

Reverso en español
**Weather
Safety
checklist**
on page 32

SEVERE WEATHER GUIDE

HURRICANES

FLOODS

TORNADOES



**PREPARE YOUR HOME.
PROTECT YOUR FAMILY.**



Let's Build Something Together™

» PROTECT YOUR HOME AND FAMILY: THE LOWE'S SEVERE WEATHER GUIDE

It's never too early to prepare your family and your home for hurricanes, severe weather or natural disasters. Lowe's has created this "How-To" guide to help you protect your property and loved ones in advance of an emergency.

By following the prevention and preparedness tips in this guide, you'll help ensure that your family weathers the storm. Lowe's is a national partner with the American Red Cross in disaster preparation and relief. The Red Cross encourages individuals, families, communities and businesses to take action and reduce the effects of disasters and other emergencies.

You can support the American Red Cross in their efforts to assist the victims of thousands of disasters across the country each year by making a financial gift to the American Red Cross Disaster Relief Fund, which provides shelter, food, counseling and other assistance to those in need. Call 1-800-HELP-NOW (1-800-435-7669) or for instructions in Spanish, call 1-800-257-7575.



Helping customers feel safe and comfortable in their homes is our business. Let Lowe's help you get started on your storm readiness projects. From everyday low prices to expert assistance, you won't find a better home improvement resource.



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The purpose of this document is to provide homeowners with guidance on storm preparedness and reduce losses from storm damage. It contains suggestions and recommendations based on judgment, experience and third-party research and is intended to serve only as a guide. Lowe's, the authors and contributors and publishers disclaim all express and implied warranties and guarantees with respect to the information in the guide and assume no liability or responsibility with respect to the information.

Have a Plan

The time to prepare for severe weather is when there isn't a cloud in the sky. Take a few minutes and put together a family survival plan. It'll help keep your loved ones and your home safe.



HERE'S WHAT YOU CAN DO RIGHT NOW:

- ❑ **Familiarize yourself with the kinds of severe weather that can occur in your area.**
- ❑ **Create a Storm Readiness Kit.** (See pages 10 through 14.)
- ❑ **Gather your family and talk about where to go for safety.** Choose two locations: one outside the home but nearby; the other outside your neighborhood. Consult local emergency management officials for appropriate locations.
- ❑ **Choose one emergency contact person.** Call this out-of-town friend or relation if your family becomes separated.
- ❑ **Prepare your home.** Look for areas that are vulnerable to storm damage and make repairs and improvements. (See page 32 for specifics.)
- ❑ **Evaluate your homeowner's insurance.** Be sure you are covered for flood and storm surge, if appropriate.
- ❑ **Determine what you would do with your pets.** Most emergency shelters do not accept pets. See page 14 for suggestions.
- ❑ **Know how to turn off your water, electricity and gas.** Do not turn off the gas unless local officials instruct you to, however.
- ❑ **Visit redcross.org, fema.gov and Lowe.com** for a wealth of detailed information and specific recommendations for how to prepare for severe weather and other emergencies.

YOUR IMPORTANT PHONE NUMBERS:

Fill in the essential phone numbers for your family and keep this guide with your Storm Readiness Kit.

Emergency Contact Person _____

Local Emergency Management _____

Local Utility Companies _____

Police Department _____

Fire Department _____

Local American Red Cross _____

Advice from Lowe's .com

TO PREPARE FOR SEVERE WEATHER, there's no better place to get the up-to-date information you need than the Internet. And there's no better site to find that information than **Lowe's.com**. Take a few minutes to register when you first visit the site. This gives you access to free newsletters, Web videos, money-saving offers and more. While you're visiting, check out the information on its products and installation services, too.



FOR HOW-TO-DO-IT INFORMATION:

To find practical information on preparing your home and family for storms, type "severe weather" in the search box at the top of the home page at **Lowe's.com**; then click on "hurricane preparedness" in the Project Center column.

WHAT YOU'LL FIND:

- **Videos** that show how to protect your windows and roof, plus how to use generators safely, and much more.
- **Links** to helpful Web sites including the American Red Cross, the Home Safety Council and hurricanetrack.com where you can track storms and check weather conditions along the Atlantic coast and the Caribbean.
- **How-to articles** that show you how to prepare your home for severe storms and hurricanes, stay safe after a disaster, create a family disaster plan, and more.
- A free **16-page, downloadable booklet**, "Severe Weather and Natural Disaster Home Readiness Guide."
- A **shopping list** to help ensure you'll have all the supplies you need if severe weather strikes.

FOR HOW-TO-BUY-IT INFORMATION:

To find out more about the tools and materials you'll need before, during and after a storm, click on the "Building Products" and "Tools" areas on the top navigation bar.

WHAT YOU'LL FIND:

- A listing, by category, of **products** available at Lowe's along with costs and **online ordering** information.
- **Buying guides** to help you select the right materials and tools for your projects.
- Lists of **special values, special offers, rebates and downloadable rebate forms**.

FOR INSTALLATION SERVICE INFORMATION:

Click on the "Installation Services" box for a complete list of installation services offered by Lowe's.

WHAT YOU'LL FIND:

- A list of **products** in over 40 categories for which installation is available, along with a detailed breakdown of what services are and are not included.
- Information on how to **arrange for installation**.
- **Special installation offers, rebates and gift card information**.



Severe Weather: What to Do

HURRICANE

WATCH There is a threat of hurricane conditions within 24 to 36 hours.

- » Listen to radio or watch TV for weather updates.
- » Locate Storm Readiness Kit (see pages 11 through 13).
- » Gas up your vehicle, in case of an evacuation notice.
- » Fill gas containers for generator. Store in a safe place.
- » Bring in outdoor objects such as lawn furniture, toys and garden tools, and anchor objects that cannot be brought inside. (See page 19 for further details.)
- » Clear your yard of debris.
- » Review evacuation plans.
- » Install storm protection devices such as shutters. Brace entry doors and garage doors.
- » Moor boat securely or move it to a designated safe place. (See page 19.)

WARNING Hurricane conditions (winds of 74 miles per hour or greater, or dangerously high water and rough seas) are expected in 24 hours or less.

- » Listen to radio or watch TV for weather updates and official instructions.

- » Store water in clean bathtubs, jugs, bottles and cooking utensils. If water service is cut off you can use this stored water for hygiene.
- » Turn refrigerator and freezer to coldest settings to keep stored food fresh longer if power is knocked out. Open only when absolutely necessary and close quickly.
- » Stay inside, away from windows, skylights and glass doors.
- » Keep flashlights and extra batteries handy. Store in dry areas or containers.
- » If power is lost, unplug appliances, TVs, stereos and computers to reduce potential damage from a power surge when electricity is restored.
- » If in a mobile or manufactured home, check tie-downs and evacuate immediately.

EVACUATION If an evacuation notice is given for your area:

- » Gather insurance documents and prescription medications and add them to your Storm Kit.
- » Protect your home by unplugging appliances and turning off electricity and the main water valve. Do not turn off natural gas unless local officials advise it.
- » Tell someone outside of the storm area where you are going and the route you are likely to take.
- » If time permits, and you live in an identified surge zone, elevate furniture to protect it from flooding, or better yet, move it to a higher floor.
- » Lock up your home, grab your Storm Kit and Emergency Car Kit and evacuate.

Hurricanes can change direction and intensity very quickly. Stay tuned to local radio and TV stations for updates.



TORNADO

WATCH Weather conditions are favorable for the development of severe thunderstorms that are capable of producing tornadoes.

- » Secure or bring indoors any outdoor furniture and other belongings that could become airborne hazards.
- » Go indoors and listen to radio or watch TV for weather updates.

WARNING There is immediate danger from a tornado or severe thunderstorm.

- » Stay away from windows.
- » Take cover immediately. Go to the basement or the center of the lowest level of your home. Bring your Storm Readiness Kit with you or it may be blown away by high winds. If no basement is available, get underneath something sturdy, like a workbench or heavy table, crouch down and cover your head. Under a stairway is also good.
- » Cover yourself with some sort of thick padding (mattress, blankets, etc.), to protect against falling debris in case the roof and ceiling fail.
- » Bring a radio with you to your place of shelter so you'll know when the danger has passed.
- » Know where very heavy objects rest on the floor above you (pianos, refrigerators, waterbeds, etc.) and do not take shelter under them.
- » If you live in a mobile home, evacuate immediately and find shelter, ideally in your community tornado shelter.
- » If you are caught outdoors and no shelter is available, crawl into a ditch, depression or culvert and cover yourself, protecting your head. Stay away from trees and cars, which may be blown on top of you.
- » If you're in a vehicle, and the traffic is light, you may be able to drive out of the path of the tornado by driving at right angles to it. Otherwise, park your car quickly and safely, off the road. However tempting, don't park under bridges, which can cause a traffic danger while giving you little protection.

For additional information, visit spc.noaa.gov and search on "tornado safety."

Flying and falling debris is the biggest danger. Have mattresses, sleeping bags or other padding available in your storm shelter.



FLOOD

WATCH Weather conditions favor the occurrence of a flood.

- » Listen to radio or watch TV for information on conditions.
- » Move furniture and valuables, including important legal papers, to higher floors.
- » Gas up your vehicle, in case of an evacuation notice.
- » Secure items that may be washed away.

WARNING A hazardous flooding event is occurring or is imminent.

- » Locate Storm Readiness Kit.
- » Fill sinks, tubs and buckets with water. This water can be used for hygiene.
- » If you have a well, seal it to keep out silt and debris.
- » Shut off electricity at your main panel, if the floor beneath the panel is dry.
- » Attach rigid foam insulation or plastic sheeting around the outside first floor walls. Water will get in, but most of the silt will be kept out.
- » Be ready to leave on short notice if evacuation is required.

EVACUATION If the notice to evacuate is given, leave as soon as possible.

- » Gather all prescription medications and add them to your Storm Kit.
- » Let an emergency contact person know you're leaving and what route you'll take.
- » Move to higher ground away from rivers, streams, creeks and storm drains.
- » Do not drive around barricades or through flooded areas.
- » If your vehicle stalls in rapidly rising water, abandon it immediately and climb to higher ground.

For additional information, visit redcross.org and consult your local authorities. Flood conditions vary enormously depending on your location.

TURN AROUND DON'T DROWN

Each year, flooding claims more lives than any other kind of severe weather. The National Weather Service has devised signs with the slogan "Turn Around Don't Drown" to warn people not to walk or drive through flood waters. Moving water 6 inches deep can knock over an adult, and water less than 1 foot deep can wash away a truck. It's easy to underestimate the power of floodwater. Play it safe: Turn Around Don't Drown.



3 Storm Kits

Every family should have a Storm Readiness Kit. Here are suggestions for how to make three kits: basic, upgraded and ultimate. Make sure all family members know where the kit is stored.

BASIC KIT

This storm kit will get your family through **48 hours without electricity** and basic services and help you deal with storm-related emergencies.



UPGRADED KIT

If you'd like to feel more comfortable about your ability to survive a severe storm and you have the resources, consider an upgrade of the basic storm kit. The upgraded kit will help you through **three to four days without electricity** and other services.



ULTIMATE KIT

If you live in a remote area, care for an elderly or physically challenged child or adult, or if you simply want maximum preparedness, this is the kit for you. It will help you through **one week without electricity** and basic services, or through catastrophic conditions.



Note: The Storm Readiness Kits described here are suggestions only. Make sure your kits are suited to your own needs, and consult local officials about specific recommendations for your area. The length of time you can be comfortable without power is an estimate only.

THE IMPORTANCE OF WATER



If your home is hit by severe weather, your water supply could be cut off or contaminated. An adequate supply of drinking water is perhaps the **most** important part of your Storm Readiness Kit.

Allow one gallon per person per day.

Allow one gallon per person per day. A three-day supply is a good minimum. If you have been warned of severe weather and have sufficient time, fill sinks, tubs and buckets with water.

This water can be used for hygiene and the water in your kit can be saved for consumption.

Ceramic water filters or purification tablets, such as those used by campers, are also great for emergency water purification.

BASIC KIT: 48 hours



FIND AT LOWE'S

- Plastic container with a tight-fitting lid or a waterproof duffel bag** This will hold your kit.
- General First Aid Kit** Bandages, antiseptic wipes, aspirin and non-aspirin pain relievers, gauze, small scissors, antacid, laxatives, anti-diarrhea medication. Many preassembled kits are available.
- Large tarp**
- Rope or tarp tiedowns**
- Flashlights** One per family member is best, plus extra batteries.
- Battery-operated radio and extra batteries**
- Plastic garbage bags**
- Extra propane for gas grill** or other cooking device
- Roll of plastic sheeting**
- Light sticks**
- This Storm Guide**, with important phone numbers (page 4) filled in.
- Blankets** One per family member. Sleeping bags are a good alternative.
- Whistles** One per family member, to help locate each other.
- Important papers** A copy of your insurance policies, health insurance cards, your IDs, government benefit eligibility documents, etc.
- Cash** Include small bills.
- Adapter for car cigarette lighter to recharge cell phone**
- Map showing shelter locations**
- Personal items** Toilet tissue, toothbrushes, toothpaste and denture needs, feminine hygiene items, paper towels, hand wipes. If you have a baby in the house, include a supply of diapers, wipes, formula, and any other special needs.
- Paper and pencils**
- Non-electric can opener**
- Food** Two days worth of packaged meats, fruit and vegetables, canned or bottled juice, energy/high-protein bars. Baby food and pet food, if necessary. Check dates and replace expired items every six months.
- Water** See "The Importance of Water" at left. Have a three-day supply. Replace water supply every 12 months.
- Prescription medications and other medical needs** See page 13.

NO POWER? NO PROBLEM!

Sure, you could dine on cold baked beans and water when your power goes out, but there is something better. Being able to cook when there's no electricity may not be a life-saver, but it sure is convenient. If your kitchen range is electric, consider having a backup cooking system, either a spare tank of propane for your outdoor gas grill, or a basic camping stove. Use them only outdoors.

UPGRADED KIT: 3-4 days



FIND AT LOWE'S

INCLUDE ALL THE ITEMS IN THE BASIC KIT

- Plastic container with a tight-fitting lid or a waterproof duffel bag
- General First Aid Kit
- Large tarp
- Rope or tarp tiedowns
- This Storm Guide, with important phone numbers (page 4) filled in.
- Light sticks
- Flashlights
- Battery-operated radio and extra batteries
- Plastic garbage bags
- Extra propane for gas grill or other cooking device
- Roll of plastic sheeting

IN ADDITION, ADD THE FOLLOWING ITEMS:

- Pliers or Multi-tool
- Duct tape and scissors
- Work gloves
- Safety glasses
- Water jugs For additional drinking/hygiene water.
- Wrench If needed to shut off water or gas.

- Blankets
- Whistles
- This Storm Guide, with important phone numbers (page 4) filled in
- Important papers
- Cash
- Adapter for car cigarette lighter to recharge cell phone
- Map showing shelter locations
- Personal items
- Paper and pencils
- Non-electric can opener
- Food
- Water
- Prescription medications and other medical needs
- Clothing At least one complete change of clothes per family member. Remember to keep current with the temperature conditions.
- Additional Toiletries Shampoo, soap, razors, vitamins, contact lens supplies, sun block and insect repellent.
- Rain gear For at least one family member.
- Books and games For children and adults.
- Additional food For two additional days.
- Additional water For two additional days.

ULTIMATE KIT: 1 week or more



FIND AT LOWE'S

INCLUDE ALL THE ITEMS IN THE UPGRADED KIT

- Plastic container with a tight-fitting lid or a waterproof duffel bag
- General First Aid Kit
- Large tarp
- Rope or tarp tiedowns
- Flashlights
- Battery-operated radio and extra batteries
- Plastic garbage bags
- This Storm Guide, with important phone numbers (page 4) filled in.
- Roll of plastic sheeting
- Extra propane for gas grill or other cooking device
- Pliers or Multi-tool
- Light sticks
- Duct tape and scissors
- Work gloves
- Safety glasses
- Water jugs For additional drinking/hygiene water.
- Wrench If needed to shut off water or gas.

IN ADDITION, ADD THE FOLLOWING ITEMS:

- Fire extinguisher
- Dust masks One per person.
- Additional tarp and rope
- Paper cups, plates and plasticware
- Disinfectant (bleach)
- Ceramic water filter or water purifying chemicals
- Pillows, earplugs and eye covers that may help you sleep
- Matches in waterproof container
- Portable air cleaner with HEPA filter
- Signal flare

PRESCRIPTION MEDICATIONS

It is very important that your family has access to all prescription medications and other medical needs in the aftermath of severe weather. It may not be practical to keep a supply of medications in your Storm Readiness Kit. To ensure that you don't forget to add them, write "Prescriptions" in large letters on the outside of the kit. Assign a family member the task of gathering up all prescriptions and other medical needs, such as insulin, and making sure these important items are added to the kit.



EMERGENCY CAR KIT

Having an emergency kit in your car is smart. Even in mild weather, you can get stranded or stuck, and when a storm hits, your kit could be a life-saver.

FIND AT LOWE'S

- Duct tape**
- Flashlight and extra batteries**
- Fire extinguisher** (2.5-lb. A-B-C type)
- First Aid Kit and manual**
- Small shovel**
- Safety flare**
- WD-40**
- Light sticks**
- Tools** Wrenches, screwdrivers, pliers, socket wrenches
- Fluorescent safety vest**
- Brightly colored cloth or emergency sign** Can be used to signal other motorists if you're in trouble.
- Matches in waterproof container**
- Current map of your region**
- Food and bottled water**
- Extra warm clothes and blankets**
- Extra fuses**
- Jumper cables**
- Kitty litter, salt or sand for traction**
- Tire repair kit and pump**
- Windshield scraper**

PROTECT YOUR PETS

BEFORE STORM SEASON

- » Find local shelters that allow pets. American Red Cross shelters only accept service animals, but some municipalities have special shelters for people with pets. Contact them about pre-registering and any special requirements. Leaving your pet alone in the house should be the very last resort. Your local Humane Society, ASPCA or your vet will have information on boarding and other resources for pets in your area.
- » You may want to have a microchip implanted in your pet. Most animal shelters routinely scan lost animals.
- » Keep a good picture of your pet so you can post it if the pet is lost.
- » If you plan to leave the area before the storm, search the Web for listings of pet-friendly motels.
- » Make arrangements well in advance for exotic pets like reptiles, birds or rare fish.

WHEN A STORM HITS

- » Bring your pets inside before the storm and keep them in the safe part of the house with the rest of your family.
- » Keep a leash close at hand for your dog, and keep cats and small mammals in cages or carriers to keep them from running off and hiding.
- » Don't let your animals drink or swim in floodwater.
- » If you're evacuating, make sure tags and collars are securely attached, and write your cell phone or current contact numbers on the collars.

ESSENTIAL ITEMS FOR PETS

- Cage or carrying case**
- Food and water for a week**
- Collar with ID and vaccination tags**
- Litter, newspaper or bedding**
- Paper towels and plastic bags for cleanups**
- Toys, chewies and blankets**
- A recent picture of the pet**
- Medicines and first aid**
- A copy of immunization records, if your pet needs to go to a boarding facility**

Safety Tips

WATER AND ELECTRICITY DON'T MIX

- » If you're wet, barefoot or standing in water, don't use anything electric or try to plug in power cords.
- » If you're working outdoors or in an area with any dampness, use GFCI-protected outlets or extension cords.
- » Stay away from downed power lines.
- » Don't walk in a flooded basement if the power is still on or could go on.
- » Turn off the hot water heater (electric or gas) if there is any chance of flood.



Turn off your gas only if instructed to or if you smell gas. Only a pro should turn the gas back on after the storm.

FIRES

- » Avoid using candles. If a fire starts, there may be no phone service, the fire department may not be able to get to you, and fire hydrants may not be working.
- » Don't ever use a charcoal or propane grill in the house.
- » Turn off propane or natural gas to the house only if instructed to do so by authorities or if you smell gas. Let a pro turn the gas back on after the storm.
- » Don't light matches until you are sure that there is no damage to your gas lines.



FLOODS

- » Don't walk through fast-moving water; as little as 6 inches can knock you off your feet.
- » If your car stalls in rising water, get out and get to high ground.
- » Don't walk through a flooded area with bare feet or any open cuts.
- » Don't let your pets drink or swim in floodwater.

Emergency Power

IT TAKES JUST ONE downed power pole to interrupt the fragile chain of electricity connecting your house to the power station. A home generator can keep your refrigerator running, plus lights, microwave, air conditioners, TVs, computers and cell-phone chargers—even the washer and dryer. And in the aftermath of a storm, it will allow you to run circular saws and other power equipment. It can make a huge improvement in your ability to comfortably weather a power outage, and quickly recover from a storm.

There are two basic types of generators to consider: stationary and portable.



STATIONARY SYSTEMS

In these systems, the generator is connected indirectly to a home's wiring system. They are most suitable for people who regularly experience long power outages or who have special requirements for continuous power. Stationary systems typically run off of natural or propane gas and have a "transfer switch" that allows you to select the equipment you want powered and prevents the generator from feeding power back into the utility supply system, endangering utility line workers. The whole system generally costs \$3,000 or more and can provide 10 to 30 kilowatts or more.

In most areas, installing a back-up system requires getting a permit and having the installation inspected by an electrical inspector. Unless you are an extremely electrical-savvy do-it-yourselfer, we recommend the system be installed by a licensed electrician.

PORTABLE GENERATORS

These units run off a small gasoline engine, and can power a limited number of lights and appliances via extension cords. They can be stored out of the way and rolled to wherever you need them, and are frequently used to provide emergency power during and after a storm. A portable generator for this use can typically run for 8 to 12 hours on a tank of gas and provide 2 to 8 kilowatts or more. Prices start at \$500.

GENERATOR SAFETY

Whichever kind of generator you select, think safety. Generators produce carbon monoxide, a colorless, odorless and deadly gas. According to the Consumer Products Safety Commission, 28 people died from carbon monoxide poisoning associated with portable generators after Hurricane Katrina. However, you can use generators safely. Here's how:

- » Always use generators OUTDOORS, away from doors, windows and vents; never in homes, garages, basements or other enclosed areas, even with plenty of ventilation.
- » If you use a generator, even outdoors, install battery-operated carbon monoxide alarms in your home and test them based on manufacturer's directions.
- » Keep the generator dry, and dry your hands before touching the generator.
- » With portable generators, use heavy-duty, outdoor-rated, 3-prong extension cords that are in good condition. Use GFCI-cords for maximum safety.
- » Before refueling the generator, turn it off and let it cool. Store fuel outside in properly labeled, approved containers away from any fuel-burning appliances.
- » When using the generator, start your high-wattage devices first, one at a time, then proceed to lower-wattage devices.

WHAT SIZE IS RIGHT FOR YOU?

Here's how to figure out the generator capacity you need: Determine the electrical requirements of the devices you'd like to run, and add them up. For example, if you wanted to run a small microwave (750 watts), radio (200 watts), and four lights (300 watts), you'd require a minimum of 1,250 watts. However, devices with motors can require much more power to start them than they use running. For example, a refrigerator that needs 1,200 watts to run might require up to 3,000 watts to start. For running wattage and startup wattage for various electrical devices, visit Lowe's.com.

Here is a list of what you can expect from three typical sizes of generators.

A 3,550-WATT GENERATOR CAN EASILY POWER:

- » Refrigerator
- » Air conditioner (10,000 BTU)
- » Television
- » 4 Lights (75 watt)

A 5,000-WATT GENERATOR CAN EASILY POWER:

- » Refrigerator
- » Air conditioner (10,000 BTU)
- » Television
- » 4 Lights (75 watt)
- » Microwave (1,000 watt)
- » Deep freezer

AN 8,000-WATT GENERATOR CAN EASILY POWER:

- » Refrigerator
- » Air conditioner (10,000 BTU)
- » Television
- » 8 Lights (75 watt)
- » Microwave (1,000 watt)
- » Deep freezer
- » 1/2-hp well pump
- » Electric stove
- » Security system
- » Garage door opener



PORTABLE GENERATOR,
5,000 WATT CAPACITY



STATIONARY GENERATOR
WITH TRANSFER SWITCH,
9,000 TO 10,000 WATT CAPACITY

FIND AT LOWE'S

PORTABLE GENERATORS

CARBON MONOXIDE DETECTORS

Essential protection when portable generators are used. Models starting at \$20 to protect different rooms in your house.

STATIONARY GENERATORS

GAS CANS

A typical generator has a 3 to 8 gallon tank, and will run for 8 to 12 hours per fill. Be sure to have enough gas on hand.

HEAVY-DUTY EXTENSION CORDS

12- or 14-gauge grounded (3-prong) extension cords. GFCI extension cords.

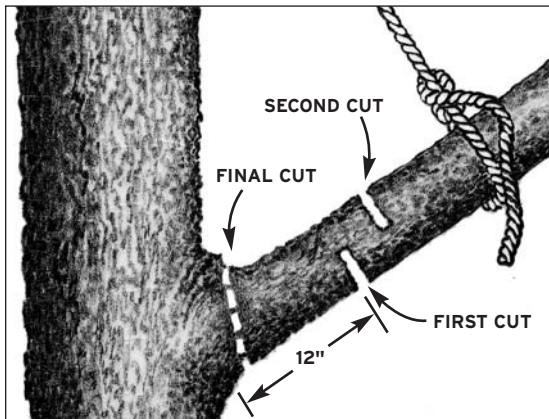
Prepare Your Yard

YOUR YARD TAKES a beating when severe weather roars through. Take these steps to prepare.

- » Prune trees to remove dead branches that could snap and cause personal injury or property damage. Remove any branches that overhang or touch the house. Pruning reduces wind resistance in trees, which makes them less likely to be blown down.
- » Prune trees using the correct three-step technique (shown below).
- » Remove dead trees.
- » Establish a natural windbreak of hardy, tall trees around your property. Be sure to keep the trees trimmed and remove any dead limbs.
- » Keep poles, shovels, bicycles and anything else that could become a hazardous flying object stored away.
- » Use soft mulch materials, like shredded bark, which does less damage in a storm than loose stones or gravel.
- » If any of your trees are near power lines, hire a professional tree trimmer or have the utility company do the work.



3 STEPS for proper pruning



Step 1

Make an upward cut partway through the branch 12 inches from the trunk.

Step 2

Make a downward cut all the way through the branch 1 inch past the first cut.

Step 3

Remove the remaining nub near the trunk with a final downward cut.

BUY IT SMART

PROPER PRUNING TOOLS

Using the right tools makes pruning less time consuming, safer and easier on the trees. For branches up to 1/2 inch thick, use pruning shears. If you have to twist and strain to cut through the branch, you should be using loppers. Loppers can cut branches up to 2 inches thick. If you have larger branches to remove, use a pruning saw. Never use a conventional shop saw. For high branches, buy or rent a pole pruner.



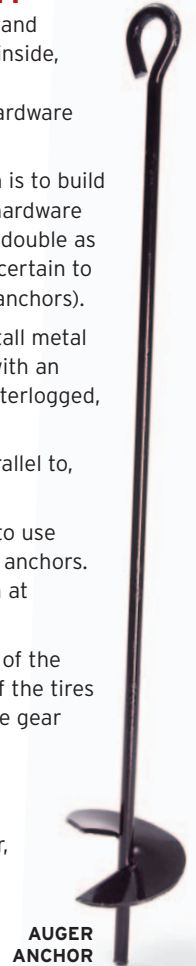
Tie It Down

YOU'VE PROBABLY SEEN THE PHOTOS of plastic drinking straws driven into telephone poles during a hurricane. If high winds can do that to a straw, think of the damage they could do with a lawn chair or grill cover. When severe storms are brewing, it's critical to batten down the hatches.

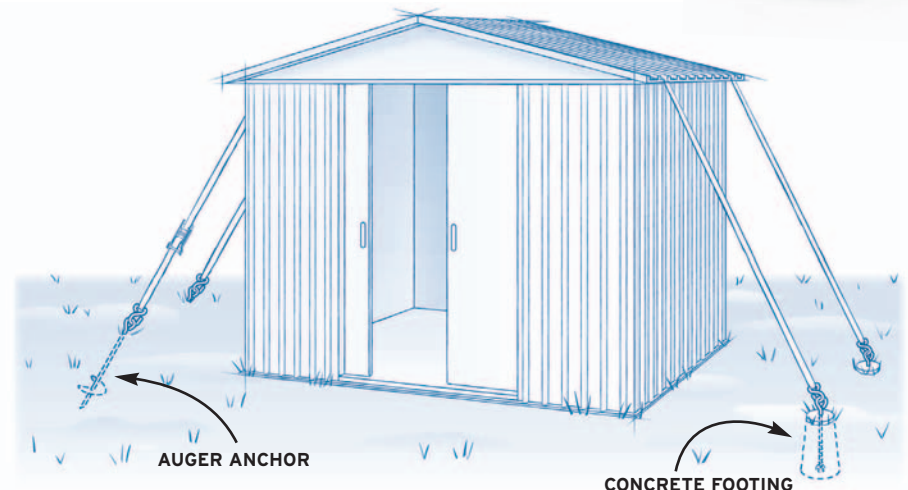
WHAT TO TIE DOWN AND HOW TO DO IT

Smaller items like lawn chairs, toys, grills, garden ornaments and plants should be brought inside. For items too large to bring inside, here are a few guidelines:

- » The best anchors are eyebolts or another type of sturdy hardware deeply embedded in concrete footings or pads.
- » In areas where high winds are common, the ideal approach is to build a "tiedown area." These are areas made of concrete with hardware anchored in place for securing objects. Tiedown areas can double as patios, parking pads for boats or sports courts (just make certain to take precautions so people don't trip over any protruding anchors).
- » If you don't have concrete-anchored tiedowns, you can install metal auger anchors. These devices look like gigantic eye bolts with an auger on one end. Bear in mind, if the ground becomes waterlogged, strong winds can yank these anchors out of the ground.
- » Auger anchors work best when installed in line with, or parallel to, the angle of the rope or cable being secured to them.
- » Whatever type of in-ground anchor you use, make certain to use heavy-duty straps, cable or rope for securing things to the anchors. Straps with built-in ratchets, found in the hardware section at Lowe's, are sturdy, easy to store and easy to tighten.
- » Strap boats firmly to their trailers, then secure the tongue of the trailer to a rock-solid object, if possible. Let some air out of the tires and pour water inside the boat for weight. Remove all loose gear and electronics.
- » Mobile and manufactured homes and trailers should be firmly secured in place to solid in-ground anchors. Bear in mind, experts recommend moving to a more secure shelter, when available.



AUGER ANCHOR



Shutters for Doors and Windows

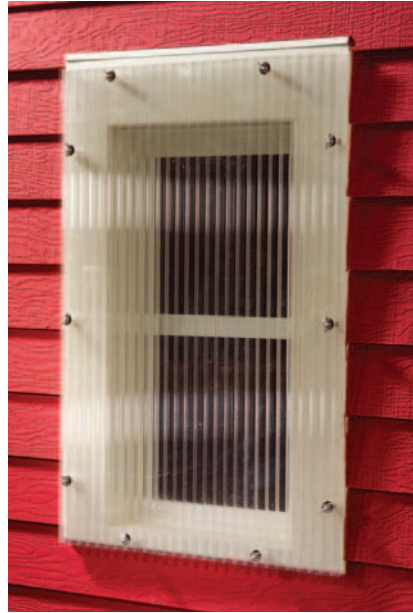
Shutters are your best defense against high winds and flying debris. Here's a quick guide.

Removable shutters or panels attached to permanently installed bolts are a durable and economical solution that works with most windows and doors. After the first use, when the shutters are cut to size and bolts are set, these types of shutters can be installed and removed very quickly.



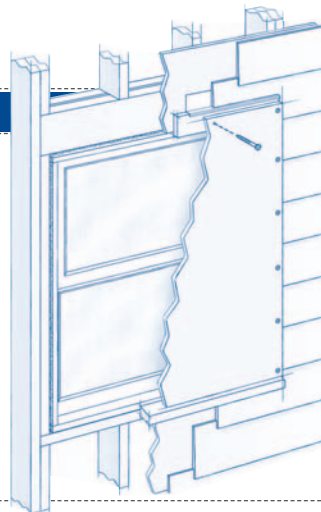
POLYPROPYLENE PANELS

Tough, corrugated 4-ft. x 8-ft. polypropylene sheets are a quarter the weight of 5/8-in. plywood but just as tough. They're cut to size with a circular saw and installed with bolts and wing nuts. They allow 70 percent of the light through. **Cost:** Less than \$700 for a small house (10 average windows and one large door), but some waste depending on window sizes.



POLYCARBONATE PANELS

These 4-ft. x 8-ft. panels are similar to polypropylene, but much clearer. Objects and movement can be seen through them, and they let plenty of light into the house. One side is UV resistant so panels won't yellow in the sunlight. **Cost:** Around \$950 for a small house.



DO IT SMART

Shutters need to be firmly attached to the house to work well. Always bolt or screw shutters to the framing. You can find framing locations by using a stud finder on the interior wall.

Remember that skylights and vents also need to be covered. Accessories for building up shutters over projecting vents or trim details are available. Don't use nails to attach shutters. They won't hold adequately and will damage siding. Check with local officials for guidelines on temporary shutter installation.



ALUMINUM CORRUGATED SHUTTERS

Aluminum panels come in one ft. wide, easy-to-handle sections that fit into permanently installed top and bottom tracks (side-mounting is also possible). The tracks can be painted to match the house, and built-out tracks are available to span existing window sills and trim.

Cost: Around \$1,125 for a small house.



POLYCARBONATE CORRUGATED SHUTTERS

Like aluminum shutters, these come in narrow sections and are installed on top and bottom tracks. The polycarbonate is almost as clear as window glass. The panels are light and easy to handle and are available in a wide range of sizes.

Cost: Around \$1,800 for a small house.



FABRIC PANELS

Fabric-shield panels are made of strong, PVC-coated fabric. Grommets are installed after the fabric is cut to size, then the panels are fastened in place with permanent bolts and wing nuts. The panels allow some light through.

Cost: Around \$1,100 for a small house.

TEMPORARY PLYWOOD SHUTTERS

Plywood shutters are inexpensive, but difficult to install on 2nd story windows and large openings. Siding repairs may be needed to patch screw holes when these shutters are removed.

FEMA recommends using minimum 5/8-in. plywood, overlapping the windows by at least 5-in., and screwing into the framing every 8 to 12 in.

FIND AT LOWE'S

Metal shutters, fabric panels and several styles of plastic shutters are available at selected Lowe's stores. See your local Lowe's for more information.

Hurricane shutter installation videos can be viewed at [Lowe's.com/hurricane](https://www.lowes.com/hurricane).

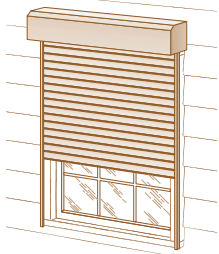
Hurricane shutter installation clinics are available at selected Lowe's stores. See your local Lowe's for more information.

Specifications for wood shutters are available at [Lowe's.com/hurricane](https://www.lowes.com/hurricane).

Shutters for Doors and Windows

PERMANENT SHUTTERS AND SCREENS

Permanently installed shutters are the most expensive option, but are convenient once they're in place, and may qualify you for a discount on homeowner's insurance.

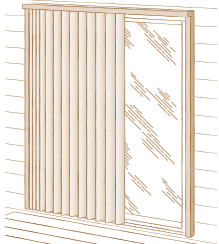


ROLL-DOWN SHUTTERS

Housing and track are bolted to framing. Shutters are hidden inside housing when not in use.

Pros: You can add an electric motor with battery backup and close these shutters automatically.

Cons: Initial expense is high (\$26 to \$40 sq. ft.). Lets in very little light.

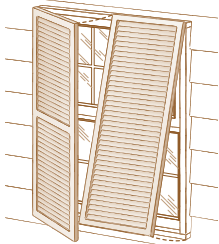


ACCORDION SHUTTERS

Housing and tracks are bolted to framing.

Pros: Fits wide or curved openings. Less expensive than roll-down shutters (\$14 to \$25 sq. ft.).

Cons: Side-mounted housing can be unattractive. Must be closed from outside with casement or awning windows.

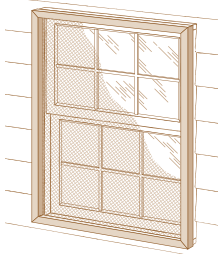


COLONIAL OR BAHAMA SHUTTERS

Hinges are bolted to framing - on the side of the window for Colonial or above the window for Bahama.

Pros: Attractive, good ventilation. Less expensive than roll-downs (\$18 to \$35 sq. ft.). Available in a wide variety of colors.

Cons: Only for windows. May not be code-approved in some areas.

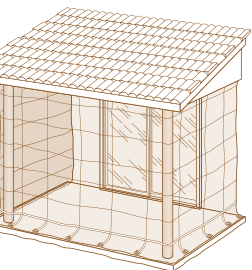


STEEL MESH SCREENING

Stainless steel mesh screens on a metal frame are permanently mounted in window opening. Screen doors are also available.

Pros: Similar to regular window screen, and it's always in place. Let's light and air through. Increases security.

Cons: Expensive (\$35 sq. ft.). More complicated installation with out-swinging windows. Flexible, so it needs to be spaced 3-in. away from glass.



REMOVABLE FABRIC SCREENS

Flexible polypropylene mesh screening is fastened to permanently mounted bolts or tracks around opening.

Pros: Lets light and air through. Works well for porches, balconies, lanais and other large or irregular openings. Lightweight and easy to store.

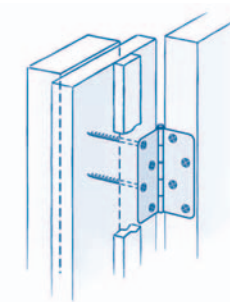
Cons: Limited availability and usually installed only by authorized dealers (\$12 to \$14 sq. ft.). Needs to be spaced away from glass.

A NOTE ABOUT WINDOW FILM

Some companies are marketing a glue-on plastic safety film as protection against hurricane damage. According to the International Window Film Association, this is misleading. Window film applied to existing windows may keep glass fragments together, but does not strengthen the edges of the glass or the window frame, and because of this, windows can still be blown out.

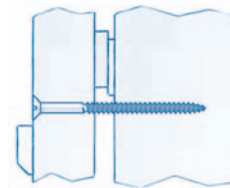
Strengthen Doors

In high winds, doors are a weak point, especially their frames and hardware. Here's how to reinforce them.



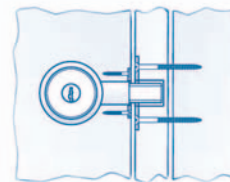
1. Strengthen hinges.

Replace the inner two screws on the jamb side of each hinge with 3-inch screws driven into the framing.

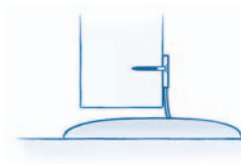
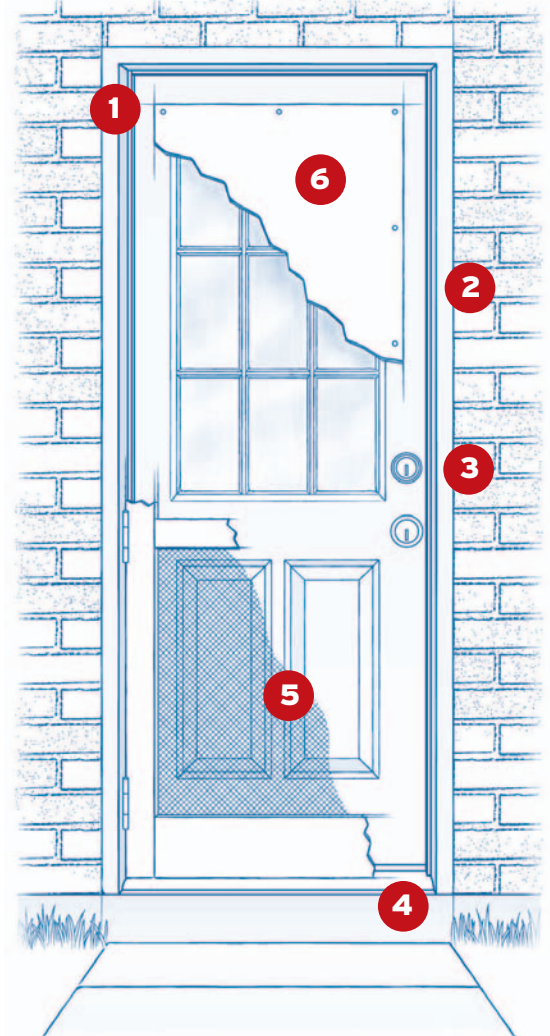


2. Secure door frames to studs with 3-inch screws.

For even more protection, take off the interior trim and fill the cavity between the frame and studs with minimally expanding foam.



3. Make sure the dead bolt fully extends into the door frame. Screw the strike plate to the framing with 3-inch screws.



4. Use a door sweep or adjustable threshold to keep water from blowing in underneath. Seal gaps around the sides with weatherstripping.

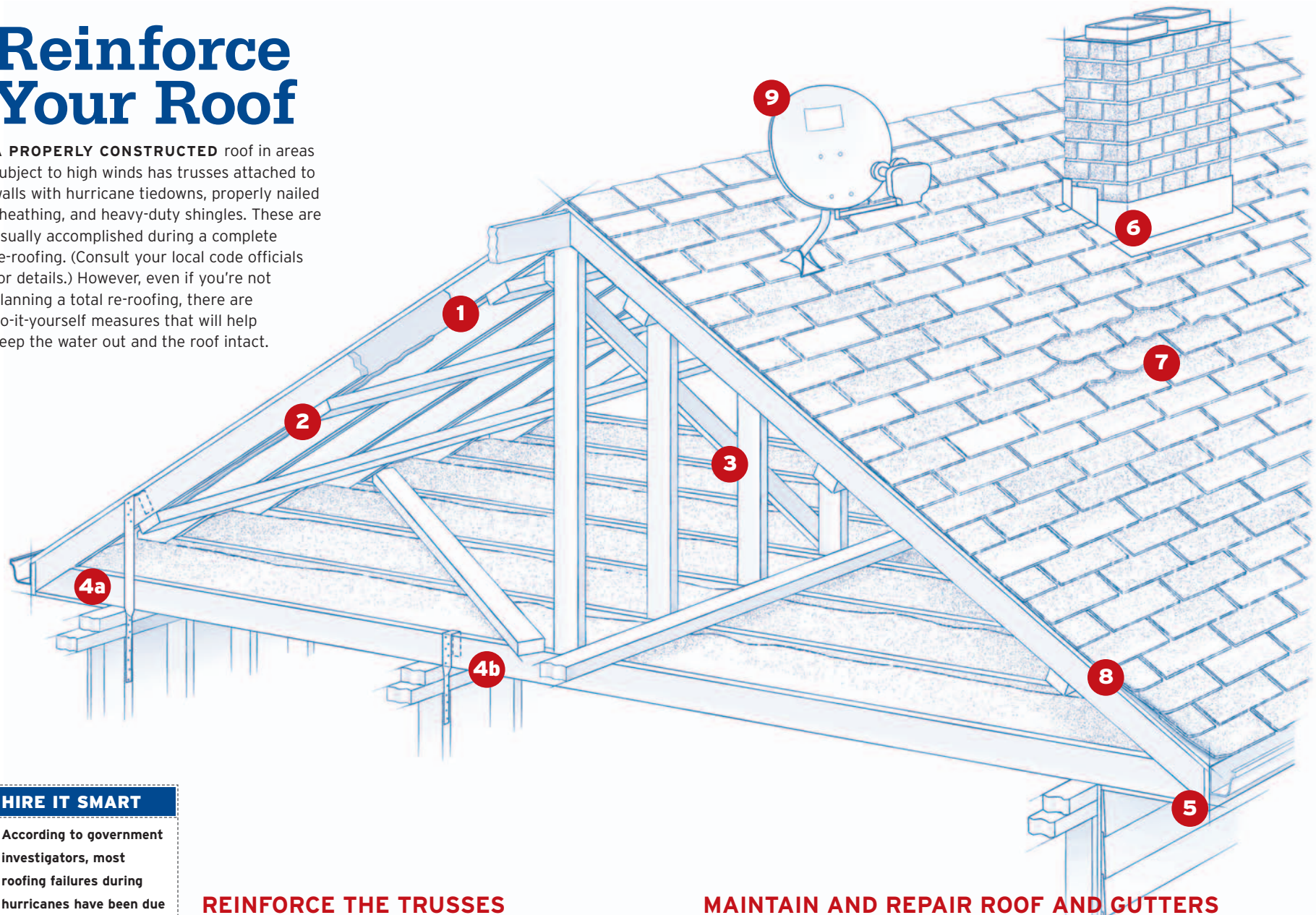
5. Remove screen or storm doors to protect them from damage.

6. Cover glass with 5/8-inch plywood or metal panels. Full view, patio or French doors should be protected with shutters or panels.

For double door or French doors, add heavy-duty barrel bolts (available at Lowe's) at the top and bottom of the fixed door to help prevent the door from being blown in. Make sure screws are long enough to go 1 inch or more into the framing.

Reinforce Your Roof

A PROPERLY CONSTRUCTED roof in areas subject to high winds has trusses attached to walls with hurricane tiedowns, properly nailed sheathing, and heavy-duty shingles. These are usually accomplished during a complete re-roofing. (Consult your local code officials for details.) However, even if you're not planning a total re-roofing, there are do-it-yourself measures that will help keep the water out and the roof intact.



HIRE IT SMART

According to government investigators, most roofing failures during hurricanes have been due to poorly installed shingles. Shingles that had been stapled instead of nailed, nailed in the wrong spots, attached with only two nails, or applied by a shortcut method called "racking" (where shingles are applied in a straight line up the roof instead of horizontally or diagonally) were more likely to fail. Roofs with shingles that had been correctly installed held up substantially better.

REINFORCE THE TRUSSES

- 1. Apply construction adhesive** along the edge of the truss to strengthen the connection to the plywood roof deck. Apply the adhesive as you would caulk.
- 2. Stiffen trusses** by joining them with 2x4s running from one end of the house to the other.
- 3. Brace gable ends** with diagonal 2x4s.

4a. and 4b. Connect trusses to walls with hurricane tiedowns. Strap down trusses wherever you can get access, either from the attic, behind soffit panels or through interior walls. Attach straps at inside walls if nothing else is accessible.

NOTE: Installing metal tie-downs in an existing roof can be very difficult and is best done during a complete roof replacement.

MAINTAIN AND REPAIR ROOF AND GUTTERS

- 5. Clean out gutters** and downspouts so water can quickly drain off the roof.
- 6. Repair and caulk flashing** at roof penetrations, dormer walls, skylights and chimneys—anywhere water could get in.
- 7. Check for loose or damaged shingles**, especially at the eaves, and glue down any that need it with dabs of roofing cement along the front edge.

- 8. If you can lift shingles or underlayment** along gutters, eaves or valleys, squirt a line of roofing cement underneath.
- 9. Remove TV or satellite antennas.** Remove roof turbines and fasten galvanized flashing with screws to cover the hole.

NOTE: Metal and clay tile roofs should be inspected and repaired by pros.

FIND AT LOWE'S

Construction adhesive, 2x4s, hurricane tie-downs, caulk, roofing cement
New roof installation is also available.

Strengthen Your Garage Door

FEW OLDER GARAGE doors are built and installed well enough to resist high winds and flying debris. When weak doors fail, a domino effect can take place, leading to failure of the garage walls and roof.

The best way to deal with this problem is to replace the door with a new, code-approved model (see page 31). In lieu of replacement, there are several ways to strengthen an existing door. However, if your door is made of lightweight materials, replacement is your best option.

Option 1

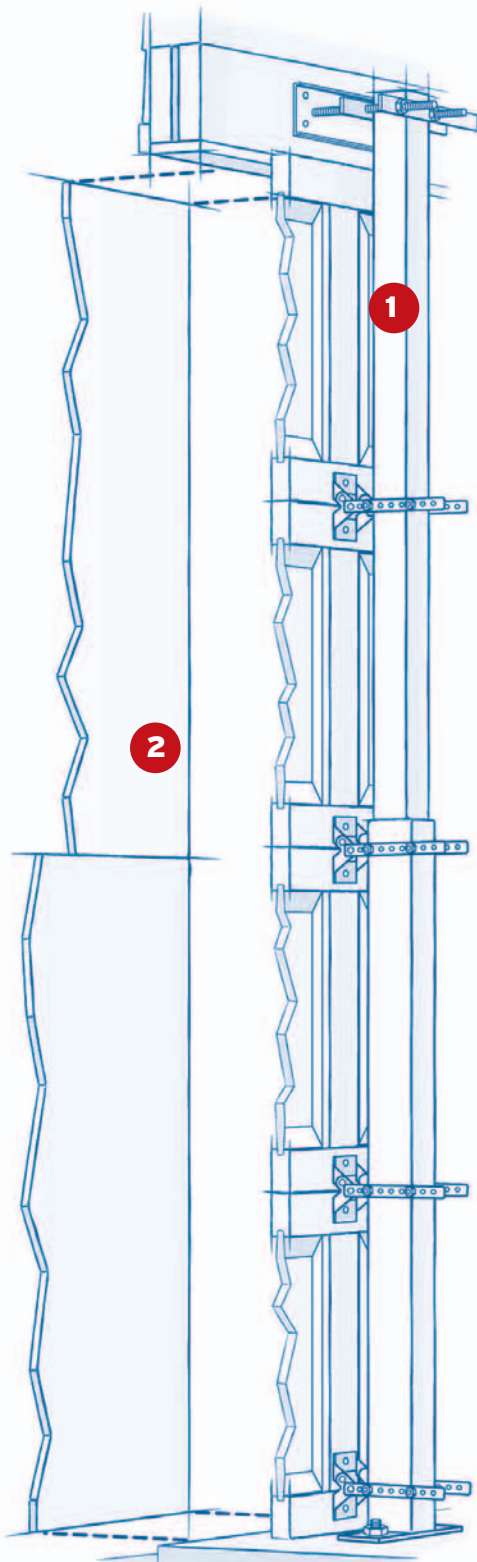
Install a code-approved metal post system which allows you to quickly reinforce your garage door to keep it from blowing in or out (about \$150 per brace, use two for a double garage door). Make sure the track is securely fastened to the framing, and brace the framing.

Option 2

Cover the outside of the door with metal panels, fabric screen or 5/8-inch plywood installed with additional bracing (2x4s at each joint and 2 feet on center).

Some doors can be strengthened with retrofit kits that add vertical and horizontal reinforcement and beef up tracks and hardware. However, reinforcing adds additional weight to the door, and the springs that raise and lower the door must be adjusted. Spring adjustment is a job for a professional.

Reinforcing an older door may help keep the door from being blown in, but will not give it any additional protection against dents and punctures.

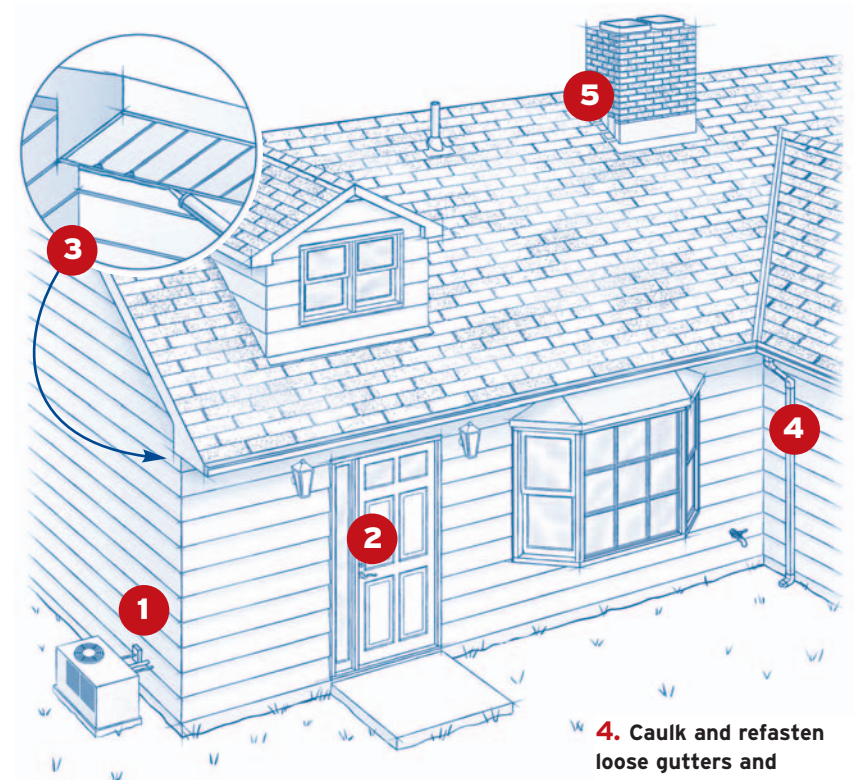


Caulk and Seal

Caulking is a quick and inexpensive way to keep rainwater and storm surge out of your house and strengthen vulnerable areas from high winds.

1. Seal out storm surge and floodwater. Caulk wiring and plumbing penetrations, such as lights and outlets, faucets, gas lines and air conditioners, especially near ground level. Large holes can be plugged with electrician's putty.

2. Keep out wind-driven rain. Caulk around all windows and doors.



3. Protect metal soffits from high winds. Caulk all edges to the house and the fascia (outside of eaves). Renail and caulk any loose pieces.

4. Caulk and refasten loose gutters and downspouts. Remove and store downspout sections that could be blown away.

5. Keep out heavy rain. Caulk around chimneys, skylights and other roof penetrations.

CAULKING TIPS

Acrylic latex caulk works well for most areas and can be painted to match siding and trim. Apply it with a caulk gun, then wipe it smooth within a minute or two with your finger or a damp rag or sponge.

Silicone is a tough, durable caulk, but color options are limited and it can't be painted unless you buy a special type. Smooth joints immediately with a cloth, caulk-smoothing tool or moistened finger.

Urethane caulk also works well, but is messy to work with.

Butyl rubber caulk is the best choice for gutters and downspouts.

Before caulking, clean off dirt and loose paint and fill large voids with foam backer rod.

Get Your Home Ready for Floods



YOU DON'T NEED TO LIVE in the Mississippi Delta to be at risk for flooding. Heavy rains, melting snow and inadequate drainage can also inundate a home with water. In fact, 25% of flood insurance claims occur in low-to-moderate risk areas.

BE PREPARED

- » Find out the base flood elevation (BFE) for your property from the local authority that issues building permits. Use this figure as a guideline for preparing your home against high water.
- » Have an adequate amount of basic supplies: plastic sheeting, sand and sandbags, plastic garbage bags, lumber, shovels and plywood.
- » Install a backflow-prevention device in the main waste line of your plumbing system. This will prevent sewage and storm water from backing up into your home.
- » Every spring, test your sump pump by filling the sump pit with water to ensure it switches on and operates properly.
- » Construct barriers to stop floodwater from entering your home.
- » Seal walls in basements with waterproofing compounds to avoid seepage.
- » If you're remodeling or upgrading, consider raising your heating and cooling systems and main electrical panel to a level higher than the BFE.

FINANCIAL PROTECTION

- » Standard homeowner's insurance does not cover flooding, so shop for separate flood insurance. If your carrier doesn't provide it, call the National Flood Insurance Program at (800) 427-4661. Premiums average \$400 per year. There is typically a 30-day waiting period for coverage to take effect.
- » Take an inventory of your belongings and write down brand names and serial codes. Making a video or taking digital photos will help with your documentation.
- » Consider keeping insurance policies, deeds and other crucial documents in a safe place outside your home, such as a safe deposit box.

For additional information, visit fema.gov and search on "flood."

A Safe Room



BUY IT SMART

When shopping for a safe room (or a contractor to build one) make sure the unit meets or exceeds the FEMA 320 guidelines, as well as any other state and local building codes and requirements.

WHEN SEVERE WEATHER strikes quickly, evacuation may be difficult. In these situations, many experts say the best place to head is a "safe room"—a freestanding structure with walls and roof built of materials capable of withstanding the impact of falling and flying debris. They're also the logical place to store your Storm Kit and other supplies.

Safe rooms are designed to be independent of the house structure and are securely bolted to a concrete basement floor, ground-level slab or outside pad. They can be made from reinforced poured concrete, concrete block, welded steel or multiple layers of wood, steel and fiberglass. They can be built by contractors or do-it-yourselfers, or they can be installed as pre-built modular units. Prices can range from \$1,500 up to \$10,000 and more for contractor-installed units.

SAFE ROOM BASICS

- » A safe room is only as strong as its weakest link. If you're going to build it, build it right. Make sure there is adequate ventilation. Follow the guidelines laid out in the "Taking Shelter from the Storm" booklet by FEMA (see below).
- » Safe rooms aren't "wasted space." They can do double duty as a storage room or walk-in closet, or as a storage shed when built outside. One company even manufactures a tornado safe room that seats five and doubles as a workbench. As a bonus, a safe room can serve as a nearly impregnable vault for valuables, guns and documents.
- » Safe rooms don't float nor are they designed to keep out water. In a flood zone, a safe room can be a trap, not a refuge.

For additional information, see "Taking Shelter from the Storm: A Safe Room Inside Your House," available from fema.gov.

Storm-Tough Building Products

Installing storm-tough components while remodeling isn't only safety-smart, it's dollar-smart too. Why?

- » Many storm-tough products are also energy efficient products, helping reduce utility bills in the long run.
- » Although the materials may be more expensive, the labor to install them is often no more than to install standard products.

- » Most products, because they're built to stand up to the elements, have a longer projected lifespan.
 - » Many insurance companies offer discounts to policy holders installing storm-tough materials.
- Here are some key areas where you should consider upgrading your home's components during a renovation:

SHINGLES AND ROOFING

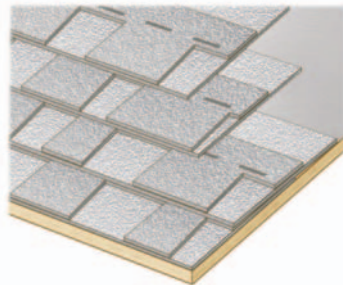
Even the best roofing materials can't stand up to severe weather when improperly installed. So buy the right materials and hire a contractor who knows how to install them correctly.

Most wind-resistant asphalt shingles are a thicker, multi-layered variety called dimensional or laminated shingles. They're heavier and less prone to uplift; many are able to withstand winds up to 130 mph or greater. Most major shingle manufacturers offer them. Another type of asphalt shingles—interlocking—are wind resistant because the vulnerable lower edge is designed to interlock with adjacent shingles.

Metal roofing also stands up well in high winds because the edges interlock and there are fewer seams. Many types are capable of withstanding winds up to 150 mph.

Tile and slate roofs also offer good wind resistance, but the materials and labor to install them are extremely expensive, in some cases requiring reinforcing of the structural elements of the roof itself.

Most roofing materials are installed by "the square"—an area constituting 100 square feet. Asphalt shingles usually carry a weight designation. Generally, the heavier the shingle, the better the wind-resistance. Most also carry longer warranties, some up to 50 years. Buying heavy-duty shingles is a wise investment.

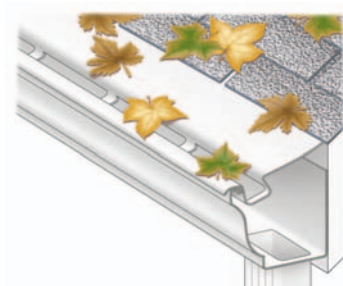


GUTTERS AND SIDING

Gutters play a critical role in ushering water away from your home in order to minimize the possibilities of flooded basements and water pressure building against basement walls. "Closed" and "clog-free" gutter systems ensure your gutters always stand at the ready to do their job. Many systems must be professionally installed, but are made of thicker materials and carry longer warranties.

Siding is another critical element in protecting the building envelope. Traditional vinyl and aluminum siding are much more vulnerable to damage because they're loosely nailed to allow for expansion and contraction. Some newer products, such as cement-based sidings, are capable of withstanding stronger winds.

Impact-resistant siding costs more than standard siding, but carries a longer warranty. The installation cost for some siding is higher due to the more complex interlocking system used.

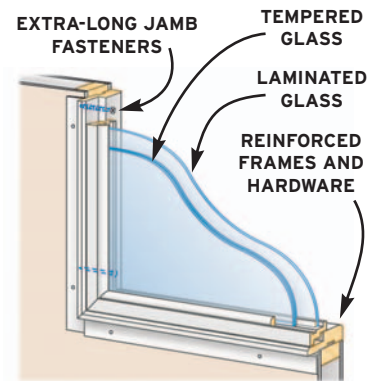


WINDOWS

Windows that are compromised during severe weather spell double trouble. Broken glass can inflict severe injuries and once a house is "opened," wind pressurizes the interior and creates additional damage as it smashes through doors, windows and other vulnerable areas.

Most storm-tough windows are double-pane and consist of laminated glass for the outside pane (two panes are bonded together by a layer of polyvinyl butyral similar to a car windshield) and tempered glass for the inside pane. As a bonus, most storm-tough windows are more energy efficient and block more exterior noise than standard windows.

Expect to spend at least 30% more for storm-tough windows than standard dual-pane windows. Although installation takes slightly longer (often extra steps are required to secure the window itself within the opening), added labor costs should be minimal.



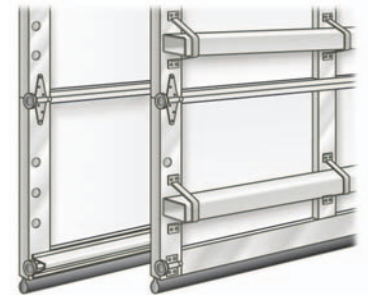
DOORS AND GARAGE DOORS

A sturdy garage door is critical, because once a door has been compromised wind can wreak severe damage, just as it does when windows fail. Often garage doors are the first house component to give way.

Impact-resistant garage doors are constructed using more substantial, reinforced vertical stiles and horizontal rails. The added door weight dictates stronger springs and heavier duty openers be used.

Tracks, rollers and hinges also need to be upgraded to withstand severe weather. Add-on reinforcement posts that bolt to the door, floor and top of garage-door opening are also available (see page 26).

Storm-rated doors can be made of fiberglass, steel or other metal and may cost up to twice as much as standard doors. A heavier duty automatic opener is usually required.



FIND AT LOWE'S

Impact-resistant garage doors

Windows featuring impact-resistant glass.

Wind-resistant shingles, specially designed and warranted for hurricane-strength winds.

Metal roofing

Gutter guards and severe weather downspouts

Heavy-duty vinyl and fiber-cement siding

BUY IT SMART

Dade County Florida, located deep in the heart of hurricane country, has some of the strictest building codes in North America. Before you buy a product, consult their Web site, miamidade.gov/buildingcode/online_product_search.asp, to see if the product is approved for Dade County. If it is, it may have passed rigorous testing. Always consult your local authorities and codes for additional information.

Prepare Your Home A checklist

Plan your storm readiness improvement projects with this master list

THE BASICS

- Know the severe weather risks in your area.
- Prepare a Storm Readiness Kit.
- Sit down with your family and develop a plan in case of severe weather.
- Take pictures or videotape of your house and valuables for insurance purposes.



HURRICANES

- Prepare shutters or other coverings for doors and windows.
- Reinforce the roof trusses—a cool-weather job.
- Examine and repair roof shingles—do it while the weather's cool or overcast.
- Caulk openings, flashings and soffits.
- Reinforce the entry doors and round up exterior covering as required.
- Replace hard mulch with soft material.
- Buy and install a backflow-prevention device in your sewer line.
- Trim your trees and bushes.
- Purchase supplies for your Storm Readiness Kit.
- Purchase generator, gas cans, carbon monoxide detectors and extension cords.
- Decide how to tie down large outdoor equipment, and purchase supplies.
- Reinforce or replace your garage door.
- Purchase supplies for cleanup and repair.



FLOODING

- Purchase flood insurance.
- Buy and install a backflow-prevention device in your sewer line.
- Consider moving heating/cooling appliances and electrical panel to higher level.
- Purchase plastic sheeting and sand bags.
- Seal basement walls to prevent seepage.

TORNADO

- Consider buying or building a safe room or shelter.
- Have mattresses or padding available at your place of shelter.
- Decide how to tie down large outdoor equipment, and purchase supplies.



Did you know?

- » **Most hurricane damage is caused**, not by wind, but water entering the house from leaks, broken windows, flood water, storm surges and back-flowing sewers.
- » **In over 80% of the cases**, wind damage to homes starts when the garage door is compromised.
- » **SUVs—because of their larger size and larger tires**—are actually more buoyant than small cars and can be swept away on flooded roads just as easily.
- » **The most common cause of roof shingle failure** during a hurricane is poor installation and improper nailing.
- » **If you store water in case of emergencies**, you'll need at least one gallon per person, per day. A three-day supply is a good minimum.

After the Storm

Stay safe, help others and record the damage.



RECOVERY

- » Don't return to severely damaged buildings until advised to do so. There may be structural damage that makes the building unsafe to enter.
- » Help a neighbor who may require special assistance: the elderly, people with disabilities and large families with young children.
- » Take photos of the damage for your records and save samples of spoiled floorings and furnishings to show to your insurance claims adjuster.

RAIN AND WIND

It's essential to work safely when cleaning up wind and rain damage. One study showed that 50% of tornado-related injuries happened after the storm.

- » Tetanus. If your last tetanus shot is more than 10 years old, get an updated vaccination.
- » Glass, fiberglass insulation and other particulates can injure unprotected eyes, lungs and hands. Wear eyewear, sturdy boots, a dust mask, long sleeves and pants, and leather gloves during clean-up efforts.
- » Soft items, such as upholstered furniture, mattresses, pillows, blankets, carpeting and draperies may contain dangerous slivers of glass. Inspect carefully and consider professional cleaning or replacement of these items.
- » Food stored in cupboards may also be embedded with glass splinters. Check flour, sugar, boxed mixes and cereal thoroughly. When in doubt, replace it.

FLOODING

- » The sooner the cleanup can begin, the better. The first 24 hours after the flood are vital for preventing mold from forming in water-damaged homes.
- » Floodwater in your home may contain sewage, E. coli, salmonella and household chemicals. Wear rubber boots, rubber gloves, and goggles.

- » Electrocutation is a major cause of death in flood zones. Do not enter a flooded home where outlets and appliances have been submerged without verifying the power is turned off, not just knocked out and likely to come on unexpectedly.
- » Do not attempt to clean a wet basement with a vacuum that is not meant to handle water. You could be electrocuted.
- » Open every door, drawer, cupboard and window to maintain air circulation. If your air conditioner is working, set it on low to draw the humidity out of your house.
- » Test for water trapped in walls by removing the baseboard and poking small holes in the drywall or plaster about two inches above the floor.
- » Remove and discard all water-soaked, porous items such as upholstered furniture, carpets, soft toys, drywall and insulation. Label this garbage as "contaminated."
- » After washing with water, disinfect the floors and flooded portions of the walls using a chlorine bleach solution (1/2 cup laundry bleach to 1 gallon water) treating 2 feet above the flood line.
- » Have flood-affected appliances and heating and cooling units checked out and repaired by a qualified service technician before operating them.
- » Stay away from wet, damp or flood-affected outlets, circuit breaker boxes and switches, and have them replaced by a licensed electrician, as needed.

For additional information

visit Lowe.com/hurricane and redcross.org

TOOLS & RECOVERY SUPPLIES

The time to purchase tools and supplies for cleanup is before the storm hits.

FIND AT LOWE'S

- Axe**
- Chain saw**
- Extra chain for chain saw**
- Gas and oil for chain saw**
- Crowbar**
- Rubber boots and gloves**
- Generator** (See page 16.)
- Gas containers**
- Wet/dry vacuum**
- Heavy-duty cleaning supplies**
- Power washer**
- Large fan** for drying items out
- Jumbo trash bins and bags**
- Bleach**
- Bottled water**
- Outdoor gas grill**
- Six 16-foot 2x4s and large tarp** for temporary roof repairs

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"Turn Around Don't Drown" sign, National Weather Service Southern Regional Headquarters

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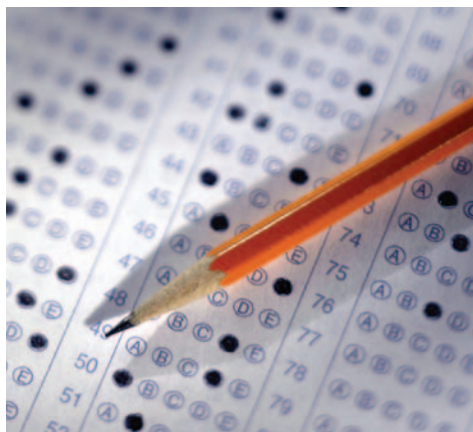
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Do You Know What to Do?

MANY PEOPLE THINK they already know everything they need to know about severe weather, or that common sense will carry them through the day. Common sense helps, but it's not enough. There is plenty of storm knowledge which is not obvious, and your safety can depend on how much you know. Recent surveys reveal that even homeowners in hurricane-prone regions don't know what to do in a storm. Do you? Here's a little quiz to help you find out.



1. If the power goes out, have plenty of matches and candles on hand. T F
2. In hurricane country, it's best to use heavy mulches like gravel around your yard, because it won't blow away. T F
3. Most hurricane damage is caused by high winds. T F
4. In a flood, you can walk in moving water if it's less than a foot deep. T F
5. Backing your car against the garage door will keep the door in place. T F
6. Taping windows to strengthen them is better than nothing. T F
7. If a flood is expected within 48 hours, it's important to get flood insurance. T F
8. You should open windows on the side of the house facing away from the storm to equalize air pressure in the house. T F
9. If you want to tie down a boat or shed to protect it from wind, you can use rope attached to anchors which screw into the ground. T F
10. If your vehicle gets stuck in a snow drift during a storm, don't run the engine for warmth. Instead, walk carefully to the nearest shelter. T F
11. If you store water in case of emergencies, you'll need at least one gallon per person per day. T F
12. Most wind damage to homes starts when the garage door is compromised. T F
13. Research shows that the most common cause of roof shingle failure during a hurricane is poor workmanship. T F
14. If a tornado approaches while you're driving, you should park carefully and crouch in the back seat, covering your head. T F
15. SUVs are safer to drive on a flooded road than small cars. T F

ANSWERS

1. False. Candles can start fires, and during a storm fire departments may not be able to respond. Use flashlights or battery-powered lights.
2. False. Gravel can easily get airborne. Use soft mulches like shredded bark instead.
3. False. Water does most of the damage, coming into the house from leaks, broken windows, flood water, storm surges and back-flowing sewers.
4. False. 6-inch-deep moving water can knock over an adult. Non-moving flood water can be dangerously contaminated.
5. False. Garage doors can be pulled out or pushed in by the wind.

6. False. Tape is useless.
7. False. Flood insurance is an excellent idea if your home is at risk, but policies take 30 days to go into effect.
8. False. It can actually increase the amount of damage.
9. True. Screw anchors work, although anchors set in concrete work better.
10. False. Stay in your vehicle. It's easy to get lost if you start walking outdoors in a storm. If necessary, run the engine 10 minutes every hour for warmth, with tailpipe clear and windows open slightly. See page 7.
11. True.
12. True. More than 80%, according to the Federal Alliance for Safe Homes.

13. True. According to researchers from the National Institute of Standards and Technology, most roofs they examined that had lost large areas of shingles showed evidence of improper nailing or poor installation. See page 24.
14. False. Yes, you should park your vehicle safely. But don't stay in it; tornados often lift cars and toss them around. You're better off finding a tornado shelter, or even a ditch to lie in with your head covered.
15. False. Because of their larger size and larger tires, SUVs are actually more buoyant and can be swept away just as easily.