Radon Mitigation System Inspection Report

May 22, 2026

244 Vent Stack Lane, Austin, TX

AI

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Table of Contents

Executive Summary **3**

Report Sections **7**

1. System Type And Scope 7
2. Drain-Tile, Sump, And Suction Points 7
3. Crawlspace And Membrane Systems 9
4. Vent Piping, Fittings, And Supports 10
5. Radon Fan And Discharge 13
6. Sealing And Soil-Gas Barriers 15
7. Electrical And Monitoring 16
8. Labels, Documentation, And Limitations 16

Executive Summary

22

TOTAL ITEMS INSPECTED

10

REPAIRS NEEDED

PROPERTY DETAILS

INSPECTION DATE
May 22, 2026

INSPECTION TIME
10:45 AM

WEATHER CONDITIONS
Clear and dry

APPROX. OUTDOOR TEMPERATURE
72 F

PEOPLE PRESENT
Client and inspector

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 244 Vent Stack Lane, Austin, TX 78748, conducted on 2026-05-22 for client Riley Radon. The structure is a single-family home estimated to have been built in 1998 and is equipped with an active sub-slab depressurization system including a sump pit suction point. This inspection is visual in scope only and does not include radon concentration measurement or testing; no determination is made regarding indoor radon levels or system effectiveness. Multiple correction-needed findings were identified across the sump and drain-tile suction points, crawlspace vapor retarder, vent piping, fan and discharge, slab and sump sealing, electrical labeling, and the system identification label. Portions of the exterior discharge route were inaccessible due to height and roof geometry. All correction-needed items should be reviewed and addressed by a qualified radon mitigation professional. Where separate radon testing is planned or has been conducted, results should be reviewed with a qualified radon professional.

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

This report reflects conditions observed at the time of inspection. The inspection was visual and non-invasive, was limited to readily accessible components, and was not technically exhaustive. Concealed, inaccessible, or excluded items were not inspected. This report is not a warranty, guarantee, code-compliance inspection, insurance policy, or substitute for evaluation by qualified professionals where further review is recommended. 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 Seal

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

Have a qualified radon mitigation professional evaluate and reseal the sump cover and all pipe penetrations to restore an airtight assembly.

Priority: Drain-Tile Discharge Controls

Drain-Tile, Sump, And Suction Points - A one-way flow valve was not observed at the visible drain-tile discharge location; drain control could not be determined from visible conditions.

Have a qualified radon mitigation professional evaluate the drain-tile discharge and install or verify appropriate flow control as required.

Priority: Perimeter Drain And Trapped Drain Configuration

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 from visible conditions.

Have a qualified radon mitigation professional evaluate the perimeter drain sealing and trapped drain arrangement and make corrections as needed.

Priority: Crawlspace Vapor Retarder — Seams And Edges

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

Have a qualified radon mitigation professional repair the membrane tear and reseal all edges and seams to maintain the intended soil-gas barrier.

Priority: Pipe Material — Schedule 40 Verification

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

Have a qualified radon mitigation professional evaluate the exterior pipe section, verify material compliance, and repair or replace as needed.

Priority: Pipe Joint Sealing — Near Fan

Vent Piping, Fittings, And Supports - One accessible pipe joint near the radon fan had visible sealant gaps, indicating the joint was not fully sealed.

Have a qualified radon mitigation professional seal all accessible pipe joints, prioritizing the joint near the fan, to eliminate air leakage.

Priority: Exhaust Discharge Clearances

Radon Fan And Discharge - The exhaust termination appeared near an upper-level window; exact clearance was not measured and could not be determined from the inspection vantage point.

Have a qualified radon mitigation professional evaluate the discharge termination location and verify or correct clearances from openings per applicable installation guidelines.

Priority: Fan Housing Label And Weather Rating

Radon Fan And Discharge - The fan housing label was weathered and not fully legible; the weather rating for the exterior-mounted fan could not be verified.

Have a qualified radon mitigation professional evaluate the fan, verify its weather rating and suitability for exterior installation, and replace the fan or label as warranted.

Priority: Sump Cover And Membrane Seam Sealing

Sealing And Soil-Gas Barriers - The sump cover seal and one crawlspace membrane seam were observed to require further evaluation and correction.

Have a qualified radon mitigation professional evaluate and reseal the sump cover and the identified membrane seam.

Priority: Slab Penetration Sealant — Basement

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

Have a qualified radon mitigation professional remove the deteriorated sealant and apply appropriate replacement sealant at the affected slab penetration.

Monitor / Maintenance Notes

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

Maintenance: Vent Pipe Supports — Garage Horizontal Run

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

Have a qualified radon mitigation professional evaluate the horizontal pipe run and add supports at appropriate intervals.

Monitor: Manometer — Initial Operating Range Mark

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

Have a qualified radon mitigation professional establish and clearly mark the initial operating range on the manometer to enable ongoing occupant monitoring.

Monitor: Radon Fan Circuit Breaker Label

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

Have a qualified electrician or radon mitigation professional clearly label the radon fan circuit breaker at the electrical panel.

Maintenance: System Description Label

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

Have a qualified radon mitigation professional replace or supplement the system label with a durable, legible label showing installer information, installation date, and a retest advisory.

Report Sections

1. System Type And Scope

R1

This is a visual radon mitigation system inspection only. No radon measurement or testing was included in this inspection scope. An active sub-slab depressurization system, including a sump pit depressurization point, was observed at the property. HRV-related items were not applicable to this structure. All findings are based solely on visible, accessible conditions at the time of inspection.

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 — PASS

Status: inspected
Notes: An active sub-slab depressurization system was observed.

Radon measurement/addendum status documented — PASS

Status: inspected
Notes: No radon measurement results were included for this visual mitigation system inspection. This is scope information only, not a repair item.

2. Drain-Tile, Sump, And Suction Points

R2

Suction points observed included a slab suction point, a sump pit connection, and a drain-tile connection. The sump pit cover was present; however, the pipe penetration seal was observed to be incomplete, and the cover was not airtight at inspection. A one-way flow valve was not observed at the visible drain-tile discharge point, and drain control could not be determined from visible conditions. The perimeter drain configuration was not fully sealed at the sump cover, and the trapped drain arrangement could not be verified. The suction pit itself was inspected with no correction needed.

SECTION DETAILS

Suction Points Observed
Slab suction point, Sump pit, Drain-tile connection

Drain Controls Observed
Drain to daylight, No control observed

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-tile discharge controls

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 - Condensate, perimeter drain, and trapped sump drain details

3. Crawlspace And Membrane Systems

R3

A crawlspace was present and a vapor retarder was observed. Seams were visible and edges appeared to be present, but the membrane had loose edges and a small tear was observed near one pier at the time of inspection. Hollow-block wall depressurization components were not present at this property. Crawlspace appliances and materials were inspected with no correction needed.

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

PASS

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

Hollow-block wall openings and cracks

NOT PRESENT

Status: not present
Notes: Hollow-block wall depressurization components were not present.

4. Vent Piping, Fittings, And Supports

R4

The vent pipe system was observed to route through interior spaces, the exterior, and the garage, terminating at a roof discharge. PVC piping consistent with Schedule 40 was present; however, the Schedule 40 rating could not be verified from visible markings on the exterior pipe section, which was also exposed to potential physical damage. One accessible pipe joint near the fan had visible sealant gaps. A horizontal run in the garage had wide support spacing, indicating an inadequate support interval. Pipe drainage and freeze-protection characteristics were inspected with no correction needed. Fittings were inspected with no correction needed. A condensate bypass mechanism was not observed and was noted as not applicable given the visible conditions and warm climate.

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

PASS

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

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 - Pipe joints and connections

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 - Vent pipe supports and access clearance

Vent pipe drainage and freeze protection

PASS

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

Condensate bypass mechanism

NOT PRESENT

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.

Radon mitigation material requirements

CORRECTION NEEDED

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.

Vent Piping, Fittings, And Supports 4.6a - Radon mitigation material requirements

5. Radon Fan And Discharge

R5

The radon fan was located at the exterior wall and appeared secured at the time of inspection. The fan was observed to be operating at the time of inspection. The exhaust termination appeared to be located near an upper-level window; exact clearance was not measured and could not be determined from visible conditions. The fan housing label was weathered and not fully legible, preventing verification of the weather rating. Portions of the exterior discharge route were not fully visible due to height and roof geometry.

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 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 - Radon fan visible condition and rating

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 - Exhaust discharge location and clearances

6. Sealing And Soil-Gas Barriers

R6

Sealing was observed or expected at slab openings, foundation wall penetrations, the sump cover, and crawlspace membrane seams. A sealant concern was identified at the time of inspection. Deteriorated sealant was observed around one basement slab penetration. The sump cover seal and one crawlspace membrane seam also presented concerns, consistent with findings noted in the sump and membrane sections.

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.

Sealing And Soil-Gas Barriers 6.2a - Sump, membrane, and crawlspace sealing

7. Electrical And Monitoring

R7

Electrical components observed included a disconnect switch, a fan circuit breaker, a receptacle, a junction box, and a hard-wired fan configuration. A manometer was present as a system monitoring device. Visible wiring was inspected with no correction needed. The manometer's initial operating range mark was not clearly identified at the time of inspection. The radon fan circuit breaker was not clearly labeled at the electrical panel.

SECTION DETAILS

Monitoring Observed

Manometer, Initial pressure mark, Breaker label

Electrical Observed

Disconnect switch, Fan circuit breaker, Receptacle, Junction box, Hard-wired fan

DETAILED INSPECTION ITEM BREAKDOWN

System performance monitoring device — CORRECTION NEEDED

Status: inspected
Defects: Manometer not marked; Not legible
Notes: The manometer was present, but the initial operating range mark was not clearly identified.

Electrical disconnects, breaker labels, and receptacles — CORRECTION NEEDED

Status: inspected
Defects: Breaker not labeled; Recommend electrician evaluation
Notes: The radon fan breaker was not clearly labeled at the panel.

Visible wiring and power supply conditions — PASS

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

8. Labels, Documentation, And Limitations

R8

A system description label, electrical panel label, and floor-level pipe labels were noted as observed components. The system description label was weathered and did not display a legible installer date or retest advisory at the time of inspection. Portions of the exterior discharge route were inaccessible due to height and roof geometry and could not be fully evaluated during this inspection. No radon measurement was included in the scope of this inspection; radon testing status and any prior test results should be reviewed with a qualified radon professional.

SECTION DETAILS

Labels Observed

System description label, Electrical panel label, Floor-level pipe labels

Limitations Observed

Measurement not included, Exterior discharge not visible

DETAILED INSPECTION ITEM BREAKDOWN

Radon system labels and documentation — CORRECTION NEEDED

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.

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.