

# A+ HOME INSPECTIONS

*Structural & Mechanical*



1234 Anywhere Street  
Houston, TX 77000

Prepared for: John Doe

Inspector: David Rogers    T.R.E.C.: #5048

Date: 02/13/2023

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# A+ HOME INSPECTIONS

*Structural & Mechanical*

Date: 02/13/2023

John Doe  
1234 Anywhere Street  
Houston, TX 77000

Re: Commercial inspection at 1234 Anywhere Street

Dear John:

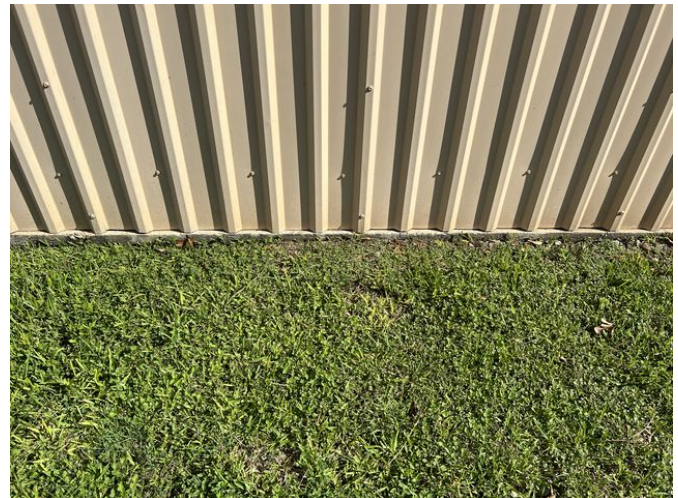
As requested I have performed a visual commercial structural and mechanical inspection of the subject property. The weather conditions were fair and the temperature was 91 degrees.

**Overview:**

The building is a steel frame construction with a corrugated steel wall exterior. The foundation is slab on grade construction and the slab appears to be performing its intended function.



*Building is steel frame construction on slab*



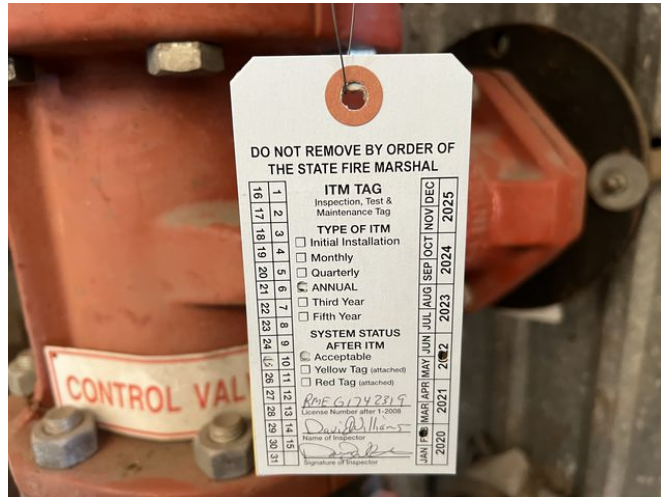
*Exterior walls corrugated metal*

**Fire Protection:**

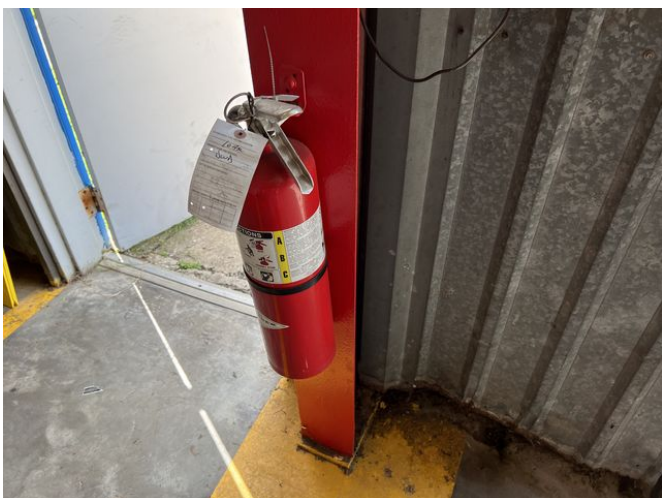
The building is installed with a fire sprinkler system. This type of fire sprinkler requires an annual inspection of the system. The last inspection performed by the Fire Marshall was on February 26, 2022. There is a manual fire alarm lever installed at the exterior of the receiving room and manual fire extinguishers are located at the exterior doors and top of the attic stairway. Smoke detectors are not required since the building occupancy is less than 50 people.



Fire sprinkler controls at warehouse



Fire Marshall inspection tag



Fire extinguishers located at the exterior doors



Manual fire alarm lever at receiving door



Fire extinguishers located at the exterior doors



Fire extinguisher at the attic stairway landing

**Grading:**

The grading is not properly sloped away from the dwelling at the right, rear and left rear corner of the dwelling. The gutter downspouts at the right exterior are not installed with directional diverters and causing erosion under the downspout.

Debris and standing water was observed at the gutters. The gutter seams are leaking at several locations. The left front downspout was leaking at the subsurface drain pipe connection. There was standing water at the left drive and front delivery well. The subsurface drain is not working at the front delivery well and the water has to be mechanically pumped out. Tar has been applied to the base of the right exterior wall to minimize standing water from entering the building.



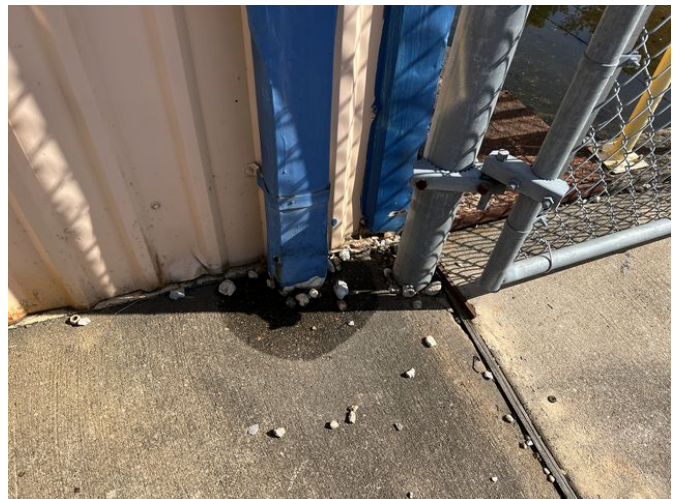
*Improper grading right building*



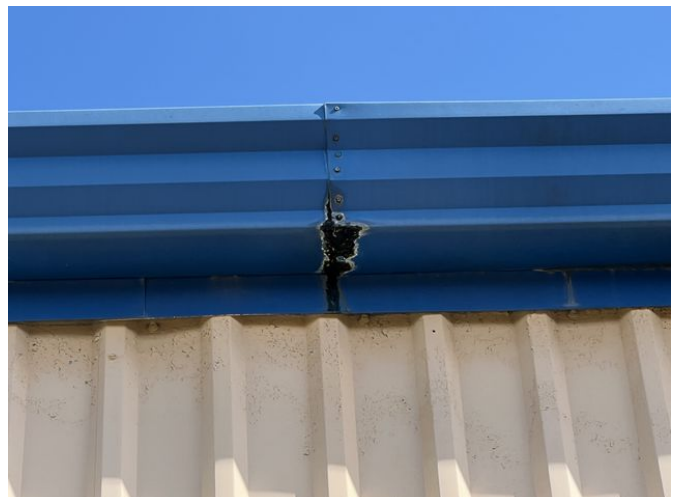
*Downspouts missing diverters and splashblocks, erosion*



*Standing water front delivery well*



*Left front downspout leaking at drain pipe connection*



*Standing water left drive*



*Inadequate slope rear building*

*Gutter seams leaking several places*



*Inadequate slope left rear building*



*Debris gutters*



*Standing water gutters*

### **Roof Covering:**

The roof covering is corrugated metal. The tenant disclosed that there are currently 3 leaks that they are aware of. The left roof slope at the left rear of the warehouse at the roof eave. This is likely the result of debris in the gutters causing an overflow during heavy rainfall. Two of the left slope skylights are also leaking. Inspection of the roof indicated some rust at several locations. It was observed that several of the roof fasteners are loose and or missing that could also result in roof leaks. There is debris and vegetation contact at the right roof slope. Further evaluation by a professional roofer is recommended.



*Skylight leaking left roof slope*



*Skylight leaking left roof slope*



*Leak at left rear corner warehouse*



*Rust along the ridge cap*



*Debris right roof slope*



*Rust at roof covering, vegetation contact right slope*



*Loose fasteners at roof covering*



*Missing fasteners at roof covering*

### **Exterior Walls:**

The exterior wall covering terminates at the slab surface and is not flashed to keep water from entering the base of the wall. Tar had been applied along the right side of the dwelling where water entry is occurring with regularity. There are several penetrations in the exterior metal veneer that are not properly sealed at the front, right left and rear of the building. Rust was observed at the base of the metal veneer at multiple locations around the building. There is also some physical damage to the exterior metal veneer at several locations possible from heavy equipment hitting the siding. Several holes were observed in the siding that were not properly sealed. There is tree and vegetation contact at the exterior siding at the right and rear of the building.



*Siding not flashed at the slab, tar applied in places*



*Penetrations not properly sealed*



*Rust at the base of the walls at several locations*



*Penetrations not sealed several locations*



*Damaged siding from equipment contact*



*Vegetation contact siding rear dwelling*



*Tree contact siding right rear building*



*Penetrations not sealed at siding*

**Interior Walls:**

Rust observed at the interior metal walls at several locations. The interior drywall was observed stained at the base along



the right and front office walls. Drywall is cracked at the right front office right wall, metal studs are damaged at the right warehouse wall from heavy equipment contact. Insulation observed missing at several of the interior walls where visible.



*Hole siding front building, insulation missing*



*Metal stud damage right warehouse wall, siding rusted*



*Moisture stains right front office base wall*



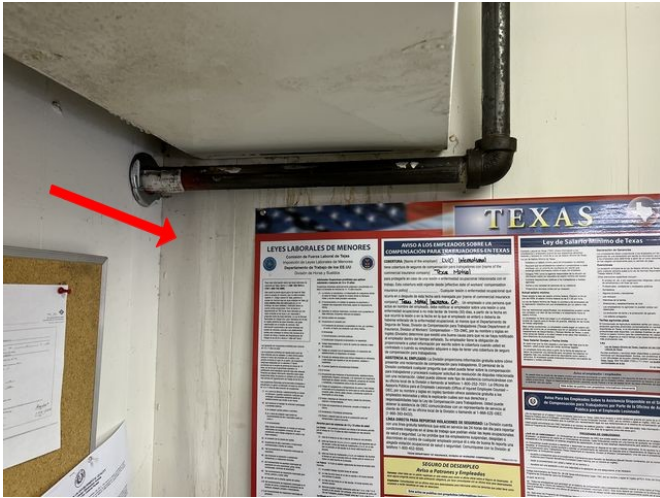
*Moisture stains right front office base wall*



*Drywall crack right front office right wall*



*Moisture stains receptionist room front wall*



*Moisture stains receiving room front wall*



*Moisture stains receiving room front wall*

### **Doors:**

The front entry door is binding at the door jamb. The office hallway door to the receiving room does not latch. Weather strip observed missing at the front entry door, storage room double doors to the warehouse and the storage room single door to the warehouse. The office hallway door to the receiving room glass pane is not installed with tempered glass.



*Deteriorated jamb warehouse garage door*



*Rear warehouse door deteriorated*



*Storage room rear double doors not weather stripped*



*Storage room rear door not weather stripped*



*Office hallway door at receiving room not latching*



*Glass not tempered at hallway door at receiving room*



*Front entry door not weather stripped*

#### **Safety Railing/Fencing:**

The safety guard rail at the front delivery well has openings greater than 4" wide where the pit is deeper than 30". The fence at the right property line is damaged. The gate fencing at the right side of the building is also damaged.



*Gate damaged right side building*



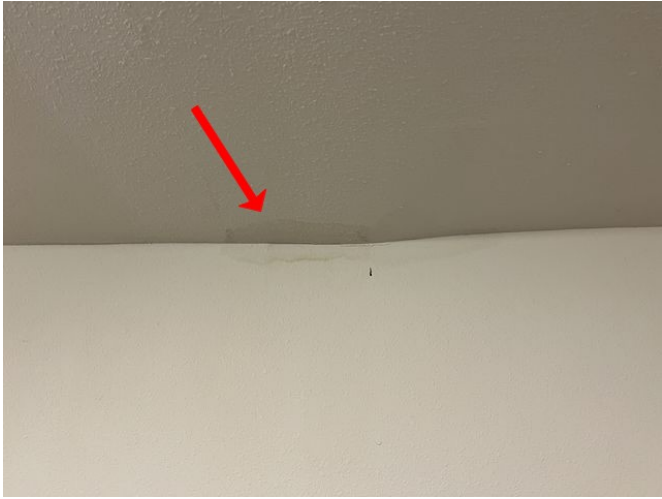
*Right property line fencing damaged*



*Delivery well guard rail has opening wider than 4"*

#### **Ceiling and Floors:**

Moisture stain observed at the right front office ceiling. Moisture stain observed at the office women's bathroom. Ceiling is cracked at the rear office. Moisture stains observed at the storage room under the electrical panels along the right exterior building wall.



*Moisture stain right office ceiling*



*Moisture stain women's bathroom ceiling*



*Drywall cracked rear office ceiling*



*Moisture stains storage room floor at right wall*

**Warehouse Ventilation:**

The power ventilation fans installed at the left exterior wall and right exterior wall did not respond to controls when inspected.



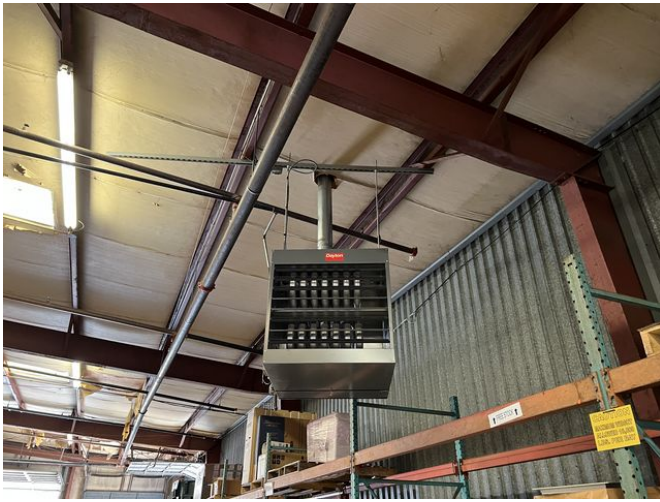
*Warehouse left wall ventilation fan not working*



*Warehouse right wall ventilation fan not working*

**Warehouse Heaters:**

Two heaters have been installed at the warehouse to provide heat for the fire sprinkler system during freezing conditions. Both heaters were operated and working. The right heater fan had some vibration observed when operated. Further evaluation is recommended.



*Left warehouse heater*



*Right warehouse heater*



*Fan vibration right warehouse heater when operated*

**Electrical Service:****Above Ground Service:**

The service conductors from the power pole are in contact with the front tree. The service conductors are resting on the A/C waterlines and are not installed with proper clearance at the metal gutter downspouts.



*Power lines in contact with front tree*



*Power lines on the A/C drain lines, clearance gutter*

### **Grounding and Bonding:**

The grounding rod at the right exterior of the building is not driven below grade. The metal building is bonded at the storage room right wall. The gas pipe is not bonded at the meter at the right exterior of the building. The galvanized water pipe is not bonded at the service entrance at the right side of the building. The grounding and bonding does not originate at the electrical service gutter at the storage room. This is the point of service where neutrals and grounds should be in common.



*Ground rod at right side building not driven below grade*



*Metal building bonding clamp at storage roof*



Grounding and bonding not originated at service gutter



Gas pipe not bonded right side building



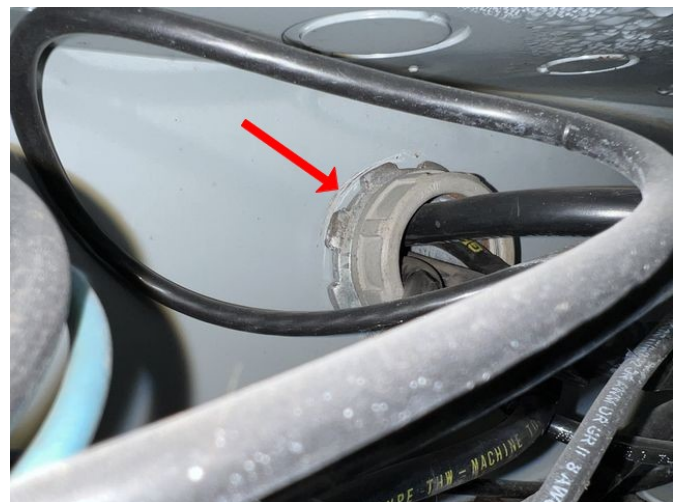
Galvanized water pipe not bonded right side building

**Gutter enclosure:**

Moisture observed at the interior of the gutter cabinet. No bonding bushing at the service conduit. Several conductors observed double lugged at the terminals.

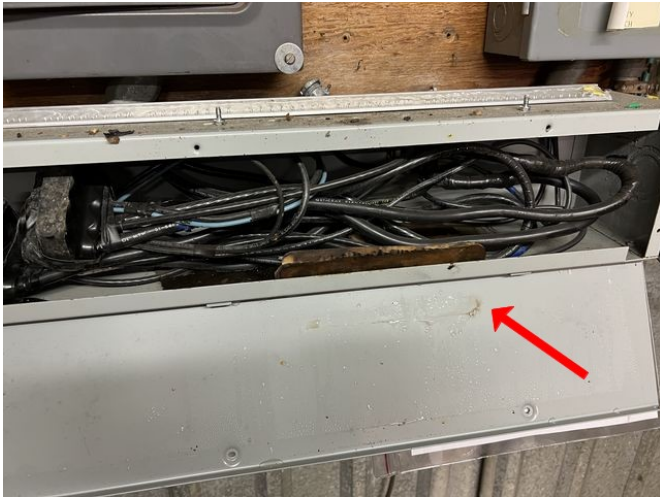


Building electrical service at the storage roof



No bonding bushing at service conduit





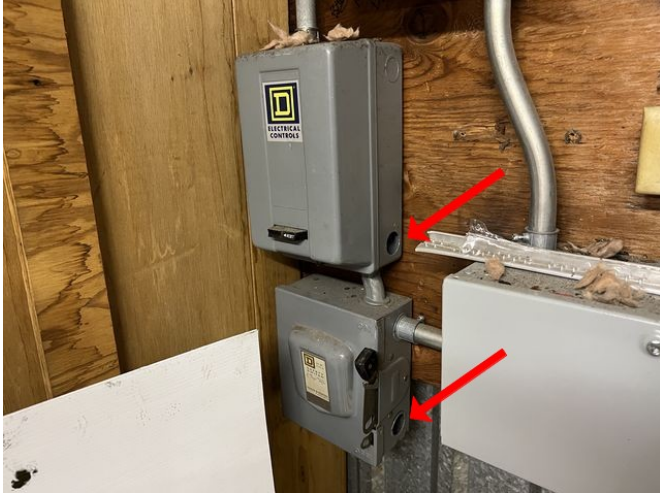
*Interior gutter cabinet is wet*



*Double lugged terminals at gutter cabinet*

### **Equipment Disconnects:**

Knockouts not covered at the sides of two of the left disconnects.



*Knockouts not covered at left disconnects*

### **Right Panelboard: Square D Panel, 50 amp disconnect at the left panel**

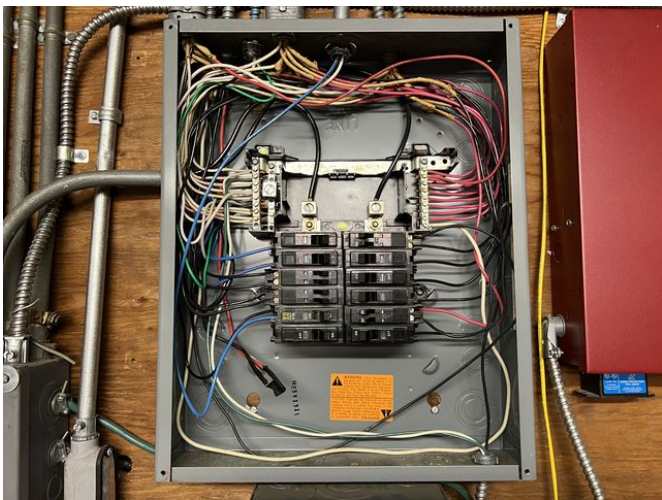
The branch circuit distribution panelboard is missing labels, 2 set screws are missing, neutrals are double terminated, neutrals and grounds are in common and not properly separated, no grounding conduction installed between the panelboards, the black sheathed service neutral is not marked white, trip ties missing at the circuit breakers that have a shared neutral, the panelboard is not properly bonded.



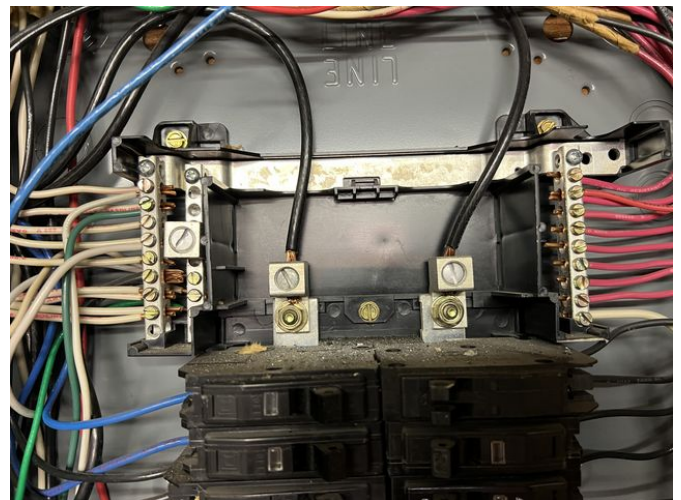
Right panelboard, Square D



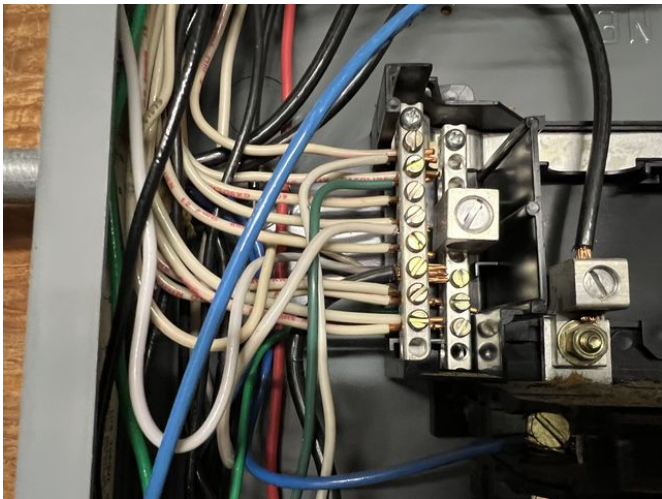
Labels missing at the dead front cover



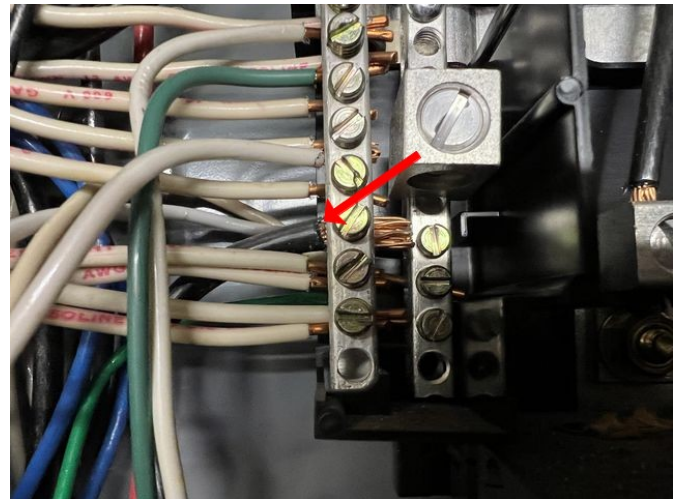
Neutrals and ground in common, no ground from panel



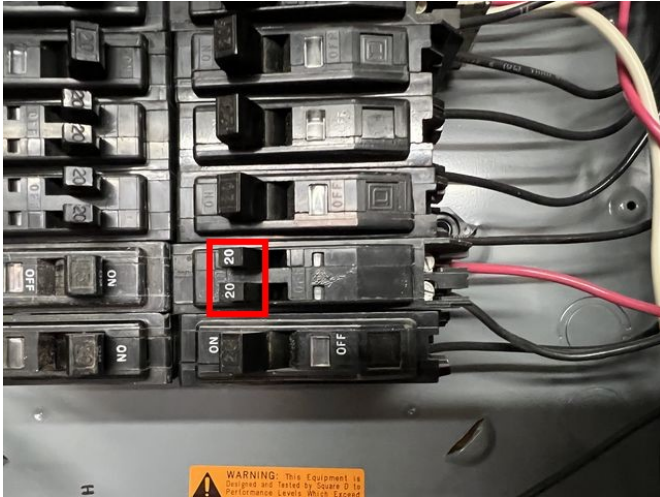
Double lugged neutrals



Neutrals and grounds in common, not separated



Black sheathed neutral not marked white



*Trip tie missing at breakers with shared neutral*

**Left Panelboard: Square D Panel, 100 amp disconnect**

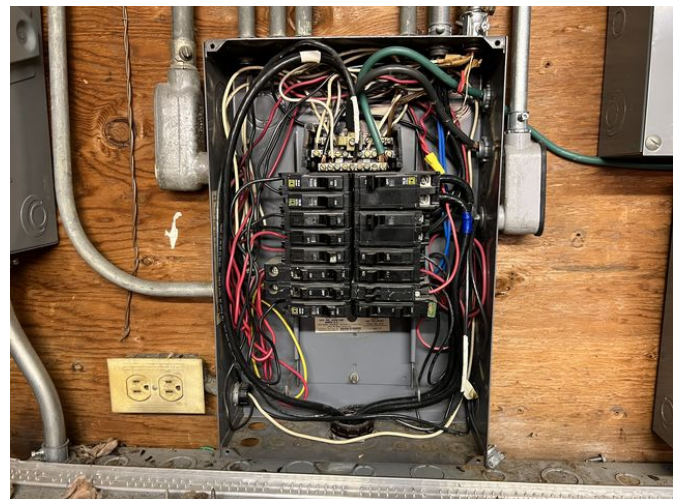
The branch circuit distribution panelboard is missing labels, improper set screws installed at the dead front cover, knockouts are not covered at the bottom of the panelboard, the neutral and grounds are in common and not properly separated, black sheathed ground is not marked green, panelboard is not properly bonded.



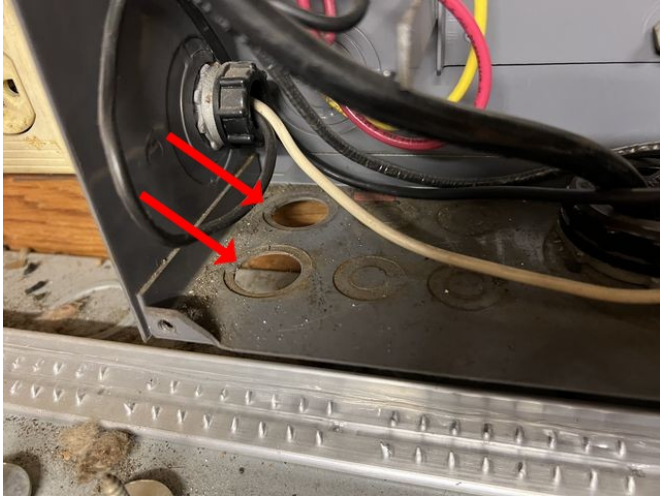
*Left panelboard, Square D*



*Labels missing at dead front cover*



*Improper set screws dead front cover*

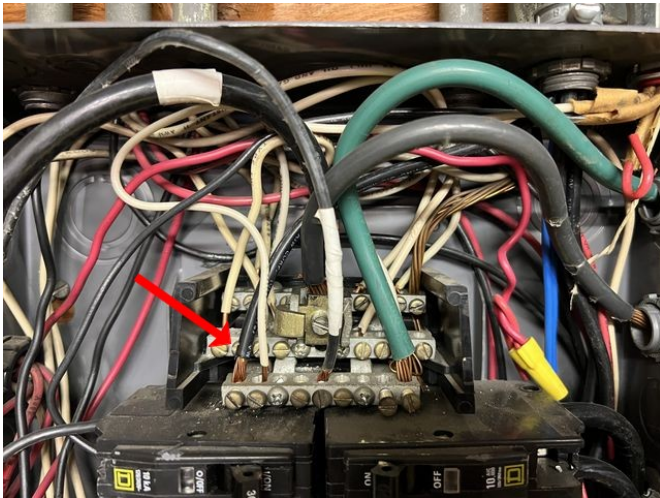


*Knockouts not covered bottom panelboard*

*Neutral and grounds in common at panelboard*



*No ground from the gutter cabinet point of service*



*Black sheathed ground not marked green*

**Electrical Branch Circuits:**

Ground fault circuit interrupter (GFCI) receptacles are not installed at the following required locations: exterior, bathroom, warehouse. The junction box is missing a coverplate at the left rear warehouse ceiling. The attic right wall light is not working. The attic ceiling light fixture is missing a bulb. Several of the receptacle coverplates are cracked in the offices. No power the reception office left wall receptacle.



*No GFCI receptacles at the exterior*



*No GFCI receptacles installed in the warehouse*



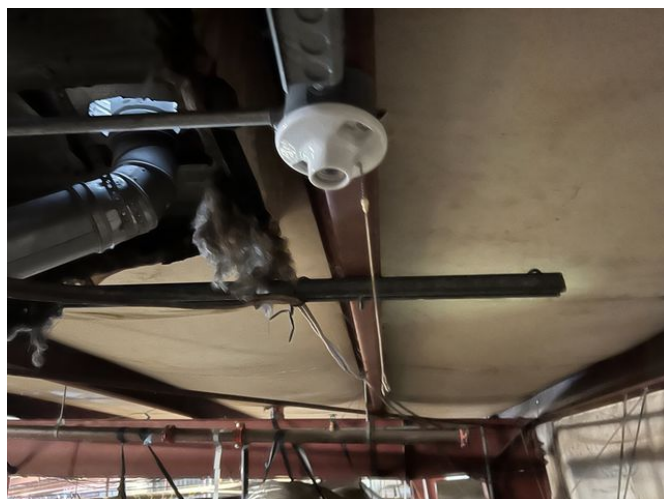
*No GFCI receptacles installed at the bathrooms*



*Junction box coverplate missing at warehouse ceiling*



*Attic light at the right wall not working*



*Bulb missing at the attic light fixture*



*Several of the coverplates are cracked in the offices*



*No power reception left wall receptacle*

### **Plumbing:**

The hose bibs are missing anti-siphon devices, the right exterior hose bib wheel handle is damaged, waterlines at the warehouse are not insulated, the fire sprinkler main line is not insulated at the left side of the building.

Storage room bathroom: The urinal is not working at the storage room bathroom, the sink stopper is missing, commode is loose at the floor mount.

Office Women's bathroom: The commode is loose at the floor mount, the sink stopper is missing.

Office Men's bathroom: The sink stopper is missing, the sink bowl is cracked.

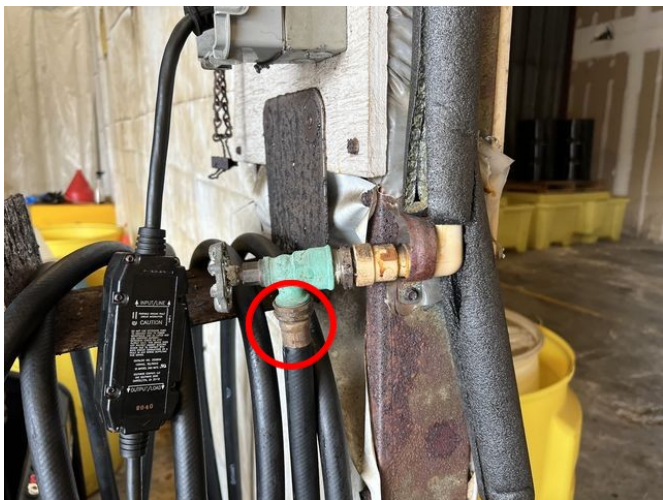
There is not a water heater installed in the building.



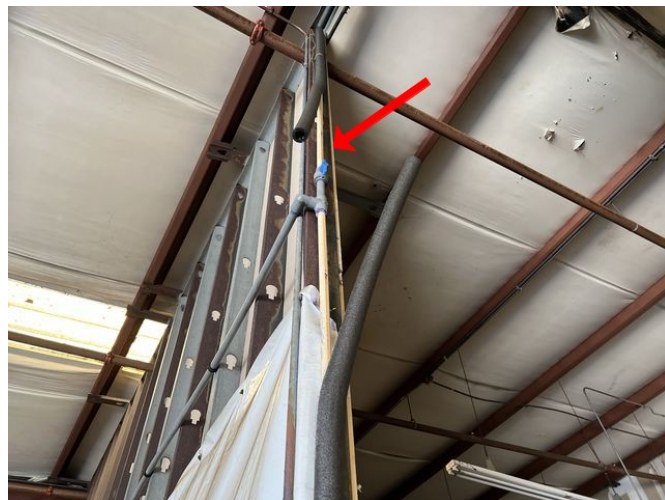
*Broken wheel handle right hose bib*



*Insulation missing at sprinkler main waterline*



*Anti-siphon devices missing at hose bibs*



*Waterlines not properly insulated at warehouse*



*Urinal not working at storage room bathroom*



*Sink stopper missing storage room bathroom*



*Commode loose at floor storage room bathroom*



*Commode loose at floor women's bathroom*



*Sink stopper missing women's bathroom*



*Sink bowl cracked men's bathroom*

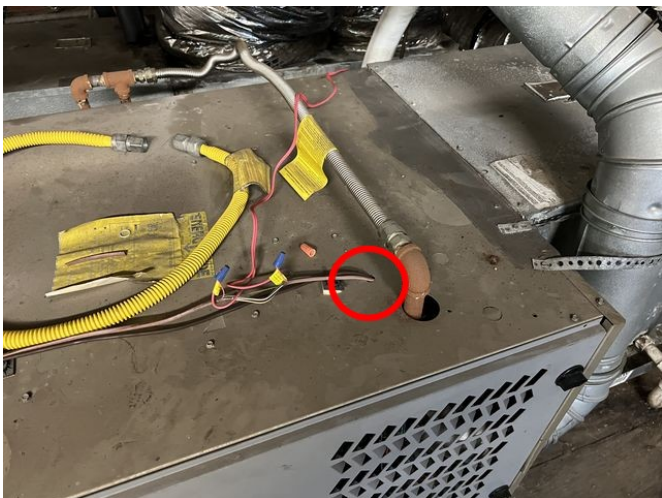


*Sink stopper missing men's bathroom*

#### **Air Conditioning: Heating**

The furnaces were performing at the time of inspection. The thermostat wires are not sleeved at both furnace cabinets. The office furnace gas shut off is located too far from the equipment. Both furnaces are not properly vented to the exterior of the building. The furnace vents should extend the proper distance above the roof and be terminated with a cap and collar.





*Thermostat wires not sleeved at office furnace*



*Gas shut off valve too far from the office furnace*



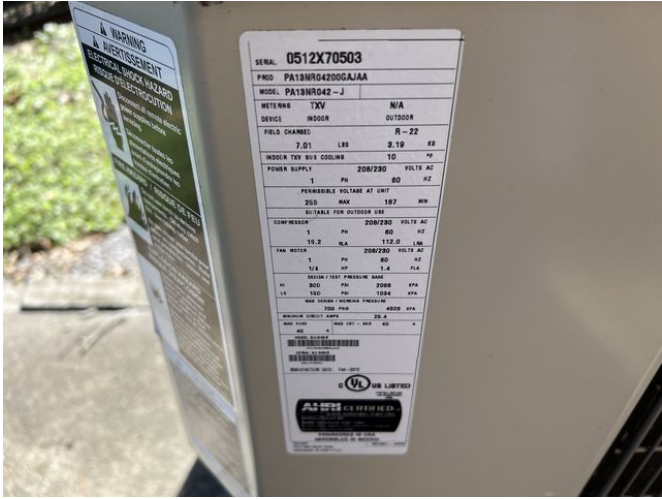
*Thermostat wires not sleeved at storage area furnace*



*both furnace are not properly vented to the exterior*

### **Air Conditioning: Cooling**

The office A/C unit is a 3.5 ton unit, the rear storage A/C unit is a 2 ton unit. Both A/C units were cooling adequately at the time of inspection. The exterior suction line insulation is deteriorated at both condensing units. Both A/C drain lines deposit at the right side of the dwelling. Current codes require the A/C condensate drain lines deposit into the sanitary sewer above at p-trap. The auxiliary drain line at the front of the building is not located at a conspicuous location (above a door or window). The office primary drain line is missing insulation at the attic. There is rust in the office A/C drain pan, continue to monitor.



Office condensing unit labeling, 3.5 tons



Storage area condensing unit labeling, 2 tons



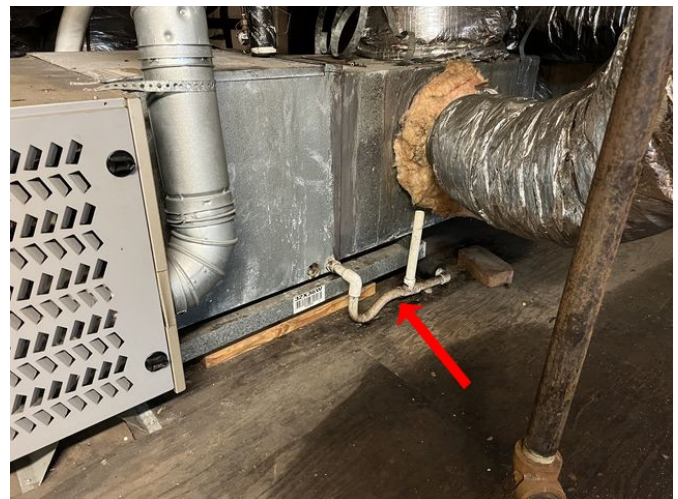
Deteriorated suction line insulation at exterior



A/C drain lines deposit right side building



Auxiliary drain line not a conspicuous location



Insulation missing office A/C primary drain line



*Office A/C drain pan rusted, monitor*

### **Air Conditioning: Ductwork**

The ductwork installed is a combination of metal rigid duct and mylar flex duct. Several of the duct runs were observed to be sweating and dripping condensate. Insulation may be loose and or missing. Further evaluation is recommended. The mylar flex duct should be separated where touching to prevent thermal bridging (sweating and dripping). Organic stains was observed at the air supply registers at the receiving room and storage room.



*Separate ductwork where touching at attic*



*Ductwork sweating and dripping at attic*



*Ductwork sweating and dripping at attic*



*Ductwork sweating and dripping at attic*



*Duct sweating at receiving room*



*Organic stains observed at receiving room register*



*Organic stains observed at storage room registers*

**Disclaimer:**

This report contains only visual observations of deficiencies by the inspector at the time of inspection. This report is not intended as a recommendation on how any of the items listed above should be repaired or replaced and should not be construed as such. The inspector makes no guarantee or warranty that all defects have been found or that the inspector will pay for repair of undisclosed defects. That any of the items inspected are designed or constructed in good and workmanlike manor. That any of the items inspected will continue to perform in the future as they are performing at the time of the inspection. That any of the items inspected are merchantable or fit for any particular purpose. It is recommended that all deficiencies listed in this report be reviewed by the related professional trades where applicable to determine what corrective action should be taken, if any.

Unless specifically stated, the report will not include and should not be read to indicate opinions as to the environmental conditions, presence of toxic or hazardous waste or substance, whether or not the property lies within a flood plane or flood prone area, whether or not property lies within close proximity of a geological fault, presence of termite or other wood-destroying organisms, or compliance with codes, ordinances, statutes or restrictions or the insurability, efficiency, quality, durability, future life or future performance of any item inspected.

**Conclusion:**

I am available to answer any questions you may have after reviewing the inspection report. Please do not hesitate to call if I can be of further assistance.

Sincerely,



David J. Rogers  
*Professional Real Estate Inspector*  
T.R.E.C. # 5048