

Insurers of Quality in Safe Rooms (Storm Shelters)

PRODUCER MEMBERS- are persons, firms, corporations, or partnerships who are engaged in the manufacturer or construction of safe rooms (storm shelters) and who certify that the manufacture and installation or construction are in compliance with the latest edition of the ICC/NSSA 500 Standard, FEMA P-260 and FEMA P-361 Guidelines. Producer Members apply an NSSA seal bearing the Producer Member's name, serial number, type shelter (tornado) and DWS 250 mph to each safe room (storm shelter) produced. Producer Members may have AUTHORIZED REPRESENTATIVES perform designated functions for which the Producer Member assumes responsibility.

AUTHORIZED REPRESENTATIVES – are persons, firms, corporations, or partnerships that are contractually authorized representatives of a Producer Member, who are trained by the Producer Member to perform functions assigned by the Producer Member.

INSTALLER MEMBERS - are persons, firms, corporations or partnerships who install safe rooms (storm shelters) for Producer Members and who bear responsibility for compliance with installation instructions provided by the Producer Member.

PROFESSIONAL MEMBERS - licensed design professionals such as architects and engineers who are engaged in the storm shelter industry and who subscribe to the NSSA Bylaws and applicable standards and guidelines.

THIRD PARTY EVALUATIONS – independent, NSSA-approved, third party evaluators—architects and engineers—who verify that the Producer Member's design complies with all aspects of the ICC/NSSA 500 Standard and FEMA P-320 and P-361 Guidelines as applicable. Legal considerations dictate that the third-party evaluator can only verify designs and calculations produced by a registered design professional architect or engineer who is the designer of record.

CHIEF COMPLIANCE OFFICER - A design professional, appointed by NSSA who shall be responsible to encourage compliance of NSSA Producer Members with the *ICC/NSSA 500 Standard* and other applicable standards and guidelines and to assure compliance of all NSSA members' business practices with the NSSA Bylaws. The Chief Compliance Officer is informed of the *ICC/NSSA 500 Standard* and relevant guidelines and is competent in the field of design of safe rooms (storm shelters) for protection against the effects of tornadoes and hurricanes.

Processes for Verifying Standards-Compliance of Residential Tornado Safe Rooms

Important Notice: The following verification process is applicable for *Residential Tornado Safe Rooms* only. The Standard and Guidelines both provide certain exceptions for residential use and use as a tornado safe rooms.

Community Producer Members must comply with *Community Tornado Safe Room* Standards and Guidelines and must meet all requirements of the Authority Having Jurisdiction (AHJ), for the area in which the safe room is being built.

NSSA Compliance Verification Process

Designer of Record

For each model, the Designer of Record, a licensed design professional:

- Provides engineered drawings and specifications for safe room (storm shelter) to Producer Member. Seals, signs and dates each sheet of drawings.
- Identifies applicable standards and guidelines met or exceeded in design. Include latest editions of ICC/NSSA 500 Standard; FEMA P-320 and P-361 Guidelines. If differences exist in design criteria, the most stringent shall be met.
 - For above ground safe rooms (shelters), provide:
 - Minimum specifications for foundation or slab design--thickness, reinforcement, overhang; avoidance of pre-tensioning or post-tensioning strands; anchoring details.
 - Assembly and installation instructions including detailed step-by-step installation checklist or a Quality Assurance Plan.
 - For below ground safe room (shelter), provide:
 - Specification for site preparation, minimum and maximum slope of grade, slope stabilization
 - Design of anchorage, ballasting to prevent buoyancy with saturated soil conditions.
 - Step-by-step installation instructions including backfilling, encasement, and compaction or a Quality Assurance Plan. Under-slab-on-grade safe rooms (storm shelters) are included in the standards listed above.
- Provide Inspection Checklist- Producer Member will create this checklist to meet required inspections and may include specific installation instructions they deem important.
- Provides these documents to Third Party Evaluator.

Design

Debris Impact Test

For each model, an International Accreditation Service or approved testing facility must perform the debris impact tests.

- The Texas Tech Debris Impact Facility is an approved testing agency.
- The ICC 500 2014, Section 305 and Chapter 8 gives specific testing requirements for shelters, doors, and components.

Impact Test

Third-Party Evaluator for standards compliance. (a list of Third Party Evaluators is given on our website).

- Evaluates all elements of design for standards compliance
- Reviews and evaluates installation instructions and/or detailed Quality Assurance Plan
- Issues statement of scope of third-party evaluation stating compliance with latest editions of ICC/NSSA 500 & FEMA P-361.
- Provides evaluation report to Producer Member and to NSSA home office

Evaluate

Producer Member

- Provides sealed engineering drawings/specifications, Third Party Evaluator report and Impact Test report to NSSA home office along with member application documents.
- Provides sealed engineering design drawings and specifications, installation instructions and/or Quality Assurance Plan to authority having jurisdiction when requested
- Follows design drawings and specifications and follows installation instructions to engineering specifications.
- Permits plant or construction site visits by NSSA Chief Compliance Officer and/or inspectors of jurisdictional authorities if required by either. Purpose and focus of visit shall be stated in writing upon arrival
- Provides drawings and specifications to owner or installer to obtain building permits as required
- Affixes NSSA Producer Member Seal (Type 1 or Type 2) to each safe room (storm shelter) installed and files Certificate of Installation and Inspection Checklist with NSSA home office.

Production/
Manufacture

Producer/Installer (Authorized Representative of Producer Member or NSSA Installer Member)

- Follows installation instructions and completes Inspection Checklist, performing all required inspections.
- Notifies owner that site must be verified to be outside of a floodway and meet minimum safe floor level to meet FEMA guidelines (FEMA will have SFHA local maps online for flood information)
- Records GPS Coordinates of installation site; encourages owner to register site with local emergency management agencies
- Records serial number of Producer Member Seal. (Affix Type 3 Seal if Type 2 seal has been affixed)
- Signs Certificate of Installation or separate document that installation instructions were followed. Attach completed installation check list.

Installation

Inspection/Rebates

- When required by the Authority Having Jurisdiction (AHJ) or by grant authority, the AHJ or a duly appointed inspector performs scheduled inspections and produces an Inspection Report after the final inspection..
- When required by the homeowner applying for a grant, the Producer shall provide sealed engineering designs, a signed copy of Inspection Checklist, grant authority's Certificate of Installation and any other requested information, for submittal to grant administering agency

Inspection