



Lone Star Stucco, LLC

Moisture Assessment Report

Robbie and Virginia Flippin

1607 W 24th Street, Unit B

Houston, Texas 77008



Lone Star Stucco, LLC 2220 S Piney Pt Rd #208 Houston, TX 77063
Inspector's Cell: (936) 661-6612 (preferred text) **Office:** (936) 228-2268
Email: angelalonestarstucco@gmail.com



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Project Information

PROPERTY INFORMATION		INSPECTION INFORMATION	
Client Name	Robbie and Virginia Flippin	Type of Inspection	Invasive
Property Address	1607 W 24th Street, Unit B	Date of Inspection	05/17/2022
City, State, ZIP	Houston, Texas 77008	Temperature	94 Degrees
Phone	Robbie - (713) 444-2175	Weather	Clear
Square Footage (estimated)	2646 SqFt	Last Rain	11 Days
Approximate Age of Property	2012	In Attendance	Inspectors
Stories	3	Inspector	Gregg Morgan / Marcus McCracken
Type of Exterior	Traditional Hardcoat Stucco / Cementitious Fiber Panel		
Substrate	Oriented Strand Board		
Windows	Metal / Fixed / Single Hung		

Inspection Test Equipment		
Equipment Description	Test Range	Setting
Delmhorst Moisture Probe Meter- BD 2100	Low 6-13 /Medium 13-19 /High 19+	1
<p>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.</p>		



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Caulking	Good	Not Adequate	N/A	Comments
Caulking Around Window Frame		X		Seal All Windows Typical
Caulking At Window Joints / Miters		X		Seal
Caulking Around Door Frame		X		Seal DoorTrim / Typical
Caulking At Door Joints / Miters		X		Seal Door Miter / Typical
Caulking Around Other Breaches			X	
Flat Accents Caulked or Angled		X		Missing Metal Cap / Install
Soffit, Frieze & Facia Boards Caulked	X			
Flashings / Diverters	Good	Not Adequate	N/A	Comments
Kickout Flashings / Roof / Wall		X		Failing / Modify
Balcony Flashings			X	
Other Attachment Flashings			X	
Porches / Stoop Flashing		X		Seal Porch Flashings / Typical
Chimney Cap			X	
Chimney Cricket			X	
Window Head Flashing	X			
Door Head Flashing	X			
Column Flashing			X	
Terminations	Yes	No	N/A	Comments
Stucco In Contact With Flat Work		X		
Stucco In Contact With Soil		X		
Miscellaneous	Yes	No	N/A	Comments
Evidence Of Sprinkler Overspray	X			
Gutters Clean & Functioning	X			
Cracks or Impact Damage	X			
Exterior Evidence of Pest Infestation		X		
Control Joints Noted On System	X			Control Joints Present



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Summary Page

- Lone Star Stucco, LLC recommends consulting with a qualified waterproofing contractor to touch up or seal all doors, windows and penetrations as needed in an effort to avoid moisture intrusion.
- Stucco appears to be typically detailed at grade for the time of this construction. The inspector suggests that this is a positive detail and recommends no modification at this time but to always keep soil away from the structure. Please refer to photos #4.2, #4.3, #4.4, #4.5 and #4.6 for more detail.
- The door trim and miter sealants are aged, separated or missing at this location. The inspector suggests to have a qualified waterproofing contractor seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #5.2, #5.3, #5.4, #5.5 and #5.6 for more detail.
- The penetration sealants are aged, separated or missing in these locations. The inspector suggests to have a qualified waterproofing contractor seal these areas with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #6.2, #6.3, #6.4, #6.5 and #6.6 for more detail.
- The window sealants are aged or separated. The inspector suggests to have a qualified waterproofing contractor further assess and seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #7.2, #7.3, #7.4, #7.5, #7.6, #8.1, #8.2, #8.3 and #8.4 for more detail.
- Confirmed substrate and potential frame damage is noted at these locations. The inspector suggests to have a qualified waterproofing contractor further assess the extent of damage and repair as needed in an effort to prevent moisture intrusion. Please refer to photos #10.2, #10.3, #10.4, #10.5 and #10.6 for more detail.
- Efflorescence has been noted in these areas of the home. This is when a naturally occurring salt migrates to the surface of the system causing a coating. The inspector suggests to consult with a qualified stucco contractor to treat these areas with commercial cleaners or contact the system manufacturer for the best explanation of removal. Please refer to photos #11.2, #11.3, #11.4, #11.5 and #11.6 for more detail.
- The roof flashing sealants are aged at this location. The inspector suggests to have a qualified waterproofing contractor further assess and seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #12.2, #12.3, #12.4, #12.5 and #12.6 for more detail.



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- A metal cap is missing at the parapet wall allowing moisture to penetrate the system at this location. The inspector suggests having a qualified waterproofing contractor further assess and install proper a metal cap with a minimum of a 3" overlap of the stucco, then seal in an effort to prevent moisture intrusion. Please refer to photos #13.2, #13.3, #13.4, #13.5 and #13.6 for more detail.
- Confirmed substrate and potential frame damage is noted on the outside corner wall below the failing parapet wall. The inspector suggests to have a qualified waterproofing contractor further assess the extent of damage, repair and modify this area as needed in an effort to prevent moisture intrusion. Please refer to photos #14.2, #14.3 and #14.4 for more detail.
- Roof diverter flashing is failing at this location allowing moisture to penetrate the system causing potential substrate damage (Red Boxes) below. The inspector suggests to have a qualified waterproofing contractor further assess core sample the probe locations then modify this area as needed in an effort to prevent further moisture intrusion. Please refer to photos #15.2, #15.3, #15.4 and #15.5 for more detail.
- Although the bottom of the wall noted does not have a proper relief, this was a proper detail at the time of construction. Upon invasive testing at this location, the substrate was firm with low moisture readings. The inspector recommends no modification at this point in time but recommends to maintain all sealants above this location to prevent potential moisture intrusion. Please refer to photos #16.2, #16.3, #16.4, #16.5 and #16.6 for more detail.
- Although the bottom of the wall noted does not have a proper relief, this was a proper detail at the time of construction. Upon invasive testing at this location, the substrate was firm with low moisture readings. The inspector recommends no modification at this point in time but recommends to maintain all sealants above this location to prevent potential moisture intrusion. Please refer to photos #17.2, #17.3, #17.4 and #17.5 for more detail.
- The trim/stucco termination sealants are missing at this location. The inspector suggests to have a qualified waterproofing contractor further assess and seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #18.2, #18.3, #18.4, #18.5 and #18.6 for more detail.
- You have several areas that are showing signs of elevated moisture. Nonexistent substrate was noted in some of these areas. It is recommended to consult with a qualified waterproofing contractor to investigate all nonexistent areas. Please refer to the attached report for more detail.



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Summary Page

- **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.
- **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 your home 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.
- **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 your home on a regular basis is the best way to prevent costly repairs associated with moisture damage. Also, should you decide to sell your home, annual inspections and maintenance documentation will be a valuable selling tool, providing evidence to show that your home has been inspected and maintained on a regular basis by a reputable and qualified firm.
- **PLEASE NOTE:** Lone Star Stucco, LLC is not a home inspection company, and does not perform home inspections. This report's primary use is to show the areas that are likely to have moisture intrusion in an effort to help control mold. This report and all its contents are sanctioned by the Texas Department of State and Health Services in guidelines for mold prevention.



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Summary Page

Thank you for your business,

Inspected By:
Marcus McCracken
Exterior Design Institute
EDI# TX-206
Expiration: 12/31/22

Reviewed By:
James "Gregg" Morgan
Texas Department of Licensing and Regulation
Mold Assessment Consultant
License Number: MAC 1299
Expiration: 8/13/22
Exterior Design Institute
EDI# TX-205
Expiration: 1/31/23



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Photo4.1



Photo4.2



Proper Grade Termination with Weep Screed/ Positive Detail

Photo4.3



Proper Grade Termination with Weep Screed/ Positive Detail

Photo4.4



Proper Grade Termination with Weep Screed/ Positive Detail

Photo4.5



Proper Grade Termination with Weep Screed/ Positive Detail

Photo4.6



Proper Grade Termination with Weep Screed/ Positive Detail

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Yellow Lines	Grade Termination			Stucco appears to be typically detailed at grade for the time of this construction. The inspector suggests that this is a positive detail and recommends no modification at this time but to always keep soil away from the structure. Please refer to photos #4.2, #4.3, #4.4, #4.5 and #4.6 for more detail.



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Photo5.1



Photo5.2



Door Sealants / Seal

Photo5.3



Door Sealants / Seal

Photo5.4



Door Sealants / Seal

Photo5.5



Door Sealants / Seal

Photo5.6



Door Sealants / Seal

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Green Arrows	Doors			The door trim and miter sealants are aged, separated or missing at this location. The inspector suggests to have a qualified waterproofing contractor seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #5.2, #5.3, #5.4, #5.5 and #5.6 for more detail.



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Photo6.1



Photo6.2



Penetration Sealants / Seal

Photo6.3



Penetration Sealants / Seal

Photo6.4



Penetration Sealants / Seal

Photo6.5



Penetration Sealants / Seal

Photo6.6



Penetration Sealants / Seal

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Yellow Arrows	Penetrations			The penetration sealants are aged, separated or missing in these locations. The inspector suggests to have a qualified waterproofing contractor seal these areas with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #6.2, #6.3, #6.4, #6.5 and #6.6 for more detail.



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Photo7.1



Photo7.2



Window Sealants / Seal

Photo7.3



Window Sealants / Seal

Photo7.4



Window Sealants / Seal

Photo7.5



Window Sealants / Seal

Photo7.6



Window Sealants / Seal

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Red Arrows	Windows			The window sealants are aged or separated. The inspector suggests to have a qualified waterproofing contractor further assess and seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #7.2, #7.3, #7.4, #7.5, #7.6, #8.1, #8.2, #8.3 and #8.4 for more detail.



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Photo8.1



Window Sealants / Seal

Photo8.2



Window Sealants / Seal

Photo8.3



Window Sealants / Seal

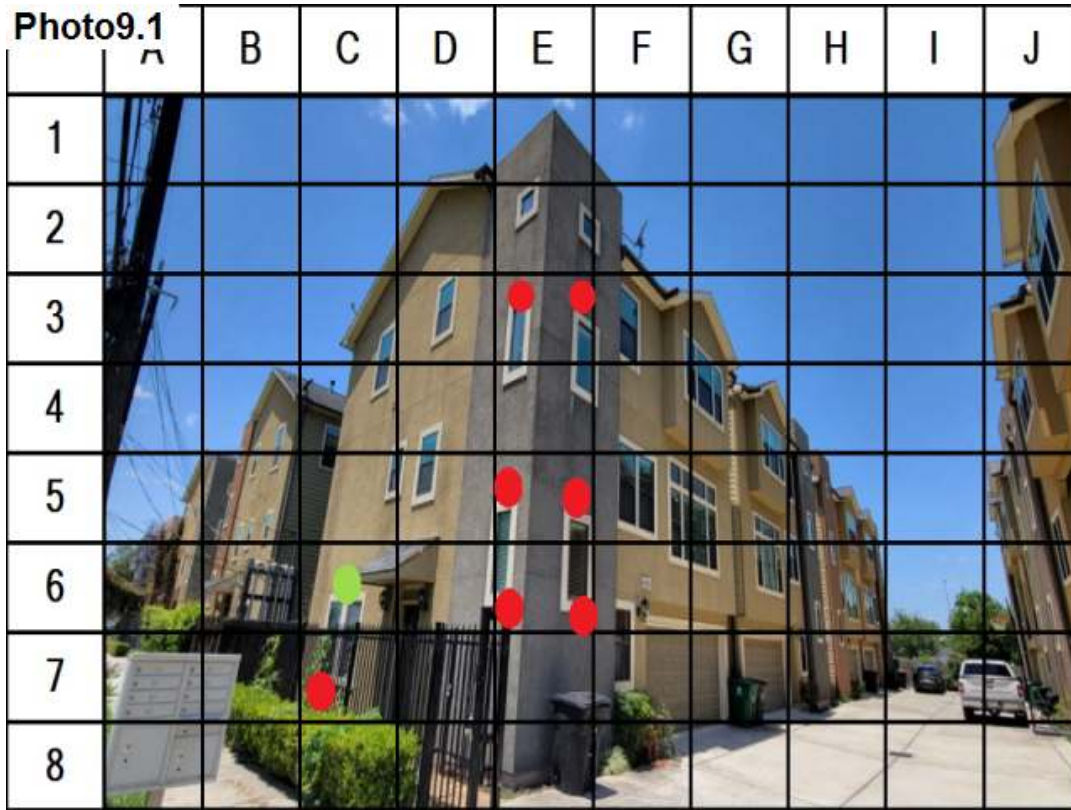
Photo8.4



Window Sealants / Seal



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Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
C7	Window Lower Left	20%	Firm	A moisture probe was taken at the window lower left. An elevated moisture reading was noted with a firm substrate.
C6	Window Header	16%	Firm	A moisture probe was taken at window header. The substrate was firm with no damage noted at this time.
E6	Window Lower Right		None	A moisture probe was taken at the window lower right. No substrate was noted at this time, modify as needed.
E6	Window Lower Right	22%	Semi-Firm	A moisture probe was taken at the window lower right. An elevated moisture reading was noted with a semi-firm substrate.
E5	Window Lower Right	22%	Firm	A moisture probe was taken at the window header. An elevated moisture reading was noted with a semi-firm substrate.
E5	Window Header		None	A moisture probe was taken at the window header. No substrate was noted at this time, modify as needed.
E2 Left	Window Header	22%	Semi-Firm	A moisture probe was taken at the window header. An elevated moisture reading was noted with a semi-firm substrate.
E3 Right	Window Header	23%	Semi-Firm	A moisture probe was taken at the window header. An elevated moisture reading was noted with a semi-firm substrate.



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Photo10.1



Photo10.2



Substrate Damage / Assess & Repair

Photo10.3



Substrate Damage / Assess & Repair

Photo10.4



Substrate Damage / Assess & Repair

Photo10.5



Substrate Damage / Assess & Repair

Photo10.6



Substrate Damage / Assess & Repair

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Red Boxes	Damage			Confirmed substrate and potential frame damage is noted at these locations. The inspector suggests to have a qualified waterproofing contractor further assess the extent of damage and repair as needed in an effort to prevent moisture intrusion. Please refer to photos #10.2, #10.3, #10.4, #10.5 and #10.6 for more detail.



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Photo11.1

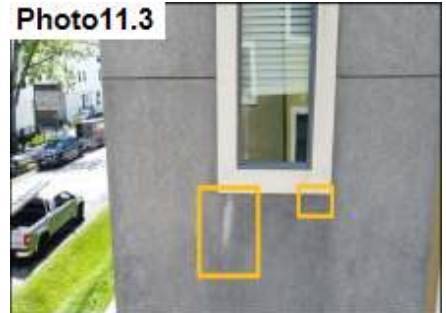


Photo11.2



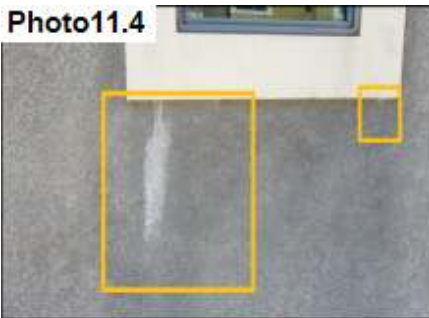
Efflorescence / Clean as Needed

Photo11.3



Efflorescence / Clean as Needed

Photo11.4



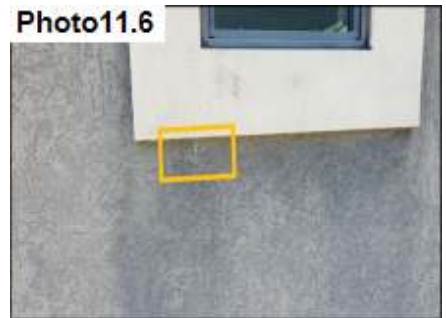
Efflorescence / Clean as Needed

Photo11.5



Efflorescence / Clean as Needed

Photo11.6

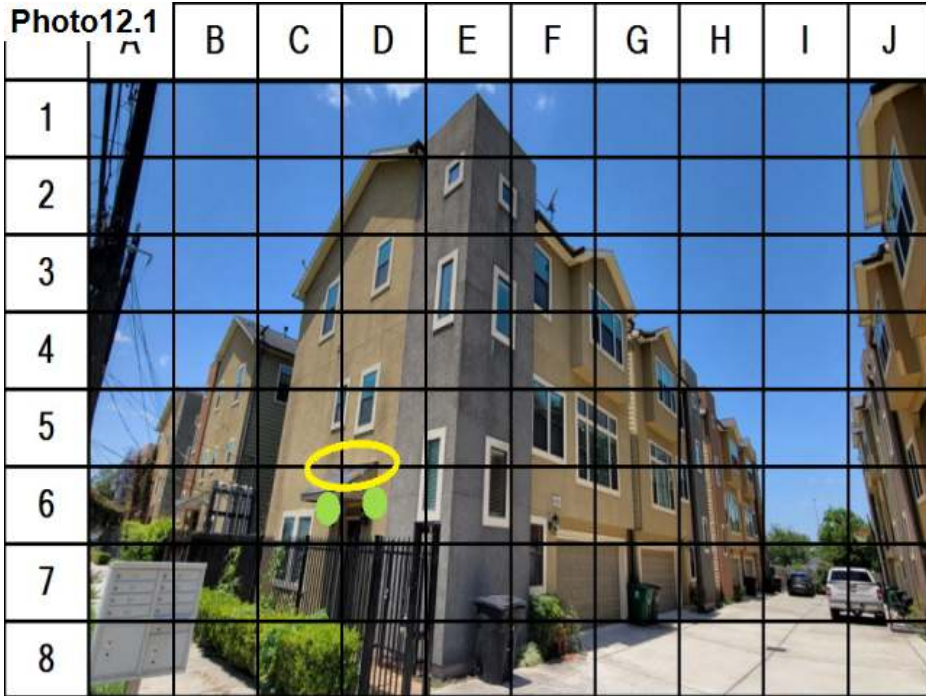


Efflorescence / Clean as Needed

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Orange Boxes	Efflorescence			Efflorescence has been noted in these areas of the home. This is when a naturally occurring salt migrates to the surface of the system causing a coating. The inspector suggests to consult with a qualified stucco contractor to treat these areas with commercial cleaners or contact the system manufacturer for the best explanation of removal. Please refer to photos #11.2, #11.3, #11.4, #11.5 and #11.6 for more detail.



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Roof Flashing / Seal



Roof Flashing / Seal



Roof Flashing / Seal



Roof Flashing / Seal



Roof Flashing / Seal

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Yellow Circle	Roof Flashing			The roof flashing sealants are aged at this location. The inspector suggests to have a qualified waterproofing contractor further assess and seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #12.2, #12.3, #12.4, #12.5 and #12.6 for more detail.
C6	Below Roof Flashing	12%	Firm	A moisture probe was taken below the roof flashing. The substrate was firm with no damage noted at this time.
D6	Below Roof Flashing	14%	Firm	A moisture probe was taken below the roof flashing. The substrate was firm with no damage noted at this time.



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Photo13.1



Photo13.2



Missing Metal Cap / Install

Photo13.3



Missing Metal Cap / Install

Photo13.4



Missing Metal Cap / Install

Photo13.5



Missing Metal Cap / Install

Photo13.6

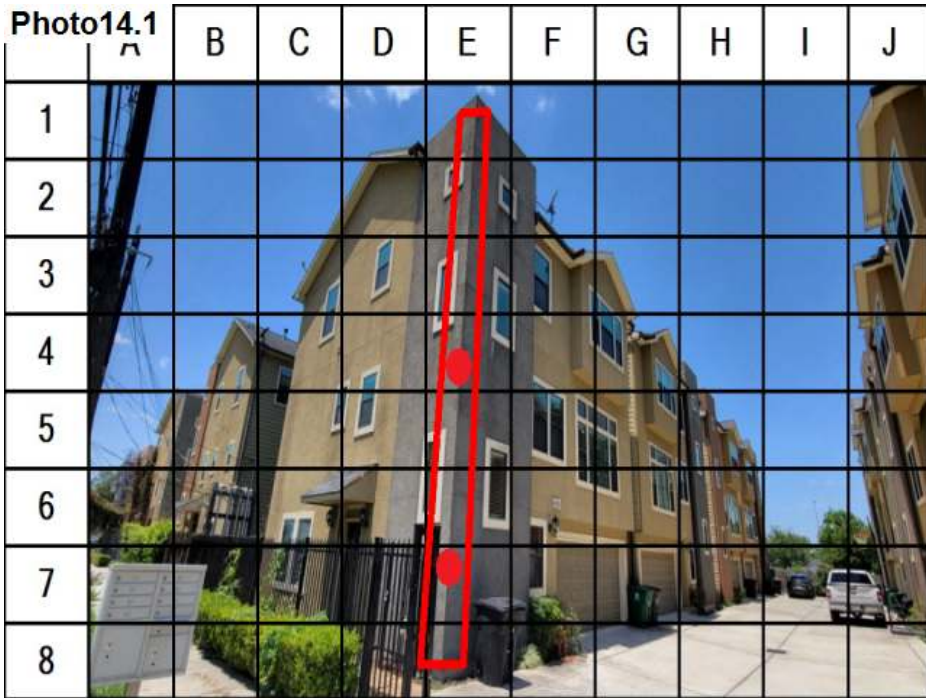


Missing Metal Cap / Install

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Orange Lines	Missing Metal Cap			A metal cap is missing at the parapet wall allowing moisture to penetrate the system at this location. The inspector suggests having a qualified waterproofing contractor further assess and install proper a metal cap with a minimum of a 3" overlap of the stucco, then seal in an effort to prevent moisture intrusion. Please refer to photos #13.2, #13.3, #13.4, #13.5 and #13.6 for more detail.



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Substrate Damage / Assess & Repair



Substrate Damage / Assess & Repair

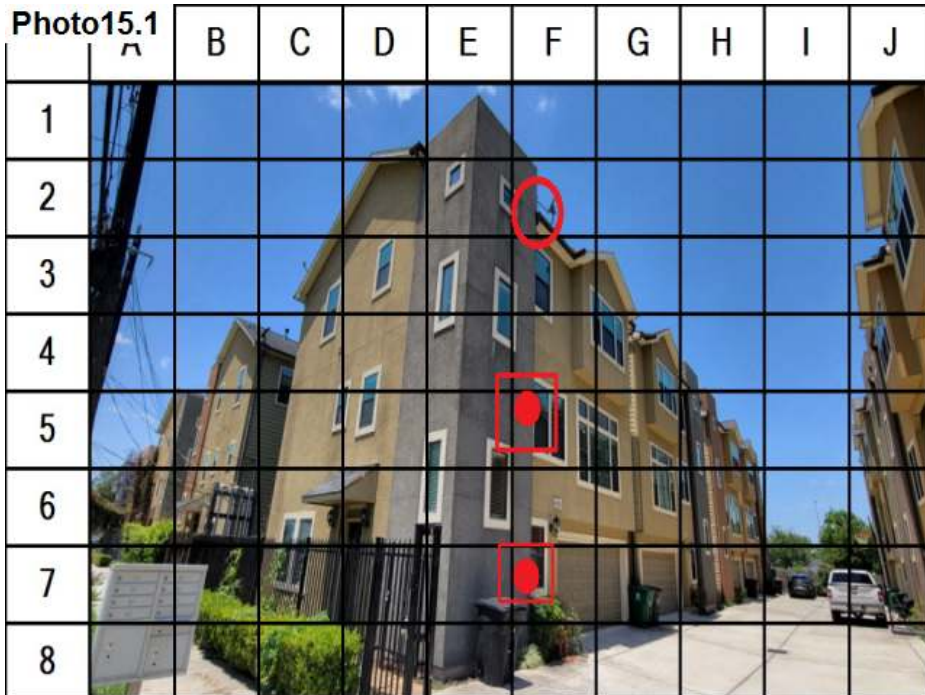


Substrate Damage / Assess & Repair

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Red Box	Damage			Confirmed substrate and potential frame damage is noted on the outside corner wall below the failing parapet wall. The inspector suggests to have a qualified waterproofing contractor further assess the extent of damage, repair and modify this area as needed in an effort to prevent moisture intrusion. Please refer to photos #14.2, #14.3 and #14.4 for more detail.
E7	Corner Wall		None	A moisture probe was taken at corner wall below the failing parapet wall. No substrate was noted at this time, modify as needed.
E4	Corner Wall		None	A moisture probe was taken at corner wall below the failing parapet wall. No substrate was noted at this time, modify as needed.



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Roof Diverter Flashing / Modify



Roof Diverter Flashing / Modify



Roof Diverter Flashing / Modify



Roof Diverter Flashing / Modify

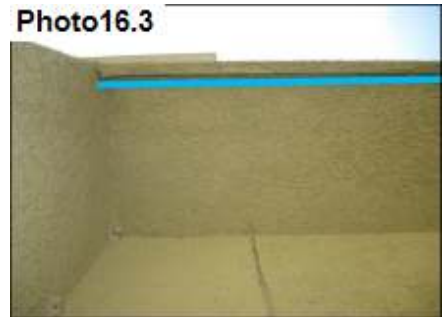
Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Red Circle	Roof Diverter Flashing			Roof diverter flashing is failing at this location allowing moisture to penetrate the system causing potential substrate damage (Red Boxes) below. The inspector suggests to have a qualified waterproofing contractor further assess core sample the probe locations then modify this area as needed in an effort to prevent further moisture intrusion. Please refer to photos #15.2, #15.3, #15.4 and #15.5 for more detail.
F7	Below Roof Diverter Flashing	24%	Semi-Firm	A moisture probe was taken at the corner wall below the roof diverter flashing. An elevated moisture reading was noted with a firm substrate.
F5	Below Roof Diverter Flashing	22%	Semi-Firm	A moisture probe was taken at the corner wall below the roof diverter flashing. An elevated moisture reading was noted with a firm substrate.



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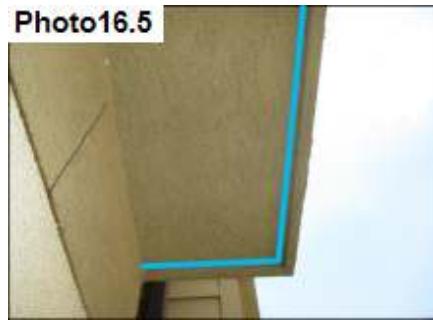
No Relief / No Modification



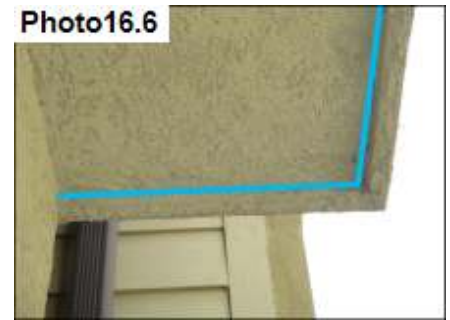
No Relief / No Modification



No Relief / No Modification



No Relief / No Modification



No Relief / No Modification

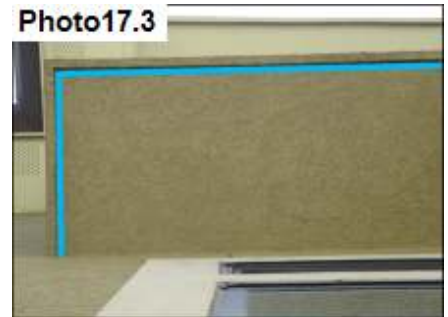
Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Blue Line	Relief			Although the bottom of the wall noted does not have a proper relief, this was a proper detail at the time of construction. Upon invasive testing at this location, the substrate was firm with low moisture readings. The inspector recommends no modification at this point in time but recommends to maintain all sealants above this location to prevent potential moisture intrusion. Please refer to photos #16.2, #16.3, #16.4, #16.5 and #16.6 for more detail.
F6	Bottom Wall Below Window	12%	Firm	A moisture probe was taken at bottom wall below the second floor window. The substrate was firm with no damage noted at this time.
G6	Bottom Wall Below Window	12%	Firm	A moisture probe was taken at bottom wall below the second floor window. The substrate was firm with no damage noted at this time.



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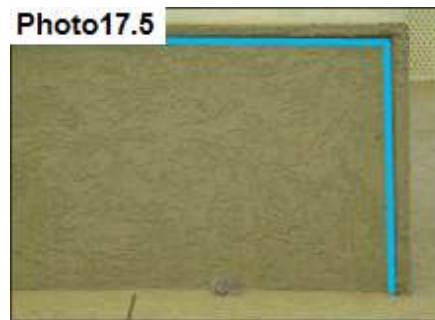
No Relief / No Modification



No Relief / No Modification



No Relief / No Modification



No Relief / No Modification

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Blue Line	Relief			Although the bottom of the wall noted does not have a proper relief, this was a proper detail at the time of construction. Upon invasive testing at this location, the substrate was firm with low moisture readings. The inspector recommends no modification at this point in time but recommends to maintain all sealants above this location to prevent potential moisture intrusion. Please refer to photos #17.2, #17.3, #17.4 and #17.5 for more detail.
F3	Bottom Bumpout Wall Below Window	14%	Firm	A moisture probe was taken at bottom bumpout wall below the third floor window. The substrate was firm with no damage noted at this time.
G3	Bottom Bumpout Wall Below Window	16%	Firm	A moisture probe was taken at bottom bumpout wall below the third floor window. The substrate was firm with no damage noted at this time.



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Photo18.1



Photo18.2



Trim & Stucco Termination / Seal

Photo18.3



Trim & Stucco Termination / Seal

Photo18.4



Trim & Stucco Termination / Seal

Photo18.5



Trim & Stucco Termination / Seal

Photo18.6



Trim & Stucco Termination / Seal

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
Orange Line	Trim & Stucco Termination			The trim/stucco termination sealants are missing at this location. The inspector suggests to have a qualified waterproofing contractor further assess and seal this area with a low modulus sealant in an effort to prevent moisture intrusion. These types of sealants are of high quality and compatible with stucco and other termination points. Please refer to photos #18.2, #18.3, #18.4, #18.5 and #18.6 for more detail.