ELEPHANT STORM SHELTERS

1. Elephant Storm Shelters provide aboveground or underground protection from storms, tornadoes, hurricanes and other violent weather. Our shelters provide the ultimate protection with FEMA 320 and ICC-500 compliant construction.

ELEPHANT BUNKERS

2. Elephant Survival Bunkers are an affordable underground survival shelter manufactured from solid steel. Customize your bunker with telecommunications, bedding, tables, television and video mounts, gun racks, and more.

ELEPHANT STORM SHELTERS

3. Elephant Safe Rooms provide outstanding protection against intruder threats, provide safe and secure gun and ammunition storage and even weather. Upgrade your safe room to a fully FEMA 320 and ICC-500 compliant structure and utilize your safe room as a certified storm shelter.

ELEPHANT COMMUNITY SHELTERS

4. Elephant Community and Commercial Shelters are FEMA 361 compliant. These shelters for large groups of people are ideal for businesses, campgrounds, public facilities, and homeowner associations. Any location where you need to protect up to 500 people.

OUR SHELTERS
SAFE · STRONG · SECURE

Backed by over 30 years of manufacturing consumer, residential and government-contract steel buildings.
After your storm shelter is installed it is important to prepare your shelter before the storm hits. Preparation of your storm shelter can give you the security and comfort you and your family need in the event of a storm.

Two of the most destructive, recurring weather disturbances in the United States are tornadoes and hurricanes. *What do these two types of storms have in common?* Both tornadoes and hurricanes can occur at any time and can cause devastating damage to homes and families.

Tornadoes and hurricanes can occur at any time and can cause devastating damage to homes and families.
A hurricane is a violent, rotating storm that sustains extremely strong winds and can intensify greatly. Hurricanes form over warm ocean waters and can extend to the coast, striking land. Once a hurricane forms, it is up to weather forecasters to predict its path and how strong it will become.

In the North Atlantic, hurricanes and tropical storms mainly occur during the summer and fall months with the peak season from mid-August to late October. Hurricanes can develop anywhere along the US Atlantic Seaboard, the Gulf of Mexico, Atlantic Caribbean islands as well as Pacific Ocean islands.

There are 5 categories of hurricanes based on wind speed, which are rated by the Saffir-Simpson Hurricane Scale. The five categories are explained to the right:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>WIND SPEED (MPH)</th>
<th>DAMAGE CREATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>74-95</td>
<td>Roof damage including torn shingles and vinyl siding; tree branches will snap, shallow rooted trees will uproot, power lines will result in outages that can extend up to several days (depending on house location).</td>
</tr>
<tr>
<td>2</td>
<td>96-110</td>
<td>Solid, well-constructed houses can undergo major roof damage; shallow rooted trees will be uprooted, road signs can be damaged, and power loss is expected with outages that could last for weeks (depending on house location).</td>
</tr>
<tr>
<td>3</td>
<td>111-208</td>
<td>Well-constructed homes will experience major damage to roofing and/or decking, large trees will be snapped or uprooted, electricity will be unavailable for weeks until storm has passed (depending on location).</td>
</tr>
<tr>
<td>4</td>
<td>130-156</td>
<td>Well-built houses will suffer severe damage with loss of most of the roofing and siding, small structures will be destroyed, large trees will be uprooted and/or snapped, power poles and power lines will be fallen, power outages will last for weeks (depending on location), emergency crews and firefighters will usually be on scene. Areas will be uninhabitable for weeks or months.</td>
</tr>
<tr>
<td>5</td>
<td>157 +</td>
<td>A large amount of solid constructed homes will be demolished; roof failure; large trees will be uprooted or snapped, power poles and power lines will isolate residential areas, power outages will last for weeks and possibly months, most of the area that is destroyed will be uninhabitable for weeks or months.</td>
</tr>
</tbody>
</table>
A tornado is a violently-rotating column of air that stretches between a thunderstorm cloud and earth’s crust. Approximately 1,200 tornadoes hit the U.S yearly, many of which occur in Tornado Alley. Tornado Alley is a nickname that was invented by the media for broad area coverage of the central United States. Altts not the only geographical region that tornadoes can be spotted.

Tornado season is different for many regions of the United States. In the Southern Plains, it occurs mainly from May to June; on the Gulf coast it occurs during early spring, and in the northern plains and the upper Midwest it occurs during June and/or July. Tornadoes can be present any time of the year.

Tornado visibility can be tricky. Some tornadoes are clearly visible, with rain, low-hanging dark clouds, and large hail, but some may not be visible. Tornadoes can develop so rapidly that they may be hard to see in their beginning stages.

Tornadoes have different ratings, classifying each tornado’s strength, wind speed and damage level. The Fujita Tornado Ratings Scale is explained to the right:

<table>
<thead>
<tr>
<th>F-SCALE</th>
<th>INTENSITY</th>
<th>WIND SPEED (MPH)</th>
<th>DAMAGE CREATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Gale</td>
<td>40-72</td>
<td>Roof damage, tree limb debris, uprooted smaller trees, damaged signs.</td>
</tr>
<tr>
<td>1</td>
<td>Weak</td>
<td>73-112</td>
<td>Can peel off roofing materials, mobile homes can be overturned, moving vehicles can become relocated, smaller foundations can be destroyed.</td>
</tr>
<tr>
<td>2</td>
<td>Strong</td>
<td>113-157</td>
<td>Extensive damage. Roofs torn off housing frames, mobile homes demolished, cars can be turned over, large trees snapped and uprooted, light object missiles generated.</td>
</tr>
<tr>
<td>3</td>
<td>Severe</td>
<td>158-206</td>
<td>Roofing and side-walls torn off of solid housing foundations, trains overturned and large trees uprooted or snapped.</td>
</tr>
<tr>
<td>4</td>
<td>Devastating</td>
<td>207-260</td>
<td>Solid, well-constructed houses leveled, cars and houses can be thrown and demolished, large missiles generated.</td>
</tr>
<tr>
<td>5</td>
<td>Incredible</td>
<td>261-318</td>
<td>Strong frame houses demolished and/or lifted off foundations and thrown, debris the size of automobiles or larger can be thrown in excess of 100 meters, solid trees uprooted, and steel-reinforced concrete structures become damaged.</td>
</tr>
</tbody>
</table>
The following weather patterns may indicate that a tornado is near or approaching:

- Tornado sirens
- Large sized hail
- Dark green or black colored clouds/sky
- Low storm clouds
- A loud roar from the cyclone

If any of these weather patterns illustrated above are present, take cover in your storm shelter immediately. A NOAA weather radio is the preferred way to receive updates and warnings from the National Weather Service.

When choosing a storm shelter, it is smart to allow clearance for 1-3 extra persons. In the event of a panic, you may need to help neighbors or others in need. Make sure you keep plenty of water and nonperishable food (cold food or canned goods) stored in your storm shelter (don’t forget a can opener). A first aid kit can be very helpful in times like these. An extra bucket, duct tape, scissors, flashlight and extra batteries, a whistle to signal help, a dust mask, and a pair of pliers and a wrench are all necessities to keep stored in your storm shelter. Keep comfortable in your storm shelter by storing blankets, sleeping bags, pillows, as well as paper and pencils for entertainment.

If you own pets be sure to keep an extra bag of your pet’s food in your safe room, as well as extra water and even pet toys. Keep your necessities organized in a sealed container to maintain an efficient space.

There is no telling how devastating the storm may be so proper preparation is necessary. In the event of a large storm valuables may be destroyed so it is proper to store all of your essential paperwork and documents in your storm shelter. Store all birth certificates, ownership certificates, social security cards, insurance policies, wills in a small plastic container inside your storm shelter.

STORMS CAN LAST FOR DAYS, WEEKS AND EVEN MONTHS, SO PROPER PRECAUTIONARY MEASURES ARE NECESSARY. KEEP YOU, YOUR FAMILY AND OTHERS SAFE IN A STORM SHELTER TODAY.
Some guidelines for assembling your emergency food supplies:

- Store at least a three-day supply of non-perishable food.
- Choose foods your family will eat.
- Remember to include any special dietary needs.
- Avoid foods that will make you thirsty.
- Include unsalted crackers, whole grain cereals and canned foods with lots of liquid added.

Following a disaster, be prepared for power outages which may last for several days or more. Stock canned foods, dry mixes and other staples not requiring refrigeration, cooking, water or special preparation. Be sure to include a manual can opener and eating/cooking utensils.

The following items are suggested emergency food supplies:

Dried fruits and nuts
Canned pasteurized milk
Infant foods
Comfort foods
Ready-to-eat canned meats, fruits, vegetables (and can opener!)

Protein, fruit or granola bars
Vitamins
Crackers/Chips
Canned juices
Dry cereal or granola
Nut butters (peanut, almond, sesame, etc.)
High energy foods

Floods, fires, and other disasters and/or the loss of power from high winds, snow or ice storms might compromise the safety of your food. Knowledge of what to do before and after an emergency could help you reduce your risk of illness and minimize the amount of potential food loss due to spoilage.

Power outages can occur at any time of the year, with outages lasting from a few hours to several days or more in residential areas. Without electricity or a cold source, food stored in refrigerators and freezers can become unsafe to eat. Bacteria grow rapidly in foods at temperatures between 40 and 140 °F, and if these foods are consumed, they may cause serious illness.
**DO:**

- Keep food in covered tight containers.
- Keep all utensils clean.
- Keep garbage in closed containers and dispose of outside (bury garbage if necessary).
- Keep your hands clean by washing them frequently with soap and water that has been boiled or disinfected.
- Discard any food that has come into contact with contaminated floodwater.
- Discard any food that has been at room temperature for two hours or more.
- Discard any food that has an unusual odor, color or texture.
- Use ready-to-feed formula, if possible, for formula-fed infants. If using ready-to-feed formula is not possible, it is best to use bottled water to prepare powdered or concentrated formula. If bottled water is not available, use boiled water. Use treated water to prepare formula only if you do not have bottled or boiled water. Breastfed infants should continue breastfeeding.

**DON’T:**

- Eat foods from swollen, dented, corroded or rusted cans, even though the food may look safe to eat.
- Eat any food with abnormal smell or appearance, even if the can appears normal.
- Accumulate garbage inside your shelter, for sanitary and fire-safety reasons.
- Note: thawed food is usually safe to eat if it is still “refrigerator cold.” It can be re-frozen if it still contains ice crystals. As the saying goes: “When in doubt, throw it out.”

During emergencies, alternative cooking sources include candle warmers, chafing dishes, fondue pots, fireplaces and wood stoves.

- Use charcoal grills and camp stoves outdoors only.
- Commercially canned food may be eaten out of the can without warming.

**TO HEAT FOOD IN A CAN:**

- Remove label.
- Thoroughly wash and disinfect the can. (Use a diluted solution of one part bleach to ten parts water.)
- Open the can before heating.
**BE PREPARED:**
Keep a refrigerator thermometer on hand.
Find local sources for dry ice.
Keep several days’ worth of ready-to-eat foods in storage that do not require cooking or cooling.

**DURING A POWER OUTAGE:**
Keep the refrigerator and freezer doors closed as much as possible.
Refrigerators will keep food safely cold for about 4 hours if unopened.
Keep your refrigerator at 40° F or below for proper food storage.

**AFTER POWER IS RESTORED:**
Check the refrigerator and freezer’s inside temperatures.
If an appliance thermometer was kept in the freezer, check the temperature after power has been restored. If the freezer temperature is 40° F or below, the food is safe and may be refrozen. If no thermometer had been kept in the freezer, check all food packages to determine safety. Don’t rely on odor or appearance. If ice crystals are still visible, or if food is 40° F or below, it is safe to cook or refreeze.
Refrigerated food should be safe as long as the power outage lasted for no longer than 4 hours. As much as possible, keep the refrigerator door closed.
Discard any perishable food (meat, fish, poultry, leftovers, eggs, etc.) that have been above 40° F for more than two hours.

**USING DRY ICE:**
Normally, you shouldn’t keep dry ice in the freezer. A properly-running freezer might shut off if the dry ice makes it too cold inside the freezer. However, during extended power outages, dry ice is the best way to keep things cold.
Twenty-five pounds of dry ice will keep a 10-cubic-foot freezer below freezing for 3-4 days.
If you use dry ice to cool your food, ensure that the dry ice does not come into direct contact with your food, as it will damage the food.
Use care when handling dry ice. Wear dry, heavy gloves to avoid injury. Allow people to drink according to their bodies’ needs.
Many people need more than a gallon of water per day (the average). Individual water consumption needs will depend on age, physical activity, physical condition and seasonal weather changes.

Never ration drinking water unless a trusted authority has ordered the rationing.

Drink the amount you need each day and look for additional water the next day. No one should drink less than one quart (four cups) of water each day. Help reduce your water consumption needs by minimizing activity and staying cool.

Drink water which you know is uncontaminated first.

Water which is suspect, such as cloudy water from faucets or water taken from streams or ponds, can be used after it is treated. If water treatment is not available, defer drinking questionable water for as long as possible; however, it is important to not become dehydrated.

Carbonated beverages are not an acceptable substitute for drinking water.

Avoid caffeinated drinks and alcohol, as they dehydrate the body, increasing the need for drinking water.

Turning off the main water valves:

If there are indications of broken water or sewage lines in your area, or if local officials advise you of a specific problem, protect the water sources already in your home from contamination. It is wise to know in advance the location of your incoming water valve. Turn it to the closed position. You and your family members should know how to perform this important task.

SAFE SOURCES OF WATER:

- Melted ice cubes
- Liquids from canned fruits or vegetables
- Water drained from pipes
  
  To use the water in your pipes, allow air into the plumbing system by turning on the faucet in your home which is at the highest elevation. A tiny amount of water should trickle out. You can then draw water from the lowest faucet in your home.
- Water drained from the water heater
  
  To use water from your hot water tank, first be sure the electricity or gas is turned off, then open the drain at the bottom of the tank. Start the water flow by turning off the water intake valve at the tank and turning on the hot-water faucet. After you are sure that clean water has been restored to your area, refill the tank before turning the gas or electricity back on. If the gas is turned off, call a professional to turn it back on.

UNSAFE SOURCES OF WATER:

- Radiators
- Hot water boilers (home heating systems).
- Water from the toilet bowl or flush tank.
- Water beds. Fungicides added to the water or chemicals in the vinyl may make water unsafe to use.
- Swimming pools, hot tubs and spas. The concentration of chemicals used for killing germs will be too high for safe consumption, but should be fine for personal hygiene, cleaning and similar uses.
If your stored water has all been depleted, and you can't find other reliable clean water sources, it may be necessary to treat suspicious water. Treat all water of questionable quality before using it for drinking, cooking preparation, dishwashing, brushing teeth or ice-making. Contaminated water may not only have an unpleasant odor or taste, but can also contain microorganisms (germs) that cause diseases such as hepatitis, cholera, dysentery, and typhoid.

There is no one sure way to treat water. If possible, use a combination of methods. Before treating, allow any loose particles to settle to the bottom or strain them through coffee filters or clean cloth layers. Be sure to have water treatment materials included in your disaster supplies kit.

**BOILING**

Boiling is the safest method of water treatment. In a large kettle or pot, bring water to a rolling boil for one full minute, keeping in mind that some evaporation will occur. Allow water to cool before drinking.

Improve the taste of the boiled water by returning oxygen to it by pouring the water back and forth between two clean containers. This method is also effective for improving the taste of your stored water.

**CHLORINATION**

You can use household liquid bleach to kill microorganisms. Use regular household liquid bleach only (containing 5.25 to 6.0 percent sodium hypochlorite). Do not use scented bleaches, color safe bleaches or bleaches with added cleaners. Bleach potency diminishes over time, so—whenever possible—use bleach from a newly opened or unopened bottle.

Add 16 drops (1/8 teaspoon) of bleach per gallon of water, stir and let stand for 30 minutes. You should notice a slight bleach odor in the water. If not, then repeat the dosage and let stand another 15 minutes. If it still does not smell of chlorine, dispose of it and find another source of water.

Other chemicals, such as iodine or water treatment products sold in camping or surplus stores that do not contain 5.25 or 6.0 percent sodium hypochlorite as the only active ingredient, are not recommended and should not be used.

**DISTILLATION**

Boiling and chlorination will kill most of the microbes in water, though for any remaining germs or microbes not eliminated by these methods, distillation is a reliable method of purification, and it will also remove heavy metals, salts and most other chemicals. Distillation is a process of boiling water and then collecting only the condensed water vapor that forms. The condensed vapor will not include salt or most other impurities.

To distill, fill a pot halfway with water.

Tie a cup to the handle on the pot's lid so that the cup will hang right-side-up when the lid is upside-down (make sure the cup is not hanging so low that it dips into the water). Boil the water for 20 minutes. The water that drips from the lid into the cup is distilled water, and is safe to drink.
BASIC DISASTER SUPPLIES KIT

A basic emergency supply kit could include the following recommended items:

- One gallon of water per person per day for at least three days, for drinking and sanitation
- A three-day (minimum) supply of non-perishable food
- Battery-powered or hand-cranked radio and a NOAA Weather Radio with tone alert and extra batteries for each
- Flashlight with extra batteries
- First-Aid kit with fresh supplies
- Whistle for summoning help
- Dust mask for filtering contaminated air; plastic sheeting and duct tape to assemble an in-place shelter.
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Wrench or pliers to turn off utility valves and/or faucets.
- Manual (non-electric) can opener for food
- Local maps
- Cell phone with chargers, inverter or solar charger

ADDITIONAL EMERGENCY SUPPLIES

In addition to the supplies for a basic emergency kit, the following items are also highly recommended, as appropriate:

- Prescription medications and eyeglasses
- Infant formula, diapers and wipes
- Pet food and extra water for your pet, plus pet toys
- Cash or traveler’s checks and change
- Important family documents such as copies of insurance policies, identification and bank account records, living wills, etc. in a waterproof, portable container. You can use the Emergency Financial First Aid Kit - EFFAK (PDF - 977Kb) developed by Operation Hope, FEMA and Citizen Corps to help you organize your information.
- Emergency reference material such as a first aid book.
- Sleeping bags and/or warm blankets for each person. Additional bedding and/or thermal blankets may be needed if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants, sturdy shoes and warm hats. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper — When diluted, nine parts water to one part bleach. Bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- Fire extinguisher
- Matches in a waterproof container
ADDITIONAL EMERGENCY SUPPLIES (cont’d)

- Feminine & personal hygiene supplies
- Mess kits, paper cups, plates, paper towels and plastic utensils
- Paper and pencil
- Books, games, puzzles, toys and other activities for children

FIRST AID KIT:

Injuries are a possibility for any family member during an emergency. If you keep these basic first aid supplies you will be better prepared to help your loved ones if they are hurt. Knowing how to treat minor injuries, and make a difference during an emergency. Consider taking first aid and CPR classes, but even just having the following items can help you stop bleeding, prevent infections and assist in decontamination:

- Two pairs of Latex gloves (or other sterile gloves if you are allergic to Latex)
- Sterile gauze dressings to stop bleeding
- Cleansing agent/soap and antibiotic towelettes
- Antibiotic ointment
- Burn ointment
- A variety of adhesive bandages
- Eye wash solution to flush the eyes or as general decontaminant

- Thermometer
- Prescription medications you take every day such as insulin, heart medicine and asthma inhalers. Periodically rotate medicines as expiration dates pass.
- Prescribed medical supplies such as glucose and blood pressure monitoring equipment and supplies
- Non-prescription drugs:
  - Aspirin or non-aspirin pain reliever
  - Anti-diarrhea medication
  - Antacid
  - Laxative

Other first aid supplies:

- Scissors
- Tweezers
- Petroleum jelly or other lubricant
SUPPLIES FOR UNIQUE NEEDS:

Remember the unique needs of your family members, including children, elderly or infirmed, when making your emergency supply kit and family emergency plan.

FOR BABY:
- Diapers
- Bottles
- Powdered milk
- Formula
- Medications
- Moist towelettes
- Diaper rash ointment

FOR ADULTS:
- Denture needs
- Contact lenses and supplies
- Spare eyeglasses

Consult with your doctor about storing prescription medications such as heart and high blood pressure medication, insulin and other prescription drugs.

If you live in a cold climate, prepare for alternate ways of keeping warm. It is possible that your heating source may be cut off. Allow for adequate clothing and bedding needs. Include one complete change of clothing and shoes per person, including:

- Jacket or coat
- Long pants
- Long sleeve shirt
- Warm hat (ski hat or similar style)

In summary, remember these three key things:

1. Get an emergency supply kit
2. Make a family emergency plan
3. Be informed about the different types of emergencies that could occur and their appropriate responses.

Everyone should have some basic supplies on hand in order to survive for at least three days if an emergency occurs.

Individuals should also consider having at least two emergency supply kits, one full kit at home and smaller portable kits in their workplace, vehicle or other location(s) in which they regularly spend time.