



# **StuccoSpec Moisture Testing Inspection**

### **Property Located At:**

265 Elm Street, Anywhere, USA

01/27/02

Ordered by: Mr. & Mrs. John Doe





#### 1. INTRODUCTION

**1.1 PURPOSE:** Enclosed is your Stucco Moisture Inspection. 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 and conduct random moisture readings using electronic moisture scan devices. Please note that the provision of a scope of work for remedial repairs is <u>not</u> 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 homes 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.
- **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 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.
- 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 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.



Client	Mr. & Mrs. John Doe	Builder	Southern Oak Construction
Street Address	265 Elm Street	Phone Number	N/A
City,State,ZIP	Anywhere, USA	Buyer's Realtor	N/A
Phone Number	555-111-2222	Phone Number	N/A
<b>Property Owner</b>	N/A	Buyer's Realtor Co.	N/A
Street Address	Same as above	Seller's Realtor	N/A
City,State,ZIP	Same as above	Phone Number	N/A
Phone	N/A	Seller's Realtor Co.	N/A
Type of exterior	EIFS	Date of Inspection	01/27/02
Substrate (if known)	OSB/Gypsum	Inspector	Kevin Harbison
Age of property	8 years	Others Present	Buyer
Approx. Sq. Feet	3600	Temperature	86 Degrees/72% R.H.
Stories	1	Weather Conditions	Clear
Type of windows	Metal Single Hung	Last Rainfall	Approx. 1 day

#### **Inspection Test Equipment**

	<b>Test Equipment Description</b>		Setting		
		Low	Medium	High	
A	Tramex Wet Wall Detector				5
В	Delmhorst BD 2000				1

**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**

DESCRIPTION OF DETAIL	YES	NO	IMP	COMMENTS
Sealant Satisfactory on Window Trim		X		265 Elm Street, Anywhere, USA 01/27/02
Sealant Satisfactory on Window Joints		X		
Sealant Satisfactory on Door Perimeters		X		
Sealant Satisfactory on Door Joints		X		
Sealant Satisfactory on all Penetrations		X		
Sealant Satisfactory on Flat Accents		X		
Sealant Satisfactory on Terminations		X		
Mildew Present		X		
Rust Aggregates Present		X		
Window Head Flashings Present		X		
Window Pan Flashings Present		X		
Door Head Flashings Present		X		
<b>Door Pan Flashings Present</b>		X		
Kickout Flashings Present	X			High moisture beneath two.
<b>Balcony Flashings Present</b>				N/A
<b>Chimney Flashing Present</b>	X			
<b>Chimney Cricket Present</b>	X			
Chimney Metal Cap Present	X			
Stucco System in contact w/concrete	X			
Stucco System in contact with soil	X			Close.
Exposed Mesh/foam noted	X			At several areas along the bottom edges.
<b>Expansion Joints Present</b>				N/A
<b>Delamination Present</b>	X			Below dining room window.
<b>Evidence of Wood Destroying Insects</b>	X			Ants.
<b>Compression Wrinkle Present</b>		X		
Visible Stucco Damage/Cracking		X		
<b>Control Joints Present</b>		X		
Dead Valley Present on Roof		X		
Stucco in contact with roof shingles	X			
Sprinkler System Present	X			





Photo #1a ---- 265 Elm Street

Grid Site	Description of Problem	Moistur % Wet	re Readings Equipment	Read for Add'l Info
A/B4 - A/B7	Brick Terminations. See Detail #1			
	Seal all brick/EIFS terminations to prevent moisture intrusion.			Ch 3.10
B/C7	High moisture reading at window lower left.	80% Fi	rm	
	No sealants present.			
D7	High moisture reading at window lower right below the band	40+%F	ìrm	
	23% Firm at the band.			
	All windows and other penetrations need perimeters sealed			Ch 3.1,3.2
	Seal all window construction.			Ch 3.2
F3,4	Area where moisture probe was made under kickout flashing.	8% Fir	m	
	See Detail #2 Kickout flashing is present. Seal all kickouts.			
D2-F3	EIFS is flush on roofline. See Detail #3 Consult a qualified water-	-		
	proofing contractor to modify as needed to prevent moisture			
	intrusion and corrosion of flashing. Typical.			





Photo #1b ---- 265 Elm Street

Grid Site	Description of Problem	Moistur % Wet	re Readings Equipment	Read for Add'l Info
E/F3,4	Soffit/Fascia. See Detail #4 No sealants present.			
	Seal all soffit/fascia terminations to prevent moisture intrusion.			Ch 3.10
G7	High moisture reading at window lower left. See Detail #5	34% S	oft	
	Soft substrate noted when probing this area. No sealants.			
H7	High moisture reading at window lower right. No sealants.	30% S	oft	
	Soft substrate noted when probing this area.			
	Inspector's Note: Repair is probably necessary beneath this			
	window (approx. 8 Sq. Ft.) Ants emerged from the probe holes			
	beneath this window. Consult with inspection specialist to investi-			
	gate this area further.			
	All windows and other penetrations need perimeters sealed			Ch 3.1,3.2
	Seal all window construction.			Ch 3.2





Photo #2a ---- 265 Elm Street

Grid Site	Description of Problem	Moistu % Wet	re Readings Equipment	Read for Add'l Info
B/C4,5	Area where moisture probe was made under kickout flashing.	18% F	irm	
	See Detail #6 EIFS is flush on roofing/flashing.			
	Consult a qualified waterproofing contractor to modify kickout/			
	EIFS to roof termination to prevent moisture intrusion & corrosion	ı <b>.</b>		
C6,7	Area where moisture probe was made at window lower left.	16% F	irm	
C6,7	High moisture reading at window lower middle.	19% F	irm	
D6,7	High moisture reading at window lower right.	30% F	irm	
	All windows / Doors / other penetrations need perimeters sealed			Ch 3.1,3.2
	Seal all window and door construction.			Ch 3.2
D7	High moisture reading at lower edge. See Detail #7 Landscaping	40% F	irm	
	is too close to foundation grade. Raw EPS foam observed at			
	bottom terminations. Assess and modify.			
	Consult a qualified waterproofing contractor to assess and modify			Ch 3.3
	as needed to prevent moisture intrusion and insect infestation.			



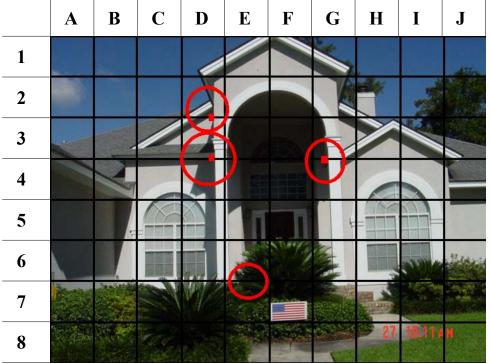


Photo #2b ---- 265 Elm Street

Grid Site	Description of Problem	Moisture Readings % Wet Equipment	Read for t Add'l Info
D3,4	Area where moisture probe was made under kickout flashing.	14% Firm	
	See Detail #8 Kickout flashing is present.		
F/G3,4	High moisture reading under kickout flashing. See Detail #9	34% Firm	
	It appears that this kickout was installed sometime after the		
	original EIFS installation. There is a noticeable "patch" present.		
	Consult a qualified waterproofing contractor to seal and modify		
	this kickout flashing to prevent moisture intrusion.		
D2,3	Area where moisture probe was made under kickout flashing.	8% Firm	
	See Detail #10 Kickout flashing is present.		
E6,7	Porch Floor Termination. See Detail #11		
	EIFS is flush on porch floor. Consult a qualified waterproofing		Ch 3.3
	contractor to assess and modify as needed to prevent moisture		
	intrusion and wicking. Seal all window and door construction.		Ch 3.2
	All windows / Doors / other penetrations need perimeters sealed		Ch 3.1,3.2





Photo #2c ---- 265 Elm Street

Grid Site	Description of Problem	Moistu	re Readings Equipment	Read for Add'l Info
D7	High moisture reading at knee wall. See Detail #7	30% S	oft	
	Soft substrate noted when probing this area. Note: Inspector was			
	unable to tell if this knee wall is concrete or treated lumber. 30%			
	moisture with semisoft substrate was found near the front porch.			
	Consult a qualified waterproofing contractor to assess and modify			
	as needed.			



	A	В	C	D	E	F	G	Н	I	J
1			j					N		
2	4				/		7	THE STATE OF THE S		
3										
4	3									
5				200	40 . 5	*				
6									1	1
7										111 3116
8								27	10:11	M

Photo #3a ---- 265 Elm Street

Grid Site	Description of Problem	Moistur % Wet	e Readings Equipment	Read for Add'l Info
B/C6	High moisture reading at window lower left.	22% Fi	rm	
C6	High moisture reading at window lower middle.	38% Sc	oft	
D6	High moisture reading at window lower right. See Detail #12	40% So	oft	
	Soft substrate noted when probing these areas.			
	All windows / Doors / other penetrations need perimeters sealed			Ch 3.1,3.2
	Seal all window and door construction.			Ch 3.2
E3	High moisture reading under kickout flashing. See Detail #13	40+%S	oft	
E4	High moisture reading under kickout flashing.	40+%F	irm	
	Kickout flashings are present at both locations. Note: Kickouts			
	are in contact with roof shingles. Kickout is at a 90 degree angle			
	should be a 45 degree angle. Approx. 6 square feet of rotten			
	substrate is beneath this kickout. Repairs are necessary. Consult			
	a qualified waterproofing contractor to modify this kickout flashing	3		
	to prevent moisture intrusion.			



	A	В	<b>C</b>	D	E	F	G	н	I	J
1			Í					No.		
2	4				/		ğ	W W		
3				16						
4	3									
5		•		200	40 5	1			1 . A . B	
6										
7										111 200
8								27	10:11	M

# Photo #3b ---- 265 Elm Street

Grid Site	Description of Problem	Moistur % Wet	e Readings Equipment	Read for Add'l Info
G5,6	High moisture reading at window lower left. No sealants.	40+%F	irm	
H5,6	High moisture reading at window lower right. No sealants.	19% Fi	rm	
	All windows / Doors / other penetrations need perimeters sealed			Ch 3.1,3.2
	Seal all window and door construction.			Ch 3.2



	A	В	$\mathbf{C}$	D	E	F	G	Н	I	J
1										Ž.
2			(		-					17
3										
4										1
5										Service of the last
6										13
7							1			
8								27	10:127	×

Photo #4 ---- 265 Elm Street

Grid Site	Description of Problem	Moistu % Wet	re Readings Equipment	Read for Add'l Info
D2-F2	Cap flashing is present.			
C/D6,7	Cricket is present.			
D7-F7,8	EIFS is in contact with flashing and shingles. Consult a qualified			
	waterproofing contractor to assess this area and modify as needed			
	to prevent moisture intrusion and corrosion of flashing.			



	A	В	<b>C</b>	D	E	F	G	Н	I	J
1								1		
2		1								
3										
4										
5						1				
6										
7										
8								7	推挂	

Photo #5 ---- 265 Elm Street

Grid Site	Description of Problem	Moistu % Wet	re Readings Equipment	Read for Add'l Info
E2-H2	Cap flashing is present.			
D6	Cricket is present.			
E7-F7	Roofline is flush on flashing/shingles. Consult a qualified water-			
	proofing contractor to assess this area and modify as needed			
	to prevent moisture intrusion and corrosion of flashing.			



## 265 Elm Street, Anywhere, USA



Detail Photo #1 -- Brick Terminations. No sealants present. Seal all brick/EIFS terminations to prevent moisture



Detail Photo #2 -- Kickout flashing is present. Seal all kickouts.



Detail Photo #3 -- EIFS is flush on roofing. Consult a qualified waterproofing contractor to modify.



Detail Photo #4 -- No sealants at soffit/fascia. Seal all soffit/fascia areas to prevent moisture intrusion.



Detail Photo #5 -- No sealants at window lower left. High moisture reading at this window. Seal perimeters/construction.



Detail Photo #6 -- EIFS is flush on roofing/flashing. Modify to prevent moisture intrusion.



### 265 Elm Street, Anywhere, USA



Detail Photo #7 -- Lower Edge. Landscaping is too close to foundation grade. Assess and modify.



Detail Photo #8 -- Kickout flashing is present. Seal all kickouts.



Detail Photo #9 -- Kickout flashing is present. This was installed after original EIFs installation. Noticeable patch. Seal.



Detail Photo #10 -- Kickout flashing is present. Seal all kickouts.



Detail Photo #11 -- Porch Floor Termination.



Detail Photo #12 -- No sealants at window lower right. High moisture reading. Seal perimeters/construction.



## 265 Elm Street, Anywhere, USA



Detail Photo #13 -- Kickout flashing is present but there is a high moisture reading. Soft substrate noted. Consult a qualified waterproofing contractor to assess this location and modify as needed to prevent moisture intrusion. Seal all kickouts.



# Summary Observations

Property Address: 265 Elm Street, Anywhere, USA... 01/27/02

- All windows, doors and penetrations through the EIFS should be professionally resealed around the perimeter using a quality sealant suggested by the manufacturer of your system.
- Seal all single hung window construction (miters and mullions) and door construction (miters) to prevent future moisture intrusion.
- Seal all exposed Soffit/Fascia and Brick/EIFS terminations to prevent future moisture intrusion.
- Seal all tops of flat accents to prevent future moisture intrusions.
- Kickout flashings are present but three kickout flashings are experiencing moisture intrusion below them. Modifications are needed on these kickout flashing areas to prevent moisture intrusion. Consult with a qualified waterproofing contractor to assess, modify and waterproof all kickout flashings as needed. Seal undersides and construction of all kickout flashings. Seal soffit/fascia areas around kickout flashing locations.
- Front entry is in contact with the concrete patio. Modifications are needed to prevent moisture intrusion and wicking. Consult with a qualified waterproofing contractor to assess terminations and either waterproof or modify (cut back) to prevent future moisture intrusion.
- There is an area in your EIFS system that is close to the landscaping. This area should be modified to prevent moisture intrusion and insect infestation. Consult with a qualified waterproofing stucco contractor to check all bottom terminations and modify as needed by either cutting back EIFS or modifying the ground to allow proper clearance. Refer to elevation photos for specific locations.
- There are areas on the bottom termination that have foam exposed. All bottoms should be sealed tightly to prevent moisture intrusion and insect infestation. Have a qualified EIFS contractor check all bottoms for exposed foam.
- Delamination of the EIFS is below dining room window. Consult with a qualified



waterproofing contractor to assess these areas and repair as needed to prevent future related problems.

- Ants were observed at below one window. Consult with a qualified insect specialist to investigate these areas further.
- The EIFS is in direct contact with roof shingles at all roof areas. Modifications are needed to prevent corrosion of roof flashing and moisture intrusion.
- All sprinkler heads should be directed away from the EIFS and windows to prevent moisture intrusion.
- There are several areas below windows, kickout flashing areas, knee wall and at a lower edge that are showing signs of high moisture. The substrate was soft upon probing several of these areas. Consult with a qualified waterproofing EIFS contractor to assess and investigate by core sampling all of these soft areas for possible moisture intrusion damage. Refer to elevation photos for specific locations of moisture readings and substrate integrity. (Firm, Soft or None)
- Great care should be exercised in choosing the appropriate caulk. The manufacturer of
  your system has recommended specific brands and types of sealant for various applications.
  Each caulking manufacturer has recommendations about how their particular caulk should
  be applied. It is important that these guidelines be followed in order to maximize the
  effectiveness of the caulk and enhance its ability to protect your home. All caulk joints
  should be thoroughly cleaned before caulking to ensure the effectiveness and adherence of
  the caulk.
- It is suggested that a follow-up inspection be completed in 3 to 6 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.
- This report only reports on the condition of the structure at the specific locations indicated. Locations were determined by the inspector according to the probable areas of possible moisture intrusion and in accordance with Industry Standards. The suggestions for corrections to prevent moisture intrusion are given in accordance with the best judgment and experience that have been determined from previous inspections, repairs, and knowledge gained from our experience and other knowledgeable persons in the industry. No judgment is intended or given for any areas not reported on.
- Please note that the moisture readings included in this report are the raw data recorded by the Delmhorst probe meter. Moisture levels are affected by the ambient weather conditions and other factors, and this can result in variations between the readings taken on one day and readings taken in the same area on another day. The readings provided in this report



are accurate indicators of the presence of retained moisture at the surface of the substrate in the area tested at that given moment in time. These readings are not represented to be the absolute moisture content of the full thickness of the substrate.

End of Summary Observations...265 Elm Street, Anywhere, USA.. 01/27/02