Inspection Report

Jack & Jill Smith

Property Address:
9725 Hollywood Ave
Leawood KS 66224

Dan Bowers Company

Dan Bowers, CMI, CRI, EDI

(913) 649-8878

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Date: 10/28/2007	**Time:** 09:30 AM	**Report ID:** 6378 - Visual Sample
Property: 9725 Hollywood Ave Leawood KS 66224	**Customer:** Jack & Jill Smith	**Real Estate Professional:** NONE

We have been told that the home originally had an EIFS type stucco system on it that was recently removed, and replaced with a conventional type of stucco.

In the enclosed Report you will find our observations and comments regarding the visual stucco review 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.

Dan Bowers & Stacey Van Houtan

Age Of Home:	**Weather:**	**Temperature:**
9- 10 Yrs +/- p/Owner	Clear	Mid 40's

1. SCOPE AND PURPOSE

		Y	N	PAR	IMP	NA	NP	NVI
1.0	**What Is the Scope and Purpose of our Inspection?**	X						

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

1.0 Per the owners request a **VISUAL INSPECTION** with **NO MOISTURE TESTING** or **PROBING** of the stucco at the subject property was performed for the purpose of observing and commenting (within reasonable limits), on the overall application and condition of the **newly installed stucco system** at this 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 the visible and apparent condition of the applicable cladding system and accessories at the time and date of our review. **When making a visual inspection it is required that certain assumptions be made regarding the existing conditions. Some of these assumptions are not verifiable without expending additional sums of money, or destroying adequate and serviceable portions of the building or finish material.** There was **NO** destructive or intrusive testing done by this company or its inspectors.

The condition of any hidden systems (footings, framing, wall cavities, etc.) is not known. Because of the type of cladding system that stucco is, the initial signs of moisture entry may be concealed within the walls and not immediately visible. On stucco systems, rot can sometimes work from the inside out, rather than working its way inward, such as on a house clad with wood siding.

Our examination is based on our interpretation of the industry standards of groups like the 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 review was visual ONLY and limited by time. Therefore, conditions which would require inspection or testing by physical or destructive means (including moisture probing), were not 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 opinions only and are not to be construed as a prediction of future conditions nor a guaranty or warranty.

Note: The exterior cladding this building is one that is referred to by builders, contractors or inspectors as **"Conventional Stucco System"** (or Hardcoat Stucco). This type of stucco is a compound made out of sand, cement, resin and water. This type of cladding is in the Kansas City Area, and is often used on upper bracket single-family residences. It has been our experience, that if installed properly with the proper architectural details it is a very sturdy and high quality material. If however, the proper architectural details are absent, installed incorrectly, or if the architectural features (such as windows, flashings, etc.) are sealed improperly, it can create conditions that are conducive to moisture intrusion inside the wall cavities of the stucco. If this should happen, moisture has the potential to be trapped in the wall cavities with serious long-term consequences. With this type of stucco system it would not be uncommon to periodically get minor cracks around windows or doors. It should also be pointed out that very few homes clad with this type of stucco, have every single architectural detail done perfectly. Most stucco clad homes that we inspect, are missing one or more architectural details, or some of the details present were not done completely correct.

Many "imperfect details" have been there for years, and have never caused any problems - others have. We have no way of telling which ones will never become a problem and which ones will become problematic, nor when the problems will happen to show up. Therefore, in the report that follows, we will pretend that we live in a perfect world and discuss missing or incorrect architectural details accordingly.

Note: Without probing or intrusive testing to prove otherwise, the exterior cladding of this building appears to use accents and trim components that look like EIFS (exterior insulation finish system). Just like stucco, if installed properly with the proper architectural details, EIFS can be a sturdy material. If however, proper architectural details are absent, installed improperly, or if doors, windows, etc are sealed incorrectly, it can create conditions conducive to moisture intrusion inside wall cavities. If this should happen, moisture can be trapped in the wall with serious long-term consequences. Some concerns noted with a EIFS system today may not have been required architectural details a few years ago - others were. Few homes with EIFS, have every architectural detail done perfectly. As with stucco, most homes with EIFS are missing one or more architectural details, or some of the details present were not done completely correctly. We have no way of telling which ones will become problematic, nor which ones will not. Therefore as with stucco details, we will pretend we live in a perfect world and discuss missing or incorrect architectural details accordingly.

In our opinion, this stucco system shows details that make it somewhat of a **"Hybrid System".** What makes this a Hybrid is that at some areas it looks like the stucco is installed over a building foam. In our opinion, this does not look like it is foam designed for EIFS.

Note: See the attached photo logs to better understand our suggestions and comments.

Probing and moisture testing is part of a complete stucco inspection. **We did not perform moisture testing or probing**. The following report is a limited Inspection. The suggestions for corrections or improvements are given in accordance with the judgement and experience gained from industry knowledge and past inspections. Limited judgement is given for areas not tested and/or probed.

2. SYSTEM COMPONENTS

Styles & Materials

Type of Siding System:
Hardcoat Stucco
Combination of Claddings
Hybrid System
EIFS Accents

Type Mesh / Lath:
Plastic

Foundation:
Basement

Substrate:
Unknown / No Probing Done

Mesh Color:
Blue Where Visible

		Y	N	PAR	IMP	NA	NP	NVI
2.0	**Is the Moisture Barrier Installed?**							X
2.1	**Are Control (vertical) Joints Present?**		X		X			
2.2	**Are Control (horizontal) Joints Present?**			X	X			
2.3	**Are Drives, Walks, or Slabs Touching the Stucco?**	X			X			
2.4	**Are Roof Coverings too Close or Touching the Stucco?**	X			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

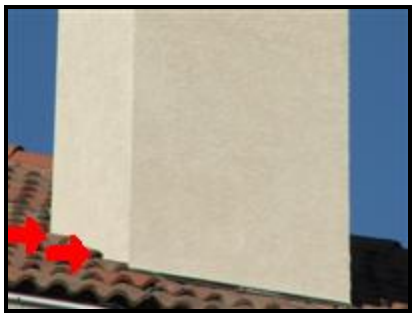
2.0 Due to the system finish out, the presence or absence of a moisture barrier under the stucco system could not be verified at ALL locations.

2.1 The typical architectural details for a Hardcoat Stucco System, such as on this building, is the presence of"Trim Accessory Joints" at certain locations 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. Common locations on a structure to see these joints are at wall penetrations such as at doors, windows, etc. This detail was lacking at one or more locations on this building, and we recommend Repair or Modification.

2.2 The typical architectural details for a Hardcoat Stucco System, such as on this building, are the presence of "Control Joints" at all floor lines and other needed areas on the exterior of the structure. These joints help control cracking of the stucco caused by either: movement of the structure; or due to the shrinkage and compression of the wood framing members. This detail was visible at some locations on this building, **BUT** not at **ALL** applicable locations. We recommend Repair or Modification.

2.3 There were one or more locations where concrete slabs were too close and/or touching the stucco wall. 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. Repair or Modification recommended.

2.4 There were one or more locations where roof coverings were close or touching the stucco wall. This is a common but improper building practice. There should have been a space where they meet to allow any movement of the roof covering from causing cracks or moisture damage to the stucco walls. Damage to the stucco can occur if is is too close to a roof covering. Seal the stucco at least 6" up the wall.



2.4 Picture 1

3. CAULKING / SEALANTS

		Y	N	PAR	IMP	NA	NP	NVI
3.0	**Is Caulking Satisfactory at Windows / Doors / Frames / Joints / Perimeters / Sashes / Trim?**		X		X			
3.1	**Is the Caulking Satisfactory around Window Joints and Sashes?**							X
3.2	**Is the Caulking Satisfactory around Door Perimeter and Trim?**							X
3.3	**Is the Caulking Satisfactory on Doors Frames?**							X
3.4	**Is the Caulking Satisfactory Around all Breaches?**			X	X			
3.5	**Additional Comments**	X			X			

Y N PAR IMP NA NP NVI

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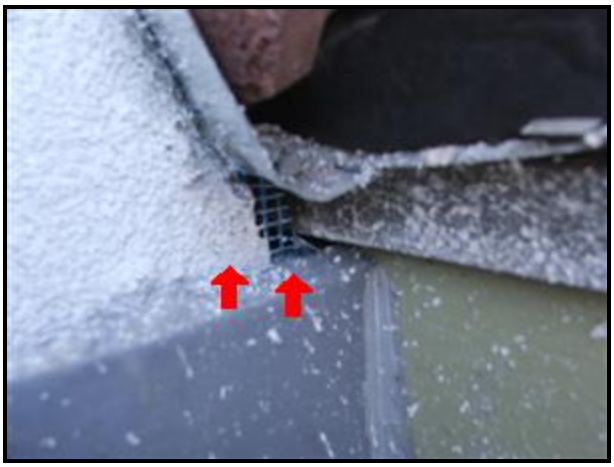
3.0 Most caulking has various areas on the building where it is worn, separating, the wrong type, split, etc (all of which can allow moisture intrusions). Have a competent stucco contractor caulk **AND** re-caulk any place below the soffit line where the stucco meets another building material, such as windows, doors, trim, siding, wood, mitre joints, masonry, flashing, etc.

3.4 Some breeches were well sealed, others were not. Plastic mesh was still showing through the walls at locations like by the A/C unit freon lines and under the kickout flashing by the garage. Caulk or re-caulk any place below the soffit line where stucco meets another material, such as around meter openings, electrical outlets, light fixtures, utility lines, cable TV openings, downspout fasteners and any other types of "breeches" to the stucco system.

See Examples .....

3.4 Picture 1 Breech Sealed

3.4 Picture 2 A/C Freon Lines

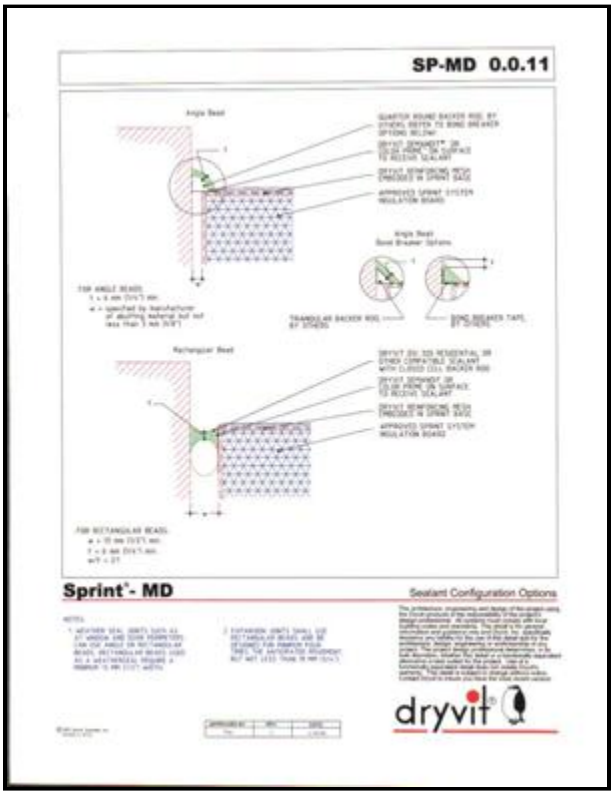


3.4 Picture 3 Under Kickout Flashing

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. The areas of trim that look like EIFS should have an elastomeric type caulk - it did not. Remove or cover this caulking as needed. Re-caulk as needed.

Caulking was failing or separating at several locations and we are told it was installed very recently.



3.5 Picture 1

4. FLASHINGS

		Y	N	PAR	IMP	NA	NP	NVI
4.0	**Is the Chimney Cap Installed on all Chimneys?**		X		X			
4.1	**Is a Cricket or Roof Diverter Installed on all Chimneys?**					X		
4.2	**Are Window and Window Trim, Head Flashings Present?**			X		X		
4.3	**Are Window Sill Pan Flashings Present?**		X					
4.4	**Are Door and Door Trim Head Flashings Present?**		X		X			
4.5	**Are Door Pan Flashings Present?**		X					
4.6	**Are Kickout Flashings Present?**			X	X			
4.7	**Are Diverter Flashings or Crickets Present at Trapped Valleys?**					X		
4.8	**Are Deck Flashings Present?**					X		
4.9	**Are all Trim Flashings Present ?**			X	X			

		Y	N	PAR	IMP	NA	NP	NVI

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4.0 Your chimney cap and/or flashing should cover the entire top of the chimney and any accent area's to protect the stucco from moisture intrusion. From the ground, yours did not appear to do this. Repair or modify as needed. All gaps should be sealed.

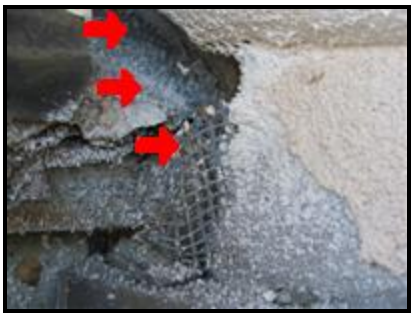
4.2 There were some windows and trim around windows with missing or improper flashings. Installation or service of these is suggested. Repairs could include; end dams created, sealing overlaps, caulking the bottoms, bent flashing straightened, etc.

4.4 There were some door and trim around doors with improper or not installed head flashings. Installation and/or service of these is suggested. This could include; end dams created, sealing overlaps, caulking the bottoms, bent flashing straightened, etc.

4.6 (1) In a house clad with stucco, there should be a "kickout flashing" installed at any area where a gutter meets a wall or at certain roof/wall junctions. At this home "kickout flashings" were not present at all recommended locations, some were not properly installed **OR** not properly sized according to industry design criteria at some areas. A competent stucco contractor can install proper "kickout flashings" for about $395-$450 each.

See Example .....

Missing or improperly installed "kickout flashings" have been a common moisture entry point on stucco homes. We recommend installing proper kickout flashings where applicable.Some kickout flashings are missing and should be installed at the needed locations, such as the secondary kickout location by the garage. The existing kickout flashings did not fully appear to be properly installed. In our opinion they should be modified. Correct installation and sealant help assure a watertight exterior.



4.6 Picture 1 No Kickout by Garage

4.6 Picture 2 Kickout - Front of House

(2) Example of a proper Kickout Flashing

4.6 Picture 3

4.9 There were some trim pieces 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.

5. WINDOWS AND DOORS

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

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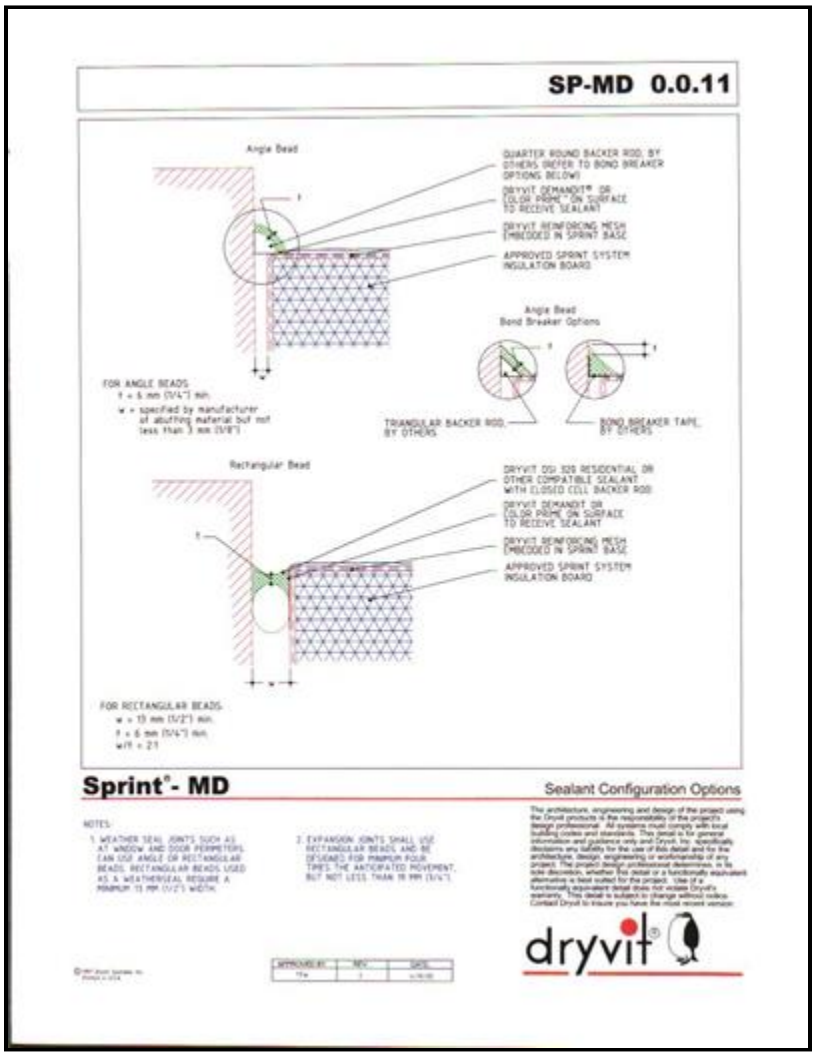
5.0 There was no visible caulk joint at some areas like windows, doors, etc. Typically on a house clad with stucco we should see a 3/8" gap around areas like the windows and doors - a "backer rod" is then placed in the gap and this area is properly sealed - this detail did not appear to be visible on this home. Repair or modifications needed.

See Graphic Example of a Caulk Joint.....



5.0 Picture 1

5.1 Read the comments on Window Details. The same comments apply to the doors.

Also note the sills at the two double doors on the front porch don't fully cover the wood jamb below them.

See Example .....

5.1 Picture 1 Door Jamb

6. GUTTERS / DOWNSPOUTS

		Y	N	PAR	IMP	NA	NP	NVI
6.0	**Are Gutter Guards Installed?**		X					
6.1	**Are the Gutters and Downspouts Attached and Routed Correctly?**			X	X			

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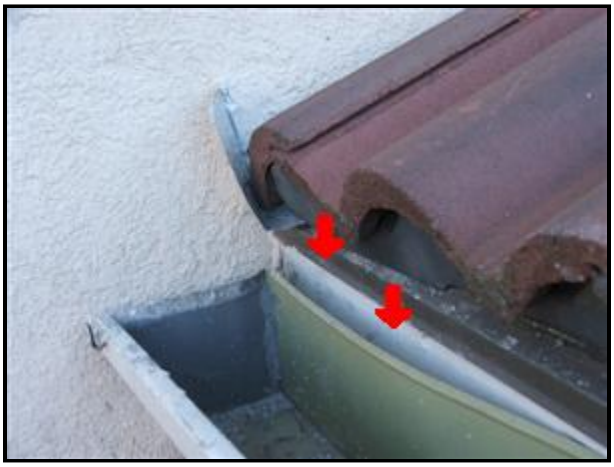
6.0 Gutter guards can be installed at the gutter system to keep them clear of debris.

6.1 Most gutters look functional. You were missing a downspout by the garage. The gutters were loose at the fascia over the garage area, and should be secured to the fascia tightly and not allow water between the gutter and fascia. Secure the gutters to stop this leakage. Repair and Re-seal gutters as needed.

See Example



6.1 Picture 1

7. MOISTURE

		Y	N	PAR	IMP	NA	NP	NVI
7.0	**Are There Signs of Moisture Penetration?**					X		
7.1	**Is any wood rot visible?**							X
7.2	**During the Probing was any Substrate Soft or Spongy?**					X		

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7.0 No probing was performed so moisture readings are not available. You have locations with conditions present to cause moisture problems in the future. Actions should be taken now to correct these conditions before damage occurs.

7.2 No probing was done. With out probing, we have no knowledge of the substrate. These area's may need to be explored further by a competent stucco contractor to determine if any damage is present. Without substrate knowledge, an accurate Moisture Content can not be determined

8. WOOD DESTROYING INSECTS AND ORGANISMS

		Y	N	PAR	IMP	NA	NP	NVI
8.0	**Is the Stucco in Contact with the Ground?**	X			X			
8.1	**Is the Foam Insulation and/or Stucco Below Soil Grade?**	X			X			
8.2	**Are Bushes or Shrubs in contact with the Stucco?**	X			X			
8.3	**Any Signs of Wood Destroying Organisms?**	X			X			
8.4	**Additional Comments**	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

8.0 Your stucco is in direct contact with the ground at some areas, such as at the side, etc. This area should be re-graded to prevent insect infestations and the possibility of moisture intrusion and a Termite Band installed to allow proper Wood Destroying Inset Inspections.

8.0 Picture 1

8.0 Picture 2

8.0 Picture 3

8.1 Your stucco is below the ground at some areas. This should be re-graded to prevent insect infestations and the possibility of moisture intrusion.

8.2 Bushes or other foliage rub the stucco walls at various locations around the homes exterior. This can give pests an easy bridge into the home and can also allow for moisture damage. Trim the bushes or other foliage back from the walls.

8.3 We do **NOT** inspect for wood destroying insects, **BUT** signs of termites were observed. Have a qualified and licensed pest management operator inspect the building and determine the need for treatment or service.

8.4 Pest Management @ 816-461-7378 inspects and Treats for pests. Ask for Roger.

9. STUCCO SURFACE

		Y	N	PAR	IMP	NA	NP	NVI
9.0	**Is the Caulking or Slope Satisfactory on all Flat Accents?**		X		X			
9.1	**Is There any Visible Stucco Damage?**	X			X			
9.2	**Is Any Foam and/or Reinforcing mesh visible?**			X	X			
9.3	**Is a Lawn Sprinkler System present?**	X						
9.4	**Are shutters present?**							X
9.5	**Are Surface Stains Present?**		X					
		Y	**N**	**PAR**	**IMP**	**NA**	**NP**	**NVI**

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9.0 (1) Not all of the flat accents were caulked, sealed, or sloped correctly. This can allow moisture to enter behind the stucco and cause moisture damage to the stucco and structure. Caulk, seal or slope all flat accents.

See Example .....

9.0 Picture 1

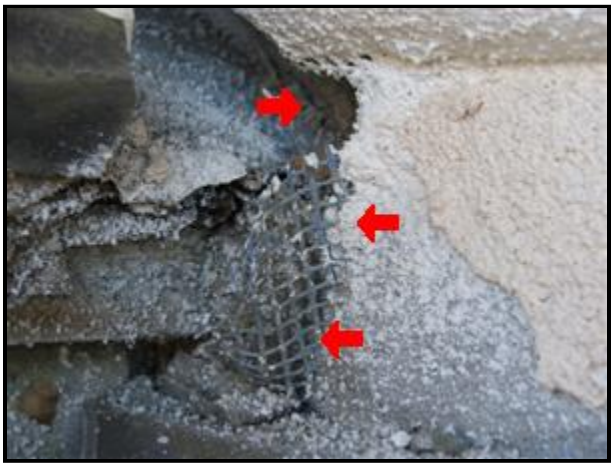
(2) Keep all caulk joints caulked to prevent moisture intrusion. Some locations are already separating.

9.0 Picture 2 Front of House Wall

9.1 There were areas where impact cracks or improperly sealed gaps/holes were noted. These can allow moisture intrusion and should be repaired.

9.2 When foam or reinforcing mesh are visible the stucco can get moisture penetration. These areas should be better sealed to protect the system from potential moisture intrusion.

See Example .....



9.2 Picture 1

9.2 Picture 2

9.3 The sprinkler heads should always be aligned to direct high pressure water away from the stucco and windows to prevent moisture intrusion or damage to the Stucco System.

10. MISCELLANEOUS

		Y	N	PAR	IMP	NA	NP	NVI
10.0	**Are There Other Areas of Concern**	X			X			
10.1	**Stucco Contractors**	X						
10.2	**Suggested Actions**	X						

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10.0 Prior repairs were noted. We recommend further monitoring for leakage and/or movement of the stucco.
In our opinion there is a high possibility of improper lath and moisture barrier installation at varied locations all sides. Repairs and/or removal and replacement could be needed. We recommend having a competent stucco contractor address this for you. Spot removal of stucco at several areas will be needed to determine the full extent of the improper installation.

Neither the inspection report by PREVIOUS Inspection Company nor the repair contractors letter that we saw, indicated a full moisture probing of the house was done **OR** what the varied moisture readings were if done.

10.1 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 Conventional Hardcoat Stucco Systems.

You may also find other contractors by calling stucco distributors, the homebuilder associations or in the yellow pages.

Stucco Contractors - Ray Weidman (316) 734-0015 - Ralph Heying (816) 590-0617 - Todd Jones (816) 835-5320 - Chuck Kincaid (816) 510-6375

10.2 A full moisture analysis is recommended to determine if moisture has penetrated the stucco cladding. Contact at least 2-3 stucco contractors to obtain repair bids.

Contact at least 2-3 Pest/Termite control contractors to obtain repair bids.

11(A). Front

		Y	N	PAR	IMP	NA	NP	NVI
11.0.A	**Example Photos and Moisture Readings (if probing was done)**	X			X			

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

11.0.A (1) Front Elevation

11.0.A Picture 1

11.0.A Picture 2

(2) Evidence of termites

11.0.A Picture 3

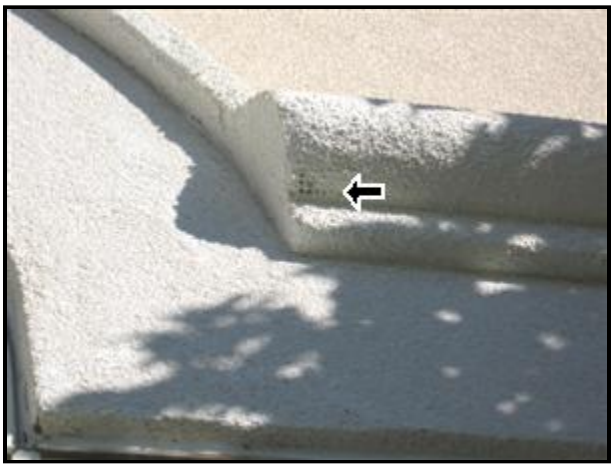
(3) Gaps at window high potential for moisture intrusion thru window (typical detail on this house). Caulking needed.

11.0.A Picture 4

(4) Gaps in window flashing. Proper flashing is needed.

11.0.A Picture 5

(5) The reinforcing mesh shows through the stucco. This often means the base coat is too thin.



11.0.A Picture 6

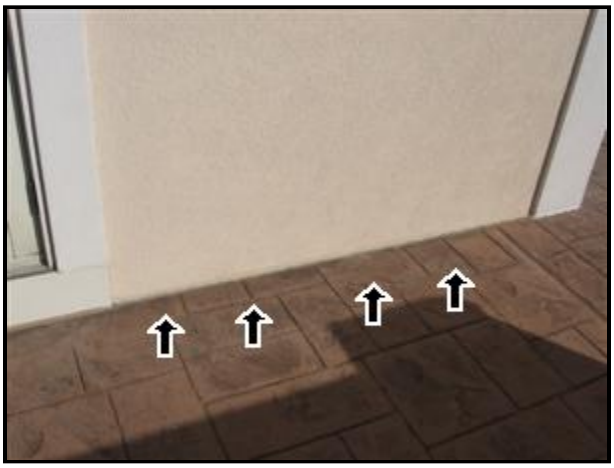
(6) The stucco is too close to the soil (typical detail at the rear and sides).

11.0.A Picture 7

(7) The caulking is improperly installed and the wrong type. Also, it appears to be separating or failing.

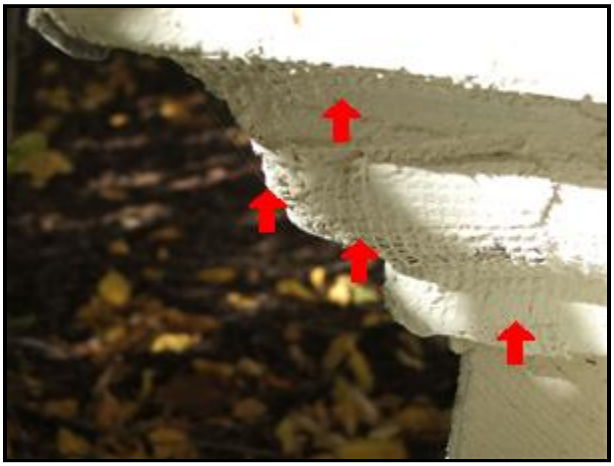
11.0.A Picture 8

(8) The stucco is touching or close to the stoop. Common but improper detail.



11.0.A Picture 9

(9) The reinforcing mesh shows through the stucco to the left of the front porch. This often means the base coat is too thin.



11.0.A Picture 10

(10) Example of flat accents - manufactures recommend they be sloped or flashed to help prevent water ponding there and causing damage.

11.0.A Picture 11

11(B). Right side

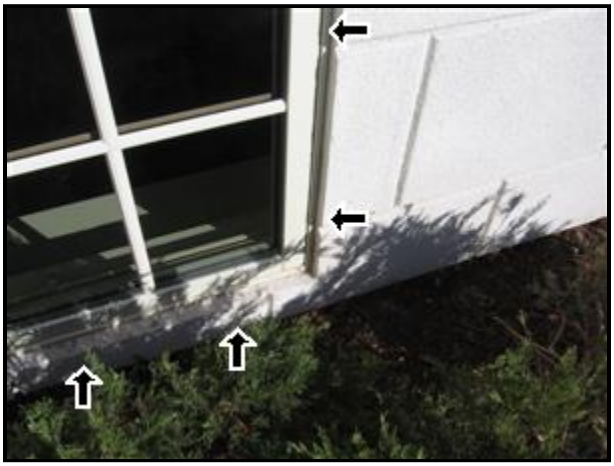
		Y	N	PAR	IMP	NA	NP	NVI
11.0.B	**Example Photos and Moisture Readings (if probing was done)**	X			X			

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

11.0.B (1) Side Elevation.

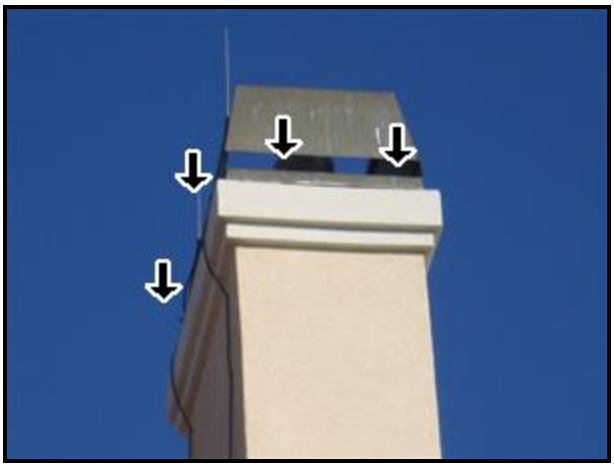
11.0.B Picture 1

(2) A proper type of caulking joint is missing.

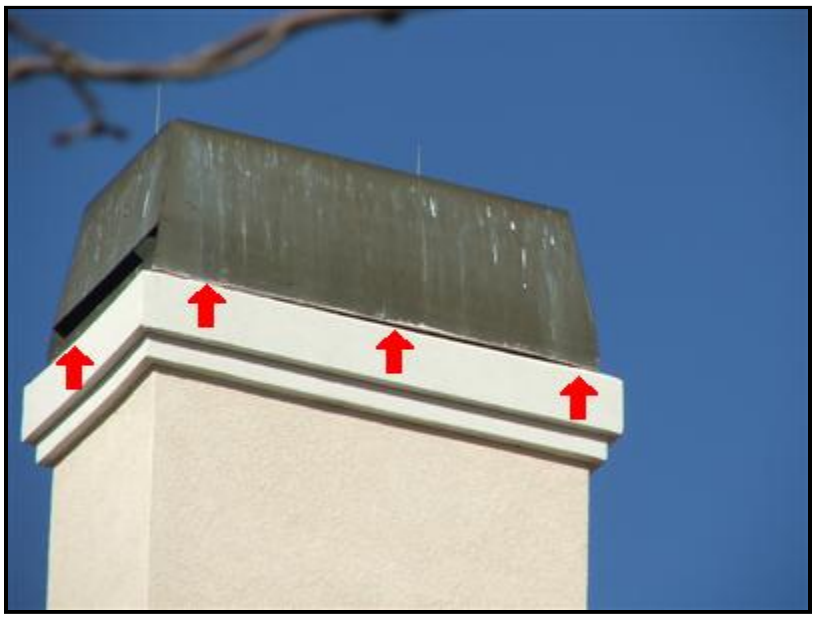


11.0.B Picture 2

(3) A proper chimney cap fully covering the tops of the chimneys was not visible if present.



11.0.B Picture 3



11.0.B Picture 4

11.0.B Picture 5

11(C). Rear

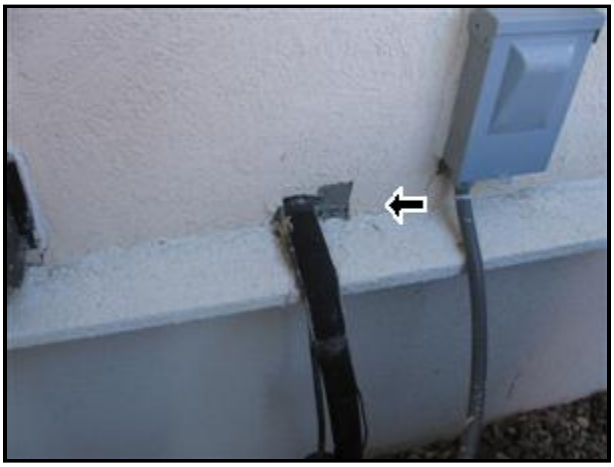
		Y	N	PAR	IMP	NA	NP	NVI
11.0.C	**Example Photos and Moisture Readings (if probing was done)**	X			X			

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

11.0.C (1) Rear Elevation

11.0.C Picture 1

(2) In our opinion, it appears that partial replacement of the stucco system was performed. The re-installed stucco appears to be a drainage system, but with improper drainage paths.



11.0.C Picture 2

(3) The kickout flashing is improperly installed (typical on this house).

11.0.C Picture 3

11(D). Left side

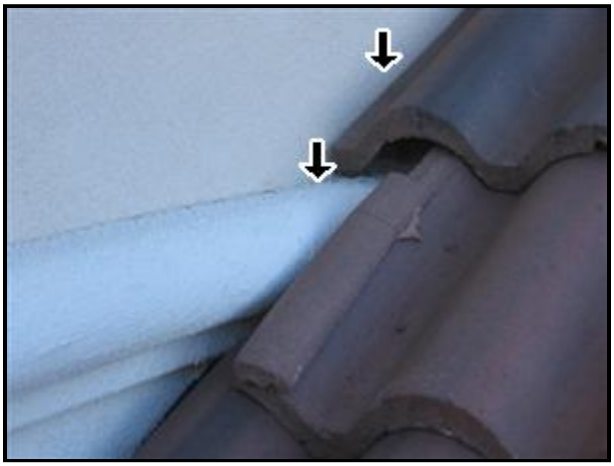
		Y	N	PAR	IMP	NA	NP	NVI
11.0.D	**Example Photos and Moisture Readings (if probing was done)**	X			X			

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

11.0.D (1) Garage Side.

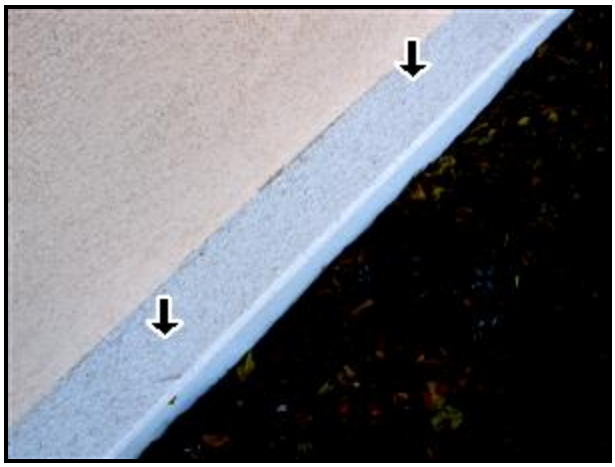
11.0.D Picture 1

(2) The stucco is too close to the roof. Proper flashing is recommended.



11.0.D Picture 2

(3) The mesh is showing through. The flat area is improperly installed (not sloped and sealed correctly). Typical detail on this house.



11.0.D Picture 3

11.0.D Picture 4

Dan Bowers Company

Dan Bowers, CMI, CRI, EDI

(913) 649-8878