

# 2023

# HURRICANE PREPARATION



**Helpful Guide for Homeowners & Businesses**





# Preparing your home

This section is intended to help you prepare your home, belongings and family in the event of a hurricane.

Please remember that the first priority is to ensure safety.

- Hurricanes are capable of producing winds in excess of 155 mph and causing catastrophic damage to coastlines and several hundred miles inland.
- Hurricanes can also lead to storm surges along the coast and cause extensive damage from heavy rainfall.
- The hurricane season lasts from June to November, with the peak season from mid-August to late October.



Listed on the next several pages are checklists of items that are general in nature and may not address all issues or preparations that may be necessary for a given location.

# Home preparation

## What needs to be done



- Build an emergency supply kit and make a family communication plan.
- Learn the elevation level of your property and whether the land is flood-prone to best protect against the likelihood of storm surge or tidal flooding.
- Learn hurricane evacuation routes and how to find higher ground. Determine where you would go and how you would get there if you needed to evacuate.
- Cover your home's windows. Permanent storm shutters offer the best protection for windows. A second option is to board up windows with 5/8" marine plywood, cut to fit and ready to install. Tape does not prevent windows from breaking.
- Install straps or additional clips to securely fasten your roof to the frame structure. This will reduce roof damage.
- Be sure trees and shrubs around your home are well trimmed so they are more wind resistant.
- Clear loose and clogged rain gutters and down spouts.
- Reinforce your garage doors. If wind enters a garage, it can cause dangerous and expensive structural damage.
- Make plans to secure your property. Bring in all outdoor furniture, decorations, garbage cans, and anything not tied down.
- Determine how and where to secure your boat (if applicable).
- Install a generator for emergencies.
- If in a high-rise building, be prepared to take shelter on or below the 10th floor. If in a home, determine the best location for a safe room.

# Emergency supply kit

What to prepare and where to keep it



- Water: At least one gallon daily per person for 3-7 days
- Food: Enough non-perishable food for at least 3-7 days – include a manual can opener
- Radio: Battery-powered or hand-crank and a NOAA weather radio with tone alert
- Flashlights, batteries, and extra batteries
- First aid kit, medicines, glasses, and prescription drugs
- Whistle to signal for help
- Fully-charged cell phones with backup battery power
- Cash (including small bills), traveler's checks, and change
- Dust mask to help filter contaminated air
- Plastic sheeting and duct tape to shelter-in-place
- Moist towelettes, garbage bags, and plastic ties for personal sanitation
- Wrench or pliers to turn off utilities
- Vehicles: Fuel and local maps
- Copies of important documents in a waterproof or watertight bag
  - Insurance policies
  - Identification records
  - Bank account records

Keep this kit in a designated place and have it ready in case you have to leave your home quickly. Make sure all family members know where the kit is kept. In case you are stranded, keep emergency supplies in your car.



# Preparing your business

This section is intended to help you prepare your business during the threat of a hurricane.

Please remember that the first priority is to ensure employee safety.

- Identify those employees who are needed to maintain or protect the site and those who should evacuate.
- Determine which operations are critical and the time required to properly shut down each operation.
- Determine what resources are needed and their availability.



Listed on the next several pages are checklists of items that are general in nature and may not address all issues or preparations that may be necessary for a given location.

# Impending hurricane

36 to 48 hours prior to landfall



- Monitor your local news or The Weather Channel to stay up to date on the storm's path.
- Inspect and repair drains, gutters, and flashings. Inspect all fire protection equipment (sprinkler control valves, fire pumps, suction tanks, etc.).
- Remove all loose objects from the roof. Strap or anchor all roof-mounted equipment such as HVAC units and exhaust vents to the roof structure (e.g., the joists).
- Consider stopping operations that rely on outside power sources.
- Check the following supplies:
  - Batteries
  - Lanterns (check fuel and mantle supplies)
  - Portable radios (operable and charged)
  - Cellular phones (operable and charged)
  - First aid supplies
  - Bottled water
  - Non-perishable food
  - Heavy tarps (for roof or window damage)
  - Heavy gauge plastic sheeting (to cover equipment, supplies, etc. in the event of leaks or building damage)
  - Rope
  - Plywood and dimensional lumber (2x4s)
- Start and run all fire pumps, generators, and sump pumps for 30 minutes or more.
- Update employee home and cell phone lists. Consider gathering email addresses for an email distribution list.
- Update phone lists of roofing, electrical, restoration, and equipment contractors.
- Protect or relocate vital records as necessary. Instruct employees to put files away in cabinets and to remove all loose files from floors and desks. Confidential, critical, or valuable documents should be properly secured.
- Backup all electronic data and store in a water/wind protected site. Consider sending copies of backups to other facilities not in a hurricane zone.

# Impending hurricane

36 to 48 hours prior to landfall



- Install hurricane shutters or plywood over windows and door, making sure to not block emergency exits. Brace large openings such as dock doors.
  
- Anchor, secure, dispose of, or relocate anything in the yard that could potentially blow away or blow into and damage a facility, such as:
  - Loose yard debris
  - Nonessential yard equipment
  - Flammable/combustible/corrosive liquid drums – do not move these items into the main building
  - Portable buildings (sheds, trailers, etc.) – these items should be securely anchored
  - Outdoor signs
  
- Inspect all fire protection equipment (sprinkler control valves, fire pumps, suction tanks, etc.).
  
- Identify areas of refuge for employees that are to remain on site.

# Imminent hurricane

36 to 48 hours prior to landfall



- Ensure that employees who are to remain have current telephone contacts, lists, supplies, and equipment (potable water, nonperishable food, first aid supplies, flashlights, walkie-talkies, cellular telephones).
- Have cash on hand for post-hurricane needs (buying food and supplies or paying employees and contractors).
- Anchor or fill above ground tanks with product or water.
- Clean roof drains, storm drains, and catch basins.
- Remove or secure satellite dishes and antennas.
- Cover computers, machinery, and stock with tarps, plastic, or waterproof covers (focus on critical or valuable items first).
- Arrange for incoming shipments to be diverted; expedite outgoing shipments if possible.
- Relocate remaining storage as high off the floor as possible or at the very least onto pallets.
- Isolate, neutralize, or remove any chemicals that can react violently with each other.
- Contact the gas utility. Determine if it is advisable to turn off the gas valve.
- Inform employees how to obtain information on site closure and reopening.
- Notify vendors, delivery companies, truckers, and site visitors of site closure.
- Revise telephone answering system to inform callers of site closure.
- Tour the entire property. Check roofs, roof-mounted equipment, yards, signs, doors, windows, electrical systems, and the interiors.
- Prepare to deactivate – and disconnect if possible – all noncritical, nonessential, and sensitive electrical equipment.
- Plug or seal floor drains, particularly those below grade level, if appropriate.



# During the hurricane

Emergency personnel should stay if it's safe



- Patrol the inside of the property continuously, and watch for roof leaks, pipe breakage, fire, or structural damage.
- Personnel should have a refuge available that is safe from wind and flooding. Refrain from being outdoors. Wind-borne objects can be dangerous.
- Constantly monitor any boilers that must operate.
- If power fails, turn off electrical switches, and if possible, close main gas valves to reduce risk when service is restored.

# After the hurricane

## Inspect, report and recover



- Report injuries, state of building, impairments of utilities, community services, and conditions (roads, sewers, water, etc.) to management.
- Check foundations and piping. Secure the site (lock doors, fences, etc.).
- Inspect roofs (entire area and perimeter), roof-mounted equipment, walls, windows (outside and inside), doors, and the entire yard. Clean roof drains and remove debris from roof to prevent drainage problems.
- Eliminate safety hazards such as live wires, leaking gas, flammable liquids, and hazardous materials releases.
- Repair damage to automatic fire sprinkler systems and restore protection as soon as possible. Use impairment monitoring system whenever automatic fire sprinklers and/or water supplies are impaired.
- Call key personnel and restoration contractors to start repairs. Make sure safety systems are fully operational before work is allowed to begin. Control smoking. Use cutting and welding permits. Make contractors responsible for fire-safety conditions.
- Begin salvage as soon as possible to prevent further damage.
- Cover broken windows and torn roof coverings immediately.
- Separate damaged goods, but do not accumulate combustibles inside buildings.
- Contact your risk/insurance manager in case of loss.
- Contact your insurance company for advice in restoring fire protection.
- Visually check damaged bus bars, conductors, and insulators before re-energizing main electrical distribution systems. In case of doubt, contact an electrician.  
**DO NOT TOUCH OR MOVE EXPOSED, BARE WIRES.**



# Dealing with storm surge

The greatest potential for loss of life related to a hurricane comes from the storm surge.

A storm surge is water that is pushed toward the shore by the force of the winds swirling around the storm. This advancing surge combines with the normal tides to create the hurricane storm tide, which can increase water level to heights affecting roads, homes, and other critical infrastructure.

Wind-driven waves are superimposed on the storm tide. This rise in water level can cause severe flooding in coastal areas, particularly when the storm tide coincides with the normal high tides. Because much of the United States' densely populated Atlantic and Gulf Coast coastlines lie less than 10 feet above average sea level, the danger from storm tides is tremendous. The storm surge combined with wave action can cause extensive damage and severely erode beaches and coastal highways.