



SOUTHERN BROTHERS INSPECTIONS

904.747.0888

info@southernbrothersjax.com

<http://www.southernbrothersjax.com>



MOLD REMEDIATION PROTOCOL

10363 Bridge St
White Springs, FL 32096

Town of White Springs

06/11/2024



Inspector

Tanner Yirka

Tanner Yirka

HI16373, JE354741

904.747.0888

info@southernbrothersjax.com

1: INSPECTION DETAILS

Information

Property Type	Type of Sample(s)
Residential	Air, Swab

A Note from our CEO

Neighbor,

Our team at Southern Brothers Inspections desires to provide you with facts and not opinions, while at the same time providing effective inspection services through inspecting every property as if it were our own. Our desire is to serve you in the same professionalism you would serve, while providing you with the education and the highest value of inspection you require.

We are thankful for the opportunity to be of service! If there is anything we can do to further your knowledge and understanding of property inspections or building science we are happy to help.

We hope that we have exemplified Jesus Christ in our work and that we were able to reflect the scriptural principal of Hebrews 3:4, which is quoted, "...every house has a builder, but the one who built everything is God."

Regards,

Mark Riccaboni

Co-Founder, CEO

Southern Brothers Inspections

Confidentiality and Copyright

Southern Brothers Inspections is pleased to submit the enclosed report. This report is a professional opinion based on a visual inspection of the readily accessible areas and components of the building. The information provided in this report is confidential to you and your representatives or agents, solely for your use. Southern Brothers Inspections will not release a copy of this report, nor will we discuss its contents with any third party, without your written consent. We ask that you honor us in protecting it's contents and not freely distributing this report or it's contents to others without our consent, according to your 'Inspection Agreement'.

Story Video - All About Southern Brothers Inspections

If you're viewing your report online or via mobile device, check out Our Story video, by clicking the link below:

Southern Brothers Inspections: Our Story



Watch on  YouTube

Scope of Work

Purpose & Scope

Purpose: The purpose of the inspection is to attempt to detect the presence of fungal growth, microbial development, mold, etc. by performing a visual inspection of the property and collecting physical samples to be analyzed by a third party laboratory.

Scope: The scope of the inspection is limited to the readily accessible areas of the property and is based on the condition of the property at the precise time and date of the inspection and on the laboratory analysis of the samples collected.

Mold is a naturally occurring fungi which grows and multiplies based on its cellular make up and surrounding environmental characteristics. Mold can grow in wall cavities, under carpet, beyond finish materials and is often undetectable by typical visual examination. It should also be understood that mold grows and reproduces naturally.

As such, this report and the mold assessment is not a guarantee that mold is or is not present within the premise, property, or areas sampled/inspected.

This report is to be utilized to confirm the presence or absence of mold spores as identified by sampling methods and accessible areas for visual examination. As a courtesy Southern Brothers Inspections may point out conditions that contribute to mold growth but such comments are not part of the bargained for report.

Typical air sampling consists of three samples, one exterior control sample taken outside of the property to determine airborne environment outside the property, and two additional interior samples as advised by the client and determined to be the most appropriate locations by the technician or inspector.

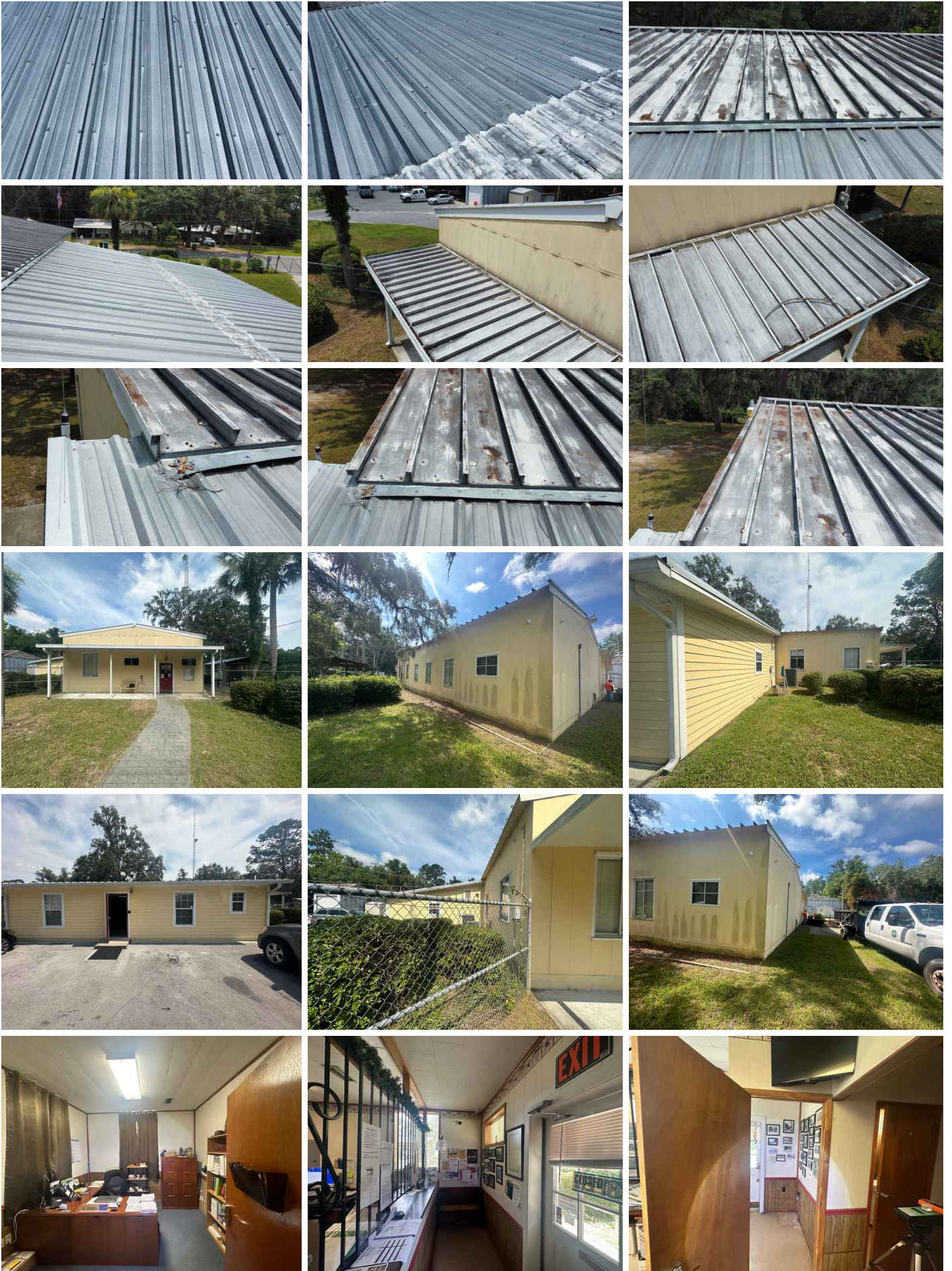
Indoor samples are able to represent approximately 500-800 square feet.

It is Southern Brothers stance that sampling should be conducted in all areas, rooms, detached sections, and other architectural space of the home for the most accurate representation of the properties air quality in relation to fungal growth.

To be clear, multiple samples (at additional costs), beyond the allotted for service package pricing, may be required to fully evaluate and provide the most accurate interpretation of indoor air environment. All clients are advised to request additional sampling.

Existing Condition - Documentation Photos

General condition photos of the property and areas sampled on the day of the mold assessment.





2: MOLD REMEDIATION PROTOCOL

Information

Remediation Protocol - HVAC

System: HVAC System Items

Requiring Cleaning

Air Handler, Ductwork

General Notes - Remediation Protocol: General Notes - Mold Remediation Protocol Report

- **The source and origination of any defects, water intrusion, air exchange, or the like that cause mold to occur must be resolved, repaired, or replaced in full and in entirety to assure the success of mold remediation efforts.**
- This protocol, the associated mold assessment/sampling records, and interpretation of lab reporting is the opinion of Southern Brothers Inspections and is established based on information obtained at the project site at the time and date of the mold assessment or indoor air quality evaluation.
- We assure that the mold remediation of the project site is obtainable and clearance of elevated fungal environment is possible, considering the methods and suggestions in this report and the integrity of the project site are protected in accordance with industry standards and state/local statutes, guidelines, and standards of practice.
- This protocol should be utilized for this project only, and may not be replicated in any other area of the property or on other properties.
- Following a successful attempt at remediation protocol as described within this report. The contracted Remediator shall notify Southern Brothers Inspections of anticipated completion within 48 hours of desired Post Remediation Verification (PRV). Samples will be conducted in the same processes and method as during the initial assessment. (Some specific areas previous cleared may not be retested, unless cross-contamination is expected or other stipulations within this protocol or project site conditions, determine need for additional sampling.
- Following third party lab analysis and report, Southern Brothers Inspections will issue a letter/report, which shall be required to be in order to determine the successful completion of the mold remediation protocol. It may be necessary to complete further remediation efforts if the post clearance test unveils remnant levels of mold beyond threshold requirements, or other concerns related to an unsuccessful remediation effort. (These conditions are outlined in detail within other sections of this report.)
- A POST REMEDIATION VERIFICATION inspection/assessment shall be used to determine a "cleared/clear" or "passed" condition, which is determined by Southern Brothers Inspections interpretation of the lab report, the project site conditions, adherence to the details within this protocol, and other contributing factors.

General Notes - Remediation Protocol: Mold Remediation Contractor - State License Required

The State of Florida is regulated by the Department of Business and Professional Regulations (DBPR), which also oversees the licensure of mold assessors and mold remediators. Remediator licenses can be validated at myfloridalicense.com or via other DBPR resources.

Other associations certifications for continuing education are beneficial, and can be advantageous to a contractors experience, but are not specifically required to perform mold remediation.

Southern Brothers Inspections expects mold remediation contractors selected to perform this protocol TO BE PROPERLY LICENSED BY STATE STATUTES and utilize Mold Remediation Protocol & Guidelines in IICRC R520-2015 Guide, for any conflicting information, this text shall govern.

The contractor must have the training, equipment, tools, personnel and experience required to properly remediate the scope of work described within this protocol, and as described in reference texts and state statutes.

A LICENSED MOLD ASSESSOR AND LICENSED MOLD REMEDIATOR ARE NOT THE SAME LICENSE OR SERVICE.

THESE ARE TWO SEPARATE LICENSES WHICH REQUIRE SEPARATE PROVISIONS AND STIPULATIONS. - SOUTHERN BROTHERS INSPECTIONS ADVISES NOT CONTRACTING REMEDIATORS WHO CONDUCT THEIR OWN ASSESSMENTS AND TESTING ON THE SAME PROJECT.

General Notes - Remediation Protocol: Southern Brothers Inspections - Not Supervising

Southern Brothers Inspections is not affiliated with, supported by, or in partnership with mold remediation firm, company, or licensed agent. Additionally we do not advocate or refer any specific company to perform the scope of this protocol.

Southern Brothers Inspections assumes and defaults to the position and general agreement that our company will not be directly involved with the oversight of the contractor or their representatives, workers, or agents during remediation and cleaning activities. Therefore, we are unable to provide any information regarding job site progress, activity, or status.

If you would like Southern Brothers Inspections to provide additional supervision, please contact our office at 904.747.0888, to discuss this service in more detail.

General Notes - Remediation Protocol: General Remediation Notes

The objective of this Protocol is to complete a successful mold remediation of the project site, in compliance with all applicable regulations and specifications of appropriate federal and local governing bodies. (Interested oversight and specifications include but are not limited to State and local ordinances and licensing laws, the Environmental Protection Agency, Occupational Healthy and Safety Administration)

This Protocol is to be used as a reference guide by the remediation contractor, selected by the client, in remediating the project site, as defined within this protocol and the original mold assessment findings.

The objective of this Protocol is to complete a successful mold remediation of the project site, in compliance with all applicable regulations and guidelines of the U.S. Occupational Safety and Health Administration (OSHA) , U.S Environmental Protection Agency (EPA) , State of Florida, and local governments.

The following items contain the minimum standard for mold remediation at this project site:

1. Compliance with all applicable regulations, guidelines, permits, etc. which may be required to legally conduct this scope of work within your local municipality or state is solely the responsibility of the contractor selected to perform the remediation.
2. The remediation should be completed in accordance with IICRC S520 Standard and Reference Guide for Professional Mold Remediation.
3. State Licensed Remediation Contractor agrees to complete the remediation in accordance with the following:
 - All work will be completed in a competent, workmanship-like manner.
 - Do not alter containment, equipment or project site conditions such as build back of renovated materials or installation of finishes, paints, walls, ceilings, floors, etc. prior to post remediation verification assessment and testing. After Southern Brothers Inspections obtains satisfactory mold testing results and a "clear/cleared/passed" interpretation letter is received by the client; construction and restoration of the project site may commence.

- Leave area remediated in equal or better condition found, regarding cleanliness and orderliness.
 - Maintain strict confidentiality in regard to all aspects of the project.
4. By agreeing to complete the remediation, the client selected remediation contractor agrees to perform the work conforming with all sections and details of the referenced standards and guidelines, as well as the applicable notes, language, and performance requirements within this protocol and this specific project.
5. The remediation contractors goal is to meet the final inspection and post-remediation testing criteria of Southern Brothers Inspections, as stipulated within other sections of this report.
6. Any required heating, ventilation, and air conditioning (HVAC) remediation should be completed in accordance with NADCA standards.
7. Time is of the essence! Southern Brothers Inspections recommends that the affected areas be remediated as soon as possible, and these matters be dealt with in a nature of immediacy and diligent protection of all parties involved at all times.
8. Occupancy - Contaminated spaces and project site should not be occupied by owners, tenants, or other entitled third party other than licensed professionals contracted to perform this protocol.
9. If health problems are being experienced, a medical doctor should be consulted concerning occupancy of the premises.
10. Southern Brothers Inspections advises that any contaminated property, dwelling, area, rooms, or property in whole be vacated during the remediation process and at any point in time prior to contractors final clearance of post remediation verification and contractors removal of all equipment as defined within this protocol.
11. During and after remediation, until testing confirms complete remediation, the impacted areas should not be occupied or entered by anyone, except the remediation firm's representatives. This includes cleaning staff and others who may periodically enter the impacted areas. After remediation is completed and testing shows the impacted areas are safe these areas may be entered and occupied.
12. Acceptance of the remediation project and execution of the protocol herein indicates that the Contractor assumes all responsibility for all work - by individual licensees, companies representing, and workers associated by contract or employment, and agrees to abide by the requirements within this report.
13. The affected areas should be contained in negative pressure enclosures in accordance with S520 Standard and the details provided within this report.
14. All sources of water and moisture which caused the problem must be eliminated before preceding any further.
15. Dehumidifiers must be installed to keep relative humidity below 60% until satisfactory post remediation verification results are obtained and materials are put back.
16. It is to be assumed that the remediation contractor shall physically perform their own assessment of, inspect and remediate all walls, floors, cabinets, ceilings, etc, showing evidence of water intrusion.
- 1. Including but not limited to areas with active leaks, water intrusion/staining, water damage, or visible microbial growth.
 - 2. If additional evidence of water intrusion is found, continue removal 3 feet (ft) beyond the end of the evidence, in accordance with S520 Standard for the expanded areas.
17. The proper personal protective equipment must be worn at all times, by all contractor personnel active on the job site, whether actively within containment or actively performing work. Controls must be maintained to ensure OSHA regulations are met in relation to all chemical applications, MSDS, respirator training, workplace safety, etc.
18. Failure to disclose or report any additional work completed beyond the known scope of this protocol may result in a failed post remediation assessment.
19. It is the remediation contractors responsibility to notify Southern Brothers Inspections of changes to the project site conditions, or additional findings during demolition, investigation, or other tasks.
20. This protocol is not and does not claim to create specifications or establish any baseline, reference, or guidance of referenced standards, texts, or associations. This portal is defining performance Protocol, and is not providing any specifications.
21. Licensed Contractor agrees to complete the remediation in accordance with the following:
- 1. All work and workers contracted or employed will be completed in a competent, workmanship-like manner. Jobsite and worker safety is crucial to the success of this remediation. No indication or specifications within this protocol should be taken as direction to act outside of safe workplace environment and stipulations set forth by OSHA.
 - 2. Maintain licensure and insurance required to operate in accordance with previously mentioned entities and statutes, throughout entirety of remediation and PRV.
 - 3. NO NEW CONSTRUCTION BUILD BACK of new walls, ceilings, floors, etc. until after Southern Brothers Inspections obtains satisfactory mold testing results, install new walls, ceilings, floors, etc.
 - 4. Leave area remediated in equal or better condition found, regarding cleanliness and orderliness.
 - 5. Maintain strict confidentiality in regard to all aspects of the project.

General Notes - Remediation Protocol: Molds with Mycotoxins Identified - such as Aspergillus, Penicillium, Fusarium, and Alternaria

If mold genus are identified/recorded present by the lab report/analysis that produce mycotoxins. It shall be assumed that the remediation contractor will be cleaning with the assumption that there are mycotoxins in each room. Final testing will address these identified mold genus and mycotoxins.

General Notes - Remediation Protocol: Scope - Cross Contamination

The scope of this remediation allows for multiple outcomes and possible cross contamination. The areas requiring remediation impact the air quality of the entire property. Remediator shall avoid any cross contamination of space by any means necessary. Workers shall not occupy interior spaces after directly working in areas of concern without proper decontamination and removal of contaminated PPE.

ENTRANCE INTO INTERIOR SPACES SHALL ONLY BE CONSIDERED AFTER THOROUGH ATTENTION TO DECONTAMINATION.

Remediation Protocol - Containment: Advised Containment Layout

Contact our office or project technician/inspector regarding questions or clarification about changes to containment plans, for additional coordination as necessary.

Containment/Vestibules should be established to protect the intermittent spacing between floors and walls of interior spaces from cross contamination at all costs.

Sealing of all ceiling/wall penetrations is expected and is to include: plumbing escutcheons/penetrations, open drain pipes, receptacles, switches, plugs, light fixtures, etc.

Vestibules if specified, shall be established to allow for decontamination prior to entry into clean interior space. See remainder of protocol for additional guidelines.

Remediation Protocol - Containment: Containment is Required

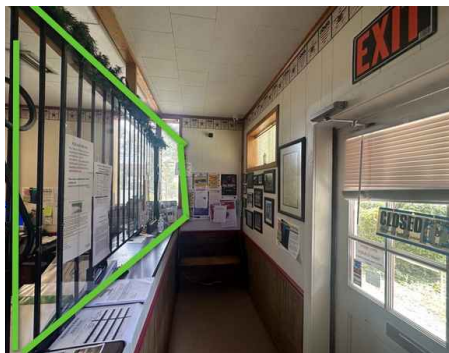
If containment is not followed PER THIS PROTOCOL then it is possible the clearance may fail.

Zipper type containment openings only. No taped or flapped seams shall be permitted as acceptable containment.

Utilization of containment brace support systems (zip wall posts), spray adhesive and professional tape are advised in combination to prevent failed containment or openings in pressurized seams.

Remediation Protocol - Containment: Rooms/Locations Requiring Remediation and Containment Entry





Remediation Protocol - Containment: Rooms Requiring Attention but Not Specifically Requiring Containment

Conference Room

These rooms and areas have the potential to be impacted by remediation scope but are not specifically requiring containment, unless scope is altered upon further investigation and demolition reveals necessary changes. The Contractor conducting remediation shall notify the testing company, Southern Brothers Inspections, of any changes in scope or further information once demolition is conducted as mentioned in this protocol.

***If these areas fall within three feet in any direction, of last identified mold contamination or water intrusion point containment protocol shall be followed for these areas, to contain demolition and remediation efforts, as identified in this protocol elsewhere.

Remediation Protocol - Containment: Zipper doors required

Zipper door containment is advised at all door openings leading to non areas of concern and areas not scoped in this protocol.

Remediation Protocol - Containment: Advise minimizing containment square footage as feasible

We advise Remediator be conscious of containment square footage. Safe work space should be established, however whenever feasible we encourage reduction to containment square footage to minimize necessary cleaning square footage which will not impact final outcomes and successful completion of remediation as defined in this protocol.

Remediation Protocol - Surface Cleaning: Rooms/Areas Requiring Surface Cleaning

Within Containment, Entry





Post Remediation Notice & Clearance Testing: Scrubbers/Dehumidifiers Note

Air Scrubber needs to be on for 48 hours after final remediation.

Make sure the dehumidifier is running up to 24 hours prior to clearance testing or if space is subjected to high humidity 4 hours before clearance testing

Post Remediation Notice & Clearance Testing: Deviation from Protocol

It is recognized that remediation projects are unique, and that in certain circumstances, common sense, experience and professional judgment may justify deviation from this standard.

It is the responsibility of the client selected mold remediation contractor to determine and verify on a case by case basis that application of this standard and advised procedures is appropriate.

Allowing mold or moisture conditions to remain is strongly discouraged; since it can compromise the health of occupants, further damage building materials and expose remediators to liability and other consequences.

Post Remediation Notice & Clearance Testing: General Notes - Clearance Testing

Testing needs to be done in a contained remediated area prior to the installation of the sheet rock and or post construction materials, if applicable. The Contractor must contact Southern Brothers Inspections as early as possible to schedule the Post-remediation Inspection Testing. A minimum of 72 hours notice is advisable for scheduling.

Southern Brothers Inspections will conduct the Inspection with the Contractor present, if desired to confirm that the procedures and guidelines within this protocol were followed, there are no readily visible remaining water damaged or contaminated materials, and there is no remaining dust or debris.

If Southern Brothers Inspections final inspection discovers and proves an unsatisfactory post remediation verification result, the remediation contractor will be required to complete the cleaning guidelines of this protocol again.

Southern Brothers Inspections will conduct additional post remediation verification assessments at the remediator's expense.

Once a satisfactory inspection is completed, leave air scrubbers on (in recirculating mode, not outside air mode) for at least 48 hours from finishing the remediation through Southern Brothers Inspections' final testing verification.

The air scrubbers may be turned off after Southern Brothers Inspections tests, but continue dehumidification until satisfactory Post-remediation Test results are obtained and materials are put back.

If testing completed by Southern Brothers Inspections for Owner shows contamination remains, re-clean or remediate as required. Southern Brothers Inspections proposes additional cleaning according to the standards written in the protocol and additional testing to obtain a "clear/cleared/passed" result.

Post-remediation criteria follow:

- Indoor air mold populations should be smaller than those found during initial mold assessment testing.
- Indoor air populations should not be significantly larger than those outside.
- Indoor air population should have similar mold genera compared to outside.
- Penicillium/Aspergillus should not comprise significantly more than 30% of the indoor air populations, nor significantly exceed the levels outside.
- Indoor air populations should not have significant levels of a few mold genera indicative of wet or damp conditions. These genera include Penicillium, Aspergillus, Stachybotrys, Chaetomium, Trichoderma, Memnoniella, Acremonium, Aureobasidium, Phoma, Fusarium, and Ulocladium. Additionally, no Aspergillus fumigatus shall be present.
- Air-o-cells or Allegenco D, one outside and the appropriate number inside will be used. There is a 48 hour business day turnaround from when the labs receive the samples.
- Spore traps may be used at each air sampling station both inside and outside the project site. Results may not be available for several calendar days after sample collection, depending on market conditions.
- Swabs will be used if there is a visible surface contaminate evident.
- Cello-tape, swab or other tape lift type surface samples will be collected from remaining building materials and the HVAC system (if indications prove necessary). Swab or tape lift sample results should show no more than 25% coverage, no significant wet or damp indicator genera, and no active growth indicators.

There are no mandated actions specific to molds and indoor air quality required by any state or federal agencies. The U.S. EPA Indoor Air Quality website states, "Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants." However, some environmental companies, industrial hygienists, and other IAQ professionals use the following arbitrary numbers for guidance in interpreting microbial survey results. The final mold interpretation should not be based solely on numbers! Information gathered from the walk-through investigation of the area is very significant, including sources of moisture or high humidity, and signs of visible mold growth. In air samples, it is important to consider the type and concentration of fungi indoors, as compared to outdoors or a non-complaint area. One should consider the indoor: outdoor fungal count ratio, the presence/absence of certain fungi indoors versus outdoors, the genus/species of predominant fungi indoors versus outdoors, and whether the fungi detected indoors are allergenic and/or toxigenic.

Limitations

Post Remediation Notice & Clearance Testing

GENERAL LIMITATIONS

Southern Brothers Inspections evaluation and test results do not guarantee that the indoor environment is free of contaminants, gases organisms or any analyses sampled for. The customer understands that there are limitations associated with the instrumentation used associated with accuracy, precision and uncertainty. Additionally, further limitations are present as a result of sampling and measurement methods/procedures utilized in testing and measuring as well as any or all factors such as environmental and climatic conditions. The customer is aware that no destructive testing was performed and that the evaluation can only assess for conditions that re visible at the time of the evaluation.

Southern Brothers Inspections' opinions as noted in the report are based on the findings and upon our professional experience with no warranty or guarantee implied. Southern Brothers Inspections accepts no responsibility for interpretations or actions based on this report by others. The findings, results and conclusions as part of our assessment are only representative of conditions at the time of the Southern Brothers Inspections visit and do not represent conditions at other times. This report is intended for your use and your assigned representatives. Is data and content shall not be used or relied upon by other parties without prior written authorization of Southern Brothers Inspections and the client.

Observations

2.1.1 General Notes - Remediation Protocol

DEMOLITION AND REMOVAL SCOPE

Advise demolition and removal of wall covering, interior trim, baseboards, insulation, and other building materials within or around described area of concern.

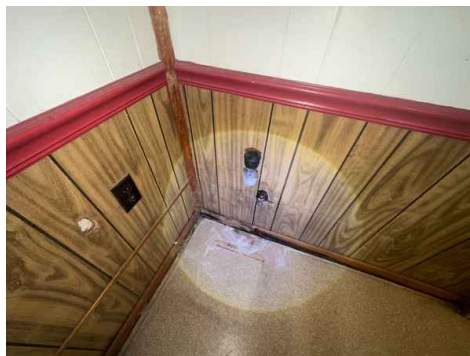
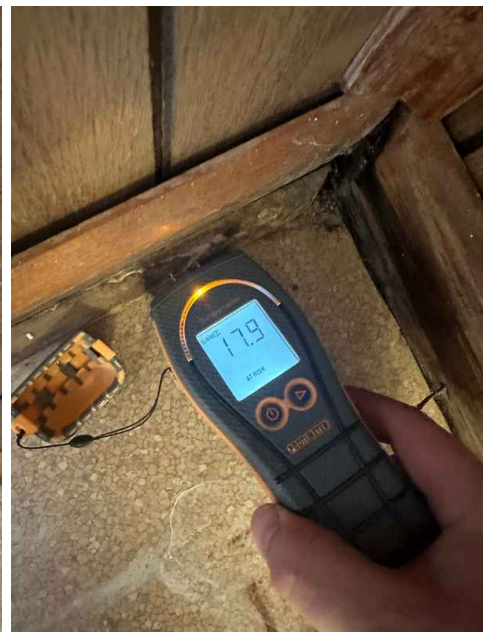
Areas of concern include but are not limited to entry way, hvac closet, and conference room.

Advise demolition and removal of all moisture damaged materials and any materials with visible microbial growth at surface of area of concern. Consult protocol for cleaning procedures at other materials beyond, such as framing and structural elements beyond.

Advise, demolition and removal of moisture damaged ceiling covering at or around defined areas, and specifically any areas at or below moisture intrusion locations.

Any other items of concern or question should be addressed with mold assessor prior to removal or disposal.

Follow IICRC guidelines for all demolition and disposal.



2.1.2 General Notes - Remediation Protocol

GENERAL DESCRIPTION OF AREA OF CONCERN & PROJECT SCOPE

Resolution includes an extensive scope with repairs and climate control resolution mentioned within, in addition to mold remediation procedure described below.

Conditions conducive to microbial growth are identified within the mold assessment report and highlighted briefly below:

2.1.3 General Notes - Remediation Protocol

UNSEALED PENETRATIONS BETWEEN CONDITIONED/ ON CONDITIONED SPACES

2.1.4 General Notes - Remediation Protocol

MOISTURE INTRUSION/DAMAGES AT WALL COVERING/TRIM - VISIBLE GROWTH

2.1.5 General Notes - Remediation Protocol

ACTIVE ROOF LEAKS

2.2.1 Remediation Protocol - Containment

GENERAL CLEANING OF ITEMS IN CONTAINMENT AREA

Porous: Fabric, paper, clothing, furniture

Spore deposition: Use HEPA sandwich cleaning (HEPA vacuum, hot water extraction with drying and HEPA vacuum), dry cleaning, (chemical residue may be a problem), specialized laundering such as Esporta.

Visible growth: Disposal and replacement unless high value, then specialized restoration such as freeze drying papers and HEPA sandwich cleaning etc

Books, documents, office supplies, computers, pictures and similar items need be done by air washing in a different space. Complete in accordance with conditions 1, 2 or 3 as described in IICRC S520. Store in different area or they can be moved in center and covered with large items. (See Below)

Clean and wipe down large items and furniture, chairs and tent them with plastic before remediating the room. Complete in accordance with conditions 1, 2 or 3 as described in IICRC S520.

Cleaning can be performed by using antimicrobial agent and water by wiping with a micro fiber free rag. Move to the center of the room and tent with plastic and tape to floor or tape to cleaned wall and floor. If space is required, move furniture to off site location with controlled climate.

2.2.2 Remediation Protocol - Containment

CONTAINMENT REQUIRED GENERAL NOTES

Entrance Wall: Create separation from the rest of the facility by installing plastic wall w/ zipper door at entrance to room. NOTE: The zipper door needs to be sealed at the sides and the top and bottom. NOTE IF THE WALL FALLS DOWN ADDITIONAL TESTING WILL BE REQUIRED

Install:

The zipper door needs to have a "do not enter" tape across it when the remediator leaves. In addition sign or not needs to alert the resident not to open the containment area or to turn off any of the equipment inside the containment area (IICRC S520, 8.4)The remediator is responsible to alerting the resident not enter the area. Any or all on site contractors need to be alerted to this as well. In addition a sign needs to hang when the remediator's are working stating "that mold remediation work is in process per IICRC S520, 12.2.4.

Only outfitted licensed remediators or assessors should enter the containment area. Containment areas need to be intact when Post Clearance testing is conducted. If they are not the Assessor may require the area to be re-treated before clearance can be conducted.

2.3.1 Remediation Protocol - Surface Cleaning

GENERAL CLEANING GUIDELINES

HEPA vacuum ceilings, walls, windows, doors and all areas which have been impacted by demolition within the contained space. This includes but is not limited to studs, concrete, concrete block, substrate, wood paneling, and the like. Unobstructed and non damaged surfaces are all required to be incorporated within cleaning if the items are within containment.

See notes related to clients personal belongings and contents in other sections.

Regarding fixed in place HARD and POROUS surfaces:

Advised product application -

FIBERLOCK ADVANCED PEROXIDE CLEANER (8314) TO ALL SURFACES. (Follow all manufacture guidance and performance standards)

- Apply with hand pump.
- Allow 10 minutes dwell time prior to wiping or commencing vacuum.
- If the building materials are compromised by micro cleaning process in any way - Southern Brother Inspections advises removal and replacement.

General guidance and minimum standard for microbiology cleaning process, below, is to be used in all containment areas or areas contaminated by mold.

GENERAL GUIDANCE AND MINIMUM STANDARD

When terminology is used such as microbiology cleaning or a method of cleaning known as "HEPA Sandwich" the cleaning process is advised per industry standard with the following process:

- It is advised that surfaces undergo this process a minimum of three times or passes.
- All surfaces should be understood as all vertical and horizontal surfaces.
- The cleaning cycle consists of:
 1. HEPA vacuuming
 2. Thorough wipe down with a mild detergent solution
 3. HEPA vacuum the contained area again in its entirety

2.3.2 Remediation Protocol - Surface Cleaning

PERSONAL ITEMS NOT AFFIXED - CONTENTS CLEANING GUIDELINES

Furniture, Carpets/Rugs

Personal items within the contaminated project site shall be addressed and properly packed out and cleaned according to provisions within this protocol.

- Basic Procedures

Cleaning Appliances Contaminated with Mold

- Vacuum all surfaces using a HEPA vacuum.
- Blow compressed air through fan exhaust.
- Thoroughly clean the appliance using a mild detergent.
- Wipe all surfaces with a disinfectant solution.
- Vacuum all surfaces again using a HEPA vacuum.

Cleaning Bedding Contaminated with Mold

- HEPA vacuum all bedding, mattresses, box springs, pillows, etc.
- Sheets, blankets, duvets, etc should be laundered as per label instructions.
- Pillows and stuffed animals should be laundered if possible.
- Clean mattresses and box springs via hot water extraction and speed dry using air movers.
- Apply disinfectant to mattresses and box springs and allow to air dry
- HEPA vacuum mattresses, box springs, and all non-launderable items.

Cleaning Clothing and Fabric Contaminated with Mold

- All machine washable clothing should be vacuumed with a HEPA vacuum, and then laundered.
- All dry-clean-only clothing should be either hand washed or replaced.
- Dry cleaning is not an effective remedy to remove mold.
- Area rugs should be HEPA vacuumed and cleaned either via hot water extraction or immersion cleaning.

Cleaning Electronics Contaminated with Mold

- HEPA vacuum all surfaces.
- Blow compressed air through fan exhaust and throughout the unit.
- Clean with degreaser or safe electronic alternate.
- Wipe with a disinfectant.
- HEPA vacuum all surfaces.

2.3.3 Remediation Protocol - Surface Cleaning

FLOOR CLEANING

Clean all surface by HEPA vacuuming first, Steam Clean & HEPA again.

If Carpets: Follow 14.3.4.1 of the IICRC S250 in regards to cleaning and or steam cleaning the rugs. If the rugs or floor covering cannot be cleaned using this standard removal may be necessary.

2.4.1 Remediation Protocol - HVAC System

WALLS, CEILINGS, AND OTHER MATERIALS ADJACENT EQUIPMENT

If contaminants and/or microbial development are indicated visibly or via cleaning process on surrounding materials, wall coverings, ceiling coverings and the like, appropriate cleaning measures should be conducted in accordance with the remediation and cleaning efforts of the HVAC System.

Ensure all ceiling and wall penetrations are appropriately sealed at air duct penetrations to eliminate air transfer between dew point climates. Consult appropriately licensed professionals when necessary to conduct cleaning measures and repairs to HVAC systems.

2.5.1 Post Remediation Notice & Clearance Testing

ITEMS WHICH WILL BE REVIEWED AT CLEARANCE

1. Is this Protocol on site and filled out?
 2. If yellow tape was installed is it intact?
 3. Are the scrubbers & dehumidifiers off?
 4. Are all items covered or removed?
 5. Is there evidence of air polishing?
 6. Is the area white glove clean?
-

2.5.2 Post Remediation Notice & Clearance Testing

ACCEPTANCE OR NON ACCEPTANCE (PASS/FAIL) PROCESS

If clearance has failed...

If the clearance has failed then Southern Brothers Inspections will provide a report with lab findings. This checklist will be reviewed to see if all procedures were followed. Please refer to the pass/fail criteria noted on this report as to acceptance of cleaning.

If clearance has passed...

Important: the containment areas should be HEPA vacuumed and cleaned with a damp micro rag with soap and water prior to the removal of containment barriers. Plastic sheeting should be bag immediately and removed from the project site.

2.5.3 Post Remediation Notice & Clearance Testing

ACCEPTANCE OR NON ACCEPTANCE (PASS/FAIL) CRITERIA

Based on research published by industry guidance document residential structures should be less than ~1,000 cts/m³ for total spores, with no individual "indoor spore" category or genera higher than 750 cts/m³. It is suggested that medical facilities should consider using concentrations of ½ the above levels, i.e. 500 cts/m³ total and 300-400 cts/m³ for any individual "indoor spore" category.

If outside make-up air is utilized or has likely infiltrated into to the work area, the outside background for ascospores, basidiospores, and Cladosporium (the most common outdoor spores) needs to be considered in deciding if successful clearance has been achieved.

Outdoor levels of these spores can often exceed 5,000 cts/m³. Remember, although indoor mold spore concentrations are "on average" less than the regional average of outdoor mold spore concentrations, care must be exercised when comparing "low" outdoor concentrations with small numbers of indoor samples.

A direct comparison between inside and outside concentrations, should be avoided. Outdoor samples are collected for the primary purpose of ensuring that a false failure of clearance is not assumed when the elevated spore levels may in fact be due to infiltration of outside make-up air.

Clearance Air Test: Clearance counts are based on comparison with original assessment report. If there wasn't any assessment report done they will be compared with an outside test. Note: Clearance will be based on visual conditions and the way the containment was constructed and the condition it is in at the time of the clearance inspection. In addition moisture testing will be done to check the condition of the affected areas. The remediation must also pass a "white glove" test as well as meet the air testing criteria below.

Target for pass in each area tested:

1. Total spore count less than 1000 spores m³.
2. Inside counts shall be no greater outside reading of similar counts.
3. Counts should not exceed original assessment levels.
4. Aspergillus-Penicillium should be no greater than 400 spores m³.
5. Cladosporium, Alteraria, Curvularia, Ulocladium, Ganodema shall be no greater than 300 spores m³ each.
6. No Stachybotrys, Chaetomium, Memnoniella, Fusarium & Trichoderma at any levels.
7. Less than 5 counts of hyphal fragments, and no mycotoxins shall be present.
8. Debris ratings 3 or lower.

2.6.1 Additional Information

ADDITIONAL PROTOCOLS SCOPE MAYBE REQUIRED

Following Post Remediation Testing, if assessor has identified any failed protocol items or scope requirements, including lab results, specific cleaning requirements, or specifications. Client is responsible for additional testing and time required to obtain a passed result. If passed or cleared result cannot be obtained, client has the right to notify assessor of additional third party testing at the cost of the client. Assessors clearance notice is the sole discretion of Southern Brothers Inspections and failure to obtain clearance relieves Southern Brothers Inspections and associated remediation companies of all liabilities. Clearance notices are issued for the moment in time tested and do not represent or guarantee healthy indoor air for any period of time. Clearance notices are provided as an interpretation of lab results by licensed and insured professionals, in conjunction with available building science and property conditions.