

HOUSTON INSPECTIONS

Houston Home Inspections, PLLC d/b/a Houston Inspections
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Houston, TX 77007
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Invasive Stucco Inspection



INSPECTED FOR

Brooke Sankey
904 W 18th St Unit D
Houston, TX 77008

October 12, 2021

1. INTRODUCTION

1.1 PURPOSE: The purpose of this moisture inspection is to help assess the condition of the stucco system by looking for visible installation flaws, inadequate water diversion, and sealant failures. In addition, we will conduct random moisture readings using electronic moisture scan devices. Please note that the provision of a scope of work for remedial repairs is not the purpose of this inspection. Further investigation may be needed to determine the extent of water damage, if any, and how best to modify your home to address any moisture problems that may be indicated by this inspection.

1.2 SCOPE OF INSPECTION: This is a basic, stucco inspection limited to the following:

- A visual examination of the condition of the stucco, exterior sealants, flashing, windows, doors, roof-to-stucco transitions, parapets, gutters, deck-to-building connections, stucco terminations and any penetrations through the stucco.
- Conducting of *random* electronic moisture scanning of the building envelope.
- Preparing a report of our observations of potential problem areas and recording any high readings found.
- Providing detailed information on typical moisture-related problems in stucco structures to assist you in maintaining the value of your home.

1.3 LIMITATIONS OF LIABILITY: Because this is a limited inspection, we can make no guarantee, express or implied, that our observations and random moisture readings offer conclusive evidence that no installation or moisture problems exist, or that problems found are all-inclusive. This inspection company, its employees and any divisions shall not be liable for non-visual defects, unseen defects, unspecified defects or hidden damage and conditions existing on the subject property and hereby disclaims any liability or responsibility thereof. All parties concerned agree to hold harmless and indemnify this inspection company involving any liabilities that may result. In addition, the client should understand that all properties that are inspected have areas that cannot be accessed either because of the height (we carry 26' ladder), the area cannot be safely reached, along with other factors.

1.4 FURTHER TESTING / INVESTIGATION: Our policy is to rely on moisture meter readings as an indicator of relative moisture values between different test spots, not as an absolute value of water content in the substrate. It is difficult to determine if the structural wood of the structure has been damaged in areas of high readings without 'probing' and/or removing a core sample of the stucco to allow for visual inspection. Should we feel that further investigation is needed this will be indicated in the summary section of the report.

1.5 REPAIR FOLLOW-UP AND ANNUAL INSPECTIONS: A repair follow-up inspection should be conducted within three months after completion of the repairs to assess the effectiveness of the moisture modifications. This is extremely important. Annual inspections should also be scheduled to ensure that your stucco system remains dry. This way any sealant failures, stucco cracks, etc. can be caught and repaired promptly. Testing and maintaining the structure on a regular basis is the best way to prevent costly repairs associated with moisture damage. Also, should you decide to sell the property, annual inspections and maintenance documentation will be a valuable selling tool, providing evidence to show that your property has been inspected and maintained on a regular basis by a reputable and qualified firm.

HOUSTON INSPECTIONS

Inspection Information

Owner's Information		Buyer's Information	
Owner's name	N/A	Buyer's Name	Brooke Sankey
Street address	904 W 18th St Unit D	Buyer's Phone	Refer to Work Order
City, State, Zipcode	Houston, TX 77008	Buyer's Email	Refer to Work Order
Owner's Phone	N/A	Buyer's Realtor	Refer to Work Order
Property Information		Inspection Information	
Type of Exterior	Stucco Veneers - Hard Coat, Cement Board, Siding, Trim, Wood Trim	Date of Inspection	10/12/2021
Substrate (if known)	Assumed to be OSB	Inspector	Ronald Hagelberger #TX-198
Age of System	6 - 10 Years	Present at inspection	Owner
Square Footage	Refer to Work Order	Weather Conditions	Clear, Dry
Stories	4	Temperature/Humidity	80 to 90
Type of Windows	Vinyl	Last Rainfall	2 - 5 Days

Inspection Test Equipment

Test Equipment		Test Range			Setting
		Low	Medium	High	
A	Delmhorst Moisture Probe Meter BD 2000	6-14	15 - 19	20 - 40	1
B	Extech M0260 Pinless Moisture Meter	10 - 20	21 - 50	51 - 99	n/a

How to interpret the observations and photos sections of this report:

Building Codes or Installation Standards = Blue Text

Items that do not comply with current building codes other standards (manufacturer, trade associations, etc.).

Items Damaged, Non-Functional, or Operating Improperly= Red Text

Items in need of repairs either because they are not functioning or damaged.

General Comments & Specific Limitations= Black Text

These are general information, limitations, or notices.

Important Note: The test equipment is used to help locate problem areas. It must be understood that the test equipment is not an **exact** science but rather good tools used as indicators of possible problems. At times, because of hidden construction within the wall cavity, the meters get false readings or no readings at all. Some meters will pick up on metals, wiring, unique wall finishes, etc. Positive readings do not always mean there is a problem, nor do negative readings necessarily mean there is not a problem. We do not use the equipment to obtain **exact** moisture content, but rather to obtain relative readings between suspected problem areas and non problem areas. This information is then used to help determine potential problem areas which may warrant more investigation.

Baseline Measurements:



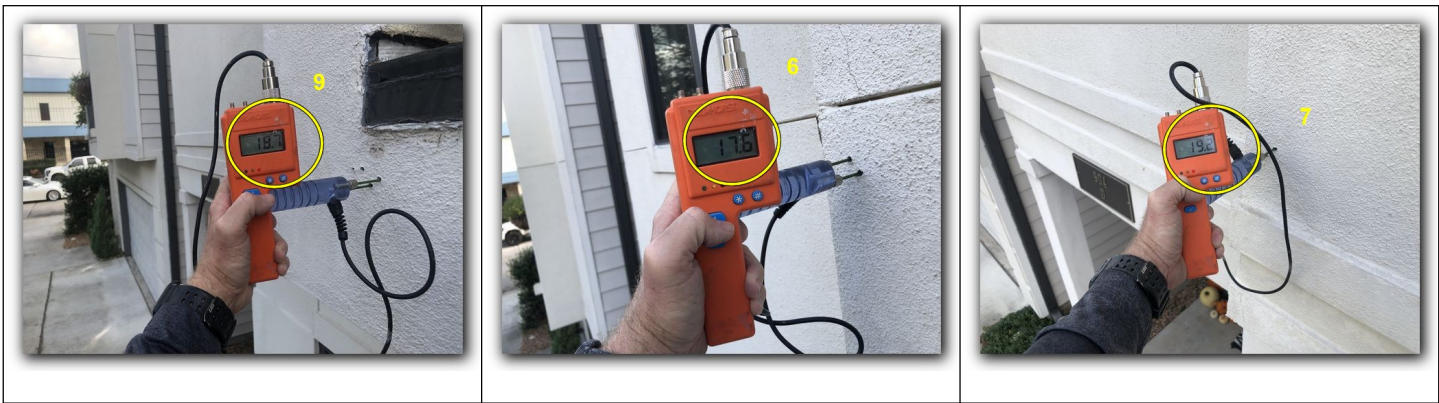
General Observations

U/D =Unable to determine N/A = Not applicable

	YES	NO	U/D	N/A
Are there any areas of cracking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there any areas of impact damage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sealant joints present at windows and doors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have sealants been applied at all penetrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sealant joints present at intersections of the stucco and dissimilar materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the stucco system terminate 4" above grade?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the stucco system terminate 2" above hard surface / flatwork?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the stucco system terminate 2" above roof surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are kickout / diverter flashing's installed at required locations and properly installed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the window and door flashing's installed (head flashings)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the chimney flashing's installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has a chimney cricket been installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are the exterior fixtures installed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there evidence of sprinkler over spray?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all deck flashing details installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are flat surfaces present and properly protected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are gutter downspouts installed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TREC NOTICE: This report was prepared for our client named on page two of this report in accordance with the client's requirements. This report addresses the stucco cladding system only and is not intended as a substitute for a complete standard inspection of the property. Standard inspections performed by a Texas Real Estate Commission licensee and reported on Texas Real Estate Commission "TREC" promulgated report forms may contain additional information a buyer should consider in making a decision to purchase.

Front Elevation 1



Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	Cracks and deteriorated sealant
2	Low	Firm	
3	Low	Firm	
4-5	Low	Firm	Deteriorated/missing sealant
6-7	Mid Range	Semi Soft - Damage	Cracks and deteriorated sealant
8	High	Soft - Damage	"
9-10	Mid Range	Semi Soft - Damage	Missing weep screed/Missing diverter/end dam flashing/Deteriorated/missing sealant
11	High	Soft - Damage	"

Supporting Photos



Front Elevation 2





Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	
2	High	Soft - Damage	Cracks and deteriorated sealant
3	Mid Range	Semi Soft - Damage	Cracks and sealant missing
4-5	Mid Range	Semi Soft - Damage	Missing weep screed/Cracks and deteriorated sealant
6	High	Soft - Damage	"
7	Mid Range	Semi Soft - Damage	"
8	Mid Range	Semi Soft - Damage	"
9	High	Soft - Damage	"

Supporting Photos

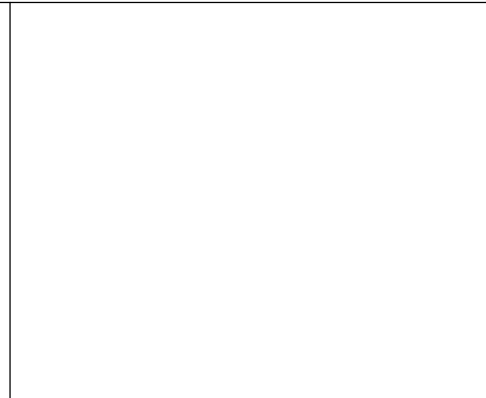
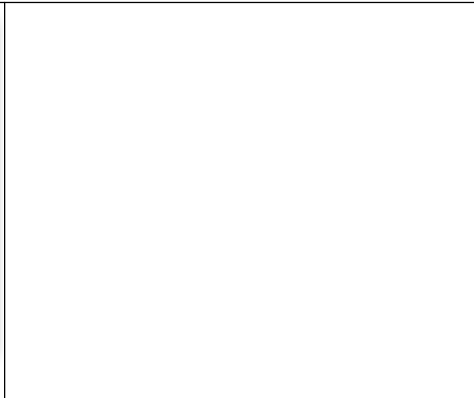


Front Elevation 3



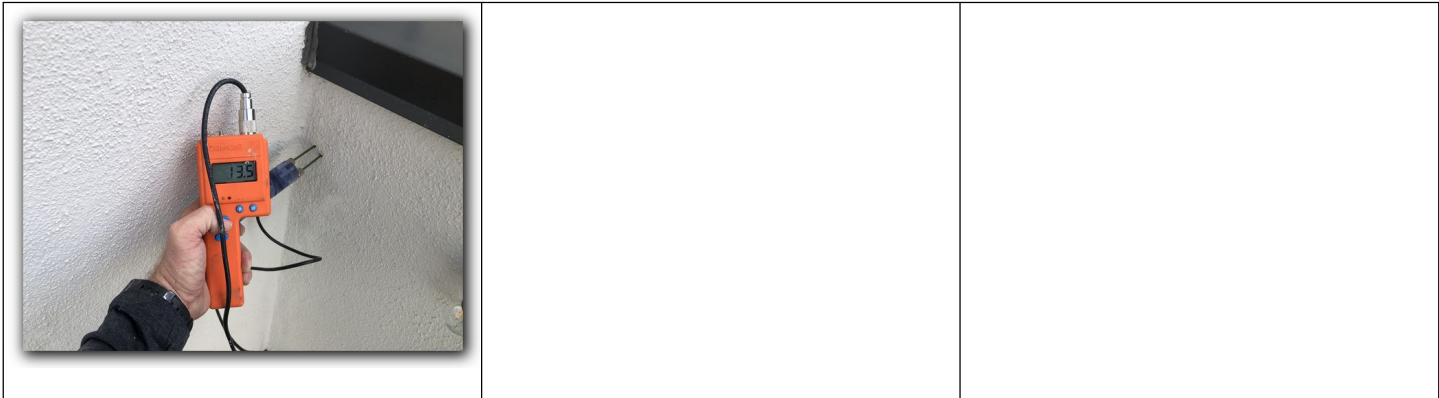
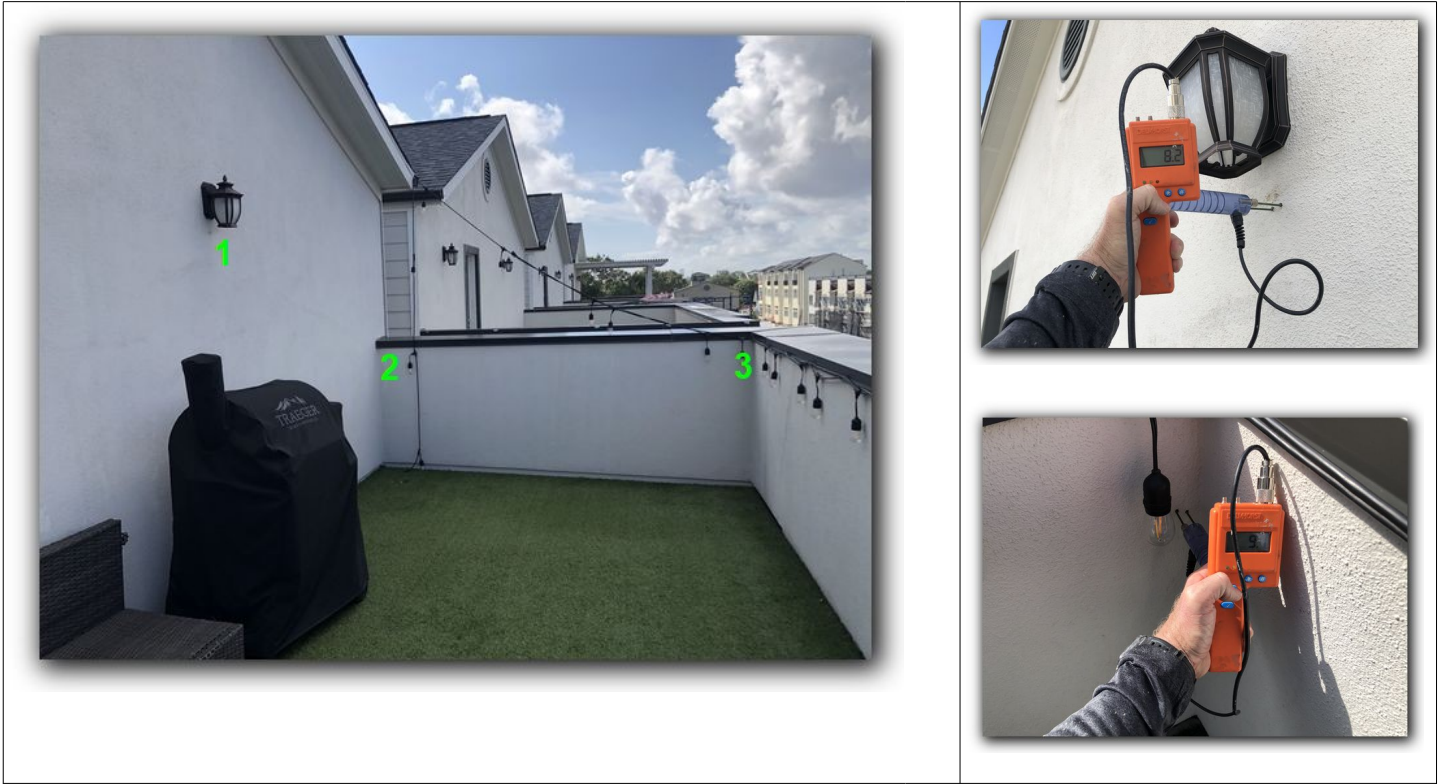
Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	
2	Low	Firm	
3	Low	Firm	Cracks and sealant missing
4	Low	Firm	Deteriorated/missing sealant
5	Low	Firm	Cracks and sealant missing

Roof Top 1



Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	Deteriorated/missing sealant
2	Low	Firm	Deteriorated/missing sealant
3	Low	Firm	

Roof Top 2



Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	
2	Low	Firm	Deteriorated/missing sealant
3	Low	Firm	Deteriorated/missing sealant

Items Damaged, Non-Functional, or Operating Improperly

1. End dam flashing is not present / visible at the balcony wall terminations.

1.1



1.2

2. Missing weeps / vents / drainage openings were found during the inspection. This has led to elevated moisture within the wall cavity at the substrate and damaged. Repairs should include repairs to the substrate and installation of weeps / drainage openings.

2.1



2.2



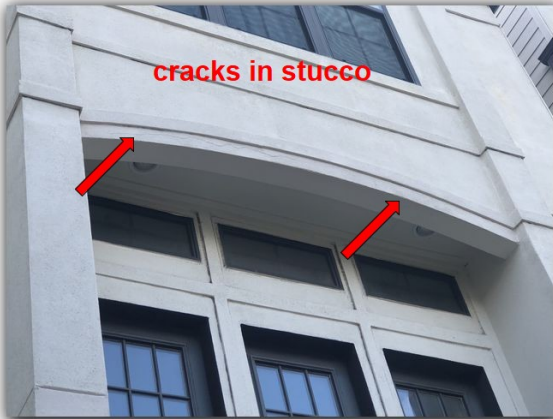
2.3



2.4

3. Cracking was found at sections of the stucco walls. The below photos are a sampling of the cracks found, but do not represent all cracking. Recommend repairs by a qualified contractor.

3.1



3.2



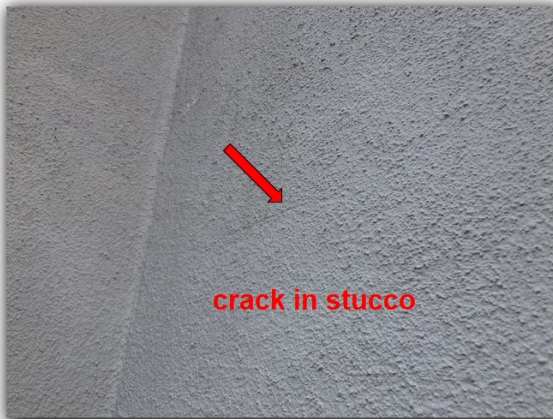
3.3



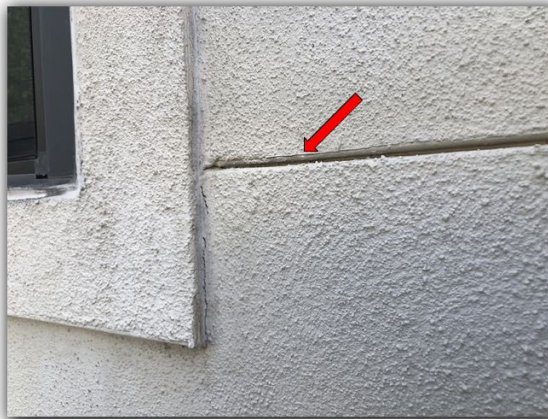
3.4



3.5



3.6



4. The sealant / caulking which has been used to seal areas at joints, transitions, and voids on the exterior veneers are starting to deteriorate as evident by cracking and/or shrinkage around these areas. This material acts as a moisture barrier to prevent water from moving to the underlying wall cavity and should be continuously monitored and maintained. It is recommended that a qualified tradesman be contacted to evaluate and determine if the re-sealing of the exterior veneers should be considered.

4.1



4.2



4.3



4.4



4.5



4.6



5. Discoloration was noted at portions of the stucco veneer surfaces which could indicate moisture behind the stucco base coat.

5.1



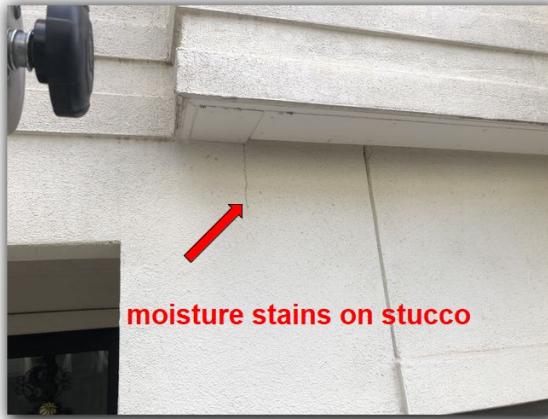
5.2



5.3



5.4



5.5



5.6



6. Plastic has been wrapped around the bottom of the wood substrate at the drainage plane on right side of the garage (behind surface veneer). Recommend correcting this deficiency along with any underlying wood rot.

6.1



6.2

7. Kickout / diverter flashing has not been installed at the wall and roof intersections. This has led to elevated moisture readings at the substrate. It is recommended that a qualified contractor be consulted to correct this problem to prevent ongoing water penetrations and substrate damage.

7.1



7.2



Building Codes or Installation Standards

1. The transition between the stucco and dissimilar materials is missing a sealant joint. The stucco should terminate into a casing bead to create a joint between the two materials. The sealant joints should be a minimum of ¼ inch and no more than ¾-inch with a backer rod and approved sealant.

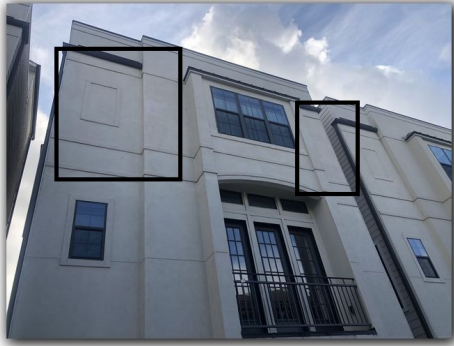
1.1



1.2

General Comments

The areas in the photos below with the black outline were inaccessible (could not reach with 27' ladder, inoperable windows at the interior and because ladder placement was obstructed when safely extended)



Front left areas of the underlying substrate / sheathing and the plastic vapor barrier were not visible or accessible for inspection around the perimeter of the home due to the clearance between the wall and termination and foundation.



The sealant / caulking which has been used to seal areas at joints, transitions, and voids on the exterior veneers acts as a moisture barrier to prevent water from moving to the underlying wall cavity and should be continuously monitored and maintained.

Property Address: 904 W 18th St Unit D, Houston, TX 77008
10/12/2021

This inspection was performed as a visual & invasive testing inspection of areas accessible from a 26' ladder or by using the interior openings to gain access to the exterior, i.e. windows, balconies, etc.. Possible areas of high moisture penetration will be detected and tested during this inspection process.

It is suggested to thoroughly read the inspection report to evaluate and determine costs for repairs.

- All windows, doors, and penetrations through the system should be professionally sealed using a high quality, professional sealant, suggested by the manufacturer of your system and properly tooled into joints to prevent moisture intrusion and sealant separation. Sealants are suggested to be replaced every 2-3 years.
- Coatings should be elastomeric and high quality designed for the material being coated. It is recommend to seal all hairline cracks routinely on the exterior of the building. Painting is suggested every 8-10 years, to alleviate all staining and cracks.
- It is recommended for the performance of the building envelope, that sealants be maintained at all times and inspected by a qualified stucco or waterproofing contractor on a regular basis, generally every 2-3 years. Waterproofing stucco systems is recommended every 8-10 years using elastomeric coatings.
- All sprinklers (if present) should be directed away from the structure, especially where penetrations are present, to prevent damages.
- Stucco industry details require a minimum ground clearance of 4" above landscaping, 2" above hard surface grade, and 2" above roof covering. Tress, shrubs, and other plants should be kept clear from the stucco.
- All repairs should be performed by qualified contractors with expertise in stucco. Repairs should conform to current accepted industry standards.

This document only reports on the condition of the structure at the specific locations indicated. Locations were determined by the inspector according to probable areas of possible moisture intrusion, accessibility, and in accordance with accepted industry standards. No judgment is intended or given for any areas not reported on or not accessible. The inspection is limited to the accessible areas. Please know that this system is composed of many details, which can not be exposed without the removal of portions of the system. This inspection and report are not a warranty or guaranty, of any kind whatsoever, that all work and materials on this property are in complete conformity and compliance with installation specifications or that such installation and material will necessarily perform as intended. It is suggested that a follow-up inspection be completed in 12 - 24 months after all repairs are completed to ensure that the moisture levels remain within an acceptable level and proper corrections have been made to prevent moisture intrusion and wood rot.

It has been a pleasure providing this inspection service for you. If you have any questions, please feel free to contact our office at office@houstoninspect.com or 713-408-1129.

With appreciation,

Ronald Hagelberger #TX-198