

TITLE: ROOF ASSEMBLY
VERSION: VI.3
DATE PUBLISHED: 7/31/20

DEFINITION: The external upper covering of a house or other building.
PURPOSE: Protect the interior from the exterior elements, as well as collect and redirect the accumulation of precipitation from the roof surface to the ground or drainage system.
NAME VARIANTS: Pitched roof; Flat roof
COMMON MATERIALS: Asphalt shingles; Slate; Clay; Concrete; Rubber; Built-up roofing; Metal; Wood; Vinyl; Tar and gravel
COMMON COMPONENTS: Roof covering; Drain; Gutter; Downspout; Flashing; Roof ventilation (if present); Scupper; Eaves; Soffits; Fascia
LOCATION: Unit None
 Inside None
 Outside On top of building
MORE INFORMATION: None

DEFICIENCY 1: Restricted flow of water
LOCATION: Outside

DEFICIENCY 2: Damaged, missing, or unfixd gutter components
LOCATION: Outside

DEFICIENCY 3: Roof surface has standing water
LOCATION: Outside

DEFICIENCY 4: Substrate is exposed
LOCATION: Outside

DEFICIENCY 5: Roof assembly has penetrative hole
LOCATION: Outside

DEFICIENCY 6: Roof assembly has damage
LOCATION: Outside

DEFICIENCY I — OUTSIDE: RESTRICTED FLOW OF WATER

DEFICIENCY CRITERIA: Debris is limiting the ability of water to drain; water may not be present.

OR

An area of approximately 25 sq. ft. of ponding water is located above the drain.

HEALTH AND SAFETY DETERMINATION: Standard This is a standard health and safety issue. A repair, correction, or act of abatement for this deficiency should occur within 30 days.

CORRECTION TIMEFRAME: Within 30 days

HCV — CORRECTION TIMEFRAME: Within 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Indirect	Condition could affect resident's mental, or physical, or psychological state.	If roof drain, gutter, or downspout is clogged, then ponding water may occur and promote infestation.
M2	Routine Maintenance	Direct	It is reasonable to expect that this deficiency would be identified through routine daily observations and facilities management would prioritize work orders to fix this deficiency.	If roof drain, gutter, or downspout is clogged, then it is likely routine work orders are not being addressed.
M3	Preventative Maintenance	Direct	This defect indicates that a property is not following preventative maintenance practices for the item or equipment.	Roof assembly inspection should be part of preventative maintenance plan. If roof drain, gutter, or downspout is clogged, then it is likely preventative maintenance activities are not being addressed.
M4	Capital Cost	Direct	This defect, on its own, is significant enough to be a capital cost to repair.	If roof drain, gutter, or downspout is clogged, and ponding water occurs, then it may indicate a level of structural failure in the roof assembly which will likely result in significant cost to repair.
M6	Structural	Indirect	This condition indicates potential structural failure of the building or a load-bearing component.	If roof drain, gutter, or downspout is clogged, and ponding water occurs, then there will be increased weight on the roof resulting in possible collapse. Additionally, the presence of this deficiency may indicate a level of structural failure in the roof assembly.

INSPECTION PROCESS:

- OBSERVATION:**
- Look at roof drain, gutter, or downspout for ponding water.
 - Look for evidence of clogging (e.g. debris, leaves, or soil).
- REQUEST FOR HELP:**
- None
- ACTION:**
- If visually accessible, inspect roof drain and gutters.
- More Information:**
- It may not be possible to gain access to roof in single family units.
 - Ponding may be hard to determine if it has not been raining; in this situation, inspector is unable to cite deficiency.

TOOLS OR EQUIPMENT:

- REQUIRED:**
- None
- USEFUL:**
- Flashlight
 - Distance Measuring Device
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DEFICIENCY 2 — OUTSIDE: DAMAGED, MISSING, OR UNFIXED GUTTER COMPONENTS

DEFICIENCY CRITERIA: Gutter, including endcap, downspout, and splash block, is not securely fixed to dwelling.

AND / OR

Gutter has hole or is bent resulting in the stream of water diverting off the intended course.

HEALTH AND SAFETY DETERMINATION: Standard This is a standard health and safety issue. A repair, correction, or act of abatement for this deficiency should occur within 30 days.

CORRECTION TIMEFRAME: Within 30 days

HCV — CORRECTION TIMEFRAME: Within 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R2	Safety	Indirect	Resident could be injured because of this condition.	If gutter is damaged, missing, or unfixed, then resident may be injured by falling components.
R6	Usability and Operability of Fixtures	Direct	Because of this condition, the resident is unable to use certain fixtures, features, or appliances, which are reasonably assumed to be part of their rent.	If gutter is damaged, missing, or unfixed, and the stream of water diverted off the intended course, then resident cannot fully utilize a feature that is expected to be maintained as part of their rent.
M1	Corrective Maintenance	Direct	It is reasonable to expect a tenant to report this deficiency, and for facilities management to prioritize a work order response to fix that deficiency.	If gutter is damaged, missing, or unfixed, then the resident would likely report this deficiency and its presence may indicate that complaint-based work orders are not being addressed.

INSPECTION PROCESS:

- OBSERVATION:**
- Look at the gutter system to detect any:
 - Gutter components that are damaged (i.e., visibly defective; impacts functionality).
 - Gutter components that are missing (i.e., evidence of prior installation, but now not present or is incomplete).
 - Loose gutter components (i.e., pulled away from the fascia or roofing structure).
 - Confirm all downspouts have splash blocks.
- REQUEST FOR HELP:** - None
- ACTION:** - None
- More Information:** - Gutters may not be present on all properties.



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TOOLS OR EQUIPMENT:

REQUIRED: - None

USEFUL: - None

DEFICIENCY 3 — OUTSIDE: ROOF SURFACE HAS STANDING WATER

DEFICIENCY CRITERIA: Water ponding in area approximately 25 sq. ft. or greater on a flat roof surface not near drain or scupper.

HEALTH AND SAFETY DETERMINATION: Standard This is a standard health and safety issue. A repair, correction, or act of abatement for this deficiency should occur within 30 days.

CORRECTION TIMEFRAME: Within 30 days

HCV — CORRECTION TIMEFRAME: Within 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Indirect	Condition could affect resident's mental, or physical, or psychological state.	If roof surface has standing water and there is infestation, then resident's health may be in jeopardy.
M1	Corrective Maintenance	Direct	It is reasonable to expect a tenant to report this deficiency, and for facilities management to prioritize a work order response to fix that deficiency.	If roof has standing water, the resident would likely report this deficiency and its presence may indicate that complaint-based work orders are not being addressed.
M2	Routine Maintenance	Direct	It is reasonable to expect that this deficiency would be identified through routine daily observations and facilities management would prioritize work orders to fix this deficiency.	If roof has standing water, then it is likely that maintenance staff is not identifying deficiencies or responding to self-generated work orders.
M4	Capital Cost	Direct	This defect, on its own, is significant enough to be a capital cost to repair.	If roof has standing water, then it may be a sign of roof assembly failure which has a significant cost to repair.
M6	Structural	Indirect	This condition indicates potential structural failure of the building or a load-bearing component.	If roof has standing water, then it may increase the weight on the roof assembly and indicate a level of structural failure.

INSPECTION PROCESS:

- OBSERVATION: - Look to see if building has a flat roof; if not, disregard this deficiency.
 - Look for ponding water on roof that isn't located above drain or scupper.
- REQUEST FOR HELP: - None
- ACTION: - Measure the ponding.
- More Information: - None

TOOLS OR EQUIPMENT:

REQUIRED: - Distance Measuring Device

USEFUL: - None

DEFICIENCY 4 — OUTSIDE: SUBSTRATE IS EXPOSED

DEFICIENCY CRITERIA: Any amount of substrate is exposed.

HEALTH AND SAFETY DETERMINATION: Standard This is a standard health and safety issue. A repair, correction, or act of abatement for this deficiency should occur within 30 days.

CORRECTION TIMEFRAME: Within 30 days

HCV — CORRECTION TIMEFRAME: Within 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Indirect	Condition could affect resident’s mental, or physical, or psychological state.	If substrate is exposed, and it leads to water infiltration, then resident may be exposed to mold.
R2	Safety	Indirect	Resident could be injured because of this condition.	If substrate is exposed, and there is a structural defect, then resident could be injured as the result of collapse.
M2	Routine Maintenance	Direct	It is reasonable to expect that this deficiency would be identified through routine daily observations and facilities management would prioritize work orders to fix this deficiency.	If substrate is exposed, then it is likely that maintenance staff is not identifying deficiencies or responding to self-generated work orders.
M3	Preventative Maintenance	Direct	This defect indicates that a property is not following preventative maintenance practices for the item or equipment.	If substrate is exposed, then it is likely preventative maintenance activities are not being addressed.
M4	Capital Cost	Direct	This defect, on its own, is significant enough to be a capital cost to repair.	If substrate is exposed, the repair will likely be significant enough to incur capital cost.
M6	Structural	Indirect	This condition indicates potential structural failure of the building or a load-bearing component.	If roof has substrate exposed, then the probability of water infiltration increases which may compromise the structural integrity.

INSPECTION PROCESS:

- OBSERVATION:** - Look at surface of roof for evidence of exposed substrate (e.g., missing or damaged shingles, tiles, or membrane).
- REQUEST FOR HELP:** - None
- ACTION:** - None
- More Information:** - It may be difficult to determine if there is exposed substrate in single family homes.



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TOOLS OR EQUIPMENT:

REQUIRED: - None

USEFUL: - None

DEFICIENCY 5 — OUTSIDE: ROOF ASSEMBLY HAS PENETRATIVE HOLE

DEFICIENCY CRITERIA: Penetrative unintentional holes are found.

OR

Intentional holes are found and are not covered by vents or screens.

HEALTH AND SAFETY DETERMINATION: Standard This is a standard health and safety issue. A repair, correction, or act of abatement for this deficiency should occur within 30 days.

CORRECTION TIMEFRAME: Within 30 days

HCV — CORRECTION TIMEFRAME: Within 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Direct	Condition could affect resident's mental, or physical, or psychological state.	If roof has penetrative hole, it may lead to water infiltration that could cause mold or mildew which could affect the resident's health.
R2	Safety	Indirect	Resident could be injured because of this condition.	If roof has penetrative hole, and there is a structural defect, then resident could be injured as the result of collapse.
M3	Preventative Maintenance	Direct	This defect indicates that a property is not following preventative maintenance practices for the item or equipment.	If roof has penetrative hole, then it is likely preventative maintenance activities are not being addressed.
M4	Capital Cost	Direct	This defect, on its own, is significant enough to be a capital cost to repair.	If roof has penetrative hole, then it may be a sign of roof assembly failure which has a significant cost to repair.

INSPECTION PROCESS:

OBSERVATION: - Look at roof's soffits, eaves, fascia, and roof deck for holes—both intentional and unintentional—that penetrate completely through the component's material.

REQUEST FOR HELP: - None

ACTION: - None

More Information: - None

TOOLS OR EQUIPMENT:

REQUIRED: - None

USEFUL: - None

DEFICIENCY 6 — OUTSIDE: ROOF ASSEMBLY HAS DAMAGE

DEFICIENCY CRITERIA: Roof assembly has damage (i.e., visibly defective; impacts functionality) present that causes one or more components to become unstable.

HEALTH AND SAFETY DETERMINATION: Standard This is a standard health and safety issue. A repair, correction, or act of abatement for this deficiency should occur within 30 days.

CORRECTION TIMEFRAME: Within 30 days

HCV — CORRECTION TIMEFRAME: Within 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R2	Safety	Indirect	Resident could be injured because of this condition.	If roof assembly is damaged, and there is a structural defect, then resident could be injured as the result of collapse.
M2	Routine Maintenance	Direct	It is reasonable to expect that this deficiency would be identified through routine daily observations and facilities management would prioritize work orders to fix this deficiency.	If roof assembly is damaged, then it may indicate that maintenance staff is not identifying deficiencies or responding to self-generated work orders.
M3	Preventative Maintenance	Direct	This defect indicates that a property is not following preventative maintenance practices for the item or equipment.	If roof assembly is damaged, then it may indicate that maintenance staff is not addressing preventative maintenance activities.
M6	Structural	Direct	This condition indicates potential structural failure of the building or a load-bearing component.	If roof assembly is damaged, then structural failure may occur.

INSPECTION PROCESS:

OBSERVATION: - Look at roof's perimeter soffits, eaves, fascia, and roof deck for damage.

REQUEST FOR HELP: - None

ACTION: - None

More Information: - None

TOOLS OR EQUIPMENT:

REQUIRED: - None

USEFUL: - None

SUMMARY OF CHANGES

TITLE: ROOF ASSEMBLY
VERSION: VI.3
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FIELD	CHANGE	VERSION	DATE
Overall Formatting	Complete rework of document format and layout	VI.3	2020-07-31
Definition	Revised definition	VI.3	2020-07-31
Purpose	Field added	VI.3	2020-07-31
Name Variants	Revised name variants	VI.3	2020-07-31
Common Materials	Revised common materials	VI.3	2020-07-31
More Information	Field added	VI.3	2020-07-31
Deficiency 1	Separated by inspectable location — Outside	VI.3	2020-07-31
Title	Revised title; added inspectable location		
Deficiency Criteria	Revised deficiency criteria		
Health and Safety Determination	Added standardized description		
Correction Timeframe	Field added; response input as “Within 30 days”		
HCV — Correction Timeframe	Field added; response input as “Within 30 days”		
Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions		
Inspection Process	Revised observation, request for help, action, and more information		
Tools or Equipment	Field added to deficiency; response revised		
Deficiency 2	Added by inspectable location — Outside	VI.3	2020-07-31
Title	Added title; added inspectable location		
Deficiency Criteria	Added deficiency criteria		
Health and Safety Determination	Added “Standard” determination; added standardized description		
Correction Timeframe	Field added; response input as “Within 30 days”		
HCV — Correction Timeframe	Field added; response input as “Within 30 days”		

Rationale	Added rationale categories, types, and explanations; added standardized codes and descriptions		
Inspection Process	Added observation, request for help, action, and more information		
Tools or Equipment	Field added to deficiency		
Deficiency 3	Previously deficiency 2 Separated by inspectable location – Outside	VI.3	2020-07-31
Title	Revised title; added inspectable location		
Health and Safety Determination	Added standardized description		
Correction Timeframe	Field added; response input as “Within 30 days”		
HCV – Correction Timeframe	Field added; response input as “Within 30 days”		
Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions		
Inspection Process	Revised observation, request for help, action, and more information		
Tools or Equipment	Field added to deficiency; response revised		
Deficiency 4	Previously deficiency 3 Separated by inspectable location – Outside	VI.3	2020-07-31
Title	Added inspectable location		
Health and Safety Determination	Added standardized description		
Correction Timeframe	Field added; response input as “Within 30 days”		
HCV – Correction Timeframe	Field added; response input as “Within 30 days”		
Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions		
Inspection Process	Revised observation, request for help, action, and more information		
Tools or Equipment	Field added to deficiency; response revised		
Deficiency 5	Previously deficiency 4 Separated by inspectable location – Outside	VI.3	2020-07-31
Title	Added inspectable location		
Deficiency Criteria	Revised deficiency criteria		
Health and Safety Determination	Added standardized description		
Correction Timeframe	Field added; response input as “Within 30 days”		
HCV – Correction Timeframe	Field added; response input as “Within 30 days”		

Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions
Inspection Process	Revised request for help, action, and more information
Tools or Equipment	Field added to deficiency; response revised
Deficiency 6	Previously deficiency 5 Separated by inspectable location – Outside
	VI.3
	2020-07-31
Title	Revised title; added inspectable location
Deficiency Criteria	Revised deficiency criteria
Health and Safety Determination	Added standardized description
Correction Timeframe	Field added; response input as "Within 30 days"
HCV – Correction Timeframe	Field added; response input as "Within 30 days"
Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions
Inspection Process	Revised request for help, action, and more information
Tools or Equipment	Field added to deficiency; response revised