



REALM INSPECTIONS, LLC

(919) 295-0899

hello@realminspections.com

<https://RealmInspections.com>



RESIDENTIAL INSPECTION

1513 Anterra Dr
Wake Forest, NC 27587

Autin Dufresne & Elizabeth Dufresne

09/03/2025



Inspector

Joseph Boos

Certified Master Inspector :: NC #4785 ::
InterNACHI #NACHI20090748 :: NC
Wastewater #699711 :: IAC2 #23443 :: FAA
#4472513

(919) 295-0899

hello@realminspections.com



Agent

Kenny Norris

Mark Spain

9199854006

kennynorris@markspain.com

TABLE OF CONTENTS

1: Additional Testing and Results	11
2: Inspection Details	13
3: General	15
4: Utilities	19
5: Site	21
6: Roof	24
7: Attic	28
8: Structure	30
9: Exterior	35
10: Interior	40
11: Fenestration (Doors, Windows & Skylights)	54
12: Electrical	56
13: HVAC System	68
14: Plumbing	77
15: Wastewater (Septic)	90
16: Insulation	95
17: Garage/Carport	97
18: Report Footer	101

INSPECTION REPORT

Thank you for choosing us to perform this inspection. Our objective is to ensure that both the home and your investment in it, are safe!

We make all attempts to turn over the report within 24 hours of the inspection. Given the expedited turnaround times, we do reserve the right to make modifications to the reports up to 48 hours post-publishing. We do our best to inform you of updates to the reports but also encourage you to check back frequently.

INSPECTION LIMITATIONS

The Inspection is Visual

The purpose of this report is to reflect, as accurately as possible, the visible condition of the home at the time of the inspection. Although the inspector may use basic instruments, the inspection performed is primarily visual and non-invasive. This inspection is not a guarantee or warranty of any kind. Its purpose is to identify safety hazards and defects in systems and components that exist at the time of the inspection.

Not Pass/Fail

Properties do not "Pass" or "Fail" a General Home inspection. An inspection is designed to reflect the visual condition of the home at the time of the inspection.

Please feel free to contact me with any questions about either the report or the property. *We are your resource for life!*

Scope of the Inspection

The inspection was performed in compliance with the **North Carolina Home Inspectors Standards of Practice and Code of Ethics**. The following conditions lie beyond the scope of the General Home inspection:

Identification of building regulation violations;

Code Compliance

Conditions not readily observable;

Failure to follow the manufacturer's installation recommendations, or

Any condition requiring research.

Not Technically Exhaustive

Please keep in mind that home inspectors are generalists, not specialists. Homes contain numerous systems and components of different types, varying quality and age, installed by those with varying skill levels in different climate zones.

To have the same level of expertise, a library of knowledge, or perform inspections to the same technical degree as contractors specializing in each of those systems is impossible for a home inspector.

Because home inspectors do not perform research, the General Home Inspection does not confirm compliance with any manufacturer's recommended installation instructions, property boundary limits, or compliance with structure setback regulations.

Although some conditions commented on within this report may be building code violations, **identification of building code violations lies beyond the scope of the General Home Inspection.** To fully understand what is and is not included in a General Home Inspection, please visit the Standards of Practice page of the North Carolina Home Inspectors Licensure Board found at <https://www.ncosfm.gov/home-inspector-licensure-act-statutes-and-rules-oct-1-2018pdf-0/open>.

This inspection report aims not to make a purchase recommendation but to provide the client with useful, accurate information to help them make an informed decision.

Repairs, Evaluations, and Corrections

For the protection of everyone, any repairs, corrections, or specialist evaluations should be performed by qualified contractors or licensed professionals. Safety hazards or poorly executed work can continue to be a problem or even be made worse when home sellers try to save money by hiring inexpensive, unqualified workers or attempting the work themselves. Be sure to take whatever actions are necessary before the expiration of your Due Diligence Period!

Do a Final Walkthrough!

Because conditions can change very quickly, we recommend that you or your representative perform a final walk-through inspection immediately before closing to check the property's condition, using this report as a guide.

We're Here to Help!

As mentioned, we are your resource for life. If you have questions about the contents of this report or the home, please don't hesitate to contact us for help. No matter how much time has passed since your home inspection, we'll be happy to answer your questions to the best of our ability.

Notice to Third Parties

This report is the joint property of the Inspection company that created it and the Client for whom it was prepared. Unauthorized transfer of this report to any third parties or subsequent buyers is not permitted. It may place those in violation or those who improperly depend on the information contained herein in jeopardy. This report and supporting inspection were performed according to a written agreement limiting its scope and use. Unauthorized recipients are advised to not rely on the contents of this report but instead to retain the services of the qualified home inspector of their choice to provide a current report.

HOW TO READ THIS REPORT

Web and Mobile versions

Layout

There is a navigation pane to the left (*web version*), and under the menu icon (*mobile version*) that lets the user jump to specific sections as needed.

Each major system is broken out into its own sections such as Roof, Electrical, Plumbing, etc.

Each section is then divided into two parts:

1. The upper portion includes **Information** or short descriptions of the system, components, and materials used therein. This section will also include general explanations, diagrams, maintenance tips, and more.
2. The lower portion of the section includes the **Deficiencies** or observations that were made during the inspection. Each observation falls into a rating category described below.

Inspection Categories: Explanation of Ratings

All observations made during the inspection are given a rating with the corresponding color. These ratings are listed below along with explanations.



**DIY Items: Everyone has different skill levels. When an item is marked "DIY," we make no assumptions about the client's or any individual's technical abilities. If you encounter an issue that needs correction and are unsure or uncomfortable handling it yourself, we strongly recommend hiring a professional. We are not liable for the outcome of any corrective work performed based on this report.*

Observations

Observations are organized under a corresponding main section (e.g. Roof, Exterior, Plumbing) and will include the following parts detailed in the image.

1. Header: Calls out the subsection within each main section. (e.g. *drainage system, flashing, branch circuits*)

2. Images or videos (if applicable)
Additional comments supporting the

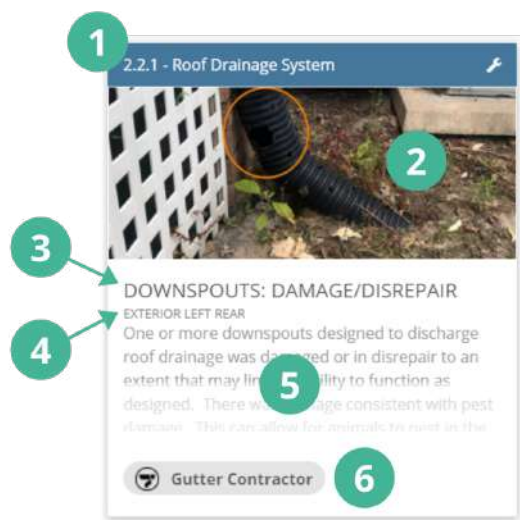
image will be indicated by a **small white chat balloon** in the lower left of the image. Rollover or click on the chat balloon to read the comments.

3. Observation Title (e.g. "Kickout: None Installed")

4. Location: Where on/in the premises the item was observed (if not called out elsewhere). (e.g. *Front, Left, Upper level, Bedroom, Living Room, etc.*)

5. Description: Describes the component or system. Determines the issue and details of the observation, implications if not addressed, followed by direction for a suggested course of action. The online version can be expanded to read the whole description. The printed version will have the entire description.

6. Recommendation for a contractor or service professional to be consulted.

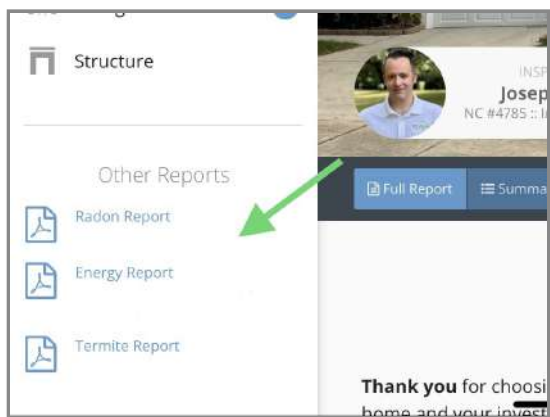


Representative Observations

Representative observations are the same as other observations, except they reflect the same issue in multiple locations. Grouping them allows for a shorter report and less reading. Representative observations will list out the LOCATIONS where they were found. If the terms "THROUGHOUT", "VARIOUS", or "MULTIPLE" are used for LOCATIONS, then it implies the recommended professional / specialist should perform a complete evaluation of that particular system and make corrections to all defective items as necessary.

Addenda and Supplemental Reports

Any additional attachments including, but not limited to radon, pest, or mold will be reflected on your "Inspection Details" page and will also be available from within your inspection report.



To access these reports: From within your inspection report, scroll to the bottom of the navigation menu (located along the left margin if viewing on a computer or in

landscape on a mobile device, or by clicking the expandable menu button  if viewing in portrait on a mobile device)

INTERACTIVITY

The web-based report contains interactive features including high-resolution images and videos. *Please note: printed versions of these reports do not include interactive features.*

Images and videos can be selected to enlarge for a better view.

Images may include mark-ups or captions emphasizing areas of concern.

Videos can be muted, downloaded to a local device, or popped out to a separate window for viewing while scrolling through the remainder of the report.

This report was created by Realm Inspections, LLC and the following Certified and Licensed Inspector,

Joseph Boos, CMI

Certified Master Inspector ®

NC License Number: 4785

North Carolina Home Inspector Licensing Board

NCOWCICB License: #69971

SUMMARY

SUMMARY PAGE

READ THE REPORT!

This summary page is not the entire report. The complete report may include additional information of interest or concern to you. It is strongly recommended that you promptly read the complete report. For information regarding the negotiability of any item in this report under the real estate purchase contract, contact your North Carolina real estate agent or attorney.

INSPECTION CATEGORIES

Explanation of Ratings (How to read this report)

All observations made during the inspection are given a rating. These ratings are listed below along with explanations.

MINOR IMPORTANCE / MAINTENANCE

Maintenance items, DIY items*, or inspector-recommended upgrades will fall into this category. These items will ultimately lead to **Moderate Importance** or **High Importance** if neglected for extended periods and are generally more straightforward and less expensive to remedy.

For New Construction inspections (e.g. Phase 3 - Final, and Phase 4 - 11 Month Builder Warranty Check) - these items are inspector-suggested improvements and do not fall under the builder's obligation.

MODERATE IMPORTANCE / CONSIDER

These callouts are considered prioritized observations or builder improvements (for new construction inspections). This is a functional system or component that is not operating as intended or is deemed to be defective. These are items that inevitably lead to or directly cause (if not addressed promptly) adverse conditions that can negatively impact the home's value or create unreasonable risk (unsafe) to people or property. These concerns are typically more complicated to remedy. They will require further evaluation by professionals who specialize in the particular system or component.

For New Construction inspections (e.g. Phase 3 - Final, and Phase 4 - 11 Month Builder Warranty Check) - these items are deficiencies the build should take action on and include code compliance, incomplete or poorly executed work, or safety hazards.

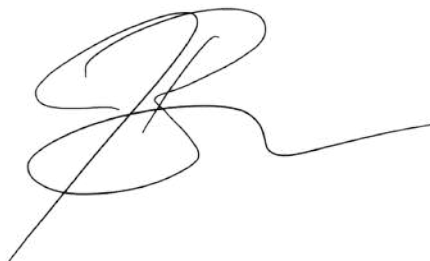
HIGH IMPORTANCE / PRIORITY

These comments call out a specific issue with a system or component that may have a significant, adverse impact on the property's condition or pose an immediate safety risk to people or property. These items are often in need of immediate correction or may be difficult or expensive to remedy.

For New Construction inspections (e.g. Phase 3 - Final, and Phase 4 - 11 Month Builder Warranty Check) - these items are deficiencies the build should take action on and include code compliance, incomplete or poorly executed work, or safety hazards.

**DIY Items: Everyone has different skill levels. When an item is marked "DIY," we make no assumptions about the client's or any individual's technical abilities. If you encounter an issue that needs correction and are unsure or uncomfortable handling it yourself, we strongly recommend hiring a professional. We are not liable for the outcome of any corrective work performed based on this report.*

This report was created by Realm Inspections, LLC and the following Certified and Licensed Inspector,



Joseph Boos, CMI

Certified Master Inspector ®

NC License Number: 4785

North Carolina Home Inspector Licensing Board

NCOWCICB License: #69971

-
- ⊖ 5.2.1 Site - Grounds, Grading, and Vegetation: Vegetation overgrown, contact with exterior
 - ⊖ 6.3.1 Roof - Roof Drainage System : Downspouts: discharged direct to foundation
 - ⊖ 8.5.1 Structure - Crawl Space: Crawlspace floor: soil cover, inconsistent
 - ⊖ 8.5.2 Structure - Crawl Space: Relative humidity, high
 - 🔧 8.5.3 Structure - Crawl Space: Floor structure: framing probed, elevated moisture detected
 - ⊖ 8.5.4 Structure - Crawl Space: Floor structure: foam board installed
 - 🔧 9.10.1 Exterior - Exterior Stairs: Construction: settled, stable
 - 🔧 9.13.1 Exterior - Walkway 2: Undermined: erosion
 - 🔧 10.1.1 Interior - General Interior: Ceilings: stains, roof leaks, moisture normal
 - ⊖ 10.4.1 Interior - Laundry: Electrical receptacles: no GFCI protection
 - ⊖ 10.4.2 Interior - Laundry: Make-up air: insufficient or none provided
 - ⊖ 10.5.1 Interior - Bathroom: Tile: grout maintenance needed
 - ⚠ 10.5.2 Interior - Bathroom: Bathtub: faucet, hot-cold reversed
 - ⊖ 10.5.3 Interior - Bathroom: Toilet: handle/button in disrepair
 - ⚠ 10.7.1 Interior - Fireplace: Flue: improper clearance from combustibles, insulation
 - ⊖ 10.9.1 Interior - Pests: Evidence of pests in the interior
 - ⊖ 11.1.1 Fenestration (Doors, Windows & Skylights) - Doors: Garage Door to interior: No self-closing hinges
 - ⚠ 11.1.2 Fenestration (Doors, Windows & Skylights) - Doors: Entryway door: sliding glass door, lock missing

- ⊖ 11.1.3 Fenestration (Doors, Windows & Skylights) - Doors: Entryway door to garage: No deadbolt
- ⚠ 12.8.1 Electrical - Smoke & CO Detectors: Smoke Detectors: Old
- ⊖ 12.9.1 Electrical - Branch Circuits: AFCI: update recommended
- 🔧 12.9.2 Electrical - Branch Circuits: Receptacles: loose
- ⚠ 12.9.3 Electrical - Branch Circuits: GFCI: missing, 6 feet from sink
- ⚠ 12.9.4 Electrical - Branch Circuits: Receptacle: scorched
- 🔧 13.5.1 HVAC System - Air Handling Unit: Condensate disposal: discharge location at foundation
- ⊖ 13.5.2 HVAC System - Air Handling Unit: Condensate drainpipe: No insulation - attic location
- 🔧 14.5.1 Plumbing - Distribution and Supply: Exterior Faucet: No anti-siphon device
- ⊖ 17.2.1 Garage/Carport - Doors :: Vehicle access: Door springs: adjustment needed, would not stay open
- ⊖ 17.3.1 Garage/Carport - Automatic Opener :: Vehicle Doors: Automatic opener: light inoperable

1: ADDITIONAL TESTING AND RESULTS

Information



This section presents the results of tests conducted to assess the environmental conditions affecting the air or water quality of the home. These tests, while not mandatory as part of the standards of practice for a General Home Inspection, may be required by financial institutions to secure funding for specific loan programs such as FHA, VA, or USDA. The results outlined below are contingent on the optional tests chosen by the client. It's important to note that the collected samples and results represent the conditions present in the moment and may change over time, necessitating ongoing testing.

The optional test protocols available include Radon, heavy metals, mold, bacteria, inorganic compounds, or volatile organic compounds (VOC).

Realm Inspections does not currently provide testing for lead or asbestos containing materials.

Radon: Radon testing requested

The client had requested the radon levels in the home be tested. The EPA requires a minimum of 48 hours for sampling. The results will be included in this report once complete.

Water Quality: Water testing requested

The client has requested a water test be performed. Typical turnaround time for lab results is between 7 to 10 business days. The results will be included in this report once complete.

Mold: Mold testing requested

The client has requested a mold sample be collected and tested in the home. Sampling tests can take 7 to 10 business days to process. The results will be included in this report once complete.

Mold: Collection Details

Interior - Livable space, Air samples

The sample was collected using standard protocols.

Tape lift samples are collected using a filament with adhesive backing. The adhesive side is applied to the area of concern, lifted from the surface capturing the substance, and then applied to a glass slide/plate to be examined under a microscope at an accredited laboratory.

Mold: About: Air samples

Air samples are collected along with control samples to determine the presence of exterior conditions that may contribute to detected spores within the interior of the home.

Two (2) exterior control samples are collected as per standard protocols for all tests. Unless otherwise requested by the client, one (1) interior test sample will be collected per installed heating, ventilation, and air conditioning (HVAC) system. Multiple zone distribution that originates from a single air handling unit (AHU) that is split out to multiple floors is considered to be a single HVAC system.

Interior samples that are out of range when compared to the exterior control samples are called out in the report. When an interior sample exhibits a higher spore count than the control samples, it indicates the contaminant exists independent of exterior conditions.

It is possible to have other spores detected. If the indoor air sample includes similar readings to the exterior control samples, it indicates that the interior spores are influenced by exterior environmental conditions. This can occur from standard air exchanges and deficiencies in the airtightness of the structure thus allowing outside air to infiltrate through various openings in the home.

The occupants of the home may be susceptible to allergens and experience reactions to these potential contaminants. Air purification and filtration may be an option to improve indoor air quality, however, complete sterilization of the

indoor air is unlikely. The other spores detected are included in the attached laboratory analysis but excluded from this inspection report. The inspector recommends the client read the attached lab analysis.

For more information about how to reduce exposure to airborne contaminants, contact an indoor air quality contractor or qualified mold remediation specialist.

2: INSPECTION DETAILS

Information



Inspection Details

The following describes the conditions present at the time of the inspection. These conditions can impact or influence how the inspection is performed and how some of the equipment is evaluated.

Access Security

Secured, Lock Box (Combination)
This describes the type of access provided to allow for agents, potential buyers, contractors, and inspectors to enter the property.

Temperature (°F)



Relative Humidity

40%-50%

Weather (Precipitation)

None

Attendees

Termite & Pest Inspector, Client, Buyer, Seller, Homeowner

State of Occupancy

Owner occupied

Weather (Visibility)

Sunny, Clear

Weather-related Property Condition

Dry

Attendance

-- Present at various times throughout the inspection

Was the home furnished?

Yes

Animals

None present

LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Stored Personal Items

Throughout
Certain areas of the home contained stored personal items. Per state board regulations and insurance policy restrictions, the inspector is not permitted to move these items. As a result, the inspection was limited in these areas, and any concealed deficiencies that were not visible at the time of inspection are excluded from this report.



Furnished

Furniture may limit the inspector's ability to conduct a thorough assessment. Areas obstructed by furniture were not inspected, and any concealed deficiencies are excluded from this report.



3: GENERAL

Information



General Information

This section includes details about the home's construction including type, style, and age. Orientation helps to understand the various location callouts found throughout the report with details about each to follow. Lastly, this section will cover any systems and components found on the property that are excluded from the inspection and the report.

Construction: Status
Existing Build

Construction: Structure Type
Single Family Residence (SFR),
Detached

Construction: Year Built
2007

Construction: Style
Custom

Construction: Levels
2-Story



ORIENTATION

"LOCATION" callouts are represented as:

- FRONT
- REAR
- LEFT
- RIGHT

These are based on the elevation views of the structure. An Elevation is drawn from a vertical plane looking straight onto the building's exterior facade or interior surface. This is as if you were looking directly at the surface.

The directions are oriented according to the view from outside the home facing the front door.

(ex. "FRONT LEFT BEDROOM", "EXTERIOR RIGHT", "2ND FLOOR REAR MIDDLE FLEX SPACE")

FRONT



REAR



LEFT



RIGHT

Satellite View

Property View



Neighborhood View



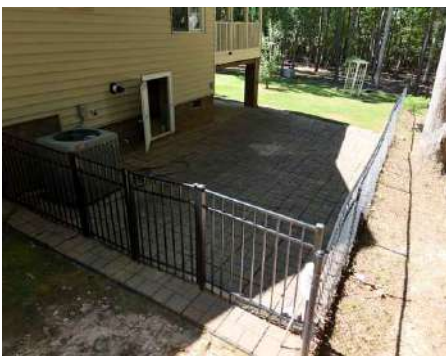
Exclusions

During the inspection, certain items were observed on the property but were not inspected. These items are outside the scope of a General Home Inspection, as defined by the North Carolina Home Inspectors Licensing Board.

Realm Inspections may offer evaluations for some of these items as an additional service (fees apply). If you are interested, feel free to inquire with your inspector.

Fences and gates

There was a privacy screen or fence surrounding portions of the property. Inspecting these items is not part of the scope and is excluded from the report.



Propane tanks

Propane tanks were present on site. Propane tanks are not included with the scope of a general home inspection. The tanks are either owned or rented from the service provider. The condition of the tank is excluded from the report.



Water Treatment Systems

There was one or more water treatment systems installed. These systems require specialized tradespeople to inspect and maintain. These items lie beyond the general Home inspection scope and were not Inspected. The Inspector recommends these systems be evaluated by water quality specialists prior to the expiration of the Due Diligence Period.



3rd Party Service Provider Equipment

There was service provider equipment on the property at the time of the inspection that is not part of the standards of practice. This equipment is not inspected and is excluded from the report.



Generators

Generators and electrical support systems are not included in the scope of a general home inspection. These systems should be evaluated by specialists. The generator was not inspected and is excluded from this report.



LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

"Representative Number"

The Standards of Practice stipulate that the inspector will examine a "representative number" of specific items. This approach means:

1. The inspector is not required to inspect every individual item of a particular type.
2. Instead, a selection of items will be examined to assess their general condition.
3. This method provides an overall view of the property's state without exhaustive individual checks.

It's important to note that the inspector is not liable for defects in items not directly inspected. The "representative number" approach aims to offer a balanced assessment of the property's condition.

Items subject to this inspection method include:

- Windows
- Interior doors
- Built-in cabinets
- Light fixtures
- Ceiling fans
- Light switches
- Power outlet receptacles

4: UTILITIES

Information



Utility Shutoff Locations

The following are the locations for shutting down the various utility services to the home including electricity, gas, and water. Not all homes are outfitted with gas service. The information contained within this section is provided as a courtesy to the client.

Electrical



Location of the Main Electrical Shutoff

There may be more than one disconnect. If multiple disconnects exist, all applicable switches and breakers must be turned off to completely disconnect power to the home.



Gas / Fuel



Location of the Gas/Fuel Shutoff

Additional shutoff valves are located throughout the home for individual gas-fired appliances. These locations may be referenced elsewhere in the report.





Gas: Propane tank fill level

80% and above

If applicable, the propane tank fuel fill gauge reading is included as an informational comment. To maintain uninterrupted service **the propane tank should never be allowed to drop below 30%**. Inspection of propane tanks is not included in the scope of a general home inspection.



Water



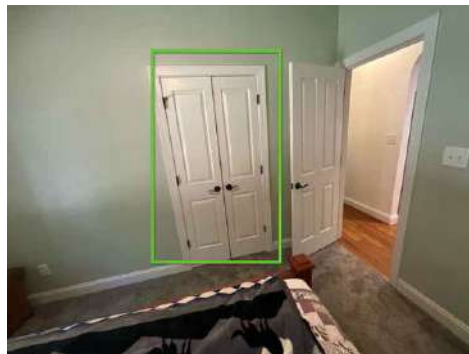
Location of the Main Water Shutoff

For homes with **public water service**, there may be multiple shutoff locations. One shutoff is often located outside near the property easement or right-of-way. Another may be inside the home, typically in a crawlspace or another interior location.

For homes served by a **private well**, there are two ways to shut down the system:

- **Water Flow Shutoff:** Usually located at the pressure tank (crawlspace or outbuilding) as a valve on the distribution line.
- **Power Disconnect:** Shuts off the well pump. This is critical in case of a leak between the pump and plumbing shutoff. It may be located at the pressure tank or the wellhead.

For homes using a **shared community well**, the main shutoff is typically located within the home.



Utilities: All on

All available utilities were on at the time of the inspection.

Note: not all homes are supplied with gas service

5: SITE

Information



Site Description and Characteristics

This section provides information pertaining to the building site, including the grounds, landscape, topography, and drainage characteristics. The inspector's scope does not cover the entire property but the area immediately surrounding the main structure and up to 30 feet from the exterior walls. Property lines and setbacks are not verified by the inspector. This data can be acquired from an existing plot survey, if available. It is advisable to commission a new survey by a qualified surveyor contractor during the due diligence period of the transaction.

Building Lot: Site Characteristics

Gently Sloped



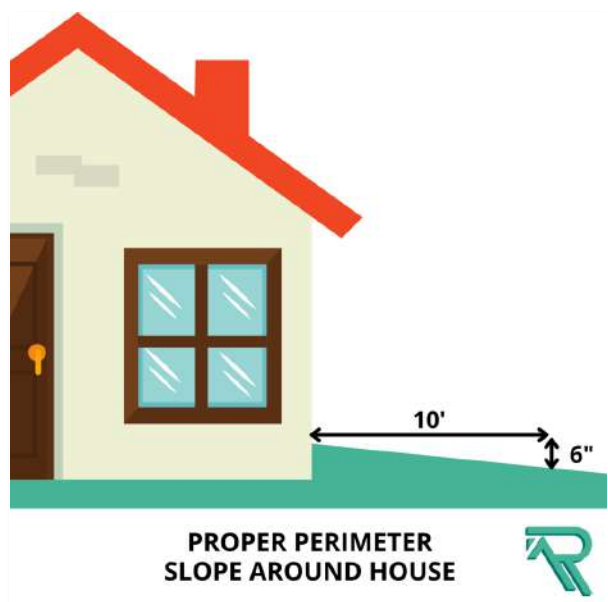
Building Lot: Drainage systems/ditches

Areas of the property had drainage ditches designed to route runoff to public disposal systems. Care should be taken when walking around the property as these appurtenances have steep slopes that can result in falls and injury.



Grounds, Grading, and Vegetation: Grading: Proper slope

The soil grading and landscaping around the foundation was appropriately sloped away from the home at a rate of **6 inches of drop for every 10 feet of run** (*roughly 1/2 inch per 1 foot*). The homeowner must maintain this slope when working around the exterior or when making modifications to perimeter planting beds to encourage proper drainage.



Grounds, Grading, and Vegetation: Lot: Covering and materials

Established grass, Planting beds around foundation, Mulch, Established trees, Shrubs

Pests: WDIR Requested and added to scope

The client had requested a Wood Destroying Insect Report (WDIR) inspection be performed. We contract with local professionals to complete this portion of the scope as North Carolina required special licensing to perform this work. These inspections apply to wood-destroying insects only and do not apply to other pests. Other pests include feral mammals (cats, opossums, skunks, rodents, etc.), certain varieties of non-wood-destroying ants, spiders, and flying insects.

The home inspector may report on non-wood-destroying pests if any evidence is observed in readily accessible locations within the home.

LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Termite inspections: outside of scope

Wood Destroying Insect Report (WDIR) inspections, commonly referred to as "Termite" inspections, lie beyond the scope of a general home inspection. Special licensing is required by the state of North Carolina to perform termite inspections. The Inspector always recommends these inspections be performed by a qualified contractor during the Due Diligence Period.

- Some lenders will require wood-destroying insect reports (WDIR) to qualify for loan funding.
- Damage and repairs from termites and pests are typically not covered by most homeowners' insurance policies.

Property: Large lot, limited inspection

Given the size of the property, not all areas were evaluated. Typically, the grounds within 30 feet of the main structure are inspected. Portions of the property that are beyond this distance are excluded from the report unless specifically called out.

Observations

5.2.1 Grounds, Grading, and Vegetation



Moderate Importance / Consider

VEGETATION OVERGROWN, CONTACT WITH EXTERIOR

Vegetation around the exterior walls was overgrown, in contact with the exterior, and needed to be cut back. Vegetation in contact with the exterior walls can damage the cladding and lead to water infiltration. This leads to structural damage and the potential for mold growth. The inspector recommends all vegetation in contact with the exterior of the home be removed and to **maintain a buffer of at least 12 inches between the vegetation and the exterior walls.**

Recommendation

Contact a qualified landscaping contractor



6: ROOF

Information

General: .



Roof Systems

The roof is a complex system of vital components that protect the interior structure from the elements. Shingles, underlayment, and sheathing provide the protective layer while flashing safeguards vulnerable areas where there is a transition of materials such as chimneys, hips, valleys, sidewalls, plumbing stacks, etc. Ventilation systems, whether passive or active are also part of the roof system. Rake, Eaves, and gutter systems manage precipitation discharge. A properly maintained roof will dictate the life of the structure. Regular inspection is key to ensuring your roof's longevity and protection from the elements.

Roof inspection method

Aerial (drone)

Various inspection methods can be used to examine the roof. Certain conditions determine the inspection method used, **with the safety of the inspector being a priority**. The methods used by the inspector during the inspection are listed above. The various methods that may be used include any of the following:

- Using an Unmanned Aerial Vehicle (UAV or drone)
- Directly walking on the roof surface (either in part or in its entirety)
- Ladder situated at the edge of the roof
- Windows overlooking sections of the roof
- Interiors from the attic
- Assessment from the ground

Design

Gable, Dormer(s), Overbuild



Covering

The roof covering is the material that protects the home's roof from the elements, such as rain, snow, and wind. The most common types of roof coverings are asphalt shingles, metal, tile, and wood shakes. The roof covering is visually inspected to ensure that it is properly installed and free from any damage or wear and tear that could cause leaks or other problems. It is essential to keep your roof covering in good condition to protect your home and keep it safe and dry.

Roof Covering Material

Asphalt Shingle

Asphalt Shingles: Type: Dimensional

The roof is covered with dimensional fiberglass asphalt shingles, also known as "architectural" or "laminated" shingles. These shingles consist of:

1. A fiberglass mat base
2. Asphalt embedding
3. Ceramic-coated mineral granules as a top layer

Key features:

- Multiple bonded layers, enhancing durability compared to single-layer shingles
- Typical warranty of 20-30 years, with premium varieties offering up to 50-year ("lifetime") warranties

Important Note: The actual lifespan of these shingles can vary based on their quality. Determining the specific quality or remaining lifespan of the shingle roof is beyond the scope of this inspection.

Asphalt Shingles: Substrate

1 layer, oriented strand board (OSB)

Asphalt Shingles: Type of

Fastening

Not visible

Asphalt Shingles: Valley Type :: Woven

When installing woven valleys, courses on adjacent slopes are installed at the same time, overlapping each course at the valley before the next course is started.



ex. Woven Valley

Asphalt Shingles: Warranties: check with seller or builder

Based on the condition of the shingles, it is possible that the shingle warranty had not expired yet. However, to confirm this, documentation would be required. When a home is sold, the warranty may transfer partially, fully, or not at all. It is important to note that there may be time limits for notifying the shingle manufacturer upon the sale of the home. To ensure that the warranty remains in effect, it is crucial to carefully read the terms of the warranty and determine if any action is necessary on your part or that of the seller.



Maintenance Tips:

Maintaining your asphalt shingle roof is crucial to protecting your home from the elements and ensuring the longevity of the roof. Here are three straightforward tips to keep your asphalt shingle roof in great condition.

1. **Inspect Shingles Regularly:** Check for any cracked, missing, or curled shingles and replace them as necessary to prevent water intrusion.
2. **Clean Off Debris:** Regularly remove leaves, twigs, and other debris from the roof to prevent damage and moisture retention.
3. **Trim Overhanging Branches:** Keep tree limbs trimmed away from your roof to reduce the risk of damage and limit debris accumulation.

Penetrations: Roof Penetration Types

Plumbing vent stack, Combustion appliance vent/chimney

Attic vents can include both active and passive varieties.

Active attic vents include "Whirlybirds", thermostatically controlled fans, and other designs.

Exhaust vents include forced air from bathroom fans, kitchen hoods, Energy/Heat Recovery Ventilators (ERV/HRV), and others.

Combustion appliance vents are those that serve a furnace, boiler, water heater, or fireplace.

LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Fascia Board: obscured, fascia cap flashing

The presence of a fascia cap covering the fascia board prevented the materials beneath from being thoroughly evaluated. Any underlying defects of the fascia (or surrounding structure) are disclaimed by the inspector and excluded from this report.

Underlayment: Disclaimer, completely hidden

The underlayment was hidden beneath the roof-covering material. It was not inspected and the Inspector disclaims responsibility for evaluating its condition or confirming its presence.

Roof: limited inspection, safety

The Inspector was unable to walk on the roof for the inspection due to safety issues including weather, height, and roof pitch. The roof was inspected using other methods and technology. The inspection was limited to the capabilities of the technology deployed.

Asphalt Shingle: Fastening, disclaimer

The Inspector did not directly view the fasteners and disclaims responsibility for confirming proper fastening of the asphalt shingles. Fasteners used to connect asphalt shingles to the roof were not visible. At the time of the inspection the shingle sealant strips were fully bonded. Because a fully bonded roof is the most important factor in the wind resistance of the shingles, breaking shingle bonds to view fasteners would constitute damage to the roof. Destructive testing lies beyond the scope of the General Home Inspection. The Inspector observed no outward indication of fastener deficiencies.

Asphalt Shingles: Installation disclaimer

Many different types, brands, and models of asphalt shingles have been installed over the years, each with specific manufacturers installation recommendations that may or may not apply to similar-looking shingles. In addition, shingles have underlayment and fastening requirements that cannot be visually confirmed once the shingles have been installed without invasive measures that lie beyond the scope of the General Home Inspection. For this reason, the Inspector disclaims all responsibility for the accurate confirmation of proper shingle roof installation. The Inspector's comments will be based on and limited to, installation requirements common to many shingle types, brands, and models, but accurate confirmation of a particular shingle roof installation, which requires research that exceeds the scope of the General Home Inspection, will require the services of a qualified roofing contractor.

Flashing: limited inspection, not visible

Some or all of the flashing systems on the roof could not be inspected and are excluded from the report. This can be due to concealment by construction materials or the limited view of the roof from the inspector's vantage.

Observations

6.3.1 Roof Drainage System



Moderate Importance / Consider

DOWNSPOUTS: DISCHARGED DIRECT TO FOUNDATION

One or more downspouts discharged roof drainage next to the foundation. **Although acceptable per modern standards**, this condition can result in erosion and excessively high moisture levels in soil at the foundation that can lead to damage related to soil/foundation movement. Excessive moisture levels in the soil near the foundation can affect the ability of the soil to support the weight of the structure above and can cause damage related to soil/foundation movement. Individuals may be encouraged to deploy splash blocks, however, these are not considered a permanent solution. The Inspector recommends the installation of downspout extensions by qualified drainage contractors to discharge roof drainage a **minimum of 6 feet** from the foundation.

Recommendation

Contact a qualified gutter / drainage system contractor



7: ATTIC

Information



Attic

The attic of a home is a vital space influencing both structural integrity and overall efficiency. Framing, often composed of trusses or rafters, supports the roof and shapes the attic's spatial design. Ensuring proper insulation with materials like fiberglass or cellulose is critical for temperature regulation, energy conservation, and preventing heat loss. This space may house chimney structures, facilitating proper venting for fireplaces or heating systems. Roof ventilation is key to prevent moisture buildup and maintain air quality. The attic also accommodates essential systems such as HVAC equipment, electrical wiring, and plumbing components. Regular inspections are imperative since the attic is seldom visited by occupants.

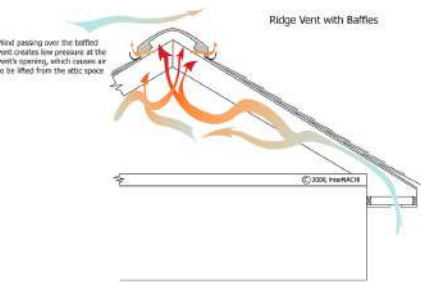
Attic Access: Access location	Attic Access: Attic access type	Attic Access: Attic light switch
Upper level	Walk in	In the attic

Attic/Roof Structure Ventilation:
Roof/Attic Ventilation Method
Continuous ridge vents, Soffit vents



Attic/Roof Structure Ventilation: Continuous ridge / soffit vents installed

A combination of soffit and continuous ridge vents were installed to ventilate the attic space. This is typically among the most effective combination.



LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Attic access: Limited inspection

Insulation, No access to some areas

There were conditions present at the time of the inspection that inhibited the inspector's ability to perform a complete and full evaluation of all areas within the attic. This included some or all of the items listed above.

Attic floor: Not visible, obscured by insulation

A majority of the attic floor structure was obscured by installed insulation. The inspector does not move insulation to observe conditions underneath unless other conditions prompt them to do so. Moving the insulation would diminish the effectiveness of the material. Any latent defects obscured from view by the insulation are disclaimed by the inspector and excluded from the report.

Ventilation disclaimer, year-round conditions

The Inspector disclaims confirmation of adequate attic ventilation year-round performance, but will comment on the apparent adequacy of the system as experienced by the inspector on the day of the inspection. Attic ventilation is not an exact science and a standard ventilation approach that works well in one type of climate zone may not work well in another. The performance of a standard attic ventilation design system can vary even with different homesite locations and conditions or weather conditions within a single climate zone.

8: STRUCTURE

Information



Structure

The structure of a home comprises the foundation, wall, and floor assemblies. **The foundation** of a home serves as the critical base, providing stability and support for the entire structure. Constructed from concrete, blocks, or other cementitious materials, it transfers the weight of the entire house to the earth and ensures it is firmly anchored to the ground. Moving upward, **the wall framing** comprises a network of studs and other components, forming the skeleton of the home. This framing supports the exterior load-bearing walls, dividing the space into rooms with partition walls and providing the framework for windows and doors. Meanwhile, **the floor and ceiling framing**, composed of joists and beams using conventional lumber or engineered components, adds another layer of support to the home. These components ensure the structural integrity of the floors and ceilings, distributing the load evenly and contributing to the overall stability of the dwelling.

Foundation: Foundation condition, OK

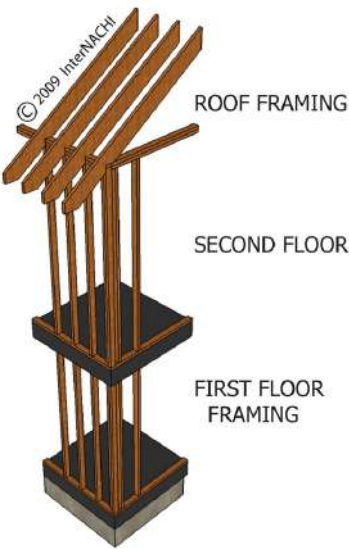
At the time of the inspection, no adverse conditions were observed that would indicate a problem with the foundation. Be aware that some or all of the foundation may be obscured from view preventing the inspector from performing a complete assessment.

Foundation: Foundation Type	Foundation: Foundation Wall Material	Foundation: Foundation Pier Material
Crawlspace	Concrete masonry unit (CMU)	Concrete masonry unit (CMU)

Floor Structure Framing: About: Platform framing

Platform framing is a popular and efficient method used in modern residential construction. It involves building each floor individually as a platform or level. This approach allows for organized construction, with workers focusing on one level at a time. Platform framing is preferred for its cost-effectiveness, speed, and adaptability in creating the framework of residential buildings.

FRAME TYPE: PLATFORM



Floor Structure Framing: Intermediate bearing: concrete foundation piers and perimeter support

The floor joists were observed to be lapped over and supported by a combination of intermediate concrete foundation piers and the perimeter foundation wall. This framing technique is typical in crawl space construction and provides distributed structural support across the span of the floor system. The concrete piers help reduce flex or bounce by minimizing unsupported spans, while the perimeter foundation adds lateral stability.

Floor Structure Framing: OSB over conventional joists

The floor structure consisted of oriented strand board (OSB) subfloor sheathing installed over conventional joists.

Roof Structure Framing: Roof Framing Method

Conventional framing

Roof Structure Framing: Roof Sheathing Material

Obscured by radiant barrier film



Crawl Space: Access Hatch Location

Exterior, Right

Crawl Space: Crawlspace Inspection Method

Direct entry

Crawl Space: Crawlspace: Type

Vented

Crawl Space: Crawlspace: floor Material

Earth, Soil cover (plastic)



LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

General Structure: concealed, finished

The floors, ceilings, and wall structures were obscured by the finished surfaces and could not be inspected. Any latent defects could not be observed. The inspector disclaims these areas and excluded them from the report.

Footing: not inspected, obscured

The footings were below grade and not visible at the time of the inspection. Any latent defects are disclaimed by the inspector and excluded from the report.

Wall structure: not visible

A majority of the wall structure above the foundation wall was not visible due to the completed stage of construction. Any latent defects were concealed and could not be inspected. The inspector disclaims these areas and excluded them from the report.

Observations

8.5.1 Crawl Space

CRAWLSPACE FLOOR: SOIL COVER, INCONSISTENT



Moderate Importance / Consider

The soil cover in the crawlspace was inconsistent. Soil covers consist of plastic sheeting installed to help reduce humidity levels in crawlspaces by limiting moisture evaporation from the soil into the air. Reducing humidity levels can help prevent conditions that encourage mold growth and wood decay. The Inspector recommends the soil cover be repaired or replaced by a qualified contractor.

Recommendation

Contact a qualified insulation contractor.



8.5.2 Crawl Space

**RELATIVE HUMIDITY,
HIGH** Moderate Importance / Consider

The inspector observed conditions consistent with high humidity in the crawlspace. Relative humidity levels were tested during the inspection and observed to be above 60%. If not addressed, consistently high humidity levels in the crawlspace can lead to various issues with components and building materials. Those issues can include but are not limited to deterioration of insulation, corrosion of electrical and mechanical components, deterioration of HVAC plenums and ducts, as well as the creation of an environment conducive to harboring fungal growth (including mold). Correction may involve the addition of a soil cover and dehumidification systems with severe cases warranting full crawlspace encapsulation. The client should consult with a qualified professional contractor including a crawlspace encapsulation expert for options and costs associated with correction.

Recommendation

Contact a qualified crawlspace encapsulation contractor



8.5.3 Crawl Space

**FLOOR STRUCTURE:
FRAMING PROBED, ELEVATED MOISTURE DETECTED** Minor Importance / Maintenance

Measurements of wood framing in the crawlspace using a **surface contact and penetrating moisture meter** indicated elevated levels of moisture consistently above 16%. Moisture and humidity are common in crawlspace environments with readings of wood components typically measuring between 12 and 16 percent. **When the surface moisture of wooden components reaches 18%, microbial growth (including mold) can thrive. When interior readings (via probe) exceed 18%, deterioration of the wood is probable with prolonged exposure.** The inspector recommends the client consult with a qualified crawlspace contractor to discuss options and costs associated with controlling the moisture levels in the crawlspace.

Recommendation

Contact a qualified crawlspace encapsulation contractor



8.5.4 Crawl Space



Moderate Importance / Consider

FLOOR STRUCTURE: FOAM BOARD INSTALLED

Foam board insulation was installed directly against the underside of the main floor structure within the crawl space. This type of installation can trap moisture against framing members, conceal structural conditions, and limit visibility for future inspections. The inspector recommended a qualified general contractor or insulation contractor remove the foam board and consider a full crawl space encapsulation system as a more effective method of moisture control and energy efficiency.

Recommendation

Contact a qualified crawlspace encapsulation contractor



9: EXTERIOR

Information



Exterior

The exterior section of the home inspection includes elements related to the walls, wall coverings, including siding and veneers. In addition to the walls, appurtenances and flatwork that include porches, patios, decks, driveways, etc. will be inspected and reported on within this section.

General: .

Exterior Walls

The exterior walls include the materials for cladding (siding), underlayment or vapor barriers, and trim. These items protect the home's structure from the elements, such as rain, snow, and wind. The most common types of cladding are vinyl, cementitious (James Hardie), brick or stone veneer, and the now antiquated wood hardboard composite (Masonite). The exterior walls are visually inspected to ensure that they are properly installed and free from any damage or wear and tear that could cause leaks or other problems. Like the roof, the exterior walls are essential to protect your home and keep it safe and dry.

Wall Cladding: Materials

Vinyl, Adhered Masonry Stone
Veneer

Wall Cladding: General Condition, OK

The Inspector observed no deficiencies in the condition of the exterior walls.

Siding, Vinyl: 3-5-year Maintenance required

You should be aware that vinyl siding requires that window and door openings be re-sealed with a high-quality sealant every 3 to 5 years to prevent moisture intrusion. Cleaning and pressure washing is also recommended whenever biological growth is observed on the surface of the siding.

Siding, Adhered Masonry Stone

Veneer: Artificial stone veneer installed

Exterior walls of the home were covered with artificial stone veneer.

Exterior Trim: Trim Material

Vinyl, Metal flashing

Flashing: General description

Flashing is a general term used to describe (typically) sheet metal fabricated into shapes and used to protect areas of the roof from moisture intrusion. Inspection typically includes assessing the condition and proper installation of flashing in the following locations:

- Roof penetrations such as vents;
- Electrical masts;
- Chimneys;
- Mechanical equipment;
- Patio cover attachment points;

- Around skylights;
- Junctions at which roofs meet walls;
- Roof edges;
- Areas at which roofs change slope;
- Areas at which roof-covering materials change; and
- Areas at which different roof planes meet (such as valleys).

Flashing: Flashing type(s) observed

Apron, Fascia Cap, Pipe-Boots,
Splash Guards, Chimney Thimble

Flashing: Material

Metal, Plastic/Vinyl, Rubber

Appurtenances

An appurtenance, in terms of a residential home, is any permanent immovable feature not required for the general function and operation of the home. Think in terms of "luxury items". They can include features attached to the structure or installed permanently on the property. Some examples include porches, patios, decks, driveways, sidewalks, pergolas, trellises, etc. For the purposes of a General Home Inspection, only those appurtenances listed in the standards of practice of the North Carolina Home Inspectors Licensing Board will be inspected. Other items reported on are done so as a courtesy to the client.

Condition Descriptions

These descriptions are a generalization of the observed condition of the applicable appurtenance at the time of the inspection. Noteworthy deficiencies will be called out elsewhere in the report.

Good: The appurtenance exhibited minor to no defects. Minor defects may include normal wear and tear, along with cosmetic blemishes on the surfaces and components.

Fair: Exhibits moderate deficiencies over a general area of the appurtenance. This may include deterioration of surfaces and components beyond blemishes to the finish.

Poor: Exhibits severe deficiencies over a majority of the appurtenance. This includes advanced deterioration of the walls, ceilings, floors, and associated components.

Porch: About: Porch Types

Porch Types Defined

Porch: A porch is a covered entryway with an integrated roof attached to the house, typically with space for seating and used for relaxation.

Portico: A portico is a small, sheltered entryway providing protection from the elements. They are not large enough to have seating for relaxation.

Verandah: A verandah is a long, continuous, open, roofed platform that runs along multiple sides of the house. Large enough for seating and relaxation and offering a space for outdoor living, dining, or leisure.

Lanai: A lanai is a Hawaiian term for a covered, outdoor living space, usually attached at the rear or side of a home. They are large enough to offer ample room for not only relaxation but also entertainment activities and food preparation.

Porch: Porch Type, Location, and Condition

Open porch, Front entryway, --
Good Condition

Porch 2: Porch Type, Location, and Condition

Open porch, Rear entryway





Deck: Location and Condition
Rear, Porch, -- Good Condition

This is the location and general condition of the deck as observed during the home inspection. Each deck will have its own section. Deficiencies, if any were present, will be described below.



Deck: Attachment to Home
Bolted to the ledger

Requirements for attachment to homes have changed over the years. It is possible that the method of attachment was considered acceptable at the time the deck was constructed. The inspector takes this into consideration, however, recommendations will still be made for upgrades to comply with modern safety standards.

Deck: Floor Material and Attachment method Composite wood/plastic	Deck: Guardrail Materials Composite wood/plastic, Wood, Metal	Deck: Deck Understructure Post Material Brick piers
Deck: Foundation Type Concrete slab	Deck: Finish Coating Type NA - Composite	Exterior Stairs: Location Rear of home, Porch
Exterior Stairs: Foundation Material Ground	Exterior Stairs: Structure Materials Wood	Exterior Stairs: Tread Material Plastic/wood composite

Flatwork

The term flatwork, in construction, refers to any flat horizontal system, made of either concrete, asphalt, or pavers. Flatwork can include foundation slabs, sidewalks, curbs, gutters, patios, parking lots, driveways, and other appurtenances. For the purposes of this report, flatwork will refer to any item not referenced in its own section.

Condition descriptions

- Good:** The flatwork exhibited minor to no defects. Minor defects may include normal hairline shrinkage cracks less than 1/8 inch wide. Flat and even elevation between any cracking. Minor chip out or spalling on isolated portions of the surface.
- Fair:** Exhibits moderate deficiencies over a general area of the surface. This may include cracks up to 1/4 inch wide with some deflection in elevation on either side of the crack. Moderate levels of chip out (spalling). **Noteworthy deficiencies will be called out below.**

Poor: Exhibits severe deficiencies over a majority of the surface. This may include cracks greater than 1/4 inch wide. Significant deflection in elevation on either side of the crack along with significant chip out (spalling) that could be trip hazards resulting in personal injury or property damage. **Specific deficiencies will be called out below.**

Driveway: Location, Surface Material, and Condition
Front, Left, Concrete, — Good Condition



Walkway: Location, Surface Material, and Condition
Front, Concrete, — Good Condition



Walkway 2: Location, Surface Material, and Condition
Rear, Concrete, — Good Condition



Patio: About: Patios

Patios are ground-level dining or recreation spaces made of concrete, stone, or brick that either butt up against the home or are located out in the yard.

Covered Patios do not have roofs integrated with the home's structure but may have awnings, sails, or other detached structures (pergolas) to provide cover from the elements.

Patio: Patio Type, Location, and Condition
Open Patio, Right side, -- Good Condition

Other Flatwork: Surface material
None present



LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

House-wrap: not inspected, obscured

In most cases, the inspector will not be able to confirm the presence of a house-wrap / vapor retarder due to the installed wall cladding. For that reason, any concealed defects are disclaimed for this portion of the inspection.

Observations

9.10.1 Exterior Stairs



Minor Importance / Maintenance

**CONSTRUCTION:
SETTLED, STABLE**

The exterior stair off the deck had settled but remained stable at the time of inspection. While the condition did not present an immediate safety concern, continued movement could affect stability or create uneven steps over time. The inspector recommended a qualified general contractor further evaluate the stair structure and make repairs if settlement progresses.

Recommendation

Contact a qualified professional contractor



9.13.1 Walkway 2



Minor Importance / Maintenance

UNDERMINED: EROSION

The walkway has eroded soil that undermined the concrete pad. This is an indication of excess water flow in and around this area. If left uncorrected the concrete slab will fail. All sources of excessive water that collect or flow in this area should be rerouted away. Any drainage repair should be performed by a qualified drainage contractor and eroded soil should be backfilled and compacted by a qualified landscaping contractor.

Recommendation

Contact a qualified professional contractor



10: INTERIOR

Information

General Interior: .



Interiors

The interior of the home covers a broad spectrum of items, components, appliances, et al contained within the livable (heated) space of the structure. This section includes the items required to be evaluated as part of the Standards of Practice as outlined by the North Carolina Home Inspector Licensing Board. General descriptions of items along with maintenance tips may be provided. The inspector will not dismantle any portion of the interior to gain access to concealed areas.



General Interior: General Floor Materials

Carpet, Engineered Hardwood, Vinyl sheet, Ceramic tile

The information contained here is a general representation of all floor covering materials observed in the home at the time of the inspection regardless of location within the home.

General Interior: General Wall Materials

Drywall

The information contained here is a general representation of all wall covering materials observed in the home at the time of the inspection regardless of location within the home.

General Interior: General Ceiling Materials

Drywall

The information contained here is a general representation of all ceiling covering materials observed in the home at the time of the inspection regardless of location within the home.

Thermal Imaging: Inspection Observations

Contributing factors for reduced comfort levels in the home may include:

- Supply registers located away from exterior walls
- Poorly balanced distribution system (vent registers and ductwork dampers)
- Insufficient number of supply registers per room (best practice: 1 supply per 100 sqft)
- Home orientation (Northern exposure)
- High ceilings (hot air rises)
- Supply registers located on the ceilings (heat cannot get to the floor)
- Gaps in the thermal envelope (air tightness)
- Insufficient thermal insulation (walls, ceilings, and crawl spaces)
- Excessive fenestration (windows and doors)

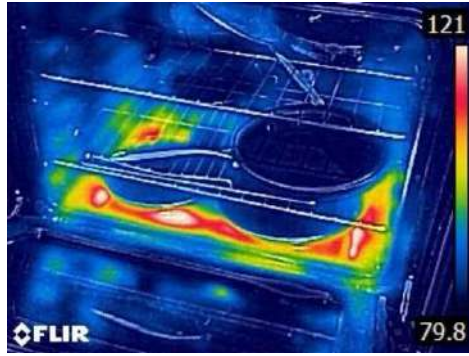
Only installed appliances are required to be evaluated during a general home inspection. The term "installed" implies those items that are physically connected to the home. This includes cooktops, ranges, wall ovens, exhaust hoods, dishwashers, cabinet-mounted units, trash compactors, and garbage disposers. This does not include refrigerators, freezers, or countertop appliances (including countertop microwaves).



A kitchen scene featuring light-colored wooden cabinetry and a stainless steel oven. The oven has a glass door with a handle and a control panel on top. To the left of the oven is a small, dark-colored microwave. On the countertop to the right of the oven, there is a silver pot, a paper towel holder, and a container with utensils. The floor is made of light-colored wood.



©Realm Inspections, LLC :: 1513 Anterra Dr, Wake Forest, NC 27587 --



Kitchen: Built-in Oven Brand & Type

Not applicable

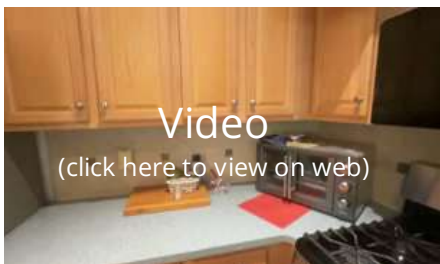
Kitchen: Exhaust Hood Brand & Type

Whirlpool, Integrated with microwave, Vented to exterior, Below 400 CFM

Cooking appliances with exhaust systems rated over 400 cubic feet per minute (CFM) that vent outside need to have a make-up air system. This requirement is in place to prevent back-drafting in other combustion appliance vent systems, which could create hazardous conditions.



Kitchen: Exhaust Hood operation

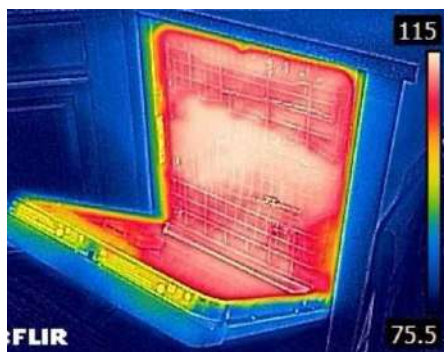


Kitchen: Dishwasher Brand & Type
Maytag



Kitchen: Dishwasher operation

Kitchen: Dishwasher Switch/Disconnect



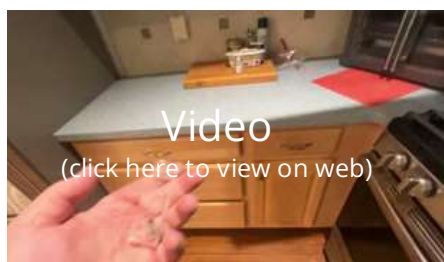
Kitchen: Microwave Brand (built-in)

Whirlpool

Only built-in microwave appliances are considered "installed" and inspected under the standards of practice for a general home inspection. Microwaves that are not installed (countertop models) typically do not convey with the sale of the home and therefore, are not inspected.



Kitchen: Microwave operation



Kitchen: Refrigerator Brand

LG

Refrigerator appliances are not considered "installed" and are therefore not required to be evaluated as per the standards of practice. In some cases refrigerators do not convey with the sale of the home. The information contained in this comment are for reference purposes only.



Maintenance Tips:

Regular maintenance of your refrigerator not only ensures efficient performance but also extends its lifespan. Here are three simple tips to keep your refrigerator running smoothly.

- 1. Clean the Coils:** Use a coil brush or vacuum to clean the condenser coils every six months.
- 2. Check Door Seals:** Ensure door seals are tight and clean them with mild soap and water to prevent air leaks.
- 3. Set the Correct Temperature:** Maintain the refrigerator at 37-40 degrees Fahrenheit and the freezer at 0 degrees Fahrenheit for optimal efficiency.



Kitchen: Disposal: none installed

No garbage disposal was installed at the kitchen sink. There are no requirements to install a garbage disposal to meet modern building standards. **Homes with private wastewater collection systems (septic) typically do not, and should not, have disposals installed.** While aftermarket "septic-safe" disposals are available, there is insufficient data to confirm that these devices are genuinely safe for septic systems. Installation should be approached with discretion.



Kitchen: Trash Compactor Brand

None installed

Laundry: .



Laundry Areas

Laundry areas typically feature both washers and dryers. Washers need connections to hot and cold water and have a drain for wastewater. Dryers come in two types: electric and gas. Electric dryers require a 240-volt electrical outlet, while gas dryers need a gas line and a 120-volt outlet. Although gas dryers can be more energy-efficient, they are less common in newer homes compared to electric models. Both types of dryers must have a vent that expels hot air and lint to the outside. It's important to use a metal smooth-walled vent duct for safety and efficiency. Regular maintenance of these connections and hoses ensures safe and effective operation of your laundry appliances.



Maintenance Tips:

Maintaining your laundry area is key to ensuring your appliances work efficiently and safely. Here are three quick tips to help you keep your laundry area in top shape.

1. **Clean Lint Filters:** Regularly clean your dryer's lint filter after each load to enhance air circulation and prevent fire hazards.
2. **Inspect Washing Machine Hoses:** Check for leaks or bulging in the hoses every few months to avoid water damage.
3. **Keep the Area Dry:** Wipe up any spills immediately and use a dehumidifier if necessary to prevent moisture buildup and mold.

Laundry: Location

Dedicated Room



Laundry: Dryer Connection Type

Electric: 4-prong

Modern clothes dryers accept both gas and electric service depending on the model.

Gas connections can be either natural gas or liquified petroleum gas (LPG) or more commonly liquid propane (LP). Most modern gas dryers are set up for natural gas from the factory. Propane adaptor kits are available as needed. Gas dryers still require a standard electrical receptacle for operation.

3-prong electrical connections, typically NEMA 11-30 or deprecated NEMA 10-30, were common in homes predating 1990. This receptacle style uses 240 volts on a 30 amp circuit across two energized wires, one for each 120V leg, with a single wire to carry both the neutral return path and ground. These connections are considered outdated by the current NEC standard but are still found in many older homes. Although not technically a defect, consideration should be made to upgrading the branch circuit to support the current standard.



4-prong electrical connections, typically NEMA 14-30, include three conducting wires and a dedicated grounding wire. These receptacles are the current standard for electric dryer connections.



Laundry: Dryer vent discharge**location**

Sidewall

**Bathroom: .****Bathroom(s)**

Bathrooms are categorized both by the number of plumbing fixtures they contain and how they're intended to be used. Understanding these distinctions can be helpful when reviewing floor plans, evaluating functionality, or planning future renovations.

By Fixture Count:

- **Full Bathroom:** Includes a toilet, sink (usually with a vanity cabinet), and a bathing fixture (either a bathtub, a shower, or both). Some may also include a bidet.
- **Three-Quarter Bathroom:** Features a toilet, sink, and shower, but does not include a bathtub.
- **Half Bathroom:** Also known as a powder room, it contains only a toilet and a sink, with no bathing facilities.

By Function or Location:

- **Powder Room:** A small half bathroom typically located near common areas for guest use.
- **Common Bathroom:** A full or three-quarter bath accessible from hallways or shared living areas.
- **Shared or Jack-and-Jill Bathroom:** Positioned between two bedrooms and accessible from both, often with dual sinks and locking doors.
- **Private or En-Suite Bathroom:** Located directly within a bedroom (usually the primary bedroom) for exclusive use by that occupant.
- **Water Closet:** A toilet enclosed in its own small room or compartment within a larger bathroom. This feature is commonly found in private bathrooms, particularly in primary suites, and offers added privacy.

Each bathroom observed during the inspection is evaluated for fixture condition, plumbing function, ventilation, and general safety as access and occupancy allow.

Bathroom: Number of Bathrooms

3 bathrooms

**Bathroom: Room Ventilation**

Exhaust fan

Bathroom: Jetted bathtub GFCI



Bedroom: .



Bedrooms

A bedroom or sleeping room in a residence is a designated space used primarily for sleeping and relaxation.

A sleeping room must:

- Have a minimum of 70 square feet of floor space, with no dimension being less than 7 feet in any horizontal direction
- Be no less than 7 feet from floor to ceiling
- Have at least one operable window with 5.7 square feet of clearance to be used as an emergency escape or rescue opening.
 - The minimum height of the opening shall be 24 inches.
 - The minimum width of the opening shall be 20 inches.
- Have a door that satisfies a means of emergency egress
- Have a mechanical or natural ventilation system that meets requirements for air exchange and circulation.
- Have a smoke detector and alarm - battery powered and installed versions are permitted.



Bedroom: Supply registers present

Yes

The presence of supply air registers or ducts is dependent on the type of heating and cooling distribution system installed in the home. As of the writing of this report, the North Carolina mechanical code did not include specifications for a minimum number of supply air registers per room. Industry-accepted best practice was to include at least one air supply register or duct per 100 square feet of living space. As stated, **this was a best practice** and was **not mandated** in any known building code.

Bedroom: Smoke detectors installed

Yes

Standards for smoke detector placement have changed over the years. The information above is based on current compliance at the time of the writing of this report.

Fireplace: .**Fireplace**

Residential fireplaces come in various types, such as traditional wood-burning, gas, electric, and ethanol models. Wood-burning fireplaces use logs, while gas fireplaces rely on natural gas or propane. Electric fireplaces are convenient and require only an electrical outlet, while ethanol fireplaces burn bioethanol. Basic safety measures include regular chimney cleaning, using a spark guard, and keeping flammable materials at a safe distance to prevent accidental fires.

Fireplace: Fireplace Type

Gas-fired - propane

**Fireplace: Fireplace: Operation****Stairs, Balconies, and Railings: Staircase Type**

L-shaped w/landing, Winding

LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Disclaimed Appliances: Not in scope

Refrigerators, freezers, freestanding microwave ovens, clothes washers & dryers, and other appliances that are not built-in or installed are excluded from the scope of a General Home Inspection. These appliances were not inspected and are excluded from the report.

General Interior: Disclaimer, cosmetic defects

Imperfections and blemishes of wall, ceiling, and floor materials deemed superficial are considered cosmetic. Cosmetic defects are not included in the scope of a General Home Inspection.

Range / Oven(s): Disclaimer, limited inspection

The testing of ranges and ovens during a General Home Inspection does not include the operation of all features but is limited to confirmation of cooktop burners, bake, and broiler functionality. The client should ask the homeowner about the functionality of any other features.

Laundry: Dryer exhaust duct visual inspection only

A dryer exhaust duct examination is visually only. A visual examination is external only and will not detect the presence of lint accumulated inside the duct, which is a potential fire hazard. The Inspector recommends that you have the dryer exhaust duct cleaned at the time of purchase and establish a routine annual cleaning to help ensure that safe conditions exist. Lint accumulation can occur even in approved, properly installed ducts. All work should be performed by a qualified contractor.

Limited thermographic inspection

The Inspector had performed a General Home Inspection using a thermographic camera. Although the Inspector may include images from a thermal imaging device (also known as an "infrared camera"), these images are supplemental to the General Home Inspection. You should be aware that the inspector used the device as a peripheral tool only, and is not required per the Standards of Practice set by the NCHILB.

Observations

10.1.1 General Interior

CEILING: STAINS, ROOF LEAKS, MOISTURE NORMAL

PRIMARY BEDROOM CLOSET - RIGHT

Stains on the ceiling appeared to be the result of roof leakage. The moisture meter showed normal levels of moisture in the stained areas, indicating that the leakage may have been corrected, or may be intermittent. You should ask the seller about this condition. The Inspector recommends that once it has been determined that the source of leakage has been corrected, the ceiling should be repaired as necessary. You should ask the seller about this condition. All work should be performed by qualified contractors.

Recommendation

Contact the seller for more info



Minor Importance / Maintenance

10.4.1 Laundry

ELECTRICAL RECEPTACLES: NO GFCI PROTECTION

At the time of the inspection, no ground fault circuit interrupter (GFCI) protection of home electrical receptacles was provided in the laundry room. Standards have changed since the home was built, however, the homeowners are not obligated to perform upgrades unless they have performed a renovation since the standard was established. Regardless, the Inspector recommends that electrical receptacles located within 6 feet of a plumbing fixture be provided with ground fault circuit interrupter (GFCI) protection in good working order to avoid potential electric shock or electrocution hazards. All work is to be completed by a qualified electrical contractor.

Recommendation

Contact a qualified electrical contractor.



Moderate Importance / Consider



10.4.2 Laundry



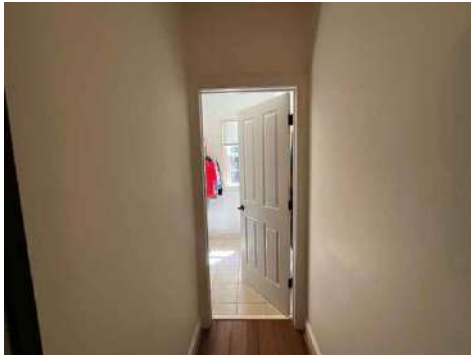
Moderate Importance / Consider

MAKE-UP AIR: INSUFFICIENT OR NONE PROVIDED

The laundry room was observed to have insufficient or no make-up air with the access door closed. Make-up air is necessary for proper appliance operation, ventilation, and combustion safety (if applicable). Restricted airflow can lead to negative pressure, reduced dryer efficiency, and potential back-drafting of gas appliances. The inspector recommended that a qualified contractor evaluate and install an appropriate make-up air source, such as a louvered door, vent grille, or dedicated air intake, to ensure proper airflow and safe operation.

Recommendation

Contact a qualified hvac contractor



10.5.1 Bathroom



Moderate Importance / Consider

TILE: GROUT MAINTENANCE NEEDED

Grout lines in the tile of this bathroom needed maintenance. Deteriorated grout can produce sharp edges that can pierce the shower pan beneath resulting in leaks and moisture infiltration supporting an environment conducive for microbial growth. All repair work should be performed by a qualified tile contractor.

Recommendation

Contact a qualified tile contractor



10.5.2 Bathroom

BATHTUB: FAUCET, HOT-COLD REVERSED High Importance / Priority

The bathtub faucet handles were reversed, with the hot and cold-water controls operating opposite of standard orientation. This condition could create confusion for users and increase the risk of accidental scalding. The inspector recommended a qualified plumbing contractor correct the faucet connections to restore proper hot and cold operation.

Recommendation

Contact a qualified plumbing contractor.



10.5.3 Bathroom

TOILET: HANDLE/BUTTON IN DISREPAIR Moderate Importance / Consider

The toilet handle/button was in disrepair and did not function as intended, which could lead to incomplete flushing or the need for repeated use. The inspector recommended a qualified plumbing contractor repair or replace the handle/button to restore proper operation.

Recommendation

Contact a qualified plumbing contractor.



10.7.1 Fireplace

FLUE: IMPROPER CLEARANCE FROM COMBUSTIBLES, INSULATION High Importance / Priority

The furnace exhaust flue was observed to have insufficient clearance from combustible materials, including nearby insulation, which poses a fire hazard. Exhaust flues require specific clearance distances, typically 1 to 2 inches depending on the flue type and manufacturer specifications, to allow safe dissipation of heat and prevent ignition of surrounding materials. The inspector recommended that a licensed HVAC contractor or qualified technician correct the installation to meet modern safety standards and ensure proper fire separation from combustible materials.

Recommendation

Contact a qualified professional contractor



10.9.1 Pests



Moderate Importance / Consider

EVIDENCE OF PESTS IN THE INTERIOR

Evidence of pests was observed in the interior of the home. This may include droppings, nesting materials, or damage to materials such as wood, insulation, or wiring. The presence of pests can lead to structural damage, health concerns, and reduced indoor air quality. The inspector recommended that a licensed pest control specialist assess the extent of the infestation and take appropriate measures to eliminate the pests and prevent future infestations.

Recommendation

Contact a qualified pest control contractor



11: FENESTRATION (DOORS, WINDOWS & SKYLIGHTS)

Information



Fenestration

What is fenestration?
Originating from the Latin word fenestra, meaning window, fenestration refers to the openings in a building's facade. As it applies to modern construction, fenestration can be explained as the arrangement of windows, doors, and other openings in and around the building.

Doors: Interior Door Types Hollow core	Doors: Total Number and Location of Entryway Doors Front, Rear, Garage to interior, 4 doors
--	---

Doors: All entryway doors tested, OK
All of the entryway doors to the home were tested and confirmed functional. All doors are operated since they serve as a safe means of egress from the structure in the event of an emergency. Any defects noted in this report are separate from the doors' ability to open, close, and latch freely.

Windows: Window Style(s) Fixed, Single-hung	Windows: Window Frame Material Vinyl	Windows: Window Glazing Type Double-pane
---	--	--

Windows: Vinyl, useful life
On average, **vinyl windows last between 15 and 20 years**. Some high-end varieties may last up to 30 or 40 years. Their life expectancy depends on the climate and conditions the windows are subjected to. For instance, if your windows are exposed to harsh sunlight for extended periods of time, the vinyl will break down faster and their lifespan will be less.

LIMITATIONS
If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Representative number
As per the North Carolina Home Inspector Licensing Board, only a representative number of windows, doors, and skylights are required to be inspected. The number inspected is subjective. Therefore it is possible that some defects will not be identified during the inspection. Any defects not observed under these conditions are disclaimed by the inspector and excluded from this report.

Observations

11.1.1 Doors



Moderate Importance / Consider

GARAGE DOOR TO INTERIOR: NO SELF-CLOSING HINGES

The door separating the garage and the living space did not have an operable self-closing device. Self-closing devices, including hinges and springs, are safety mechanisms designed to close the door without intervention. They are intended to limit the spread of fire and toxic fumes when the entryway is not in use. **Self-closing hinges are not required as per modern building standards.** Regardless, the inspector recommended a self-closing device be added to the garage entryway door by a qualified contractor.

Recommendation

Contact a qualified professional contractor



11.1.2 Doors



High Importance / Priority

ENTRYWAY DOOR: SLIDING GLASS DOOR, LOCK MISSING

The sliding glass door at the entryway was missing its lock, leaving the door unsecured. This condition presented a security concern and reduced the safe function of the entryway. The inspector recommended a qualified door or general contractor install a proper locking mechanism to restore security.

Recommendation

Contact a qualified door repair/installation contractor.



11.1.3 Doors



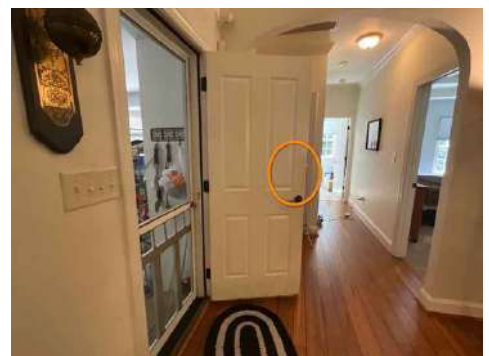
Moderate Importance / Consider

ENTRYWAY DOOR TO GARAGE: NO DEADBOLT

The entry door between the garage and the interior living space was not equipped with a deadbolt lock. While the existing latch may provide basic security, the absence of a deadbolt reduces resistance to forced entry at this vulnerable access point. The inspector recommended that a qualified general contractor install a deadbolt to improve household security and comply with modern residential safety expectations.

Recommendation

Contact a qualified professional contractor



12: ELECTRICAL

Information

General: .



Electrical Systems

A home electrical system consists of service entrance cables connecting to the utility company, a meter socket measuring energy usage, and one or more electrical panels with overcurrent protection devices (OCPD) "breakers" directing electricity to different parts of the house. Amperage sizing, usually 100 or 200 amps, determines the system's capacity. The amperage capacity of the home follows the "weakest link" methodology, meaning that any one component can limit the maximum system ampacity.

Electrical Service: Electrical Service Amperage (maximum)

200 Amps

Electrical Service Amperage is calculated by determining the maximum sustainable current that can safely pass through the system. The components that determine the ampacity include the Service Entrance Conductors (SEC), the Meter Socket, the Main Service Panel, Main Disconnect Breaker for the domicile, and service cables between the Meter and Main Service Panel. The final amperage is based on "the weakest link", meaning the lowest ampacity of any component dictates the maximum ampacity the system can support. Individual branch circuits do not impact the home's ampacity rating.

(ex. 250 Amp SEC, 200 Amp Meter Socket, 135 Amp Main Service Panel, 200 Amp feeder cables = 135 Amp service since the Main Service Panel has the smallest Ampacity rating)

Electrical Service: Electrical Service Voltage

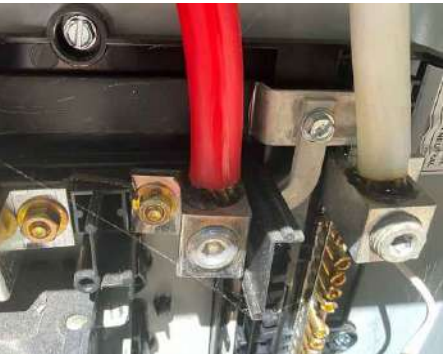
240 Volts (3-wire)

Residential electric service enters the building in two forms, 120 volts, and 240 volts. These are nominal numbers, which means that the actual voltage in the house can vary.

Electrical Service: Electrical Service Conductor Material

Aluminum

The permitted wire gauges for copper are normally one size smaller than for aluminum used at the same ampacity rating. This is because copper is a better conductor than aluminum. Aluminum wire must be larger to safely carry the same current as copper.



Electrical Service: Service Entrance Method

Underground (Lateral), Public Utility

Electrical Service: SEC Attachment

Side of structure

Service Entrance Cables: SEC to Meter

4/0 aluminum/200 amps



Service Entrance Cables:
Observed:

In the service panel, At the weatherhead



Electric Meter Socket: Electric
Meter Location

Exterior, Left



Electric Meter Socket: Electric
Meter Type

Solid state (LCD)



Service Grounding & Bonding: About: Grounding Electrode: Driven Rod

The service panel had a grounding electrode conductor (GEC) visible that was bonded to the service panel and clamped to the top of a driven rod that serves as the grounding electrode. Driven rods are typically 8-foot copper or steel rods required to be driven into the soil for their full length. The inspector was unable to confirm the length of the driven rod. Evaluation of the effectiveness of the service ground would require the services of a qualified electrical contractor using special instruments.

Service Grounding & Bonding:
Grounding Electrode Type

Presumed Driven Rod,
Connection to driven rod
obscured



Service Panel: About:

MAIN SERVICE PANEL

The main service panel is where the power comes into the home after the meter socket. It is where the transfer of liability to the homeowner occurs. The main service panel includes a main switch, breaker, or fuse that allows for the power to be connected and disconnected. Modern code allows for up to six switches to control power to other panels (sub-panels) or appliance disconnects. Main service panels can be found on the exterior of the home as either standalone panels or integrated with the meter socket. It is also possible to find them within the interior of the home, typically in an attached garage, laundry room, or mechanical closet.

Service Panel: Service Panel**Location**

Exterior, Left

**Service Panel: Brand, Type, and Manufacturer Label**

Load Center, Surface Mount, Eaton

**Service Panel: Label: Circuit Directory**

Legible, Complete

**Service Panel: Panel Interior - dead front cover removed****Service Panel: Main Disconnect Ampacity & Type**

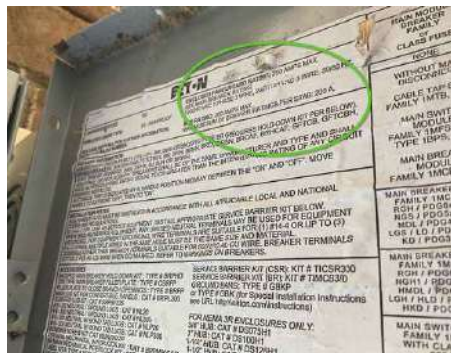
NA

Main disconnects for homes can include one or more over-current protection devices (OCPD) (e.g. breakers). Modern standards state that all power to the dwelling must be able to be deactivated with 6 hand motions "throws" or less. Some homes have a single disconnect while others will have more. Those disconnects may apply to one or more sub-panels (distribution panels) that supply power to the branch circuits of the home and property. Others may be dedicated to heating and cooling equipment, water heaters, private water well systems, wastewater systems, pools, etc. For systems with multiple disconnects, the ampacity for each will be called out above.

Service Panel: Maximum Panel Ampacity

200 amps

Maximum ampacity is a rating designated by the manufacturer. It indicates the total amount of current the panel can safely support.



Service Panel: Over Current Protection Device (OCPD) Supported

Circuit Breaker: Standard (thermal-magnetic), Circuit Breaker: AFCI

Panel-mounted OCPDs include fuses and circuit breakers, with breakers available in thermal-magnetic, GFCI, AFCI, and dual-function (AFCI/GFCI) types. Tandem breakers combine two circuits in one slot but vary by panel compatibility.



Service Panel: Description: load center service panel

The electrical service conductors fed a load center service panel containing a main disconnect and breakers that protected and controlled power to branch circuits.

Service Panel: OCPD type: breakers

Overcurrent protection of branch circuits was provided by circuit breakers located in the service panel.

Service Panel: OCPD: GFCI breakers present

The service panel contained Ground Fault Circuit Interrupter (GFCI) breakers designed to provide protection by shutting off current flow should sensors indicate a difference between incoming and outgoing voltage in outlets at protected circuits.

Sub-Panel: About:

SUB-PANELS

The sub-panel (also known as: "distribution panel") comes after the main service panel via a feeder circuit to distribute power to the individual branch circuits of the home. Multiple sub-panels may be installed depending on the power distribution needs of the property.

They can be located inside and outside the home. Sub-panels typically do not contain a single switch to disconnect power to the panel, however there will be a switch located within the main service panel for this purpose.

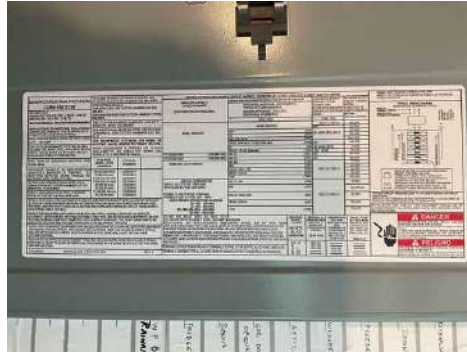
Sub-Panel: Sub-panel Location

Garage

Sub panels are typically located within the home. They are usually found in an attached garage, laundry room, or mechanical closet.

**Sub-Panel: Brand, Type, and Manufacturer Label**

Load Center, Flush Mount, Eaton

**Sub-Panel: Label: Circuit Directory**

This is the circuit directory label of the sub-panel.

**Sub-Panel: Panel Interior - dead front cover removed**

This is the interior of the sub-panel.

**Sub-Panel: Main Disconnect Ampacity & Type**

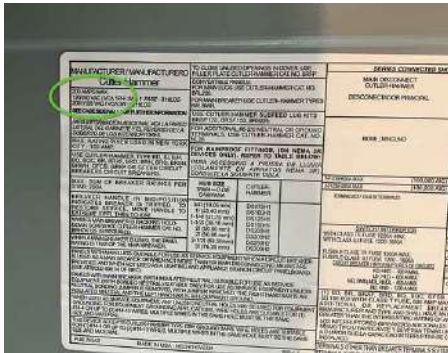
NA, Located in Service Panel

Main disconnects for homes are typically found only in the main service panel and not in sub-panels or distribution panels.

Sub-Panel: Maximum Panel Ampacity

200 amps

Maximum ampacity is a rating designated by the manufacturer. It indicates the total amount of current the panel can safely support.



Sub-Panel: Over Current Protection Device (OCPD) Supported

Circuit Breaker: Standard (thermal-magnetic), Circuit Breaker: AFCI

Panel-mounted OCPDs include fuses and circuit breakers, with breakers available in thermal-magnetic, GFCI, AFCI, and dual-function (AFCI/GFCI) types. Tandem breakers combine two circuits in one slot but vary by panel compatibility.



Sub-Panel: OCPD: AFCI present

This sub-panel contained Arc Fault Circuit Interrupter (GFCI) breakers designed to provide fire protection by shutting off current flow should sensors detect arcing at outlets on the protected circuit. AFCI protection of electrical outlets in sleeping rooms is required in new construction.

Sub-Panel: OCPD: breakers

Overcurrent protection of branch circuits was provided by circuit breakers located in this sub-panel. A circuit breaker is an electrical switch designed to protect an electrical circuit from damage caused by overcurrent/overload or short circuits. Its basic function is to interrupt current flow after protective relays detect a fault over overheating.

Smoke & CO Detectors: About:

Smoke and Carbon Monoxide (CO) Detectors

Smoke and Carbon Monoxide (CO) detectors are critical and required life safety devices. They came in a variety of technology and installation types.

- Smoke detectors can be either ionization or photo-electric. Both offer their own set of benefits. It is up to you, the homeowner, to decide which is best.
 - Ionization** has a faster response time than photoelectric once a danger is detected. But only in a matter of seconds.
 - Photoelectric**, on the other hand, is much better at detecting smoldering elements which often precedes an actual fire, giving occupants more advanced warning (minutes) to respond to the danger.
- Carbon monoxide (CO) is an odorless, colorless, tasteless, toxic gas that is a byproduct of the combustion process. CO is harmful when breathed because it displaces oxygen in the blood and deprives the heart, brain, and other vital organs of oxygen. Large amounts of CO can overcome an individual in minutes, causing a loss of consciousness and suffocation. Combustion appliances such as gas furnaces, water heaters, and some fireplaces can introduce dangerously high levels of carbon monoxide into the indoor air if not properly vented or require repair. CO molecules are small enough to transmit through drywall and mix with the air inside a home. CO detectors monitor indoor air and sound an alarm if dangerously high levels of CO are detected.



Smoke & CO Detectors: Smoke Alarms Present

Yes - installed, Dated - replace

The state of North Carolina requires the presence of smoke alarms to be reported in a general home inspection. The term "Installed" refers to alarms that are hardwired to an electrical circuit and does not apply to battery-powered devices. Locations of such alarms are based on the latest requirements established by current building standards.

Each detector should be checked occasionally to make sure it has power. If a detector has power, the indicator light will be illuminated. A number of types of smoke detectors exist and effective testing methods are not always obvious. The Inspector recommends that you take the time to learn how to check all detectors for proper operation.

Smoke & CO Detectors: Carbon Monoxide (CO) Alarms Present

Yes - installed

The state of North Carolina requires installed carbon monoxide (CO) alarms to be reported in a general home inspection. Installed alarms indicate the device is physically installed to the wall or ceiling and does not apply to plug-in devices. Locations of such alarms are based on the latest requirements established by current building standards.

Smoke & CO Detectors: Detectors: Maintenance and Replacement



Maintenance Tips:

- Smoke and Carbon Monoxide (CO) detectors/alarms should be maintained according to the manufacturer's instructions.
- Test smoke alarms at least once a month using the test button.**
- Make sure everyone in the home understands the sound of the smoke alarm and knows how to respond.
- Follow the manufacturer's instructions for cleaning to keep smoke alarms working well. The instructions are included in the package or can be found on the Internet.
- Smoke alarms with non-replaceable 10-year batteries are designed to remain effective for up to 10 years. If the alarm chirps, warning that the battery is low, replace the entire smoke alarm right away.
- Smoke alarms with any other type of battery need a new battery at least once per year. If the alarm chirps, warning the battery is low, replace the battery right away.
 - A best practice is to develop a routine to check the battery when changing the clocks during seasonal time changes.**
- When replacing a battery, follow the manufacturer's list of batteries on the back of the alarm or the manufacturer's instructions. The manufacturer's instructions are specific to the batteries (brand and model) that must be used. The detectors/alarms may not work properly if a different kind of battery is used.

Smoke & CO Detectors: About: Nuisance trigger

Nuisance triggers or nuisance trips are when a smoke alarm sounds off during standard activities such as cooking (particularly gas cooking appliances) or when burning certain types of candles or other aromatic biotic material. This is not a defect of the smoke detector but, as the name implies, a nuisance. **Be mindful to run exhaust fans during cooking (particularly if using a broiler), and to locate burning aromatics away from detectors.**

Branch Circuits: Branch Circuit Conductor Type

Copper, Stranded aluminum

Branch Circuits: Overcurrent Protection Type

Circuit breakers, GFCI, AFCI

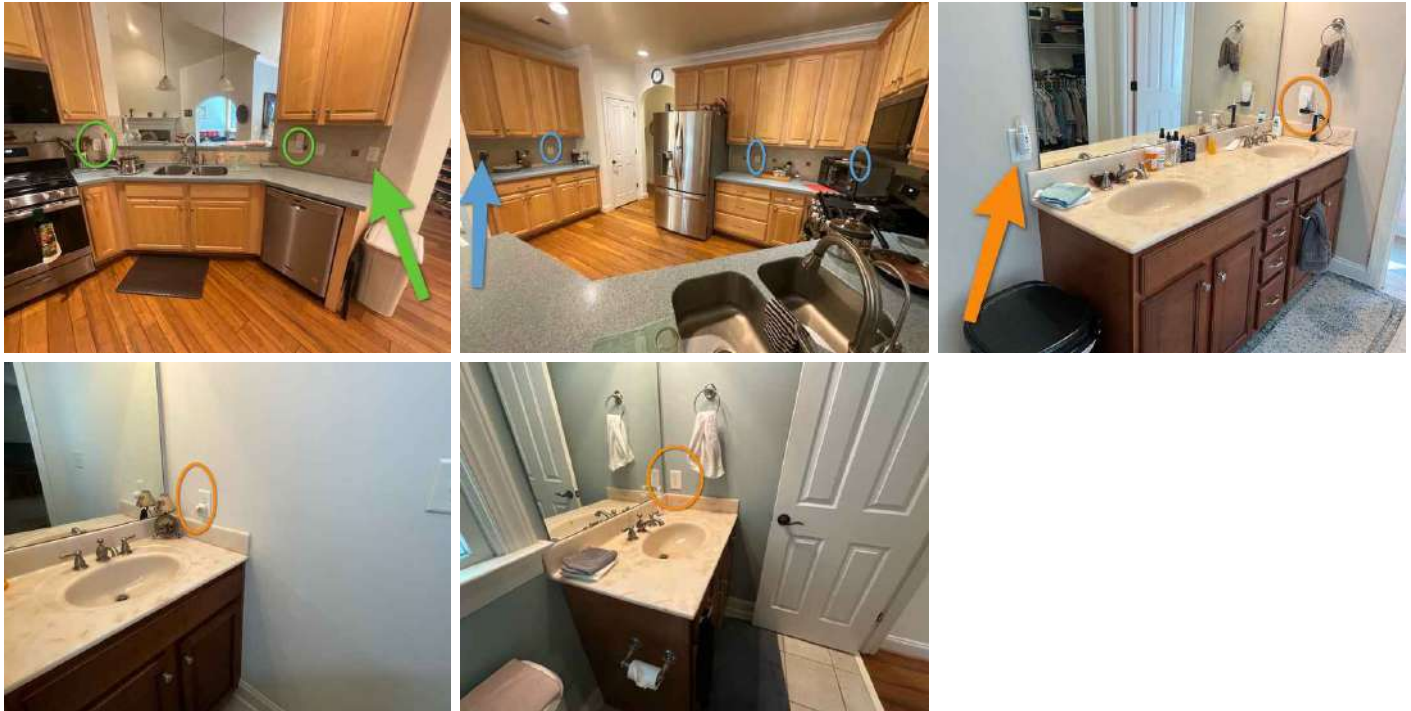
Branch Circuits: GFCI Receptacles: Remote Locations Protected

One or more GFCI receptacles observed in one location protected receptacles in other locations. This is typical of bathrooms sharing the same branch circuit. The same may apply to kitchens, garages, laundry rooms, and exterior locations. When the GFCI receptacle is tripped, it deactivates power to all receptacles downstream on the same circuit.

The arrows and circles with the same color represent the same circuit. The arrow points to the GFCI receptacles that protect the circled receptacles.

The **ORANGE** arrow indicates the receptacle or breaker that controls all bathroom receptacles.

The **WHITE** arrow indicates the receptacle or breaker that controls exterior receptacles (if applicable).



Branch Circuits: About: GFCI Protection

A ground fault circuit interrupter (GFCI) is a particular type of safety device (typically a circuit breaker or electrical receptacle outlet) that can automatically shut off the power when an electrical fault is detected. GFCI receptacles are commonly required in bathrooms, garages, crawl spaces, basements, laundry rooms, exterior locations, and areas where a water source is present. **GFCI protection can significantly reduce but not eliminate the potential risk of injury.** Individuals should still take care in areas where water and power are present.

GFCI devices and GFCI protection requirements have changed over the years, and vary by jurisdiction, depending on which set of standards have been adopted. Reference the current version of the National Electric Code (NEC) for the latest location requirements.

Branch Circuits: OCPD Maintenance



Maintenance Tips:

To ensure the safety and proper functioning of your home's electrical system, it's important to test the buttons on your Overcurrent Protection Device (OCPD) Arc Fault Circuit Interrupter (AFCI) and Ground Fault Circuit Interrupter (GFCI) breakers found within the electrical panels. Simply press the "Test" button on each breaker to simulate a fault. The breaker should trip, cutting power to the circuit, which confirms it's working correctly. After testing, reset the breaker. Regular testing every 6 months helps detect potential malfunctions and ensures your electrical system is providing adequate protection against shocks and electrical fires.

LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Grounding Electrode: Disclaimer

The Inspector disclaims responsibility for positive identification of the service grounding electrode, its proper installation, and adequate performance for the following reasons:

1. The electrode is often hidden from view

2. Electrode performance can vary with installation practice and soil conditions,
3. Measuring electrode performance requires specialized instruments and skills that lie beyond the scope of the General Home Inspection.

For an accurate evaluation of the electrical grounding electrode system, you would need to hire a qualified electrical contractor.

Branch Circuits: Disclaimer

Home branch circuit wiring consists of metal conductors distributing electricity to devices such as switches, receptacles, fixtures, and appliances. Most conductors are hidden behind floor, wall, and ceiling coverings and cannot be evaluated by the Inspector. The Inspector does not remove cover plates, and inspection of branch wiring is limited to readily visible components and a representative number of electrical receptacles and switches.

Meter Socket: no access, locked

Electric meter socket panels and cans are typically locked by the service provider. To remove the lock by those not permitted is a violation and a finable offense. The inspector does not remove locks from meter socket enclosures therefore any non-observable defects are disclaimed and excluded from the report.

Detectors: Battery, useful life

Smoke and Carbon Monoxide detectors can be battery-powered or hard-wired with a battery backup. The specific type and model will determine if the battery is integrated or replaceable. Checking the batteries of the installed detectors is not part of the scope of a General Home Inspection. Units with integrated batteries typically have a 10-year warranty with the date of manufacture printed somewhere on the unit. For units with replaceable batteries, the inspector recommends the client replace the batteries upon moving into the home and then develop a routine maintenance plan to test and replace them in the future.

Observations

12.8.1 Smoke & CO Detectors



High Importance / Priority

SMOKE DETECTORS: OLD

One or more of the smoke detectors protecting the home appeared to be old and may not be functional or beyond their useful life. Manufacturers use a resin that yellows when smoke detectors have aged beyond their useful life, usually 10 years. The Inspector recommends that any old (yellowed) smoke detector be replaced by a qualified electrical contractor.

Recommendation

Contact a qualified electrical contractor.



12.9.1 Branch Circuits

 Moderate Importance / Consider**AFCI: UPDATE
RECOMMENDED**

Arc-fault circuit interrupter (AFCI) protection was designed to provide additional safety to residential buildings' electrical systems. During the inspection, it was observed that AFCI protection was installed for some branch circuits of the home. However, newer standards have been passed to include additional areas not currently protected.

Builders are only obligated to comply with the standards in place when the permits for the construction of the home were approved. Although the electrical system is not required to be updated, the Inspector recommends that AFCI protection be installed by qualified electrical contractors to comply with current electrical safety standards. The following locations are current as of the 2020 edition of the National Electric Code.

- kitchens
- family rooms
- dining rooms
- living rooms
- parlors
- libraries
- dens
- bedrooms
- sunrooms
- recreation rooms
- closets
- hallways
- laundry areas or similar rooms



Recommendation

Contact a qualified electrical contractor.

12.9.2 Branch Circuits



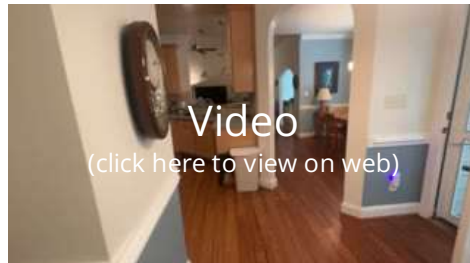
Minor Importance / Maintenance

RECEPTACLES: LOOSE

Electrical receptacles at various areas in the home were improperly secured and moved when plugs were inserted. Receptacles should be securely installed to prevent the terminal connections from deteriorating resulting in potential fire, shock and/or electrocution hazards. The inspector recommends that all loose receptacle outlets be securely fastened by a qualified electrical contractor.

Recommendation

Contact a qualified electrical contractor.



12.9.3 Branch Circuits



High Importance / Priority

GFCI: MISSING, 6 FEET FROM SINK

Ground fault circuit interrupter (GFCI) protection was missing. Modern standards state that GFCI electrical receptacles are required for all countertop areas within kitchens and any location within 6 feet of a sink. Although GFCI protection may not have been required at the time the home was built, for safety reasons, the Inspector recommends that proper receptacles be added to meet modern safety standards. All work should be performed by a qualified electrical contractor.

Recommendation

Contact a qualified electrical contractor.



12.9.4 Branch Circuits

RECEPTACLE: SCORCHED High Importance / Priority

An electrical receptacle was scorched. This condition indicates overheating and is a potential fire hazard. The Inspector recommends that an evaluation by and electrician and all necessary work be performed by qualified contractors.

Recommendation

Contact a qualified electrical contractor.



13: HVAC SYSTEM

Information

General: .



HVAC Systems

Heating, Ventilation, and Air Conditioning (HVAC) is one of the most complicated and least understood systems in the home. Solutions may comprise multiple systems with multiple components per system. Design is based on several factors not limited to the amount of livable space, layout, climate zone, and fuel source availability.

General: About: System Design

The HVAC (Heating, Ventilation, and Air Conditioning) system design in your home is crafted to meet the unique needs of the property. Solution configurations and designs are carefully considered based on several critical factors:

- **Size of the Home:** The total square footage of the home directly influences the capacity of the HVAC system needed to efficiently heat and cool the space.
- **Location:** Geographical factors, including climate conditions and seasonal variations, play a significant role in determining the appropriate HVAC design that will deliver optimal performance throughout the year.
- **Layout of the Home:** The internal layout, including the number of rooms, levels, and the presence of basement or attic spaces, affects how the HVAC system is configured to ensure even distribution of air.
- **Available Fuel Sources:** The type of energy available (e.g., gas, electric, solar) influences the type of HVAC system installed, as some systems may be more compatible with certain energy sources than others.

Given the complexity of HVAC solution designs, it may not be possible for the inspector to identify and verify the configuration for all areas of the home during a standard inspection. The assessment of the HVAC system is based on visible components and accessible areas. For a comprehensive evaluation of system design and efficiency, specialized HVAC inspections are recommended. These are conducted by certified HVAC technicians who can provide a more detailed analysis of the system's design and functionality.

General: Terminology

Heating and cooling systems are complex comfort solutions designed to provide conditioned air throughout the home. They comprise many different components that work on the basic principle of transferring heat from one location to another. Below are some common terms used in the report.

- **AC:** Air Conditioning, Cooling, Comfort Cooling, or Refrigerant Cooling
- **System:** A system will comprise a heating, cooling, and an air circulating appliance.
- **Zone:** A specific area within a building that has its temperature controlled independently from other areas.
- **AHU:** Air Handler/Handling Unit
- **Furnace:** Fuel heat source (propane, natural gas, or oil) via forced air
- **Boiler:** Fuel heat source (propane, natural gas, or oil) via circulated liquid (aka hydronic heating)
- **Heat Pump:** Electric heat source, Refrigerant Heating
- **AFUE:** Annual Fuel Utilization Efficiency (applies to furnaces and boilers)
- **SEER:** Seasonal Energy Efficiency Ratio (applies to cooling/heat pumps)
- **HSPF:** Heating Seasonal Performance Factor (applies to heat pumps)
- **EER:** Energy Efficiency Ratio (measures the efficiency of cooling devices)
- **COP:** Coefficient of Performance (evaluates the efficiency of heating and cooling equipment)
- **Thermostat:** Device that regulates the temperature of a system or room
- **Ductwork:** Network of conduits used to transport air from the HVAC system throughout the building
- **VRF/VRV:** Variable Refrigerant Flow/Volume (a system that regulates the amount of refrigerant flowing to multiple indoor units)
- **Split System:** An HVAC system divided into two main components, the condenser/compressor appliance and the furnace/air handling appliance
- **Package Unit:** A single cabinet containing both the heating and cooling equipment, typically installed outside the home

- **Condenser:** The outdoor component of a cooling system, which releases or collects heat, depending on the mode
- **Evaporator Coil:** Component of the HVAC system where heat exchange happens during the cooling cycle

General: Configuration: Number of Zones & Area(s) Served

1-Zone, Serves whole house

A **zone** is a dedicated comfort space within the home. Zones may have their own dedicated heating and cooling equipment, or may share equipment with other zones.

Additionally, an individual zone may provide conditioned air for one or more floors. In some cases, a zone may only serve a single interior space, such as with a ductless mini-split system. For the purposes of this callout, zones refer to those areas served by each system, not the total number of zones in the home.

General: About: Split Systems

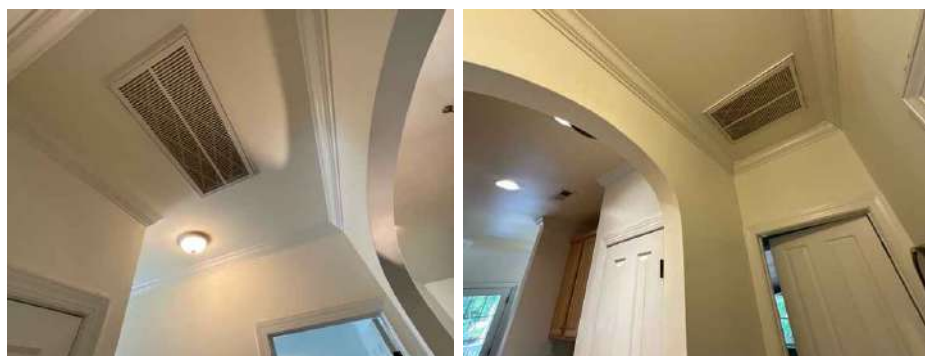
Split HVAC Systems are utilized with refrigerant heating and cooling solutions. They have a cabinet housing the compressor, exhaust fan, and condensing coil located separately from the evaporator coil and circulating fan. As is typical with split systems, the compressor/condenser cabinet is located at the home's exterior where it collects or dissipates heat energy. The evaporator coils function much like the condenser coil but in reverse depending on the call for heat or cooling. Evaporator coils of split systems are located within the air handling unit installed in the home, attic, or crawlspace.



Example of Split System with Air Handler at the Furnace

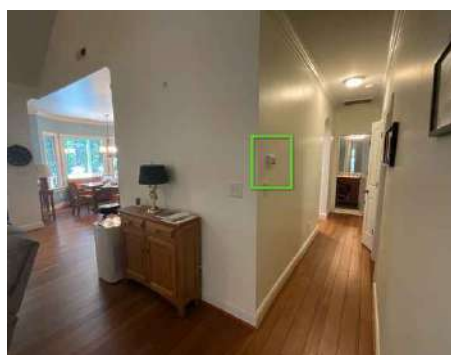
General: Air Filter Location

Return air grilles



General: Thermostat: programmable, heating/cooling

The heating and cooling systems were controlled by a programmable thermostat. Heating and cooling costs can be reduced by programming the thermostat to raise and lower home temperatures at key times.



Cooling System: .**Cooling System**

The HVAC cooling system in a home is designed to regulate indoor temperatures and provide comfort during warmer months. It typically consists of an outdoor unit, known as the condenser, which releases heat, and an indoor unit, usually referred to as an evaporator coil, where the cooling process occurs. The system circulates refrigerant between these units to absorb heat from the indoor air and expel it outside. Air handlers or blowers then push the cooled air through ductwork, distributing it throughout the home. This system not only cools the air but also helps in reducing humidity levels, enhancing overall indoor air quality and comfort. Proper maintenance, including regular cleaning of filters and ducts and checking system integrity, is essential for efficient operation and longevity of the cooling system.

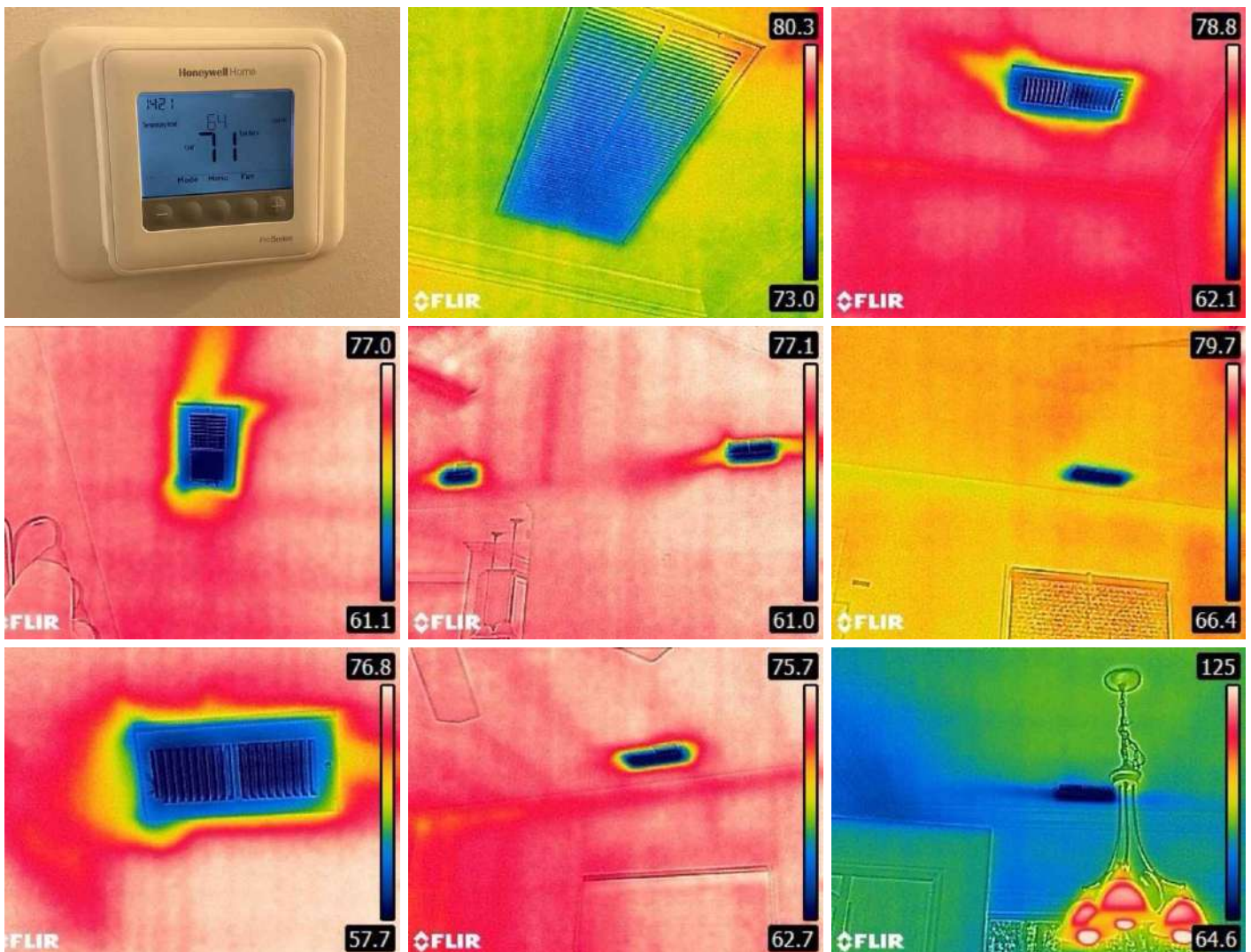
Cooling System: Type**Split System (AC & Heat Pump)**

Cooling systems comprise two main components, a condenser located on the exterior of the home and an air handling unit (AHU) that holds the blower fan and evaporator coil. The air handler is typically located within the home, attic, or crawlspace.

Cooling System: Distribution & Delivery**Cooling Tested, Observed Delta (Δ): 16-22°**

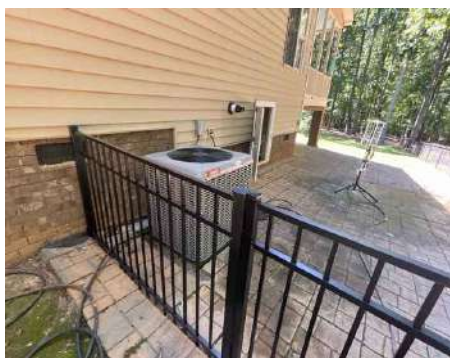
These images are a representation of the distribution effectiveness of conditioned air throughout the home at the time of the inspection. The images are a representation of the entire system and **DO NOT** reflect every area. If no systems were tested or there was a discrepancy with the distribution system it will be noted elsewhere in this report.

** Cooling systems are not operated when outside temperatures are below the industry's generally accepted ranges for safe operation.*

**Cooling System: Condenser Unit Location**

Exterior, Right

Cooling systems typically comprise two components, a condenser located on the exterior of the home and an air handler that holds the blower fan and evaporator coil. The air handler is typically located within the home, attic, or crawlspace.



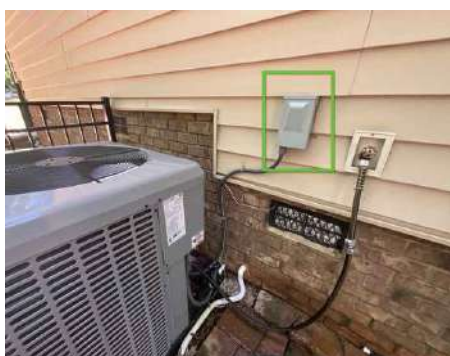
Cooling System: Condenser Brand and Data plate

Coleman



Cooling System: Condenser Electrical Disconnect

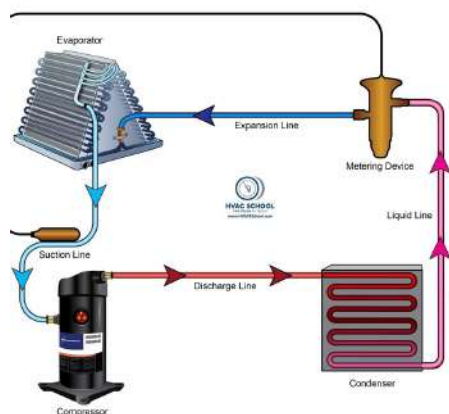
Although it was not operated, the electrical disconnect for the condensing unit appeared to be appropriately located and installed and in a serviceable condition at the time of the inspection. A disconnect, disconnect switch, or isolator is used to ensure that the electrical circuit is completely off. Disconnects are not used for regular control of the circuit but are employed as a safety precaution. Modern standards stipulate the disconnect must be within sight from the AC unit to prevent someone who doesn't know the technician is working on the unit from turning the power on, causing damage to the unit or personal injury or death.



Cooling System: About: Refrigerant Cooling

Air conditioners work by transferring heat from one location to another.

1. The **compressor** pumps refrigerant into a condenser unit, where heat energy drawn from the home is transferred to the outside ambient air through the **condenser coil**. A fan circulates exterior air across the condenser coil to transport the expendable energy away from the coil.
2. The gaseous refrigerant then moves through the condenser, increasing the pressure within the **liquid line** thus condensing the gas and converting it into a liquid state. **Due to the increased pressure, the smaller liquid line should be warm to the touch.**
3. The liquid refrigerant is then pushed at high pressure through a **metering device "expansion valve"** on one side of the evaporator unit, expanding and changing the liquid back into a gas.
4. The rapid expansion between states causes the refrigerant's temperature to drop dramatically. This creates a temperature differential within the evaporator. As this super-cooled refrigerant gas moves through the **evaporator coil**, it absorbs the heat from inside the home. The gaseous state of the refrigerant then carries the heat energy to the inlet port of the compressor via the larger suction line, where the cycle starts again. **The suction line should be cooler to the touch in comparison to the liquid line.**



Basic refrigeration cycle: compressor
→ condenser coil → metering
device/expansion valve →
evaporator coil → back to
compressor. Understanding this
loop helps homeowners appreciate
how cooling and dehumidification
work.

Cooling System: Excluded accessory components

HVAC systems can include various accessory components including but not limited to ultra-violet (UV) light sterilizers, humidifiers, dehumidifiers, and emergency shut-off switches. Inspecting these components is beyond the scope of a General Home Inspection and are excluded from the report.

Heat Pump: .



Refrigerant Heating System

A heat pump is a versatile HVAC system designed to provide both heating and cooling to a home by transferring heat between the indoors and outdoors. During warmer months, it operates like a traditional air conditioner, extracting heat from inside the home and releasing it outdoors. In colder weather, the process reverses, and the system extracts heat from the outdoor air—even in cold temperatures—and moves it indoors to warm the home. Heat pumps are energy-efficient because they move heat rather than generate it, making them an environmentally friendly option. They typically consist of an outdoor unit connected to one or more indoor air handlers, and they require regular maintenance, such as cleaning filters and checking refrigerant levels, to ensure efficient operation and durability.

The current building standards at the time of the inspection required heat-conditioned air to be provided in all Sleeping, Living, Cooking, and Eating spaces.

Heat Pump: Type

Split System (AC & Heat Pump)

Heating systems come in a variety of types, fuel usage, and configurations. The system installed is typically dictated by climate region, access to fuel resources, and preference.

Heat Pump: Distribution: Delivery

Heating system - Not operated*, See LIMITATIONS

These images are a representation of the distribution effectiveness of conditioned air throughout the home at the time of the inspection. The images are a representation of the entire system and **DO NOT** reflect every area. If no systems were tested or there was a discrepancy with the distribution system it will be noted elsewhere in this report.

** Heating systems are not operated when outside temperatures are above the industry's generally accepted ranges for safe operation.*

Heat Pump: Distribution: Delivery - Auxiliary / Emergency Heat

Auxiliary / Emergency Heat system - Not operated*

Note: Not all heating systems utilize emergency heat or auxiliary heat systems. Typically, only heat pumps employ a backup heating system in the event the primary heat pump system fails.

Standards update: Recent changes to building standards require temperature lock-out devices to be deployed with all auxiliary/emergency heating systems to prevent damage and excessive energy consumption. These lockouts prevent activation and testing when outside temperatures are above the system's low-end efficiency threshold (varies per manufacturer). It may not be

possible for the home inspector to test the auxiliary/emergency heat to confirm functionality. The inspector recommends the client confer with a qualified heating and cooling contractor to confirm the functionality of these system features.

If applicable, the provided images are a representation of the distribution effectiveness of conditioned air throughout the home at the time of the inspection using the **Auxiliary / Emergency Heat** function of the system. The images are a representation of the entire system and **DO NOT** reflect every area. If no systems were tested or there was a discrepancy with the distribution system it will be noted elsewhere in this report.

Heat Pump: Condenser Unit: Location

Exterior, Right

Cooling systems typically comprise two components, a condenser located on the exterior of the home and an air handler that holds the blower fan and evaporator coil. The air handler is typically located within the home, attic, or crawlspace.

Heat Pump: Brand and Data Plate

Same as AC

Heat Pump: About: Refrigerant Heating (aka Heat Pumps)

The home HVAC system included an electric heat pump. A heat pump utilizes the same equipment as the home's installed refrigerant cooling system. Instead of making the interior cold, the refrigerant cycle is reversed (via a reversing valve), extracting the available heat energy from the exterior environment and transferring it to the interior. Generally, heat pumps are efficient down to 30°F.

The current building standards at the time of the inspection required heat-conditioned air to be provided in all Sleeping, Living, Cooking, and Eating spaces.

Heat Pump: About: Auxiliary / Emergency Heating Systems

Auxiliary and Emergency heating systems are the same component but utilized in different ways. Commonly paired with an electric heat pump, they provide supplemental heat when needed by way of an electric resistance coil or gas burner. Sometimes referred to as a "dual fuel" system.

Auxiliary heat is automatic and is deployed when the temperatures either drop drastically or to a point lower than the primary heat pump can efficiently support. Typically below 30°F.

Auxiliary heat may inadvertently be activated if the end-user (occupants) tries to drastically increase the temperature in the home. This feature varies by make and model but typically occurs when the end-user increases the call for heat by more than 2 or 3 degrees at a time. This can have a negative impact on heating costs resulting in a higher-than-normal electric service bill. **As a best practice, the end-user should only increase the temperature by 1 degree at a time, allowing for the system to recover before increasing the call for heat again.**

Emergency heat is manually activated with a specific switch setting on the thermostat controller. **Emergency heat should only be deployed when the primary heat pump fails to operate.** If you notice that emergency heat is active during normal operation it could indicate a problem with the system. Contact a qualified HVAC contractor immediately if that is the case.

Air Handling Unit: .



Air Handling Unit

The air handling unit (AHU) is the interior component of a two-piece "split system" that heats and cools your home. In a Package unit, the AHU will be located with the condenser and/or furnace on the exterior of the home. The AHU will house the coil, blower motor fan, and depending on the design of the system, the emergency/auxiliary electric heat strip and filter.

- The **evaporator coil or hydronic heating coil** transfers energy to/from the air passing over it, making it either hot or cold.
- The **blower motor fan** moves the air throughout the system. It draws air in through the return ducts, passes it over the evaporator coil or heat strip, and then pushes it out through the distribution system to the supply air registers in the various rooms.
- The **emergency/auxiliary electric heat strips** provide supplemental heat when conditions require it. It activates when the main heat pump fails or if the heat pump cannot keep up with the temperature demands.

Air Handling Unit: Location	Air Handling Unit: Brand and Data plate	Air Handling Unit: Method of Inspection and Testing
Attic The air handler is typically located within the home, attic, or crawlspace.	Same as AC	The unit was inspected visually, The unit was operated using standard controls (thermostat)



Air Handling Unit: Primary condensate discharge location

This pipe is the primary condensate discharge for the air conditioning system. Its purpose is to safely discharge condensate produced by the HVAC air handler. Discharge locations may include pipes run to the exterior or to approved wastewater receptors located within the home's interior such as laundry room standpipes. **It is normal to see water discharging from this pipe when the air conditioner's cooling cycle is operating.**



Air Handling Unit: Backup condensate discharge safety shutoff switch

The backup condensate discharge for the air conditioning system was equipped with a safety shutoff switch designed to automatically turn off the system if condensate is detected. The purpose of this backup is to protect the home in the event the primary condensate discharge becomes blocked. **If you experience the heating & cooling system not responding to the thermostat controls it's possible this safety switch has been triggered. In the event, you should contact a qualified HVAC professional immediately.**



Air Handling Unit: Power switch/disconnect



Ductwork & Distribution: .



Ductwork & Distribution

HVAC ductwork and distribution systems are crucial for the effective dissemination of conditioned air throughout a home. This network of ducts carries warm or cool air from the central HVAC unit—whether it's a furnace, heat pump, or air conditioner—into each room, ensuring a consistent temperature across different spaces. Properly designed and installed ductwork should minimize loss of energy and maintain optimal air flow, which is essential for both comfort and efficiency. It's important that ducts are well-sealed and insulated, especially in unconditioned spaces such as attics or crawl spaces, to prevent energy wastage. During a home inspection, checking for leaks, obstructions, and proper insulation in the ductwork is key. Properly functioning ductwork is integral to the overall efficiency and effectiveness of the home's heating and cooling systems.

Ductwork & Distribution: Duct Type

Flexible duct, Insulated



Ductwork & Distribution: Delivery Method

Forced Air / Ducted

Ductwork & Distribution: Shared Components

The heating and cooling appliances shared the same ductwork to distribute the conditioned air throughout the home. This is a common building practice to reduce construction and maintenance costs.

Ductwork & Distribution: Heating and Cooling installed for each habitable space

Present in all required locations

The current building standards at the time of the inspection considered **habitable spaces** as any location designated for Sleeping, Living, Cooking, and Eating.

Installed sources do not include through-wall units, through-window units, or portable space heating devices.

Ductwork & Distribution: Balancing supply air registers

Modern heating and cooling systems typically share the same ductwork for distributing conditioned air throughout the home. Seasonal changes can affect the perceived comfort levels in different rooms throughout the year. Adjusting the dampers on the supply air registers helps to balance the distribution of air. During the cooling season (warm months) any south and south-west facing rooms of the home will be warmer than those on the opposite side due to their exposure to the sun. Fully opening the dampers on the supply air registers in the south and south-west facing rooms while closing dampers in the north and north-east facing rooms will improve the comfort levels. The opposite holds true for the heating season (cold months).

CAUTION: closing too many supply air registers can have a negative impact on the static pressures the system was designed to support. Doing so could result in poor performance and premature equipment failure.

LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Heat Pump: Not operated, outdoor temperature too high

As per manufacturer specification, heat pumps are not operated when the outdoor ambient temperature is above 65 degrees Fahrenheit. Operating a heat pump during high temperatures can damage the unit.

Systems: Standing Recommendation

Given the sensitive nature of heating and cooling equipment, the systems are not operated when outdoor temperatures are beyond the generally accepted safe operation limits. This means that cooling systems are not operated when the temperatures are below 65 degrees Fahrenheit, and heat systems (heat pumps) are

not operated when temperatures are above 65 degrees Fahrenheit. The system was visually inspected only where components were readily accessible. For this reason, the inspector extends a blanket recommendation for all clients to consult with a qualified heating and cooling contractor to perform in-depth diagnostic tests of the systems prior to the expiration of any due diligence period or other negotiation deadlines.

Systems: Performance disclaimer, multi-story structures

The General Home Inspection does not include confirming even temperature distribution throughout the home by the heating and cooling system. In multiple-story homes, a temperature differential will often exist, with upper floors being warmer than lower floors. If there is ever any concern, always consult with a qualified heating and cooling contractor.

Observations

13.5.1 Air Handling Unit

 Minor Importance / Maintenance

CONDENSATE DISPOSAL: DISCHARGE LOCATION AT FOUNDATION

The condensate tube, the purpose of which is to safely discharge condensate produced by the operation of the heating and cooling system's evaporator coils, discharged condensate at the foundation. This will add excessive moisture at the foundation that, over time, can result in erosion and settlement of the soil at the foundation. The Inspector recommends **the pipe be routed to a point no less than 6 feet away from the foundation wall.**



Recommendation

Contact a qualified plumbing contractor.

13.5.2 Air Handling Unit

 Moderate Importance / Consider

CONDENSATE DRAINPIPE: NO INSULATION - ATTIC LOCATION

The condensate drainpipe located in the attic was observed to have no insulation. Uninsulated condensate drainpipes in unconditioned spaces like attics can result in condensation forming on the exterior of the pipe, which may lead to moisture damage or microbial growth on adjacent building components and materials. The inspector recommended that a qualified HVAC contractor install insulation around the condensate drainpipe to prevent condensation and protect surrounding materials.

Recommendation

Contact a qualified hvac contractor



14: PLUMBING

Information

General: .



Plumbing Systems

A residential home's plumbing system is a critical infrastructure that ensures the distribution of clean potable water for various household needs and the efficient removal of wastewater. Common items and systems that are evaluated include the visible and readily accessible components of the water source, water heater, distribution piping, traps and drain piping, vent piping, fixtures, and sump and ejector pumps.

Water Heater: About:



WATER HEATER

Water heaters are appliances designed to heat and maintain water temperatures at an elevated level. They come in varying styles and sizes depending on the hot water demands of the occupants in the home.

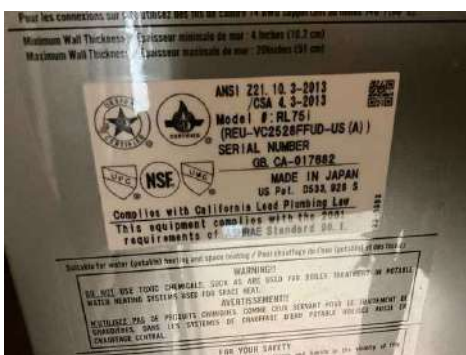
Water Heater: Location

Crawlspace



Water Heater: Brand and Data Plate

Rinnai



Water Heater: Type

Tankless (on-demand), Non-condensing, Natural gas heat source

Water Heater: Tank Capacity

NA

A generally accepted rule for storage tank size of a domestic water heater is **12 gallons per occupant**.

ex. 4 occupants = 48 gallon storage tank

Water Heater: Date of Manufacture - Rinnai

2015-02-01

The date of manufacture for your water heater has little bearing on its life expectancy or remaining useful life. Multiple factors contribute to the life span of a water heater, including but not limited to the brand, model series, type, technology, installation, the chemical composition of water and fuel source, location, exposure, water usage habits, number of occupants, capacity, maintenance, and others.

Rinnai Serial Number Decoded:

YEAR
MONTH
WEEK (if numeric)

Production Year Codes:

Code	Year	Code	Year
A	2009	M	2020
B	2010	N	2021
C	2011	O & P	2022 (used for one model)
D	2012	R	2023
E	2013	S	2024
F	2014	T	2025
G	2015	W	2026
H	2016	X	2027
J	2017	Y	2028
K	2018	Z	2029
L	2019		

Production Month Codes:

Code	Month	Code	Month
A	January	G	July

B	February	H	August
C	March	J	September
D	April	K	October
E	May	L	November
F	June	M	December

Example Serial Number Styles:

- Style 1: BL. CA-051306
- Style 2: 04. 03-102521
- Style 3: 05083453



Water Heater: Life Expectancy, Gas - tankless (on demand)

The average life expectancy of a tankless (on-demand) gas water heater is **between 15-20 years**.

Water Heater: Gas Valve Shutoff



Water Heater: Electrical Shutoff



Water Heater: Water Valve Shutoff



Water Heater: About: Temperature Adjustments

Temperature adjustments vary based on water heater type and energy source.

- Electric tank water heaters thermostats are typically contained within an access panel at the top or bottom of the tank.
- Gas units typically have direct access to the thermostat via a dial or button
- Tankless units typically have front panel controls to adjust the temperature.

Water Heater: Thermostat



Water Heater: Note: Water heater location: Crawlspace

There are two facts about water heaters, they make water hot, and they fail 100% of the time. Next to attics, crawlspaces are the most rarely visited spaces in a home. A failed water heater in a crawlspace can leak, causing considerable damage, mainly in the form of excessive moisture that can harbor mold. In general, water heaters should be evaluated every six months. A proper drain pan, in good condition, should be installed under the water heater to limit the potential for damage due to failure.

Water Heater: About: Gas Tankless (On-Demand) Water Heaters

Tankless water heaters heat water directly without the use of a storage tank. When a hot water fixture is opened, cold water enters the heater and is heated by either a gas burner or an electric element. Tankless water heaters deliver a constant supply of hot water, on demand. You don't need to wait for the water in a storage tank to be heated.

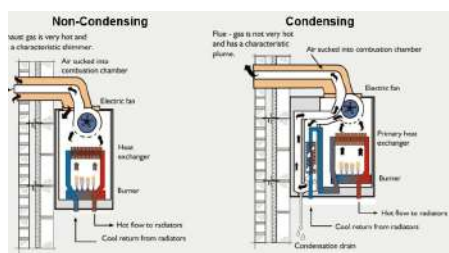
The downside is that the supply of hot water may not be able to keep up with demand. Typically, tankless water heaters provide hot water at a rate of 2–5 gallons (7.6–15.2 liters) per minute. Gas-fired tankless water heaters produce higher flow rates than electric ones. Sometimes, however, even the largest, gas-fired model cannot supply enough hot water for simultaneous, multiple uses in large households. Sometimes multiple heaters are installed to alleviate this problem.

Water Heater: About: Condensing vs. Non-condensing Gas-fired Water Heaters

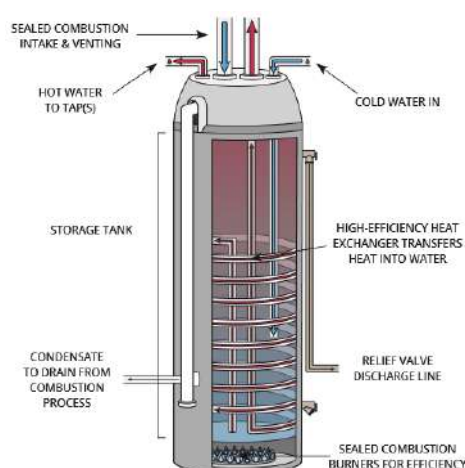
A **non-condensing** gas water heater will vent the hot byproducts from combustion to the outside. This exhaust air is hot, with temperatures around **300°F**. When heat is vented, energy is wasted. Non-condensing units have efficiencies of around 80%, meaning around 20% of the heat is wasted through the venting of its exhaust.

Condensing gas water heaters recycle the extra heat that would typically be vented to the outside. The byproduct is the remaining vapor that is no longer useful for the heating process, with temperatures somewhere around **100°F**.

Since the condensing unit captures and reuses the residual exhaust heat, you get efficiencies in the area of **98%**. More of your heating expense is actually going into heating your water.



Tankless Unit



Tank Storage Unit

Water Heater: Maintenance



Maintenance Tips:

Maintaining a water heater is a critical step in ensuring years of reliability. These are seven tips for success.

Note: We do not recommend performing this work by non-professionals and advise assistance from licensed and qualified professionals.

- **Draining and Flushing**, the water heater tank to remove built-up sediment at least once a year.
- **Sacrificial Anode** is designed to protect the tank interior from caustic chemicals found in water. The rate of decay of the anode is based on multiple variables. Evaluate the sacrificial anode once per year and consider replacement every four years.
- **Adjust the temperature.** You should keep the water temperature set at a **minimum of 120 degrees** Fahrenheit to kill microbes and a **maximum of 130 degrees** to prevent scalding. Check the temperature at the closest fixture to the water heater. Seasonal adjustments may be required.
- **TPR Valve.** Sources on the internet suggest testing the Temperature Pressure Relief (TPR). **We strongly advise against this.** Hire a professional to test that device. If it fails during the test, the professional will be better equipped to react and make repairs as needed. Look for water below the TPR valve discharge pipe.*
- **Tankless Units.** Tankless units require special attention from skilled trades to properly maintain. A regular maintenance schedule should be established with a qualified professional.
- **Get a professional inspection.** In addition to the tips above, hiring a professional inspector every few years helps to stay in front of defects with the water heater and the home in general.
- **Do NOT** install commercially available water heater insulated jackets. Water heaters are manufactured with ample insulation from the factory. The additional coverage has negligible improvement in efficiencies and most cases will void the manufacturer's warranty.

**If you observe moisture on the floor or a slow drip below the TPR discharge pipe, it indicates that your TPR valve is failing or has already failed. The TPR is a safety device that is designed to vent pressure due to excessive internal temperatures. If a TPR valve trips as designed, the flow of water exiting the discharge pipe could be significant and indicate something else wrong with the unit. If this occurs, turn off the fuel source (gas valve or power disconnect) and turn off the water to the unit. Then call a qualified plumbing contractor.*

Water Heater: Direct vent

A direct vent system in a water heater uses a two-way pipe system to manage air intake and exhaust. This system pulls air from outside the home for combustion and expels the exhaust back outside, making it an efficient and safe ventilation method. Direct vent water heaters are particularly useful in tightly sealed or indoor spaces where internal air flow is limited.



Water System: :

Water Service & Distribution

The water service and distribution section cover the main supply line, visible interior piping, flow at fixtures, and functional drainage. This includes an evaluation of material types, water pressure, and overall system performance where accessible.

Water System: Water Source

Private Well

Water sources can include public utility, private wells, or shared community wells.

Water System: Water Service Pipe

Size and Material

1-inch, PVC (Polyvinyl chloride)

Private Water Well (advanced): Well Pump: Location

Well (submersible only)



Private Water Well (advanced): Well Pump: Type

Submersible

Centrifugal Pumps are only used for shallow wells that are no more than 25 feet deep. The aforementioned depth is its effective range to generate enough suction forced to lift the water up to the surface. It has only one pipe that is inserted into the well borehole and into the water column. Since they are smaller in size, they cost less and are easy to maintain.

Submersible Pumps are considered to be the most popular choice for a well pump as they can be used in deep and shallow well operations. Because they are designed to be used as underwater units, their watertight properties ensure that there will be no electrical contact with the water source, as well as the elimination of potential water leakages. Its higher powered suction pumps allow it to transport water for a further distance, thus making it suitable for deep wells.

Jet Pumps come in two versions, the deep well and shallow well jet pump. A shallow well jet pump basically shares the same properties and functions of a submersible pump with a suction length of no more than 25 feet. Its mechanical systems are simpler than its counterpart, and requires little maintenance. If you are budget conscious, this is the version to go for. Deep well jet pumps are much more powerful than the shallow pumps. This time round, there will be 2 pipes contained within the borehole. One pipe is used for suction purposes and the other returns water to operate its jet units. The jet units are installed in the well borehole below water level. The pump forces water down its primary pipe (smaller diameter) and back up through its secondary pipe (larger diameter); Lifting water from more than 50 feet below. The pumps can also be upgraded to lift water up from more than 100 feet below.

Constant Pressure Pump operates using a variable speed motor that is built into the unit which allows the pump to speed up or slow down depending on the level of water usage. Thus, when more water is needed, the Constant Pressure Pump runs faster, and when less water is used, it runs at a slower speed. The benefits of a constant pressure pump include:

- Better water pressure when taking a shower
- More "city-like" water pressure coming from all faucets
- Higher powered lawn irrigation
- A smaller, low cost tank that takes up less space
- Several built in features to prevent any damage to your pump
- Convenient push button pressure selection

Power Ratings are based on several factors including target flow rate, water depth, distance, and recovery rate of the well. Represented in horsepower (hp), the larger the rating the more powerful the pump. Typical private well systems utilize 1/2 to 3/4 hp pumps.



Private Water Well (advanced): Well Pump: Saver Device

No

A pump saver device is a safety system designed to protect the pump. The device will turn off the power to the pump when low water "dry well" conditions in the well are present. These devices are not required but come highly recommended.

Private Water Well (advanced): Pressure Tank: Location Crawlspace



Private Water Well (advanced): Pressure Tank: Size 22 gallons



Private Water Well (advanced): Pressure Tank: Pre-charge (empty) 33 PSI

The pressure tank's empty pressure (pre-charge) setting should be 2 psi less than the cut-on pressure of the pressure switch.



Private Water Well (advanced): Pressure Tank: Drawdown Capacity 11.2 gallons

Drawdown capacity is the amount of usable water in a pressure tank. It is the amount of water drawn from the tank between the time the pressure switch cuts off (turning off the pump) and cuts on (turning on the pump).

The calculation to determine the actual drawdown capacity of an installed pressure tank:

$$(P1/P2 - P1/P3) \times V$$

Where,

P1 = Pre-charge Pressure (psi)

P2 = Cut-in Pressure (psi)

P3 = Cut-out pressure (psi)

V = Tank capacity (gallons)

Private Water Well (advanced): Pressure Switch Setting (observed)

40-60 psi

Pressure switch settings have two numbers, a low number (cut in), and a high number (cut off). This controls when the pump turns on and off based on the water demand. When the pressure in the tank drops to the "cut-in" pressure, the switch toggles the pump on. When the pressure in the tank reaches the "cut-out" pressure, the switch toggles the pump off.

Private Water Well (advanced): Control Box

Above pressure tank in crawl space

The control box is located near the pump or pressure tank. It is in place to turn off power to the system for maintenance purposes.



Private Water Well (advanced): Load Test: Flow Rate - Gallons Per Minute (GPM)

3.1- 4.4 GPM

The flow test is NOT a pass fail test and is designed to report the gallons per minute measured at the point-of-entry to the home (typically at the pressure tank). If a connection is not available at the pressure tank then the GPM will be measured from a point-of-use faucet (typically an exterior house bib). The measurement is based on the performance of the system at the time of the inspection and is not a guarantee of future performance. **It should be noted that there is no set minimum for acceptable flow rates in North Carolina.** Industry recommendations for minimums to support an average household are between 3-5 GPM.



Private Water Well (advanced): Well Casing Data Plate

See photo



Private Water Well (advanced): Well Maintenance Record

Not Available

If the well has been properly maintained, a maintenance log should be available. If none is available, the Inspector recommends that you contact a licensed, certified local company with a good reputation and make arrangements to have the well inspected on an annual or bi-annual basis.

The purpose of the well inspection is both to maintain the well equipment in good operating condition and to identify any potential health risks as early as possible.

Private Water Well (advanced): Peripheral Equipment Observed

Filtration/Treatment Equipment

Private Water Well (advanced): Is the Pressure Tank Bladder intact?

Yes

The bladder of the pressure tank can be checked by tapping on the upper and lower portions of the tank. The sound the tank makes can determine if the bladder has failed. As long as the pitch is different between the upper and lower portions of the tank the bladder can be assumed to be intact.

Pressure tanks are typically not required with **constant pressure** well systems. On occasion, a smaller tank will be installed to limit the potential for water-hammer.

Private Water Well (advanced): Load Test: Duration

over 150 minutes

A load test, as it applies to a private water well, includes running the well system for an extended period of time. The purpose of the load test is to qualify the well produces an acceptable amount of potable water for the home and its occupants. The longer the load test is performed the more accurate the results.

Private Water Well (advanced): Load Test: Volume

847.6 gallons

The volume above is based on the duration of the test performed during the inspection.

Industry standards recommend that a private water well should be able to produce or recover at a rate not less than 1440 gallons of water per day (60 gallons per hour). Recovery rates and Flow rates are not the same.



Distribution and Supply: Pipe Material

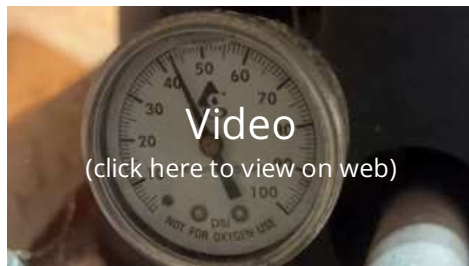
PEX (Crosslinked polyethylene)

The plumbing distribution pipe material called out above is based on the locations that were accessible and visible at the time of the inspection. These locations include but are not limited to sink cabinets, garages, utility closets, crawlspaces, and unfinished attic spaces.

Distribution and Supply: Water Pressure

40-60 psi (well pressure)

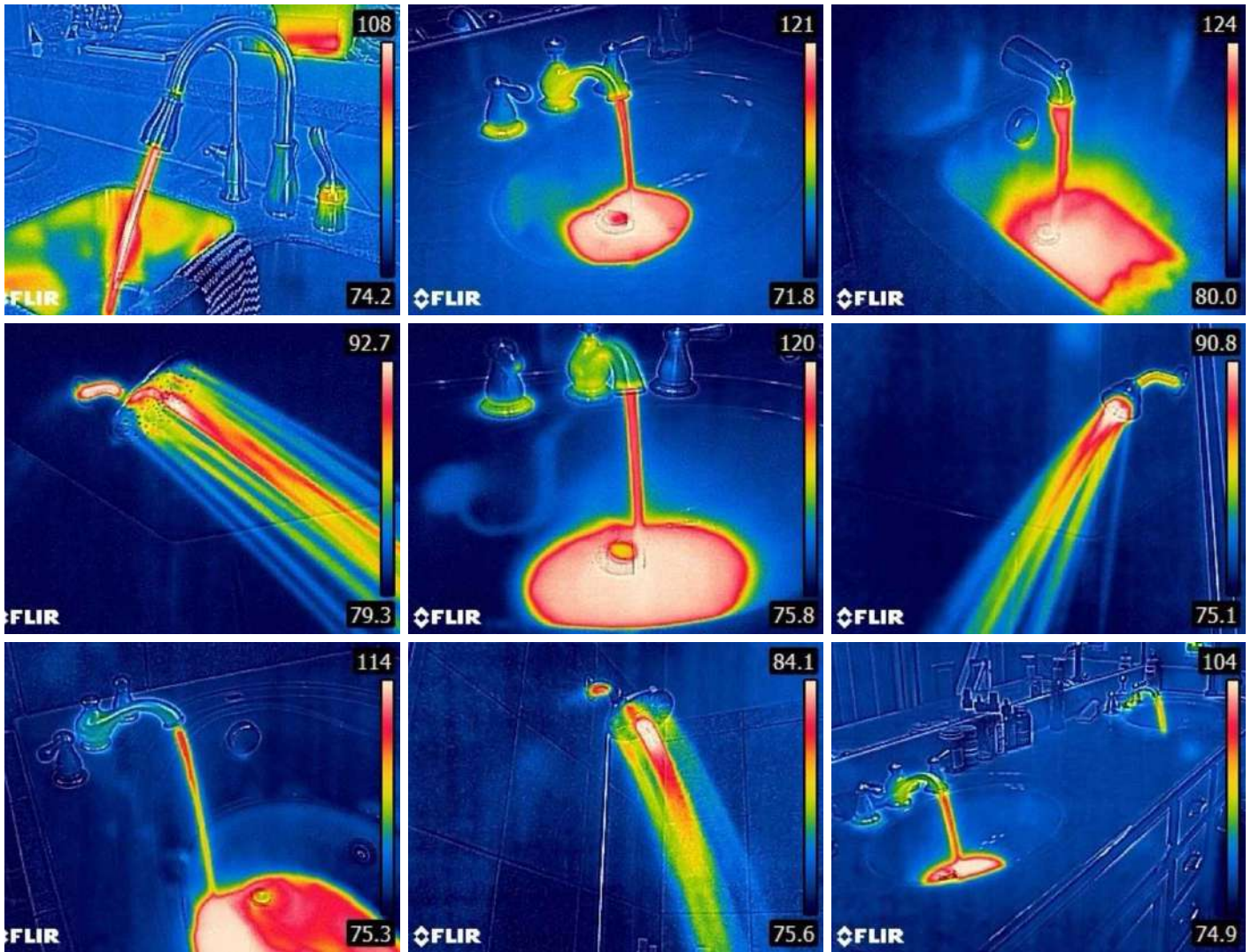
Water pressure measurements are dependent on the point of collection. This limits access to include an exterior hose bib with a threaded connector or available interior laundry supply connection. Newer homes have split distribution systems separating the exterior faucets and interior fixtures. With homes connected to public utility, there will typically be a pressure regulating valve located on the interior fixture side of the system. That means the readings at the exterior faucets may not accurately reflect the pressures found within the home.



Distribution and Supply: Hot water delivery

These images are a representation of the distribution system for hot water throughout the home at the time of the inspection. The images are a representation of the entire system and DO NOT reflect every area. If there is a discrepancy with the distribution system

it will be noted elsewhere in this report.



Distribution and Supply: Pipe Bonding

Non-metallic pipes - not required

In the past, metallic water supply distribution piping was used to provide water throughout the home. The metal pipe was connected to metal fixtures in kitchens, bathrooms, and other wet locations. These connections created a continuous circuit for stray electricity to travel throughout the system, discharge, and potentially harm occupants. Electrically bonding the metal piping was a necessity that greatly reduced or eliminated this potential.

It is extremely difficult for an inspector to confirm the presence of bonded metallic plumbing pipes in a finished home.

With the advent of non-metallic water supply distribution piping, the need for electrical bonding has been virtually eliminated.

Drain, Waste and Vent (DWV): :

Water Drain, Waste, and Venting

Your home's Drain-Waste-Vent plumbing system is the collection of pipes that rid your home of sewage and wastewater from toilets, bathtubs/showers, sinks, and appliances like dishwashers and washing machines.

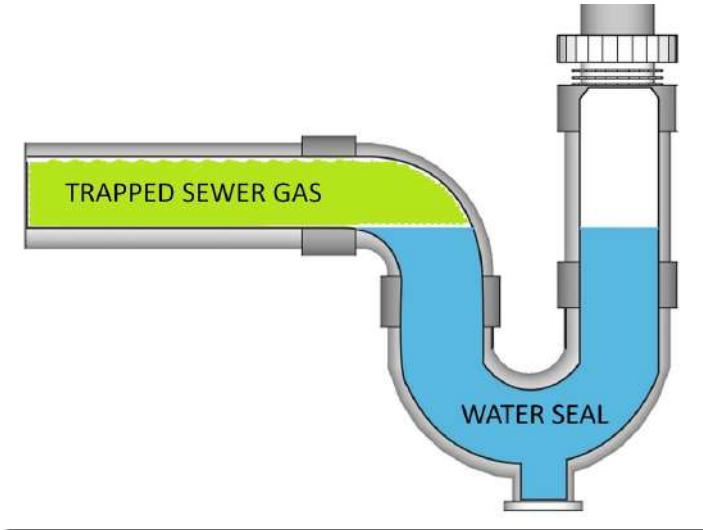
There are two parts to the DWV plumbing system: drain-waste pipes and vent pipes.

- Drain-waste pipes take the actual waste from the various drains and appliances in your home and deliver them to the public sewer or septic tank.
- Vent pipes perform two functions. First, they ventilate the sewage gases out of the house, usually by way of an exhaust pipe on the roof. Second, they provide air to the drain-waste pipes, which helps the sewage drain smoothly and silently (without gurgling noises).



Maintenance Tips:

If you notice sewer-like odors around seldom-used sinks, tubs, or floor drains, this may indicate a dry P-trap. The P-trap's curved section (weir) holds water that creates a vital seal preventing sewer gases from entering your home. When fixtures aren't regularly used, this water can evaporate. Simply **run water in these fixtures for 30 seconds every few weeks** to maintain the water seal and prevent unpleasant odors.



Drain, Waste and Vent (DWV): Waste System Type

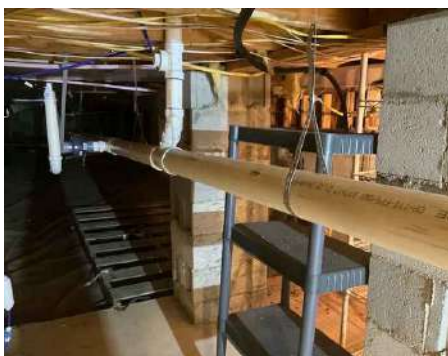
Private (Septic)

Wastewater systems can include public sewer or private septic systems.

Drain, Waste and Vent (DWV): Pipe Materials

Polyvinyl Chloride (PVC)

Pipe materials come in a variety of sizes and types. Current DWV systems are typically all PVC. Older homes can have a variety of types depending on when they were built and if any renovations were performed over the years. It's not uncommon to find multiple types of DWV piping material in older homes.



Gas System: :

Gas System & Distribution

Gas System: System & Fuel Type

Public Utility, Private Service, Natural gas, Propane / LP or LPG (Liquified Petroleum Gas)

Fuel delivery systems consist of either public utility (i.e. natural gas) or private service (e.g. propane, or oil).

Natural gas is purchased from a public utility and metered at the house with the meter located at the exterior of the home. The pipe leading to the meter will usually be accompanied by a tracer wire. This is a jacketed metal conductor (typically yellow) that is used to identify the location of the buried pipe.

Propane and oil both use a tank located on the property to store the fuel. They can be located above or below ground. Some older homes may have oil tanks installed in the cellar/basement. The fuel is purchased from a private supplier as needed or on a routine basis. The tanks can be leased or owned by the homeowner. Although oil systems are still utilized, they have fallen out of favor as an efficient means of fueling the home due to their higher long-term operating costs. The inspector recommends contacting a local service provider to determine seasonal fuel costs and equipment liability.



Maintenance Tips:

For the safety of you and your family, installing one or more combustible gas detectors in the home is highly recommended. These devices provide an audible alarm upon the detection of non-combusted fuel in the home. Install one wherever a combustion fuel appliance is located.

Gas System: Distribution Pipe Material (interior)

Steel (black)

Gas System: Main Shutoff Location

At the gas meter, At the propane tank

Gas System: Propane tank: Location

Below ground

Gas System: Oil tank: Location NA

Gas System: About: Propane tank ownership

Propane tanks are sometimes privately owned and transfer with ownership of the property, and are sometimes leased, and new lease arrangements must be made at the time of sale. You should ask your agent to confirm the terms that apply to the propane tank supplying gas to this property.

LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Water supply valves not operated

Water supply valves for toilets, sinks, and other interior fixtures were evaluated visually only and were not operated.

Water Heater: TPR valve not tested

The water heater was equipped with a temperature/pressure relief (TPR) valve as required per modern standards.

Testing the valve is not advised unless performed by a qualified plumbing contractor. The inspector's evaluation is limited to determining if the valve may be corroded. This is completed by spinning the toggle on its axis.

Water system: excluded items

The following systems and components are not part of the standards of practice for a General Home Inspection and are excluded from this inspection unless specifically requested under a separate service agreement.

- Water conditioning (e.g., water softeners, acid neutralizers, filtration devices)
- Fire and lawn sprinkler systems
- On-site water quantity and quality
- On-site waste disposal systems (e.g. septic, ATU, cesspools)
- Foundation irrigation systems
- Bathroom spas, whirlpools, or air jet tubs except as to functional flow and functional drainage
- Swimming pools
- Solar water heating equipment
- Fixture overflow devices or shower pan liners

Water System: Most DWV piping not visible

Most drain, waste and vent pipes were not visible due to wall, ceiling and floor coverings.

Water System: Most supply piping not visible

Most water pipes, both supply and distribution, were not visible due to wall, floor and ceiling coverings. The Inspector disclaims responsibility for inspection of pipes not directly visible.

Observations

14.5.1 Distribution and Supply

EXTERIOR FAUCET: NO ANTI-SIPHON DEVICE



Minor Importance / Maintenance

One or more exterior hose spigots did not have an anti-siphon device (vacuum breaker) installed. This can allow cross contamination of the potable water system of the home. The Inspector recommended that a vacuum breaker be installed at all applicable locations.

Recommendation

Recommended DIY Project



15: WASTEWATER (SEPTIC)

Information

General: .



Wastewater (Septic) System

This section includes all relevant information pertaining to the private onsite wastewater system (aka septic system) installed on the property. The information provided strictly follows the required standards of practice set forth by the North Carolina Onsite Wastewater Contractor Inspector Certification Board (NCOWCICB). The governing body requires all inspections conducted during real estate transactions be performed by those that carry the specific inspector license only.

General: Scope

The client had requested a private wastewater system (septic) inspection. The septic inspection was not part of the North Carolina Home Inspectors Licensing Board (NCHILB) Standards of Practice and was completed under an additional scope for an additional fee. The septic inspection was performed in compliance with the North Carolina Onsite Wastewater Contractor Inspector Certification Board (NCOWCICB) Rules and Regulations.

General: Disclosure

No representation, warranties, or opinions are hereby given, written or expressed otherwise, as to the future performance of the onsite wastewater system described herein. This onsite wastewater system inspection is a presentation of system facts in place on the date of inspection.

General: Condition at time of Inspection :: Satisfactory

Good Condition

During the inspection, the septic system was confirmed to be operating as designed and was in satisfactory condition. To support its continued functionality, please follow the maintenance tips provided in this report. Regular maintenance will help to keep the system functioning optimally.

General: Bedrooms

4

The advertised number of bedrooms as stated in MLS or as stated in the attached sworn statement by the owner or owner's representative.

General: Gallons per day

480 gallons

The gallons per day for designed system size or the number of bedrooms as stated in available local health department information.

General: Included System Components

Inspection shall include any part of the system located more than 5 feet from the primary structure that is a part of the operations permit.

General: Operations Permit

Granville county

General: Notes

None
Other pertinent facts noted during the inspection

Operator Required

No

If **Yes** then the system requires a certified subsurface water pollution control system operator pursuant to G.S. 90A-44

Operation and Maintenance Report	Water Supply Type
Not Applicable	Private Well

Septic Tank: About septic tanks

The property is served by a private on-site septic system. The septic tank is typically a watertight underground container designed to separate solids from wastewater and allow partial treatment before effluent flows to the drain field. Tanks may be constructed of concrete, fiberglass, or polyethylene and generally consist of two compartments accessed via risers or inspection ports. This inspection includes a visual assessment of accessible components and system performance based on available access and site conditions at the time of the inspection.

Septic Tank: Distance from house or structure	Septic Tank: Distance from water line if applicable and readily visible	Septic Tank: Distance from well, if applicable
15 feet	Greater than 10 feet	Greater than 50 feet



Septic Tank: Distance from property lines if said property lines are known
Greater than 10 feet

Septic Tank: Depth from finished grade to top of tank or access riser
0- 0 " (inches)

Septic Tank: Were Access Risers present?

Yes, Poor condition

Access risers connect the buried tank to the ground surface allowing for easy access to the tank lids. Risers may be cast concrete or plastic with accompanying lids.

Condition descriptions

Good: The risers exhibited minor to no defects. Minor defects may include normal surface cracks that do not penetrate the wall.

Fair: Exhibits moderate deficiencies over a general area of the surface. This may include cracks up to 1/8 inch wide or moderate levels of chip out (spalling). Noteworthy deficiencies will be called out below.

Poor: Exhibits severe deficiencies over a majority of the surface. This may include cracks greater than 1/4 inch wide, evidence of ground water or runoff weeping into the riser compartment, disconnection from the top of the tank, or significant chip out (spalling) that could compromise the integrity of the riser walls. Specific deficiencies will be called out below.

Septic Tank: Were the Tank lids intact?

Yes

Septic Tank: Was there a Tank baffle wall?

Yes

The baffle wall separates the inlet and outlet compartments of the tank. It aids in the separation of solids and scum from the effluent. The baffle wall also helps prevent solids from entering subsequent components that may lead to the failure of the system. Older tanks may not have had baffle walls.

**Septic Tank: Were there roots present in tank?**

No

It is not uncommon to find fine, filament-like, vegetative roots typical of ground cover (grass or weeds) entering the tank. These are not a concern unlike larger roots from shrubs and trees that indicate structural damage.

Septic Tank: Was there evidence of tank leakage?

No

Septic Tank: Was there a connection present from the house to the tank?

Yes

Septic Tank: Was there evidence of non-permitted connections?

No

Non-permitted connections include but are not limited to downspouts, drain system, sump pump discharge.

Septic Tank: Inflow to tank

Sufficient

**Septic Tank: Was the water level in the tank relative to the tank outlet?**

Not applicable - tank was recently pumped out

Septic Tank: Was an Outlet Tee present? Describe condition

Yes, PVC, Good condition

Notable defects will be referenced below

**Septic Tank: Did the Outlet Tee have a filter?**

Yes

**Septic Tank: Did Effluent leave the outlet?**

Not applicable - tank recently pumped out

Septic Tank: Was there a connection present from the tank to the next component?

Yes

Septic Tank: What was the percentage of solids in the tank?

0 %

Below 30% is acceptable. Tanks should be pumped when solids are above this level.

Septic Tank: Does the system have a Pump Tank?

No

Dispersal Field: Type of system

Conventional

Type of Pretreatment: **NA**
Dispersal Field: Distance from property lines if said property lines are known

Greater than 10 feet

Dispersal Field: Distance from septic/pump tank

10 feet

Dispersal Field: Surfacing -- Was there evidence of past or current surfacing at the time of inspection?

No

Dispersal Field: Traffic over field - Was there evidence of traffic over the dispersal field at the time of inspection?

No

Dispersal Field: Vegetation, grading, and drainage

Yes, Satisfactory

Vegetation, grading, and drainage noted that may affect the condition of the system or system components.

Dispersal Field: Effluent at field

Not applicable - tank levels below outlet

Evidence of effluent reaching the dispersal field. A properly functioning dispersal field will have effluent present.



Maintenance Tips:

Maintaining a septic system is essential for the proper functioning and longevity of the system. Here are some key tips and best practices to ensure your septic system operates efficiently:

- **Regular Pumping:** Schedule regular septic tank pump-outs every 3 to 5 years, depending on household size and water usage. This prevents solid waste buildup, allowing the system to function optimally.
- **Filter Cleaning:** Inspecting and, if necessary, cleaning the outlet-tee filter plays a vital role in preventing solids from flowing into the drain field. Periodically check the filter and clean it if there's any sign of accumulation, typically every six months to a year, depending on system usage.
- **Water Conservation:** Conserve water to prevent overloading the septic system. Fix any leaks promptly, install low-flow fixtures, and consider spacing out laundry and dishwasher usage to avoid a sudden influx of water.
- **Avoid Harsh Chemicals:** Refrain from using harsh chemicals, such as bleach, strong cleaners, and antibacterial soaps, as they can disrupt the natural balance of bacteria in the septic tank, hindering its ability to break down waste.
- **Avoid Additives:** A properly functioning septic biome does not require off-the-shelf additives. These products will not improve operation and can disturb or destroy the native biome within the tank that is crucial for breaking down waste.
- **Appropriate Disposal:** Avoid disposing the following to maintain optimal performance:
 - Non-biodegradable items
 - Food scraps
 - Feminine hygiene products
 - Insulin syringes
 - Diapers
 - Paper towels
 - Sanitary wipes (e.g. Dude wipes).
 - FOG: Fats, Oils, and Greases can clog the system and lead to issues.
 - Paints
 - Solvents
- **Landscaping Considerations:** Avoid planting trees or shrubs with aggressive root systems near the septic system. Roots can infiltrate pipes and the tank, causing damage.
 - Seasonal Vegetable gardens or pollinator gardens are ideal and will thrive over the nitrogen-rich drain field.
 - Avoid using weed cloth or other vapor barriers as they prevent adequate evaporation of soil moisture. The field needs to "breathe" as part of its normal operation.

- **Septic Inspections:** Schedule regular professional inspections to catch any potential issues early. Professionals can assess the system's health and recommend any necessary maintenance or repairs.
- **Vehicle Parking:** Avoid parking heavy vehicles or placing structures on top of the septic system. The weight can compact the soil and potentially damage the pipes or tank.
- **Protect the Drain Field:** Be mindful of what goes into the drain field area. Keep it clear of structures, and avoid compacting the soil to allow for proper absorption of treated wastewater.
- **Seasonal Considerations:** During winter, insulate exposed pipes to prevent freezing. Excessively cold temperatures can lead to system malfunctions.
- **Educate Household Members:** Ensure everyone in the household is aware of septic system best practices. Educate them on what can and cannot be flushed or drained into the system.
- **If applicable, Lift Station Control Box Maintenance:** Regularly check the lift station control box to ensure it is operating correctly.
 - **Exercise the Alarm Toggle:** Periodically test the alarm toggle to ensure the alarm system is functioning properly. This ensures that you will be alerted in case of a high-water event, preventing potential overflow or system failure.
 - **Hand, Off, Auto Switch:** Test the Hand, Off, Auto switch within the control box to verify that each mode operates correctly. The "Hand" mode allows you to manually control the pump, "Off" shuts it down, and "Auto" ensures it operates based on the float triggers. Regularly exercising this switch helps maintain its functionality and ensures the system operates automatically as intended.

By following these maintenance tips and best practices, you'll contribute to the long-term health and efficiency of your septic system, promoting a trouble-free living experience in your new home. If you have specific questions or concerns, don't hesitate to consult with a local septic system professional for personalized advice.

16: INSULATION

Information



Thermal Insulation

Thermal insulation in a home is crucial for maintaining a comfortable indoor temperature and reducing energy costs. Thermal transfer is the movement of heat energy from one place to another in the pursuit of equilibrium. *Objects do not get cold, they lose heat.*

Insulation acts as a barrier against thermal transfer, preventing the escape of warmth during colder months and the intrusion of heat during hotter weather. Proper insulation enhances energy efficiency, ensuring a more comfortable and cost-effective living environment for homeowners.

Thermal Envelope

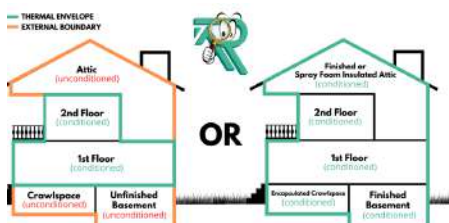
Attic outside the thermal envelope, Crawlspace outside the thermal envelope

The **thermal envelope** includes the systems that shield the interior air from the outdoor environment. The interior area/space within the thermal envelope can be effectively conditioned using heating and cooling systems. It is often referred to as "*livable space*".

The following materials and components often comprise the thermal envelope.

- **Insulation:** Materials like fiberglass, foam board, cellulose, or spray foam insulated walls, floors, ceilings, and roof decks reduce heat transfer.
- **Windows and Doors:** Energy-efficient windows and doors with proper seals and insulation reduce heat exchange and air leakage.
- **Exterior Walls:** Materials such as wood, brick, concrete, or insulated concrete forms (ICFs) contribute to the overall thermal resistance of the building envelope.
- **Roofing:** Reflective roofing materials, attic insulation, radiant barrier sheathing, and ventilation help control heat gain or loss through the roof.
- **Foundation:** Proper insulation and sealing techniques for basements or crawl spaces contribute to the overall thermal efficiency of the home.
- **Air and Vapor Barriers:** Materials like house wraps and vapor barriers prevent air infiltration and moisture penetration, enhancing energy efficiency.
- **Seals and Caulks:** Weather-stripping, caulking, and sealing around windows, doors, and other openings prevent drafts and air leaks.
- **Flooring Materials:** Carpeting, rugs, or insulating flooring materials can contribute to maintaining a comfortable temperature inside.
- **HVAC Ducts:** Well-insulated and sealed ductwork helps in efficient heating and cooling distribution throughout the home.
- **Thermal Mass:** Certain building materials, like concrete or stone, can act as thermal mass, absorbing and releasing heat to help stabilize indoor temperatures.

*Confirming the effectiveness of the home's thermal envelope is beyond the scope of a general home inspection.



Department of Energy Recommendations: Zone 4

The Department of Energy (DOE) recommendations for insulation R-values typically exceed local building code requirements. R-value is the insulation's resistance to heat flow and is determined by the type of insulation used and its applied depth. The higher the R-value the more resistant the insulation thus the more efficient your home is during the heating and cooling seasons. As per the DOE, this region of North Carolina is classified as **Zone 4**. The minimum recommended R-value for ceilings in this zone is **R-49**.

About: Air Barriers

The air barrier complements thermal insulation by working synergistically to create an energy-efficient home. While thermal insulation prevents heat transfer through *conduction*, the air barrier ensures that the controlled indoor climate is maintained by preventing air leakage (or heat loss through *convection*). Together, these elements form a comprehensive system that maximizes energy efficiency, comfort, and cost savings for homeowners. For this reason, spray foam insulation is among the most efficient forms of insulating a structure. It combines thermal insulation and an air barrier in a single application. This allows for less material to provide a higher perceived effect.

Older homes typically do not have proper air barriers which is why they are often referred to as "drafty". New construction improves the air barrier of the thermal envelope with certified "Green Homes" offering the highest level of protection available at a premium.

Attic: Thermal Insulation Type

Fiberglass, Faced Batts



Attic: Insulation: Average Depth

7-10 inches, 11-16 inches, Typical



LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Insulation: Limited inspection, attic vantage

There were areas of the attic that were not accessible due to various conditions. This limited the inspector's ability to fully evaluate the thermal insulation in those areas. Any latent defects to the insulation are disclaimed by the inspector and excluded from the report.

Insulation: Wall surfaces finished, not inspected

Wall insulation could not be confirmed to be installed in the exterior wall cavities between the framing studs due to the finished wall surfaces. For this reason, the inspector disclaimed any latent defects concealed by the wall surfaces and the condition of the wall insulation was excluded from the report.

Insulation not disturbed

The inspector is not required to disturb insulation unless **readily visible** evidence indicates a problem.

17: GARAGE/CARPORT

Information



Garages and Carports

A garage and a carport are both structures designed to provide shelter for vehicles, but they differ in key ways. A garage is an enclosed space, either attached or detached from the main home structure, that has walls and a roof, often featuring a large vehicle door for secure access. The vehicle door can be opened and closed manually or electronically. Garages serve as protective enclosures to shield vehicles from the elements, including rain, snow, and sunlight. Additionally, garages often function as versatile storage areas for tools, equipment, and household items, offering homeowners a convenient and secure space to organize and safeguard possessions. In contrast, a carport is a covered structure that typically consists of a roof supported by pillars or posts, leaving the sides open. Carports may be standalone or could be integrated with the structure and roof system. While a garage offers complete protection from the elements and enhanced security, a carport provides a more open and accessible space, allowing for easy entry and exit. Carports are generally more cost-effective and can be a practical solution for those who prioritize covered parking without the need for a fully enclosed space.

Condition descriptions for Floors, Walls, and Ceilings

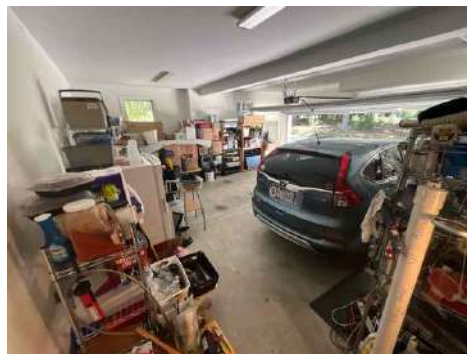
Good: The garage/carport floor exhibited minor to no defects. Minor defects may include normal hairline shrinkage cracks less than 1/8 inch wide. Flat and even elevation between any cracking. Minor chip out or spalling on isolated portions of the surface.

Fair: Exhibits moderate deficiencies over a general area of the surface. This may include cracks up to 1/4 inch wide with some deflection in elevation on either side of the crack. Moderate levels of chip out (spalling). **Noteworthy deficiencies will be called out below.**

Poor: Exhibits severe deficiencies over a majority of the surface. This may include cracks greater than 1/4 inch wide. Significant deflection in elevation on either side of the crack along with significant chip out (spalling) could be trip hazards resulting in personal injury or property damage. **Specific deficiencies will be called out below.**

Description

2-car, Attached



Floors, Walls, & Ceiling: Floor Type and Condition

Concrete, Good condition, Some obscured

Floors, Walls, & Ceiling: Ceilings: Covering type and Condition

Gypsum/ Drywall, Good condition

Floors, Walls, & Ceiling: Walls: Covering type and Condition

Gypsum/ Drywall, Mostly obscured

Doors :: Vehicle access: Operation, overhead door(s)

Operated with opener, Operated manually, Opener disconnect

Terminology

Opener: Automatic garage door opener

Disconnect: Pull string with handle (typically red) used to disengage the shuttle from the opener's drive mechanism.

Doors :: Vehicle access: Overhead doors: OK

The Inspector observed no deficiencies in the condition of the garage overhead doors.

Doors :: Vehicle access: Door tracks: OK

The overhead garage door tracks appeared to be correctly installed and stable.

Automatic Opener :: Vehicle Doors: Automatic opener: manual disconnect, OK

At the time of the inspection, the Inspector observed no deficiencies in the operation of the manual disconnect.

Automatic Opener :: Vehicle

Doors: Number of Automatic

Openers

1

Automatic Opener :: Vehicle Doors: Operation, safety

Auto-reverse (low resistance)

The auto-reverse safety feature of the overhead garage door opener was tested using the means selected. The resistance test is not scientific nor a confirmation of the manufacturer's specifications. The test is performed by the inspector grabbing the lower edge of the door as it is being lowered and applying varying degrees of resistance to activate the safety feature. Resistance levels are subjective and based on the professional assessment and experience of the inspector. The levels are described here:

- **Low Resistance:** Little to no effort applied, single-handed activation
- **Moderate Resistance:** Applied effort requiring two hands to activate
- **High Resistance:** Tensed effort requiring two hands and arm strength to activate

Note:

1. Some test methods include placing inanimate objects in the path of the door travel. We do not perform the test this way as we do not believe it represents real-world applications. We assess for the worst-case scenario for safety, taking children, the elderly, the disabled, and animals into consideration.

2. If the resistance indicated is beyond your comfort level, we advise you to inquire with a professional garage door contractor to evaluate and adjust the system to your satisfaction.

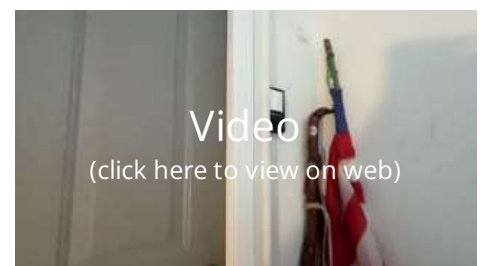
Automatic Opener :: Vehicle Doors: Opener Model



Automatic Opener :: Vehicle Doors: Opener Controller



Automatic Opener :: Vehicle Doors: Automatic door operation



LIMITATIONS

If applicable, any conditions that inhibited the inspector's ability to conduct a thorough assessment for the items included under this section will be listed below.

Parked car(s)

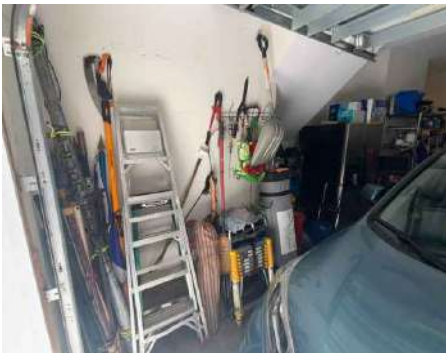
One or more cars were parked in the garage at the time of the inspection limiting access to areas within. These areas were not inspected and are excluded from this report.



Stored Personal Items

The garage was being used to store personal items. Access was limited preventing a thorough assessment. Concealed defects are excluded from this report. Excluded components include but are not limited to:

1. Wall/Ceiling coverings
2. Garage floor slab
3. Electrical components
4. Garage door hardware
5. Garage door opener systems



Observations

17.2.1 Doors :: Vehicle access

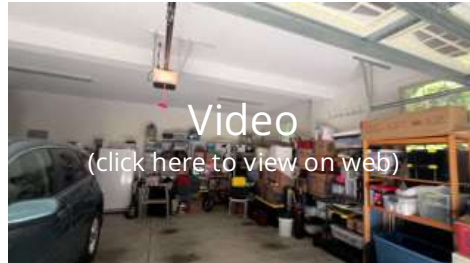
DOOR SPRINGS: ADJUSTMENT NEEDED, WOULD NOT STAY OPEN

Moderate Importance / Consider

Springs supporting an overhead garage door would not hold the door open when the door was opened manually. Correction would require spring adjustment by a qualified garage door contractor. Attempts to adjust the springs by those not qualified can result in serious or fatal injury.

Recommendation

Contact a qualified garage door contractor.



17.3.1 Automatic Opener :: Vehicle Doors

AUTOMATIC OPENER: LIGHT INOPERABLE

Moderate Importance / Consider

The integrated light of the garage vehicle door opener was not functioning at the time of the inspection. This could be as simple as a failed/missing lightbulb or it could indicate an issue with the appliance. The inspector recommends a qualified contractor evaluate and make corrections as needed.

Recommendation

Contact a qualified professional contractor



18: REPORT FOOTER

Information

*This section is
intentionally left blank.*