

Preparing for a Flood: What You Need to Know

Assembling an Emergency 72-Hour Kit:

Assemble supplies you might need if you were isolated for three days. Store them in an easy-to-carry container, such as a backpack or duffle bag. **Include:**

- A supply of water (one gallon per person per day). Store water in sealed, unbreakable containers. Identify the storage date and replace every six months.
- A supply of non-perishable packaged or canned food and a non-electric can opener.
- A change of clothing, rain gear, and sturdy shoes.
- Blankets or sleeping bags.
- A first aid kit and prescription medications.
- An extra pair of glasses.
- An extra set of car keys.
- A list of family physicians.
- A list of important family information; the style and serial number of medical devices, such as pacemakers.
- Special items for infants, elderly, or disabled family members.
- Gas-powered generator (if available).
- Camp stove and fuel.
- Power fail phone.
- Battery-powered radio or Television.
- Flashlights and extra batteries.
- Whistle to signal for help
- Toilet paper, personal hygiene items and garbage bags for disposal
- Matches in a waterproof container
- A tool kit.
- Cash or traveler's checks and a credit card
- Pet items (food, water, paperwork, spare collar and ID tag, photos, leash and harness, toys, kennel or cage and first aid kit).



If your house is located in a defined flood zone where flooding is immanent, items should be placed in a dry spot where they can be easily accessed, such as a shelf or elevated place in a garage or basement, during a flood event. These items include:

- Plastic sheeting (enough to cover the foundation of the house to a height of 3 feet).
 - Include fasteners such as nails, and include duct tape to repair tears in the plastic.
- Sandbags (enough to cover plastic on the foundation to a height of 3 feet).
 - Unfilled sandbags can be purchased by contacting Waitsburg City Hall (337-6371)
- Gas-powered pump.

Action to take before, during and after a flood event:

Before:

- Be aware of low elevation spots that could flood.
- Store emergency items in a safe, high place.
- Consider installing a back-flow prevention device if any of your inside drains or fixtures are lower than the side sewer vent on the sidewalk.
- Prepare written instructions on how to turn off electricity, gas and water if authorities advise you to do so. (Remember, you'll need a professional to turn them back on.)

During:

- If water has entered a garage or basement, do not walk through it.
- Do not try to drive over a flooded road. If your car stalls, abandon it immediately. Attempting to move a stalled vehicle in flood conditions can be fatal.
- If you are asked to leave your property, disconnect all electrical appliances.
- Tune to local channels for emergency advisors and instructions.
- Avoid downed power lines and broken gas lines.

After:

- Do not turn your utilities back on yourself. Call your utility companies.
- Avoid direct contact with floodwater. Wear protective clothing, including heavy gloves, to remove wet materials that may become contaminated.
- Follow local instructions regarding the safety of drinking water (16 drops of liquid bleach per gallon) before drinking.
- Do not use fresh foods or canned goods that have come in contact with floodwaters.
- Flooded buildings should be pumped out, disinfected and dried as quickly as possible to prevent mold.
- Do not handle live electrical equipment in wet areas. Have them checked before use.

Flood Wraps and Temporary Shields

Plastic sheeting is a versatile flood barrier. Using plastic sheeting in a sandbag levee improves the levee's performance significantly. Dry flood-proofing seals a building permanently so water will not enter; plastic sheeting can be used against the outside walls to provide similar temporary protection. The plastic can be supported on the main structure or structures built out from the building, so landscaping around the building is not displaced and the building does not feel the force of water on its walls. It is necessary to block doors, windows, small drains and other openings, and to prevent sewer backup when you make a temporary flood barrier with plastic sheeting.

Cost and Considerations

When plastic is supported on the building, the wall is exposed to the unbalanced force of water on one side. Properly constructed walls in good condition should be able to withstand the pressure of 3 feet of water, but buildings poorly constructed or suffering from decay or termite damage may not.

Depending on the duration of flooding and the ease with which water flows through the soil, the slab may be exposed to buoyant (upward) force. In a flooded building, this is balanced by the weight of water above the slab, but when flood water is excluded, the unbalanced buoyant force

may cause damage. Wrapping is most suited to areas with clay soils, where floods are short in duration and where flood levels are below 3 feet.

Using a temporary wrap avoids any moisture problems that may be associated with permanent coatings.

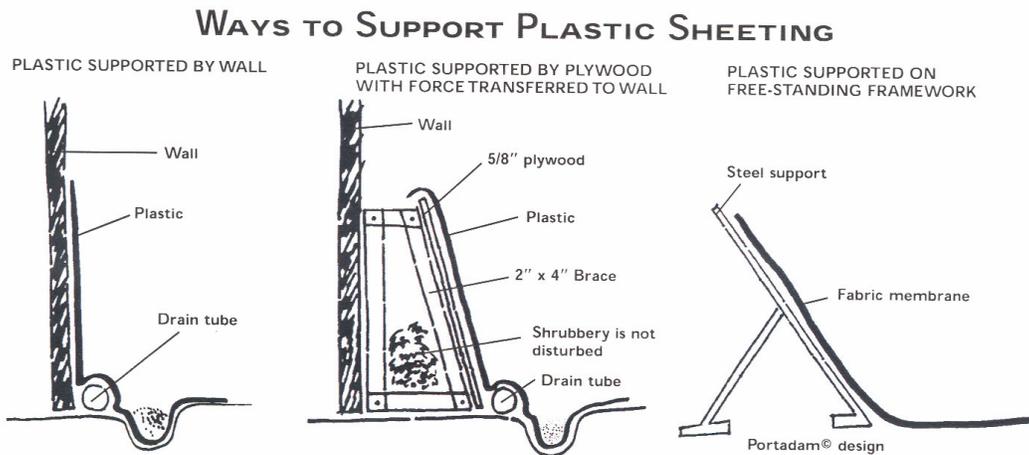
Buildings on piers or pilings are more difficult to wrap than buildings on slabs. Plastic supported on barriers other than the wall can be used to protect such buildings.

The materials required to wrap a 1,500-square-foot building on a slab with 6-mil polyethylene cost about \$500 (not including pumps). The cost increases significantly if you hold the plastic away from the building on a temporary structure.

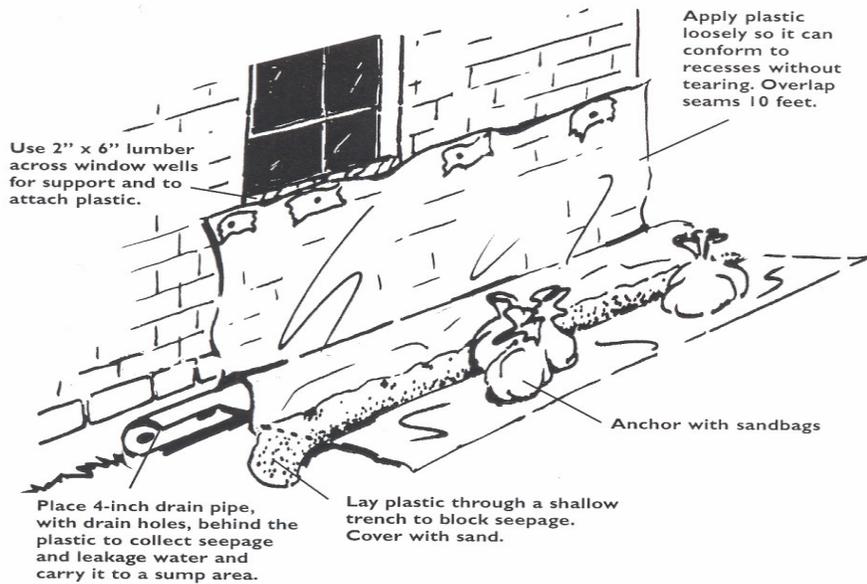
You can make a support system out of wood, aluminum, steel or other material. It must be strong enough and anchored well enough to withstand the force of the flood waters. Consult an engineer and confirm the adequacy of the design and materials you plan to use.

A commercially constructed barrier system with heavy-weight plastic and a steel support framework comes in heights ranging from 3 feet to 10 feet. A 3-foot-high system rents for about \$20 per linear foot, including installation and post-flood removal.

The following diagrams represent effective flood-proofing techniques to use during a flood event:



Building Wrapped with Polyethylene Sheeting



Tips for constructing barriers with plastic sheeting:

- Do not attempt to construct temporary barriers to withstand water depths greater than 3 feet.
- Prevent tears in the plastic by reinforcing it with duct tape wherever nails penetrate or where the plastic will rub on sharp objects.
- Use heavier plastic when floating debris may strike the film.
- Practice installing your wrap or barrier system, including closure for windows, doors and other openings.
- Have one or more sump areas and pump(s) to discharge water that leaks or seeps in. If your temporary barrier stands away from the building, remember to consider rain inside the barrier when estimating your pumping requirements.
- Have an evacuation plan. Structural failure or over-topping can result in sudden or forceful entry of floodwater. Plan in advance when you will abandon a flood fight and save your life.

This document is intended for guidance only. The lists are not all-inclusive, and suggestions within the document are general and not tailored to specific locations/types. This document should not be considered as a replacement for professional services or counsel.