American Property Inspectors

Website:www.apinspector.com E-Mail:arpi@arpi.gccoxmail.com

**Date of Inspection** 

#### **Stucco Moisture Inspection**

Property Address Address of Property City, FL

Report Ordered By: Customer's Name



OWNER	INFORMATION	BUYER	INFORMATION		
Owners		Buyers	Customer's Name		
Property Address	address of property	Buyers Address			
City, State, ZIP	City, State, Zip	City, State, ZIP			
Phone		Phone			
EMail		EMail			
Owners Realtor		Buyers Realtor			
Phone		Phone			
EMail		EMail			
PROPERT	Y INFORMATION	INSPECTION INFORMATION			
Type/Exterior Cladding	Hardcoat	Date of Inspection	Date of inspection		
System Manufacturer	Undetermined	Inspector	Inspectors name		
Mesh Color	Unknown	Present at Inspection	Buyer		
Underlying Substrate	Plywood	Temperature / Humidity	88 Degrees/75 Percent		
Age of Property	10 Years	Weather Conditions	Clear		
Square Footage	4174	Last Rain	within the past week		

#### **Project Information**

	Inspection Test Equipment										
	<b>Test Equipment Description</b>		Test Range		Setting						
		Low	Medium	High							
Α	Tramex Interior Moisture Encounter	10-12	13-18	19-25	2						
B	Tramex Exterior Wet Wall Detector	10 - 20	21-50	51-100	4.5						
С	Delmorst Moisture Probe Meter	10 - 20	16-25	26-99	2						
D	Structural Resistance Tester (SRT)	>44 = Pass	<44 = Fail	Higher is better							
Imn	ortant Note:										

#### 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.

## **General Observations**

Window Frame Perimeters		•		Exposed gaps or creacks around window trim need to be sealed.
Window Joints/Miters		Y		Window constructin, which includes all construction joints, miter joints and behind the sash tracks, need to be caulked.
Window Mullion Joints	✓			
Door Frame Perimeters	<b>&gt;</b>			
Door Joint/Miters	<b>&gt;</b>			
Breaches and Wall Penetrations				All utility breaches, including hose bibs, light fixtures and vents, need to be caulked or re-caulked.
Flat Accents Beveled/Sealed	>			
Soffit, Frieze & Facia Boards	<b>&gt;</b>			
FLASHING ADEQUATE	Yes	No	NA	
Kick-out Flashing/Roof/Wall		•		Existing kick-out flashing appears to be improperly installed, suggest repair.
Deck Flashings	✓			
Other Attachment Flashing			✓	
Porches/Stoop Flashing			•	
Chimney Cap	✓			
Chimney Cricket	✓			
Window Head Flashing			•	
Door Head Flashing			•	
Column Flashings	✓			
TERMINATIONS ADEQUATE	Yes	No	NA	
EIFS/DEFS Above Grade			✓	
EIFS/DEFS is Sealed at Bottom			✓	
EIFS/DEFS Terminated at Porches			✓	
MISCELLANEOUS	Yes	No	NA	
Free of Sprinkler Overspray	<b>&gt;</b>			
Gutters Clean & Functioning	<b>~</b>			
Down Spout Fasteners Sealed	<b>~</b>			
Free of Cracks or Impact Damage		•		Exposed cracks or impact damage need to sealed or repaired.
Free of System Delamination			•	
Free of Visual Pest Infestation		•		Evidence of pest infestation noted at location(s) shown in report.
Adequate Slope of Grade Away	<b>~</b>			

Other	Crawlspace Inspection		•	
	Other			

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**Elevation Page #1** 

	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
E6	Windows	13	Firm	Acceptable Moisture	
E6	Windows	9	Firm	Acceptable Moisture	
F6	Windows	17	Firm	Acceptable Moisture	
G6	Wall	7	Firm	Acceptable Moisture	
A-J6-7	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	3
E4	Windows			Wall impact damage, suggest repair	1,2
E7	Wall			Previous repair noted	5

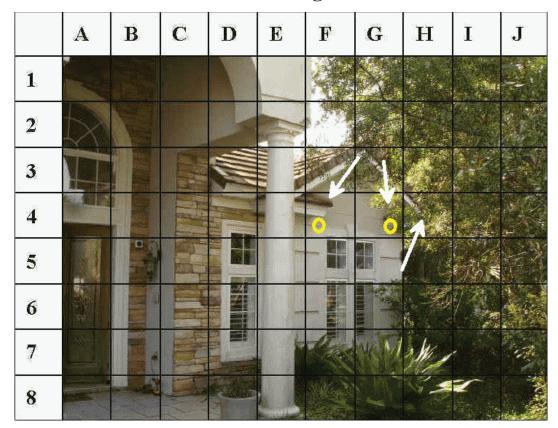
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	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
B3	Kick-out	15	Firm	Acceptable Moisture	
E2	Windows	9	Firm	Acceptable Moisture	
F2	Windows	17	Firm	Acceptable Moisture	
F2	Windows	24	Firm	Elevated Moisture, suggest sealing	
G2	Windows	20	Firm	Acceptable Moisture	
B3	Kick-out			Kick-out flashing adequate	4
F2	Windows			Perimeter seal adequate	6
G2	Windows			Perimeter seal adequate	7

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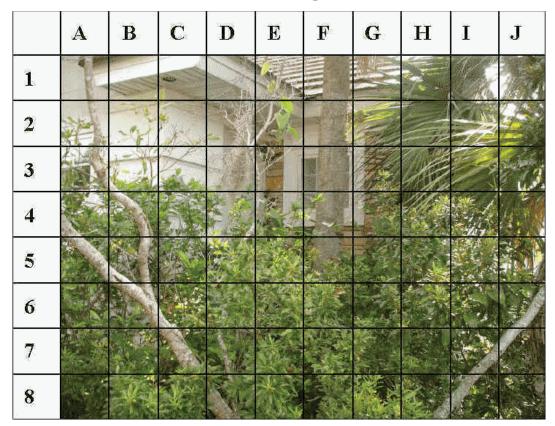
**Elevation Page #3** 

	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
G5	Kick-out	9	Firm	Acceptable Moisture	
G4	Kick-out			Kick-out flashing adequate	

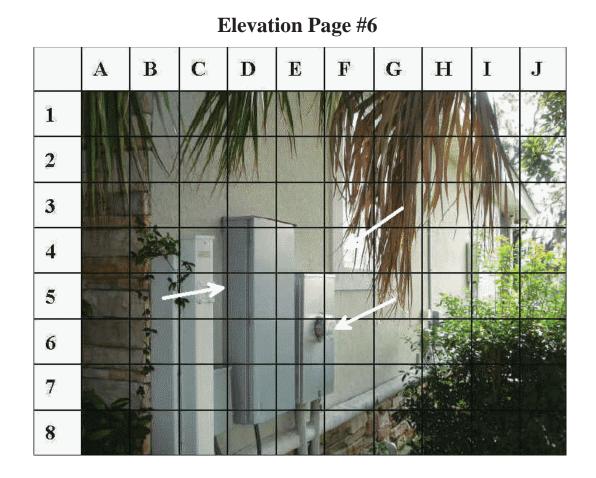


**Elevation Page #4** 

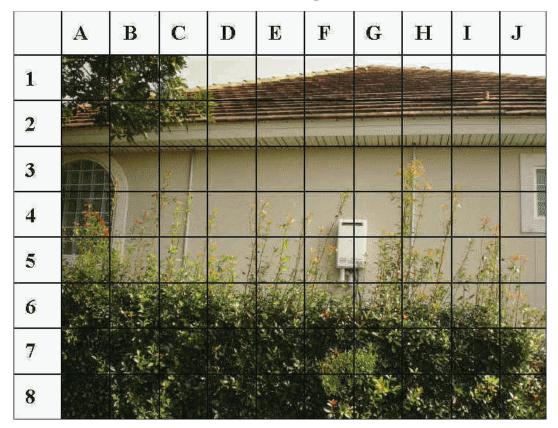
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
F4	Kick-out	9	Firm	Acceptable Moisture	
G4	Kick-out	12	Firm	Acceptable Moisture	
F4	Kick-out			Kick-out flashing inadequate/improper, suggest repair	9,10
G4	Kick-out			Kick-out flashing inadequate/improper, suggest repair	11
H4	Soffit			Pest activity, suggest pest control technician to evaluate	12
XX	Wall			Vegetation impeds moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	



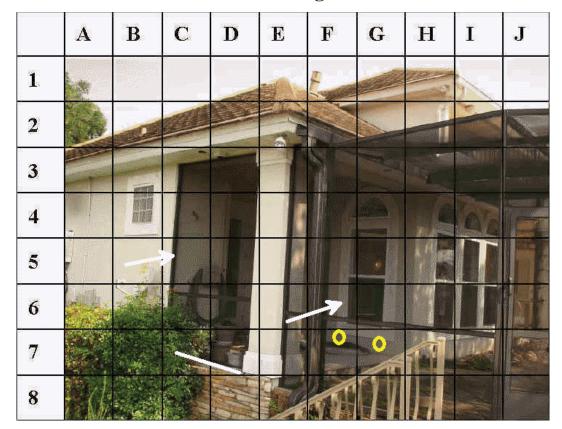
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	



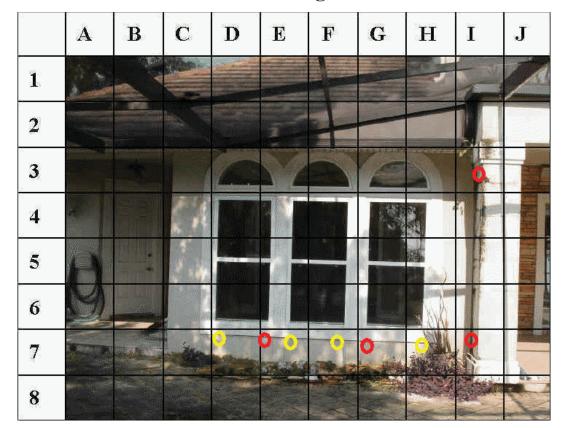
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
C5	Utility			Wall penetration seal missing/inadequate, suggest sealing	13
F6	Utility			Wall penetration seal missing/inadequate, suggest sealing	14
F4	Windows			Perimeter seal inadequate, suggest sealing	15



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
A-J6-7	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	16



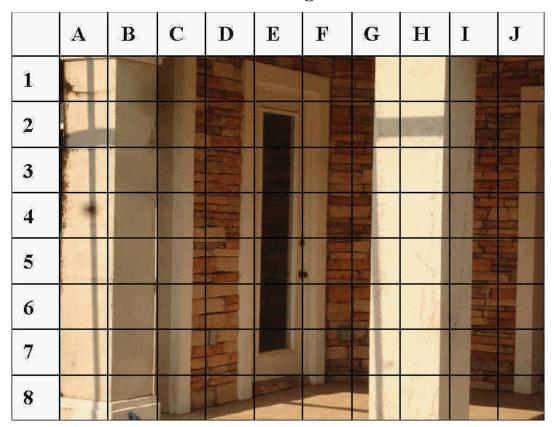
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
F7	Windows	9	Firm	Acceptable Moisture	
G7	Windows	8	Firm	Acceptable Moisture	
C5	Screen			Wall penetration seal missing/inadequate, suggest sealing	17
C-D7	Wall			Missing and loose stone, suggest repair	18
F6	Windows			Wall impact damage, suggest repair	19



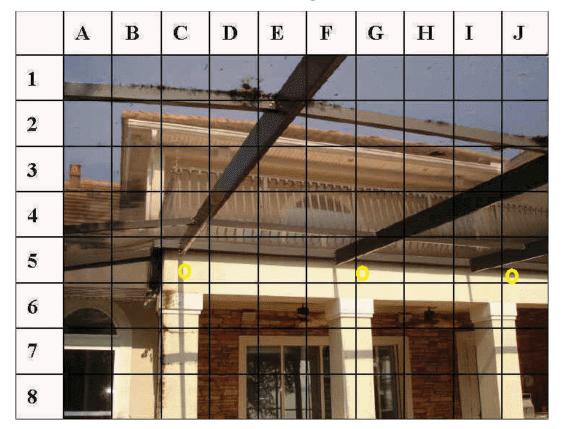
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
D7	Windows	11	Firm	Acceptable Moisture	
E7	Windows	19	Soft	Acceptable Moisture, suggest intrusive exam and repair	
E7	Windows	9	Firm	Acceptable Moisture	
F7	Windows	10	Firm	Acceptable Moisture	
<b>G</b> 7	Windows	40	Soft	HIGH MOISTURE, suggest intrusive exam and repair	
H7	Windows	23	Firm	Elevated Moisture, suggest sealing	
I3	Column	40	Soft	HIGH MOISTURE, suggest intrusive exam and repair	
I7	Column	40	QuasiSoft	HIGH MOISTURE, suggest intrusive exam and repair	



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
I2	Column			Vegetation growing on the column, suggest removal	20
I3	Column			Mildew/mold growth on wall, suggest cleaning	21
I7	Column			Mildew/mold growth on wall, suggest cleaing	22



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX				All areas, no reportable observations	

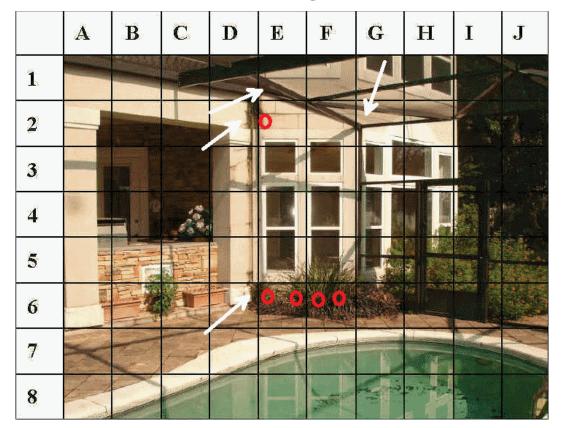


	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
C5	Balcony	14	Firm	Acceptable Moisture	
G5	Balcony	7	Firm	Acceptable Moisture	
J5	Balcony	7	Firm	Acceptable Moisture	

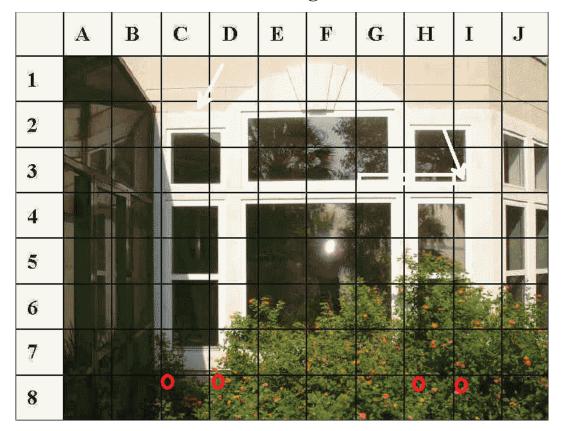
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**Elevation Page #12** 

	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX				All areas, no reportable observations	



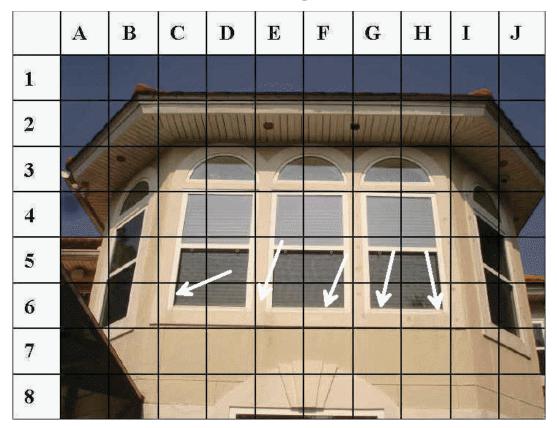
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
E2	End Dam	40	Soft	HIGH MOISTURE, suggest intrusive exam and repair	
E6	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
F6	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
F6	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
D2	Wall			Mildew/mold growth on wall, suggest cleaning	23
E1	Screen			Hole in frame, suggest sealing	24
D6	Wall			Mildew/mold growth on wall, suggest cleaning	25
G2	Wall			Wall impact damage, sugges repair	26



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
C8	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
D8	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
H8	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
18	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
C2	Windows			Previous repair	29
I3	Windows			Wall impact damage, suggest repair	32
G-H3	Windows			Inside windows have excessive silicone sealant	34,35
XX	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	

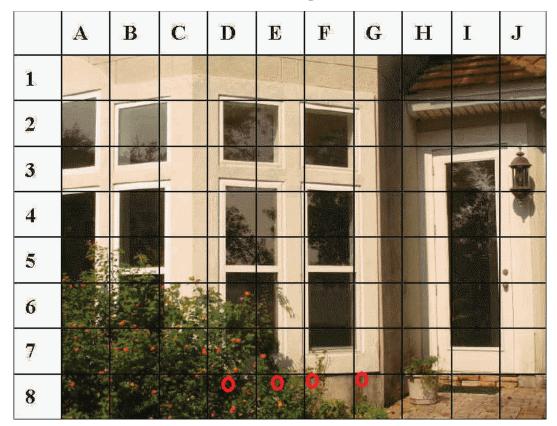
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	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
C7	Windows	20	Firm	Acceptable Moisture	
D7	Windows	16	Firm	Acceptable Moisture	
E7	Windows	14	Firm	Acceptable Moisture	
F7	Windows	8	Firm	Acceptable Moisture	
G7	Windows	18	Firm	Acceptable Moisture	
H7	Windows	25	Firm	HIGH MOISTURE, suggest further exam and sealing as needed	
I7	Windows	11	Firm	Acceptable Moisture	
J7	Windows	8	Firm	Acceptable Moisture	

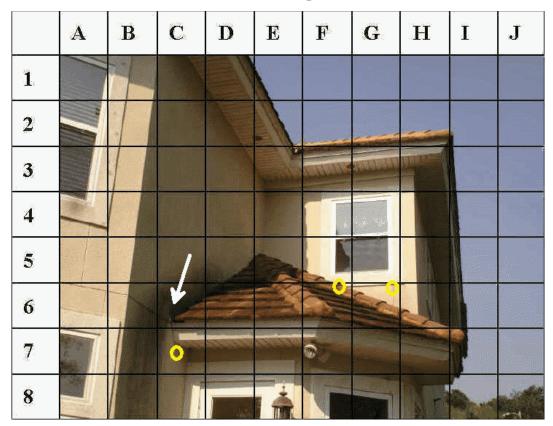


**Elevation Page #15a** 

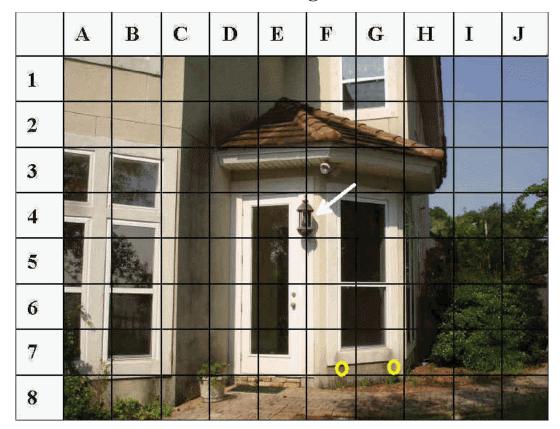
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
C6	Windows			Perimeter seal inadequate, suggest sealing	27
E6	Windows			Stucco surface crack, suggest sealing	28
F6	Windows			Perimeter seal inadequate, suggest sealing	30
G6	Windows			Perimeter seal inadequate, suggest sealing	31
H6	Windows			Perimeter seal inadequate, suggest sealing	33



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
D8	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
E8	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	
F8	Windows	40	QuasiSoft	HIGH MOISTURE, suggest intrusive exam and repair	
<b>G</b> 8	Windows	XX	Soft	Too soft to determine moisture suggest intrusive exam and repair	

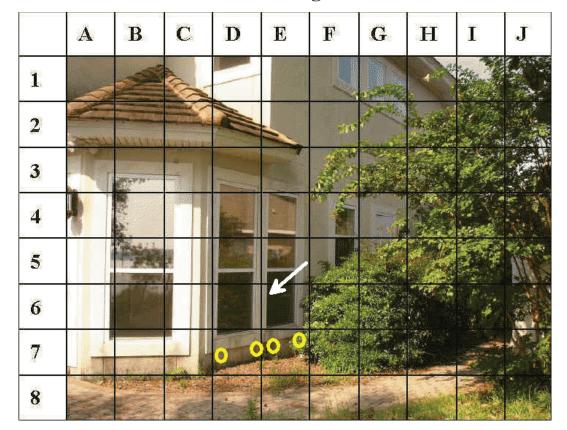


	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
C7	Kick-out	22	Firm	Acceptable Moisture	
F6	Windows	20	Firm	Acceptable Moisture	
G6	Windows	9	Firm	Acceptable Moisture	
C6	Kick-out			Kick-out flashing inadequate/improper, suggest repair	36,37

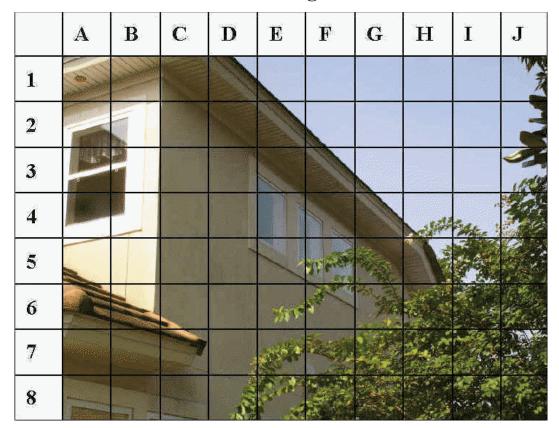


**Elevation Page #18** 

	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
F7	Windows	29	Firm	HIGH MOISTURE, suggest further exam and sealing as needed	
G7	Windows	20	Firm	Acceptable Moisture	
F4	Light			Wall penetration seal missing/inadequate, suggest sealing	38
XX				Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
D7	Windows	13	Firm	Acceptable Moisture	
D7	Windows	11	Firm	Acceptable Moisture	
E7	Windows	23	Firm	Acceptable Moisture	
E7	Windows	17	Firm	Acceptable Moisture	
E6	Windows			Perimeter seal inadequate, suggest sealing	39
XX	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX				All areas, no reportable observations	

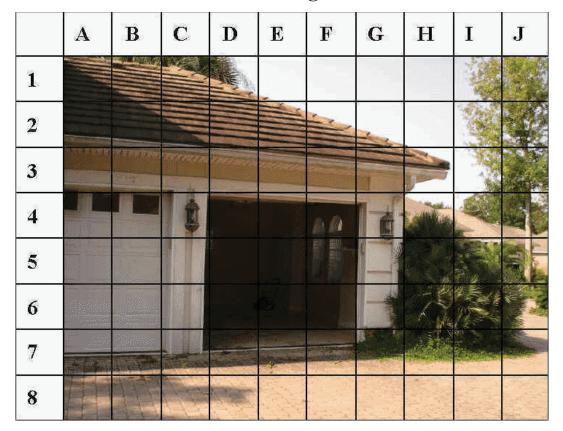
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	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
A6	Windows	13	Firm	Acceptable Moisture	
C6	Windows	9	Firm	Acceptable Moisture	
H7	Utility			Wall penetration seal missing/inadequate, suggest sealing	40
XX	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	

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**Elevation Page #22** 

	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	



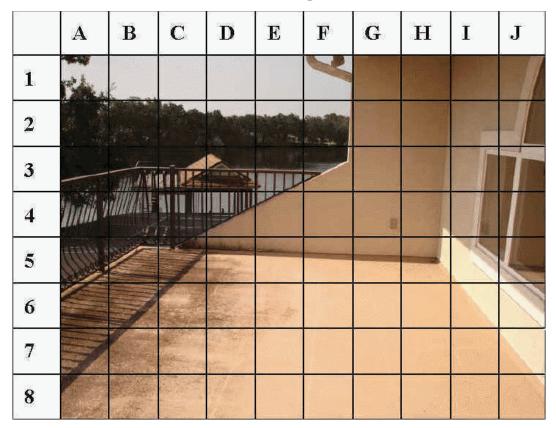
	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX	Wall			Vegetation impedes moisture evaporation, suggest vegetation be trimmed 18-24 inches from the wall	

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	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX				All areas, no reportable observations	

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	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX				All areas, no reportable observations	



	Item Description	Moisture Readings	Substrate Condition	Observations	Detail Photo #
XX				All areas, no reportable observations	





3

















# **Detail Photos Page #2**









































































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#### STUCCO MOISTURE-SCAN INSPECTION REPORT SUMMARY Address of Inspection

The information contained herein is a summary of the observations made by the inspector performing a stucco moisture-scan inspection on the above-identified property. The inspector's observation opinions and suggestions are provided as a summary to the final report. The specific observations are further identified in the body of the report and its attached photo pages.

The purpose of a moisture-scan is to inspect for excessive moisture absorption by the wood substrate behind the exterior surface. Wood has a natural tendency to absorb moisture. The percentage of absorption depends on exposure. The relative humidity in an area will allow wood to "acclimate" to low levels of moisture and is natural for any wood product. A wood product that is exposed to higher levels of water/moisture absorption is in danger of allowing wood rot to occur. A moisture content above approximately 20 percent will cause rot to occur if exposed at that level for a given period of time. The higher the level of moisture the shorter period of time needed for rot to occur.

This report summary addresses those areas in which moisture was detected to be above 15 percent and/or areas where soft substrate was detected. The lower levels (**20-25 percent**) involve areas where further examination may be needed to determine remedial actions necessary to reduce/prevent moisture penetration. The higher levels (**above 25 percent**) are areas that require more immediate corrective action, including the possibility of replacing substrate that may be soft/damaged from water intrusion.

The inspector's observations and findings as a result of this inspection are as follows:

SYSTEM IDENTIFICATION: The exterior wall cladding was determined to be a traditional wire lathe stucco system. This determination was made based on observations made by inspector's probes.

OBSERVATION #1: Moisture testing was performed at 57 random locations around the home with 22 locations indicating elevated or high moisture content within the substrate. The elevated and high moisture content areas are identified within the body of the report.

SUGGESTION: All areas of elevated or high moisture should be closely examined to determine the specific source of water intrusion with appropriate sealing and repair of these areas in accordance with the stucco manufacturer's instructions.

OBSERVATION #2: Soft/Quasi-Soft substrate was detected at 20 places during the moisture probe test. The soft substrate indicates that the wood has deteriorated as a result of excessive moisture absorption. The full extent of deteriorated/damaged wood can only be determined by a visual more intrusive examination of the soft areas detected.

SUGGESTION: The soft areas identified within the body of the report should be more intrusively examined to determine the extent of damaged wood and the repairs that may be necessary to return the substrate to a structurally sound condition.

OBSERVATION #3: Adhesive and/or cohesive failure of sealant was observed at some places around window and door frames. The failure of the sealant creates small gaps in the exterior water barrier system of the building. These gaps provide an avenue for water to penetrate the exterior stucco barrier and potentially enter the substrate behind the stucco.

SUGGESTION: All window and door frames should be resealed as necessary to prevent water from penetrating to the substrate. The sealant process should be as apecified by the stucco manufacturer or as a minimum in accord with industry standards.

OBSERVATION #4: Miter joints at the bottom of windows are not sealed. Miter seam allows water penetration into the substrate area.

SUGGESTION: All miter joints at the bottom of windows to be sealed to prevent water intrusion.

OBSERVATION #5: Unsealed wall penetrations (breaches) were observed at random places around the building. These penetrations include; plumbing pipes; HVAC lines; drainpipes; electrical lines; sub-system attaching screws, etc. These penetrations provide avenues for water to penetrate the surface and enter the substrate. The presence of elevate/high moisture in the wood substrate, if allowed to remain, will cause the molecules of the wood to react and wood rot to occur.

SUGGESTION: All wall penetrations should be sealed/resealed as necessary to prevent water penetration below the wall surface. The sealant process, including type of sealant, should be as recommended by the stucco manufacturer.

OBSERVATION #6: Roof edge kick-out (diverter) flashing was observed to be missing or inadequate at required locations. Missing or indequate kickout (diverter) flashing roof termination locations in the wall surface can allow water entry into the substrate system and interior wall locations.

SUGGESTION: All in wall roof terminations should have missing or inadequate kickout flashing should be repaired or reinstalled in a proper manner to prevent water entry into the substrate area.

OBSERVATION #7: The kick-out/diverter flashing at the roof edge of the front roof line has gaps/holes around the flashing. Cracks and gaps in the stucco water barrier surface allows water to penetrate into the substrate area where wood rot and/or mold growth may occur.

SUGGESTION: All kick-out/diverter flashing should be further examined with all cracks/gaps sealed to prevent water entry into the stucco cladding.

OBSERVATION #8: Stucco surface damage was observed at one or more locations on the wall. The impact breaks in the surface can allow water to penetrate below the surface and into the substrate. (See Sec. 3.6)

SUGGESTION: All impact damage should be repaired and resealed in accordance with manufacturer recommendation to prevent water penetration behind the surface.

OBSERVATION #9: Stucco surface cracks were observed at several locations on the walls and accent bands. The cracks in the surface can allow water to penetrate below the stucco surface and into the substrate.

SUGGESTION: All surface cracks should be sealed to prevent water intrusion into the substrate area of the wall system.

OBSERVATION #10: Heavy vegetation was observed around the walls of the home. The vegetation retains moisture in close proximity to the wall surface and inhibits the evaporation of moisture on the wall surface.

SUGGESTION: The vegetation should be trimmed/cleared from close proximity to the walls to facilitate air flow and moisture evaporation from the wall and surfaces in close proximity to the walls.

OBSERVATION #11: The number of high moisture and soft substrate area noted below the window would suggest the potential failure of window miter joints at the bottom corners of the windows.

SUGGESTION: Suggest that window miter joints be water tested for leakage during the stucco repair below the windows.