



Indiana Department of Homeland Security

Preliminary Damage Assessment



FIELD GUIDE

This field guide has been designed to serve as a quick reference tool to be utilized by local officials conducting damage assessments for homes and businesses.

Inside you will find listed the *4 Degrees of Damage* and tips - things to do, things to remember. In addition illustrations have been provided and offer examples of the different degrees of damage for both wind and flood.

Why Do Damage Assessments?

Conducting a local damage assessment enables officials to:

- determine the severity and magnitude of the event
- quantify homes and businesses impacted by the disaster
- determine whether local resources will be sufficient to effectively respond to and recover from the event
- inform the public
- facilitate effective decision-making

Local Damage Assessment Must Be Rapid, Detailed and Accurate.

- It should be completed and submitted to the State within 72 hours of the event.
- The data collected will then be analyzed to determine if supplemental assistance is needed.
- Delay in completing the assessment may delay supplemental disaster assistance to those most in need.

There Are 4 Degrees of Damage:

- Destroyed
- Major
- Minor
- Affected

Do's:

- Conduct visual inspections to verify damages.
- Be sensitive when discussing damages with property owners.
- Determine the extent of insurance coverage (i.e. homeowner's policy vs. flood insurance).
- Provide detailed assessments to Indiana DHS within 72 hours of the event.
- The basement may be considered the main floor if that area is considered primary living space (requirements: a required bedroom, the only kitchen in the home, or the only bathroom).

Do's:

- Assessment reports should be as accurate as possible. Exaggerating the amount of damage will be detrimental during a joint PDA.

- Include a comprehensive narrative to demonstrate immediate and long term needs of your community, including but not limited to the following: the number of people unemployed as a direct result of the disaster (including an estimation for how long), availability of housing, number of shelters, number of people sheltered, number of displaced people who have temporarily relocated to family, friends, etc., number of injuries and fatalities associated with the disaster, schools closed, roads closed, bridges out, number of people isolated because of the disaster, any restrictions to emergency services, threats to health and safety (sanitation issues, drinking water issues, disease-related issues), etc.

Don't's:

- Use assessed property values.
- Assume or guess on insurance coverage.
- Count outbuildings, detached garages, swimming pools, landscaping and fencing. They are **NOT** eligible.
- Miss the 72 hour deadline.

REMEMBER:

Focus on the degrees of damage and habitability. Do not become preoccupied with property value. Look for a waterline or debris line to determine the depth of water. Only report disaster-related damages. Deferred maintenance and/or pre-existing damage should not be included in your assessment. Based on criteria, make a judgment call.

FEMA Damage Matrix: Affected (For Structures Except Manufactured Housing)

Definition:

***Dwellings with minimal damage to structure
and/or contents and the home is habitable without repairs.***

Flood Examples:

Affected homes have minimal flooding with less than 3 inches of water in an occupied or required room.

Tornado/Wind Examples:

Minimal damage to structure and home is habitable without repairs.

FEMA Damage Matrix: Minor (For Structures Except Manufactured Housing)

Definition:

The home is damaged and uninhabitable, but may be habitable in less than 30 days. Some of the items that determine minor damage are: windows or doors unsecured (damaged); or, damage to functional components (i.e., furnace, water heater, HVAC, etc.).

Flood Examples:

Three to eighteen inches of water in an occupied or required room. Damage, or disaster related contamination, to private well or septic system. *Note: If water has remained in the structure for more than a day, more extensive damage may have occurred. Watch for foundation damage.*

Tornado/Wind Examples:

Windows or doors unsecured (damaged). May be made habitable in less than 30 days. Damage, or disaster related contamination to private well or septic system.

FEMA Damage Matrix: Major (For Structures Except Manufactured Housing)

Definition:

The home has sustained structural or significant damages, is uninhabitable, and requires extensive repairs. Any one of the following may constitute major damage: failure of structural elements of the residence (e.g., walls, roof, floors, foundation, etc.) that are repairable; or, damage to the dwelling that will take more than 30 days to repair (not to include contractor delays or availability of materials).

Flood Examples:

Eighteen inches or more of water on the first floor or water that covers electrical outlets. Homes with a basement may be considered for major damage if the water level has compromised the structural integrity of the home. *Note: If water has remained in the structure for more than a day, more extensive damage may have occurred. Watch for extensive wall and foundation damage.*

Tornado/Wind Examples:

Substantial roofing elements damaged or missing (e.g., roof decking, trusses/framing), damage to windows, doors, exterior walls, interior wind damage, rain/water damage, extensive debris and utility problems. Damage to dwelling that will take more than 30 days to repair (not to include contractor delays or availability of materials).

FEMA Damage Matrix: Destroyed (For Structures Except Manufactured Housing)

Definition:

The structure is a total loss. Any one of the following may constitute a status of destroyed: structure is permanently uninhabitable; complete failure or two or more major structural components (e.g., collapse of basement walls/foundation, walls, or roof); condemned structure that will require demolition or removal by local or county government because of disaster-related health and safety concerns; or, an unaffected structure that will require removal or demolition by local or county government because of a confirmed imminent danger (e.g., impending landslides, mudslides, or sinkholes).

Flood Examples:

Complete failure of two or more major structural components (e.g., collapse of basement walls/foundation, walls, or roof)(for instance, pushed off the foundation). *Note: Depth, velocity, and duration of water in and around the structure may have a significant impact on degree of damage.*

Tornado/Wind Examples:

Only foundation remains or two or more walls are destroyed and roof is substantially damaged or destroyed.

FEMA Damage Matrix: Affected (For Manufactured Housing)

Definition:

Structure has minimal damage; dwelling is habitable without repairs.

Flood Examples:

No damages affecting habitability; cosmetic damages only.

Tornado/Wind Examples:

The dwelling's frame is not bent, twisted, or otherwise compromised. No structural components of the dwelling have been damaged (i.e., windows, doors, wall coverings, roof bottom board insulation, ductwork, and/or utility hook up).

FEMA Damage Matrix: Minor (For Manufactured Housing)

Definition:

The structure is damaged and uninhabitable, but may be made habitable in a short period of time with minimal home repairs. The dwelling has some damage, but can be used without significant repair (repairable).

Flood Examples:

Water line is below the floor system. In general, skirting or HVAC may be impacted.

Tornado/Wind Examples:

The dwelling's frame is not bent, twisted, or otherwise compromised; however, there is minor structural damage (e.g., it has not been displaced from the foundation). Other structural components may have sustained minor damage (i.e., windows, doors, wall coverings, roof, bottom board insulation, ductwork, and/or utility hook up).

FEMA Damage Matrix: Major (For Manufactured Housing)

Definition:

The structure has sustained structural or significant damages; uninhabitable dwelling that requires extensive repairs. The dwelling is unusable in its current condition and cannot be made habitable in a short period of time.

Flood Examples:

Water that impacts the floor system (to include belly board insulation, ductwork, subflooring) or a water line of up to 12 inches within the living area would equate to a major designation.

Tornado/Wind Examples:

The dwelling's frame is not bent, twisted, or otherwise compromised; however, there is more than minor structural damage (e.g., it has been displaced from the foundation) and other structural components have been damaged (i.e., windows, doors, wall coverings, roof, bottom board insulation, ductwork, and/or utility hook up.)

FEMA Damage Matrix: Destroyed (For Manufactured Housing)

Definition:

The structure is a total loss; damaged to such an extent that repairs are not economically feasible. There is no value associated with the structure except for its basic material content (scrap).

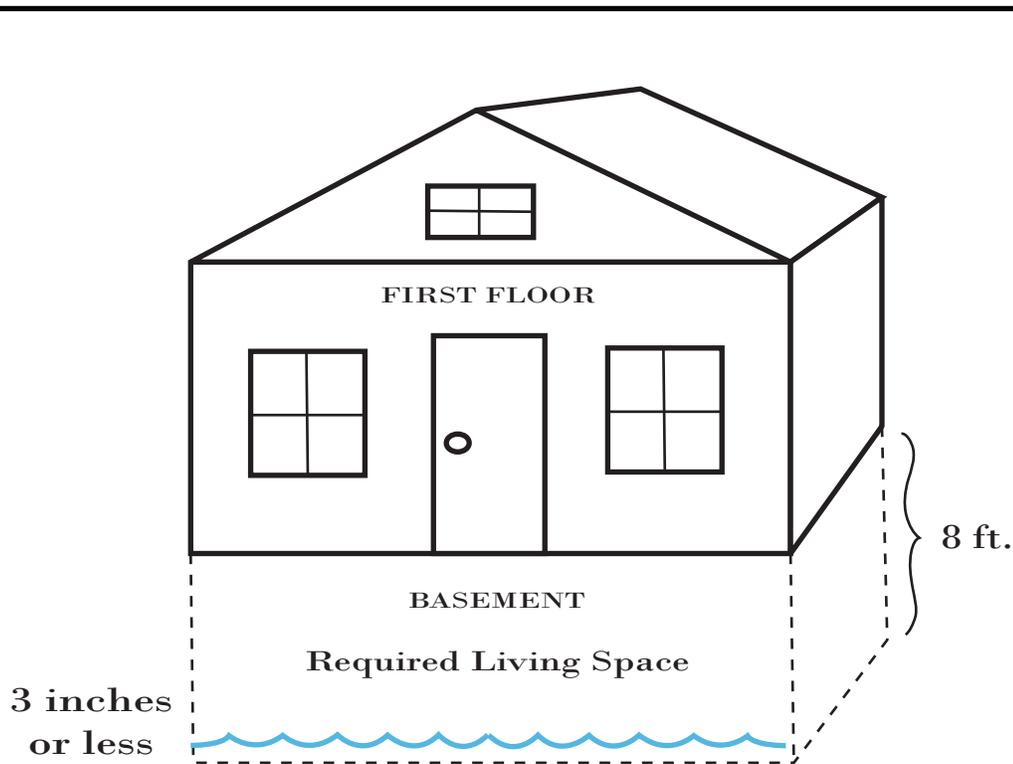
Flood Examples:

A water line higher than 12 inches would equate to a destroyed designation. To be otherwise designated as destroyed, the dwelling's frame must be bent, twisted, or otherwise compromised. The dwelling interior must be so compromised by contamination that clean up is infeasible.

Tornado/Wind Examples:

The dwelling's frame must be bent, twisted, or otherwise compromised. The dwelling must be missing the roof or has sustained significant damage to the roof covering, sheathing, and framing.

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT

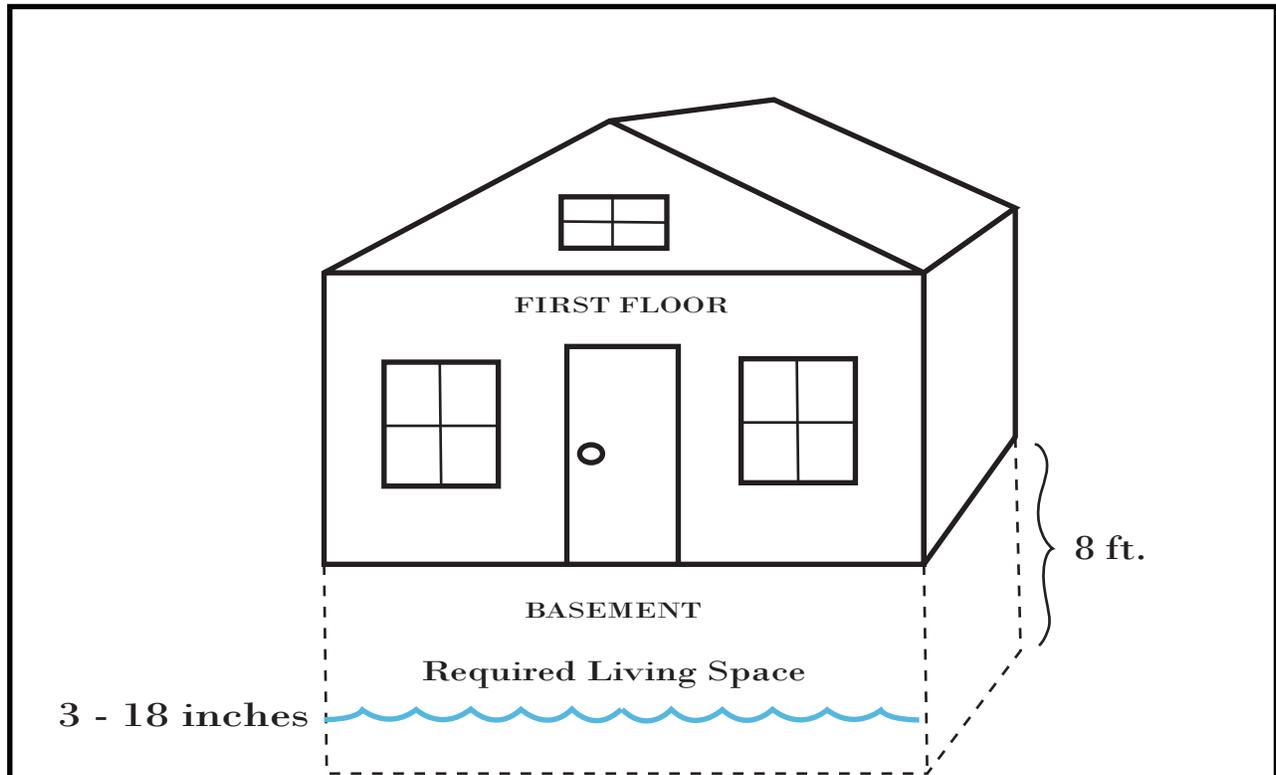


EXAMPLES:

- 3 inches or less of water in basement
- Minimal damage to structure or contents
- Home is habitable without repairs

AFFECTED - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT

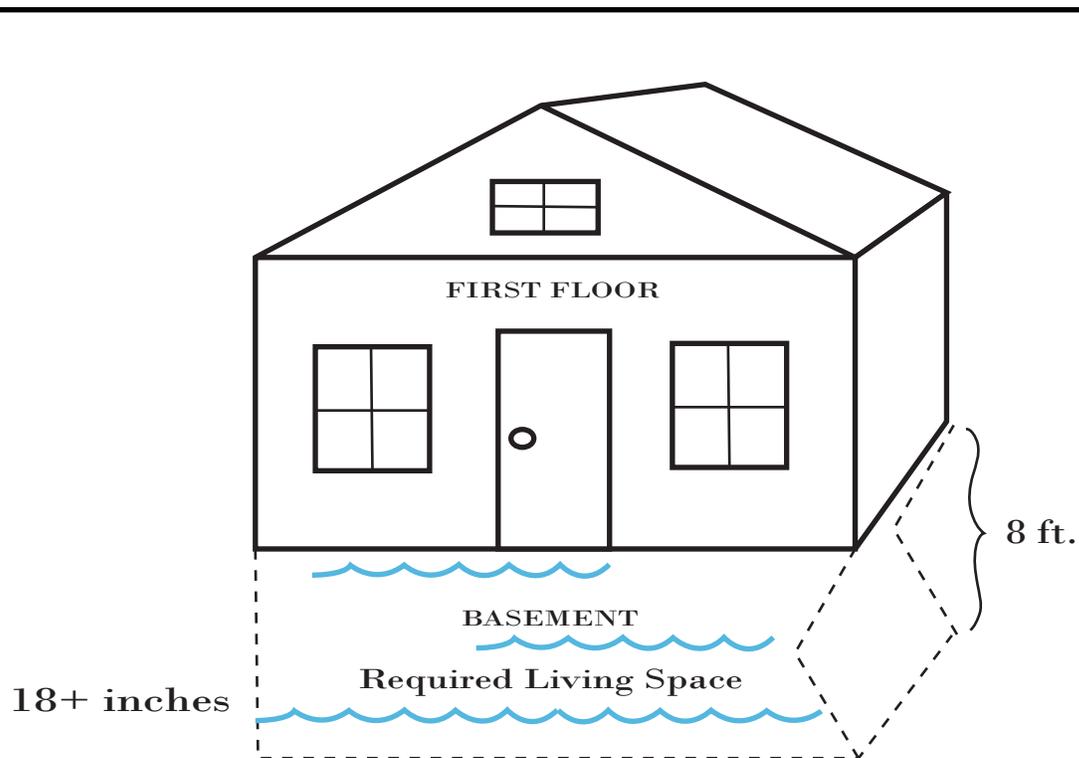


EXAMPLES:

- 3 to 18 inches of water in the basement
- Damage, or disaster related contamination to private well or septic system
- May be made habitable in less than 30 days
- If water has remained in the structure more than a day the structure may have more extensive damage

MINOR - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT

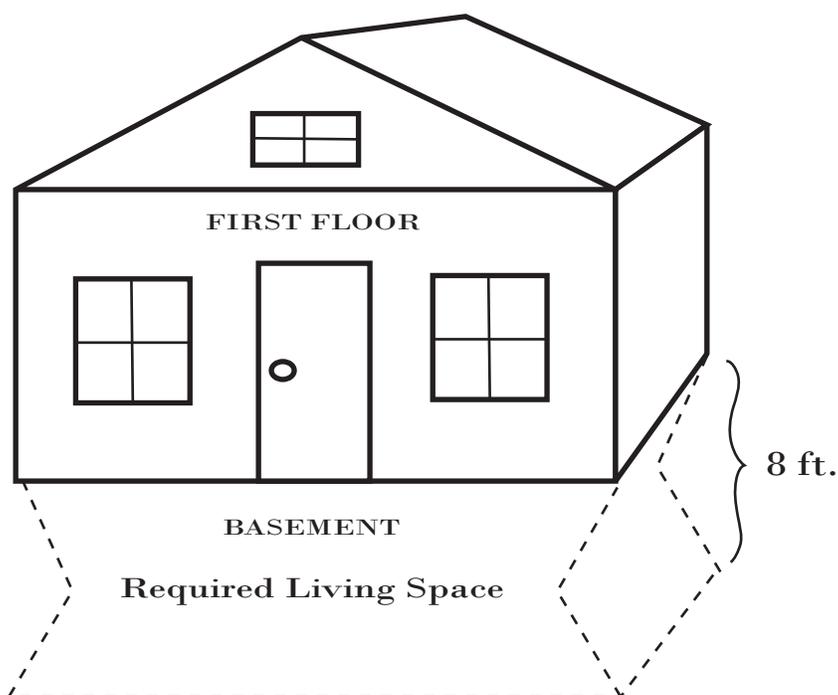


EXAMPLES:

- 18+ inches of water in the basement
- Failure of structural elements
- Water has covered electrical outlets
- Damage takes more than 30 days to repair
- If water has remained in the structure more than a day the structure may have more extensive damage

MAJOR - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT

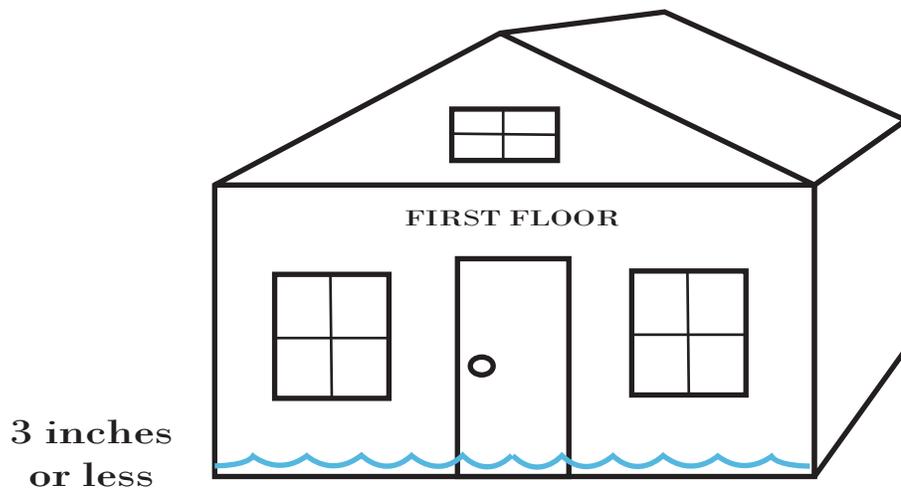


EXAMPLES:

- Complete failure of two or more major structural components
- Total loss - not repairable
- Depth, velocity, and duration of water in and around the structure may have a significant impact on the degree of damage

DESTROYED - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT

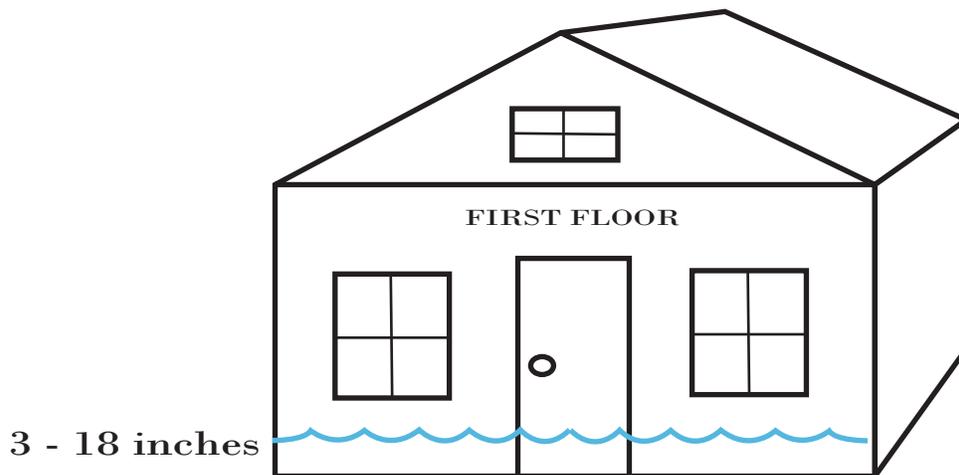


EXAMPLES:

- 3 inches of water on the first floor
- Minimal damage to structure or contents
- Home is habitable without repairs

AFFECTED - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT

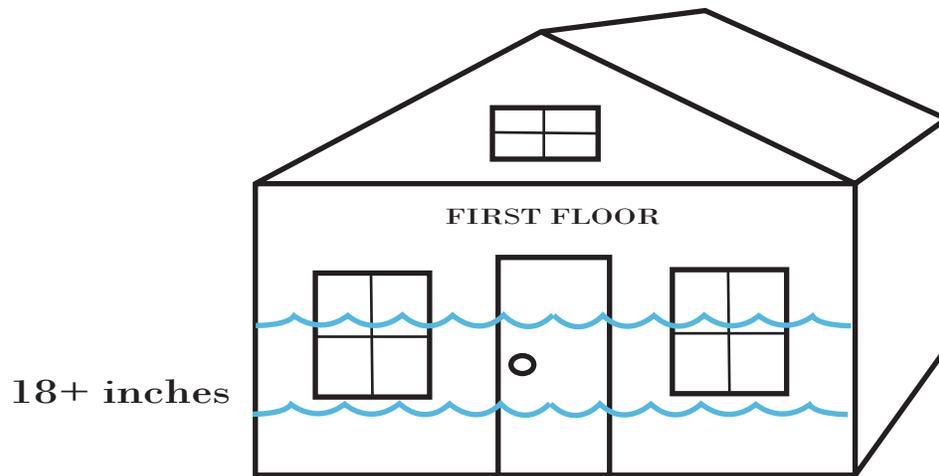


EXAMPLES:

- 3 to 18 inches of water on the first floor
- Damage, or disaster related contamination to private well or septic system
- May be made habitable in less than 30 days
- If water has remained in the structure more than a day the structure may have more extensive damage

MINOR - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT

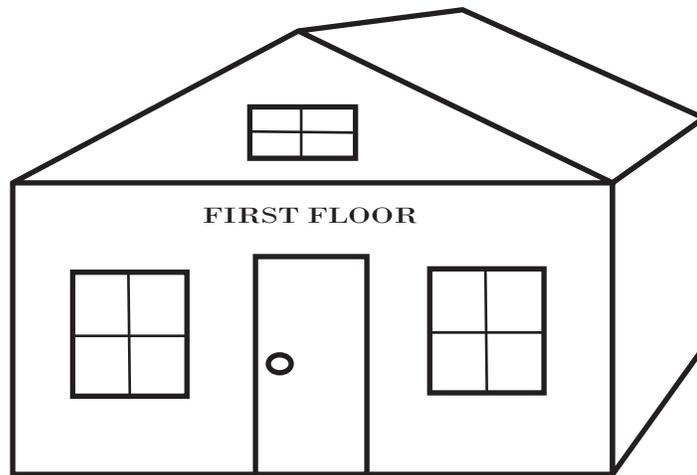


EXAMPLES:

- 18+ inches of water on the first floor
- Failure of structural elements
- Water has covered electrical outlets
- Damage take more than 30 days to repair
- If water has remained in the structure more than a day the structure may have more extensive damage

MAJOR - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT

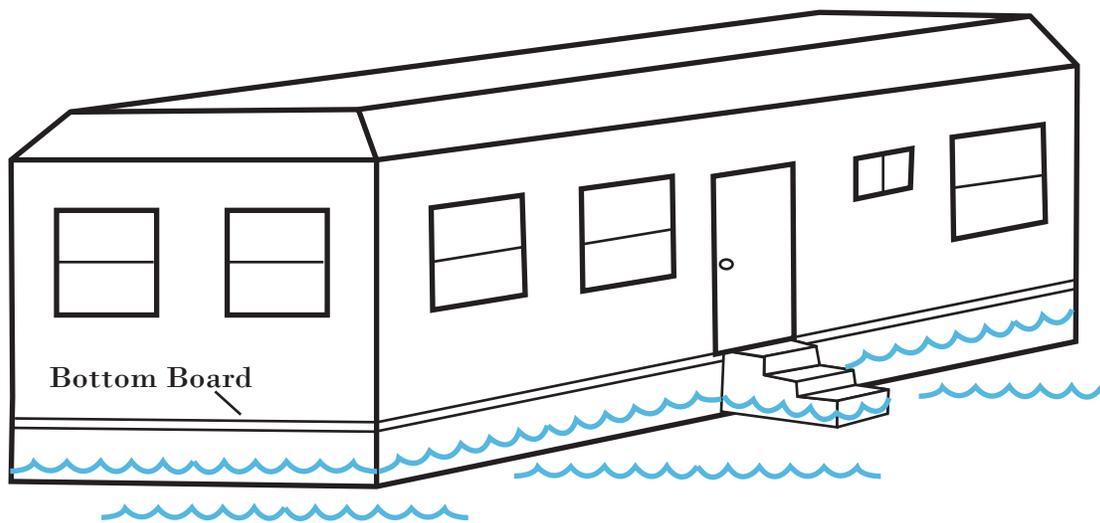


EXAMPLES:

- Complete failure of two or more major structural components
- Total loss - not repairable
- Depth, velocity, and duration of water in and around the structure may have a significant impact on the degree of damage

DESTROYED - FLOOD

FLOOD DAMAGE: MANUFACTURED HOUSING

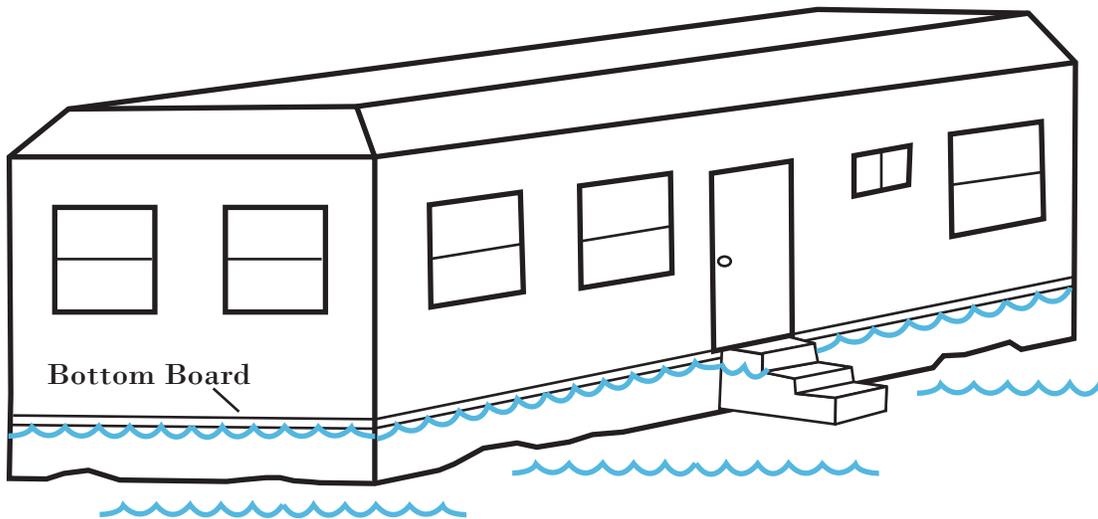


EXAMPLES:

- Minimal damage; cosmetic damages only
- Structure is habitable without repairs

AFFECTED - FLOOD

FLOOD DAMAGE: MANUFACTURED HOUSING

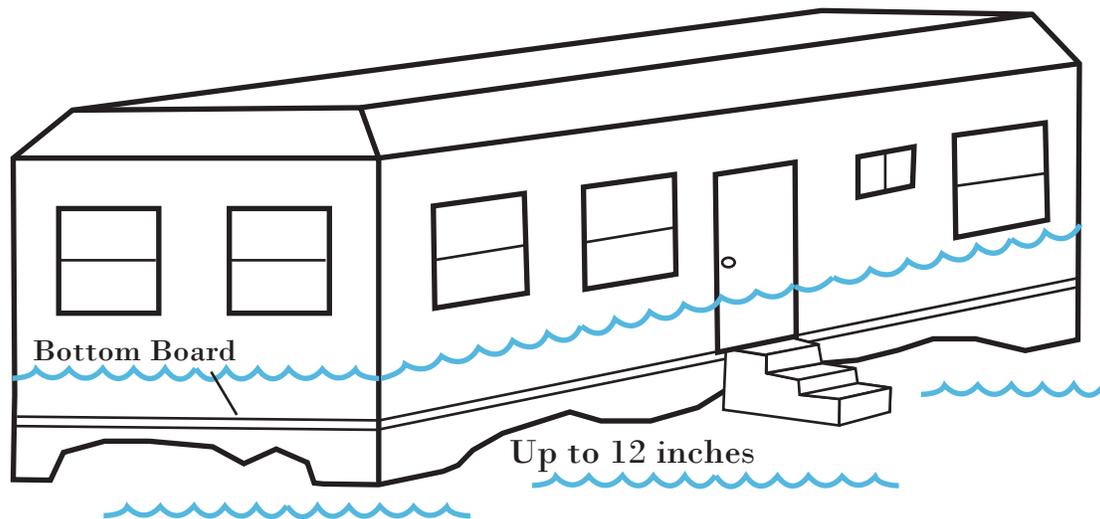


EXAMPLES:

- Skirting or HVAC may be impacted
- Some damage, but can be used without significant repair
- If the structure is damaged and uninhabitable, it can be made habitable in a short period of time with minimal repairs

MINOR - FLOOD

FLOOD DAMAGE: MANUFACTURED HOUSING

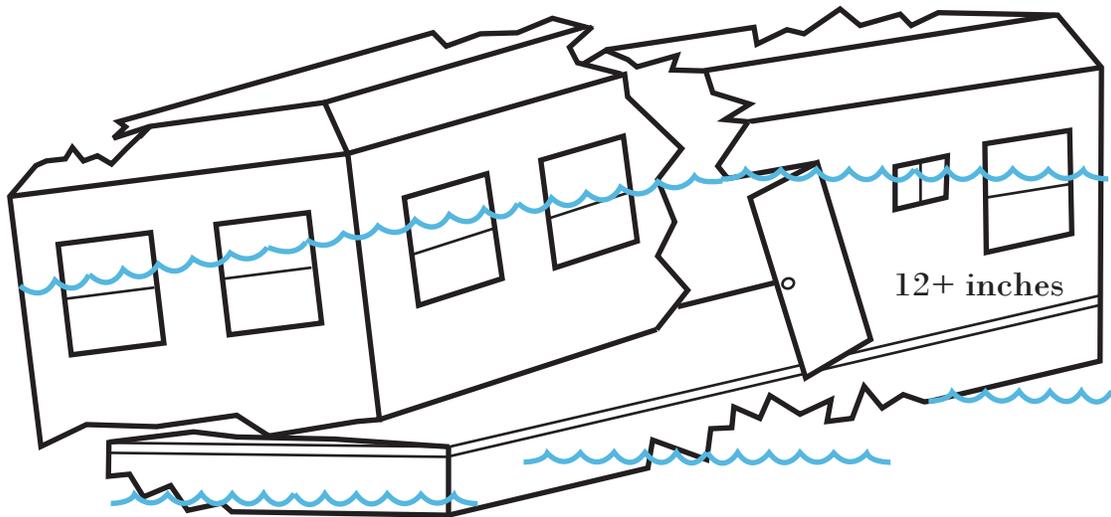


EXAMPLES:

- Water line up to 12 inches within the living area
- Water has impacted the floor system
- Structural damage or significant damages
- Uninhabitable - extensive repairs needed
- Unusable in its current state and cannot be made habitable in a short period of time

MAJOR - FLOOD

FLOOD DAMAGE: MANUFACTURED HOUSING

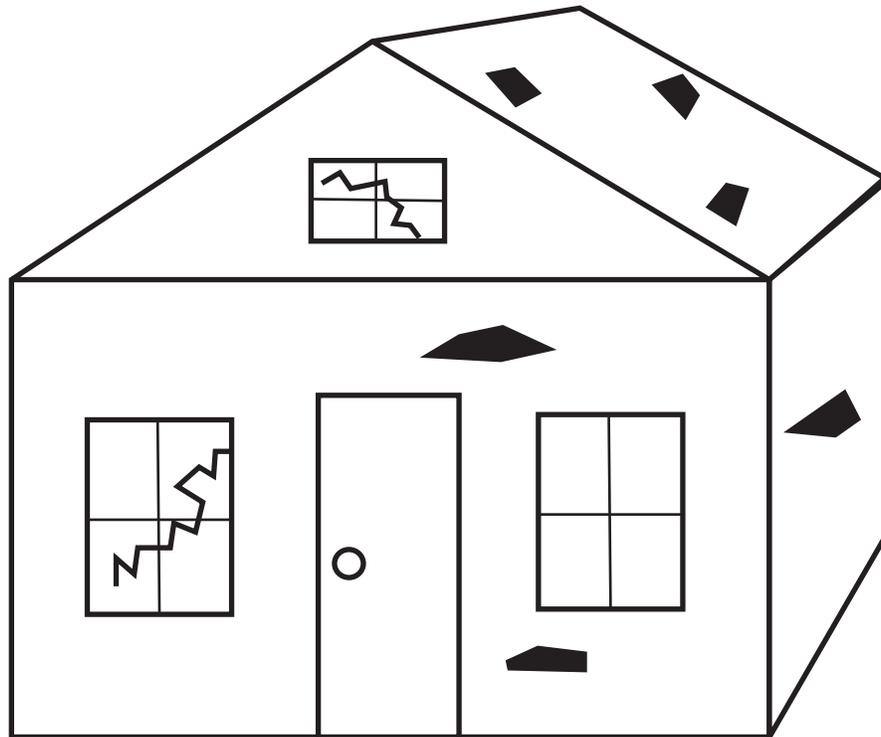


EXAMPLES:

- Water line of 12 inches or more
- Frame is bent, twisted, or otherwise compromised
- Interior contamination clean up is infeasible
- Total loss - repairs are not economically feasible

DESTROYED - FLOOD

WIND DAMAGE: SINGLE FAMILY DWELLING

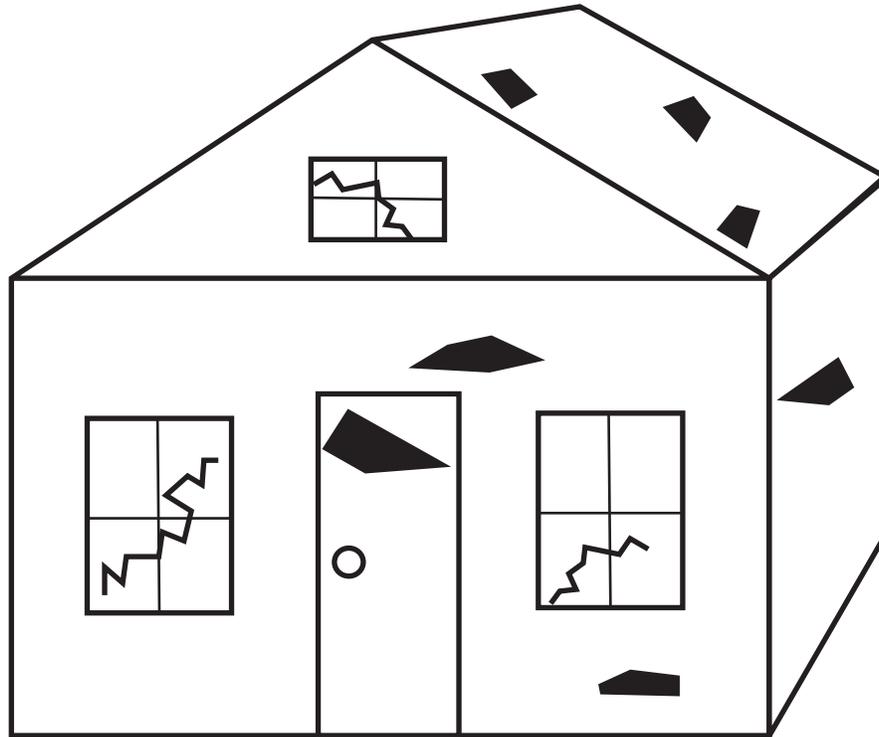


EXAMPLES:

- Minimal damage
- Habitable without repairs

AFFECTED - WIND

WIND DAMAGE: SINGLE FAMILY DWELLING



EXAMPLES:

- Windows or doors are damaged
- May be habitable in less than 30 days

MINOR - WIND

WIND DAMAGE: SINGLE FAMILY DWELLING

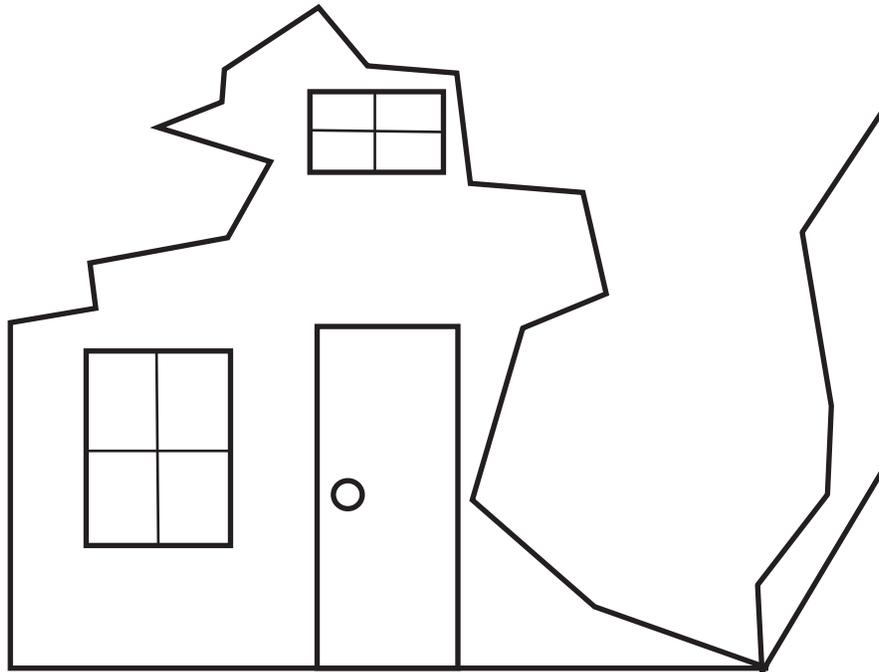


EXAMPLES:

- Substantial roofing elements damaged or missing
- Damage to windows, doors, exterior walls
- Rain/water damage
- Extensive debris and/or utility problems
- Damage will take more than 30 days to repair

MAJOR - WIND

WIND DAMAGE: SINGLE FAMILY DWELLING

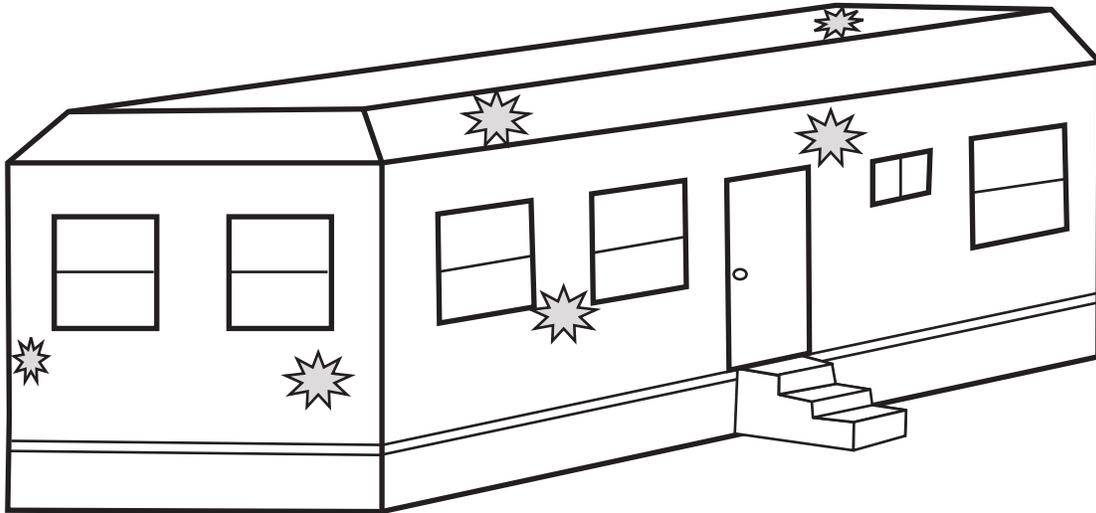


EXAMPLES:

- Total loss
- Only the foundation remains or,
- Two or more walls are destroyed and the roof is substantially damaged or destroyed

DESTROYED - WIND

WIND DAMAGE: MANUFACTURED HOUSING

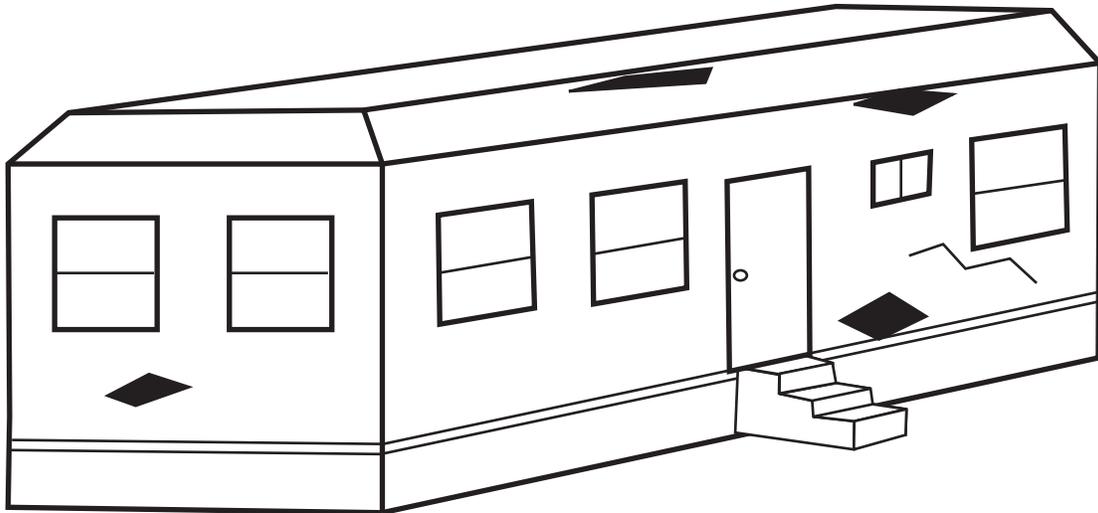


EXAMPLES:

- Frame is not bent, twisted, or otherwise compromised
- No structural components are damaged
- Cosmetic damages

AFFECTED - WIND

WIND DAMAGE: MANUFACTURED HOUSING

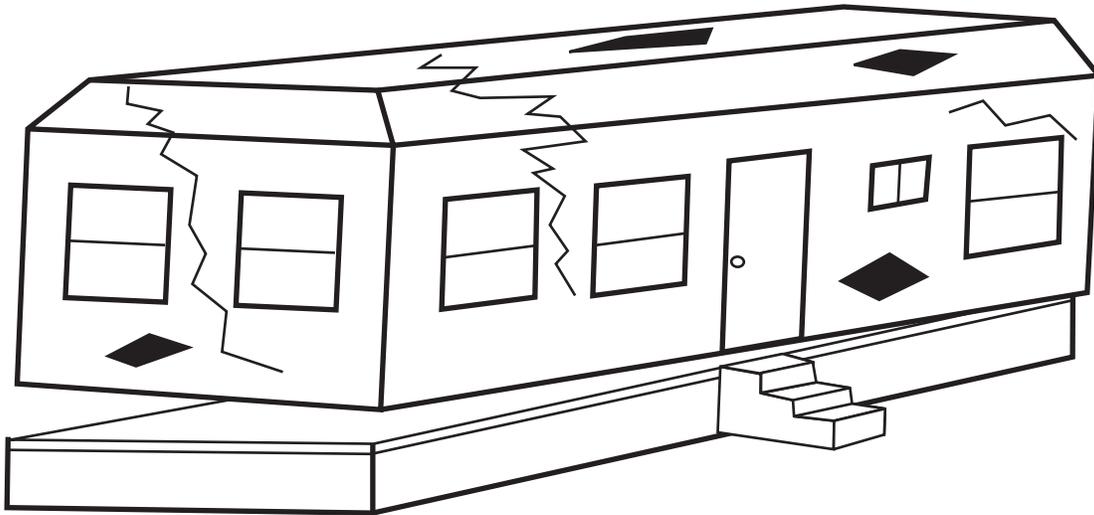


EXAMPLES:

- Frame is not bent, twisted, otherwise compromised
- Minor structural damage, but it has not been displaced from the foundation
- Other structural components may be damaged (i.e., windows, doors, roof, etc.)

MINOR - WIND

WIND DAMAGE: MANUFACTURED HOUSING

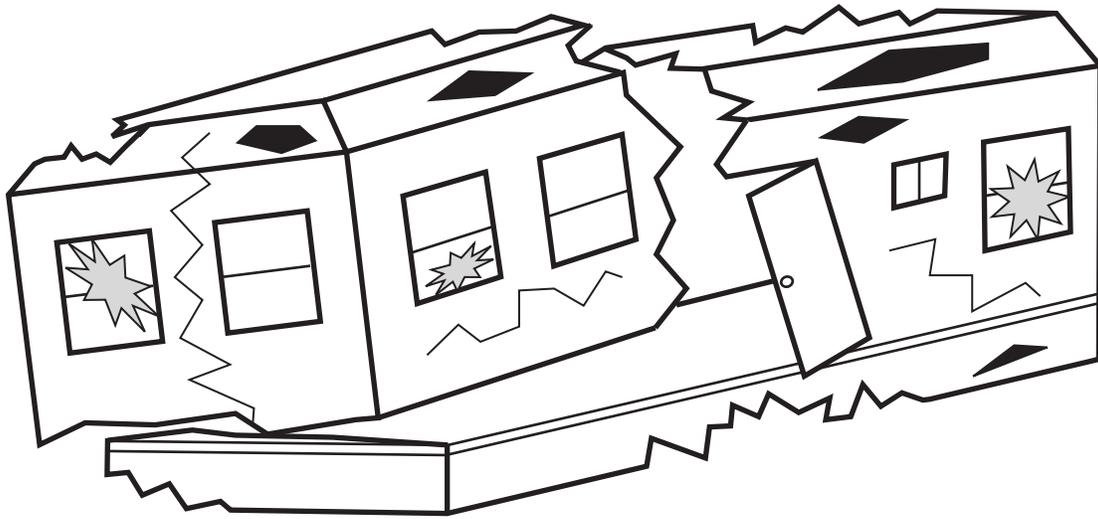


EXAMPLES:

- Frame is not bent, twisted, or otherwise compromised; however there is more than minor damage
- Structure is displaced from its foundation
- Other structural components may be damaged (i.e., windows, doors, roof, etc.)

MAJOR - WIND

WIND DAMAGE: MANUFACTURED HOUSING



EXAMPLES:

- Total loss
- Frame is bent, twisted, or otherwise compromised
- Roof is missing or has sustained significant damage

DESTROYED - WIND



Indiana Department of Homeland Security

302 W. Washington Street
Indianapolis, IN 46204

www.in.gov/dhs

This booklet was adapted from the
Ohio Emergency Management Agency's
"EMA Preliminary Damage Assessment Field Guide" booklet.