



Indiana Department of Homeland Security

Preliminary Damage Assessment

FIELD GUIDE



Indiana Department of Homeland Security

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

The Purpose of This Preliminary Damage Assessment Field Guide

This field guide has been designed to serve as a quick reference tool to be utilized by 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 will be needed from the State and/or Federal government.
- 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).
- Include the impact to businesses in your survey.
- Include the impact to the community at large.
- Attached garage damages can be considered but please mark the street sheet accordingly.

Do's:

- Current 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, the of the number of people unemployed as a direct result of the disaster (including how long), and the availability of housing.
- Provide detailed assessments to Indiana DHS within 72 hours of the event.
- The basement can be considered the main floor if that area is considered primary living space (requirements: a bedroom, the only kitchen, the only bathroom).

Don't's:

- Use assessed property values.
- Assume or guess on insurance coverage.
- Outbuildings, detached garages, swimming pools, landscaping and fencing do not count.
- Miss the 72 hour deadline.

REMEMBER:

Focus on the degrees of damage.
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.

Based on criteria, make a judgment call.

FEMA Damage Matrix: Affected

Definition:

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

Flood Examples:

Minimal damage to structure and home is habitable without repairs. Less than 1 foot of water in the basement/crawl space.

Tornado/Wind Examples:

Minimal damage to structure and home is habitable without repairs. Shingle or siding damage.

Mobile homes with similar damage may be more heavily impacted resulting in being categorized at a higher damage level.

FEMA Damage Matrix: Minor

Definition:

The home is damaged and uninhabitable, but may be habitable in a short period of time. Some of the items that determine minor damage are: windows or doors blown in; one foot or more of water/sewer backup in basement (i.e., if furnace or water heater are damaged).

Flood Examples:

One foot or more of water/sewer backup in basement. One foot or less of water on first floor (no basement).

Note: If water has remained in structure for more than a day, more extensive damage may have occurred. Watch for foundation damage.

Tornado/Wind Examples:

Windows or doors blown in. Hole in the roof caused by the storm, but substantial roofing elements are intact.

Mobile homes with similar damage may be more heavily impacted resulting in being categorized at a higher damage level.

FEMA Damage Matrix: Major

Definition:

The home has sustained structural or significant damages, is uninhabitable, and requires extensive repairs. Any one of the following may constitute major damage: substantial failures of structural elements of the residence (e.g. walls, floors, foundation, etc.); one foot or more of water on the first floor (of a home with a basement, and furnace and water heater were located in the basement); without a basement, major damage would be in the 2 to 4 foot range, depending on the length of time the home was inundated.

Flood Examples:

More than one foot of water on the first floor (with basement), two to four foot range (no basement), structural damage, collapsed basement wall. *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.

Mobile homes with similar damage may be more heavily impacted resulting in being categorized at a higher damage level.

FEMA Damage Matrix: Destroyed

Definition:

The home is a total loss or damaged to such an extent that repairs are not economically feasible. Any one of the following may constitute a status of destroyed: structure is permanently uninhabitable; complete failures to [2 or more] major components of structure (e.g. basement wall/foundation, walls, roof, etc.); only the foundation remains; two or more walls destroyed and roof substantially damaged; house pushed off foundation; an unaffected structure that will obviously require removal or demolition (home in imminent danger due to impending landslides, mudslides or sinkholes, etc.).

Flood Examples:

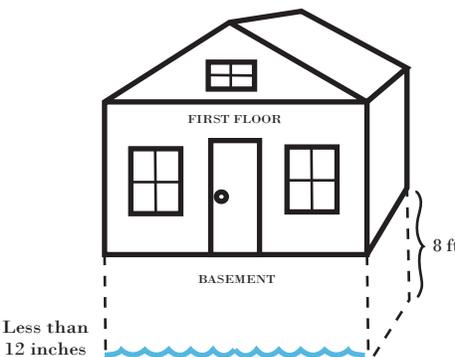
Structure is permanently uninhabitable (for instance, pushed off the foundation). *Note: Depth, velocity, and duration of water in and around the structure may have a significant impact on the degree of damage. 4 or more feet of water in the main living area.*

Tornado/Wind Examples:

Foundation only remains OR two or more walls are destroyed and the roof substantially damaged or destroyed.

Mobile homes with similar damage may be more heavily impacted resulting in being categorized at a higher damage level.

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT



Less than 12 inches

8 ft.

EXAMPLES:

- Less than 12 inches of water in basement
- No structural damage
- If the furnace or hot water heater is affected then the damage is MINOR

AFFECTED - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT



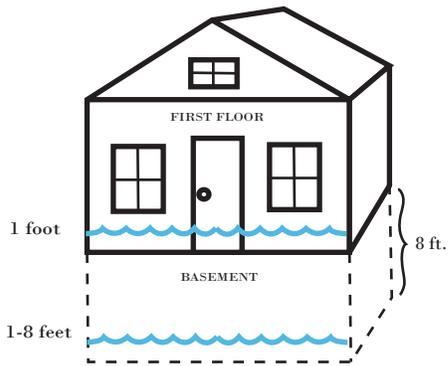
Less than 12 inches

EXAMPLES:

- Less than 12 inches on the first floor
- No structural damage
- If the furnace or hot water heater is affected then the damage is MINOR

AFFECTED - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT

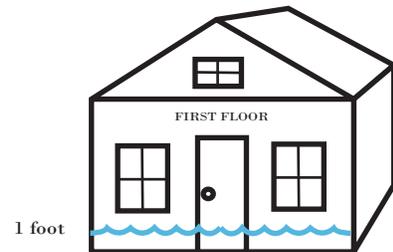


EXAMPLES:

- 1 foot of water in the basement up to 1 foot on the 1st floor

MINOR - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT

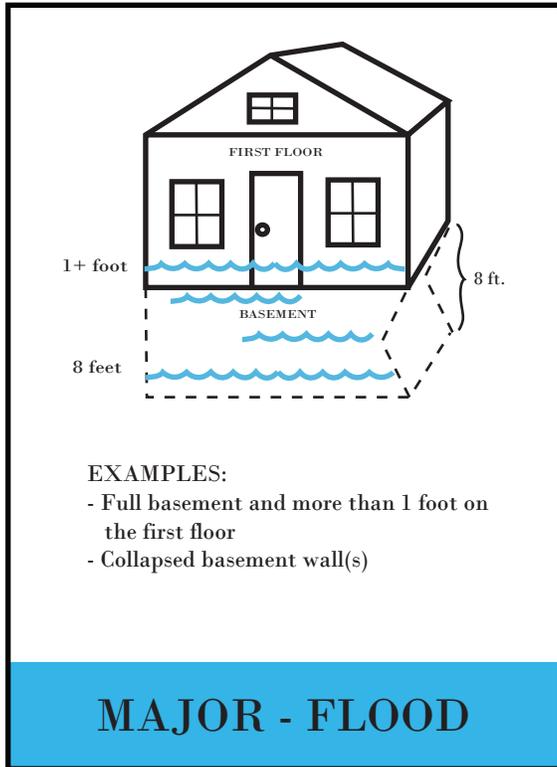


EXAMPLES:

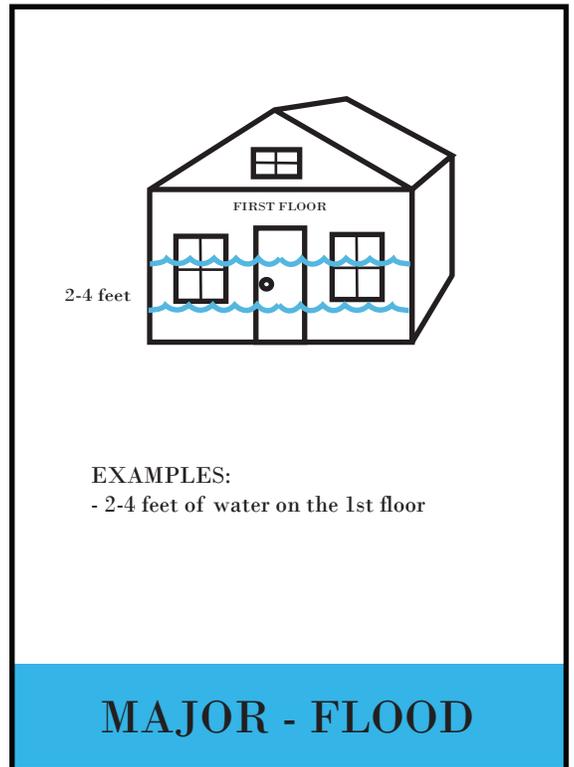
- 1 foot of water on the 1st floor

MINOR - FLOOD

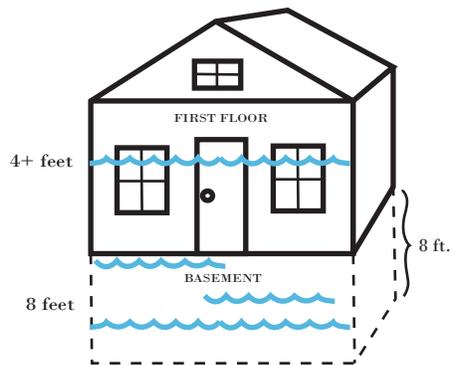
FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT



FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT



FLOOD DAMAGE: SINGLE FAMILY DWELLING WITH BASEMENT

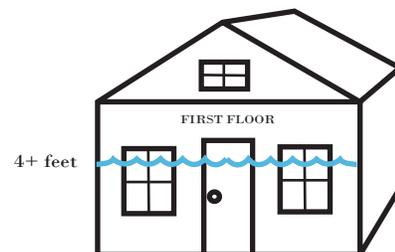


EXAMPLES:

- Basement full of water AND over 4 feet of water on the 1st floor
- Severe structural damage

DESTROYED - FLOOD

FLOOD DAMAGE: SINGLE FAMILY DWELLING WITHOUT BASEMENT

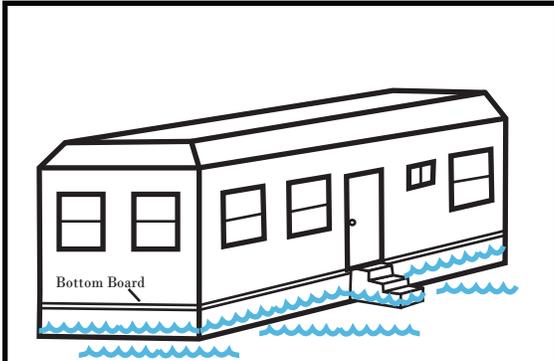


EXAMPLES:

- Over 4 feet of water on the 1st floor
- Severe structural damage

DESTROYED - FLOOD

FLOOD DAMAGE: MOBILE HOME

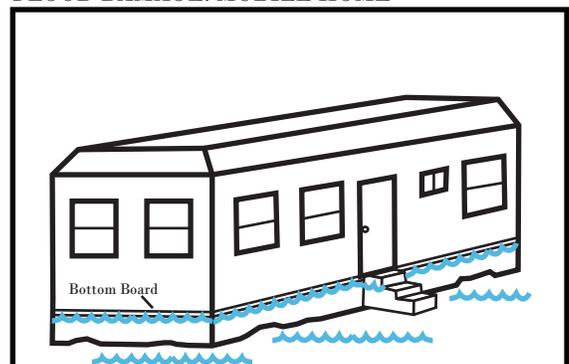


EXAMPLES:

- Water standing under or around the mobile home, but not touching the bottom board
- Indication of water being around the mobile home, but not touching the bottom board following a flash flood

AFFECTED - FLOOD

FLOOD DAMAGE: MOBILE HOME

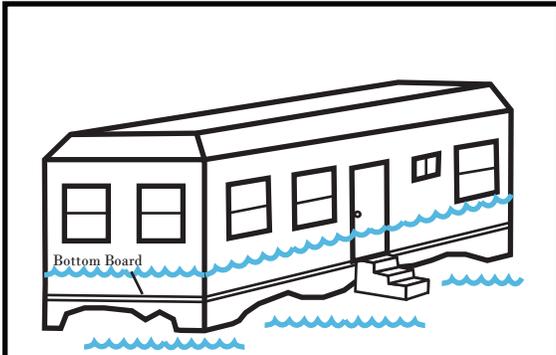


EXAMPLES:

- Utilities flooded
- Piers/foundation shifted
- Water touched or soaked the bottom board, but did not enter the primary living area

MINOR - FLOOD

FLOOD DAMAGE: MOBILE HOME

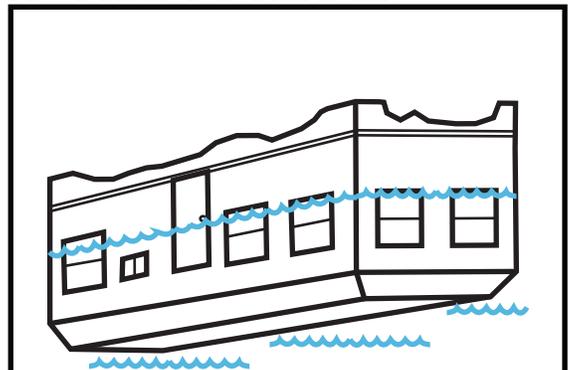


EXAMPLES:

- Water soaked bottom board AND water in the primary living area
- Piers/foundation washed out or away

MAJOR - FLOOD

FLOOD DAMAGE: MOBILE HOME



EXAMPLES:

- Washed off piers/foundation
- Frame is bent or twisted
- Mobile home has turned over on its side/top
- 4 feet + of water above the floor level

DESTROYED - FLOOD

WIND DAMAGE: SINGLE FAMILY DWELLING



EXAMPLES:

- Some shingle damage
- Few broken windows
- Cosmetic damage to siding
- Repairable

AFFECTED - WIND

WIND DAMAGE: SINGLE FAMILY DWELLING



EXAMPLES:

- One (1) wall damaged
- Section of roof missing or damaged
- Repairable

MINOR - WIND

WIND DAMAGE: SINGLE FAMILY DWELLING



EXAMPLES:

- Substantial structural damage to walls, roof, etc.
- Repairable

MAJOR - WIND

WIND DAMAGE: SINGLE FAMILY DWELLING

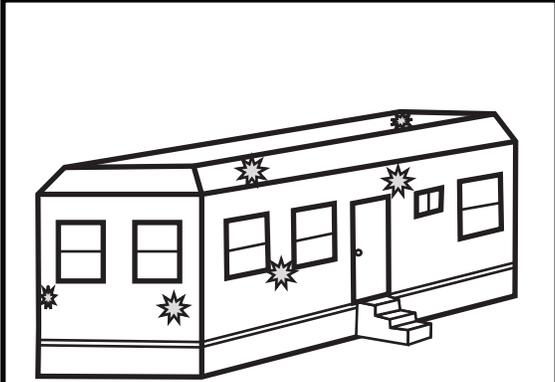


EXAMPLES:

- Total loss
- Structure is compromised
- Not repairable

DESTROYED - WIND

WIND DAMAGE: MOBILE HOME

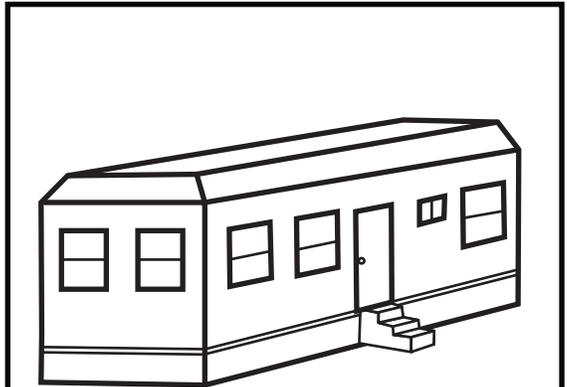


EXAMPLES:

- Minor dents to roof or siding

AFFECTED - WIND

WIND DAMAGE: MOBILE HOME

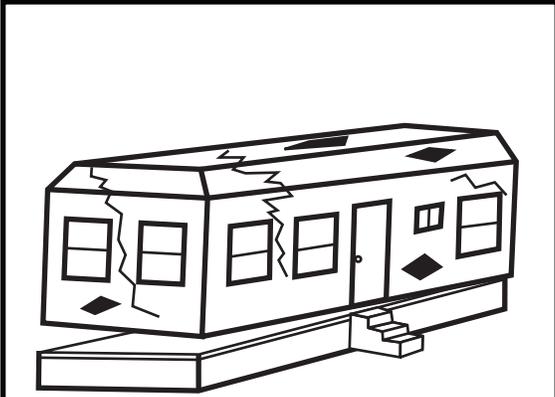


EXAMPLES:

- Utility connections broken
- Slight movement on piers/foundation

MINOR - WIND

WIND DAMAGE: MOBILE HOME

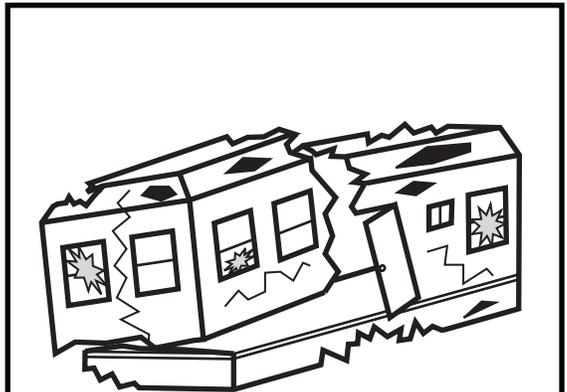


EXAMPLES:

- Wall and roof damage
- Shifted on piers/foundation

MAJOR - WIND

WIND DAMAGE: MOBILE HOME



EXAMPLES:

- Total loss
- Bent frame
- Buckled wall, roof
- Off piers/foundation

DESTROYED - WIND