



Cornerstone Home & Environmental RADON MITIGATION SYSTEM INSPECTION REPORT

405 Oakridge Ave, Charlotte, NC 28202
555-340-1400



44112 Oakridge Dr

Charlotte, NC 28216
Inspected on Jul 10, 2026

INSPECTOR

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Purpose, Scope, and Limitations of Inspection

Purpose and Scope

This report was prepared for the named client and reflects the inspector observations of visible, readily accessible, and safely observable conditions at the property on the date and time of inspection only. The inspection was limited, visual, and non-invasive. It was not technically exhaustive and did not include destructive testing, engineering analysis, dismantling, excavation, moving personal property, opening finished surfaces, or inspecting concealed, inaccessible, unsafe, shut down, buried, or excluded systems and components.

Limitations

This report is not a warranty, guarantee, insurance policy, code-compliance inspection, permit review, appraisal, engineering report, environmental assessment, design consultation, repair specification, cost estimate, or representation that the property is safe, insurable, marketable, habitable, or suitable for any particular use. Conditions can change after the inspection, and concealed or latent defects may exist.

Client Responsibilities

The summary is not the entire report. The client must read the complete report, including all sections, photos, limitations, exclusions, comments, recommendations, and attachments. Any recommended further evaluation, correction, repair, replacement, monitoring, or specialist review should be performed by qualified, licensed, and insured professionals before any applicable inspection, objection, option, contingency, insurance, or due diligence deadline expires.

Photos and Annotations

Photographs, diagrams, arrows, circles, captions, and other visual annotations are provided as examples or supporting documentation of selected observations. They are not intended to show every defect, every instance of a defect, every inspected area, or every condition discussed in the report. The absence of a photograph does not mean an item was not inspected or that no concern exists.

Radon Mitigation System Addendum

This Radon Mitigation System Report is a visual inspection of readily accessible mitigation-system components only. It is not a radon test, measurement report, health or safety certification, engineering evaluation, code-compliance verification, or guarantee that radon levels are or will remain below any action level. Radon levels can only be evaluated through appropriate testing.

Executive Summary

0

IMMEDIATE REPAIRS

9

PRIORITY REPAIRS

6

MONITOR / MAINTENANCE

PROPERTY DETAILS

INSPECTION DATE

Jul 10, 2026

WEATHER CONDITIONS

Clear and dry

PEOPLE PRESENT

Client and inspector

INSPECTION TIME

10:45 AM

APPROX. OUTDOOR TEMPERATURE

72 F

ESTIMATED YEAR BUILT

1998

TYPE OF STRUCTURE INSPECTED

Single-family home with basement mitigation system

This report documents a visual inspection of the radon mitigation system at 44112 Oakridge Dr, Charlotte, NC 28216, performed on July 10, 2026. The inspection addressed the physical condition and visible configuration of the installed active sub-slab depressurization system with a sump pit depressurization suction point. This inspection is limited to visual observation of the mitigation system components and does not include radon gas measurement or testing, and no conclusions are offered regarding indoor radon concentrations, whether they are acceptable, safe, reduced, or compliant with any action level. No inspector-entered radon measurement data was provided for this property; if a radon test is desired or has been performed separately, results should be reviewed with a qualified radon professional.

The system observed consists of a slab suction point connected to a sump pit and drain-tile network, PVC Schedule 40 piping routed through interior and exterior areas with roof-level discharge, an exterior-mounted fan, a crawlspace vapor retarder membrane, and associated electrical and monitoring components (manometer, disconnect, breaker). Several items were found in acceptable visual condition, including general suction pit condition, portions of piping material and routing, condensate/freeze-related drainage provisions (not applicable in this climate), fan mounting, and visible electrical wiring.

A number of items require attention. These include an incompletely sealed sump cover and pipe penetration, absence of a visible one-way flow control at the drain discharge, an unsealed perimeter drain detail near the sump, a torn and loosely edged crawlspace vapor retarder, an exterior pipe section exposed to physical damage with unverifiable material markings, a pipe joint near the fan with visible sealant gaps, wide support spacing on a horizontal garage pipe run, a discharge termination located near an upper-level window with clearance not determined, a weathered and only partially legible fan label, deteriorated sealant at a slab penetration, an unmarked manometer, an unlabeled fan breaker at the electrical panel, and a weathered system description label lacking legible installer/date and retest advisory information. A portion of the exterior discharge route was not fully visible due to height and roof geometry, limiting inspection of that segment. Corrective recommendations for each item are detailed in the sections below. This report does not evaluate or opine on the effectiveness of the mitigation system.

HOW TO READ THIS REPORT

The high-level summary is provided for convenience and is not the full inspection report. The client should read every section, including limitations, photos, item details, and recommendations. This report is based on inspector-recorded evidence and visible, accessible conditions at the time of inspection. Recommended evaluations or repairs should be reviewed by qualified professionals before important decision deadlines.

REPORT DISCLAIMERS

Maintenance notes are general homeowner guidance based on the inspection context. They are not repair specifications, warranties, or substitutes for evaluation by qualified professionals.

High-Level Summary

Priority Repairs Needed

These findings should be evaluated or corrected by qualified professionals.

Priority: Sump Cover And Penetration Seal

Drain-Tile, Sump, And Suction Points - The sump cover was present, but the pipe penetration seal through the cover was incomplete, and the cover itself was not airtight.

Recommend sealing the pipe penetration and cover to an airtight condition; evaluation and correction by a qualified radon mitigation contractor is advised.

Priority: Drain-Tile Flow Control

Drain-Tile, Sump, And Suction Points - A one-way flow valve was not observed at the visible drain discharge, and the drain control configuration could not be fully determined.

Recommend further evaluation by a qualified radon mitigation contractor to confirm the presence and function of appropriate drain flow controls.

Priority: Perimeter Drain And Sump Detail

Drain-Tile, Sump, And Suction Points - The perimeter drain detail was not fully sealed at the sump cover, and the trapped drain configuration could not be verified.

Recommend evaluation and sealing of the perimeter drain connection at the sump by a qualified radon mitigation contractor.

Priority: Crawlspace Vapor Retarder

Crawlspace And Membrane Systems - The crawlspace vapor retarder had loose, unsealed edges and a small tear near one support pier.

Recommend repairing the tear and resealing the membrane edges to restore an intact vapor retarder.

Priority: Exterior Pipe Material And Markings

Vent Piping, Fittings, And Supports - An exterior pipe section was exposed to physical damage, and the Schedule 40 material rating could not be verified from visible markings.

Recommend protecting the exposed pipe section from physical damage and having a qualified radon mitigation contractor confirm the pipe material rating.

Priority: Pipe Joint Sealing Near Fan

Vent Piping, Fittings, And Supports - An accessible pipe joint near the fan had visible sealant gaps, presenting a potential air leakage concern.

Recommend resealing the pipe joint near the fan to eliminate the visible gap.

Priority: Discharge Termination Clearance

Radon Fan And Discharge - The exhaust termination appeared near an upper-level window; exact clearance from the opening was not measured or determined.

Recommend a qualified radon mitigation contractor verify discharge clearance from the nearby window opening meets accepted installation guidance.

Priority: Fan Label And Weather Rating

Radon Fan And Discharge - The fan housing label was weathered and not fully legible, and the housing showed damage; the weather rating could not be verified.

Recommend evaluation of the fan housing and label by a qualified radon mitigation contractor to confirm weather rating and condition.

Priority: Sump Cover And Membrane Seam Sealing

Sealing And Soil-Gas Barriers - The sump cover seal and one crawlspace membrane seam were identified as needing further evaluation.

Recommend further evaluation and sealing of the sump cover and the identified membrane seam by a qualified radon mitigation contractor.

Monitor / Maintenance Notes

These items are ownership planning or monitoring notes and are separate from repair findings above.

Maintenance: Pipe Support Spacing

Vent Piping, Fittings, And Supports - A horizontal pipe run in the garage had wide support spacing, an inadequate support condition.

Recommend adding additional pipe supports at appropriate intervals along the horizontal garage run.

Maintenance: Slab Penetration Sealant

Sealing And Soil-Gas Barriers - Deteriorated sealant was observed around one basement slab penetration.

Recommend removing and replacing the deteriorated sealant at the identified slab penetration.

Monitor: Manometer Marking

Electrical And Monitoring - The manometer was present, but the initial operating range mark was not clearly identified or legible.

Recommend marking the manometer's initial operating range for future reference, or having a qualified radon mitigation contractor establish this baseline.

Monitor: Electrical Panel Breaker Labeling

Electrical And Monitoring - The radon fan breaker was not clearly labeled at the electrical panel.

Recommend having a qualified electrician label the radon fan breaker at the panel.

Maintenance: System Description Label

Labels, Documentation, And Limitations - The system description label was weathered and did not show a legible installer name, installation date, or retest advisory information.

Recommend replacing or restoring the system description label with legible installer, date, and retest advisory information; consult a qualified radon mitigation contractor.

Maintenance: Exterior Discharge Route Visibility

Labels, Documentation, And Limitations - Portions of the exterior discharge route were not fully visible due to height and roof geometry, limiting inspection of that segment.

Recommend further evaluation of the fully concealed discharge route sections by a qualified radon mitigation contractor using appropriate access equipment.

Report Sections

1. System Type And Scope

R1

This inspection is a visual assessment of the installed radon mitigation system components only and does not include radon gas measurement or testing. No radon measurement results were provided for review as part of this inspection. The system observed at this property is an active sub-slab depressurization system utilizing a sump pit as a depressurization suction point. This section reflects scope information only and is not a repair item.

SECTION DETAILS

System Type Active sub-slab depressurization, Sump pit depressurization	Inspection Scope Visual mitigation system inspection only
Radon Measurement Status No radon measurement included	HRV Area Asbestos-Like Material Not applicable
HRV Supply / Exhaust Port Spacing Not applicable	HRV Flow Balance Confirmation Not applicable

DETAILED INSPECTION ITEM BREAKDOWN

Radon mitigation system type described Status: inspected Notes: An active sub-slab depressurization system was observed.	PASS
Radon measurement/addendum status documented Status: inspected Notes: No radon measurement results were included for this visual mitigation system inspection. This is scope information only, not a repair item.	PASS

2. Drain-Tile, Sump, And Suction Points

R2

The system's suction points include a slab suction point, a sump pit, and a drain-tile connection. General suction pit condition was observed with no correction needed. Several items in this section were noted as needing attention, including sump cover sealing, absence of an observable one-way flow control at the drain discharge, and an unsealed perimeter drain detail.

SECTION DETAILS

Suction Points Observed Slab suction point, Sump pit, Drain-tile connection	Drain Controls Observed Drain to daylight, No control observed
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DETAILED INSPECTION ITEM BREAKDOWN

Sump pit cover and suction point seal

CORRECTION NEEDED

Status: inspected

Defects: Cover not airtight; Penetration not sealed

Notes: The sump cover was present, but the pipe penetration seal was incomplete.



Drain-Tile, Sump, And Suction Points 2.1a - Sump pit cover and suction point seal

Drain-tile discharge controls

CORRECTION NEEDED

Status: inspected

Defects: One-way valve not observed; Drain control not determined

Notes: A one-way flow valve was not observed at the visible drain discharge.



Drain-Tile, Sump, And Suction Points 2.2a - Drain control location where a one-way valve was not observed.

Visible suction pit or slab penetration condition

PASS

Status: inspected
Notes: QA seed: inspected with no correction needed.

Condensate, perimeter drain, and trapped sump drain details

CORRECTION NEEDED

Status: inspected
Defects: Unsealed perimeter/channel/French drain; Sump drain trap concern
Notes: Perimeter drain detail was not fully sealed at the sump cover and trapped drain configuration could not be verified.



Drain-Tile, Sump, And Suction Points 2.4a - Unsealed perimeter drain detail at the sump area.

3. Crawlspace And Membrane Systems

R3

A crawlspace with a vapor retarder membrane is present, with visible seams and edge sealing. Hollow-block wall depressurization components were not present at this property. Crawlspace appliances and materials were inspected with no correction needed. The membrane itself showed a condition concern requiring attention.

SECTION DETAILS	
Crawlspace Status Crawlspace present	Membrane / Retarder Observed Vapor retarder present, Seams visible, Edges sealed
Hollow-Block Wall System Not observed	

DETAILED INSPECTION ITEM BREAKDOWN

Vapor retarder seams, edges, and penetrations

CORRECTION NEEDED

Status: inspected
Defects: Edges not sealed; Membrane damaged
Notes: The crawlspace vapor retarder had loose edges and a small tear near one pier.



Crawlspace And Membrane Systems 3.1a - Vapor retarder seams, edges, and penetrations

Crawlspace materials and fuel-served appliances Status: inspected Notes: QA seed: inspected with no correction needed.	PASS
Hollow-block wall openings and cracks Status: not present Notes: Hollow-block wall depressurization components were not present.	NOT PRESENT

4. Vent Piping, Fittings, And Supports

R4
Piping is routed through interior, exterior, and garage areas with discharge above the roofline, using PVC Schedule 40 material. Pipe drainage/freeze provisions and general pipe material and fittings were inspected with no correction needed. A condensate bypass mechanism was not observed as applicable given the warm climate of the property. Support condition, joint sealing, and material verification concerns were identified as noted below.

SECTION DETAILS

Visible Pipe Material PVC, Schedule 40	Pipe Route Interior, Exterior, Garage, Roof discharge
Support Condition Support concern observed	

DETAILED INSPECTION ITEM BREAKDOWN

Vent pipe material and fitting compatibility Status: inspected Notes: QA seed: inspected with no correction needed.	PASS
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Pipe joints and connections

CORRECTION NEEDED

Status: inspected

Defects: Joint not sealed; Air leakage concern

Notes: One accessible pipe joint near the fan had visible sealant gaps.



Vent Piping, Fittings, And Supports 4.2a - Accessible pipe joint with visible sealant gap.

Vent pipe supports and access clearance

CORRECTION NEEDED

Status: inspected

Defects: Inadequate support; Support spacing concern

Notes: A horizontal run in the garage had wide support spacing.



Vent Piping, Fittings, And Supports 4.3a - Horizontal piping support spacing concern.

Vent pipe drainage and freeze protection Status: inspected Notes: QA seed: inspected with no correction needed.	PASS
Condensate bypass mechanism Status: not present Notes: The property is in a warm climate and a condensate bypass mechanism was not observed as applicable from the visible conditions.	NOT PRESENT
Radon mitigation material requirements Status: inspected Defects: Schedule 40 material concern Notes: Exterior pipe section was exposed to physical damage and the Schedule 40 rating could not be verified from visible markings.	CORRECTION NEEDED



Vent Piping, Fittings, And Supports 4.6a - Exterior piping material and visible marking condition.

5. Radon Fan And Discharge

R5
The radon fan is mounted at the exterior wall and was operating at the time of inspection, with discharge routed above the roofline. Fan location and mounting were inspected with no correction needed. Discharge clearance and fan label legibility require further review as noted below.

SECTION DETAILS

Fan Location Exterior	Fan Operation Operating at inspection
Discharge Location Above roof, Near opening, Not determined	Fan Label / Rating Status Weather rating not verified

DETAILED INSPECTION ITEM BREAKDOWN

Radon fan location and mounting

PASS

Status: inspected
Notes: The radon fan was mounted at the exterior wall and appeared secured.



Radon Fan And Discharge 5.1a - Exterior radon fan mounting and visible installation.

Radon fan visible condition and rating

CORRECTION NEEDED

Status: inspected
Defects: Weather rating not verified; Damaged housing
Notes: The fan housing label was weathered and not fully legible.



Radon Fan And Discharge 5.2a - Weathered fan label where rating was not verified.

Exhaust discharge location and clearances

CORRECTION NEEDED

Status: inspected
Defects: Discharge near opening; Clearance not determined
Notes: The exhaust termination appeared near an upper-level window; exact clearance was not measured.



Radon Fan And Discharge 5.3a - Discharge termination near an upper-level window.

6. Sealing And Soil-Gas Barriers

R6
Sealing was reviewed at slab openings, foundation wall penetrations, the sump cover, and membrane seams. Sealant concerns were observed at multiple locations, described below.

SECTION DETAILS

Sealing Areas Observed
Slab openings, Foundation wall penetrations, Sump cover, Membrane seams

Visible Seal Condition
Sealant concern observed

DETAILED INSPECTION ITEM BREAKDOWN

Slab and foundation opening sealing

CORRECTION NEEDED

Status: inspected
Defects: Unsealed penetration; Sealant deteriorated
Notes: Deteriorated sealant was observed around one basement slab penetration.

Sump, membrane, and crawlspace sealing

CORRECTION NEEDED

Status: inspected
Defects: Sump cover not sealed; Membrane seam concern
Notes: The sump cover seal and one crawlspace membrane seam need further evaluation.

7. Electrical And Monitoring

R7

Electrical components observed include a disconnect switch, fan circuit breaker, receptacle, junction box, and hard-wired fan connection. Monitoring components include a manometer and initial pressure mark provisions. Visible wiring was inspected with no correction needed. The manometer marking and breaker labeling require attention as noted below.

SECTION DETAILS

Monitoring Observed Manometer, Initial pressure mark, Breaker label	Electrical Observed Disconnect switch, Fan circuit breaker, Receptacle, Junction box, Hard-wired fan
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DETAILED INSPECTION ITEM BREAKDOWN

System performance monitoring device Status: inspected Defects: Manometer not marked; Not legible Notes: The manometer was present, but the initial operating range mark was not clearly identified.	CORRECTION NEEDED
Electrical disconnects, breaker labels, and receptacles Status: inspected Defects: Breaker not labeled; Recommend electrician evaluation Notes: The radon fan breaker was not clearly labeled at the panel.	CORRECTION NEEDED
Visible wiring and power supply conditions Status: inspected Notes: QA seed: inspected with no correction needed.	PASS

8. Labels, Documentation, And Limitations

R8

System labeling was reviewed, including the system description label, electrical panel label, and floor-level pipe labels. Limitations of this inspection include the exclusion of radon measurement and restricted visibility of a portion of the exterior discharge route.

SECTION DETAILS

Labels Observed System description label, Electrical panel label, Floor-level pipe labels	Limitations Observed Measurement not included, Exterior discharge not visible
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DETAILED INSPECTION ITEM BREAKDOWN

Radon system labels and documentation Status: inspected Defects: Installer/date not shown; Retest advisory not shown; Label not legible Notes: The system description label was weathered and did not show a legible installer date or retest advisory.	CORRECTION NEEDED
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Inspection limitations and exclusions

NOT INSPECTED

Status: inaccessible

Access limitation: Exterior discharge route was partially concealed by height and roof geometry.

Notes: Portions of the exterior discharge route were not fully visible.