Test Your Tornado IQ

#TornadoStrong

Do you know everything you need to know about protecting yourself, your family and your home against tornadoes? Check out these frequently asked questions to find out.

Keeping Yourself and Your Loved Ones Safe

Q: Is there a "tornado season"?

A: No. According to the National Weather Service, tornadoes can occur year-round anywhere in the contiguous United States. The peak time for tornadoes for the Southern Plains (e.g., Texas, Oklahoma, and Kansas) is from May to early June. On the Gulf Coast, it is earlier in the spring. In the Northern Plains and upper Midwest, tornadoes often occur in June or July.

Q: Should I seek shelter under an overpass during a tornado?

A: No. Using an overpass as a shelter can put you at a much greater risk of being killed or seriously injured by a tornado. The narrow passage underneath an overpass could cause an increase in the wind speed under the bridge.

Q: Is it better to drive away and try to outrun a tornado, or should I stay in place?

A: Usually, it's better to stay in place. Tornadoes do not follow a specific path or route and can change direction at any time, so attempting to drive away is a dangerous choice.

Q: Do tornadoes ever strike twice?

A: Yes. From 2010–2015 alone, tornadoes struck Moore, Oklahoma, repeatedly. In Guy, Arkansas, three tornadoes hit the same church on the same day. Tornadoes struck Cordell, Kansas, on the same day three years in a row.

Q: Does seeking shelter in the southwest corner of your home protect you from flying debris?

A: No. There is a misconception that all tornadoes move to the northeast. Tornadoes can move in any direction. The best place to seek shelter is in a FEMA P-320 safe room, ICC 500 certified storm shelter, or a windowless interior room on the lowest floor of your home.

Q: What is a tornado safe room or certified storm shelter?

A: A safe room is a small, typically above-ground structure that can provide near-absolute life safety protection and withstand extreme winds, even EF-4 or EF-5 tornadoes. FEMA safe rooms for one- and two-family residences are designed and constructed using the drawings and criteria in FEMA P-320. Certified storm shelters are fabricated or built with methods that are tested and approved to meet the ICC 500 standard.

Doors and door systems are critical components in tornado safe room construction and storm shelter manufacturing. Special attention is given to ensure that doors provide pressure- and debris-impact resistance.

According to FEMA, having a safe room has been shown to increase home value and sales price by 3.5%. This means that a tornado safe room can not only save your life, but it may make your home more valuable too.

Protecting Your Home and Property

Q: Should I open my windows to prevent my home from exploding?

A: No. When you open your windows and allow wind to enter, the pressure inside your home builds, like when you blow up a balloon. As the wind pressure increases, it can lift the roof, collapse the garage door, and break the windows. Eventually, your house can burst or break apart. That's why it is better to keep all doors and windows closed in tornadoes and high wind events.

Q: Is it too expensive to build homes to withstand tornadoes?

A: Probably not. For a 2,000 square foot home at $0.50 per square foot, only $1,000 in metal connectors installed from a home's roof to its foundation could upgrade a house to withstand wind uplift pressure from an EF-0 to an EF-2 tornado. National Centers for Environmental Information data estimates that 77% of tornadoes are in the EF-0 to EF-1 range, and 95% have wind speeds less than EF-3 intensity, so it is very affordable to build with tornadoes in mind.

Q: Do building codes prevent the kind of damage caused by tornado outbreaks?

A: Yes. Even when a tornado outbreak reaches EF-4 or EF-5 wind speeds, approximately 95% of the damage will still typically occur at EF-3 level and below. Since most tornadoes are rated EF-3 and below, minimum construction standards provided in building codes can and do make a meaningful difference.

Q: Can above-ground residential structures withstand an EF-4 or EF-5 tornado?

A: Yes. A small above-ground FEMA P-320 safe room or ICC 500 certified shelter can withstand extreme winds, even up to EF-4 or EF-5 tornado levels. Construction options include wood frame reinforced with steel and plywood panels, steel, concrete block, or other concrete-based methods like insulating concrete forms. Combine any of these options with a door and frame that is tested and approved to meet pressure resistance and debris-impact resistance standards.

Q: Are big cities and their tall buildings protected from tornadoes?

A: No. According to the National Weather Service, tornadoes are typically 5 to 10 miles high, so a tall building with a height of 500 to 1000 feet cannot deflect or destroy a tornado.