Block is 5:00p.m. local time on October 30, 2018. Rates will be available 2 days prior and 2 days after the Event Dates indicated in the Room Block, subject to availability of guest rooms at the time of reservation. Hotel rooms are not included in conference registration.



SALON A AT FOUR POINTS BY SHERATON

TRANSPORTATION

Complimentary Airport shuttle service from Chicago O'Hare International Airport (ORD) to Four Points by Sheraton is available Monday through Sunday from 5:00a.m. - 12:00a.m.

PARKING

On-site parking is available for \$15/day. However, parking is complimentary with a hotel reservation under the NSSA Room Block.

SPONSORS AND EXHIBITORS

Sponsorship opportunities and exhibition spaces are available for the conference. If you would like to sponsor the conference and/or host an exhibition at the conference, you can do so by obtaining forms [here](#).



FOUR POINTS BY SHERATON SUITE



2018 Storm Shelter Conference SCHEDULE

Wednesday, November 14 at the Four Points Sheraton Hotel, Chicago, IL		
Times	Event	Room
7:45 - 8:15	Registration & Continental Breakfast with Exhibits	Kennedy
8:15 - 8:30	Introduction "What Can NSSA Do For You? And, What Can You Do For NSSA?"	Salon A
8:30 - 9:45	Technical Session 1 (1.25 AIA HSW LU's)	Salon A
9:45 - 10:15	Break with Exhibits	Kennedy
10:15 - 11:30	Technical Session 2 (1.25 AIA HSW LU's)	Salon A
11:30 - 1	Kiesling Award Luncheon with "Marketing NSSA & Your Company In Today's World"	Buckingham
1 - 2:15	Technical Session 3 (1.25 AIA HSW LU's)	Salon A
2:15 - 2:45	Break with Exhibits	Kennedy
2:45 - 4	Technical Session 4 (1.25 AIA HSW LU's)	Salon A
4 - 5	NSSA Design Practices Committee Executive Subcommittee (Open to all)	Salon A
6 - 8:30	Reception (Beer, Wine and Heavy Hors D'Oeuvres)	Kennedy

Thursday, November 15 at the Four Points Sheraton Hotel, Chicago, IL		
Times	Event	Room
7:30 - 8	Registration & Continental Breakfast	Salon A
8 - noon	NSSA Design Practices Committee Meeting (Open to all)	Salon A
Noon - 1:30	NSSA Annual Meeting Luncheon (Open to all)	Salon A
1:30 - 5	NSSA Impact Protective System Database Project Work Session (Open to all)	Salon A
	NSSA Planning Committee Meeting (Open to all - may end at 2:30pm)	Eisenhower

LEAD SPONSOR



DIAMOND SPONSOR



PLATINUM SPONSOR

ASSA ABLOY

The global leader in
door opening solutions

GOLD SPONSORS



SILVER SPONSORS



Technical Session 1: Applications of ICC 500

Highlights of Select 2017 NSSA Conference Technical Presentations (Benchmark Harris – Huckabee)

This will be an executive summary of the following 2017 presentations related to Community Tornado Shelters (like those in schools and first response centers):

- Fire Safety Design Considerations
- Challenges with Natural Ventilation
- Water/Wastewater Storage
- Structural Engineers Association of Texas Recommendations
- Anchorage of Non-Structural Elements
- Construction Phase Coordination Requirements
- Special Inspections for Community Shelters

Illinois School Tornado Shelter Case Studies (Paul Pessetti – Legat Architects; Robert Wroble – Legat Architects)

The presenters will describe how the tornado shelters for two new schools in Illinois (Laraway – New K-8 School completed this summer & CUSD200 – Jefferson Early Childhood Center starting construction soon) were approached by the school system, design team, building officials, peer reviewers and contractors. This presentation will specifically include how certain challenges applying the provisions of ICC 500 were addressed on these two projects.

Design Requirements Beyond ICC 500 for Federal Funding (Glenn Overcash – AECComm; Pataya Scott – FEMA)

In addition to complying with ICC 500, Table B1.1 of FEMA P-361 Third Edition states that construction documents for safe rooms constructed with FEMA grant funds must include a statement that the wind design conforms "...to the provisions of FEMA P-361, with the edition year specified." However, FEMA P-361 is a guideline and not written as a mandatory or minimum standard. The Presenter will clarify and identify which provisions of FEMA P-361 apply.

Technical Session 2: Third Party Influences on Storm Shelter Design

Emergency Planning for Tornado Shelters (Corey Schultz – Schultz Squared Architects)

Emergency planning is related to the operations and maintenance. And, most emergency planning professionals are asked to develop plans after a building has been built. Good shelter design should involve a thoughtful conversation with those who will be responsible for operations and maintenance, to take those considerations into account when developing the design. This presentation will highlight some of the fundamental operational and maintenance concerns that are absolutely essential for a tornado shelter to function as intended by ICC 500.

Recommended Scope for Peer Reviewers (John Wallis – Linedrive Consulting)

Many owners ask for assistance in defining the scope of services for a peer reviewer. Often, they ask if it's required by the code for the owner to hire the peer reviewer for the review to be "independent" as stated in ICC 500-2014 Section 106.1.1. If peer reviewers first see plans after submission to the building official, owners can be unhappy that peer reviewer comments were not known and incorporated into the design, especially if code deficiencies are identified. And, there can be delays and unexpected costs if there is not clarity in peer reviewer's contracts regarding calculations. This presentation provides recommendations to address these and other concerns.

Required Storm Shelter Occupant Load versus Fire Egress Occupant Load (Daniel Dain – Stantec)

Section 423.4 of the 2015 and 2018 editions of the International Building Codes require tornado shelters be constructed in E occupancies for the fire egress "total occupant load" of designated spaces. However, the 2015 IBC explicitly states in the commentary, "It is not the intent to require the shelter be designed for the total occupant load of the building that is used for means of egress." And, even with the 2018 IBC provisions, while less stringent than the 2015 IBC, use of the fire egress occupant load can require tornado shelters be significantly larger than they should need to be for the normal population of the school considering the limits placed by state education agencies which often regulate the number of students in classrooms. This presentation will provide some of the preliminary recommendations from the NSSA Design Practices Committee on how design professionals and owners and building officials can work together to most closely meet the intent of the code for both new construction and additions.

Technical Session 3: Impact-Protective Systems

Common Structural Systems (Larry Curtis – KFC Engineering)

ICC 500 requires that structural wall and roof assemblies be tested for missile debris impact. However, these systems are typically not labeled because they are not manufactured products like storm doors or storm windows. This presenter will provide some common structural engineering systems that meet the impact testing criteria for tornado shelters, providing the most economical systems for each assembly known by NSSA to have passed the testing requirements.

Storm Doors & Shutters (Kenneth Richied – Allegion Steelcraft)

This presentation will address some of the key aspects of design, construction, operation and maintenance for storm doors and shutters that are often overlooked by owners, design professionals, contractors, special inspectors and building officials.

Storm Louvers (James Livingston – Ruskin; Kyle Schultz – Air Products Equipment)

This presentation will address some of the key aspects of design, construction, operation and maintenance for storm louvers that are often overlooked by owners, design professionals, contractors, special inspectors and building officials.

Storm Windows (Gerry Sagerman – Insulgard Security Products)

This presentation will address some of the key aspects of design, construction, operation and maintenance for storm windows that are often overlooked by owners, design professionals, contractors, special inspectors and building officials.

NSSA Impact-Protective System Database (Nelson Kraschel – ASSA/ABLOY)

In the summer of 2018, NSSA held a Strategic Planning meeting which identified a need in the industry for live, online guidance from experts on impact-protective systems for the design, construction, operation and maintenance of these systems. This presentation will present the preliminary framework for this program. In the afternoon of November 15, there will be an interactive workshop to develop this framework further and conceptually begin to evaluate specific products that would be entered into NSSA's database and made available online.

Technical Session 4: Upcoming Changes to Codes, Standards and Guidelines

Update on ASCE 7-22 Tornado Design Provisions Proposed for the Entire United States (Frank Lombardo – University of Illinois Champaign-Urbana)

ASCE 7 "Minimum Design Loads and Associated Criteria for Buildings and Other Structures" is referenced by the International Building Code. The next edition is scheduled to be issued in 2022 and the Wind Load Subcommittee is currently drafting proposed provisions that would require all buildings in the entire United States be designed for a certain probability of tornadic event, such as a 3,000 year mean recurrence interval.

Updates to International Code Council (ICC) Codes and Standards (Kimberly Paarlberg – International Code Council; Benchmark Harris – Huckabee)

The IS-STM Committee is currently developing the next edition of ICC 500 that should be referenced by the 2021 International Building Code. Ms. Paarlberg will discuss the process that the committee is following to consider the changes proposed by NSSA and other parties. She will also provide information on how anyone can be involved in this process. Mr. Harris will update attendees on the status of changes proposed to IBC Section 423 and ICC 500 where there has been official action in the public record.

NSSA Design Guide for Community Tornado Shelters (Benchmark Harris – Huckabee)

Even though NSSA is not currently an ANSI accredited organization, the NSSA Design Practices Committee is voluntarily comprised of a balanced interests of users (e.g. design professionals), producers (e.g. contractors) and general interest (e.g. building officials) that meet ANSI requirements. This committee is developing this design guide for owners, design professionals, building officials, peer reviewers, contractors and special inspectors. This presentation will update attendees on the status of the current draft which is based on the full day of discussions in person at the 2017 NSSA Storm Shelter Conference. This draft will be further developed the morning of November 15 during the second day of the conference and all are welcome to attend and participate.



Conference Registration Form

2018 NSSA STORM SHELTER CONFERENCE

November 14 & 15, 2018, Chicago, IL

FIRST NAME _____ LAST NAME _____ BADGE NAME _____
(first name or nickname)

TITLE _____ ORGANIZATION _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

EMAIL _____ OFFICE PHONE _____ MOBILE PHONE _____

Check all events you're interested in attending:

NOVEMBER 14, 2018

- Technical Session 1
- Technical Session 2
- Kiesling Award Luncheon
- Technical Session 3
- Technical Session 4
- NSSA Design Practices Committee Executive Subcommittee
- Reception
Number of Guests you'll be bringing to the Reception _____

NOVEMBER 15, 2018

- NSSA Design Practices Committee Meeting
- NSSA Annual Meeting Luncheon
- NSSA Impact Protective System Database Project Work Session
- NSSA Planning Committee Meeting

Registration Fee

Registration fee includes all sessions, breaks, meals, & events.

FOR NSSA MEMBERS:

- \$200 Two-Day Registration Fee (if you'll be attending both days)
- \$150 One-Day Registration Fee (if you'll only be attending one day)

FOR ATTENDEES THAT ARE NOT NSSA MEMBERS:

- \$250 Two-Day Registration Fee (if you'll be attending both days)
- \$180 One-Day Registration Fee (if you'll only be attending one day)

PAYMENT METHODS:

- I am emailing my registration form to info@nssa.cc. Please generate an invoice so I may pay my registration via credit card, PayPal or bank transfer.
(Credit Cards Accepted: Visa, MasterCard, American Express, and Discover)
- Please see my completed form and check for the designated registration amount.
Mail to:
NSSA Conference Registration
PO Box 133
Salem, IL 62881





Sponsor/Exhibitor Form

2018 NSSA STORM SHELTER CONFERENCE

November 14 & 15, 2018, Chicago, IL

NAME _____ COMPANY NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

EMAIL _____

SPONSOR OPTIONS

All sponsor logos will be displayed on the schedule and on a presentation board at the conference.

- DIAMOND \$1000 OR MORE** AMOUNT: _____
- PLATINUM \$750 TO \$999** AMOUNT: _____
- GOLD \$500 TO \$749** AMOUNT: _____
- SILVER \$250 TO \$499** AMOUNT: _____
- NOT SPONSORING**

EXHIBITOR OPTIONS

Exhibits must be set up between 6:00 am and 7:45 am on November 14.
Exhibits must be removed between 9:00 pm and 11:00 pm on November 14.

- DISPLAY AREA (10'X5') \$500** AMOUNT: _____
- DISPLAY TABLE (ONE 6' TABLE) \$400** AMOUNT: _____
- BROCHURES (ONE 8.5"X11" STACK) \$100** AMOUNT: _____
- NOT EXHIBITING**

TOTAL FOR SPONSOR AND EXHIBITOR OPTIONS AMOUNT: _____
--

PAYMENT METHOD

- I am emailing my completed Sponsorship Registration form to info@nssa.cc. Please generate an invoice so I may pay via credit card (Visa, MasterCard, American Express or Discover) or bank transfer.
- Please see my completed Sponsorship Registration Form and check for the amount designated above. (Mail to: NSSA Conference Sponsorship/Exhibiting, PO Box 133, Salem, IL 62881 Check Payable to NSSA)

