

## Structural Defects

**Definition:**      **Structure:**      Anything that is constructed or built from different interrelated parts with a fixed location on the ground. Structure can include, but not limited to, exterior walls, windows, roof, floors, sub floors, columns, and beams.

**Defect:**              A structural defect is physical damage to a designated load-bearing element of a building that could possibly affect the load-bearing function. Some common signs of possible structural defects include, but is not limited to, cracks, exposed rebar, bowed walls, gaps where a wall and floor meet, nail pops and uneven / bouncy floors.

**Name**                      frame, framing, infrastructure, shell, load bearing wall, rebar  
**Variants:**

**Most**                      concrete, wood, cement, metal, brick, clay, stone  
**Common**  
**Materials:**

**Most**                      foundation, beam, floor, walls, roof, slabs, plinth  
**Common**  
**Components:**

## Location & Inspection of Structural Defects

Abilities or Knowledge Needed:	- Visual acuity for location & inspection - Mobility for access to all areas of the property - Understanding of item's components
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Tools for Location & Inspection	Useful:	flashlight, inspection mirror
	Required:	length measuring device

Common Locations:	Unit/Inside:	bedrooms, living rooms, kitchens, basements, community rooms, patio, balcony, mechanical rooms, office
	Outside:	walls, foundation, detached buildings, garages

How to Locate:	Visual Observation:	Look at the floors, supports, and walls in common locations.
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Possible Deficiencies:	Deficiency 1:	Structure is cracked
	Deficiency 2:	Structure has exposed rebar
	Deficiency 3:	Structure has failed

## Deficiency 1:

## Structure is cracked

Rationale:	Maintenance:	Indicates maintenance staff is not identifying deficiencies or responding to self-generated or complaint-driven work orders.
	Health and Safety:	Increases probability that the resident safety can be adversely affected if the structural issue is severe enough.
	Cost:	Repair is significant enough to incur capital cost.
Health and Safety:	Standard:	This is a standard health and safety issued requiring a correction, remedy, or act of abatement within 30 days.
How to Inspect:	Visual Observation:	Look for cracks within structure.
	Action:	Measure—if cracks are seen—the length and width of cracks of each wall or floor where cracks are present.
	Action:	Photograph cracks
Record deficiency if:	cracks of the aforementioned dimensions are visible in the structure.	
	Level 1: there are structural cracks approximately ¼ inch wide and 2 feet long to an individual wall or floor.	
	Level 2: there is a crack the full length of an individual wall or floor and approximately ¼ inch wide or more.	

## Deficiency 2:

## Structure has exposed rebar

Rationale:	Maintenance:	Indicates maintenance staff is not identifying deficiencies or responding to self-generated or complaint-driven work orders.
	Health and Safety:	Increases probability that the resident safety can be adversely affected if the structural issue is severe enough.
	Cost:	Repair is significant enough to incur capital cost.
Health and Safety:	Standard:	This is a standard health and safety issued requiring a correction, remedy, or act of abatement within 30 days.
How to Inspect:	Visual Observation:	Look at a structure and examine it for any exposed rebar.
	Action:	Photograph exposed rebar
Record deficiency if:	the structure has any exposed rebar.	

## Deficiency 3: Structural Failure

Rationale:	Maintenance:	Indicates maintenance staff is not identifying deficiencies or responding to self-generated or complaint-driven work orders.
	Health and Safety:	Increases probability that the resident safety can be adversely affected if the structural issue is severe enough.
	Cost:	Repair is significant enough to incur capital cost.
Health and Safety:	<b>Severe:</b>	<b>This is a life-threatening or severe health and safety issue requiring a 24-hour repair, correction, or act of abatement. This deficiency may not be repaired or corrected within 24 hours however within 24 hours it should be considered to have tenants relocated for their safety.</b>
How to Inspect:	Visual Observation:	Look at structure for blatant signs that it is structurally unsound and is in danger of collapsing.
Record deficiency if:	any structural component appears to be in imminent danger of collapse or failure.	