# HURRICANE PREPAREDNESS



GRAINGER®

FOR THE ONES WHO GET IT DONE

## HURRICANE THE THREAT

### Ahead of the storm

Hurricanes pose a serious threat to your life and property. The most obvious is the threat posed to buildings, equipment, and people by winds over 74 mph, which characterize these storms.

Another serious threat to life and property comes from the storm surge, which occurs in coastal areas, consisting of huge domes of water and storm-driven waves pushed inland before the hurricane arrives. Tides of three to 10 feet above normal are common, but the storm surge may rise more than 20 feet in large hurricanes. Waves come ashore with great force, far beyond the reach of normal surf. In relatively flat areas, the storm surge may push many miles inland.

Hurricanes often generate heavy rainfall that can cause severe flooding over wide areas as well as spawn deadly tornadoes. Both flooding and tornadoes can severely affect areas well inland.

Over the past several years, the hurricane warning system has provided adequate time for people to move inland when hurricanes threaten. Many people have never experienced a major hurricane, resulting in a false impression of a storm's damage potential.

Saffir-Simpson Hurricane Scale				
Scale Number (Category)	Sustained Winds (MPH)	Damage	Storm Surge	
1	74-95	<b>Minimal:</b> Unanchored mobile homes, vegetation and signs.	4-5 feet	
2	96-110	<b>Moderate:</b> All mobile homes, roofs, small crafts, flooding.	6-8 feet	
3	111-130	<b>Extensive:</b> Small buildings, low-lying roads cut off.	9-12 feet	
4	131-155	Extreme: Roofs destroyed, trees down, roads cut off, mobile homes destroyed. Beach homes flooded.	13-18 feet	
5	More than 155	Catastrophic: Most buildings destroyed. Vegetation destroyed. Major roads cut off. Homes flooded.	Greater than 18 feet	

Information courtesy of Colorado State University and FEMA.

## CHECKLIST

# Help keep your facility and employees safe by planning and preparing now.

Every minute counts when a hurricane warning is issued. Use the supplies checklist below to get started. You can save time and money, and gain peace of mind.

☐ Alkaline Batteries	☐ Extension Cords & Adapters	☐ First Aid Kits
☐ Lanterns	☐ Canvas & Polyethylene Tarps	■ Water Coolers
☐ Glow-sticks	□ Nylon Rope	☐ Paper Cups
☐ Flashlights	☐ Wet/Dry Vacuums	☐ Gatorade®
☐ Barrier Tape	☐ Carpet Dryers/Blowers	☐ Floor Squeegees
□ Radios	□ Sorbents	☐ Brooms
□ Pumps	☐ Masking Tape	☐ Mops & Buckets
□ Motors	☐ Duct Tape	☐ Leather Palm Gloves
☐ Drain Hoses	☐ Masonry Screws	☐ Rainsuits
☐ Air Compressors	☐ Fasteners	□ Boots
☐ Generators	☐ Vehicle Recovery Straps	☐ Chain Saws
☐ Polyethylene Gas Cans	□ Drills	☐ Shovels
☐ Engine Oil	□ Hammers	☐ Safety Vests

For a complete listing, go online to www.grainger.com/hurricane



# **PREPARING**FOR THE STORM

Take action ahead of time to help minimize damage and lost productivity.

### Before a hurricane strikes

Plan a safe evacuation route that will take you 20-50 miles inland. Contact your local emergency management office or The American Red Cross chapter and ask for the community preparedness plan.

Also, to avoid any undue anxiety, now is the time to discuss with family and co-workers your communication and "check-in" plan for after the storm.

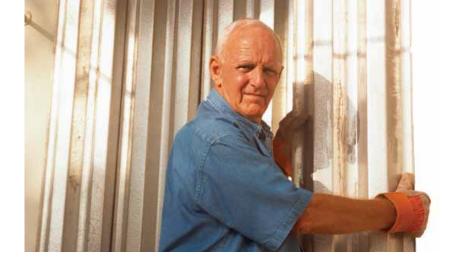
## Important disaster supplies to have on hand:

- Flashlights and extra batteries
- Portable battery-operated radio and extra batteries
- First aid kit
- Emergency food and water
- Nonelectric can opener
- Essential medicines and supplies

# **Know that you should evacuate under the following conditions:**

- If you are directed by local authorities to do so, be sure to follow their instructions
- If you are located in a mobile or temporary structure such shelters are particularly hazardous during hurricanes no matter how well fastened to the ground they are
- If you are located in a high-rise building—hurricane winds are stronger at higher elevations
- If you are located on the coast, on a floodplain, near a river, or on an inland waterway
- If you feel you are in danger

Information courtesy of FEMA.



## Some steps include:

- Make plans to secure your property. Board up windows with 5/8" marine plywood, cut to fit and ready to install. Tape does not prevent windows from breaking
- Remove outdoor hanging signs
- Bring inside or secure any objects that might become airborne and cause damage in strong winds
- Secure showcases. Use plywood to protect glass, or turn the glass side inward toward the inside wall
- Store merchandise and inventoried supplies as high as possible off the floor, especially goods that could be in short supply after the storm
- Move merchandise that cannot be stored away from glass and cover it with tarpaulins
- Clear out areas with extensive glass frontage as much as possible
- Install straps or additional clips to securely fasten the roof to the frame structure. This will reduce roof damage

Information courtesy of FEMA.

### **Essentials**



#### **Duct Tape**

The always handy, always useful general repair tape makes quick work of bundling, patching, and mending.



#### **Air Compressors**

An essential for running pneumatic tools, helpful for cleanup too.



#### Safety/Gas Can

Easy-grip handle helps you transfer fuel safely.



#### **Generators**

Power to keep lights, refrigerators, and other utilities working in the event of a power outage.

For more products and information visit www.grainger.com/hurricane



# **WEATHERING**THE STORM

When a hurricane watch or warning is issued, it's time to put your plan into action.

### When evacuation is necessary

If officials order evacuation, leave as soon as possible. Avoid flooded roads and watch for washed-out bridges.

Secure your home and business. Unplug appliances and turn off electricity and the main water valve. If time permits, elevate furniture to protect it from flooding or move it to a higher floor.

Take your pre-assembled emergency supplies and warm, protective clothing, cash and credit cards, rain boots, and copies of important papers, including bank accounts, insurance, and household and business inventory records.

# If you are unable to evacuate, go to a wind-safe room. If you do not have one, follow these guidelines:

- Stay indoors during the hurricane and away from windows and glass doors
- Close all interior doors—secure and brace external doors

- Keep blinds closed. Do not be fooled if there is a lull; it could be the eye of the storm - winds will pick up again
- Take refuge in a small interior room, closet, or hallway on the lowest level
- Lie on the floor under a table or another sturdy object

### During a hurricane, you should:

- Listen to the radio for information
- Turn off utilities if instructed to do so. If applicable, turn the refrigerator/freezer thermostats to their coldest setting and keep the doors closed
- Turn off propane tanks. Avoid using the phone, except for serious emergencies
- Ensure a supply of water for sanitary purposes such as cleaning and flushing toilets

Information courtesy of FEMA.



### Know the terms.

**Tropical Depression:** An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of 38 MPH (33 knots) or less. Sustained winds are defined as one-minute average winds measured at about 33 ft (10 meters) above the surface.

**Tropical Storm:** An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 MPH (34–63 knots).

**Hurricane:** An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 MPH (64 knots) or higher.

**Storm Surge:** A dome of water pushed onshore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50–1000 miles wide.

**Storm Tide:** A combination of storm surge and the normal tide (i.e., a 15-foot storm surge combined with a two-foot normal high tide over the mean sea level creates a 17-foot storm tide).

**Hurricane/Tropical Storm Watch:** Hurricane/tropical storm conditions are possible in the specified area, usually within 36 hours. Tune in to National Oceanic and Atmospheric Administration Weather Radio, commercial radio, or television for information.

**Hurricane/Tropical Storm Warning:** Hurricane/tropical storm conditions are expected in the specified area, usually within 24 hours.

**Short Term Watches and Warnings:** These warnings provide detailed information about specific hurricane threats, such as flash floods and tornadoes.

Information courtesy of FEMA.

### **Essentials**



#### **Flashlights**

A long-range concentrated beam helps you through power outages.



#### **Batteries**

Sold in industrial packs, so you're confident that plenty are on hand.



#### **Glow-Sticks**

See and be seen—even in wind and rain—with 6" yellow, orange, red and green lightsticks that burn up to 12 hours.



#### Coolers

Ultratherm® insulation keeps water cold.

For more products and information visit **www.grainger.com/hurricane** 



# **AFTER**THE STORM

## Getting back to business after a hurricane hits

When you go inside your building, be sure to enter carefully and check for damage. Wear sturdy shoes when walking through debris and use gloves when moving it. Possible hazards in your facility include:

**Natural gas.** If you smell gas or hear a hissing or blowing sound, ventilate the area and leave immediately. Turn off the main gas valve from the outside, if you can, and call the gas company. Do not smoke or use oil, gas lanterns, candles, or torches for lighting inside a damaged facility until you are sure there is no leaking gas or other flammable materials present.

**Sparks, broken or frayed wires.** Check the electrical system unless you are wet, standing in water, or unsure of your safety. If possible, turn off the electricity at the main fuse box or circuit breaker. If the situation is unsafe, leave the building and call for help. Do not turn on the lights until you are sure they are safe to use. You may want to have an electrician inspect your wiring.

**Appliances.** If appliances are wet, turn off the electricity at the main fuse box or circuit breaker. Then, unplug appliances and let them dry out. Have appliances checked by a professional before using them again. Also, have the electrical system checked by an electrician before turning the power back on.

**Water and sewage systems.** If pipes are damaged, turn off the main water valve. Check with local

authorities before using any water; the water could be contaminated. Pump out wells and have the water tested by authorities before drinking. Do not flush toilets until you know that sewage lines are intact.

**Open cabinets.** Be alert for objects that may fall.

**Clean up chemical spills.** Disinfect items that may have been contaminated by raw sewage, bacteria, or chemicals. Also clean salvageable items.

Information courtesy of FEMA.

# Recovering from a disaster is usually a gradual process

Safety is a primary issue, as are mental and physical well-being. If assistance is available, knowing how to access it makes the process faster and less stressful. This section offers some general advice on steps to take after disaster strikes to begin getting your facility, your community, and your life back to normal.

Your first concern after a disaster is your co-worker's health and safety. You need to consider possible safety issues and monitor co-worker's health and well-being.

#### Aiding the Injured

Check for injuries. Do not attempt to move seriously injured persons unless they are in immediate danger of death or further injury. If you must move an unconscious person, first stabilize the neck and back, then call for help immediately.



- If the victim is not breathing, carefully position the victim for artificial respiration, clear the airway, and commence mouth-to-mouth resuscitation
- Maintain body temperature with blankets. Be sure the victim does not become overheated
- Never try to feed liquids to an unconscious person

#### Health

Be aware of exhaustion. Don't try to do too much at once. Set priorities and pace yourself. Get enough rest.

- Drink plenty of clean water
- Fat well
- Wear sturdy work boots and gloves
- Wash your hands thoroughly with soap and clean water often when working in debris

#### **Safety Issues**

Be aware of new safety issues created by the disaster. Watch for washed out roads, contaminated buildings, contaminated water, gas leaks, broken glass, damaged electrical wiring, and slippery floors.

Inform local authorities about health and safety issues, including chemical spills, downed power lines, washed out roads, smoldering insulation, and dead animals

## **Essentials**



#### **Mop Bucket/Wringers**

A combination that gives you maximum water evacuation with minimal effort.



#### **Wet/Dry Vacs**

Quickly extract water from carpets and floors.



#### All-Purpose Extension Cords

Extra long to bring power where you need it.



#### **Portable Blowers**

Dry carpets and floors, exhaust foul air, ventilate, and spot cool.

For more products and information visit www.grainger.com/hurricane





# A PARTNER WHEN IT MATTERS MOST

When natural disasters strike, Grainger helps businesses recover.

#### Disaster relief

Grainger is a strategic partner with the American Red Cross in disaster relief. Since 2001, Grainger has contributed more than \$5 million to support the American Red Cross.

In September 2005, Grainger once again expanded its matching charitable gifts program to provide a four-for-one match following Hurricane Katrina, contributing \$1.2 million to the American Red Cross Disaster Relief Fund.

Beyond financial contributions, Grainger employees volunteer their time to their communities. In response to the 2005 hurricanes, Grainger employees volunteered over 450 hours taking calls from individuals seeking American Red Cross aid. Grainger encourages this by working hand-in-hand with select organizations and donating time off to allow employees to participate.

Additionally, through the Grainger Rebuilding America® program, the company awards grants to not-for-profit organizations in communities severely affected by natural disasters. The contribution is disbursed to small, independent businesses in the devastated community as seed money to begin rebuilding.

#### **Product donations**

In 2005, Grainger donated more than \$9.7 million worth of products for disaster relief and educational efforts. The company created special accounts at local branches in the Gulf area to ensure that local Red Cross volunteer units serving the hardest-hit areas got product donations quickly.

## Community commitment and financial contributions

For the past 78 years, Grainger has contributed to local communities through its charitable giving program. The company is among fewer than two percent of U.S. companies that match employee contributions three-for-one. In 2006, Grainger significantly helped their communities by donating \$3.9 million through employees matching charitable gifts program.

In January 2005, Grainger expanded its matching charitable gifts program to provide a four-for-one match for employees who contributed to the American Red Cross International Response Fund following the tsunami in Southeast Asia. Grainger employees and the company contributed more than \$300,000 to this fund.

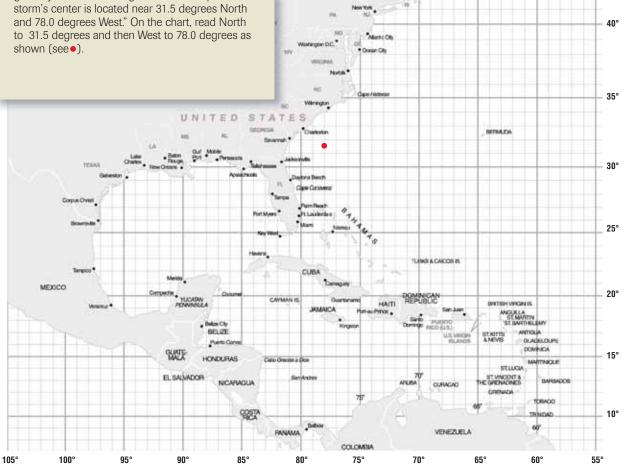
## Tracking and Plotting Hurricanes

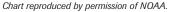
Remember: Hurricanes are large, powerful storms that can suddenly change direction. Check frequently on the storm's progress until all watches and warnings are canceled for your area by the National Weather Service.

Plotting a Storm: Hurricane center positions are given by latitude and longitude. For example: "the



CANADA





NEWFOLINDLAND

45°

# The more you know, the better you can **prepare.**

For more information on how you can prepare for a hurricane:

#### **Web Sites:**

Grainger at www.grainger.com/hurricane

The American Red Cross at www.redcross.org

The Federal Emergency Management Agency at www.fema.gov

The Weather Channel at www.weatherchannel.com

The National Oceanic & Atmospheric Administration at www.noaa.org

# or call the Grainger Emergency Phone Line:

1-800-CALL-WWG (1-800-225-5994)

Local Phone Numbers: (Write down your local emergency numbers below.)