

COMMERCIAL INSPECTION REPORT

**A Nationwide Leader in Quality
Inspection Services**



Prepared For:

12/5/2020

Richardson, TX

214-222-9208

dfwrequest@brickkicker.com

brickkicker.com/Dallas

Inspector: Brian Wharton

License #: TREC # 23689

Report Summary

Roof Materials		
Page 12 Item: 1	Roof Materials Comments	<ul style="list-style-type: none"> • Evidence of ponding was observed in one or more areas. Low spots in the roof allow water to collect and will eventually cause roof leaks (if not already leaking). Further evaluation by a qualified roofing contractor is recommended. • Roofing material appeared to be improperly installed in one or more areas. This may contribute to roof leaks and further evaluation by a qualified roofing contractor is recommended. See photos. The roof was rated 8.5 out of 10; with some maintenance recommended. <p>Items such as improper corners, improper sign fasteners, some roof drains need weep holes added. Did recommend that interior upper foyer area be covered with TPO to extend life as it is rusting and deteriorated now.</p> <p>See photos</p> <p>Rofer that conducted the evaluation is Red Bird Roofing. 972-596-5328</p>
Roof Flashing		
Page 15 Item: 1	Roof Flashing	<ul style="list-style-type: none"> • Some the screws and bolts for the roof accessories were improperly installed.
Roof Drainage		
Page 16 Item: 1	Roof Drainage	<ul style="list-style-type: none"> • Ceiling drains were present throughout but in most instances one of each pair of drains was not equipped with the proper weep holes and the result was ponding around the drain.
Sidewall		
Page 19 Item: 3	Stone Damage	<ul style="list-style-type: none"> • Loose and/or damaged stone/granite materials were noted on one or more areas of the building. This may allow water damage to the underlying surfaces. Correction by a qualified contractor is recommended. • Typical caulking maintenance is recommended at one or more areas in order to prevent moisture damage to the underlying wall surfaces.
Fenestration Exterior		
Page 22 Item: 3	Fenestration - Overhead Doors	<ul style="list-style-type: none"> • Automatic door operators are NOT functioning correctly. The control box is no longer attached and requires a key to operate. None of the keys provided would operate the overhead door controls. Creative persistence on behalf of the inspector allowed for testing and the door did open and close. Recommend replacement of the door control.
Page 22 Item: 4	Fenestration System - Windows	<ul style="list-style-type: none"> • The exterior window "ribs" are falling (see photos) and there exterior window frames are damaged or in need of paint.
Weatherproofing		

Page 24 Item: 1	Weatherproofing	<ul style="list-style-type: none"> • Caulking around windows and other wall penetrations is missing or in poor condition at many areas.
Landscape and Parking Lighting		
Page 24 Item: 2	Parking and Building Lighting	<ul style="list-style-type: none"> • The parking lighting may be inadequate for the size of the parking area (3 poles; with one heavily covered/blocked by trees). • Some exterior walk way lights were noted to be faux lights.
Landscaping		
Page 25 Item: 1	Landscaping	<ul style="list-style-type: none"> • Scheduled maintenance of landscaping appears to be lacking. We recommend a licensed landscape maintenance company be contracted with to properly maintain the grounds. • There is apparent run off around the building creating muddy areas, washout, etc.
Signage		
Page 27 Item: 1	Signage	<ul style="list-style-type: none"> • Exterior signage was added by the current Realtor/broker. It was installed in such a way as to compromise the TPO roof covering. Recommend review by roofer and/or signage company. Red Bird Roofing (972) 596-5328
Topography		
Page 28 Item: 1	Topography	<ul style="list-style-type: none"> • The site where the structure is built is generally flat, with a slight slope toward the south.
Flatwork		
Page 28 Item: 1	Flatwork	<ul style="list-style-type: none"> • Surface is raised or settled at the following areas: South ramp of handicap parking area (raised); front entrance area/foyer (settling) see photos. • A possible cause of the front foyer area settling is due to rain run off from the top-level sun roof as there is no drainage system for the water to run off the roof and instead runs down that side of the building onto the flat work.
Paving, Curbing and Parking		
Page 30 Item: 1	Paving, Curbing and Parking	<ul style="list-style-type: none"> • The parking is in good shape but there are a few potential trip areas. See photos. Recommend repair. • The curbs were found to be in satisfactory condition with few exceptions. See photos. • There are approximately 178 parking spaces for this property with 8 marked as handicap only. NOTE: there were no handicapped spaces properly marked or identified as being for a handicap van.
Access and Egress		
Page 31 Item: 1	Access and Egress	<ul style="list-style-type: none"> • There were several concerns with interior egress such as doors requiring special keys, lighting not functioning properly, exit signage not in place or functioning properly.
Other Site Components		
Page 32 Item: 2	Ramps and Docks	<ul style="list-style-type: none"> • The drain at the bottom of the loading ramp or dock should be clear of debris and draining at all times. Any clogging can result in standing water or damage. • The loading dock and ramp area is without a protective guard railing or mean to protect pedestrians from falling into the area.

Patios - Decks- Porches		
Page 33 Item: 1	Patios	<ul style="list-style-type: none"> • It was noted exterior seating and picnic areas are end of life.
Heating Equipment		
Page 36 Item: 1	Heating Equipment Comments	<ul style="list-style-type: none"> • Units were not able to be tested. • The interior units are Payne and Trane and both are end of life with rusted coils, etc. See photos. • The interior closet unit (Payne) seems to indicate a previous leak. • There are blowers located throughout the building in the main work areas. The second floor blower unit was tested for Mold. • Space heaters in the loading dock were not able to be tested.
Ventilation		
Page 38 Item: 1	Ventilation Comments	<ul style="list-style-type: none"> • HVAC duct work was crushed or missing insulation throughout the entire building. Recommend review by licensed Mechanical contractor.
Cooling Equipment		
Page 40 Item: 1	Cooling Equipment Comments	<ul style="list-style-type: none"> • The Chiller had two coils/systems and 4 air handlers (one for each floor). The air handlers were end of life. The chiller had one side low on coolant and the other had no coolant left at all. The system is a 2019 York. Recommend full review of system to determine cause of refrigerant leaks and to recharge system for proper testing/evaluation.
Plumbing Distribution		
Page 43 Item: 1	Supply Piping System	<ul style="list-style-type: none"> • Damage/Defects noted at: water main which i submerged under water. Rusted pipes noted at exterior in upper roof section. The water supply pump was running and discharging a large amount of water ; the pressure was measured at 160 (max) which is a concern. The water supply tank bladder is suspected to be defective. The main water back flow valve supports are rusted and end of life. See photos.
Page 45 Item: 2	Waster Piping System	<ul style="list-style-type: none"> • There is a pipe or conduit on the West side with an open hole to the interior. • There is a roof vent that is the incorrect height. • There is a drain pipe next the left of the loading dock that is dripping/leaking. Source of water/drainage could not be determined.
Fixture		
Page 47 Item: 2	Toilet(s)	<ul style="list-style-type: none"> • Some urinals were "dry" meaning no water.
Page 47 Item: 3	Sink(s)	<ul style="list-style-type: none"> • No sinks were active or able to be tested.
Page 48 Item: 5	Basin(s)	<ul style="list-style-type: none"> • Mop sinks were present on each floor. The third and fourth floor basins were end of life; heavily stained or leaking.
Service Conductors		
Page 49 Item: 1	Electric Service Comments	<ul style="list-style-type: none"> • There are several live wires and open junction boxes throughout. Be careful many hazards throughout. • Some receptacles are no live throughout (mostly on the south side of building). • See photos

Distribution		
Page 52 Item: 1	Transformers	<ul style="list-style-type: none"> • There are several electric distribution centers located in the NW corner of the property. There is a hose connected to one that leads to the rain gutter. Inquiry into what this is for is recommended. • See photos
Interior Spaces		
Page 53 Item: 2	Walls and Wall Coverings	<ul style="list-style-type: none"> • Two possible water leaks were noted in the north stairwell 3rd floor and in the mechanical room on 3rd floor. As well as in HVAC closet on first floor.
Page 54 Item: 3	Ceilings	<ul style="list-style-type: none"> • Moisture stains were noted throughout the 3rd and 4th floors. Suspect the fire system maybe be failing or rusting from the inside out.
Interior Doors		
Page 55 Item: 1	Interior Doors	<ul style="list-style-type: none"> • Interior doors were satisfactory.
Vertical Transportation		
Page 55 Item: 1	Elevators	<ul style="list-style-type: none"> • The south stairwell was missing proper lighting in various areas. • The elevator command controls were loose in the wall on most floors.
Windows		
Page 57 Item: 1	Window Comments	<ul style="list-style-type: none"> • No windows were noted as damaged or cracked; all appeared satisfactory.
Fire Protection		
Page 59 Item: 2	Sprinklers and Standpipes	<ul style="list-style-type: none"> • Various leaks were noted at the pump and the sprinkler pipes. Recommend review by specialized qualified contractor.
Page 62 Item: 3	Fire Extinguishers	<ul style="list-style-type: none"> • All fire extinguishers have expired green tags.
Recommendations and Further Evaluation		

<p>Page 70 Item: 1</p>	<p>Recommendations for Further Evaluation</p>	<ul style="list-style-type: none"> • The Inspector is not a physician and cannot advise on medical conditions or the habitability of a home/structure • <p>**It is recommended you consult with a physician immediately if you have any of these symptoms**</p> <p>**The Inspector is not a physician and cannot advise on medical conditions or the habitability of a home/structure**</p> <ul style="list-style-type: none"> • <p>Eight indoor air samples were taken and were compared to two outdoor samples (Rear of building [West] and front of building [East]) which were the control samples. HVAC units were not adjusted and allowed to run as they were found at the time of entrance to the building. In each case the air sampling unit was moved to a central location for that HVAC unit to ensure proper collection of air sampling.</p> <p>The air samples show high counts for Aspergillus/Penicillium and Cladosporium on the 2nd floor toward the bathrooms in the main space and some elevated amounts of both of these molds on the 3rd floor directly above as well. Stachybotrys/Memnoniellas in small amount was detected on the 2nd, 3rd, 4th floors. Stachybotrys is known as “black mold” and it is a slow growth mold. Meaning it often takes two weeks or more to grow; most molds grow/colonize in 1-2 days after a water event inside a structure. Stachybotrys presence in air samples needs to be further investigated especially if no spores are found within the air control samples.</p> <p>The actual lab results are included at the end of this report. The “E” indicator in the report represents the NE side of the main open area, the “W” indicates the same area but at the opposite end away from the bathrooms. The EXT samples were the control samples. In general any Count/M higher inside than outside requires further evaluation; any extremely high counts indicate a mold infestation. See report notes for details.</p> <p>One tape sample was taken on the second floor on the surface of the exposed air blower where existing water damage had occurred, closest to the bath rooms in the main seating area. This sample indicated the presence of Cladosporium on the unit in the medium range and the presence of Stachybotrys/Memnoniella in the rare range. Again this is approximately 1/3 inch X 1/3 inch surface area and not all spores or fungus grows evenly and therefore it is a more random sampling.</p> <ul style="list-style-type: none"> • Recommend further testing and evaluation by Texas licensed Mold Remediator.
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Purpose

1. Purpose

Visual Survey

INTRODUCTION

We appreciate the opportunity to conduct this inspection for you! Please carefully read your entire Inspection Report. Call us after you have reviewed your emailed report, so we can go over any questions you may have. Remember, when the inspection is completed and the report is delivered, we are still available to you for any questions you may have, throughout the entire closing process.

Properties being inspected do not "Pass" or "Fail." - The following report is based on an inspection of the visible portion of the structure; inspection may be limited by vegetation and possessions. Depending upon the age of the property, some items like GFI outlets may not be installed; this report will focus on safety and function, not current code. This report identifies specific non-code, non-cosmetic concerns that the inspector feels may need further investigation or repair.

For your safety and liability purposes, we recommend that licensed contractors evaluate and repair any critical concerns and defects. Note that this report is a snapshot in time. We recommend that you or your representative carry out a final walk-through inspection immediately before closing to check the condition of the property, using this report as a guide.

PURPOSE AND SCOPE

This Inspection Report is supplemental to the Property Disclosure Statement.

This document was prepared as a report of all visual defects noted at the time and date of the inspection. It is not necessarily an all-inclusive summary, as additional testing or inspection information/processes and analysis may be pending. It is subject to all terms and conditions specified in the Inspection Agreement.

It should be noted that a standard pre-purchase inspection is a visual assessment of the condition of the structure at the time of inspection and is subject to day-to-day changes. The inspection and inspection report are offered as an opinion only, of items observed on the day of the inspection. Although every reasonable effort is made to discover and correctly interpret indications of previous or ongoing defects that may be present, it must be understood that no guarantee is expressed nor implied nor responsibility assumed by the inspector or inspection company for the actual condition of the building or property being examined.

This firm endeavors to perform all inspections in substantial compliance with the International Standards of Practice for Inspecting Commercial Properties (www.nachi.org/comsop). The scope of the inspection is outlined in the Inspection Agreement, agreed to and signed by the Client. Our inspectors inspect the readily accessible and installed components and systems of a property as follows: This report contains observations of those systems and components that are, in the professional opinion of the inspector authoring this report, significantly deficient in the areas of safety or function. When systems or components designated for inspection in the Standards are present but are not inspected, the reason the item was not inspected may be reported as well.

This report summarizes our inspection conducted on this date at the above address.



Visual Survey Continued

EXCLUSIONS AND LIMITATIONS

The inspection is supplemental to the Property Disclosure Statement. It is the responsibility of the Client to obtain any and all disclosure forms relative to this real estate transaction. The client should understand that this report is the assessment of a Property Inspection Consultant, not a professional engineer, and that, despite all efforts, there is no way we can provide any guaranty that the foundation, structure, and structural elements of the unit are sound. We suggest that if the client is at all uncomfortable with this condition or our assessment, a professional engineer be consulted to independently evaluate the condition, prior to making a final purchase decision.

This inspection is limited to any structure, exterior, landscape, roof, plumbing, electrical, heating, foundation, bathrooms, kitchen, bedrooms, hallway, and attic sections of the structure as requested, where sections are clearly accessible, and where components are clearly visible. Inspection of these components is limited, and is also affected by the conditions apparent at the time of the inspection, and which may, in the sole opinion of the inspector, be hazardous to examine for reasons of personal or property safety. This inspection will exclude insulation ratings, hazardous materials, retaining walls, hidden defects, buried tanks of any type, areas not accessible or viewable, and all items as described in Sections 4 and 10 of the Inspection Agreement. As all buildings contain some level of mold, inspecting for the presence of mold on surfaces and in the air is not a part of the actual inspection, but is a value added service to help you, the client, minimize the risks and liabilities associated with Indoor Air Quality.

The International Standards of Practice for Inspecting Commercial Properties are applicable to all commercial properties. They are not technically exhaustive and do not identify concealed conditions or latent defects. Inspectors are not required to determine the condition of any system or component that is not readily accessible; the remaining service life of any system or component; determination of correct sizing of any system or component; the strength, adequacy, effectiveness or efficiency of any system or component; causes of any condition or deficiency; methods, materials or cost of corrections; future conditions including but not limited to failure of systems and components; the suitability of the property for any specialized use; compliance with regulatory codes, regulations, laws or ordinances; the market value of the property or its marketability; the advisability of the purchase of the property; the presence of potentially hazardous plants or animals including but not limited to wood destroying organisms or diseases harmful to humans; mold; mildew; the presence of any environmental hazards including, but not limited to toxins, carcinogens, noise, and contaminants in soil, water or air; the effectiveness of any system installed or methods utilized to control or remove suspected hazardous substances; the operating costs of any systems or components and the acoustical properties of any systems or components.

Inspectors are not required to operate any system or component that is shut down or otherwise inoperable; any system or component which does not respond to normal operating controls or any shut off valves or switches. Inspectors are not required to offer or perform any act or service contrary to law; offer or perform engineering services or work in any trade or professional service. We do not offer or provide warranties or guarantees of any kind or for any purpose. Inspectors are not required to inspect, evaluate, or comment on any and all underground items including, but not limited to, septic or underground storage tanks or other underground indications of their presence, whether abandoned or active; systems or components that are not installed; decorative items; systems or components that are in areas not entered in accordance with the International Standards of Practice for Inspecting Commercial Properties; detached structures; common elements or common areas in multi-unit housing, such as condominium properties or cooperative housing.

Inspectors are not required to enter into or onto any area or surface, or perform any procedure or operation which will, in the sole opinion of the inspector, likely be dangerous to the inspector or others or damage the property, its systems or components; nor are they required to move suspended ceiling tiles, personal property, furniture, equipment, plants, soil, snow, ice or debris or dismantle any system or component, or venture into confined spaces. Our inspectors are not



Visual Survey Continued

required to enter crawlspaces or attics that are not readily accessible nor any area which has less than 36" clearance or a permanently installed walkway or which will, in the sole opinion of the inspector, likely to be dangerous, inaccessible, or partially inaccessible to the inspector or other persons, or where entry could possibly cause damage to the property or its systems or components. Inspector wants the Client to know that he is not a licensed Professional Engineer or Architect, and does not engage in the unlicensed practice of either discipline. Opinions contained herein are just that.

A WORD ABOUT RODENTS, VERMIN, AND PESTS

Vermin and other pests are part of the natural habitat, but they often invade buildings. Rats and mice have collapsible rib cages and can squeeze through even the tiniest crevices. And it is not uncommon for them to establish colonies within basements, crawlspaces, attics, closets, and even the space inside walls, where they can breed and become a health-hazard. Therefore, it would be prudent to have an exterminator evaluate the structures to ensure that it is rodent-proof, and to periodically monitor those areas that are not readily accessible.

A WORD ABOUT CONTRACTORS AND 20-20 HINDSIGHT

A common source of dissatisfaction with inspectors sometimes comes as a result of off-the cuff comments made by contractors (made after-the-fact), which often differ from ours. Don't be surprised when someone says that something needed to be replaced when we said it needed to be repaired, replaced, upgraded, or monitored. Having something replaced may make more money for the contractor than just doing a repair. Contractors sometimes say, "I can't believe you had this building inspected and they didn't find this problem." There may be several reasons for these apparent oversights:

Conditions during inspection - It is difficult for clients to remember the circumstances in the subject property at the time of the inspection. Clients seldom remember that there was storage everywhere, making things inaccessible, or that the air conditioning could not be turned on because it was 60° outside. Contractors do not know what the circumstances were when the inspection was performed.

The wisdom of hindsight - When a problem occurs, it is very easy to have 20/20 hindsight. Anybody can say that the roof is leaking when it is raining outside and the roof is leaking. In the midst of a hot, dry, or windy condition, it is virtually impossible to determine if the roof will leak the next time it rains. Predicting problems is not an exact science and is not part of the inspection process. We are only documenting the condition of the property at the time of the inspection.

A destructive or invasive examination - The inspection process is non-destructive, and is generally noninvasive. It is performed in this manner because, at the time we inspected the subject property, the Client did not own, rent, or lease it. A Client cannot authorize the disassembly or destruction of what does not belong to them. Now, if we spent half an hour under a sink, twisting valves and pulling on piping, or an hour disassembling a furnace, we may indeed find additional problems. Of course, we could possibly CAUSE some problems in the process. And, therein lies the quandary. We want to set your expectations as to what an inspection is, and what it not.

We are generalists - We are not acting as specialists in any specific trade. The heating and cooling contractor may indeed have more heating expertise than we do. This is because heating and cooling is all he's expected to know. Inspectors are expected to know heating and cooling, plumbing, electricity, foundations, carpentry, roofing, appliances, etc. That's why we're generalists. We're looking at the forest, not the individual trees.



Visual Survey Continued

1. Visual Survey

Materials: To perform a limited, visual survey of specific components on the subject property and list our observations of items and conditions which indicate the need for immediate repair.

Opinions and Probable Cost

1. Opinions and Probable Costs

Observations:

- No costs to cure are a part of this review.

Major Projected Expenses

1. Major Projected Expenses

Observations:

- Five year projected major expenses are not a part of this inspection. Please review the summary for a list of the findings.

Intent

1. Intent

Observations:

- Our intent is to appraise you of the general condition of the subject property and to provide information to you which will be helpful in your prepurchase considerations as it relates to the condition of the property.

Inclusions

1. Inclusions

Observations:

- Interviews with current building owners or property managers can be very valuable for discovery or underlying issues or property concerns. The owner or manager was not available to interview during this inspection.
- The scope of our assessment was limited to the following specific visually accessible components:

Only those items which are to be controlled by the future property owners association as follows: Foundations of the building(s), structural framing (load carrying members only), building exteriors, roof structure and load carrying members of the roof framing, fences, decks and patios, sidewalks, driveways, electrical systems (having to do with the main panels and meters only), and plumbing systems (limited to crawlspace and attic plumbing only).

Inclusions Continued

Report is Confidential

1. Report is Confidential

Observations:

- Our assessment and this report are intended to be confidential to you, our client, for your exclusive use. They cannot be relied upon by a third party. We make no representation as to the condition of this property other than stated specifically in writing in the text of this narrative report. Further investigation including acquisition of bids by contractors and service companies in respect to any recommendations within this report are recommended and required. Please see the Contract Provisions for further details.

Roof Materials

I. The inspector should inspect from ground level, or eaves or roof top (if a roof top access door exists):

- A. The roof covering.
- B. For presence of exposed membrane.
- C. Slopes
- D. For evidence of significant ponding.
- E. The gutters
- F. The downspouts.
- G. The vents, flashings, skylights, chimney and other roof penetrations.
- H. The general structure of the roof from the readily accessible panels, doors or stairs.
- I. For the need for repairs.

As with all areas of the building, we recommend that you carefully examine the roof immediately prior to closing the deal. Note that walking on a roof voids some manufacturer's warranties. Adequate attic ventilation, solar / wind exposure, and organic debris all affect the life expectancy of a roof (see www.gaf.com for roof info). Always ask the seller about the age and history of the roof. On any building that is over 3 years old, experts recommend that you obtain a roof certification from an established local roofing company to determine its serviceability and the number of layers on the roof. We certainly recommend this for any roof over 5 years of age. Metal roofs in snow areas often do not have gutters and downspouts, as there is a concern that snow or ice cascading off the roof may tear gutters from the building. Likewise, be advised that such cascading may cause personal injury or even death. If this building has a metal roof, consult with qualified roofers or contractors regarding the advisability of installing a damming feature which may limit the size and amount of snow / ice sliding from the roof.

It is impossible to determine the integrity of a roof, absent of performing an invasive inspection, and absent of obvious defects noted, especially if inspection had not taken place during or immediately after a sustained rainfall. Inspector makes no warranty as to the remaining life of this roof or related components.

Be advised that there are many different roof types, which we evaluate wherever and whenever possible. Every roof will wear differently relative to its age, the number of its layers, the quality of its material, the method of its application, its exposure to direct sunlight or other prevalent weather conditions, and the regularity of its maintenance. Regardless of its design-life, every roof is only as good as the waterproof membrane beneath it, which is concealed and cannot be examined without removing the roof material, and this is equally true of almost all roofs. In fact, the material on the



Roof Materials Continued

majority of pitched roofs is not designed to be waterproof; only water-resistant.

However, what remains true of all roofs is that, whereas their condition can be evaluated, it is virtually impossible for anyone to detect a leak except as it is occurring or by specific water tests, which are beyond the scope of our service.

Even water stains on ceilings or on the framing within attics, could be old and will not necessarily confirm an active leak without some corroborative evidence, and such evidence can be deliberately concealed. Consequently, only the installers can credibly guarantee that a roof will not leak, and they do.

We evaluate every roof conscientiously, but we will not predict its remaining life expectancy, or guarantee that it will not leak. Naturally, the sellers or the occupants of a structure will generally have the most intimate knowledge of the roof and of its history. Therefore, we recommend that you ask the sellers about it, and that you either include comprehensive roof coverage in your insurance policy, or that you obtain a roof certification from an established local roofing company. Additionally, the condition of a roof can change dramatically after a hard winter, so monitoring is always necessary.

Many composite tile roofs are among the most expensive and durable of all roofs, and can be warranted by the manufacturer to last for twenty-five years or more, but are usually only guaranteed against leaks by the installer from three to five years. Again, industry experts agree that any roof over 3 years of age should be evaluated by a licensed roofing contractor before the close of escrow. Like other pitched roofs, they are not designed to be waterproof, only water resistant, and are dependant on the integrity of the waterproof membrane beneath them, which cannot be seen without removing the tiles, but which can be split by movement, or deteriorated through time. Significantly, although there is leeway in installation specifications, the type and quality of membranes that are installed can vary from one installer to another, and leaks do occur. The majority of leaks result when a roof has not been well maintained or kept clean, and we recommend servicing them annually.

Roof Materials Continued

1. Roof Materials Comments

Materials: This section of the report is concerning the roofing materials throughout the building. • Walked On: The roof surface was walked on during the inspection. A survey of the roof was made by walking patterns and walking in areas where vulnerabilities typically exist. Not every square foot of roof surface are was stepped on.

Materials: Roofing system appears to consist of either a **PVC**, (poly vinyl chloride) or a TPO, (thermal-poly olefin) membrane, with welded seams. These are typically durable roofs when installed according to the manufacturer's recommendations. Standard warranty is 15 - 20 Years although lifespans can be much longer.

Observations:

- The roof appears to have been patched or repaired in one or more areas. Recommend checking with the current owner as to the nature of the repair.
- Evidence of ponding was observed in one or more areas. Low spots in the roof allow water to collect and will eventually cause roof leaks (if not already leaking). Further evaluation by a qualified roofing contractor is recommended.
- Roofing material appeared to be improperly installed in one or more areas. This may contribute to roof leaks and further evaluation by a qualified roofing contractor is recommended. See photos. The roof was rated 8.5 out of 10; with some maintenance recommended.

Items such as improper corners, improper sign fasteners, some roof drains need weep holes added. Did recommend that interior upper foyer area be covered with TPO to extend life as it is rusting and deteriorated now.

See photos

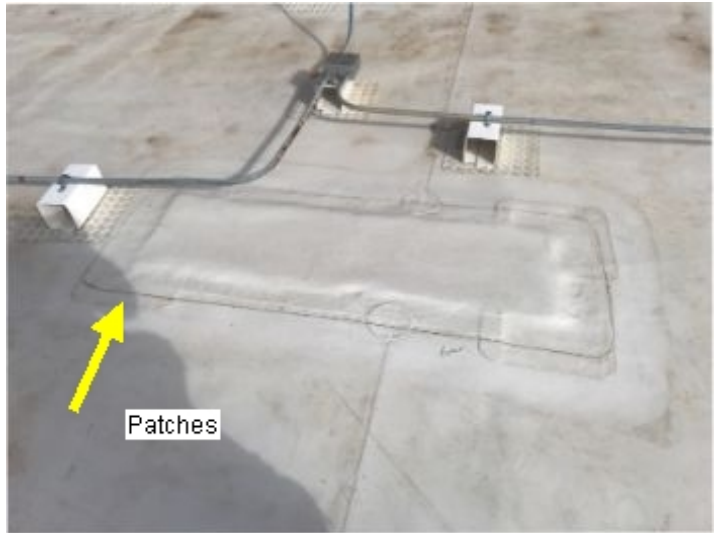
Roofer that conducted the evaluation is Red Bird Roofing. 972-596-5328



Roof Materials Continued



Roof Materials Continued



Roof Materials Continued



Roof Materials 2

1. Roof Materials Comments

Roof Sheathing

1. Roof Sheathing Comments

Roof Flashing

1. Roof Flashing

Observations:

- Some the screws and bolts for the roof accessories were improperly installed.

Roof Flashing Continued



Roof Drainage

1. Roof Drainage

Observations:

- Ceiling drains were present throughout but in most instances one of each pair of drains was not equipped with the proper weep holes and the result was ponding around the drain.



Floor and Roof Framing

1. Floor Framing

Floor and Roof Framing Continued

2. Roof Framing

Observations:

- All areas which were visible for examination appear to be in good structural condition.

Other Observations

1. Parapet Walls

2. Other Roof Observations

Sidewall

I. The inspector should inspect:

A. The siding, flashing and trim.

B. All exterior doors, decks, stoops, steps, stairs, porches, railings, eaves, soffits and fascias.

C. And report as in need of repair any safety issues regarding intermediate balusters, spindles, or rails for steps,

stairways, balconies, and railings.

D. A representative number of windows.

E. The vegetation, surface drainage and retaining walls when these are likely to adversely affect the structure.

F. The exterior for accessibility barriers.

G. The storm water drainage system.

H. The general topography.

I. The parking areas.

J. The sidewalks.

K. Exterior lighting.

L. The landscaping.

M. And determine that a 3-foot clear space exists around the circumference of fire hydrants.

N. And describe the exterior wall covering.

6.5.3 Wood decks and balconies

I. The inspector should inspect:

A. With naked eye, for deck and balcony members that are noticeably out of level or out of plumb.

B. For visible decay.

C. For paint failure and buckling.

D. For nail pullout (nail pop).

E. For fastener rust, iron stain, and corrosion.

F. And verify that flashing was installed on the deck side of the ledger board.

G. For vertical members (posts) that have exposed end grains.

H. For obvious trip hazards.

I. For non-graspable handrails.

J. Railings for height less than the 36 inch minimum.*

K. Guardrails and infill for openings that exceed the 4 inch maximum.*

L. Open tread stairs for openings that exceed the 4 and 3/8 inch maximum.*

M. Triangular area between guardrails and stairways for openings that exceed the 6 inch maximum.*

Sidewall Continued

- N. Built-up and multi-ply beam spans for butt joints.
- O. For notches in the middle third of solid-sawn wood spans.
- P. For large splits longer than the depths of their solid-sawn wood members.
- Q. For building egresses blocked, covered, or hindered by deck construction.
- R. For the possibility of wetting from gutters, downspouts, or sprinklers.

Grading and drainage are probably the most significant aspects of a property, simply because of the direct and indirect damage that moisture can have on structures. More damage has probably resulted from moisture and expansive soils than from most natural disasters. Also, there should be gutters and downspouts with splash blocks that discharge away from the building. We have discovered evidence of moisture intrusion inside structures when it was raining that would not have been apparent otherwise. In addition, we recommend that downspouts do not terminate over paved areas such as walks or driveways, as they can contribute to icy slip and fall hazards in winter.

Minor settlement or “hairline” cracks in drives, walks or even foundations are normal to properties of any age. They should, however, be monitored for expansion and sealed as necessary.

Note that any siding, but especially composition or hardboard siding must be closely monitored. A classic example is the older style Louisiana Pacific siding, where the failure and deterioration provided grounds for a class action lawsuit. Even modern composition siding and, especially, trim, is particularly vulnerable to moisture damage. All seams must remain sealed and paint must be applied periodically (especially the lower courses at ground level). It is imperative that continued moisture be kept from it, especially from sprinklers, rain splash back or wet grass. Swelling and deterioration may otherwise result.

Vegetation too close to the building can contribute to damage through root damage to the foundation, branches abrading the roof and siding, and leaves providing a pathway for moisture and insects into the building.

Although rails are not required around drop-offs less than 30”, consider your own personal needs and those of your family and guests. By today’s standards, spindles at decks and steps should be spaced no more than 4” apart for the safety of children.

Open window wells should have either grates or, preferably, a weatherproof shield installed over them. This will keep rain and snow from building up inside the well and possibly leaking into the structure, as well as minimizing your liability from children and non-residents falling inside them. An egress ladder should also be installed within the well, especially at below-grade bedrooms.

The client should understand that this is the assessment of an inspector, not a professional engineer, and that, despite all efforts, there is no way we can provide any guaranty that this foundation, and the overall structure and structural elements of the unit is sound. We suggest that if the client is at all uncomfortable with this condition or our assessment, a professional engineer be consulted to independently evaluate the condition, prior to making a final purchase decision. The inspection is supplemental to the Property Disclosure.

At least once a year, the client should carefully inspect the exterior walls, eaves, soffits or fascia, for signs of damage caused by machinery, weather, roof leaks, overfull gutters, trees or ice, and refasten or repair individual boards or panels as necessary. All trim around doors and windows should be carefully examined and then refastened, repaired or re-caulked. The paint should be examined for blisters or peeling that might indicate moisture problems within the walls and the property touched up or repainted as necessary. Finally, the foundation (interior elements and exterior elements) should be examined for signs of cracking, insect intrusion, moisture intrusion, or changes of any type (such as the appearance of cracks, or the widening or lengthening of existing cracks).

Sidewall Continued

1. Brick

2. Split Block / Concrete Block

3. Stone Damage

Observations:

- Sidewall cladding consists of stone.
- Loose and/or damaged stone/granite materials were noted on one or more areas of the building. This may allow water damage to the underlying surfaces. Correction by a qualified contractor is recommended.
- Typical caulking maintenance is recommended at one or more areas in order to prevent moisture damage to the underlying wall surfaces.



Sidewall Continued



4. Cement Stucco

5. EIFS

6. Wood Siding

7. Siding

8. Metal Siding

9. Tilt-up

10. Asbestos

11. Fibercement

Fenestration Exterior

6.5.11 Doors, windows and interior

I. The inspector should:

A. Open and close a representative number of doors and windows.

B. Inspect the walls, ceilings, steps, stairways, and railings.

C. Inspect garage doors and garage door openers.

D. Inspect interior steps, stairs, and railings.

E. Inspect all loading docks.

F. Ride all elevators and escalators.

G. And report as in need of repair any windows that are obviously fogged or display other evidence of broken seals.

1. Exterior Walk Doors

Observations:

- The south exterior walk doors are metal glad. The front doors are glass.
- The doors at the following locations are in need of minor repairs or adjustments: Front doors; threshold and kick plate edge



2. Exterior Service Doors

Fenestration Exterior Continued

3. Fenestration - Overhead Doors

Observations:

- A representative sampling of the door operation was conducted, and all appear to be in adequate condition
- Automatic door operators are NOT functioning correctly. The control box is no longer attached and requires a key to operate. None of the keys provided would operate the overhead door controls. Creative persistence on behalf of the inspector allowed for testing and the door did open and close. Recommend replacement of the door control.



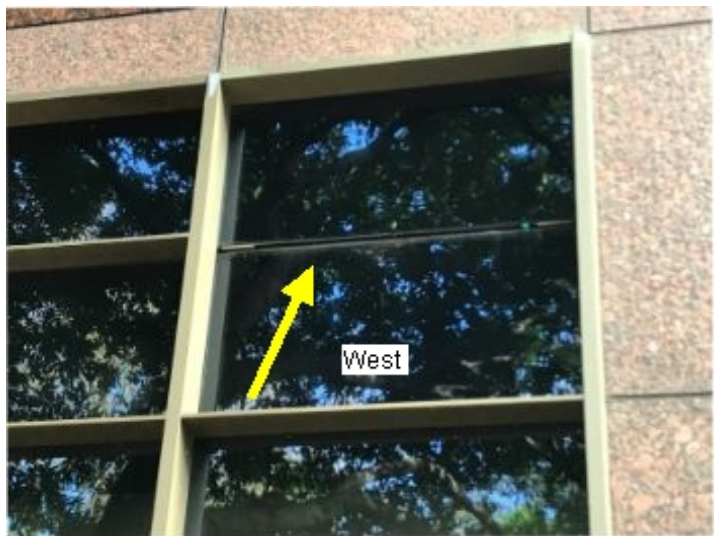
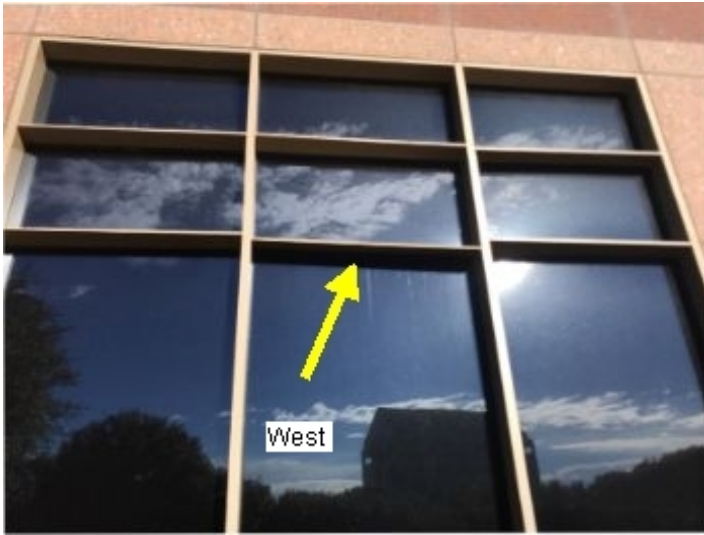
4. Fenestration System - Windows

Observations:

- The exterior window "ribs" are falling (see photos) and there exterior window frames are damaged or in need of paint.



Fenestration Exterior Continued



Canopies and Awnings

1. Canopies and Awnings

Observations:

- No canopies or awning are present

Weatherproofing

1. Weatherproofing

Observations:

- **Caulking around windows and other wall penetrations is missing or in poor condition at many areas.**

Weatherproofing Continued

Landscape and Parking Lighting

1. Landscape Lighting

Observations:

- Landscape lighting was noted, but these components were not able to be tested.



2. Parking and Building Lighting

Observations:

- Building lighting is present and appears functional and satisfactory.
- The parking lighting could not be tested.
- The exterior walkway lighting could not be activated.
- The parking lighting may be inadequate for the size of the parking area (3 poles; with one heavily covered/blocked by trees).
- Some exterior walk way lights were noted to be faux lights.



Landscape and Parking Lighting Continued



3 parking lot light poles
may not be adequate

Landscaping

1. Landscaping

Observations:

- Scheduled maintenance of landscaping appears to be lacking. We recommend a licensed landscape maintenance company be contracted with to properly maintain the grounds.
- There is apparent run off around the building creating muddy areas, washout, etc.



South exterior landscape
wall

Landscaping Continued



2. Sprinklers

Observations:

- A landscaping sprinkler system is installed on the property. The system was run in manual mode and appears to be adequate.

Landscaping Continued



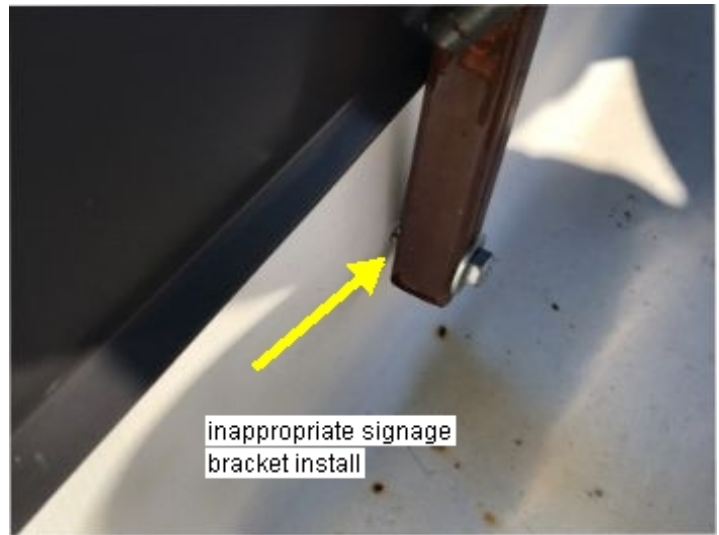
Signage

1. Signage

Observations:

- Exterior signage was added by the current Realtor/broker. It was installed in such a way as to compromise the TPO roof covering. Recommend review by roofer and/or signage company. Red Bird Roofing (972) 596-5328

Signage Continued



Topography

1. Topography

Observations:

- The site where the structure is built is generally flat, with a slight slope toward the south.

Storm Water Drainage

1. Storm Water Drainage

Observations:

- Drainage appears adequate, and all indications are that ground water drains away from the structure properly.

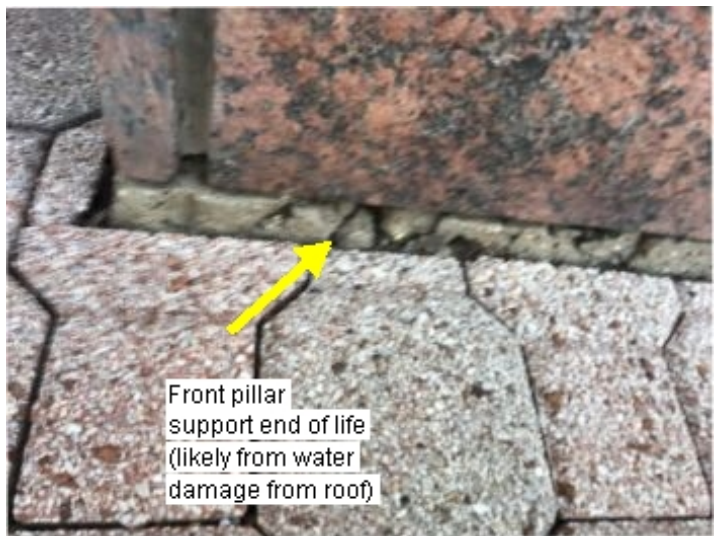
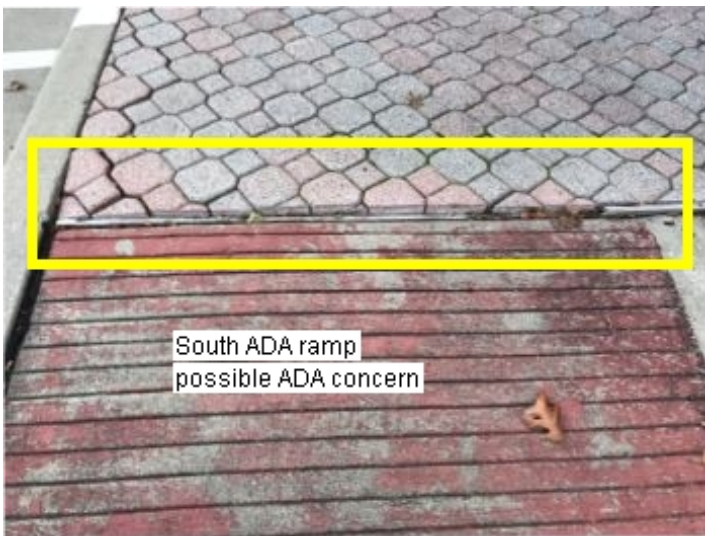
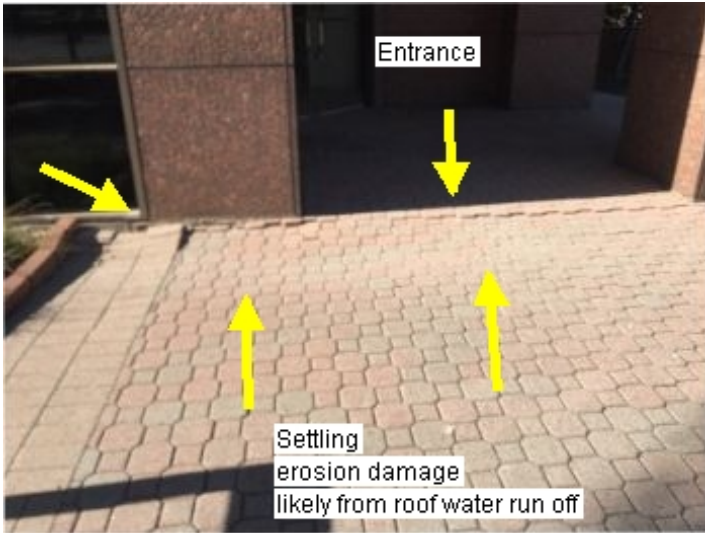
Flatwork

1. Flatwork

Observations:

- Surface is raised or settled at the following areas: South ramp of handicap parking area (raised); front entrance area/foyer (settling) see photos.
- A possible cause of the front foyer area settling is due to rain run off from the top-level sun roof as there is no drainage system for the water to run off the roof and instead runs down that side of the building onto the flat work.

Flatwork Continued



Paving, Curbing and Parking

1. Paving, Curbing and Parking

Observations:

- All parking surfaces on the lot are paved with concrete.
 - Curbs and bumpers are of concrete, and all appear to be in satisfactory condition.
 - The parking is in good shape but there are a few potential trip areas. See photos. Recommend repair.
 - The curbs were found to be in satisfactory condition with few exceptions. See photos.
 - There are approximately 178 parking spaces for this property with 8 marked as handicap only.
- NOTE: there were no handicapped spaces properly marked or identified as being for a handicap van.



Approximately 178 parking spaces



Settling at center of parking lot



Center (east) parking lot
Trip hazard



Handicap parking

Paving, Curbing and Parking Continued



Fencing

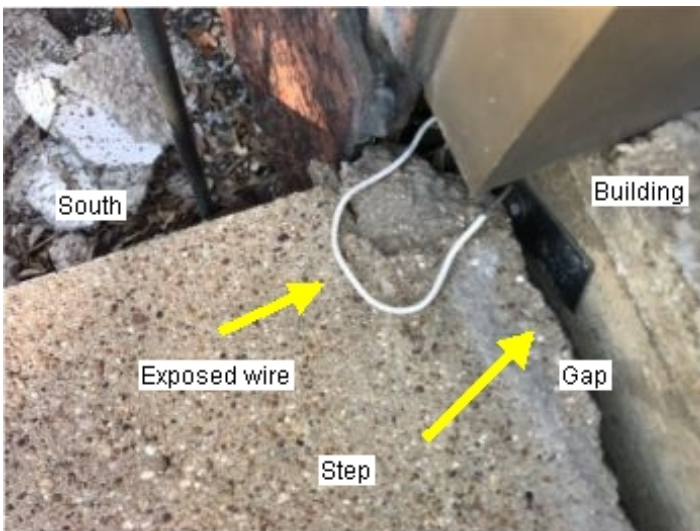
1. Fencing

Access and Egress

1. Access and Egress

Observations:

- Access and egress to the subject property are via South on Lakeside Blvd.
- There were several concerns with interior egress such as doors requiring special keys, lighting not functioning properly, exit signage not in place or functioning properly.



Access and Egress Continued



Other Site Components

1. Bollards and Protection

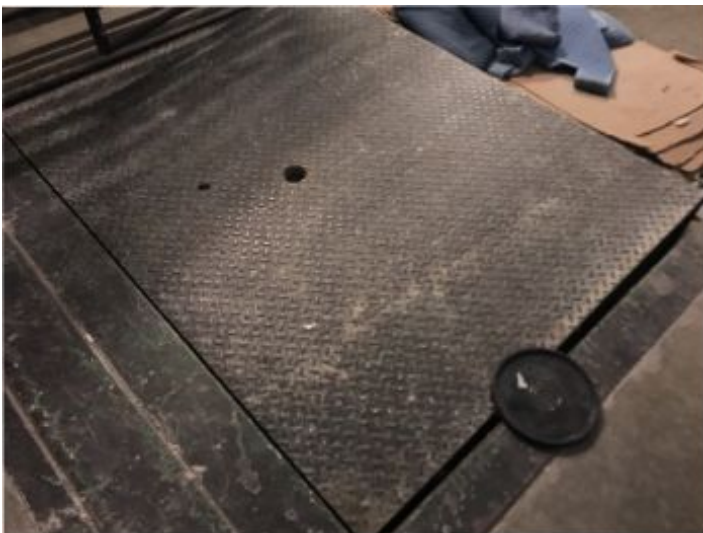
Observations:

- Bollards are protective devices installed to prevent vehicle contact with various components or structural elements.

2. Ramps and Docks

Observations:

- Loading ramp(s) or dock(s) are present.
- The operation of the levelers was partially tested; but could not be fully tested due to debris in blocking full access. If desired, a specific lock leveling inspection should be performed.
- The drain at the bottom of the loading ramp or dock should be clear of debris and draining at all times. Any clogging can result in standing water or damage.
- The loading dock and ramp area is without a protective guard railing or mean to protect pedestrians from falling into the area.



Other Site Components Continued

Retaining or Sea Walls

1. Retaining and Sea Walls

Patios - Decks- Porches

1. Patios

Observations:

- It was noted exterior seating and picnic areas are end of life.



2. Decks and & Porches

Balcony

1. Balcony

Slab Foundation

I. The inspector should inspect:

- A. The basement.
- B. The foundation
- C. The crawlspace.
- D. The visible structural components.
- E. And report on the location of under-floor access openings.
- F. And report any present conditions or clear indications of active water penetration observed by the inspector.
- G. For wood in contact or near soil.
- H. and report any general indications of foundation movement that are observed by the inspector, such as but not limited to Sheetrock cracks, brick cracks, out-of-square door frames or floor slopes.
- I. And report on any cutting, notching and boring of framing members which may present a structural or safety concern.

1. Slab Foundation

Observations:

- This structure is constructed slab-on-grade, there are no raised foundations or underfloor crawlspaces.
- The above-ground portions of the perimeter foundation showed no noticeable concerns.
- The Inspector observed no deficiencies in the condition of the visible portions of the concrete slab-on-grade foundation. Most of the slab was not directly visible due to floor coverings

Basement or Crawl Space

1. Basement or Crawl Space

2. Floor Joists (Inspected Only Where Visible)

Post and Pier

1. Post and Pier

Load Bearing Walls

Load Bearing Walls Continued

1. Load Bearing Walls

Observations:

- No visible evidence of stress or excessive movement were noted at the load bearing walls.
- Exterior walls are constructed of structural steel. Typical construction of structural steel wall framing consists of steel I-beams and other steel components welded together on site.

Seismic Stability

1. Seismic Stability

Observations:

- Seismic Stability is not required in this region.

Structural Cavities

1. Attic Spaces

Observations:

- This structure has a flat roof, which does not allow for an attic space.

2. Underfloor Spaces

Observations:

- This property is constructed as slab on grade.

Heating Equipment

I. The inspector should inspect:

- A. Multiple gas meter installations, such as a building with multiple tenant spaces, and verify that each meter is clearly and permanently identified with the respective space supplied.
- B. The heating systems using normal operating controls and describe the energy source and heating method.
- C. And report as in need of repair heating systems which do not operate.
- D. And report if the heating systems are deemed inaccessible.
- E. And verify that a permanent means of access with permanent ladders and/or catwalks is present for equipment and appliances on roofs higher than 16 feet.
- F. And verify the presence of level service platforms for appliances on roofs with a 25 percent slope or greater.
- G. And verify that a luminaire and a receptacle outlet are provided at or near the appliance.
- H. And verify that the system piping appears to be sloped to permit the system to be drained.
- I. For connectors, tubing and piping that might be installed in a way that exposes them to physical damage.
- J. Wood framing for cutting, notching and boring that might cause a structural or safety issue.
- K. Pipe penetrations in concrete and masonry building elements to verify that they are sleeved.
- L. Exposed gas piping for identification by a yellow label marked "Gas" in black letters occurring at intervals of 5 feet or less.
- M. And determine if any appliances or equipment with ignition sources are located in public, private, repair or parking garages or fuel-dispensing facilities.
- N. And verify that fuel-fired appliances are not located in or obtain combustion air from sleeping

Heating Equipment Continued

rooms, bathrooms, storage closets or surgical rooms.

O. For the presence of exhaust systems in occupied areas where there is a likelihood of excess heat, odors, fumes, spray, gas, noxious gases or smoke.

P. And verify that outdoor air intake openings are located at least 10 feet from any hazardous or noxious contaminant sources such as vents, chimneys, plumbing vents, streets, alleys, parking lots or loading docks.

Q. Outdoor exhaust outlets for the likelihood that they may cause a public nuisance or fire hazard due to smoke, grease, gases, vapors or odors.

R. For the potential of flooding and evidence of past flooding that could cause mold in ductwork or plenums.

S. Condensate drains

1. Heating Equipment Comments

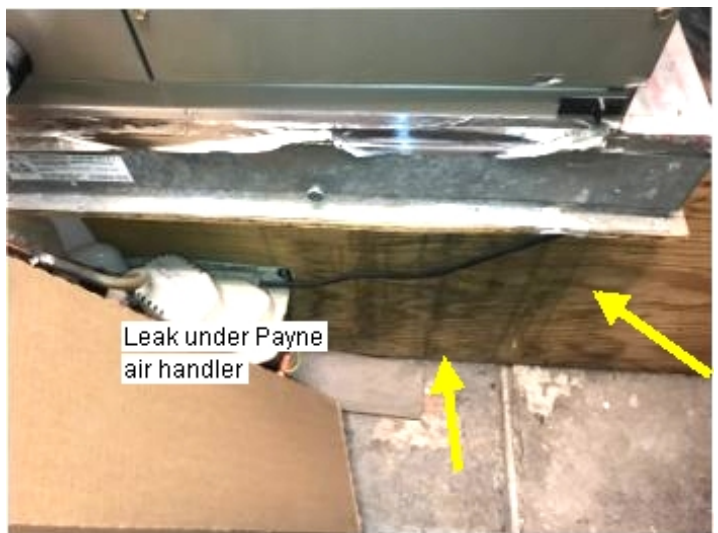
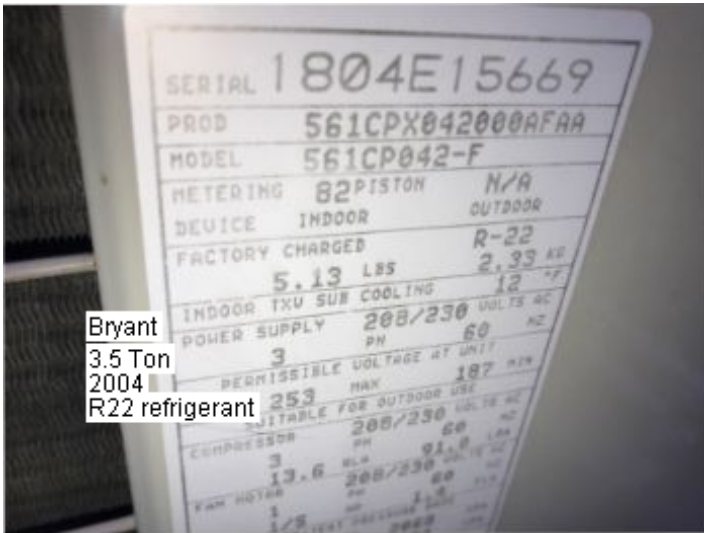
Materials: There are several small HVAC systems on the property. The exterior compressors are Trane and Bryant. The Trane was made in 2008 and the Bryant made in 2004. Both units use R22 refrigerant. Both appear to be end of life.

Observations:

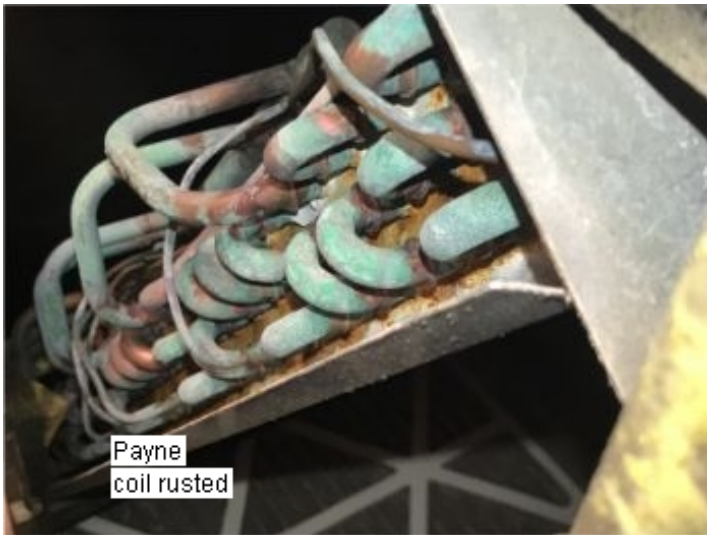
- Units were not able to be tested.
- The interior units are Payne and Trane and both are end of life with rusted coils, etc. See photos.
- The interior closet unit (Payne) seems to indicate a previous leak.
- There are blowers located throughout the building in the main work areas. The second floor blower unit was tested for Mold.
- Space heaters in the loading dock were not able to be tested.



Heating Equipment Continued



Heating Equipment Continued



Payne
coil rusted



Heaters/fans in loading dock not tested



Air blower second floor
Tape sampled for mold

Heating Equipment RTU

1. Heating Equipment Comments

Ventilation

1. Ventilation Comments

Observations:

- HVAC duct work was crushed or missing insulation throughout the entire building. Recommend review by licensed Mechanical contractor.

Ventilation Continued



Controls

1. Thermostats

Observations:

- Thermostats were not able to be tested.

Cooling Equipment

I. The inspector should inspect:

- Multiple air conditioning compressor installations, such as a building with multiple tenant spaces, and verify that each compressor is clearly and permanently identified with the respective space supplied.
- The central cooling equipment using normal operating controls.
- And verify that a luminaire and a receptacle outlet are provided at or near the appliance.
- And verify that a permanent means of access with permanent ladders and/or catwalks is present

Cooling Equipment Continued

for equipment and appliances on roofs higher than 16 feet.

E. And verify the presence of level service platforms for appliances on roofs with a 25 percent slope or greater.

F. Wood framing for cutting, notching and boring that might cause a structural or safety issue.

G. Pipe penetrations in concrete and masonry building elements to verify that they are sleeved.

H. Piping support.

I. For connectors, tubing and piping that might be installed in a way that exposes them to physical damage.

J. For the potential of flooding and evidence of past flooding that could cause mold in ductwork or plenums.

K. Condensate drains.

1. Cooling Equipment Comments

Materials: Unit Location: Exterior

• Name of Manufacturer is: Carrier, York • The type of cooling system installed is a Chiller. • The heat generation for this unit is:Electricity. • The age of the unit is: 1-3.

Observations:

• There are no current service records that we could locate, (usually they are attached to the equipment or nearby in the same room). We recommend that these units be serviced at least twice annually to maintain and extend the life of the equipment. Since we are uncertain as to whether regular servicing of this equipment has been done and are only able to inspect the unit visually from the exterior, we recommend that you have an HVAC technician service and examine this unit as needed. It may also be appropriate to enter into a maintenance contract with a commercial HVAC company.

• **The Chiller had two coils/systems and 4 air handlers (one for each floor). The air handlers were end of life. The chiller had one side low on coolant and the other had no coolant left at all. The system is a 2019 York. Recommend full review of system to determine cause of refrigerant leaks and to recharge system for proper testing/evaluation.**

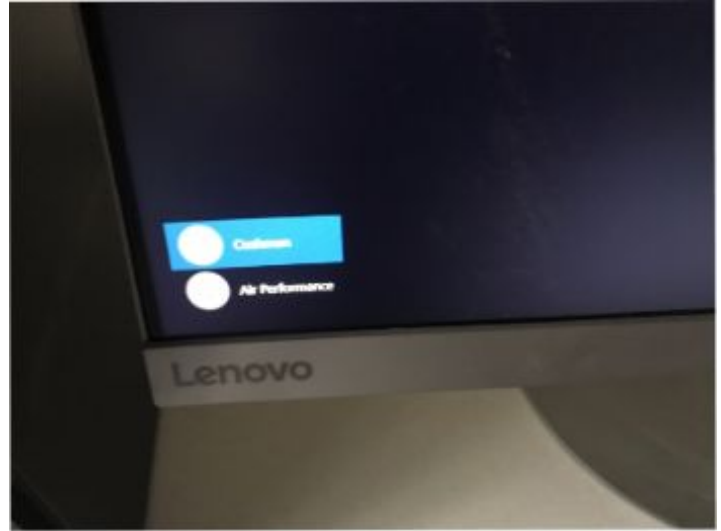
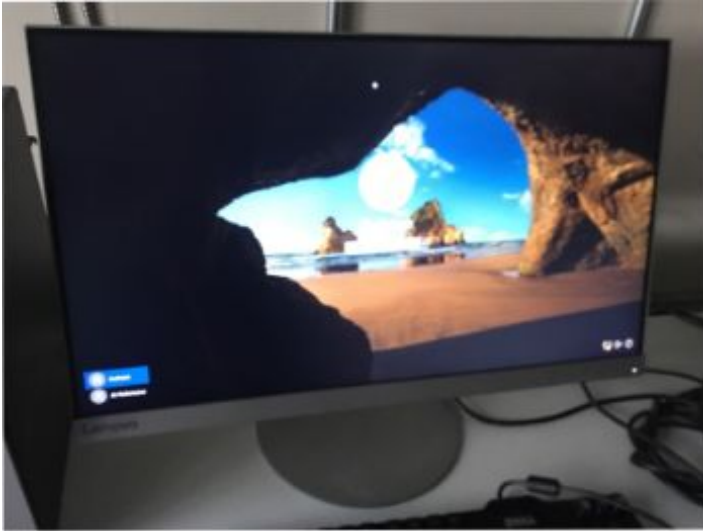


Cooling Controls

1. Thermostats

Observations:

- Condition is unknown, as I was unable to test this system as it requires a password.



Plumbing Distribution

I. The inspector should inspect:

- And verify the presence of and identify the location of the main water shutoff valve to each building.
- And verify the presence of a backflow prevention device if, in the inspector's opinion, a cross connection could occur between water distribution system and nonpotable water or private source.
- The water heating equipment, including combustion air, venting, connections, energy sources, seismic bracing, and verify the presence or absence of temperature-pressure relief valves and/or Watts 210 valves.
- And flush a representative number of toilets.
- And run water in a representative number of sinks, tubs, and showers.

Plumbing Distribution Continued

- F. And verify that hinged shower doors open outward from the shower and have safety glass conformance stickers or indicators.
- G. The interior water supply including a representative number of fixtures and faucets.
- H. The drain, waste and vent systems, including a representative number of fixtures.
- I. And describe any visible fuel storage systems.
- J. The drainage sump pumps and test pumps with accessible floats.
- K. And describe the water supply, drain, waste and main fuel shut-off valves, as well as the location of the water main and main fuel shut-off valves.
- L. And determine if the water supply is public or private.
- M. The water supply by viewing the functional flow in several fixtures operated simultaneously and report any deficiencies as in need of repair.
- N. And report as in need of repair deficiencies in installation and identification of hot and cold faucets.
- O. And report as in need of repair mechanical drain-stops that are missing or do not operate if installed in sinks, lavatories and tubs.
- P. And report as in need of repair commodes that have cracks in the ceramic material, are improperly mounted on the floor, leak, or have tank components which do not operate.
- Q. Piping support.

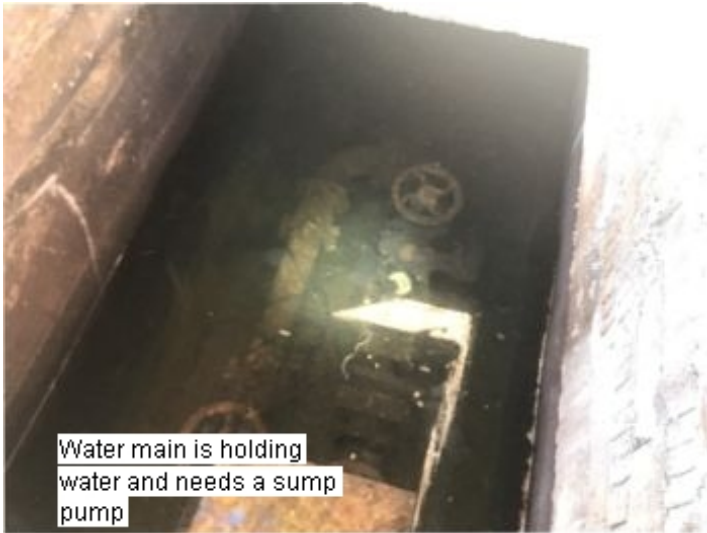
1. Supply Piping System

Observations:

• **Damage/Defects noted at: water main which is submerged under water. Rusted pipes noted at exterior in upper roof section. The water supply pump was running and discharging a large amount of water ; the pressure was measured at 160 (max) which is a concern. The water supply tank bladder is suspected to be defective. The main water back flow valve supports are rusted and end of life. See photos.**



Plumbing Distribution Continued



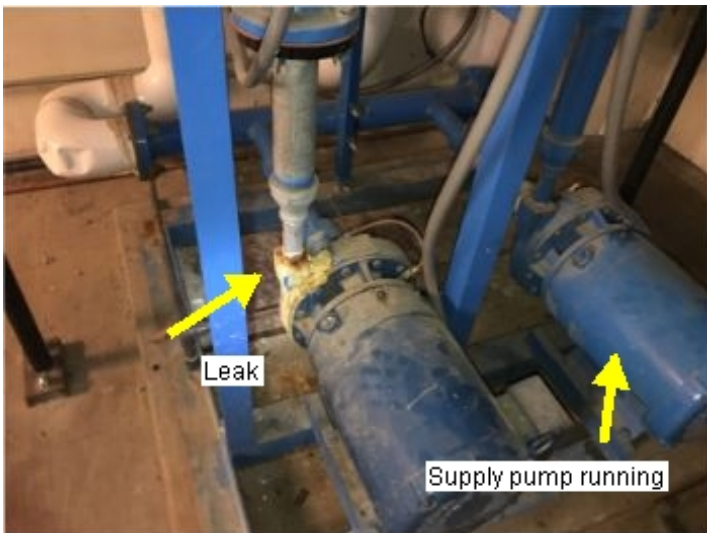
Water main is holding water and needs a sump pump



Supply water for building being pumped out at aggressive rate



Check tank bladder pressure relief valve releasing water



Leak

Supply pump running



Pressure too high on active supply pump

Plumbing Distribution Continued



2. Waster Piping System

Observations:

- There is a pipe or conduit on the West side with an open hole to the interior.
- There is a roof vent that is the incorrect height.
- There is a drain pipe next the left of the loading dock that is dripping/leaking. Source of water/drainage could not be determined.



3. Natural Gas Piping System

Materials: The fuel type is natural gas.

Observations:

- The gas system for this structure appears to be in serviceable condition at all areas which were visible

Plumbing Distribution Continued



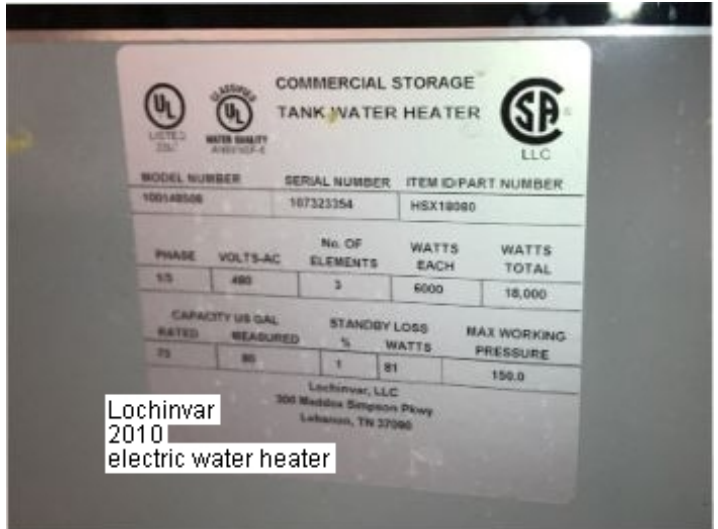
Gas meter NE corner of property

Water Heater

1. Water Heater Comments

Observations:

- The water heater is a Lochinvar made in 2010. It is electrically heated with 3 heating elements. it could not be tested at the time of the inspection.



Lochinvar 2010 electric water heater

Water Heater 2

1. Water Heater Comments

Fixture

1. Number and Type of Bathrooms

Materials: There are 8 bathrooms present. • There are 4 male bathrooms. • There are 4 female bathrooms.

2. Toilet(s)

Observations:

- Main toilets were abandoned and could not be used.
- Some urinals were "dry" meaning no water.



3. Sink(s)

Observations:

- No sinks were active or able to be tested.

Fixture Continued



4. Tub(s) and Shower(s)

5. Basin(s)

Observations:

- Mop sinks were present on each floor. The third and fourth floor basins were end of life; heavily stained or leaking.



Service Conductors

I. The inspector should inspect:

- A. The service drop/lateral.
- B. The meter socket enclosures.
- C. The service entrance conductors and report on any noted conductor insulation or cable sheath deterioration.
- D. The means for disconnecting the service main.
- E. The service entrance equipment and report on any noted physical damage, overheating, or

Service Conductors Continued

corrosion.

F. And determine the rating of the service amperage.

G. Panelboards and overcurrent devices and report on any noted physical damage, overheating, corrosion, or lack of accessibility or working space (minimum 30 inches wide, 36 inches deep, 78 inches high in front of panel) that would hamper safe operation, maintenance or inspection.

H. And report on any unused circuit breaker panel openings that are not filled.

I. And report on absent or poor labeling.

J. The service grounding and bonding.

K. A representative number of switches, receptacles, lighting fixtures and AFCI protected receptacles. Although a visual inspection, the removal of faceplates or other covers or luminaires (fixtures) to identify suspected hazards is permitted.

L. And report on any noted missing or damaged faceplates or box covers.

M. And report on any noted open junction boxes or open wiring splices.

N. And report on any noted switches and receptacles that are painted.

O. And test a representative sample of Ground Fault Circuit Interrupter (GFCI) devices and GFCI circuit breakers observed and deemed to be GFCI's during the inspection using a GFCI tester.

P. And report the presence of solid conductor aluminum branch circuit wiring if readily visible.

Q. And report on any tested GFCI receptacles in which power was not present, polarity is incorrect, the cover is not in place, the ground fault circuit interrupter devices are not installed properly or do not operate properly, any evidence of arcing or excessive heat, or where the receptacle is not grounded or is not secured to the wall.

R. And report the absence of smoke detectors.

S. And report on the presence of flexible cords being improperly used as substitutes for the fixed wiring of a structure or running through walls, ceilings, floors, doorways, windows, or under carpets.

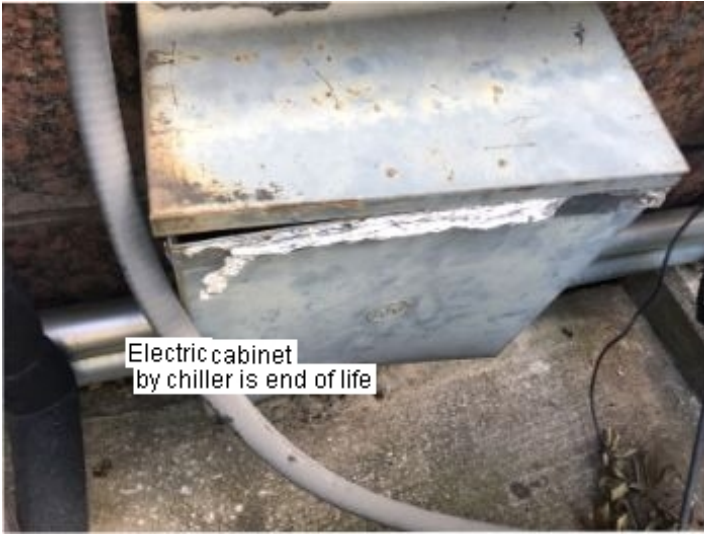
1. Electric Service Comments

Observations:

- There are several live wires and open junction boxes throughout. Be careful many hazards throughout.
- Some receptacles are no live throughout (mostly on the south side of building).
- See photos



Service Conductors Continued



Electric cabinet by chiller is end of life



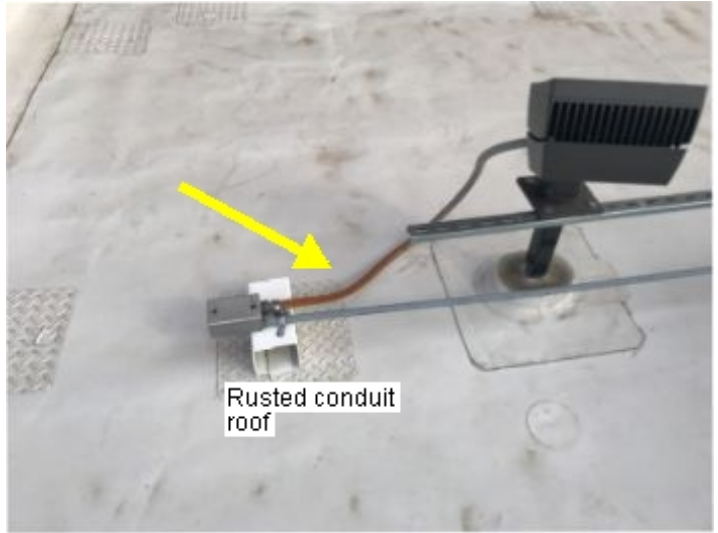
Exposed live wiring throughout



Many receptacles not live throughout
Most on south end of building



Service Conductors Continued



Panels

1. Panels and Switchboards

Observations:

- The breaker boxes appeared to be functional and satisfactory.

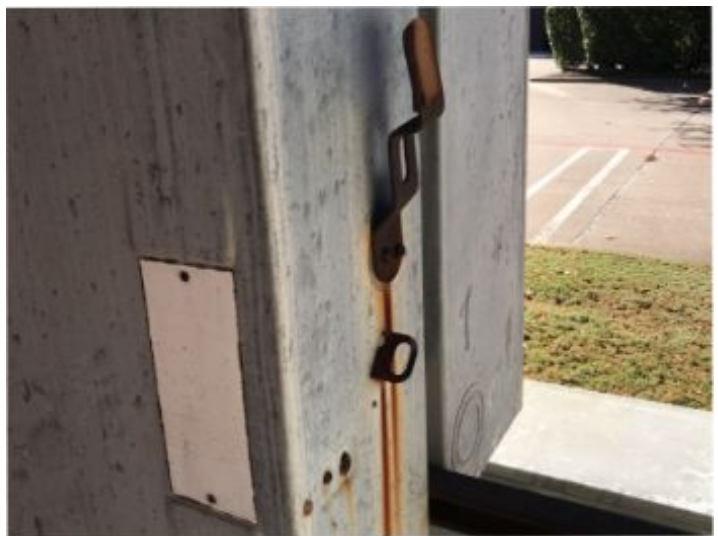
Distribution

1. Transformers

Observations:

- There are several electric distribution centers located in the NW corner of the property. There is a hose connected to one that leads to the rain gutter. Inquiry into what this is for is recommended.
- See photos

Distribution Continued



2. Distribution Conductors

3. Switches and Outlets

4. Lighting

Observations:

- Much of the lighting could not be tested.

Fireplace(s)

1. Fireplace Comments

Insulation

- I. The inspector should inspect:
- A. The insulation in unfinished spaces.
 - B. The ventilation of attic spaces.
 - C. Mechanical ventilation systems.
 - D. And report on the general absence or lack of insulation.

1. Insulation

Interior Spaces

1. Floors and Floor Coverings

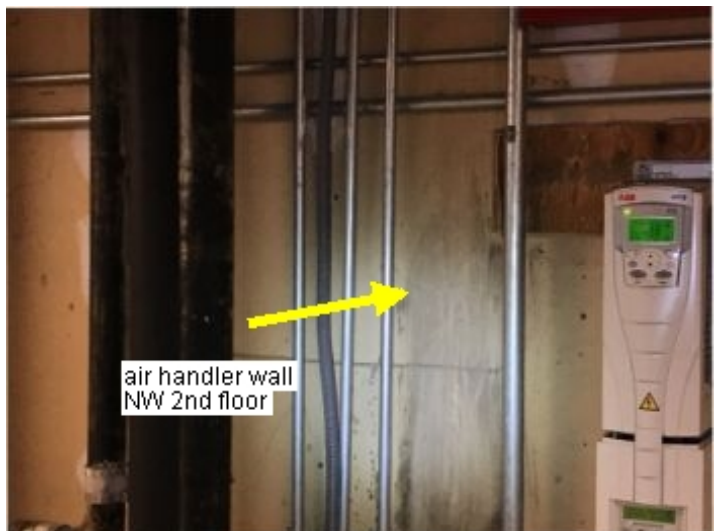
Observations:

- Floors and floor coverings appear to be in serviceable condition
- The majority of floor coverings are Concrete

2. Walls and Wall Coverings

Observations:

- Two possible water leaks were noted in the north stairwell 3rd floor and in the mechanical room on 3rd floor. As well as in HVAC closet on first floor.



Interior Spaces Continued

3. Ceilings

Observations:

- The ceilings are comprised of Drop down T-Bar Panels.
- Moisture stains were noted throughout the 3rd and 4th floors. Suspect the fire system maybe be failing or rusting from the inside out.



Interior Spaces Continued



Interior Doors

1. Interior Doors

Observations:

- Interior doors were satisfactory.

Vertical Transportation

1. Elevators

Observations:

- The elevators in this structure were run on each floor and a up to date permit was documented if present. The north elevator is deficient and does not open correctly when it reaches a floor; its permit was not present either. The south elevator functioned as commanded and had a valid permit. The lift equipment and controls were open and appeared to need service (4th floor). Recommend review by licensed elevator contractor.
- The rails in the stairwells were working as directed.
- The south stairwell was missing proper lighting in various areas.
- The elevator command controls were loose in the wall on most floors.

Vertical Transportation Continued



South elevator

Vertical Transportation Continued



2. Escalators

3. Stairways and Landings

Observations:

- Stairways and landings are in serviceable condition

Windows

1. Window Comments

Observations:

- No windows were noted as damaged or cracked; all appeared satisfactory.

Fire Protection

I. The inspector should:

- Inspect fire access roads and report on any obstructions or overhead wires lower than 13 feet 6 inches.
- Inspect the address or street number to determine that it is visible from the street with numbers in contrast to their background.
- Inspect and determine that a 3-foot clear space exists around the circumference of fire hydrants.
- Verify that hinged shower doors open outward from the shower and have safety glass conformance stickers or indicators.
- Inspect to determine that the storage of flammable and combustible materials are orderly, separated from heaters by distance or shielding so that ignition cannot occur, and not stored in exits, boiler rooms, mechanical rooms, or electrical equipment rooms.
- Inspect to determine that a "No Smoking" sign is posted in areas where flammable or combustible material is stored, dispensed, or used.
- Inspect for the presence of fire alarm systems.
- Inspect for alarm panel accessibility.
- Inspect for the presence of portable extinguishers and determine that they are located in

Fire Protection Continued

conspicuous and readily available locations immediately available for use and not obstructed or obscured from view.

J. Inspect to determine that a portable fire extinguisher exists within a 30 foot travel distance of commercial-type cooking equipment that uses cooking oil or animal fat.

K. Inspect to determine that manual actuation devices for commercial cooking appliances exist near the means of egress from the cooking area, 42-48 inches above the floor, 10-20 feet away, and clearly identifying the hazards protected.

L. Inspect to determine that the maximum travel distance to a fire extinguisher is 75 feet.

M. Inspect for the presence of sprinkler systems and determine if they were ever painted other than at the factory.

N. Inspect for the presence of emergency lighting systems.

O. Inspect for exit signs at all exits and inspect for independent power sources such as batteries.

P. Inspect for the presence of directional signs where exit location is not obvious.

Q. Inspect for the presence of signs over lockable exit doors stating "This Door Must Remain Unlocked During Business Hours."

R. Inspect for penetrations in any walls or ceilings that separate the exit corridors and/or stairwells from the rest of the building.

S. Inspect for fire separation doors that appear to have been blocked or wedged open or that do not automatically close and latch.

T. Inspect exit stairwell handrails.

U. Inspect for exit trip hazards.

V. Inspect for the presence of at least two exits to outside or one exit that has a maximum travel distance of 75 feet.

W. Inspect exit doorways to determine that they are not less than 32 inches in clear width.

X. Inspect to determine that the exit doors were not locked from the inside, chained, bolted, barred, latched or otherwise rendered unusable at the time of the inspection.

Y. Inspect to determine that the exit doors swing open in the direction of egress travel.

Z. Inspect the storage at the time of the inspections to determine if it is potentially obstructing access to fire hydrants, fire extinguishers, alarm panels, or electric panel boards, or if it is obstructing aisles, corridors, stairways or exit doors, or if it is within 18 inches of sprinkler heads or if it is within 3 feet of heat generating appliances or electrical panel boards at the time of the inspection.

1. Fire Hydrant

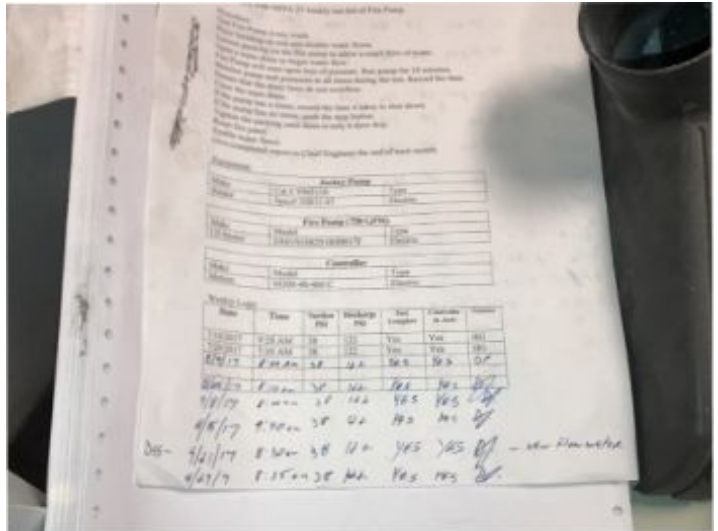
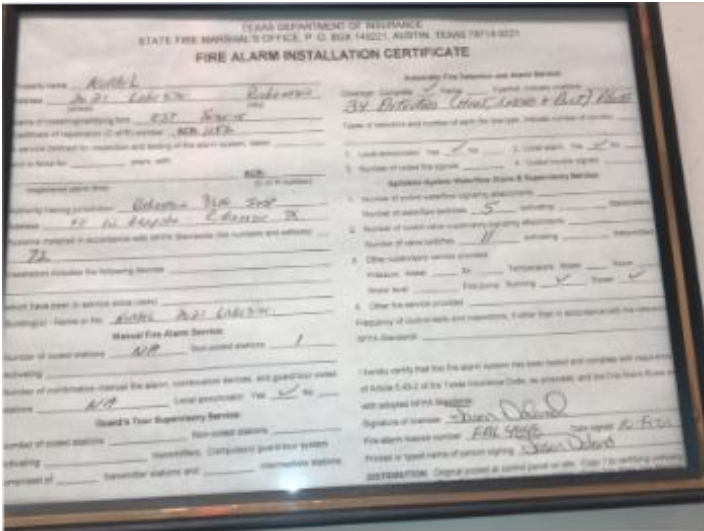


Fire Protection Continued

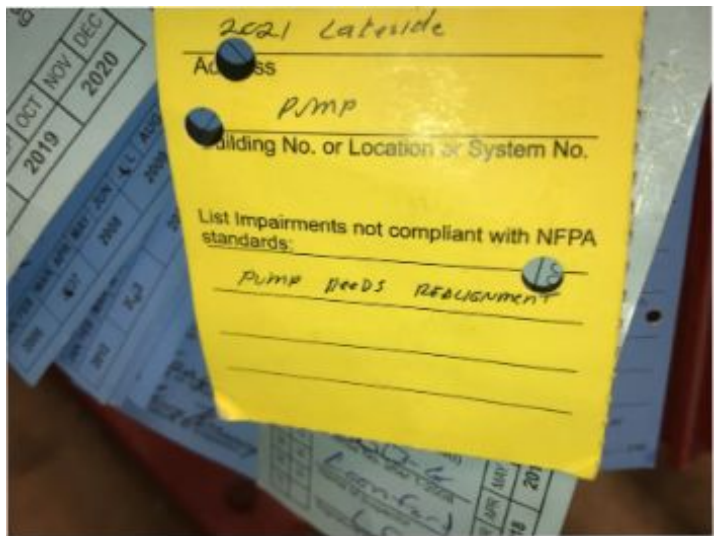
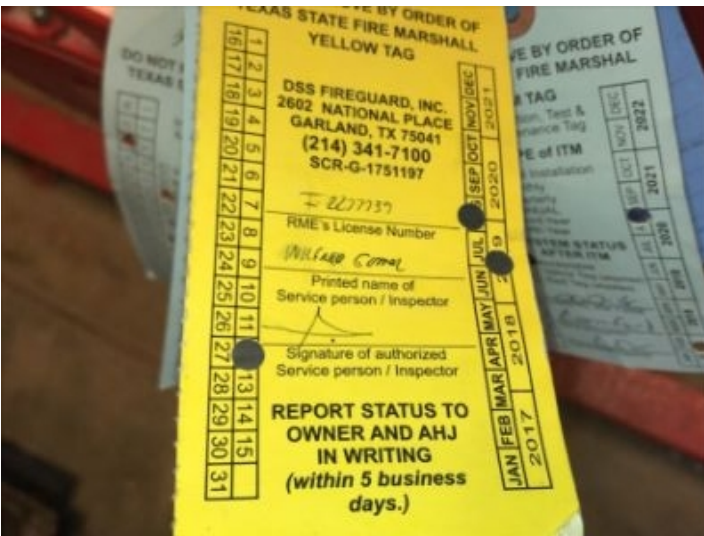
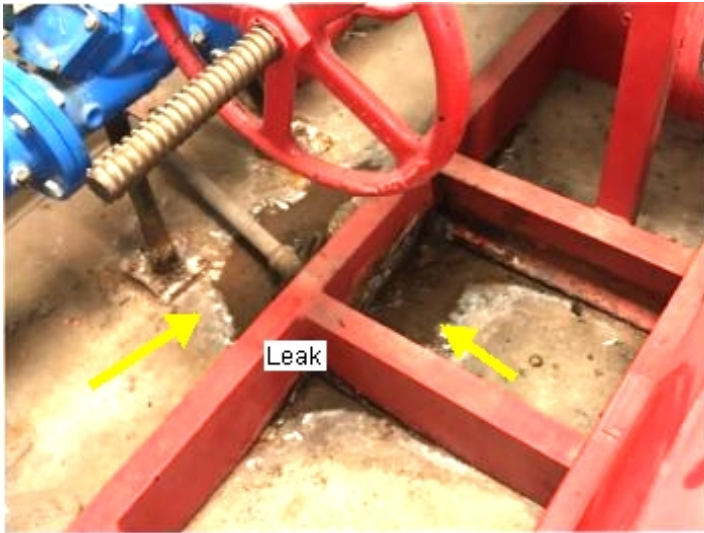
2. Sprinklers and Standpipes

Observations:

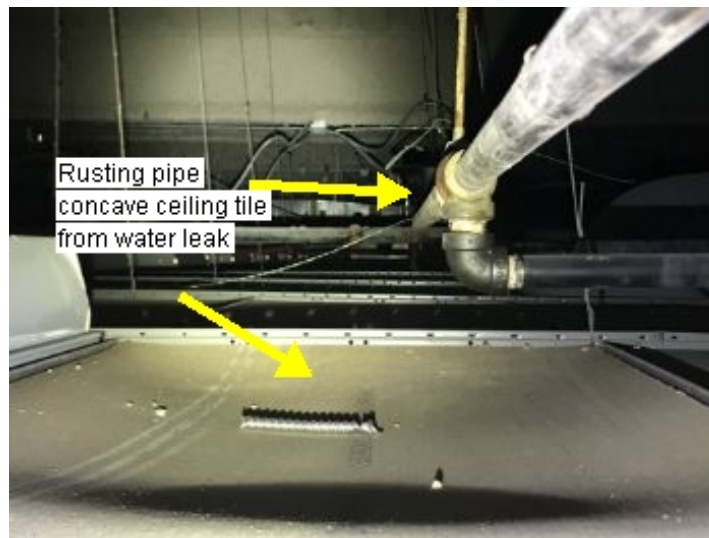
- A fire sprinkler system is installed for this structure, but inspection of these components is beyond the scope of this assessment.
- Various leaks were noted at the pump and the sprinkler pipes. Recommend review by specialized qualified contractor.



Fire Protection Continued



Fire Protection Continued

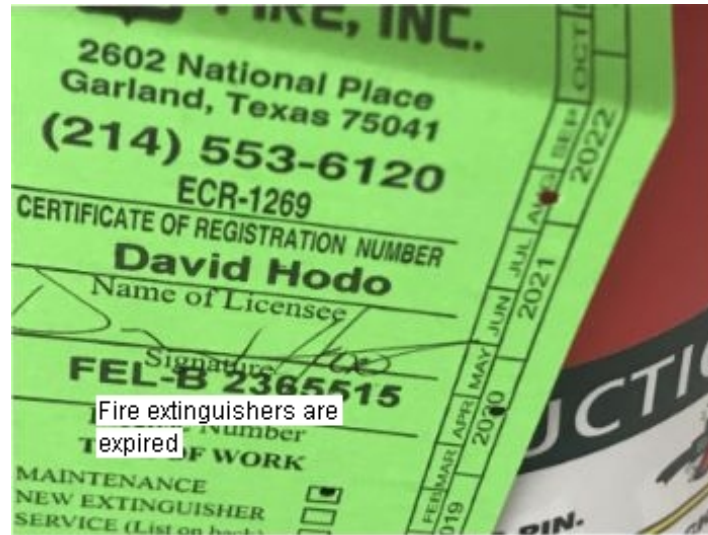


3. Fire Extinguishers

Observations:

- All fire extinguishers have expired green tags.

Fire Protection Continued



4. Fire Alarm Systems

Observations:

- A fire alarm system appears to be installed for this structure, however, these are beyond the scope of this assessment.

5. Smoke Walls and Fire Corridors

Commercial Kitchens

1. Appliances

2. Fire Suppression

Ventilation

1. Ventilation Comments

Recommendations and Further Evaluation



Recommendations and Further Evaluation Continued

1. Recommendations for Further Evaluation

Observations:

- Due to the type or number of HVAC issues which were found, we believe that someone other than the HVAC technician who has been working on this system. Therefore, we recommend that a properly licensed and qualified HVAC professional examine the entire system and make recommendations for correction.

- Due to the type or number of electrical hazards which were found, we believe that someone other than an electrician has been working on this system. Therefore, we recommend that a properly licensed and qualified electrician examine the entire electrical system and make recommendations for correction.

- We recommend that you check with the local building authority to determine if the additions/remodeling which was apparently performed on this structure were done with the proper permits and if the final inspection was signed off by the building department.

- An ADA checklist was completed and is present at the end of the document.

- A Wood Destroying Insect inspection and related report was included. No visual evidence of an infestation or activity was noted.
Regular pests (roaches, etc.) were noted.
Rat traps were noted but appeared abandoned.
Recommend regular pest control.

- We recommend that mold testing be performed on this/these structure(s) by a qualified mold specialist. There are moisture stains in this/these building(s) which may be an indication of a past or present water leaks, and there may also be visible organic growth in some locations, (if we found any visible growth it will be noted in the body of the report). The words "moisture" and "organic growth" go hand-in-hand with one another. Whenever you see the word "moisture", "water stains", "moisture intrusion", "leakage", etc. in this report, it brings with it the possibility of organic growth which can be mold, mildew, or a number of other substances. Organic growth is everywhere in our environment, outdoors and indoors, and in most cases it is not believed to be harmful, however, some organic growths have been found to be mold. Mold grows in a wide variety of types and species and different molds can be pathogenic, allergenic or even toxic in some cases. It is impossible to determine which category a particular mold falls into without proper testing. It has been recently discovered that some molds can be a serious health concern for some people, especially some of the molds that grow because of a moisture condition in wall and ceiling cavities. Moisture in these framing cavities can create mold which may not become visible until it has progressed to an advanced stage.

- Possible visual mold indicators were noted on the 2nd floor, 3rd floor, 4th floor, in ceiling tiles and with wall paints etc. The air blower on the 2nd floor appeared to have mold growth as did spray fire stop above the 2nd floor air blower. The inspector is a Texas Licensed Mold Inspector MAT1313. See details below for results of mold testing.

- The Inspector is not a physician and cannot advise on medical conditions or the habitability of a home/structure

Recommendations and Further Evaluation Continued

What does mold require:

Mold requires water, food, and oxygen to grow. It also requires an environment with a temperature it can survive. While mold cannot spread without these conditions, its spores may survive in a dormant state until conditions are suitable.

Temperature: Most molds cannot grow below 40° F. This is why food is typically refrigerated at 39° F. Mold grows best between 77° F and 86° F, especially if the air is humid.

Water: Molds thrive in damp, humid, and wet conditions. They require water to grow and spread, which is why it is recommended to keep homes – especially walls and carpets – as dry as possible. Water leaks, flooding, high humidity, and condensation all provide moisture mold can use to grow and spread.

Oxygen: Molds are obligate aerobes. This means that they need oxygen to survive. Mold grows even at very low concentrations of oxygen, however, which makes it difficult to fight mold growth by limiting oxygen.

Food: Mold grows on materials that it can digest – and it can digest a lot. It can metabolize virtually any organic (carbon-containing) matter in nature, making it impossible to remove all food sources of mold from your environment.

What can mold grow on?

Mold grows on materials it can digest and use to spread. Consequently, it may grow on any organic material. Substances from wood and paper products to dust containing dead skin cells provide organic 'food' for mold. Mold grows on and digests some synthetic materials like paints, adhesives, and textiles as well. Mold is unable to digest inorganic materials (such as concrete, glass, and metal), but it can digest and grow on the dirt, dust, and organic residue that accumulates on them. How does mold affect the surfaces it grows on?

Since mold eats the materials it grows on, those materials end up damaged or degraded. Unchecked mold can cause cosmetic damage and staining, unpleasant odors, and even the structural degradation of the surfaces. Mold digests the carbon in the surface it is growing on. While doing this, it breaks down the material bit by bit. The digestive enzymes eventually destroy the material, and the mold grows and spreads further to consume energy from more material. It's important to identify the cause of any mold on your property and remove and remediate the mold as soon as possible.

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General guidelines and comments about spore counts Air Sample Report"

.0-50 spores – these trace levels are not an issue. Even *Stachybotrys* is not considered an issue if the sample does not also contain water markers like *Chaetomium* and *Fusarium* or high levels of *Penicillium/Aspergillus*.

50-200 spores – still very low levels; the toxic mold species *Stachybotrys* and *Memmoniella* are the only species to be considered an issue at this level.

200-500 spores – the most common species (*Penicillium/Aspergillus*, *Cladosporium* and

Recommendations and Further Evaluation Continued

Curvularia) are not an issue and stay within the normal range.

500-1500 spores – sometimes the Penicillium/Aspergillus & Cladosporium levels are in this range and do not require remediation. If water intrusion or mold was not found during the, these levels can be caused by normal life in an enclosed environment.

1500-3000 spores – this point indicates that an issue may be apparent, unless a corresponding number in the outdoor sample exists. If water intrusion or mold issue wasn't found, these levels can be achieved by a dusty home or **A/C** system. An inspection is warranted.

3000-10,000 spores – without a corresponding number in the outdoor sample, some remediation is necessary. A perimeter clean-up is needed if a mold spore source has been identified. If water intrusion or mold issue wasn't found, the home may need to be cleaned and the duct system should be evaluated.

10,000-25,000 spores – without a corresponding number in the outdoor sample, a mold spore source is usually identified and remediation is needed. If no water intrusion or mold issue was found, the duct system may need to be cleaned and a general cleaning of the residence.

25,000-75,000+ spores – a mold issue will be easy to identify. Clean up will be required and should be performed by a Professional Mold Remediator.

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It is recommended you consult with a physician immediately if you have any of these symptoms

The Inspector is not a physician and cannot advise on medical conditions or the habitability of a home/structure

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Interpretation of Air Test Results

One of the most widely accepted methods of assessing indoor air quality and its effects on a building's occupants is the analysis of indoor air samples. Most often, these air samples are acquired using portable vacuum pumps that are calibrated to pull air through a tube at a specific volume of air per minute. The air that is pulled into the pump is trapped in a specially made cassette that contains an adhesive slide.

Fungal spores, insect and skin fragments, and other airborne particulate matter are deposited onto the adhesive slide, which is then analyzed under a microscope. The analysis of these slides can provide results relatively quickly because the samples do not require culturing or growing the fungal spores. Some of the mold types, however, produce spores that are so similar as to not be distinguishable by visual analysis alone and are therefore grouped together; e.g., Aspergillus/Penicillium. Still other spore types lack identifiable characteristics and therefore are counted as part of a larger group, such as Ascospores and Basidiospores.

Typically, the assessment of indoor air quality takes into account not only the analysis of the indoor air samples but also the comparison of these results to levels of fungi and other airborne matter in an outdoor baseline air sample. Spore count levels in indoor air samples generally should be lower than levels in outdoor air samples. Indoor spore counts that are lower than outdoor spore counts, however, do not automatically indicate that the indoor air quality is acceptable. Higher counts of individual types of spores or a higher count of the total spores in indoor samples may indicate mold growth inside buildings. The conclusion that indoor mold growth is occurring is strengthened

Recommendations and Further Evaluation Continued

further if mold spores' flowering bodies –called hyphae –also are identified in the indoor air sample.

There are other considerations to keep in mind when comparing outdoor baseline spore counts to indoor spore counts. The outside aerobiology is not constrained because of the variable, changing outside weather. For example, in the winter season, the spore count is always low in the outside sample. Similarly, rainy weather causes spores to be washed away or tamped down onto outside surfaces, resulting in lower counts in air samples. Also, in warmer weather, the evaporation process causes mold spores to rise in the air as well.

Outside air, furthermore, has less of an influence on indoor air quality than it has in the past due to tighter, more energy efficient buildings as well as people's tendency to leave windows closed and rely on indoor air conditioning. As a result, when spores of particular species of mold –Stachybotrys and Chaetomium, for example –are found in indoor samples, even in a low count, their presence indicates a serious indoor mold issue because these mold types are not found in outdoor samples.

Air samples and all sampling are a snap shot time. Results can vary and change by the minute, hours or day, after a sample is taken." It is recommended that additional testing be done after treatment/action is taken to determine the effects and if any other measures should be taken.

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Lab results showed:

1. High levels of Cladosporium in the air samples on the 2nd floor, 50.3%. Moderate levels on 3rd floor 24.7%
2. High levels of Aspergillus/Penicillium 2nd floor; 49.5%; moderate levels on 3rd floor 72.6%,
3. Low levels of Stachybotrys/Memnoniella were detected on 2nd, 3rd, 4th floors.

Cladosporium, Aspergillus/Penicillium and Stachybotrys/Memnoniella is a concern

In general there is more cause for concern when spore counts get above 500 spores; but Stachybotrys/Memnoniella since it is slow growth mold and often takes 1-2 weeks to grow/colonize is indicative of a major water event. Furthermore its presence on the air blower in the second floor indicates spores have been spread by the HVAC throughout other areas of the building.

The Inspector is not a physician and cannot advise on medical conditions/treatments or the habitability of a home/structure.

Cladosporium: is a concern. Cladosporium is a common mold that may affect your health. It can cause allergies and asthma in some people. In very rare cases, it can cause infections. Most species of Cladosporium aren't dangerous to humans.

Cladosporium can grow both indoors and outdoors. Spores from the mold can be airborne, which is also how the mold spreads.

This type of mold is more common in areas with humidity, moisture, and water damage.

Exposure to Cladosporium affects people in different ways. Some people may develop an allergic reaction, while others may not.

Symptoms of an allergic reaction vary. It's possible to have symptoms year-round, or only during specific months. Your symptoms may be worse in damp areas or in areas with a higher concentration of mold.

Symptoms of an allergic reaction may include:

dry skin
sneezing

Recommendations and Further Evaluation Continued

- stuffy nose or runny nose
- coughing
- postnasal drip
- itchy throat, eyes, and nose
- watery eyes

An allergic reaction to mold may become serious in some cases. Severe reactions include:
serious asthma attacks
allergic fungal sinusitis

You may have an allergic reaction and asthma at the same time. Symptoms of an allergic reaction and asthma include:

- coughing
- tightness in your chest
- wheezing
- difficulty breathing or shortness of breath

www.healthline.com/health/cladosporium#allergies

It is recommended you consult with a physician immediately if you have any of these symptoms.

Aspergillus/Penicillium: Penicillium /Aspergillus – the most common mold species to appear in indoor air samples. The majority of the hundreds of sub-species are allergenic; only a few are toxic. This group of species only grows with the humidity in the air as its water source. Aspergillus mold is a very common type of mold that grows both indoors and outdoors and is found virtually all over the world. Most people who breathe in this type of mold have no reaction to it at all. However, for those people who are allergic to the mold aspergillus (a condition known as allergic aspergillosis), it can cause an immune response in the body that may include reactions such as high fever, asthma attacks, and in extreme cases, coughing up blood and mucus (referred to as hemoptysis).

Memmoniella is a cellulolytic fungus, meaning that it thrives in the presence of **cellulose**. It is a common contaminant of wet gypsum board, particularly in warmer climates. It also frequently grows in insulation material and can occasionally be found developing on composite wood and ceiling tiles. Memmoniella, a close relative of the infamous Stachybotrys molds, is a mold that commonly develops on water damaged construction material.

Similar to Stachybotrys species, Memmoniella species are also tertiary colonizers. This means that they often appear last, i.e. only after the substrate has been colonized by primary and secondary colonizers such as Aspergillus, Penicillium or Cladosporium. Memmoniella are slow growing on artificial media and natural substrates. Because of this slow growth, it is often overgrown by faster growing fungi such as Aspergillus, Penicillium

The Effects of Memmoniella Mold

All types of mold in large concentration can be an allergen to its host, including Memmoniella mold. Although it does not usually produce life-threatening health problems, it can seriously affect asthma sufferers and persons with various common allergies. The body's reaction to allergenic mold tends to be somewhat mild, depending on individual sensitivities. The most typical symptoms include throat irritation, eye and nose itchiness and rashes. Spending time in a closed-in area that is infected with mold and mildew can eventually erode a person's autoimmune system, causing symptoms to gradually increase in severity. Long-time exposure can affect other systems of the body as well.

As with all mold, the concentration levels of the spores in the air determine the health effects that come from the inhalation of basidiospores. A minimal presence may not pose much of a health risk or even be detected at all. However, spores that grow into large colonies can be dangerous and in some cases, deadly. The possible ailments from basidiospores range from a number of mild to severe symptoms, including:



Recommendations and Further Evaluation Continued

- Pneumonia-like symptoms
- Cryptococcal meningitis (an infection of the lining of the spinal cord and brain)
- Asthma
- Eczema (skin lesions that are red, itchy or may become scaly or crusty)
- Allergic Alveolitis (an inflammation of the alveoli within the lungs caused by hypersensitivity to inhaled organic dusts)
- Fatigue
- Headaches
- Depression
- Nasal Stuffiness
- Sneezing
- Congestion
- Plugged Ears
- Watery Eyes
- Itchy Skin
- Throat Irritation
- Rash
- Hives

It is recommended you consult with a physician immediately if you have any of these symptoms
www.bustmold.com

The BrickKicker Mold Assessment Technician License MAT1313

- Recommend further testing and evaluation by Texas licensed Mold Remediator.

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It is recommended you consult with a physician immediately if you have any of these symptoms

The Inspector is not a physician and cannot advise on medical conditions or the habitability of a home/structure

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It is recommended you consult with a physician immediately if you have any of these symptoms

The Inspector is not a physician and cannot advise on medical conditions or the habitability of a home/structure

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Eight indoor air samples were taken and were compared to two outdoor samples (Rear of building [West] and front of building [East]) which were the control samples. HVAC units were not adjusted and allowed to run as they were found at the time of entrance to the building. In each case the air sampling unit was moved to a central location for that HVAC unit to ensure proper collection of air sampling.

The air samples show high counts for Aspergillus/Penicillium and Cladosporium on the 2nd floor toward the bathrooms in the main space and some elevated amounts of both of these molds on the 3rd floor directly above as well. Stachybotrys/Memnoniellas in small amount was detected on the 2nd, 3rd, 4th floors. Stachybotrys is known as “black mold” and it is a slow growth mold. Meaning it often takes two weeks or more to grow; most molds grow/colonize in 1-2 days after a water event inside a structure. Stachybotrys presence in air samples needs to be further investigated especially if no spores are found within the air control samples.

Recommendations and Further Evaluation Continued

The actual lab results are included at the end of this report. The “E” indicator in the report represents the NE side of the main open area, the “W” indicates the same area but at the opposite end away from the bathrooms. The EXT samples were the control samples. In general any Count/M higher inside than outside requires further evaluation; any extremely high counts indicate a mold infestation. See report notes for details.

One tape sample was taken on the second floor on the surface of the exposed air blower where existing water damage had occurred, closest to the bath rooms in the main seating area. This sample indicated the presence of Cladosporium on the unit in the medium range and the presence of Stachybotrys/Memnoniella in the rare range. Again this is approximately 1/3 inch X 1/3 inch surface area and not all spores or fungus grows evenly and therefore it is a more random sampling.

- Recommend further testing and evaluation by Texas licensed Mold Remediator.

Items Beyond the Scope of this Inspection



Items Beyond the Scope of this Inspection Continued

1. Items Beyond the Scope of this PCA

Observations:

• By conducting a commercial inspection and preparing an inspection report, the consultant merely is providing an opinion and does not warrant or guarantee the present or future condition of the subject property, nor may the inspection report be construed as either a warranty or guarantee of any of the following:

Any systems or components physical condition or use, nor is an inspection to be construed as substituting for any systems or equipments warranty transfer inspection;

Compliance with any federal, state, or local statute, ordinance, rule or regulation including, but not limited to, fire and building codes, life safety codes, environmental regulations, health codes, zoning ordinances, compliance with trade/ design standards, or standards developed by the insurance industry. However, should there be any conspicuous material present violations observed or reported based upon actual knowledge of the field observer or the inspector they should be identified in the inspection report;

Compliance of any material, equipment, or system with any certification or actuation rate program, vendors or manufacturers warranty provisions, or provisions established by any standards that are related to insurance industry acceptance/approval, such as FM, State Board of Fire Underwriters, etc.

There may be physical condition issues or certain physical improvements at the subject property that the parties may wish to assess in connection with a commercial real estate transaction that are outside the scope of this guide. Such issues are referred to as non-scope considerations, and if included in the inspection report, are identified in the "ADDITIONAL CONSIDERATIONS" Section of this report. Whether or not the client has elected to contract with us regarding non-scope considerations in connection with the ComSOP was a decision which was made by the client. No assessment of such non-scope considerations is required for a inspection to be conducted in compliance with the ComSOP.

We have attempted to be very thorough in our assessment of this property, and have strived to convey the findings to you in a way that is useful and easy to understand. We wish to thank you for your trust in regards to this very important part of your decision making process.

In addition to the summary and main body of this report, please be sure to review the supporting documentation, (if any), and photographs.

Please feel free to call us if you have questions

• The activities listed below generally are excluded from or otherwise represent limitations to the scope of a inspection prepared in accordance with the CCPIA ComSOP. These should not be construed as all-inclusive or imply that any exclusion not specifically identified is an inspection requirement under the ComSOP Guide:

Identifying capital improvements, enhancements, or upgrades to building components, systems, or finishes. The consultant must be aware of the distinction between repair and replacement activities that maintain the property in its intended design condition, versus actions that improve or reposition the property.

Removing, relocating, or repositioning of materials, ceiling, wall, or equipment panels, furniture, storage containers, personal effects, debris material or finishes; conducting exploratory probing or testing; dismantling or operating of equipment or appliances; or disturbing personal items or property, that obstructs access or visibility.

Preparing engineering calculations (civil, structural, mechanical, electrical, etc.) to determine any systems, components, or equipments adequacy or compliance with any specific or commonly accepted design requirements or building codes, or preparing designs or specifications to remedy any physical deficiency.



Items Beyond the Scope of this Inspection Continued

Taking measurements or quantities to establish or confirm any information or representations provided by the owner or user, such as size and dimensions of the subject property or subject building; any legal encumbrances, such as easements; dwelling unit count and mix; building property line setbacks or elevations; number and size of parking spaces; etc.

Reporting on the presence or absence of pests such as wood damaging organisms, rodents, or insects unless evidence of such presence is readily apparent and material during the course of the field observers walk-through survey or such information is provided to the consultant by the owner, user, property manager, etc. The consultant is not required to provide a suggested remedy for treatment or remediation, determine the extent of infestation, nor provide opinions of probable costs for treatment or remediation of any deterioration that may have resulted.

Reporting on the condition of subterranean conditions, such as soil types and conditions, underground utilities, separate sewage disposal systems, wells; systems that are either considered process-related or peculiar to a specific tenancy or use; or items or systems that are not permanently installed. Entering or accessing any area of the premises deemed to potentially pose a threat of dangerous or adverse conditions with respect to the field observers health or safety, or to perform any procedure, that may damage or impair the physical integrity of the property, any system, or component.

Providing an opinion on the condition of any system or component, that is shutdown. However, consultant is to provide an opinion of its physical condition to the extent reasonably possible considering its age, obvious condition, manufacturer, etc. Evaluating acoustical or insulating characteristics of systems or components.

Providing an opinion on matters regarding security of the subject property and protection of its occupants or users from unauthorized access.

Operating or witnessing the operation of lighting, lawn irrigation, or other systems typically controlled by time clocks or that are normally operated by the buildings operation staff or service companies.

Providing an environmental assessment or opinion on the presence of any environmental issues such as potable water quality, asbestos, hazardous wastes, toxic materials, the location or presence of designated wetlands, mold, fungus, IAQ, etc.

Glossary

Term	Definition
A/C	Abbreviation for air conditioner and air conditioning
Cellulose	Cellulose insulation: Ground-up newspaper that is treated with fire-retardant.
PVC	Polyvinyl chloride, which is used in the manufacture of white plastic pipe typically used for water supply lines.

Introduction

We would like to take this time to thank you for allowing us to perform this complete mold inspection for you. Please utilize this report along with the data from the laboratory samples obtained to confirm the presence of mold in your home/structure. If after you have read the entire report you have questions, please feel free to call us so we can review your report and answer any questions that you may have.

This report will contain defects that pertain to mold growth, moisture intrusion, and any conditions that may exist that promote the development of mold. The inspector may point out general, or safety related defects to you during the inspection should they exist but they are beyond the scope of this report. The Complete Mold Inspection which in many ways mimics a typical Home Inspection is meant to be a supplement to the Home Inspection or Property Disclosure Statement.

IAC2 Purpose and Scope

The International Association of Certified Air Consultants (IAC2) has published a Standard of Procedures which outlines the methods used in a mold inspection. This firm strives to perform all inspections in strict compliance with those standards. You will find the IAC2 standards as the heading for each section of the report. This is done to help you the client to understand what is inspected and why it is inspected.

This particular inspection while not considered to be invasive, allows for the inspector to move stored items and materials within reason as the inspector deems necessary. The inspector is not required to enter into any area of the home/structure that in the opinion of the inspector is unsafe or likely to be dangerous. Keeping this in mind, it is the intention of the inspector to attempt to do what is necessary to perform the intended inspection without endangering the health or well-being of the inspector.

The inspector would like to inform the client that he is not trained or qualified to perform architectural or engineering services. Any opinions given in this report are based on individual experience, opinion and training and are limited by such.

What We Inspect:

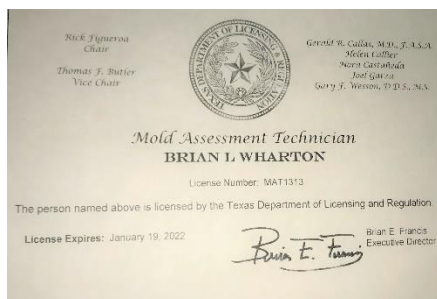
A Mold Inspection is a non-invasive visual examination of a residential dwelling, performed for a fee, which is designed to identify observed material defects within specific components of said dwelling. Components may include any combination of mechanical, structural, electrical, plumbing, or other essential systems or portions of the home/structure, as identified and agreed to by the Client and Inspector, prior to the inspection process.

A Mold inspection is intended to assist in evaluation of the overall condition of the dwelling. The inspection is based on observation of the visible and apparent condition of the structure and its components on the date of the inspection and not the prediction of future conditions.

A Mold inspection will not reveal every concern that exists or ever could exist, but only those observations made on the day of the inspection. Mold Inspections are a snap shot in time of the home/structure for that day and time of the inspection. Conditions change minute by minute, hour by hour and day by day which could and will impact ability for mold to grow. The purchaser understands and acknowledges such restrictions and

caveats upon acceptance of the mold report and releases the inspector from all liability for new concerns or observations by the purchaser after the conclusion of the in home/structure inspection.

An Inspection report shall describe and identify in written format the inspected systems, structures, and components of the dwelling and shall identify any organic growth or potential for organic growth observed. Inspection reports may contain recommendations regarding conditions reported or recommendations for correction, monitoring or further evaluation or remediation by professionals, but this is not required and any action taken is at the sole discretion of the purchaser of the report.



International Association of Certified Indoor Air Consultants

Mold Inspection Standards of Practice

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1.0 Scope

1.1 The purpose of this standard is to provide standardized procedures to be used for a mold inspection. There are two types of mold inspections described in the IAC2 Mold Inspection Standards of Practice:

- (1) Complete Mold Inspection (Section 2.0)
- (2) Limited Mold Inspection (Section 3.0)

1.2 Unless the inspector and client agree to a limitation of the inspection, the inspection will be performed at the primary building and attached parking structure. Detached structures shall be inspected separately.

1.3 A mold inspection is valid for the date of the inspection and cannot predict future mold growth. Because conditions conducive to mold growth in a building can vary greatly over time, the results of a mold inspection (examination and sampling) can only be relied upon for the point in time at which the inspection was conducted.

1.4 A mold inspection is not a home (property) inspection.

1.5 A mold inspection is not a comprehensive indoor air quality inspection.

1.6 A mold inspection is not intended to eliminate the uncertainty or the risk of the presence of mold or the adverse effects mold may cause to a building or its occupants.

2.0 Complete Mold Inspection

2.1 The inspector shall perform:

- a non-invasive visual examination of the readily accessible, visible, and installed systems and components of the building (listed in Section 4.0 Standards of Practice)
- moisture, temperature and humidity measurements (refer to Section 4.8 Moisture, Humidity, and Temperature)
- mold samples according to the IAC2 Mold Sampling Procedures (refer to Section 5.0 IAC2 Mold Sampling Procedures)

2.2 The inspector shall report:

- moisture intrusion,
 - water damage,
 - musty odors,
 - apparent mold growth, or
 - conditions conducive to mold growth;
 - results of a laboratory analysis of all mold samplings taken at the building; and
 - any system or component listed in Section 4.0 Standards of Practice that were not inspected and the reason(s) they were not inspected.
-

3.0 Limited Mold Inspection

The limited mold inspection does not include a visual examination of the entire building, but is limited to a specific area of the building identified and described by the inspector. As a result, moisture intrusion, water damage, musty odors, apparent mold growth, or conditions conducive to mold growth in other areas of the building may not be inspected.

3.1 The inspector shall describe:

- the room or limited area of the building in which the Limited Mold Inspection is performed

3.2 The inspector shall perform:

- a limited non-invasive visual examination of the readily accessible, visible, and installed systems and components located only in the room or limited area (as described in previous Section 3.1).
- mold samples according to the IAC2 Mold Sampling Procedures (see Section 5.0 IAC2 Mold Sampling Procedures)

3.3 The inspector shall report:

- moisture intrusion,
 - water damage,
 - musty odors,
 - apparent mold growth, or
 - conditions conducive to mold growth; and
 - results of a laboratory analysis of all mold samplings taken at the building
-

4.0 Standards of Practice

4.1 Roof

I. The inspector shall inspect from ground level or eaves:

- A. The roof covering.
- B. The roof drainage system, including gutters and downspouts.
- C. The vents, flashings, skylights, chimneys, and any other roof penetrations.

II. The inspector is not required to:

- A. Walk on any roof surface.
- B. Predict the service life expectancy.
- C. Perform a water test.

4.2 Exterior and Grounds

I. The inspector shall inspect from the ground level:

- A. The cladding, flashing and trim.
- B. Exterior doors, windows, decks, stoops, steps, stairs, porches, railings, eaves, soffits and fascias.
- C. The exterior grading surrounding the building perimeter.
- D. Items that penetrate the exterior siding or covering materials.

II. The inspector is not required to:

- A. Inspect underground drainage systems.
- B. Window well drainage
- C. Inspect defects not related to mold growth or moisture intrusion.

4.3 Basement, Foundation, Crawlspace, and Structure

I. The inspector shall inspect:

- A. The foundation, basement, or crawlspace including ventilation.
- B. For moisture intrusion

II. The inspector is not required to:

- A. Operate sump pumps with inaccessible floats.
- B. Inspect for structural defects not related to mold growth or moisture intrusion.

4.4 Heating, Cooling and Ventilation

I. The inspector shall inspect:

- A. The air handler, circulating fan, and air filter.
- B. The condensate pump.
- C. Readily visible ductwork.
- D. Representative number of supply and return air registers.
- E. The central humidifier.
- F. The central air conditioning unit.

II. The inspector is not required to:

- A. Inspect the air conditioning coil if not readily accessible.
- B. Inspect the condensate pan if not readily accessible.
- C. Test the performance or efficiency of the HVAC system.
- D. Inspect the interior of ductwork system.

4.5 Plumbing

I. The inspector shall inspect:

- A. The readily visible main water line.
- B. The readily visible water supply lines.
- C. The readily visible drain, waste, and vent pipes.
- D. Hot water source.
- E. Fixtures such as toilets, faucets, showers and tubs.

II. The inspector is not required to:

- A. Test the showers and tubs by filling them with water
- B. Test whirlpool tubs, saunas, steam rooms, or hot tubs.
- C. Inspect for plumbing defects that are not related to mold growth or moisture intrusion.

4.6 Attic, Ventilation & Insulation

I. The inspector shall inspect:

- A. Insulation.
- B. Ventilation of attic spaces.
- C. Framing and sheathing.

II. The inspector is not required to:

- A. To move, touch, or disturb insulation.
- B. Inspect for vapor retarders.
- C. Break or otherwise damage the surface finish or weather seal on or around access panels and covers.

4.7 Interior

I. The inspector shall inspect:

- A. The walls, ceilings, floors, doors and windows.
- B. The ventilation in the kitchen, bathrooms and laundry.
- C. Whole-house ventilation fans

II. The inspector is not required to:

- A. Inspect for interior defects that are not related to mold growth or moisture intrusion.

4.8 Moisture, Humidity, and Temperature

I. The inspector shall measure:

- A. Moisture of any room or area of the building that has moisture intrusion, water damage, moldy odors, apparent mold growth, or conditions conducive to mold growth.
 - B. Humidity of any room or area of the building (at the inspector's discretion).
 - C. Temperature of any room or area of the building (at the inspector's discretion).
-

5.0 IAC2 Mold Sampling Procedures

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- 5.7 Mold Sampling Decision Chart

5.1 General Comments

– Use the IAC2 Mold Sampling Decision Chart and the IAC2 Standards of Practice to assist in deciding when and where to take samples in a building.

- Samples of the indoor air and the outside air should be taken for comparison. There should not be any mold inside the house that is not found outside. The concentration of mold inside a home should not be higher than the concentration of mold outside.
- Keep in mind that mold spores in the air being sampled can vary greatly in relation to the life cycle of the mold, atmospheric and environmental conditions, and the amount of ventilation. There are seasonal and diurnal variability in airborne mold at an indoor residential environment.
- Air sampling may be necessary if the mold growth is suspected (for example, musty odors), but cannot be identified by a visual examination. The purpose of such air sampling is to determine the location and/or extent of mold contamination as well as a simple confirmation that mold growth exists somewhere in the building. All mold spores have a source, and identifying the source is the goal.
- Because the outdoor sample is the control, and it is used to compare with the indoor sample, the samples should be collected as close as possible in time and under the similar conditions. Air samples should be collected at the same air flow rate, for the same duration of time, near the same height above the floor in all rooms that are sampled indoors, and using the same type of collection device.

5.2 Air Flow Rate

- There are many different types of air pumps, measurement meters, and spore collectors that can be used for an air sample at a mold inspection. The air pump should be adjusted to collect air at a flow rate that is recommended by the manufacturer of the collection device. The flow rate could be 15, 10 or even 5 liters per minute. The result of an air pump sample is recorded in spores per meter cubed (spores/m³).
- If the air flow rate is too fast, the spores will bounce off the collector plate or slide and will not stick. If the airflow rate is too slow, the spores float around the collector plate or slide and will not stick.

5.3 Rotameter

- Rotameters are air flow meters that provide field accuracy in an easy-to-read instrument. The principle of operation is simple: air flow passes through a vertical, tapered tube and pushes a small ball or float having a diameter slightly less than the smaller tube end. As the little ball rises, the clearance between the ball and the tube wall increases. The ball becomes stationary when the diameter of the tube is large enough to allow the total airflow past the ball. The flow rate is determined by reading the number on the tube at the middle position of the stabilized ball.

5.4 Surface Sampling

- Surface sampling can provide information regarding whether the visible apparent mold is in fact actual microbial growth (mold) or not, measure the relative degree of the mold contamination, and can serve to confirm that the sampled mold growth may be producing mold spores in the air.

5.4.1 Area of Concern – Take One Sample

- If there is an area of concern (a room or area with moisture intrusion, water damage, musty odors, apparent mold growth, or conditions conducive to mold growth), the inspector shall perform at least one (1) surface sample in EACH area of concern.
- Additional surface samples may be performed at the discretion of the inspector.

5.4.2 No Areas of Concern – Not Required

- If there are no areas of concern (no moisture intrusion, no water damage, no musty odors, no apparent mold growth, and no conditions conducive to mold growth), the inspector is not required to perform a surface sampling.
- Surface samples may be performed in other areas of the building at the discretion of the inspector.

5.4.3 Swab

- A swab comes inside a plastic tube container. The cellulose swab is moistened with a liquid preservative stored in an ampoule at one end of the tube container. Any bacteria collected with the swab are transferred via the swab into a tube. The tube is sent directly to a laboratory for analysis.
- A swab provides immediate determination of the presence of fungal spores as well as what types of fungi are present.

5.4.3.1 Areas of Concern

- Inspector shall take at least one (1) swab sample when a visual examination of the building yields moisture intrusion, water damage, apparent mold growth, musty odors, or conditions conducive to mold growth. Additional sampling may be performed at the discretion of the inspector.

5.4.3.2 Sampling

- In general, an inspector will typically hold the tube container so that the ampoule with the liquid preservative is at the top. You pinch the plastic tube so the liquid will flow down onto the swab. To remove the moistened swab, you pull on the cap. Rub and roll the wet swab over a one-inch square area of the apparent mold growth. The swab should collect visible apparent mold. Insert the swab back into the tube. Secure the cap.

5.4.3.3 Each Sample

- A unique sample number should be recorded for each swab sample. Write the number on the tube itself. The Chain-of-Custody document should have the sample number, location, date, and time of the sampling.

5.4.3.4 Each Room

- Take the sample in each room or area where there is visible apparent mold.

5.4.3.5 Each Color

- If there is apparent mold growth with different colors in the room or area, take a sample of each different colored mold. The different colors may indicate different mold types.

5.4.3.6 Each Substrate

- If mold is visible on different substrates or building materials such as wood, drywall, or wallpaper, then a sample from each different material is recommended.

5.4.4 Tape

- A tape system provides a quick way to sample visible mold. A tape-lift system is the most

common surface sampling technique. It can be used instead of a swab sample. Many samples can be collected in a short period of time. Samples that show hyphae fragments and reproductive structures can provide proof of mold growth.

- One of the most popular tape sampling products is the Bio-Tape™ system. There are many advantages of using tape lift systems such as the Bio-Tape™ instead of using regular tape. Bio-Tape™ is easier to handle, the tapes are individually numbered, it requires less laboratory preparation time, and the slides are flexible and will not break.
- The sampling result is not quantitative. The presence of fungi can be confirmed, genera can be identified, and possibly a semi-quantitative estimation of the amount of each genus can be determined.

5.4.4.1 Sampling

The procedure to using a tape lift system such as Bio-Tape™ is as follows:

- Remove the slide from the mailer;
- Record the sample number and all other identification information prior to taking the sample;
- Peel off the protective liner from the slide to expose the adhesive;
- Place the slide with sticky side down on the contaminated area being sampled;
- Press down gently and make contact. Excessive pressure is not necessary;
- Lift the slide from the surface and place back into the slide mailer. Do not replace the protective liner;
- Record all information on the Chain-of-Custody document, including property address, date, time, and sample number;
- Mail the sample to the laboratory.

5.4.4.2 PPE

- Because there is direct contact with and disturbance of the contaminated area, PPE is recommended, including gloves and a respirator rated as N-95 or higher.

5.4.4.3 Each Sample

- A unique sample number should be recorded for each tape sample. The Chain-of-Custody document should have the sample number, location, date, and time of the tape sampling.

5.4.4.4 Each Room

- Take the tape sample in each room or area where there is visible apparent mold.

5.4.4.5 Each Color

- If there is apparent mold growth with different colors in the room or area, take a tape sample of each different colored mold. The different colors may indicate different mold types.

5.4.4.6 Each Substrate

- If mold is visible on different substrates or building materials such as wood, drywall, or wallpaper, then a tape sample from each different material is recommended.

5.4.5 Carpet

- A carpet tends to contain a history of any mold that has been growing in the building. The carpeting sampling is performed to reveal previous mold problems. A carpeting sampling can

also reveal undetected mold growth that may have been covered over or cleaned up. Choose an area that is not heavily walked upon, an area with little traffic. Do not sample under furniture.

- A household vacuum machine and a carpet-sampling cartridge are used to vacuum a small area of the carpet. The cartridge should be inserted as deep into the pile of the carpet as possible. If a carpet has not been cleaned thoroughly prior to a sampling, a carpet can easily hold evidence of a mold problem in the house. Even after cleaning, there can be mold spores discovered deep in the carpet.

5.4.5.1 Set Up

- Insert the nylon filter into the collector nozzle. It should snap in place. Attach the device to the vacuum hose securely. An adapter may be needed. If the attachment is loose, use duct tape to make a tight connection.

5.4.5.2 Sampling

- Choose a 6-foot by 3-foot sampling area in front of the sofa or large chair where occupants spend a lot of time. Vacuum this area thoroughly. Next select a 6-foot by 3-foot area in a bedroom along side a bed. Remove filter. Place into the bag that came with the unit. Mail it to the laboratory.

5.5 Outdoor Air Sampling

5.5.1 Two Outdoor Samples

- The inspector shall perform two (2) outdoor samples of the highest quality general air to be used as control samples (or background samples). These samples to be used for comparison with the indoor sample(s).

5.5.2 Upon Arrival

- The outdoor sampling should begin soon after arriving at the property, assuming that the weather is clean and calm. It is better for an inspector to perform the outdoor sampling while the weather is favorable than to wait. The outdoor conditions may change drastically during the examination and sampling of the building interior.

5.5.3 Weather

- Air sampling should not be conducted during unusually severe storms or periods of unusually high winds. Severe weather will affect the sampling and analysis results in several ways.
- First, a high wind will increase the variability of airborne mold spore concentration because of wind-induced differences in air pressure between the building interior and exterior. Second, rapid changes in barometric pressure increase the chance of a large difference in the interior and exterior air pressures, consequently changing the rate of airborne mold spores being sucked into the building. Weather predictions available on local news stations can provide sufficient information to determine if these conditions are likely.

5.5.3.1 Clean and Calm

- On a Chain-of-Custody form, the weather conditions shall be recorded. The weather conditions should be clean and calm. High winds may affect the quality of the sampling, including the comparison between indoor and outdoor sampling.

5.5.3.2 No Rain

– Air pump sampling should not take place outdoors if it is raining. If possible, you should wait for at least two (2) hours after the rain has stopped before taking an air pump sample. Alterations or adjustments to the normal procedure or locations of taking air pump samples, particularly for the control sample, must be recorded in a Chain-of-Custody.

5.5.3.3 Above Freezing

– Air pump sampling should not take place when the outdoor air temperature is below 32° Fahrenheit. All air sampling should take place when the air temperature is above freezing.

5.5.3.4 No snow covering

– If the ground is completely covered with snow, outdoor air pump sampling should not be performed. A partial covering or a light dusting of snow is acceptable.

5.5.3.5 Ten Minutes

– On a clean windless day, air pump sampling should run for 10 minutes. (Be sure to refer to the manufacturer's recommendation. There are cassettes that require only 5 minutes such as the Z5.) When the outdoor air is something other than clean and windless, then the time of the sampling should be reduced to 5 minutes or less. A breeze, the mowing of grass, nearby construction, and dusty air all affect the sampling conditions.

5.5.4 Location

- If possible, one outdoor sample should be located on the windward side of the building (the side facing the point from which the wind blows), and the other should be located on the leeward-side of the building (the side sheltered from the wind).
- The sampling device located on the windward side of the building should be positioned so as to face the wind directly. The sampling device should point towards the wind, in the direction of the point from which the wind is blowing. The sampling device should be three to six feet (3-6 ft.) from the ground surface (breathable space).
- Typically the device is about 10 feet away from the front entry door. The idea is to have both outdoor samples located in areas where the devices will collect a representative sampling of the air that may enter the building through the entry door or nearby open windows (the openings on the sides of the building).

5.5.4.1 Ten Feet

- If there is a main ventilation component of the building that draws into the building fresh air from outside, sampling should be performed ten feet (10 ft.) feet from that intake.
- The sampling should be performed at least ten feet (10 ft.) from the most frequently used entrance to the home.
- The air sampling devices should be kept at least ten feet (10 ft.) away from all openings, air intakes, registers, exhaust vents, vent pipes, ventilation fans, etc.

5.5.4.2 Nothing Overhead

– Sampling should not be performed under an overhang, soffit or eave; carport; porch roof, or any other roof or overhead structure.

5.6 Indoor Air Sampling

5.6.1 Closed-Building Conditions

- Indoor air sampling should be made under closed-building conditions. Closed-building conditions are necessary for in order to stabilize the air that may contain mold spores or mVOCs, and to increase the reproducibility of the air sampling and measurement.
- Windows on all levels and external doors should be kept closed (except during normal entry and exit) during the sampling period. Normal entry and exit include a brief opening and closing of a door, but—to the extent possible—external doors should not be left open for more than a few minutes.
- In addition, external-internal air exchange systems (other than a furnace) such as high-volume, whole house and window fans should not be operating. However, attic fans intended to control attic and not whole building temperature or humidity should continue to operate. Combustion or make-up air supplies must not be closed.
- Normal operation of permanently installed energy recovery ventilators (also known as heat recovery ventilators or air-to-air heat exchangers) may also continue during closed-building conditions. In houses where permanent radon mitigation systems have been installed, these systems should be functioning during the air-sampling period.
- Closed-building conditions will generally exist as normal living conditions in northern areas of the country when the average daily temperature is low enough so that windows are kept closed. Depending on the geographical area, this can be the period from late fall to early spring.

5.6.2 HVAC

5.6.2.1 Take One Air Sample

- At least one (1) air sampling shall be taken at an air supply register of the HVAC system. It is preferred to sample prior and during the operation of the HVAC system. If only one sampling can be performed, then the sampling should be taken 15 minutes after the HVAC system is turned on.
- Ideally, there would be at least three sampling devices similarly situated throughout the building, but financial or time constraints may limit the number of samples that can be taken.

5.6.2.3 Location

- The air sample should be taken three to five feet (3-5 ft.) from an air supply register, with the sampling device oriented so that air from the supply register directly enters the sampling device.

5.6.2.4 Agitation

- A gentle or vigorous mechanical agitation of the ductwork (a bump or shake) is appropriate.

5.6.3 Indoor Air

5.6.3.1 Take One Air Sample

- The inspector shall perform at least one (1) indoor sample. Additional samples may be performed at the discretion of the inspector.

5.6.3.2 Areas of Concern

- At least one (1) air sample shall be taken near the center of EACH room or area of the building in which there are areas of concern (moisture intrusion, water damage, musty odors, visible apparent mold growth, and conditions conducive to mold growth).

5.6.3.3 No Areas of Concern

– At least one (1) indoor air sample shall be taken in the most lived-in common room, such as the family, living, or entertainment room (The location shall be determined at the discretion of the inspector).

5.6.3.4 Location

– An indoor air sampling should only take place in a livable space in the building. Sampling in areas such as closets, under-floor crawlspaces, unfinished attics, storage or utility rooms, or inside the HVAC system is prohibited.

– The indoor air sample should be taken in the middle or center area of the area or room.

– The air collection device should be at head height (about three to six feet above the floor surface).

5.6.3.5 Ten Minutes

– Inside the building, the air pump sampling should run for 10 minutes. If there is a lot of indoor activity, then the air pump sampling should be reduced to 5 minutes. If there is an active source of dust, such as construction or cleaning, then the air sampling time should be reduced to 1 minute. Be sure to follow the recommendations of the manufacturer of the sampling device or collector; there are some devices that are designed to take a sample in 5 minutes (i.e. Z5 cassette).

5.6.4 Sampling

– The sampling equipment must be protected, clean, and properly maintained at all times. The sampling device shall be clean, free from dirt or debris prior to starting a sample. If re-usable collection devices are used, then they shall be handled and cleaned prior to use in accordance with the manufacturer's recommendation. The collector may be re-usable and have sticky slides already prepared, or the collector may be a one-time-use self-contained device.

– Slides, cassettes, and one-time-use devices should be stored in cool, dry environments. The slides must be protected from direct sunlight. Sampling devices (slides, swabs, cassettes, tapes) older than one year should not be used.

– Set the air collector at a normal breathing height, which is about 3 to 6 feet above the ground level or floor surface. A tripod is typically used to set the collector height.

– Calibrate the flow of the pump. Do not attach the sampling device, cassette or collector on the tubing yet. Measure the flow rate of the pump with a rotameter that has been calibrated to a standard. Make sure that the flow rate is set to the manufacturer's recommendation. For example, an Air-O-Cell cassette flow rate is 15 liters of air per minute. The pump should be calibrated regularly (once a day). A record of calibrations should be kept in a work ledger or logbook.

– After calibration, securely attach the tubing of the pump to the sampling device or collector. Turn on the pump. Start sampling. Record start time.

– After turning on the air pump, check the airflow rate. The flow rate should not vary. A flow change greater than five percent (5%) requires a new air sample to be taken. All air samples must have the same volume. A digital time controller on the equipment is highly recommended.

– Examine the collector. There should not be an overload on the slide. There should be a fine trace, hardly visible to the human eye, of dust and spores on the slide. A slide that has an easily visible trace on it may be unreadable. If that is the case, the environmental conditions may need improvement or a new sampling location may be needed. If a slide is heavy, a new sample

should be taken.

- Remember, all air samples must have the same volume. Refer to manufacturer's recommendations about sampling time and volume for each type of sampling device.
- Record the time that the pump stopped. Mark the sampling device with a unique sampling number. Record that information on the Chain-of-Custody.
- Place slides in a protective carrying case. Or close the collector if a cassette is used. A new sample must be taken, if a slide is accidentally touched, smeared, or contaminated, because it will be unreadable.
- Calculate the volume by multiplying the liters of air pumped by the number of minutes. An example of the calculation is 20 liters of air pump multiplied by 10 minutes equals 200 liters per minute equals 200 liters (20L x 10 minutes = 200 L).

5.7 Mold Sampling Decision Chart Condition

IAC2 Mold Sampling Decision Chart

CONDITION	Perform Swab Sampling?	Perform Tape Sampling?	Perform Interior Air Sampling?	Perform Outdoor Air Sampling?	Perform Carpet Sampling?	Perform Wall Sampling?
visible, apparent mold	YES (or a tape sampling)	YES (or a swab sampling)	YES, in the area(s) of the building with visible, apparent mold growth	YES: two outdoor samples (one windward; one leeward)	POSSIBLY, at the discretion of the inspector	NO
no visible apparent mold, but there are visible condition/s conducive to mold growth	YES (or a tape sampling), at water stains, water damage, areas of moisture, or other areas, at the discretion of the inspector	YES (or a swab sampling), at water stains, water damage, areas of moisture, or other areas, at the discretion of the inspector	YES, in the area/s of the building with condition/s conducive to mold growth	YES: two outdoor samples (one windward; one leeward)	YES, in the area/s of the building with condition/s conducive to mold growth	YES, at the wall with condition/s conducive to mold growth.
no visible, apparent mold, and no visible conducive conditions	NO	NO	YES, near HVAC return duct (if available); otherwise, at least one sampling in the most lived-in common room (such as the family room or living room)	YES		

6.0 Limitations & Exclusions

6.1 Limitations:

- I. These Standards of Practice apply only to residential buildings with four or fewer dwelling units.
- II. The mold inspection is not a warranty, guarantee, or insurance policy.
- III. The mold inspection is not technically exhaustive.
- IV. The mold inspection will not identify concealed or latent conditions or defects.
- V. The mold inspection will not identify mold growth not readily visible at the time of the

inspection.

VI. The scope of a mold inspection does not include future conditions or events

VII. The scope of a mold inspection does not include hidden mold growth or future mold growth.

6.2 Exclusions:

I. The inspector is not required to report:

- A. The condition of any system or component that is not readily accessible
- B. The condition of any system or component that is not in the IAC2 Standards of Practice.
- C. The service life expectancy of any system or component.
- D. The size, capacity, BTU, performance, or efficiency of any component or system.
- E. Compliance with codes, regulations or installation guidelines.
- F. The presence of evidence of rodents, animals, insects, wood destroying insects and pests.

II. The inspector is not required to:

- A. Determine the presence of hidden mold by physical examination or sampling.
- B. Report replacement or repair cost estimates.
- C. Lift carpeting or padding.
- D. Inspect any other environmental issue.
- E. Determine the cause or reason of any condition.
- F. Perform a geotechnical, structural, geological evaluation.
- G. Move any personal items or other inspection obstructions, such as, but not limited to: insulation, throw rugs, furniture, floor or wall coverings, ceiling tiles, window coverings, equipment, plants, ice, debris, snow, water, dirt, foliage, or appliances.
- H. Dismantle, open, or uncover any system or component.
- I. Enter or access any area, crawlspace, or attic space, which, in the opinion of the inspector, may be unsafe or may risk personal safety.
- J. Do anything that may be unsafe or dangerous to the inspector or others or damage property according to the opinion of the inspector.
- K. Determine the insurability of a property.

II. The inspector is not required to operate:

- A. Any system that is shut down.
- B. Any system that does not function properly.
- C. Any system that does not turn on with the use of normal operating controls.
- D. Any shut off water or fuel valves or manual stop valves.
- E. Any electrical disconnect or over current protection devices.
- F. Any irrigation or sprinkler systems.

7.0 Definitions

7.1 Accessible: Can be approached or entered by the inspector safely, without difficulty, fear or danger.

7.2 Apparent Mold: visible growth with characteristics of mold, which cannot be confirmed by the inspector without the benefit of sampling. The term “mold growth” is interchanged in this

course with “fungal growth” and “microbial growth.”

7.3 Area of Concern: A room or area with moisture intrusion, water damage, musty odors, visible apparent mold growth, and conditions conducive to mold growth.

7.4 Complete: Comprehensive in scope or purpose.

7.5 Component(s): A permanently installed or attached fixture, element or part of a system.

7.6 Condition(s): The visible and conspicuous state of being of an object.

7.7 Dismantle: To open, take apart or remove any component, device or piece that would not typically be opened, taken apart or removed by an ordinary occupant.

7.8 Due Diligence: The degree of care and caution required by the circumstances of a person.

7.9 Dwelling Unit: A complete place to live including a kitchen and bathroom.

7.10 Household Appliances: Kitchen and laundry appliances, room air conditioners, and similar appliances.

7.11 Invasive: To probe, dismantle or take apart a system or component.

7.12 Interior: The area(s) of a building where people have access and are included in the condition space of the building.

7.13 Limited: Not comprehensive in scope or purpose.

7.14 Microbial: Microscopic organism such as mold.

7.15 Normal Operating Controls: Devices such as thermostats that would be operated by ordinary occupants, which require no specialized skill or knowledge.

7.16 Occupants: Tenants, persons, or entities each of which uses a portion of the building.

7.17 Readily Accessible: An item or component is readily accessible if, in the judgment of the inspector, it is capable of being safely observed without movement of obstacles, detachment or disengagement of connecting or securing devices, or other unsafe or difficult procedures to gain access.

7.18 Report: A written communication (possibly including digital images) of conditions seen during the inspection.

7.19 Representative Number: At least one in a particular room or area.

7.20 Sampling: The collection of air, surface, or carpet samples for analysis.

7.21 Shut Down: Turned off, unplugged, inactive, not in service, not operational, etc.

7.22 Inspect(ed): To visually look at readily accessible systems and components safely, using normal operating controls and accessing readily accessible panels and areas in accordance with these Standards of Practice.

7.23 Inspector: One who performs an inspection.

7.24 System(s): An assembly of various components to function as a whole.

7.25 Technically Exhaustive: A comprehensive and detailed examination beyond the scope of a mold inspection which would involve or include, but would not be limited to: dismantling, specialized knowledge or training, special equipment, measurements, calculations, testing, research, analysis or other means.

7.26 Unsafe: A condition in a readily accessible, installed system or component, which is judged to be a significant risk of personal injury during normal, day-to-day use. The risk may be due to damage, deterioration, improper installation or a change in accepted residential construction standards

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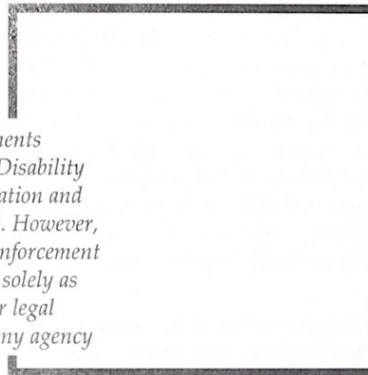
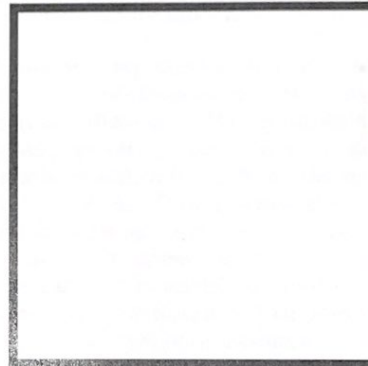
Checklist for Existing Facilities version 2.1



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**The Americans with Disabilities Act
Checklist for Readily Achievable Barrier Removal**
August 1995

Checklist for Existing Facilities version 2.1

Introduction

Title III of the **Americans with Disabilities Act** requires public accommodations to provide goods and services to people with disabilities on an equal basis with the rest of the general public. The goal is to afford every individual the opportunity to benefit from our country's businesses and services, and to afford our businesses and services the opportunity to benefit from the patronage of all Americans.

The regulations require that architectural and communication barriers that are structural must be removed in public areas of **existing facilities** when their removal is **readily achievable**—in other words, easily accomplished and able to be carried out without much difficulty or expense. **Public accommodations** that must meet the barrier removal requirement include a broad range of establishments (both for-profit and nonprofit)—such as hotels, restaurants, theaters, museums, retail stores, private schools, banks, doctors' offices, and other places that serve the public. People who own, lease, lease out, or operate places of public accommodation in existing buildings are responsible for complying with the barrier removal requirement.

The removal of barriers can often be achieved by making simple changes to the physical environment. However, the regulations do not define exactly how much effort and expense are required for a facility to meet its obligation. This judgment must be made on a case-by-case basis, taking into consideration such factors as the size, type, and overall financial resources of the facility, and the nature and cost of the access improvements needed. These factors are described in more detail in the ADA regulations issued by the Department of Justice.

The process of determining what changes are readily achievable is not a one-time effort; access should be re-evaluated annually. Barrier removal that might be difficult to carry out now may be readily achievable later. Tax incentives are available to help absorb costs over several years.

Purpose of This Checklist

This checklist will help you identify accessibility problems and solutions in existing facilities in order to meet your obligations under the ADA.

The goal of the survey process is to plan how to make an existing facility more usable for people with disabilities. The Department of Justice (DOJ) recommends the development of an Implementation Plan, specifying what improvements you will make to remove barriers and when each solution will be carried out: "...Such a plan...could serve as evidence of a good faith effort to comply...."

Technical Requirements

This checklist details some of the requirements found in the ADA Standards for Accessible Design (Standards). The ADA Accessibility Guidelines (ADAAG), when adopted by DOJ, became the Standards. The Standards are part of the Department of Justice Title III Regulations, 28 CFR Part 36 (*Nondiscrimination on the basis of disability... Final Rule*). Section 36.304 of this regulation, which covers barrier removal, should be reviewed before this survey is conducted.

However, keep in mind that full compliance with the Standards is required only for new construction and alterations. The requirements are presented here as a guide to help you determine what may be readily achievable barrier removal for existing facilities. The Standards should be followed for all barrier removal unless doing so is not readily achievable. If complying with the Standards is not readily achievable, you may undertake a modification that does not fully comply, as long as it poses no health or safety risk.

In addition to the technical specifications, each item has a scoping provision, which can be found under Section 4.1 in the Standards. This section clarifies when access is required and what the exceptions may be.

Each state has its own regulations regarding accessibility. To ensure compliance with all codes, know your state and local codes and use the more stringent technical requirement for every modification you make; that is, the requirement that provides greater access for individuals with disabilities. The barrier removal requirement for existing facilities is new under the ADA and supersedes less stringent local or state codes.

What This Checklist is Not

This checklist does not cover all of the requirements of the Standards; therefore, it is **not** for facilities undergoing new construction or alterations. In addition, it does not attempt to illustrate all possible barriers or propose all possible barrier removal solutions. The Standards should be consulted for guidance in situations not covered here.

The Title III regulation covers more than barrier removal, but this checklist does **not** cover Title III's requirements for nondiscriminatory policies and practices and for the provision of auxiliary communication aids and services. The communication features covered are those that are **structural** in nature.

Priorities

This checklist is based on the four priorities recommended by the Title III regulations for planning readily achievable barrier removal projects:

- Priority 1: Accessible **approach and entrance**
- Priority 2: Access to **goods and services**
- Priority 3: Access to **rest rooms**
- Priority 4: Any **other measures** necessary

Note that the references to ADAAG throughout the checklist refer to the Standards for Accessible Design.

How to Use This Checklist

✓ **Get Organized:** Establish a time frame for completing the survey. Determine how many copies of the checklist you will need to survey the whole facility. Decide who will conduct the survey. It is strongly recommended that you invite two or three additional people, including people with various disabilities and accessibility expertise, to assist in identifying barriers, developing solutions for removing these barriers, and setting priorities for implementing improvements.

✓ **Obtain Floor Plans:** It is very helpful to have the building floor plans with you while you survey. If plans are not available, use graph paper to sketch the layout of all interior and exterior spaces used by your organization. Make notes on the sketch or plan while you are surveying.

✓ **Conduct the Survey:** Bring copies of this checklist, a clipboard, a pencil or pen, and a flexible steel

tape measure. With three people surveying, one person numbers key items on the floor plan to match with the field notes, taken by a second person, while the third takes measurements. **Be sure to record all dimensions!** As a reminder, questions that require a dimension to be measured and recorded are marked with the ruler symbol. Think about each space from the perspective of people with physical, hearing, visual, and cognitive disabilities, noting areas that need improvement.

✓ **Summarize Barriers and Solutions:** List barriers found and ideas for their removal. Consider the solutions listed beside each question, and add your own ideas. Consult with building contractors and equipment suppliers to estimate the costs for making the proposed modifications.

✓ **Make Decisions and Set Priorities:** Review the summary with decision makers and advisors. Decide which solutions will best eliminate barriers at a reasonable cost. Prioritize the items you decide upon and make a timeline for carrying them out. Where the removal of barriers is not readily achievable, you must consider whether there are **alternative methods** for providing access that *are* readily achievable.

✓ **Maintain Documentation:** Keep your survey, notes, summary, record of work completed, and plans for alternative methods on file.

✓ **Make Changes:** Implement changes as planned. Always refer directly to the Standards and your state and local codes for complete technical requirements before making any access improvement. References to the applicable sections of the Standards are listed at the beginning of each group of questions. If you need help understanding the federal, state, or local requirements, contact your Disability and Business Technical Assistance Center.

✓ **Follow Up:** Review your Implementation Plan each year to re-evaluate whether more improvements have become readily achievable.

To obtain a copy of the Title III regulations and the Standards or other technical information, call the U.S. Dept. of Justice ADA Information Line at (800) 514-0301 Voice, (202) 514-0381 TDD, or (800) 514-0383 TDD. For questions about ADAAG, contact the Architectural and Transportation Barriers Compliance Board at (800) USA-ABLE.

QUESTIONS

POSSIBLE SOLUTIONS

Priority

1 Accessible Approach/Entrance

People with disabilities should be able to arrive on the site, approach the building, and enter as freely as everyone else. At least one route of travel should be safe and accessible for everyone, including people with disabilities.

Route of Travel (ADAAG 4.3, 4.4, 4.5, 4.7)


Is there a route of travel that does not require the use of stairs?


Yes No

- Add a ramp if the route of travel is interrupted by stairs.
- Add an alternative route on level ground.


Is the route of travel stable, firm and slip-resistant?

- Repair uneven paving.
- Fill small bumps and breaks with beveled patches.
- Replace gravel with hard top.

 Is the route at least 36 inches wide?


 width

- Change or move landscaping, furnishings, or other features that narrow the route of travel.
- Widen route.

 Can all objects protruding into the circulation paths be detected by a person with a visual disability using a cane?


 distance from wall/height


- Move or remove protruding objects.
- Add a cane-detectable base that extends to the ground.
- Place a cane-detectable object on the ground underneath as a warning barrier.

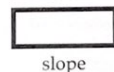
In order to be detected using a cane, an object must be within 27 inches of the ground. Objects hanging or mounted overhead must be higher than 80 inches to provide clear head room. It is not necessary to remove objects that protrude less than 4 inches from the wall.

Do curbs on the route have curb cuts at drives, parking, and drop-offs?

- Install curb cut.
- Add small ramp up to curb.

Ramps (ADAAG 4.8)

 Are the slopes of ramps no greater than 1:12?


 slope

Slope is given as a ratio of the height to the length. 1:12 means for every 12 inches along the base of the ramp, the height increases one inch. For a 1:12 maximum slope, **at least** one foot of ramp length is needed for each inch of height.

- Lengthen ramp to decrease slope.
- Relocate ramp.
- If available space is limited, reconfigure ramp to include switchbacks.

QUESTIONS

POSSIBLE SOLUTIONS

Ramps, continued

Do all ramps longer than 6 feet have railings on both sides?

Yes No

N/A

Add railings.

Are railings sturdy, and between 34 and 38 inches high?

height

N/A

Adjust height of railing if not between 30 and 38 inches.
 Secure handrails in fixtures.

Is the width between railings or curbs at least 36 inches?

width

N/A

Relocate the railings.
 Widen the ramp.

Are ramps non-slip?

Add non-slip surface material.

Is there a 5-foot-long level landing at every 30-foot horizontal length of ramp, at the top and bottom of ramps and at switchbacks?

length

N/A

Remodel or relocate ramp.

Does the ramp rise no more than 30 inches between landings?

rise

Remodel or relocate ramp.

Parking and Drop-Off Areas (ADAAG 4.6)

Are an adequate number of accessible parking spaces available (8 feet wide for car plus 5-foot access aisle)? For guidance in determining the appropriate number to designate, the table below gives the ADAAG requirements for new construction and alterations (for lots with more than 100 spaces, refer to ADAAG):

number of accessible spaces

Note widths of existing accessible spaces:

Reconfigure a reasonable number of spaces by repainting stripes.

Total spaces	Accessible
1 to 25	1 space
26 to 50	2 spaces
51 to 75	3 spaces
76 to 100	4 spaces

Are 8-foot-wide spaces, with minimum 8-foot-wide access aisles, and 98 inches of vertical clearance, available for lift-equipped vans?

width/vertical clearance

Reconfigure to provide van-accessible space(s).

At least one of every 8 accessible spaces must be van-accessible (with a minimum of one van-accessible space in all cases).

QUESTIONS

POSSIBLE SOLUTIONS

	Yes	No	
Parking and Drop-Off Areas, continued			
Are the access aisles part of the accessible route to the accessible entrance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Add curb ramps. <input type="checkbox"/> Reconstruct sidewalk.
Are the accessible spaces closest to the accessible entrance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Reconfigure spaces.
Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessible" at van spaces?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <i>van</i>	<input type="checkbox"/> Add signs, placed so that they are not obstructed by cars.
Is there an enforcement procedure to ensure that accessible parking is used only by those who need it?	<input type="checkbox"/>	<input type="checkbox"/> <i>N/A</i>	<input type="checkbox"/> Implement a policy to check periodically for violators and report them to the proper authorities.
<hr/>			
Entrance (ADAAG 4.13, 4.14, 4.5)			
If there are stairs at the main entrance, is there also a ramp or lift, or is there an alternative accessible entrance?	<input type="checkbox"/>	<input type="checkbox"/> <i>N/A</i>	<input type="checkbox"/> If it is not possible to make the main entrance accessible, create a dignified alternate accessible entrance. If parking is provided, make sure there is accessible parking near all accessible entrances.
Do not use a service entrance as the accessible entrance unless there is no other option.			
Do all inaccessible entrances have signs indicating the location of the nearest accessible entrance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Install signs before inaccessible entrances so that people do not have to retrace the approach.
Can the alternate accessible entrance be used independently?	<input type="checkbox"/>	<input type="checkbox"/> <i>N/A</i>	<input type="checkbox"/> Eliminate as much as possible the need for assistance—to answer a doorbell, to operate a lift, or to put down a temporary ramp, for example.
6 Does the entrance door have at least 32 inches clear opening (for a double door, at least one 32-inch leaf)?	<input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="text"/> clear opening	<input type="checkbox"/> Widen the door to 32 inches clear. <input type="checkbox"/> If technically infeasible, widen to 31-3/8 inches minimum. <input type="checkbox"/> Install offset (swing-clear) hinges.
6 Is there at least 18 inches of clear wall space on the pull side of the door, next to the handle?	<input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="text"/> clear space	<input type="checkbox"/> Remove or relocate furnishings, partitions, or other obstructions. <input type="checkbox"/> Move door. <input type="checkbox"/> Add power-assisted or automatic door opener.

QUESTIONS

POSSIBLE SOLUTIONS

ENTRANCE, continued
 Is the threshold edge 1/4-inch high or less, or if beveled edge, no more than 3/4-inch high?

Yes No

height

- If there is a single step with a rise of 6 inches or less, add a short ramp.
- If there is a threshold greater than 3/4-inch high, remove it or modify it to be a ramp.

If provided, are carpeting or mats a maximum of 1/2-inch high?

height

- Replace or remove mats.

Are edges securely installed to minimize tripping hazards?

- Secure carpeting or mats at edges.

Is the door handle no higher than 48 inches and operable with a closed fist?

height

- Lower handle.
- Replace inaccessible knob with a lever or loop handle.
- Retrofit with an add-on lever extension.

The "closed fist" test for handles and controls: Try opening the door or operating the control using only one hand, held in a fist. If you can do it, so can a person who has limited use of his or her hands.

Can doors be opened without too much force (exterior doors reserved; maximum is 5 lbf for interior doors)?

force

- Adjust the door closers and oil the hinges.
- Install power-assisted or automatic door openers.
- Install lighter doors.

You can use an inexpensive force meter or a fish scale to measure the force required to open a door. Attach the hook end to the doorknob or handle. Pull on the ring end until the door opens, and read off the amount of force required. If you do not have a force meter or a fish scale, you will need to judge subjectively whether the door is easy enough to open.

If the door has a closer, does it take at least 3 seconds to close?

seconds

- Adjust door closer.

QUESTIONS

POSSIBLE SOLUTIONS

Priority

2 Access to Goods and Services

Ideally, the layout of the building should allow people with disabilities to obtain materials or services without assistance.

Yes No


Horizontal Circulation (ADAAG 4.3)


Does the accessible entrance provide direct access to the main floor, lobby, or elevator?

- Add ramps or lifts.
- Make another entrance accessible.


Are all public spaces on an accessible route of travel?

- Provide access to all public spaces along an accessible route of travel.

 Is the accessible route to all public spaces at least 36 inches wide?


 width


- Move furnishings such as tables, chairs, display racks, vending machines, and counters to make more room.

 Is there a 5-foot circle or a T-shaped space for a person using a wheelchair to reverse direction?


 width


- Rearrange furnishings, displays, and equipment.

Doors (ADAAG 4.13)

 Do doors into public spaces have at least a 32-inch clear opening?



 clear opening

- Install offset (swing-clear) hinges.
- Widen doors.

 On the pull side of doors, next to the handle, is there at least 18 inches of clear wall space so that a person using a wheelchair or crutches can get near to open the door?



 clear space

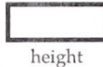
- Reverse the door swing if it is safe to do so.
- Move or remove obstructing partitions.

 Can doors be opened without too much force (5 lbf maximum for interior doors)?



 force

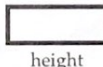
- Adjust or replace closers.
- Install lighter doors.
- Install power-assisted or automatic door openers.

 Are door handles 48 inches high or less and operable with a closed fist?


 height

- Lower handles.
- Replace inaccessible knobs or latches with lever or loop handles.
- Retrofit with add-on levers.
- Install power-assisted or automatic door openers.

 Are all threshold edges 1/4-inch high or less, or if beveled edge, no more than 3/4-inch high?


 height

- If there is a threshold greater than 3/4-inch high, remove it or modify it to be a ramp.
- If between 1/4- and 3/4-inch high, add bevels to both sides.

QUESTIONS

POSSIBLE SOLUTIONS

QUESTIONS		POSSIBLE SOLUTIONS	
<p>Rooms and Spaces (ADAAG 4.2, 4.4, 4.5)</p> <p>11111 Are all aisles and pathways to materials and services at least 36 inches wide?</p> <p style="text-align: right;">Yes No</p> <p style="text-align: right;"><input type="checkbox"/> <input type="checkbox"/></p> <p style="text-align: right;"><i>N/A</i> <input type="checkbox"/></p> <p style="text-align: right;">width</p>		<p><input type="checkbox"/> Rearrange furnishings and fixtures to clear aisles.</p>	
<p>11111 Is there a 5-foot circle or T-shaped space for turning a wheelchair completely?</p> <p style="text-align: right;"><input checked="" type="checkbox"/> <input type="checkbox"/></p> <p style="text-align: right;"><input type="checkbox"/></p> <p style="text-align: right;">width</p>		<p><input type="checkbox"/> Rearrange furnishings to clear more room.</p>	
<p>Is carpeting low-pile, tightly woven, and securely attached along edges?</p> <p style="text-align: right;"><i>N/A</i> <input type="checkbox"/> <input type="checkbox"/></p>		<p><input type="checkbox"/> Secure edges on all sides.</p> <p><input type="checkbox"/> Replace carpeting.</p>	
<p>11111 In circulation paths through public areas, are all obstacles cane-detectable (located within 27 inches of the floor or higher than 80 inches, or protruding less than 4 inches from the wall)?</p> <p style="text-align: right;"><i>N/A</i> <input type="checkbox"/> <input type="checkbox"/></p> <p style="text-align: right;"><input type="checkbox"/></p> <p style="text-align: right;">height/protrusion</p>		<p><input type="checkbox"/> Remove obstacles.</p> <p><input type="checkbox"/> Install furnishings, planters, or other cane-detectable barriers underneath.</p>	
<p>Emergency Egress (ADAAG 4.28)</p> <p>If emergency systems are provided, do they have both flashing lights and audible signals?</p> <p style="text-align: right;"><input checked="" type="checkbox"/> <input type="checkbox"/></p>		<p><input type="checkbox"/> Install visible and audible alarms.</p> <p><input type="checkbox"/> Provide portable devices.</p>	
<p>Signage for Goods and Services (ADAAG 4.30)</p> <p>Different requirements apply to different types of signs.</p>			
<p>11111 If provided, do signs and room numbers designating permanent rooms and spaces where goods and services are provided comply with the appropriate requirements for such signage?</p> <p style="text-align: right;"><input type="checkbox"/> <input type="checkbox"/></p> <p style="text-align: right;"><i>N/A</i></p> <p style="text-align: right;"><i>N/A</i></p> <p style="text-align: right;">Y N <input type="checkbox"/> <input type="checkbox"/></p> <p style="text-align: right;">height</p>		<p><input type="checkbox"/> Provide signs that have raised letters, Grade II Braille, and that meet all other requirements for permanent room or space signage. (See ADAAG 4.1.3(16) and 4.30.)</p>	
<ul style="list-style-type: none"> • Signs mounted with centerline 60 inches from floor. <input type="checkbox"/> <input type="checkbox"/> • Mounted on wall adjacent to latch side of door, or as close as possible. <input type="checkbox"/> <input type="checkbox"/> • Raised characters, sized between 5/8 and 2 inches high, with high contrast (for room numbers, rest rooms, exits). <input type="checkbox"/> <input type="checkbox"/> • Brailled text of the same information. <input type="checkbox"/> <input type="checkbox"/> • If pictogram is used, it must be accompanied by raised characters and braille. <input type="checkbox"/> <input type="checkbox"/> 	<p style="text-align: right;"><i>N/A</i></p> <p style="text-align: right;"><i>N/A</i></p> <p style="text-align: right;">character height</p> <p style="text-align: right;"><i>N/A</i></p> <p style="text-align: right;"><i>N/A</i></p>		

QUESTIONS

POSSIBLE SOLUTIONS

Directional and Informational Signage

The following questions apply to directional and informational signs that fall under Priority 2.



If mounted above 80 inches, do they have letters at least 3 inches high, with high contrast, and non-glare finish?

Yes No

N/A

letter height

- Review requirements and replace signs as needed, meeting the requirements for character size, contrast, and finish.

Do directional and informational signs comply with legibility requirements? (Building directories or temporary signs need not comply.)

N/A

- Review requirements and replace signs as needed.

Controls (ADAAG 4.27)



Are all controls that are available for use by the public (including electrical, mechanical, cabinet, game, and self-service controls) located at an accessible height?

height

- Relocate controls.

Reach ranges: The maximum height for a side reach is 54 inches; for a forward reach, 48 inches. The minimum reachable height is 15 inches for a front approach and 9 inches for a side approach.

N/A

Are they operable with a closed fist?

N/A

- Replace controls.

Seats, Tables, and Counters (ADAAG 4.2, 4.32, 7.2)
 Are the aisles between fixed seating (other than assembly area seating) at least 36 inches wide?

width

- Rearrange chairs or tables to provide 36-inch aisles.

Are the spaces for wheelchair seating distributed throughout?

- Rearrange tables to allow room for wheelchairs in seating areas throughout the area.
- Remove some fixed seating.



Are the tops of tables or counters between 28 and 34 inches high?

height

- Lower part or all of high surface.
- Provide auxiliary table or counter.



Are knee spaces at accessible tables at least 27 inches high, 30 inches wide, and 19 inches deep?

height/
 width/
 depth

- Replace or raise tables.

QUESTIONS

POSSIBLE SOLUTIONS

Seats, Tables, and Counters, continued

TYPE At each type of cashier counter, is there a portion of the main counter that is no more than 36 inches high?

Yes No

height

- Provide a lower auxiliary counter or folding shelf.
- Arrange the counter and surrounding furnishings to create a space to hand items back and forth.

TYPE Is there a portion of food-ordering counters that is no more than 36 inches high, or is there space at the side for passing items to customers who have difficulty reaching over a high counter?

height

- Lower section of counter.
- Arrange the counter and surrounding furnishings to create a space to pass items.

Vertical Circulation (ADAAG 4.1.3(5), 4.3)

Are there ramps, lifts, or elevators to all public levels?

- Install ramps or lifts.
- Modify a service elevator.
- Relocate goods or services to an accessible area.

On each level, if there are stairs between the entrance and/or elevator and essential public areas, is there an accessible alternate route?

- Post clear signs directing people along an accessible route to ramps, lifts, or elevators.

Stairs (ADAAG 4.9)

The following questions apply to stairs connecting levels *not* serviced by an elevator, ramp, or lift.

Do treads have a non-slip surface?

- Add non-slip surface to treads.

Do stairs have continuous rails on both sides, with extensions beyond the top and bottom stairs?

- Add or replace handrails if possible within existing floor plan.

Elevators (ADAAG 4.10)

Are there both visible and verbal or audible door opening/closing and floor indicators (one tone = up, two tones = down)?

- Install visible and verbal or audible signals.

TYPE Are the call buttons in the hallway no higher than 42 inches?

height

- Lower call buttons.
- Provide a permanently attached reach stick.

Do the controls inside the cab have raised and braille lettering?

- Install raised lettering and braille next to buttons.

QUESTIONS

POSSIBLE SOLUTIONS

Elevators, continued

Is there a sign on both door jambs at every floor identifying the floor in raised and braille letters?

Yes No

Install tactile signs to identify floor numbers, at a height of 60 inches from floor.

If an emergency intercom is provided, is it usable without voice communication?

Modify communication system.

Is the emergency intercom identified by braille and raised letters?

Add tactile identification.

Lifts (ADAAG 4.2, 4.11)

Can the lift be used without assistance? If not, is a call button provided?

At each stopping level, post clear instructions for use of the lift.
 Provide a call button.

TTTTT Is there at least 30 by 48 inches of clear space for a person in a wheelchair to approach to reach the controls and use the lift?


 clear space

Rearrange furnishings and equipment to clear more space.

TTTTT Are controls between 15 and 48 inches high (up to 54 inches if a side approach is possible)?


 height

Move controls.

Priority

3 Usability of Rest Rooms

When rest rooms are open to the public, they should be accessible to people with disabilities.

Getting to the Rest Rooms (ADAAG 4.1)

If rest rooms are available to the public, is at least one rest room (either one for each sex, or unisex) fully accessible?

Reconfigure rest room.
 Combine rest rooms to create one unisex accessible rest room.

Are there signs at inaccessible rest rooms that give directions to accessible ones?

N/A

Install accessible signs.

Doorways and Passages (ADAAG 4.2, 4.13, 4.30)

Is there tactile signage identifying rest rooms?

Add accessible signage, placed to the side of the door, 60 inches to centerline (not on the door itself).

Mount signs on the wall, on the latch side of the door, complying with the requirements for permanent signage. Avoid using ambiguous symbols in place of text to identify rest rooms.

QUESTIONS

POSSIBLE SOLUTIONS

Doorways and Passages, continued

Are pictograms or symbols used to identify rest rooms, and, if used, are raised characters and braille included below them?

Yes No

- If symbols are used, add supplementary verbal signage with raised characters and braille below pictogram symbol.

11111 Is the doorway at least 32 inches clear?

clear width

- Install offset (swing-clear) hinges.
- Widen the doorway.

11111 Are doors equipped with accessible handles (operable with a closed fist), 48 inches high or less?

height

- Lower handles.
- Replace knobs or latches with lever or loop handles.
- Add lever extensions.
- Install power-assisted or automatic door openers.

11111 Can doors be opened easily (5 lbf maximum force)?

force

- Adjust or replace closers.
- Install lighter doors.
- Install power-assisted or automatic door openers.

11111 Does the entry configuration provide adequate maneuvering space for a person using a wheelchair?

clear width

- Rearrange furnishings such as chairs and trash cans.
- Remove inner door if there is a vestibule with two doors.
- Move or remove obstructing partitions.

A person in a wheelchair needs 36 inches of clear width for forward movement, and a 5-foot diameter or T-shaped clear space to make turns. A minimum distance of 48 inches clear of the door swing is needed between the two doors of an entry vestibule.

11111 Is there a 36-inch-wide path to all fixtures?

width

- Remove obstructions.

Stalls (ADAAG 4.17)

Is the stall door operable with a closed fist, inside and out?

- Replace inaccessible knobs with lever or loop handles.
- Add lever extensions.

11111 Is there a wheelchair-accessible stall that has an area of at least 5 feet by 5 feet, clear of the door swing, OR is there a stall that is less accessible but that provides greater access than a typical stall (either 36 by 69 inches or 48 by 69 inches)?

length/
 width

- Move or remove partitions.
- Reverse the door swing if it is safe to do so.

QUESTIONS

POSSIBLE SOLUTIONS

Stalls, continued

In the accessible stall, are there grab bars behind and on the side wall nearest to the toilet?

Yes No

Add grab bars.

MIN Is the toilet seat 17 to 19 inches high?

Add raised seat.

height

Lavatories (ADAAG 4.19, 4.24)

MIN Does one lavatory have a 30-inch-wide by 48-inch-deep clear space in front?

Rearrange furnishings.
 Replace lavatory.
 Remove or alter cabinetry to provide space underneath.
 Make sure hot pipes are covered.
 Move a partition or wall.

A maximum of 19 inches of the required depth may be under the lavatory.

clear space

MIN Is the lavatory rim no higher than 34 inches?

Adjust or replace lavatory.

height

MIN Is there at least 29 inches from the floor to the bottom of the lavatory apron (excluding pipes)?

Adjust or replace lavatory.

height

Can the faucet be operated with one closed fist?

Replace with paddle handles.

Are soap and other dispensers and hand dryers within reach ranges (see page 7) and usable with one closed fist?

Lower dispensers.
 Replace with or provide additional accessible dispensers.

MIN Is the mirror mounted with the bottom edge of the reflecting surface 40 inches high or lower?

Lower or tilt down the mirror.
 Add a larger mirror anywhere in the room.

height

Priority

4 Additional Access

Note that this priority is for items not required for basic access in the first three priorities.

When amenities such as drinking fountains and public telephones are provided, they should also be accessible to people with disabilities.

N/A

Drinking Fountains (ADAAG 4.15)

MIN Is there at least one fountain with clear floor space of at least 30 by 48 inches in front?

Clear more room by rearranging or removing furnishings.

clear space

QUESTIONS

POSSIBLE SOLUTIONS

Drinking Fountains, continued

MINI Is there one fountain with its spout no higher than 36 inches from the ground, and another with a standard height spout (or a single "hi-lo" fountain)? *N/A*

Yes No

height

Are controls mounted on the front or on the side near the front edge, and operable with one closed fist? *N/A*

MINI Is each water fountain cane-detectable (located within 27 inches of the floor or protruding into the circulation space less than 4 inches from the wall)? *N/A*

height/
protrusion

Telephones (ADAAG 4.31)

MINI If pay or public use phones are provided, is there clear floor space of at least 30 by 48 inches in front of at least one? *N/A*

clear space

MINI Is the highest operable part of the phone no higher than 48 inches (up to 54 inches if a side approach is possible)? *N/A*

height

MINI Does the phone protrude no more than 4 inches into the circulation space? *N/A*

protrusion

Does the phone have push-button controls? *N/A*

Is the phone hearing-aid compatible? *N/A*

Is the phone adapted with volume control? *N/A*

Is the phone with volume control identified with appropriate signage? *N/A*

If there are four or more public phones in the building, is one of the phones equipped with a text telephone (TT or TDD)? *N/A*

Is the location of the text telephone identified by accessible signage bearing the International TDD Symbol? *N/A*

Provide cup dispensers for fountains with spouts that are too high.

Provide accessible cooler.

Replace the controls.

Place a planter or other cane-detectable barrier on each side at floor level.

Move furnishings.

Replace booth with open station.

Lower telephone.

Place a cane-detectable barrier on each side at floor level.

Contact phone company to install push-buttons.

Have phone replaced with a hearing-aid compatible one.

Have volume control added.

Add signage.

Install a text telephone.
 Have a portable TT available.
 Provide a shelf and outlet next to phone.

Add signage.