# HOUSTON INSPECTIONS

Houston Home Inspections, PLLC d/b/a Houston Inspections 32222 Tamina Rd, A-5 Magnolia, TX 77354 713.408.1129 Office www.houstoninspect.com

#### **Invasive Stucco Inspection**



#### **INSPECTED FOR**

Paul Varello 22 Hepplewhite Way Spring, TX 77382

May 18, 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**

Owne	er's Information	Buy	ver's Information	
Owner's name	N/A	Buyer's Name	Paul Varello	
Street address	22 Hepplewhite Way	Buyer's Phone	Refer to Work Order	
City, State, Zipcode	Spring, TX 77382	Buyer's Email	Refer to Work Order	
Owner's Phone	N/A	Buyer's Realtor	Refer to Work Order	
Prope	erty Information	Inspection Information		
Type of Exterior	Stucco Veneers - Hard Coat, Brick Veneer, Stone Veneer, EIFS Bands	Date of Inspection	05/18/2021	
Substrate (if known)	OSB	Inspector	Shawn Emerick EDI #TX-148	
Age of System	11 - 15 Years	Present at inspection	Seller (Onsite for Part of Inspection), Additional Inspectors	
Square Footage	Refer to Work Order	Weather Conditions	Clear, Dry	
Stories	2	Temperature/Humidity	80 to 90	
Type of Windows	Aluminum / Metal	Last Rainfall	<1 Day	

#### **Inspection Test Equipment**

	Test Equipment	Test Range			Setting
		Low	Medium	High	
Α	Delmhorst Moisture Probe Meter BD 2000	6-14	15 - 19	20 - 40	1
В	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**

	J/D = Unable	<u>e to detern</u>	<u>nine N/</u>	<u>A = Not ap</u>
	YES	NO	U/D	N/A
Are there any areas of cracking?		V		
Are there any areas of impact damage?				
Are sealant joints present at windows and doors?	V			
Have sealants been applied at all penetrations?		V		
Are sealant joints present at intersections of the stucco and dissimilar materials?				
Does the stucco system terminate 4" above grade?	V			
Does the stucco system terminate 2" above hard surface / flatwork?		V		
Does the stucco system terminate 2" above roof surface?		V		
Are kickout / diverter flashing's installed at required locations and properly installed?				
Are the window and door flashing's installed (head flashings)?				
Are the chimney flashing's installed?			V	
Has a chimney cricket been installed?			V	
Are the exterior fixtures installed?	V			
Is there evidence of sprinkler over spray?				
Are all deck flashing details installed?				
Are flat surfaces present and properly protected?				
Are gutter downspouts installed?	V			

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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.





Location	Moisture Reading	Substrate Condition	Observations / Comments
1 - 4	Low	Firm	
Red Arrow	n/a	n/a	Damaged EIFS Band

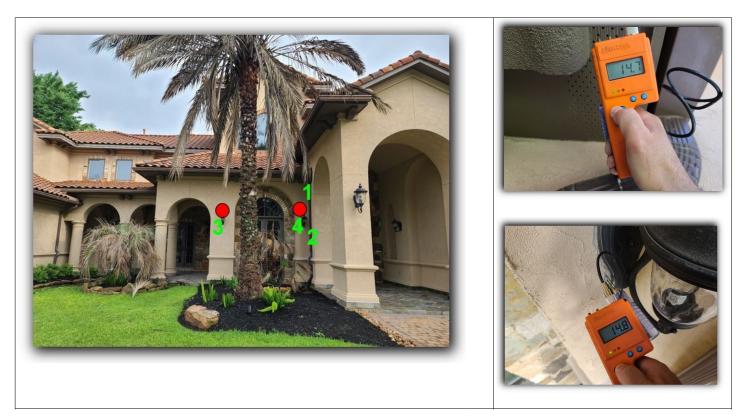
#### Supporting Photos







Location	Moisture Reading	Substrate Condition	Observations / Comments
1 - 2	Low	Firm	
3	High	Firm	Below Kickout
4	Low	Firm	Mid Wall below Kickout
Red Dot	n/a	n/a	Debris built up at the wall intersection, improve





Location	Moisture Reading	Substrate Condition	Observations / Comments
1-2	Low	Firm	Below Kickout
3 - 4	Low	Firm	Light Fixtures
Red Dots	n/a	n/a	Paint / Coating Chipped away at light fixtures / wall





Location	Moisture Reading	Substrate Condition	Observations / Comments
1 - 5	Low	Firm	
Red Box	Low	Firm	Discoloration on surface of wall

#### Supporting Photos



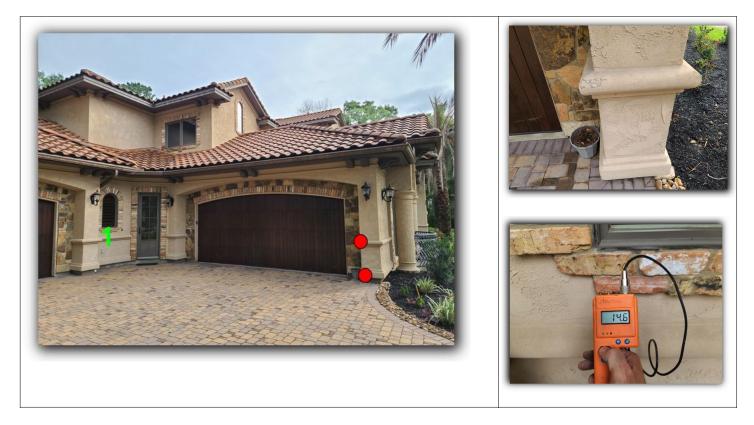


Location	Moisture Reading	Substrate Condition	Observations / Comments
1 - 4	Low	Firm	Below Kickout Flashings

#### Supporting Photos



## Garage Elevation 1



Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	
Red Dot	n/a	n/a	Damaged EIFS

### Garage Elevation 1



Location	Moisture Reading	Substrate Condition	Observations / Comments
1 - 2	Low	Firm	

### Left Elevation 1



Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	

### **Rear Elevation 1**



Location	Moisture Reading	Substrate Condition	Observations / Comments
1	Low	Firm	

### Right Elevation 1





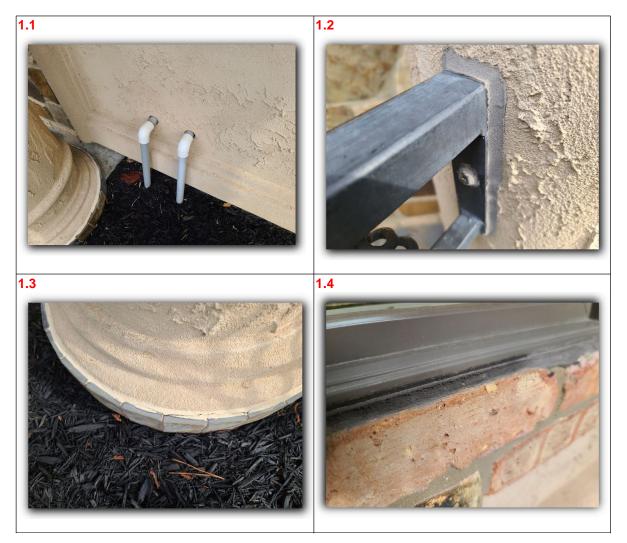
Location	Moisture Reading	Substrate Condition	Observations / Comments
1 - 4	Low	Firm	
Red Dot	n/a	n/a	Damaged EIFS

#### Supporting Photos



#### Items Damaged, Non-Functional, or Operating Improperly

1. Damaged, missing, and improperly installed sealants were found at the openings in the stucco veneers. It is recommended that a qualified waterproofing contractor be consulted to seal all doors, windows, and penetrations as needed to reduce the likelihood of water penetrations. It is recommended that an approved sealant be applied, i.e. elastomeric, NP1, etc. using approved methods / tools.



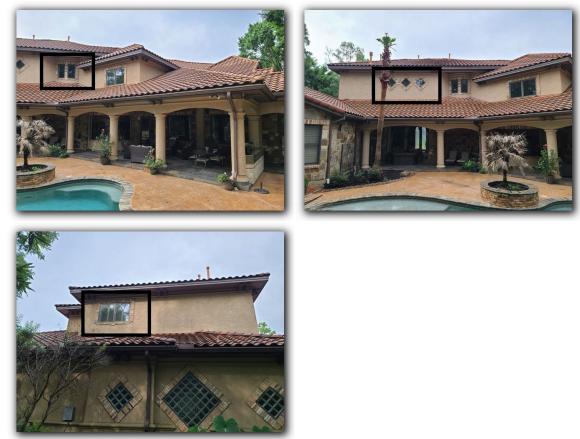
- 2. Damaged EIFS (Exterior Insulating Finish System) components were found at the following elevations:
- 1. Front elevation #1
- 2. Garage elevation #1
- 3. Right elevation #1

Recommend repairs of the EIFS by a contractor.

General Comments Many of the veneers installed at the rear of the home appear to be a true dimensional stone / brick.



The following indicated below with a black box were inaccessible for testing.



Cant beads were present at wall and flatwork intersections. These should be maintained.



Sealant was present at the visible kickout / diverter flashings. The sealant should be maintained.



OSB sheathing visible in the attic.



Property Address: 22 Hepplewhite Way, Spring, TX 77382 05/18/2021

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,

Shawn Emerick EDI #TX-148