Photo description: Palm trees blowing in stormy winds.

PROTECT YOUR PROPERTY FROM
SEVERE WINDS

FEMA

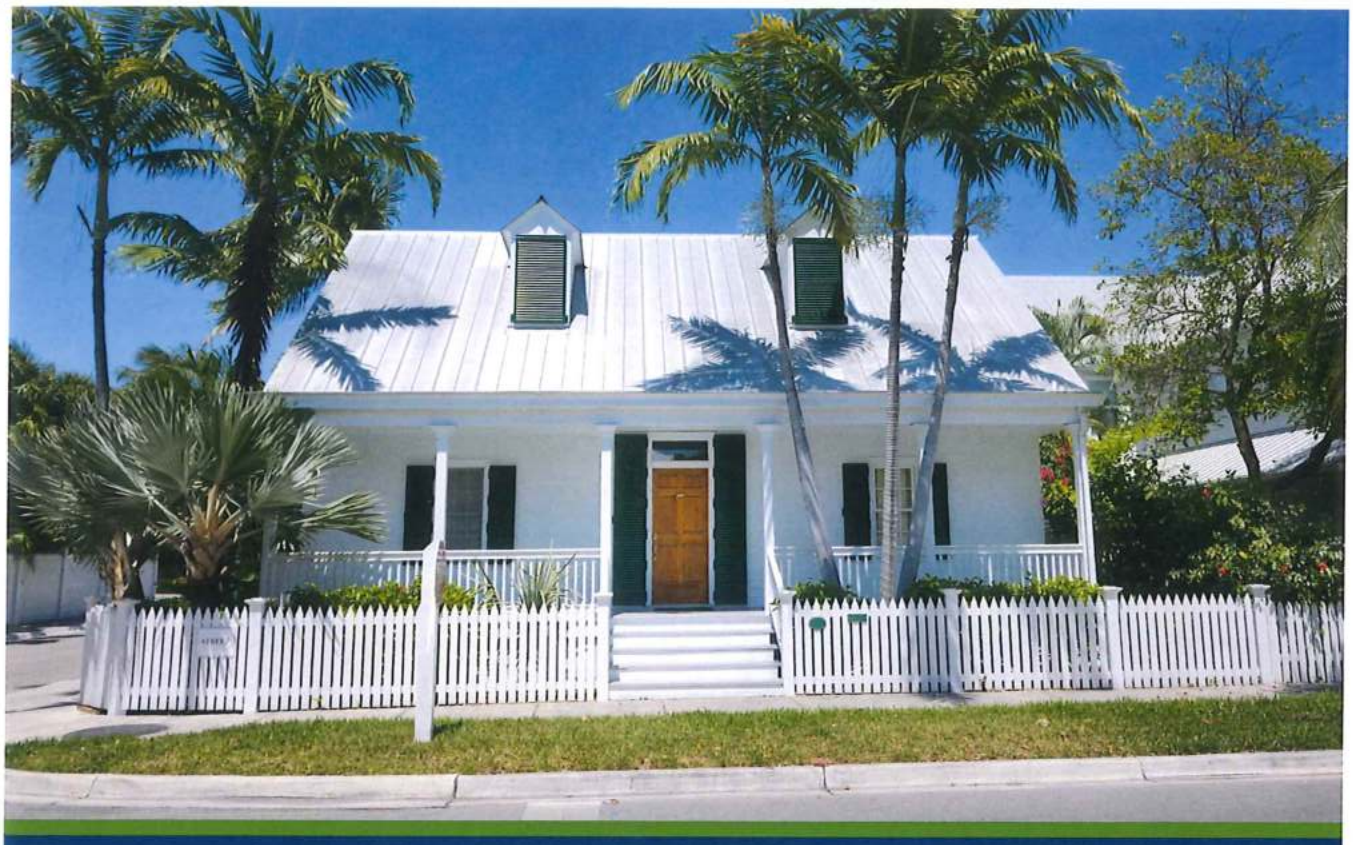


Photo description: Home with palm trees and white picket fence.

Owning a property is one of the most important investments most people make in their lives. We work hard to provide a home and a future for ourselves and our loved ones. Why risk losing it when bad weather hits close to home?

Severe winds can occur anytime, or they can accompany storms like hurricanes, tornados, and severe thunderstorms. Flying debris or downed trees and power lines can make severe winds a threat to lives, property, and utilities.

While you can't prevent severe winds from happening, there are simple, low-cost ways to secure your property to minimize damage and keep your home and your future safe.

Here's how you can help protect your home from severe winds.

Photo description: Older couple reviewing papers at a table.

INSIDE THE HOME

REVIEW YOUR INSURANCE POLICY

Taking a few minutes to check your homeowners or mobile home insurance policy and verify your coverage can help you process a claim in the future and get back on your feet faster after a storm.

DOCUMENT YOUR HOME'S CONTENTS

Having a list of all your belongings will help with the insurance claims process. Consider documenting your contents visually, either by taking photos of high-value items or walking through your home and videotaping your belongings for reference.

IF YOU LOSE POWER, UNPLUG ELECTRICAL APPLIANCES

To prevent power-surge damage, make sure to unplug all appliances until after the storm is over and power is restored. Protect your electronics from power strikes with surge protectors.

BUILD A SAFE ROOM

Even if your home is built "to code," it may not be able to withstand all types of severe winds, like tornadoes, thunderstorms, or major hurricanes. Safe rooms provide a space where you and your family can seek shelter. They provide a high level of protection. If your safe room is below ground, it must be designed to avoid gathering water during the heavy rains that can come with severe windstorm events.

DID YOU KNOW?
Learn more about safe rooms at fema.gov/safe-rooms

PROTECT WINDOWS AND GLASS DOORS WITH STORM SHUTTERS

Storm shutters prevent windows from breaking when there is windborne debris. You can also add shatter-resistant film or stormproof high-impact glass to defend glass from breaking.

REINFORCE GARAGE DOORS AND DOUBLE-ENTRY DOORS

These doors can fail under wind pressure. Garage doors can be reinforced with girts and by strengthening the wheel tracks. Double-entry doors can be reinforced with a heavy-duty deadbolt, adding slide bolts on one of the doors, and using longer hinge attachments on the door and frame.

Photo description: Worker installing hurricane shutters inside a home.

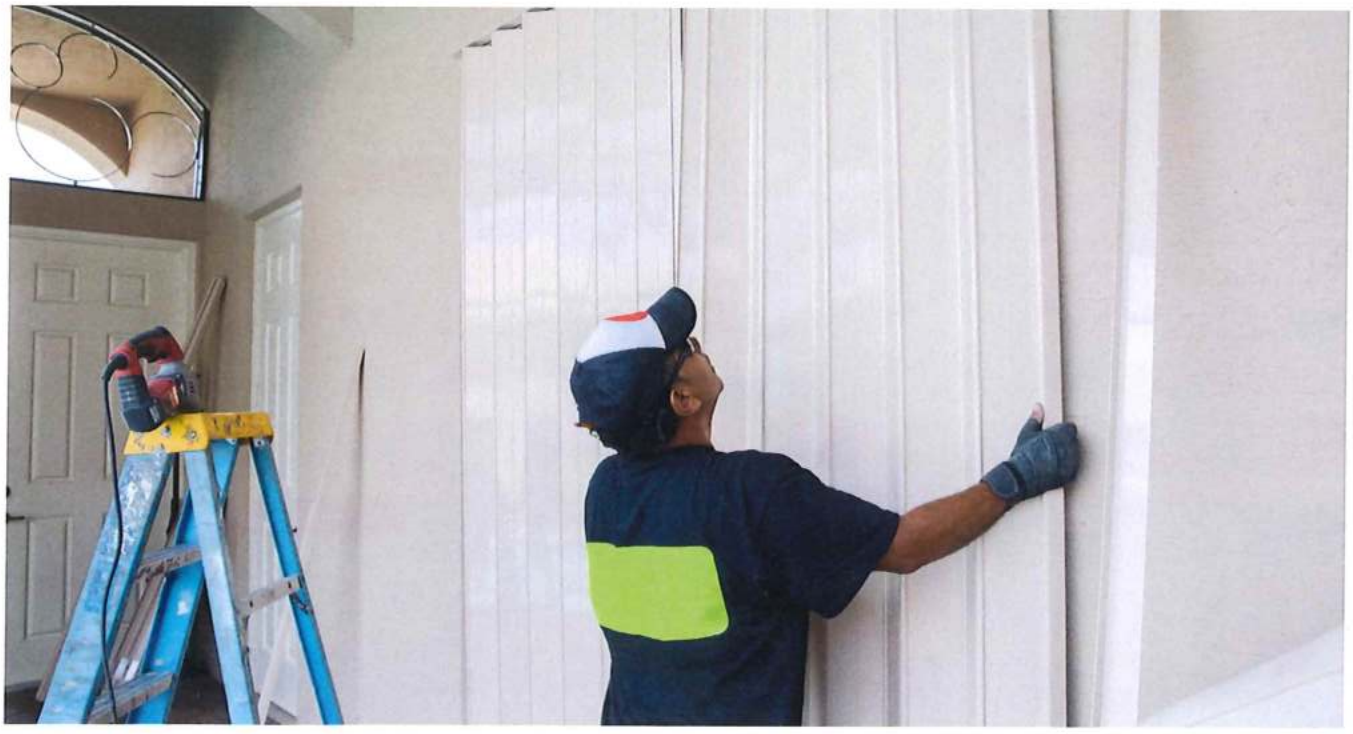


Photo description: Dark clouds loom over a countryside road.

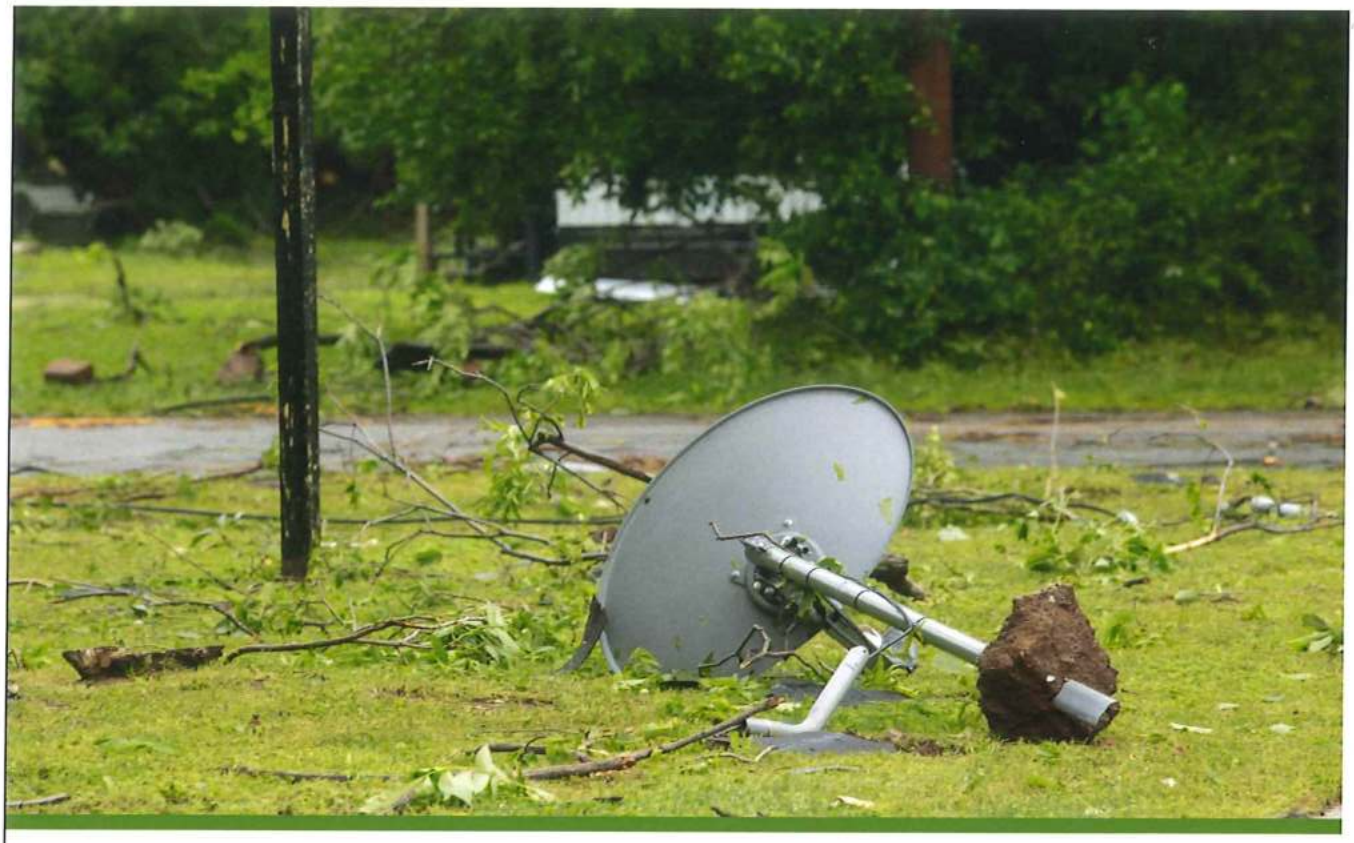


Photo description: Satellite dish and broken tree limbs on a lawn after a storm.

OUTSIDE THE HOME

FORTIFY YOUR ROOF

Your roof is your first line of defense in a high wind event. Re-adhere any loose shingles and consider impact-resistant shingles when installing a roof. Install roof strappings to anchor the roof framing to the wall framings so the wind can't lift your roof off your house.

Contact your local utility company to trim any limbs close to utility lines and poles

TRIM OR REMOVE DEAD, DAMAGED, OR ROTTING TREES AND LIMBS

High winds can cause trees and branches to fall. Make sure any damaged trees on the property are trimmed or removed on a regular basis. Your home should be at least a full-grown tree's height away from the base of any tree, usually about 40 feet away.

SECURE OBJECTS OUTSIDE THE HOME

Loose shingles, your dog's house, trash cans, and sports equipment can be picked up by the wind and cause damage to your home. Secure outdoor objects like furniture, gutters, and downspouts.

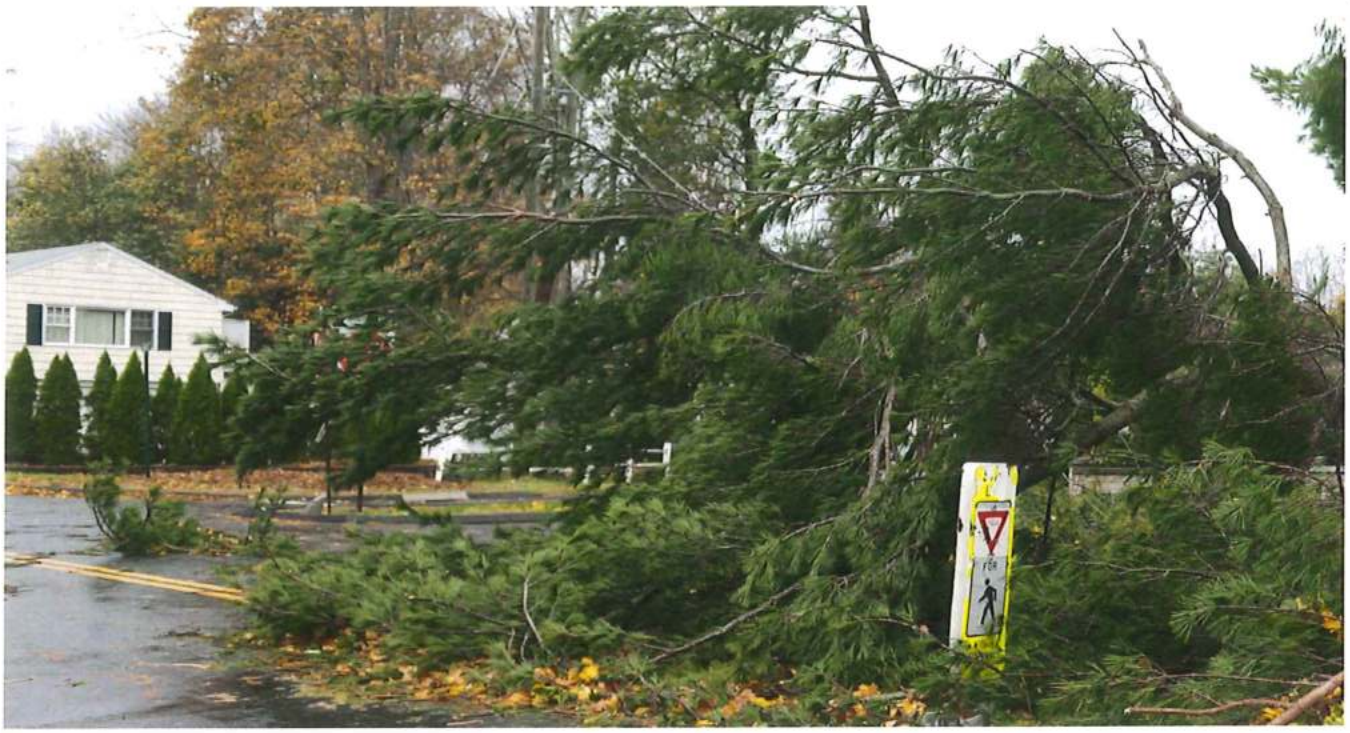


Photo description: Fallen tree and electrical wires cover a residential street.

SEAL CRACKS AND GAPS

Prevent wind or water from coming in. Make sure caulking around windows and doors is in good shape and not cracked, broken, or missing. Fill any holes or gaps around pipes or wires that enter your building with a waterproof sealant.

SECURE YOUR MANUFACTURED HOME TO THE GROUND

Bolt your entire structure to the foundation using anchor bolts. If you are also in the floodplain, your community may have specific requirements. Contact your local floodplain manager or permitting official for more information. Use a professional engineer or architect to make sure the anchoring system is designed and installed correctly.

SECURE FENCING, PORCHES, CANOPIES, AND SHEDS

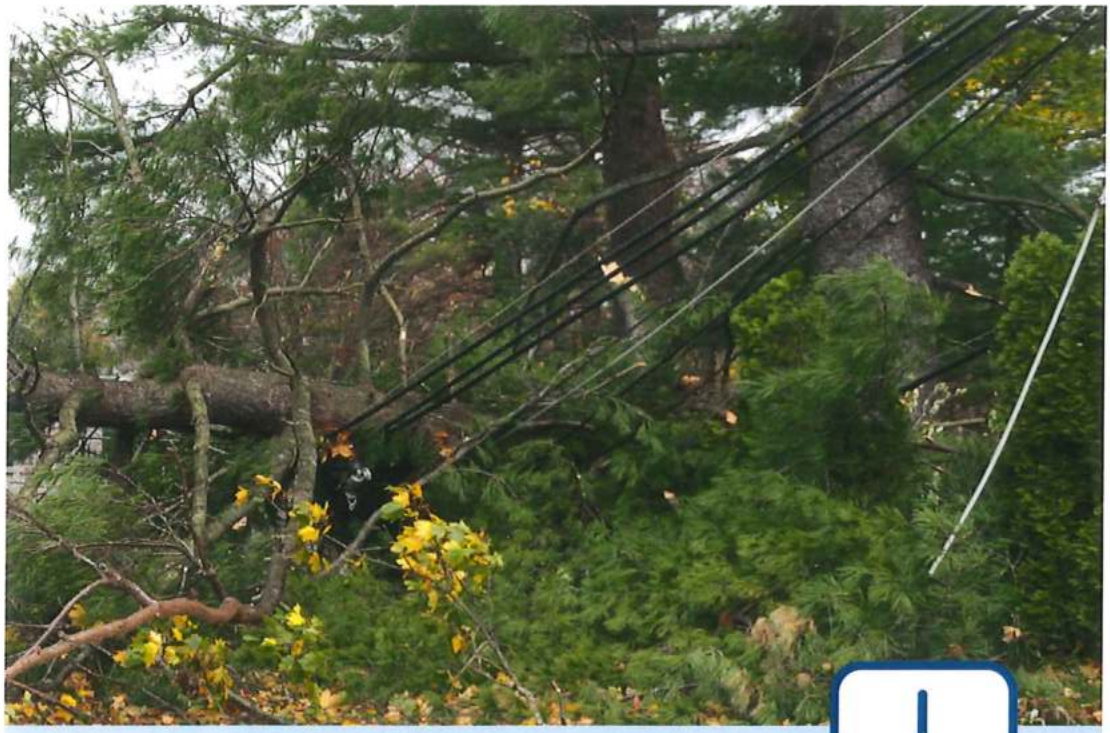
Have them inspected and make sure they are firmly attached and in sound structural condition. Secure any parts of fencing that appear weak or loose.

REPLACE GRAVEL AND ROCK LANDSCAPING MATERIALS

Rock and gravel materials can cause serious damage during a severe wind event. During particularly strong wind events, gravel has been found in mailboxes and has even shredded vinyl siding. Replace these materials with a softer material, such as mulch or dirt.

ANCHOR ANY FUEL TANKS AND EXTERNAL UTILITY LINKS

If you have an exterior fuel tank or any of your utilities are located outside, anchor or tie them down according to the ground anchor instructions. This will help reduce the risk of them overturning and sliding.



REMEMBER:

Some of these tips may work better together than others. Mitigation measures need to be tailored to your home.

Always consult professionals such as your insurance agent, architects, engineers, contractors, or other experts in design and construction before making changes to your home. Your local planning and zoning office or building department is a good place to start for advice.

Finally, be kind to your neighbors! Talk to nearby property owners before you make changes, since some actions on your property may affect theirs.

ADDITIONAL RESOURCES

FEMA, REDUCE RISK FOR YOUR HOME
Learn how to protect your home or business from natural disasters.
https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/risk-reduction-activities

FEMA, AGAINST THE WIND: PROTECTING YOUR HOME FROM HURRICANE AND WIND DAMAGE
View illustrations that explain wind mitigation techniques.
https://www.hsdl.org/?abstract&did=459942

FEMA, BUILDING SCIENCE HURRICANE ACTIVITIES AND RESOURCES
View resources specific to hurricane events.
https://www.fema.gov/sites/default/files/2020-07/hurricane-hazard-publications.pdf

FEMA BUILDING SCIENCE BRANCH BROCHURE: WIND HAZARDS
Learn more about how to improve wind resistance of buildings.
https://www.fema.gov/sites/default/files/2020-07/fema_p1089_wind_hazards_2017.pdf

FEMA

HOW TO STAY SAFE

WHEN A TORNADO THREATENS

Prepare NOW

Know your area's tornado risk. In the U.S., the Midwest and the Southeast have a greater risk for tornadoes.

Know the signs of a tornado, including a rotating funnel-shaped cloud, an approaching cloud of debris, or a loud roar—similar to a freight train.

Sign up for your community's warning system. The Emergency Alert System (EAS) and National Oceanic and Atmospheric Administration (NOAA) Weather Radio also provide emergency alerts. If your community has sirens, become familiar with the warning tone.

Pay attention to weather reports. Meteorologists can predict when conditions might be right for a tornado.

Identify and practice going to a safe shelter for high winds, such as a safe room built using FEMA criteria or a storm shelter built to ICC 500 standards. The next best protection is a small, interior, windowless room in a sturdy building on the lowest level.

Consider constructing a safe room that meets FEMA or ICC 500 standards.

Survive DURING

Immediately go to a safe location that you identified.

Take additional cover by shielding your head and neck with your arms and putting materials such as furniture and blankets around you.

Listen to EAS, NOAA Weather Radio, or local alerting systems for current emergency information and instructions.

Do not try to outrun a tornado in a vehicle.

If you are in a car or outdoors and cannot get to a building, cover your head and neck with your arms and cover your body with a coat or blanket, if possible.

Be Safe AFTER

Keep listening to EAS, NOAA Weather Radio, and local authorities for updated information.

If you are trapped, cover your mouth with a cloth or mask to avoid breathing dust. Try to send a text, bang on a pipe or wall, or use a whistle instead of shouting.

Stay clear of fallen power lines or broken utility lines.

Do not enter damaged buildings until you are told that they are safe.

Save your phone calls for emergencies. Phone systems are often down or busy after a disaster. Use text messaging or social media to communicate with family and friends.

Be careful during clean-up. Wear thick-soled shoes, long pants, and work gloves.

Take an Active Role in Your Safety

Go to **ready.gov** and search for **tornado**. Download the **FEMA app** to get more information about preparing for a **tornado**. Find Emergency Safety Tips under Prepare.

FEMA
FEMA V-1010
Catalog No. 17233-11

BE PREPARED FOR A TORNADO

FEMA

FEMA V-1010/ March 2018

Tornadoes can destroy buildings, flip cars, and create deadly flying debris.

Tornadoes are violently rotating columns of air that extend from a thunderstorm to the ground.

Can happen anytime

200+ MPH

Bring intense winds

Can happen anywhere

Look like funnels

IF YOU ARE UNDER A TORNADO WARNING, FIND SAFE SHELTER RIGHT AWAY

Go to a safe room, basement, or storm cellar.

If you can safely get to a sturdy building, do so immediately.

If there is no basement, get to a small, interior room on the lowest level.

Do not get under an overpass or bridge. You're safer in a low, flat location.

Stay away from windows, doors, and outside walls.

Watch out for flying debris that can cause injury or death.

Use your arms to protect your head and neck.