

SUMMARY

1234 Main St. Fall Branch Tennessee 37656 Buyer Name 07/31/2020 9:00AM KC Bartley Certified Master Inspector - TN Lic. #1244 Professional Home Inspections (423) 306-0508 kc@prohitn.com

Concerns



2.3.1 Conditions Conducive

IMPROPER GRADING

FRONT OF HOME

The current configuration of the grading will not allow rainwater to run away from the home properly in the referenced area(s) or portions of the referenced area(s). Grading is either wrong or right, with no gray areas in between. The grading either slopes away from the structure (Right-Positive Grading), is flat (Wrong), or slopes towards the structure (Wrong-Negative Grade). Even though no repercussions may be present at the time of inspection due to improper grading, the possibility of moisture infiltration through foundation walls is always possible during heavy rainfall events.

Flat grading and negative grading allows the soil in these areas to become saturated, once saturated the porous, permeable masonry foundation walls can wick this water out of the soil via capillary action. This can allow the masonry itself to become saturated and either evaporate this moisture into areas below grade in the form of water vapor, creating high humidity, or allow for moisture or water infiltration into areas below grade.

The soil is recommended to slope away from the structure, with a 6 inch drop in elevation, in the first 10 feet away (5% grade). When the proper grade can not be achieved a swale or drain should be installed as needed to manage rainwater runoff. Evaluation and repairs are recommended to be conducted to the grading as needed to allow for the proper runoff of rainwater by a grading contractor, foundation contractor, or other qualified contractor.

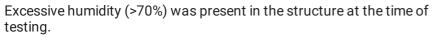
This deficiency will be labeled in **Red** (significant concern) when active moisture infiltration was observed, labeled in **Orange** (moderate concern) when indications of past moisture infiltration was observed, or **Blue** when no indications of water infiltration was observed.

A video about proper grading can be seen here: https://m.youtube.com/watch?v=5hYlda7tWqA

Here's a link to a HUD document discussing how common this defect is along with some current building standards: https://www.hud.gov/sites/documents/41451X8HSGH.PDF

Recommendation Contact a qualified professional.

3.4.1 Conditions Conducive ELEVATED INDOOR HUMIDITY



A full evaluation of the structure is recommended to be conducted by a qualified contractor familiar with building sciences to determine the source of the high humidity with repairs made to lower the humidity levels.

Recommendation Contact a qualified professional.







FUNGAL GROWTH PRESENT

FLOOR JOISTS

Fungal growth was present at the referenced areas, at the time of inspection. Tape lift sample(s) were taken, and can be sent to the lab as desired.

4.3.1 Foundation Walls INDICATIONS OF MOISTURE INFILTRATION

There was evidence of past/present moisture infiltration into areas below grade. This moisture can come from grading deficiencies, downspout terminations or damage to drain tubes, a high water table, and/or other deficiencies.

This deficiency will be labeled in **Red** (significant concern) when active moisture infiltration was observed, or labeled in **Orange** (moderate concern) when indications of past moisture infiltration was observed.

A full evaluation is recommended to be conducted by a foundation or grading contractor to determine the exact source of the moisture or indications of past moisture, with repairs made to prevent or manage future moisture infiltration.

Recommendation Contact a qualified professional.



Concerns

Page 2 of 5





4.3.2 Foundation Walls VAPOR BARRIER NOT PRESENT

Recommendations

A vapor barrier was not present covering the soil in the crawl space. A vapor barrier is recommended to cover the soil as several gallons of water may evaporate from the earth / dirt daily, adding moisture and condensation to the crawl space area. This can lead to the formation of fungal growth on framing components and other moisture related deficiencies. The installation of a minimum of a 6 mil poly vapor barrier is recommended to be conducted by a qualified person.

Recommendation Contact a qualified professional.



4.4.1 Conditions Conducive

ELEVATED HUMIDITY



Excessive humidity (>70%) was present in the structure at the time of testing.

A full evaluation of the structure is recommended to be conducted by a qualified contractor familiar with building sciences to determine the source of the high humidity with repairs made to lower the humidity levels.

Recommendation Contact a qualified professional.



6.1.1 Test Results SURFACE SAMPLING TEST RESULTS POSITIVE FOR MOLD - CLADOSPORIUM



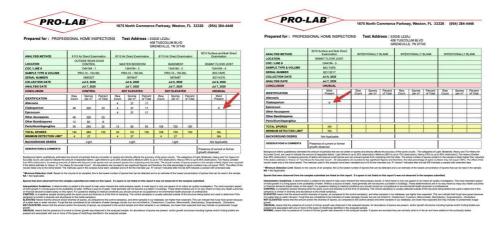
BASEMENT FLOOR JOISTS

The surface sampling test results were positive for current or former mold growth (cladosporium). Evaluation is recommended to be conducted by an environmental contractor to obtain quotes for remediation as needed. The effects of cladosporium can be found at the following link: https://www.medicalnewstoday.com/articles/320331#identification

nttps://www.medicalnewstoday.com/articles/320331#

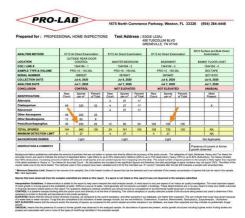
Recommendation

Contact a qualified environmental contractor



6.1.2 Test Results SPORE COUNT NOT ELEVATED -HIGHER THAN CONTROL SAMPLE BASEMENT





Although the lab results in the referenced area(s) came back as the spore counts not being elevated. Spores can be released seasonally and higher counts may be found at different times of the year. Given the fact that Penicillium/Aspergillus was found at higher levels than the outdoor control sample, warrants further evaluation by an Industrial Hygienist and/or a mold remediation contractor. This industrial hygienist and/or mold remediation contractor is recommended to be invasive with his/her evaluation in these areas of concern to determine the extent of the mold behind building materials that would not be visually accessible in this type of sampling.

Recommendation Contact a qualified environmental contractor