

TITLE: ROOF ASSEMBLY
VERSION: V2.1
DATE PUBLISHED: 4/2/21

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; Scupper; Eaves; Soffits; Fascia
LOCATION: Unit None
 Inside None
 Outside On top of building
MORE INFORMATION: None

DEFICIENCY 1: Restricted flow of water from a roof drain, gutter, or downspout.
LOCATION: Outside

DEFICIENCY 2: Gutter component is damaged, missing, or unfixed.
LOCATION: Outside

DEFICIENCY 3: Roof surface has standing water.
LOCATION: Outside

DEFICIENCY 4: Substrate is exposed.
LOCATION: Outside

DEFICIENCY 5: Roof assembly has a penetrative hole.
LOCATION: Outside

DEFICIENCY 6: Roof assembly is damaged.
LOCATION: Outside

DEFICIENCY I — OUTSIDE: RESTRICTED FLOW OF WATER FROM A ROOF DRAIN, GUTTER, OR DOWNSPOUT.

DEFICIENCY CRITERIA: Debris is limiting the ability of water to drain; water may not be present.
 OR
 An area of approximately 25 square feet of ponding water is located above the drain.

HEALTH AND SAFETY DETERMINATION: **Standard** The Standard Health and Safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

CORRECTION TIMEFRAME: 30 days

HCV PASS / FAIL: Fail

HCV CORRECTION TIMEFRAME: 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Indirect	Condition could affect resident's mental, or physical, or psychological state.	If debris is limiting the ability of water to drain, 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 debris is limiting the ability of water to drain or approximately 25 square feet of ponding water is located above the drain, 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.	The roof assembly should be checked during periodic property inspections, and according to industry best practices, should be included in a preventative maintenance plan. If debris is limiting the ability of water to drain or approximately 25 square feet of ponding water is located above the drain, then it may indicate preventative maintenance activities could be improved.
M4	Capital Cost	Direct	This defect, on its own, is significant enough to be a capital cost to repair.	If debris is limiting the ability of water to drain, and ponding water occurs, then it may indicate a level of structural failure in the roof assembly, which will likely result in significant costs to repair.
M6	Structural	Indirect	This condition indicates potential structural failure of the building or a load-bearing component.	If debris is limiting the ability of water to drain, 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 the 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 the roof drain and gutters.
- More Information:**
- It may not be possible to gain access to the roof in single family units.
 - Ponding may be hard to determine if it has not been raining; in this situation, the inspector is unable to cite a deficiency.

TOOLS OR EQUIPMENT:

- REQUIRED:**
- None
- USEFUL:**
- Flashlight
 - Distance measuring device

DEFICIENCY 2 — OUTSIDE: GUTTER COMPONENT IS DAMAGED, MISSING, OR UNFIXED.

DEFICIENCY CRITERIA: Gutter component is damaged (i.e., visibly defective; impacts functionality).
 OR
 Gutter component is missing (i.e., evidence of prior installation, but now not present or is incomplete).
 OR
 Gutter component is unfixed.

HEALTH AND SAFETY DETERMINATION: Standard The Standard Health and Safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

CORRECTION TIMEFRAME: 30 days
HCV PASS / FAIL: Fail
HCV CORRECTION TIMEFRAME: 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R2	Safety	Indirect	Resident could be injured because of this condition.	If a gutter component is damaged, missing, or unfixed, then the 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 a gutter component is damaged, missing, or unfixed, and a stream of water is diverted off its intended course, then the resident cannot fully use a feature that is expected to be provided and 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 a gutter component is damaged, missing, or unfixed, then the resident would likely report this deficiency, and the presence of this deficiency 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).
 - Gutter components that are unfixed (i.e., pulled away from the fascia or roofing structure).
- REQUEST FOR HELP:** - None
- ACTION:** - None

More Information: - Gutters may not be present on all properties.

TOOLS OR EQUIPMENT:

REQUIRED: - None

USEFUL: - None

DEFICIENCY 3 — OUTSIDE: ROOF SURFACE HAS STANDING WATER.

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

HEALTH AND SAFETY DETERMINATION: Standard
 The Standard Health and Safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

CORRECTION TIMEFRAME: 30 days

HCV PASS / FAIL: Fail

HCV CORRECTION TIMEFRAME: 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Indirect	Condition could affect resident's mental, or physical, or psychological state.	If there is water ponding in an area approximately 25 square feet or greater on a flat roof surface not near a drain or scupper, this may promote an environment conducive to infestation, which may jeopardize the resident's health.
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 there is water ponding in an area approximately 25 square feet or greater on a flat roof surface not near a drain or scupper, then the resident would likely report this deficiency, and the presence of this deficiency 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 there is water ponding in an area approximately 25 square feet or greater on a flat roof surface not near a drain or scupper, 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 there is water ponding in an area approximately 25 square feet or greater on a flat roof surface not near a drain or scupper, 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 there is water ponding in an area approximately 25 square feet or greater on a flat roof surface not near a drain or scupper, then it may increase the weight on the roof assembly and indicate a level of structural failure.

INSPECTION PROCESS:

- OBSERVATION:**
- Look to see if the building has a flat roof; if not, disregard this deficiency.
 - Look for ponding water on the roof that isn't located above a 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 The Standard Health and Safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

CORRECTION TIMEFRAME: 30 days

HCV PASS / FAIL: Fail

HCV CORRECTION TIMEFRAME: 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Indirect	Condition could affect resident's mental, or physical, or psychological state.	If the substrate is exposed, and it leads to water infiltration, then the resident may be exposed to mold.
R2	Safety	Indirect	Resident could be injured because of this condition.	If the substrate is exposed, and there is a structural defect, then the 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 the 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 the substrate is exposed, then it is likely that 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 the substrate is exposed, the repair will likely be significant enough to incur capital costs.
M6	Structural	Indirect	This condition indicates potential structural failure of the building or a load-bearing component.	If the substrate is exposed, then the probability of water infiltration increases, which may compromise structural integrity.

INSPECTION PROCESS:

OBSERVATION: - Look at the roof surface 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.

TOOLS OR EQUIPMENT:

REQUIRED: - None

USEFUL: - None

DEFICIENCY 5 — OUTSIDE: ROOF ASSEMBLY HAS A PENETRATIVE HOLE.

DEFICIENCY CRITERIA: Penetrative, unintentional hole of any size is found.
 OR
 Intentional, penetrative hole of any size is found and is not covered by vents or screens.

HEALTH AND SAFETY DETERMINATION: Standard The Standard Health and Safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

CORRECTION TIMEFRAME: 30 days

HCV PASS / FAIL: Fail

HCV CORRECTION TIMEFRAME: 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R1	Health	Indirect	Condition could affect resident’s mental, or physical, or psychological state.	If the roof has an unintentional penetrative hole or intentional penetrative hole not covered by a vent or screen, 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 the roof has an unintentional penetrative hole or intentional penetrative hole not covered by a vent or screen, and there is a structural defect, then the 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 the roof has an unintentional penetrative hole or intentional penetrative hole not covered by a vent or screen, 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 the roof has an unintentional penetrative hole or intentional penetrative hole not covered by a vent or screen, then it may be a sign of roof assembly failure, which has a significant cost to repair.

INSPECTION PROCESS:

OBSERVATION: - Look at the 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 IS DAMAGED.

DEFICIENCY CRITERIA: Roof assembly is damaged (i.e., visibly defective; impacts functionality), causing one or more components to become unstable.

HEALTH AND SAFETY DETERMINATION: Standard
 The Standard Health and Safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

CORRECTION TIMEFRAME: 30 days
HCV PASS / FAIL: Fail
HCV CORRECTION TIMEFRAME: 30 days

RATIONALE:

CODE	CATEGORY	TYPE	DESCRIPTION	EXPLANATION
R2	Safety	Indirect	Resident could be injured because of this condition.	If the roof assembly is damaged (i.e., visibly defective; impacts functionality), causing one or more components to become unstable, and there is a structural defect, then the 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 the roof assembly is damaged (i.e., visibly defective; impacts functionality), causing one or more components to become unstable, then this 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 the roof assembly is damaged (i.e., visibly defective; impacts functionality), causing one or more components to become unstable, 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 the roof assembly is damaged (i.e., visibly defective; impacts functionality), causing one or more components to become unstable, then structural failure may occur.

INSPECTION PROCESS:

- OBSERVATION:** - Look at the 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: V2.1

DATE PUBLISHED: 4/2/21

FIELD	CHANGE	VERSION	DATE
----	Copyedits	V2.1	2021-04-02
Common Components	Copyedits	V2.0	2020-10-28
Deficiency 1		V2.0	2020-10-28
Title	Revised title		
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copyedits		
Deficiency 2		V2.0	2020-10-28
Title	Revised title		
Deficiency Criteria	Revised deficiency criteria		
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copyedits		
Deficiency 3		V2.0	2020-10-28
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copyedits		
Deficiency 4		V2.0	2020-10-28
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copyedits		

Deficiency 5		V2.0	2020-10-28
Deficiency Criteria	Copyedits		
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copyedits		
Deficiency 6		V2.0	2020-10-28
Title	Copyedits		
Deficiency Criteria	Copyedits		
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copyedits		
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 I	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		