

Stucco Report

Stucco Home Buyer

Property Address:

14367 Anyplace Street Overland Park KS 66209



Holmes Inspection Company

Dan Bowers, CRI, ACI, CMI, EDI theholmescompany@hotmail.com (816) 455-8787



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Date: 7/13/2012	Time: 09:30:00 AM	Report ID: 876532
Property: 14367 Anyplace Street Overland Park KS 66209	Customer: Stucco Home Buyer	Real Estate Professional:

In the enclosed Report you will see our findings of our recent stucco inspection at the subject property.

If you have any question about the home or need clarifications on items in the report, please feel free to call.

Thank You for allowing us to be of service to you.

Dan Bowers, CRI, ACI, CMI

EDI Certified EIFS Inspector / Moisture Analyst

Approximate Age Of Home: Weather: Temperature: 18 to 20 Years +/-Clear Mid - High 80's Rain or Snow In Past Week: Type Building: Occupied: Yes / Several Rains Single Family House Yes **Soil Condition: Seller Disclosure:** Stories / Levels: We DID NOT see a "Seller Disclosure" (this limits 2-Story & Walk-Out Basement Wet / Muddy access to known facts).

Others Present:

Buyer, Seller, Agents

1. SCOPE AND PURPOSE

	Y N PAR IMP NA NP NVI
1.0 What Is the Scope and Purpose of The Inspection?	x
	Y N PAR IMP NA NP NVI

Y=Yes, N=No, PAR=Partial, IMP=Improper, NA=Not Applicable, NP=Not present, NVI=Not visible

1.0 Per your request a visual examination of the above property was performed for the purpose of determining within reasonable limits, the general condition of representative samples of the exterior stucco system at the above property. Our goal is to discover as much about the exterior cladding system being reviewed as possible, given the limitations of time and accessibility. This report is a description of visible and apparent conditions of the applicable cladding system and visible accessories. The condition of the hidden systems (insulation, framing, moisture barrier, mesh, fasteners, etc.) is not known. Because of the type of cladding system that EIFS stucco is, the initial signs of moisture entry may be concealed within the walls and not immediately visible. On certain stucco systems, rot works inside out, rather than working its way inward, such as on a wood clad house.

Our examination is based on our interpretation of the industry standard of groups like NAHB (National Association of Home Builders), EIMA (EIFS Industry Members Association), EDI (Exterior Design Institute), and our opinion of accepted building practices and standard installation or repair techniques. Our inspections is primarily visual and limited by time, and accordingly conditions which would require inspection or testing by physical or destructive means (other than moisture probing), might not have been observed. Except as expressly stated in this report, no opinions were given as to any future conditions of the premises. Where opinions are given, it is understood these are our personal opinions only and are not to be construed as a prediction of future conditions nor a guaranty or warranty.

Note #1: See the attached photo logs to better understand our observations and comments.

We performed invasive moisture probing's of the substrate at various locations on the exterior walls to check the moisture readings at specific areas.

Checking some areas with a non-invasive "Tramex Wet Wall Detector" resulted in the area(s) showing a potential for moisture retention behind the EIFS. This moisture may be in the wall cavity.

Note #2: The exterior cladding of this building has accents and trim accessory components that are often referred to by contractor, homeowners, installers, etc. as acrylic stucco, synthetic stucco, artificial stucco, etc. The proper nomenclature for this type of accent and trim accessory is **EIFS** (exterior insulation finish system). If installed properly with the proper architectural details, **EIFS** can be a sturdy and good quality material. If however, the proper architectural details are absent, installed improperly, or if the architectural features (such as windows, flashings, etc.) are sealed incorrectly, it can create conditions that are conducive to moisture intrusion inside the wall cavities. If this should happen, moisture has the potential to be trapped in the wall cavities, with serious long-term consequences. It should be pointed out that few homes with **EIFS** present, have every architectural detail done perfectly. Most are missing one or more architectural details, or some details were not done fully correctly. Many of these "imperfect details" have been there for years, and have never caused a problem. Others have, and we have no way of telling which ones will never be a problem, which ones will become problematic, nor when OR if problems might occur.

2. SYSTEM COMPONENTS

/les	X.	ма	ter	паце	4
					4

Type of Siding System:

3 ,

Plastic

Window:

Wood Vinyl Fixed Casement Other

Foundation:

Basement Poured Concrete Substrate: Strand Board

Type Mesh / Lath:

Mesh Color:

Not Visible Painted Over

We verified system components by:

Looking Under Wall Holes / Openings in Wall Other

Y N PAR IMP NA NP NVI

2.0	Is a Moisture Barrier Installed?		Χ			Χ
2.1	Are Vertical Control Joints Present?				Х	
2.2	Are Horizontal Control Joints Present?		Χ			
2.3	Do Any Drives, Stoops, Walks, Etc Touch the Stucco?	Х				
2.4	Are Roof Coverings Too Close or Touching Stucco?				X	
2.5	Can You Verify System Type?	Х				

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- **2.0** Due to the system finish out, the presence or absence of a moisture barrier under the stucco system could not be verified.
- **2.2** The typical architectural details for EIFS/Stucco, such as on this building, is the presence of "Horizontal Control Joints" at floor lines on the exterior of the building. These joints help control cracking of the stucco by anticipating certain types of movement of the structure and the shrinkage/compression of the wood framing members. This detail was lacking at one or more locations on this building (right side and rear). Due to the age of this home we suspect that most shrinkage and compression of the wood framing members has occurred.
- **2.3** There were one or more locations where concrete slabs were too close and/or touching the stucco wall (front stoop and drive). This is a common but improper building practice. There should have been a space where they meet to allow any future movement of the slabs from causing cracks or moisture damage to the stucco walls. On drainage systems this allows water to escape from behind the stucco.

The slab/wall joint is caulked and we saw no damage at this time.



2.3 Picture 1

2.5 EIFS Barrier Type



2.5 Picture 1

3. CAULKING / SEALANTS

Additional Comments

3.0

3.1

3.2

3.3

3.4

Y	N	PAR	IMP	NA	NP	NVI
	X					
	Χ					
	Х					
	X					

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Is Caulking Satisfactory at Window Perimeter / Trim?

Is Caulking Satisfactory at Window Joints / Sashes?

Is Caulking Satisfactory at Door Perimeter / Trim?

Is the Caulking Satisfactory Around all Breaches?

Is the Caulking Satisfactory on Doors Frames?

- **3.0** Caulk or re-caulk windows exteriors. This includes the window frames and trim and where the frame or trim meets another building element (stucco, stone, brick, etc.).
- **3.1** Caulk or re-caulk all windows joints and sashes. For all casement windows, caulk or re-caulk the miter joints of the casement windows, the tracks, sills, and joints. Seal any and all joints.
- **3.2** Caulk or re-caulk door; exteriors and perimeters of frames and trim. This includes the door frames and trim and where the frame or trim meets another building element (stucco, stone, brick, etc.). Caulk all thresholds and tracks as needed.
- 3.3 Caulk or re-caulk all door joints. This includes, jambs, miters, thresholds tracks etc. Seal any and all joints.
- **3.4** Anywhere an electrical line, gas line, light fixture, plumbing hose bibb, etc. penetrate the exterior walls they are commonly called a "breech location" in the stucco world. Although some breech locations were properly sealed, others were not (see example(s) in pictures). Caulk or re-seal any place below the soffit line where stucco meets another material such as around dryer vents, hose bibbs, electrical outlets or light fixtures, cable TV openings, freon lines, and other penetrations of the wall cladding materials.
- **3.5** Great care should be exercised in choosing the appropriate caulking. The manufacturer of your stucco 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.

The wrong type of caulking was used at various locations. Remove or cover this caulking as needed. Re-caulk as needed.

4. FLASHINGS

Y N PAR IMP NA NP NVI

4.0	Is a Proper Chimney Cap Installed on All Chimneys?	X				Χ
4.1	Is a Cricket / Roof Diverter Installed on the Chimney?					Χ
4.2	Do Window and Door Areas Have Head Flashings?	Х		Χ		
4.3	Are Window Sill Pan Flashings Present?		Χ		П	
4.4	Do Door and Door Trim Have Head Flashings?	X		Χ		
4.5	Are Door Pan Flashings Present?		Χ		П	
4.6	Are Kickout Flashings Present?		Х			
4.7	Are Full Deck Flashings / Deck Details Correct?		Χ			

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4.0 Too tall to fully see. Unknown





4.0 Picture 1

4.0 Picture 2

- 4.1 Too tall to see. Unknown
- **4.2** There were some windows and trim around windows with missing and/or improper flashings. Installation and/or repair of these is suggested. Repairs may include; end dams created, sealing overlaps, caulking the bottoms, bent flashing straightened, etc.
- **4.3** Water intrusion through the window assembly appears to be occurring. Specially designed window sill pan flashings are available to repair this.
- **4.4** There were some door and trim around doors with missing and/or improper head flashings. Installation and/or repair of these is suggested. Repairs may include; end dams created, sealing overlaps, caulking the bottoms, bent flashing straightened, etc.
- **4.5** Water intrusion through the door assembly may be occurring. Specially designed door pan flashings are available to repair this if it is occurring.
- **4.6** In a house clad with EIFS or stucco, there should be a **"kickout flashing"** installed at any area where a gutter meets a wall or at certain roof to wall junctions. At this home "kickout flashings" were either: not present at all recommended locations; not visible; or not properly installed OR sized according to industry design criteria at some areas. A contractor can install proper "kickout flashings" for about \$250-\$350 each. Missing or improperly installed "kickout flashings" have been a common moisture entry point on stucco homes.

See Pic Example of Proper "Kickout Flashing" (not on this house).



4.6 Picture 1 Example - Good Kickout Flashing

4.7 No visible deck flashing was noted. Install an effective deck flashing or verify an effective deck flashing as needed.



4.7 Picture 1

5. WINDOWS AND DOORS

		Y	N	PAR	IMP	NA	NP	NVI
5.0	Are Window Details Potential Moisture Intrusion Spots?	X						
5.1	Are Door Details Potential Moisture Intrusion Spots?	Х						

Y N PAR IMP NA NP NVI

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5.0 There was no visible caulk joint at areas like windows, doors, etc. Typically on a house clad with stucco we should see a 3/8" gap around areas like the windows and doors - a "backer rod" is then placed in the gap and this area is properly sealed - this detail did not appear to be visible on this home. We would suggest contacting the builder and/or reviewing the original engineering details and blueprints to validate the absence or presence of this detail and to find out how this detail was handled. Repair or modifications may be needed.

Gaps in the window weather stripping can allow moisture into the window assembly. Repair and/ or install weather stripping or caulk as needed to keep out the moisture.

Rot was noted a multiple windows. When windows have severe wood rot this can allow water to penetrate the window assembly and enter behind the stucco system.

The visible caulk at areas like windows were showing age and damage. We would suggest contacting a contractor to reseal any gaps, cracks, or failing caulk, repairing this detail. Repair and/or modifications are needed.

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6. GUTTERS / DOWNSPOUTS

YN	I PAR	IMP	NΑ	NP	NVI

6.0	Are Gutters / Downspouts Present?	Х		Х		
6.1	Are Gutter Guards Installed?	Х				

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6.0 Gutter downspouts are small and crimped and can hold or slow down the flow of water off the roof areas and away from the stucco walls. Downspouts drain too close to the house at spots and can lead to leakage thru stucco like at SW corner / left side of building. Service and correction recommended (possibly oversized ones).

Downspouts needs to be adjusted to redirect water drainage away from the house.







6.0 Picture 1

6.0 Picture 2

6.0 Picture 3

6.1 Gutter guards need to be kept cleared of any visible debris (dirt, mud, leaves, straw, etc.) Always keep gutters clear of debris or blockage. If they hold water, they have the potential to allow moisture to leak backwards and into the stucco clad wall cavities below them.

7. MOISTURE

		Υ	N	PAR	IMP	NA	NP	NVI
7.0	Are There Signs of Moisture Penetration?	Х	\prod					
7.1	Is There Wood Rot / Moisture Damage Visible?	Х	\prod		Χ			
7.2	When Moisture Probing Was Substrate Soft / Spongy?	Х	П				П	

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7.0 Elevated moisture readings WERE found during the course of the inspection. The industry standards considers moisture readings over 19% as being in the unacceptable range and elevated.

You have locations that are not showing excessive moisture, but conditions are present to cause moisture problems in the future. Actions should be taken now to correct these conditions before damage occurs.

You have areas where the substrate is missing or rotted away. At these areas a accurate moisture reading is difficult to obtain due to this lack of substrate. We did however probe into the wall cavity and touched fiberglass insulation. It appears to be at a elevated level of moisture content.

Some elevated moisture readings were found during the course of the inspection. Some of the readings were taken with a non-intrusive moisture meter. These are relative readings and not absolute percentage of moisture content. You have high relative readings that indicate moisture intrusion into the wall cavity.

Please note that any moisture readings in the report, provided by the inspectors moisture meter(s) are accurate indicators of retained moisture at the area(s) tested at that given moment in time. Moisture levels are affected by ambient weather conditions and other factors, and can result in variations between readings taken one day and readings taken at the same area on a different day. These readings are not represented to be the total and absolute moisture content of the entire wall surface(s) or throughout the entire thickness of the substrate.

Locations to be probed and moisture testing (if penetration of the wall cavities was allowed) were determined according to the inspectors opinion of the probable areas of moisture intrusion. The suggestions for corrections or improvements are given in accordance with the judgement and experience gained from industry knowledge and past inspections. No judgement is given for areas not tested and/or probed.

We suggest that a follow-up inspection be completed in six to twelve months after all repairs are completed to ensure that the proper corrections have been made to prevent possible moisture intrusion, pest infestation and/or wood rot.

- **7.1** Wood rot and/or moisture damage was present at one or more locations such as front upper level windows and rear window areas. This may include trim, windows, doors, soffits, fascia, or other areas. Competent contractor to Repair these areas as needed.
- **7.2** You have area's where the substrate appeared to be soft when probed. These area's may need to be explored further by a competent stucco contractor to determine if any damage is present.

You also have area's where the substrate appeared missing when probed. These area's may need to be explored further by a competent stucco contractor to determine if any damage is present. Without a substrate present a accurate Moisture Content may not be determined

8. WOOD DESTROYING INSECTS AND ORGANISMS

Y N PAR IMP NA NP NVI

8.0	Is Foam Insulation and/or Stucco In Contact With Soil?	Х		Х		
8.1	Are Bushes or Shrubs in Contact With Stucco?	Х				
8.2	Any There Signs of Wood Destroying Organisms?	Х		Х		

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8.0 Your stucco is in direct contact with the ground at the left side (SW corner). This area should be re-graded to prevent insect infestations and the possibility of moisture intrusion.





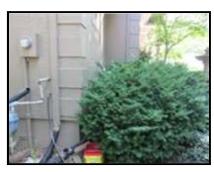
8.0 Picture 1

8.0 Picture 2

8.1 Bushes or other foliage are very close or rub the stucco walls at varied locations around the homes exterior. This can give pests an easy bridge into the home and can also allow for moisture damage. Always keep these bushes or other foliage trimmed well back from the walls or roofing. See Examples







8.1 Picture 1

8.1 Picture 2

8.1 Picture 3

8.2 We **DID NOT** not perform any WDI (wood destroying insect) inspection or evaluation at this property. A visual stucco inspection can not fully verify the absence or presence of wood destroying insects like termites, etc. A state licensed WDI specialist can provide more information or perform testing for you.

We were told there were signs of termites previously and the home is under a Termite Service Contract with Millberger Pest Control. Verify this with the applicable pest control contractor.

Ants of some type were noted coming out of house wall when probed. Left Side of house.





8.2 Picture 1

8.2 Picture 2

9. STUCCO SURFACE

		Y	N	PAR	IMP	NA	NΡ	NVI
9.0	Is There Any Flat Accents or Flat Trim?		Х					
9.1	Is There Visible Stucco Damage?		X					
9.2	Is Foam and/or Reinforcing Mesh Exposed?		Х					
9.3	Is a Lawn Sprinkler System Present?	X						
9.4	Are Surface Stains Present?		X					
9,5	Other Comments?	Х						

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- **9.3** All sprinkler heads should always be directed away from the stucco and windows to prevent moisture intrusion and damage to the Stucco System.
- **9.5** The sellers disclosure said that at some point in time he had the EIFS coated with a "Tex-Cote" Latex Polymer type paint. This is a brand name product for a "elastomeric type coating". One of its primary purposes is to resist and cracking of the stucco surface material that can allow water leaks thru the cracks by stretching or contracting without leaving open cracks. It would be prudent to know when it was done; why it was done; who installed it and what type of warranty the installer provided.

For more info on this product you can Google "Tex-Cote Latex Polymer for Stucco Repair".

10. MISCELLANEOUS

Y N PAR IMP NA NP NVI

10.0	Stucco Contractors	Χ				
10.1	Suggested Actions	X				
10.2	Any Mold and Moisture Intrusion?	X		Χ		

Y N PAR IMP NA NP NVI

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- **10.0 Stucco Contractors** Below are the names of several local repair contractors that we have been told are professionally trained and experienced in maintenance, repair or remediation needs on EIFS or stucco systems. You may also find other contractors by calling stucco distributors, the homebuilder association or in the Yellow Pages.
- 1) Chuck Kincaid (816) 510-6375 / (816) 509-4860
- 2) Ralph Heying (816) 590-0617 / (816) 942-8064
- 3) Todd Jones (816) 835-5320
- **10.1** Contact at least three stucco contractors to obtain repair bids.
- **10.2** We were told a very recent mold test revealed very high counts of penicillium in the lower level basement area of the home. We were also told that there has been foundation repairs (crack repair and piering and mudjacking at the SW corner of basement). We were also told that during recent rains in the past 1-2 weeks the home inspection revealed basement carpet has been wet in the NW area of the finished basement so we know water intrusion is still happening.

Service and correct the mold and water intrusion concerns by competent contractors in applicable specialities.

11. PHOTOS AND MOISTURE READINGS

		Y	PAR	NA	NVI	
11.0	Photos and Moisture Probing	Х				1

Y N PAR IMP NA NP NVI

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11.0 (1) Front



11.0 Picture 1

(2) The moisture content when probed was:45.8%

The substrate was MISSING when probed.



11.0 Picture 2



11.0 Picture 3

(3) The moisture content when probed was: 10.2%

The substrate was SOFT when probed.



11.0 Picture 4



11.0 Picture 5

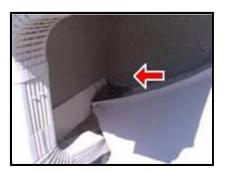
(4) The moisture content when probed was:18.9%

The substrate was MISSING when probed.

The kickout flashing is missing.







11.0 Picture 6

11.0 Picture 7

11.0 Picture 8

(5) The kickout flashing is missing.

The moisture content when probed was:14.2%

The substrate was SOFT when probed.





11.0 Picture 9

11.0 Picture 10

(6) The moisture content when probed was:9.7%

The Substrate appears SOLID where probed.



11.0 Picture 11

(7) Proper flashing is needed.

Caulking needed.



11.0 Picture 12

(8) The stucco is too close to the stoop and drive.





11.0 Picture 13

11.0 Picture 14

(9) The paint has adhesive failure. This usually is caused by moisture trying to escape.

(typical detail)





11.0 Picture 16

11.0 Picture 15

(10) Right side



11.0 Picture 17

(11) The moisture content when probed was:34.2%

The substrate was MISSING when probed.





11.0 Picture 18

11.0 Picture 19

(12) Loose Downspout



11.0 Picture 20

(13) Caulking needed.





11.0 Picture 21

11.0 Picture 22

(14) Left side



11.0 Picture 23

(15) The moisture content when probed was:18.2%

The substrate was MISSING when probed.

Ants noted





11.0 Picture 24

11.0 Picture 25

(16) Rear



11.0 Picture 26

(17) The moisture content when probed was: 21.0%

The substrate was MISSING when probed.



11.0 Picture 27

(18) (typical detail)

Wood rot.



11.0 Picture 28

(19) Caulking needed.



11.0 Picture 29

(20) The Deck flashing is missing.

The moisture content when probed was:29.0%

The substrate was MISSING when probed.



11.0 Picture 30

(21) The stucco touching the soil.



11.0 Picture 31

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Report Attachments

ATTENTION: This inspection report is incomplete without reading the information included herein at these links/attachments. Note If you received a printed version of this page and did not receive a copy of the report through the internet please contact your inspector for a printed copy of the attachments.

Caulking Info

Caulk Joint design

Kick out flashing

Sill pan flashing

Sill pan flashing Install



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