OZ SAFEROOMS Tech®

PRODUCING THE WORLDS SAFEST TORNADO PROTECTION

PROVEN STRONGER THAN F5

A FEMA MITIGATION SUCCESS STORY

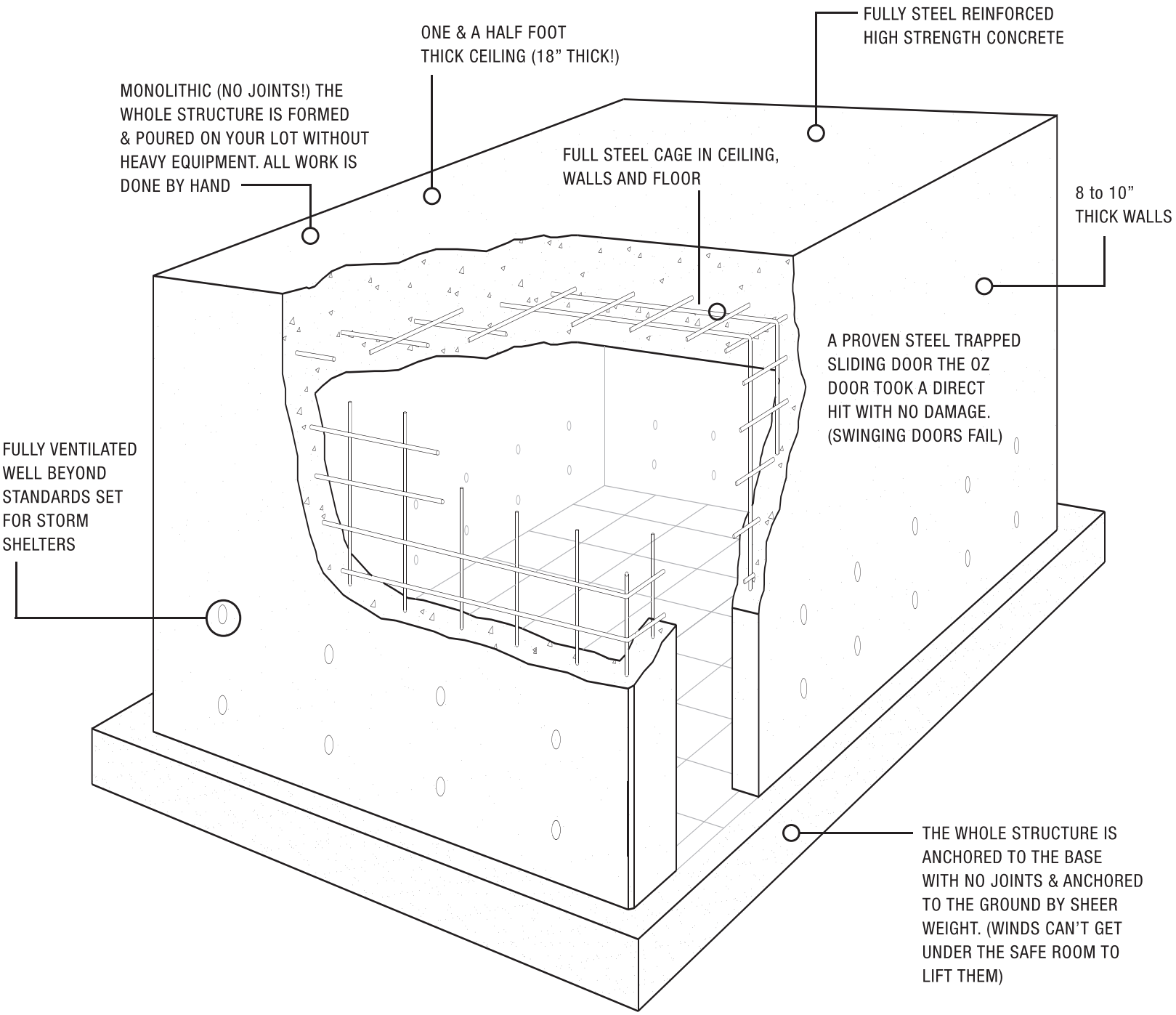
THESE TWO OZ SAFEROOMS SURVIVED A DIRECT HIT WITH AN F5 TORNADO IN MOORE, OKLAHOMA, AND SAVED LIVES!

OZSAFEROOMS.COM 405.672.8400

3216 SE 30TH STREET, DEL CITY, OK 73115

THE OZ SAFEROOM

USPTO PATENT NO.10,584,509



BEST OF moore & SOUTH OKC

THE OKLAHOMAN READERS' CHOICE WINNER 2016 PEOPLE, PLACES & THINGS

THE OKLAHOMAN READERS' CHOICE WINNER 2017 PEOPLE, PLACES & THINGS

THE OKLAHOMAN READERS' CHOICE WINNER 2018 PEOPLE, PLACES & THINGS

THE OKLAHOMAN READERS' CHOICE WINNER 2019 PEOPLE, PLACES & THINGS

VOTED NUMBER ONE SAFEROOM IN OKLAHOMA,

RATED THE BEST IN THE WORLD!

WHY AN OZ SAFEROOM?

CONCRETE STAIN

BRICKED TO MATCH THE HOME

BUILT OFF YOUR PATIO

BUILT IN AN EXISTING GARAGE

Many have said the OZ saferooms are over engineered, way more than needed for a storm shelter, but the OZ Saferoom is far beyond a storm shelter, It's the first above ground Tornado Shelter ever constructed. And the only above ground Tornado Shelter to take a direct hit with a super twister, sustain no damage and save lives!

All OZ Saferooms are seamless (no joints, the base walls and top are one continuous piece of concrete) built with an 18" thick ceiling, The walls are 8" or 10" thick (depending on the room) the whole structure has a full steel cage with #4 rebar. They come finished with a tiled floor, a 5 foot bench on the 6, 8 and 13 person rooms and fully ventilated. The OZ comes with a patent pending multi-layer, steel trapped sliding door that covers the opening, testing and recorded tornado damage shows swinging doors are a potential for injuries, and have failed! The OZ Saferoom not only exceeds the standards in the ICC 500, FEMA 320 & FEMA 361, but is the only Tornado Shelter to conform to the strict guidelines of the "National Performance Criteria for Tornado Shelters" published by FEMA.

All of the OZ Tornado Shelters are multipurpose, used for swimming pool changing rooms, Bathrooms, gun & valuable storage, extra office space, these and larger rooms can be used for protecting horses, cars, important legal documents, and anything that we don't want to lose in a tornado.

6 Person Tornado Shelter

- 24" wide door opening, 5 ½' ceiling
- Capable of being built in most garages.
- An "L" bench, almost 8 feet long
- Walls are 10" thick, 18" thick ceiling
- Built on-site or can be delivered

8 Person Tornado Shelter

- 27" wide door opening
- 6 ½' high ceiling, and is 18" thick
- 5' bench
- Built on-site or can be delivered.

13 Person Tornado Shelter

- 32" wide opening to accommodate most wheelchairs.
- 6 ½' high ceiling, and is 18" thick.
- 5' bench
- Built on-site without any heavy equipment

64 Sq. ft. & 90 Sq. ft. Multi-Purpose Saferooms

- These structures weigh 60,000 to 70,000 lbs.!
- 18" thick concrete ceiling and 8" to 10" thick walls
- 10" thick concrete base
- Four 18" deep pier footings
- 32" wide door opening, to accommodate most wheel chairs

When you place an order from OZ Saferooms, We take care of the whole process from beginning to end. After visiting our facility, and choosing the Saferoom that fits your needs, OZ has the location of all existing utilities of record on your property marked. We then provide a site visit, and help you to determine the best location for the saferoom. OZ then draws up the required site plan and fills out the permit application, and delivers all the documentation required to pull the permit from the city. Once approved, we pick up the permit, and get you set up on a build schedule. We also provide financing; the application is filled out at the time of ordering a saferoom, and approvals are given, in most cases within a day. **The peace of mind the OZ Saferoom will give you and your family is priceless!**

EXTREME TESTED

Since its conception in 1998, Inventor and CEO, Andrew Zagorski has put the OZ Saferoom through extreme testing, even standing inside while a car was dropped multiple times.

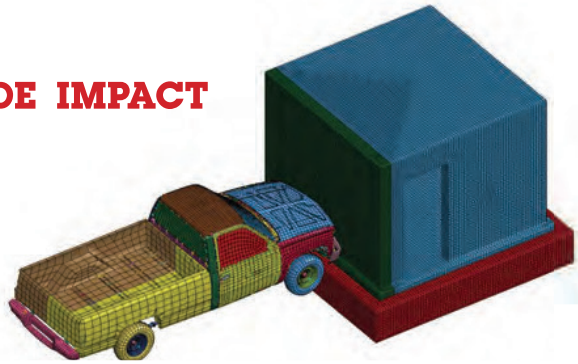
The OZ Saferoom, is the only above ground, **SEAMLESS** (one piece/no joints/monolithic) tornado shelter to take a direct hit, in the direct path of an F5 tornado (Moore, Oklahoma) Proving all the engineering and testing performed on the Saferoom to be correct. More importantly, **The OZ Saferoom saved lives!**

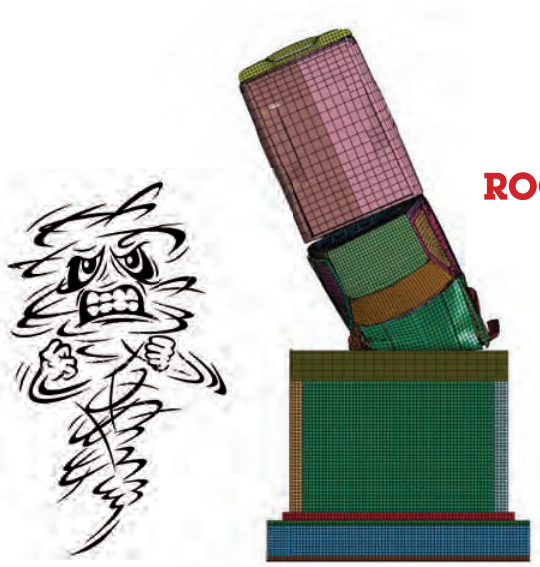
The OZ Saferoom door has been impact and pressure tested by one of Americas top testing facilities located in Florida, Assessing a product's quality is limited to the accuracy and precision of its quantifiable data. Hurricane Engineering and Testing Inc. (HETI) is a lab designed for optimal testing and data collecting methods. In order to test products under a wide range of protocols, HETI uses high-grade industrial equipment to conduct tests. HETI is able to perform structural, impact, and cyclic wind load tests with air pressures up to 560 pounds per square foot. Utilizing a variety of metallurgic destructive and non-destructive testing equipment, such as a tensile strength machine, HETI is able to analyze materials before, during, and after a test.

Testing and development never stops, first in 2004, then again in 2015 a finite analysis test was performed on the OZ Saferoom by Engineers at the Rochester Institute of Technology. Using the most sophisticated software available, LS-DYNA, developed by Livermore Software Technology Corp. (LSTC), is a multi-purpose explicit and implicit finite element program used to analyze the nonlinear response of structures. Its fully automated contact analysis and wide range of material models enable users worldwide to solve complex real world problems. Testing included well known occurrences in tornadoes, since it's not only the high winds a tornado shelter needs to protect its occupants, but the debris in those winds. Heavy objects such as steel I-Beams, and full size pickup trucks were used in the computer model(s) to impact the OZ Saferoom, not once, but multiple times. The conclusion, **The OZ Saferoom withstood every test!**

OZ Saferooms continues to look at better materials, methods, and testing to keep pushing the already proven success of the Tornado shelters to the next level!

SIDE IMPACT





ROOF IMPACT

The most sophisticated impact testing performed by the Rochester Insitute of Technology on any Saferoom, using the most advanced software utilized in manufacturing industries.

CELLARS AND STEEL STORM SHELTERS ARE NOT TORNADO SHELTERS, AND FAIL!

SUCTION - There have been occasions where fiberglass, underground shelters have been sucked out of the ground with their occupants inside. When the underground shelter is installed, the earth around the unit is disturbed and takes years for it to compact to its original state.

ENTRAPMENT - As we all know, tornadoes leave unbearable amounts of debris. Being in an underground shelter puts you at grave risl of being trapped for long oeriods of time. The consequence of this is suffering time deprivation, not to mention a horrific experience.

SUFFOCATION - Along with the large amounts of debris, the danger of and underground shelter being sealed air-tight becomes severe.

DROWNING - Tornadoes hsppen when there is large "super cell thunderstorms" containing severe downpours of rain. Other cases of water being an issue are broken water mains and broken or severed fire hydrants. Most underground shelters claim to be air-tight. In this case there is no where for the water to drain, thus occupants have been known to drown.

GAS ASPHYXIATION - Watching thousands of hours of tornado damage footage, the most frequent sight is natural gas spewing into the air from broken pipes where the gas meters used to stand. As we all know natural gas sinks to the lowest level it can find (similar to water). Spinning vents installed on top of underground shelters actually can pull the natural gas down to where you and your family are. If there are no vents.on the roof, the natural gas still finds a way into these types of shelters causing gas asphyxiation and EXPLOSIONS from candles and flashlights.

SNAKES & SPIDERS - The Oklahoma Poison Control Center warns Oklahomans that underground shelters are a frequent spot for poisonous spiders and snakes to be found. These creatures also seek shelter from the storm when dangerous weather is coming

CHEMICAL SEEPAGE - Garage floor pits have told their consumers that the vehicle can be parked over the door of the shelter. The only problem with this is that there is now a gas tank above you and your family. Many units installed in garage floors have experienced problems with everyday chemicals and their harmful vapors being trapped along with their occupants.

LIGHTNING - During super cell thunderstorms thousands of lightning strikes are reported and recorded by various weather centers. If a metal structure suffers a direct hit, its occupants could suffer severe electrical trauma.

ELECTRIC - Exposed, live transformers are pushed through homes during the smallest of tornados. Most builders hide electrical wires inside walls thus making a metal structure a dangerous place to be.

ANCHORING - All metal structures are secured to the site of location by using lags of some sort. Viewing tornado damage regularly lags of all shapes, sizes and applications have failed. The weight of the metal structure is not enough to keep it in place.

Download the app:
TornadoSpy+

This pay app will give you tornado & hail warnings and sighting map over your smartphone. Sightings are filtered through state-of-the art AccuSpy™ technology to prevent false alerts and only send you the most accurate sightings.

Also available: TornadoSpyLite, the FREE app

THE HISTORY OF OZ

• Knowing the dangers of tornadoes and the insufficient protection available, in the later part of 1988, FEMA commissioned Andrew Zagorski to build the first above ground Tornado Shelter. Andrew was chosen due to his unique method of producing monolithic (no joints) structures that are high strength steel reinforced concrete. For decades Andrew built underground monolithic structures for the government and municipalities including nuclear containment facilities and waterways. The requirement was to take his technology above ground, and it had to withstand the devastation of a tornado.

• Andrew built the first above ground monolithic concrete “tornado shelter” within days of his request from FEMA. The saferoom was impact tested, under the direction of FEMA passing with ease. Andrew also put the structure through extreme impact testing, by dropping a cor on it multiple times (while Andrew stood inside) the structure went through the first finite analysis test at the Rochester Institute of Technology (RIT) the test results proved that the structure can hold up to extreme impacts with no damage.

• Andrew was asked by FEMA in 1999 to bring his life saving Tornado Shelter to families in “tornado alley”. Once underway, FEMA provided grants and unsecured government loans for his shelters including families that where hit by the May 3rd 1999 tornado in Moore, Oklahoma.

• Immediately after the May 3rd devastation, Engineers from Texas Tech and Clemson Universities serveyed the damage hoping to find a solution to protect lives in future tornadoes. A Structural Engineer at the University of Oklahoma stated Engineering a structure that will survive winds in excess of 260 m.p.h. is still not possible! The OZ™Saferoom had already been engineered, tested and built in the Oklahoma Area.

• On May 8th 2003, Moore, Oklahoma suffered another supertwister, wind speeds recorded in excess of 250 mph (An F5 tornado is anything over 200 mph). In the vicinity of the F5, many OZ™ Saferooms stood, but two stood in the direct oath, freestanding in the backyards of two homes. These two OZ™ Saferooms took a direct hit with this F5 tornado, the structures survived with no damage, and most importantly, saved lives! The OZ™ Saferoom became a FEMA mitigation success! Proving that all the engineering and testing that went into the tornado shelter was accurate.

• The OZ™ Saferoom is the only tornado protection to meet the strict guidelines in the Natonal Performance Criteria, it also exceeds the standards in the FEMA 320, 361 and the ICC 500.

• The OZ™ Saferoom is the only above ground solution to protect your family from the direct hit of a supertwister. If storm shelters where capable of doing this, FEMA would have never searched for better protection!

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