Updated Report For 2011

Buyers Protection Group

EIFS Cladding Evaluation

Property Address:

Illinois, Wisconsin, Iowa,
Michigan, Indiana

Client:

Sam A. Sample

Chuck Johnson Inspector Direct # 815-751-3828 Toll Free 800-285-3001
www.bpgwi.com or cjohnson@bpgwi.com

I. INTRODUCTION

1.1 PURPOSE: Enclosed is your EIFS Moisture Inspection. The purpose of this moisture inspection is to help assess the condition of the EIFS system by looking for visible installation flaws, inadequate water diversion and sealant failures and conduct moisture testing using electronic moisture testing devices. Please note that the provision of a scope of work for remedial repairs is **not** 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 EIFS System inspection limited to the following:

- A visual examination of the condition of the EIFS, exterior sealants, flashing, windows, doors, roof-to-stucco transitions, parapets, gutters, deck-to-building connections, EIFS terminations and any penetrations through the EIFS.
- Conducting electronic moisture scanning and probing of the building envelope.
- Preparing a report of our observations of potential problem areas and recording any high readings taken.

1.3 LIMITATIONS OF LIABILITY: Because this is a limited inspection, we can make no guarantee, express or implied, that our observations and moisture testing 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 Buyers Protection Group 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 the home has been damaged in areas of high readings without 'probing' and/or removing a core sample of the EIFS 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 six months after completion of any repairs to assess the effectiveness of the modifications. This is extremely important. Annual inspections should also be scheduled to ensure that your EIFS system remains dry. This way any sealant failures, stucco cracks, etc. can be caught and repaired promptly. Testing and maintaining the 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.

Project Information

PROPERTY / OWNER INFORMATION		BUYER INFORMATION	
Owners	Sam A. Sample	**Buyers**	n/a
Property Address	Any town USA	**Buyers Address**	
City, State, ZIP		**City, State, ZIP**	
Phone		**Phone**	
Owners Realtor	n/a	**Buyers Realtor**	n/a
Realty Company		**Realty Company**	
Phone		**Phone**	
PROPERTY INFORMATION		**INSPECTION INFORMATION**	
Type of Exterior	EIFS (Synthetic Stucco)	**Date of Inspection**	2011 Report Form
Manufacturer	Dryvit	**Inspection Company**	**Buyers Protection Group**
Substrate (if known)	OSB (Oriented Strand Board)	**Inspector**	**Chuck Johnson**
Age of Property	~15 Years	**Present at Inspection**	Owners
Square Footage	3,000	**Temperature / Humidity**	65 Degrees
Stories	2	**Weather Conditions**	Sunny
Type(s) of Windows	Aluminum Clad Casement & Fixed Pane	**Last Rain**	Within the last two weeks

Inspection Test Equipment					
Test Equipment Description		Test Range			Setting
		Low	Medium	High	
A	**Tramex Exterior Wet Wall Detector**	**10 - 20**	**21-50**	**51-100**	**6**
B	**Delmhorst Moisture Probe Meter**	**10-15**	**16-25**	**26-40**	**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.

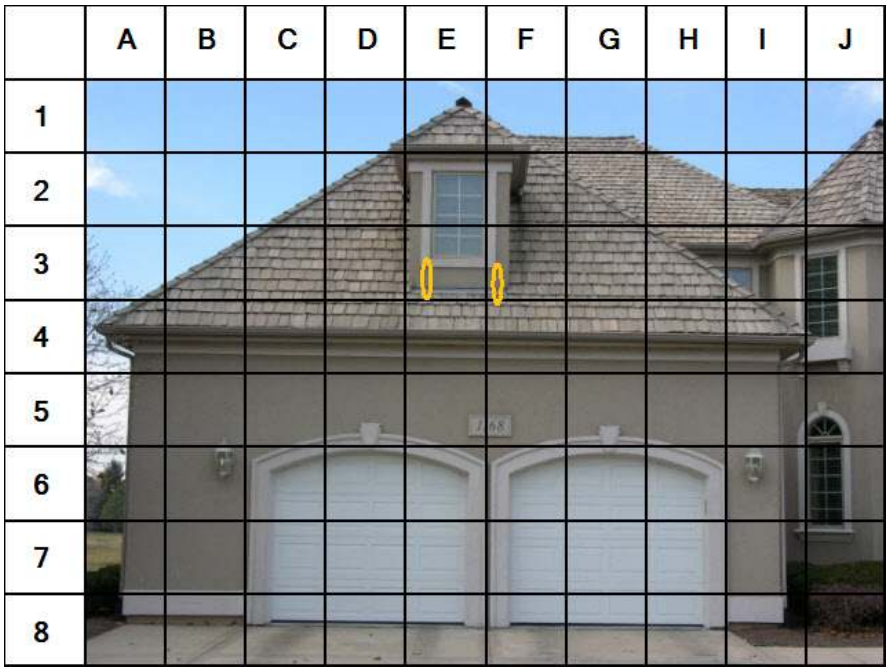
General Observations Checklist

Inspected Item Description	Adequate	Not Adequate	See Remarks	Observations / Comments
Sealants at window perimeters		X		Remove and replace all perimeter sealants.
Window construction joints miter / mullion joints		X		Open window construction can leak into the wall assembly. Suggest sealing all exposed window construction.
Window sill flashings / drainage			X	This is a barrier cladding system. No evidence of window sill flashing or drainage.
Head flashing or sealant at top of windows		X		Remove and replace sealants.
Sealants at door perimeters		X		Remove and replace all door perimeter sealants.
Door sill flashing or sealants at door thresholds		X		Thresholds not sealed. No visible evidence of sill flashing under doors. Further evaluation needed by contractor.
Head flashing or sealant at top of doors		X		Replace sealants. Install proper head flashing at exposed door openings.
Attachments or penetrations through eifs sealed		X		Seal or reseal all.
Expansion / Control Joints		X		Remove and replace all floor line expansion joint sealants.
Kickout flashings		X		With the exception of the replaced kickout on the front of the home. All other kickout flashings do not meet manufacturer standards. We recommend new kickout flashings be installed at all locations to meet manufacturer specifications.
Roof / soffit / fascia terminations		X		Remove and replace all soffit and fascia sealants.

General Observations Checklist

Inspected Item Description	Yes	No	See Remarks	Observations / Comments
Cracking evident	X			Repair minor cracking.
Impact damage	X			Repair minor impact damage.
Exposed mesh		X		
Rusting aggregates		X		
Flat horizontal surfaces	X			Modify or waterproof flat surfaces window than 1"
Delamination / Fasteners		X		
Proper terminations at roof shingles	X			Ok
Proper transition joints (eifs to brick, wood etc.)			X	n/a
Termination below grade (ground level)		X		Ok
Termination below or at slab levels	X			Correct termination to meet manufacture specifications.
Deck Flashing Installed		X		No evidence of flashing at the deck attachment. Correct as necessary to meet manufacture specifications. No access for moisture testing under the deck.
Balcony Flashing Installed		X		No evidence of flashing under the rear balcony. Correct as necessary to meet manufacture specifications.
Flashing at columns (top or bottom)			X	n/a
Yard Sprinkler System	X			Be sure sprinklers do not contact the siding or windows.
Gutters / Downspout fasteners Sealed		X		Seal all downspout fasteners.
Chimney Cap(s) Sealed		X		Contractor please check chimney caps for leaks. Seal fasteners and seams as necessary.

Elevation Details / Moisture Readings



Seal flat junctions.

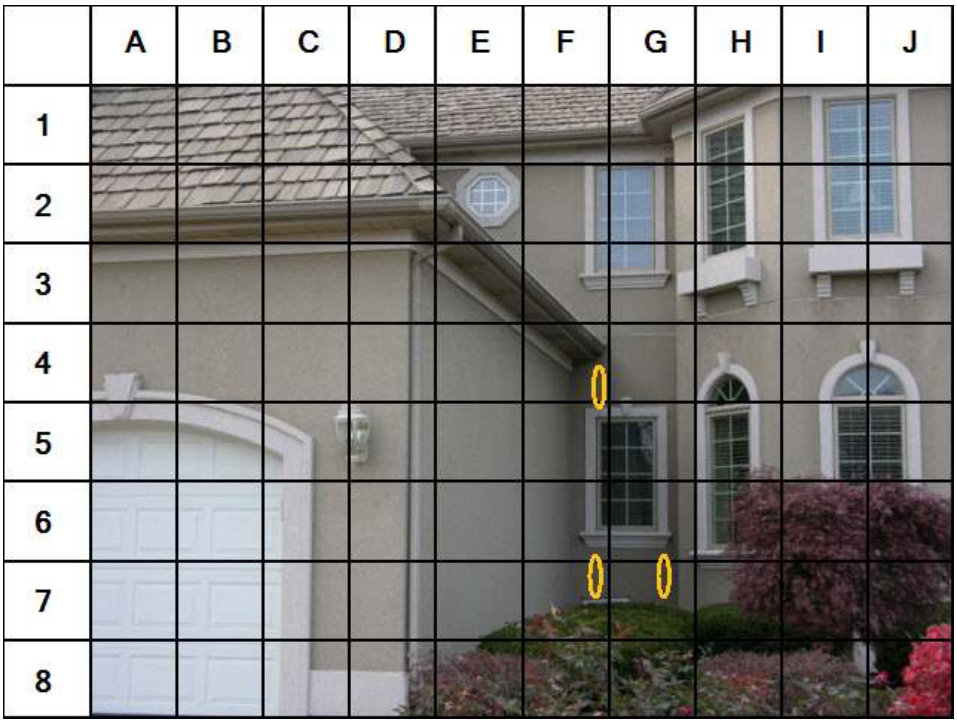
Remove and replace attachments or fixture sealants.

Remove and replace door perimeter sealants.

Cut up and repair door trim terminations.

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
E3	Windows	7.5	Firm		
F3	Windows	7.9	Firm		

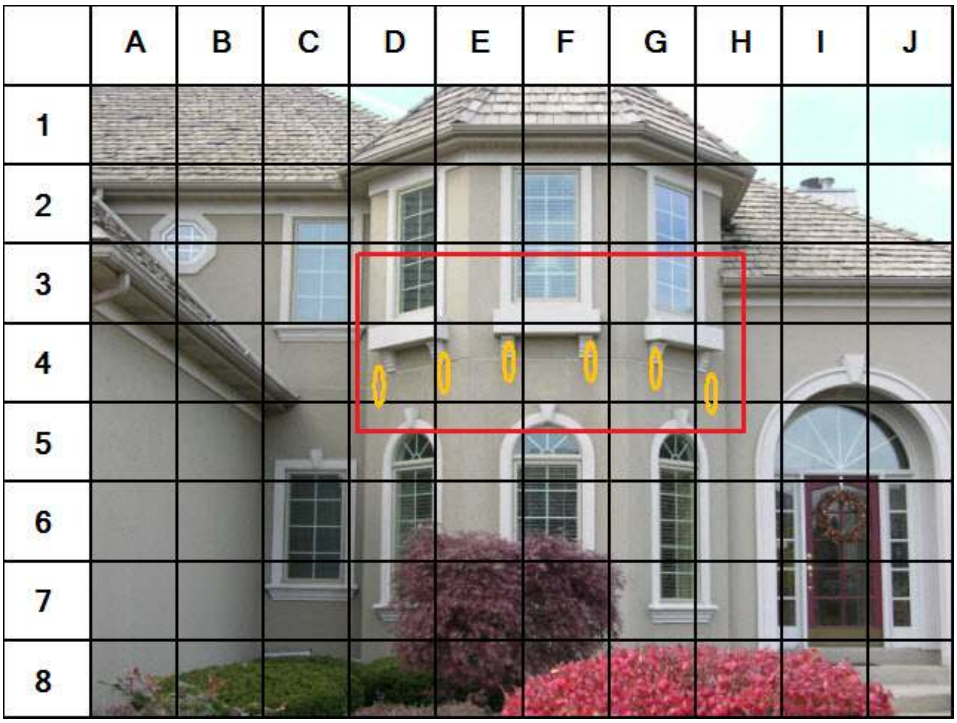
Elevation Details / Moisture Readings




Improved kickout flashing is functional.

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
F4	kickout	7.0	Firm		
F7	Window	7.2	Firm		
G7	Window	8.0	Firm		

Elevation Details / Moisture Readings



Planter boxes are improperly installed and need to be removed or corrected.

Expansion joint sealants need to be removed and replaced.

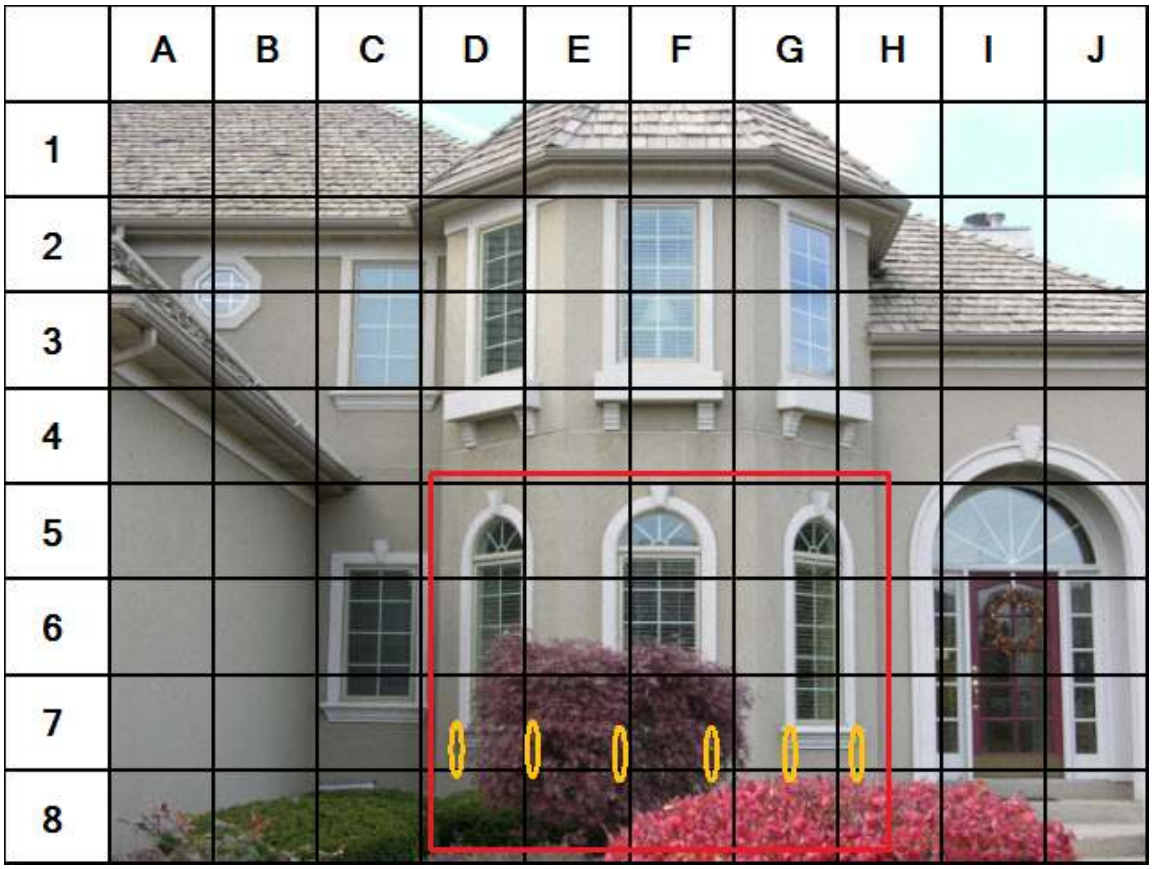
Remove and replace window perimeter sealants.

Suggest sealing all window construction joints.

Failing expansion joint sealants under planter boxes.

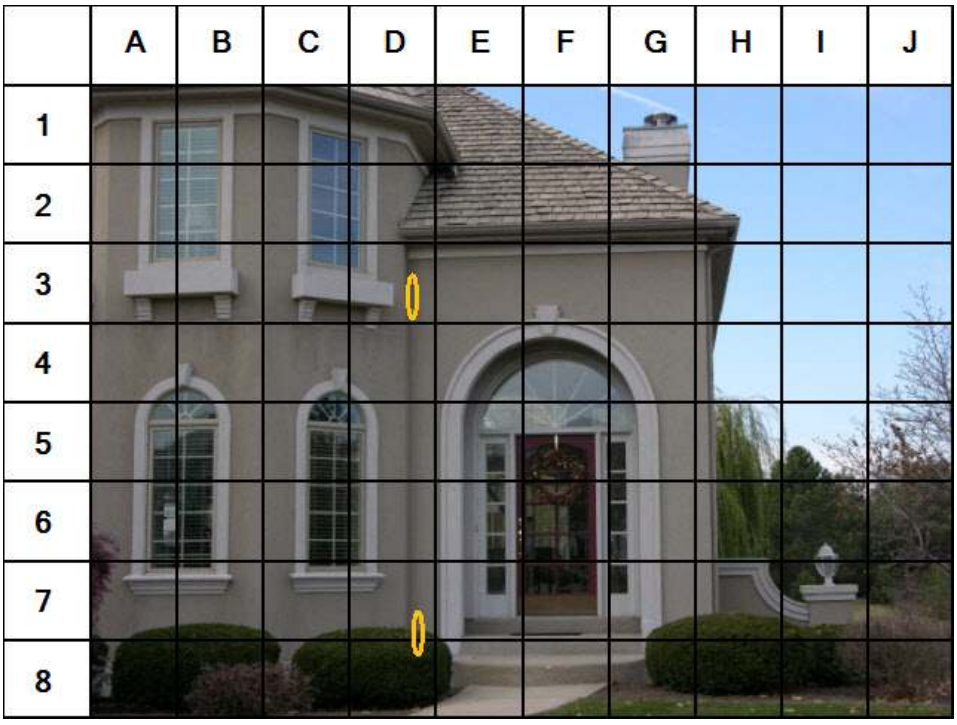
Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
C4	Window	8.5	Firm		
E4L	Window	9.0	Soft	Moisture damaged substrate expected in this area.	Red box
E4R	Window	9.1	Soft		
F4	Window	8.9	Firm		
G4	Window	7.9	Soft		
H4	Window	10	Firm		

Elevation Details / Moisture Readings



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
D7	Window	13	Med	Substrate has been softened due to moisture entry from above. The repair contractor will need to verify all of the substrate in this area.	Red box
E7L	Window	17	Med		
E7R	Window	9.1	Med		
F7	Window	12	Med		
G7	Window	11.4	Med		
I7	Window	9.5	Med		

Elevation Details / Moisture Readings

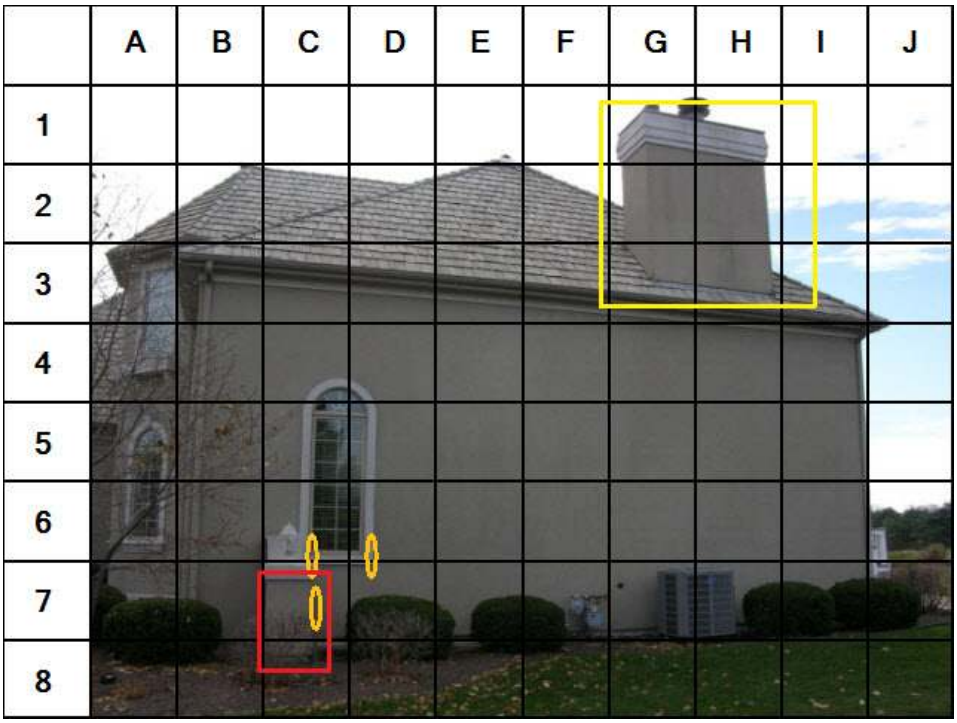


Remove and replace all soffit and fascia sealants.

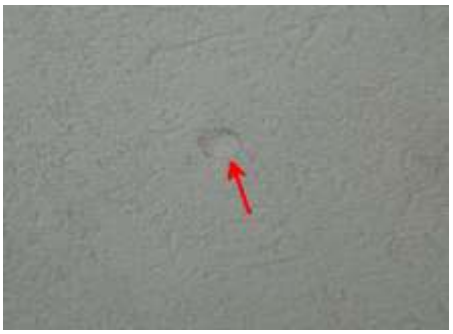
Professionally repair all cracking and replace sealants at front stoop.

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
D3	Kickout	9.1	Firm		
D7	Kickout	7.0	Firm		

Elevation Details / Moisture Readings



Check cap for leaks real fasteners and gaps as necessary.



Repair all impact damage.

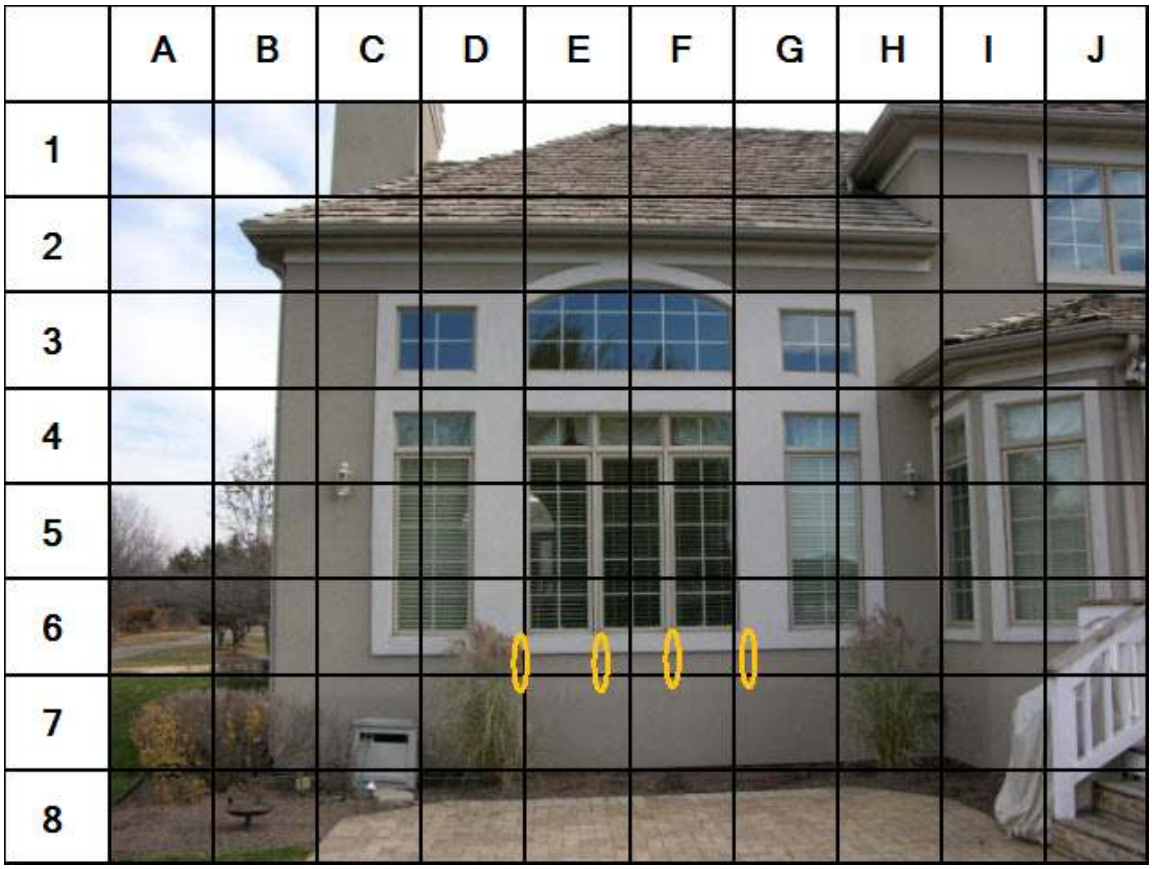
Waterproof flat surfaces.

Remove and replace sealants at all siding penetrations.

Remove and replace sealants at all utilities.

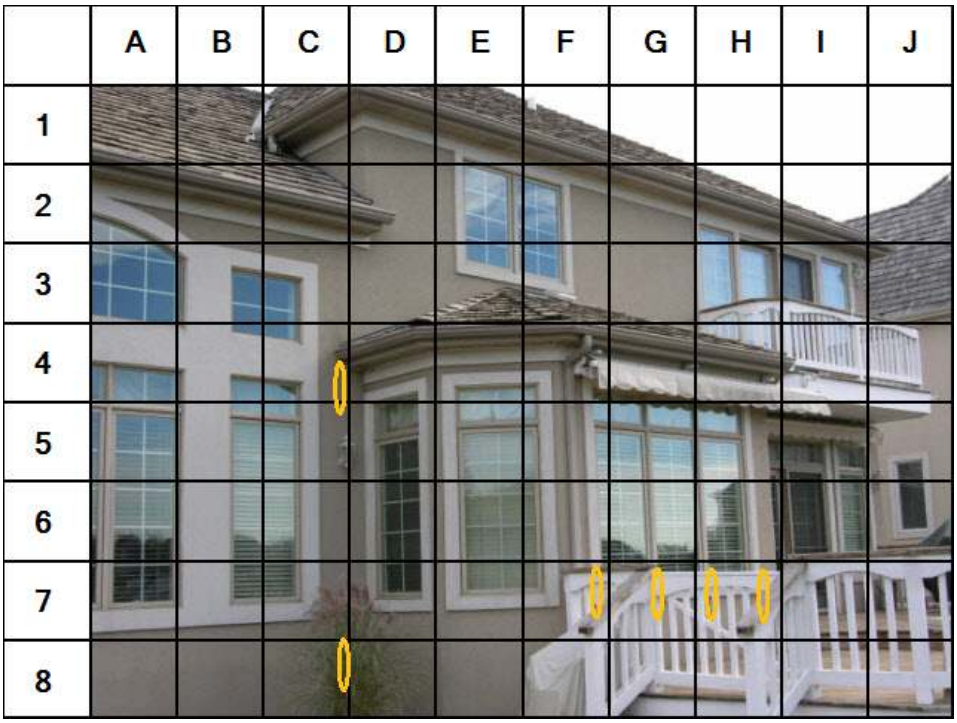
Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
C6	Window	10	Firm		
D6	Window	16	Firm		
C7	Decretive column	40	Soft	Moisture damaged column will need to be repaired.	Red box
Yellow Box	Chimney			No good access to the chimney for moisture testing. Contactor please evaluate further and correct as necessary.	

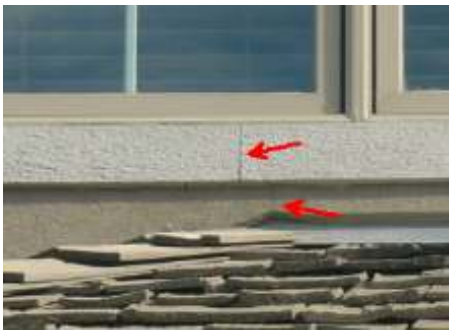
Elevation Details / Moisture Readings



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
D6	Window	8.8	Firm		
E6	Window	16	Firm		
F6	Window	9.0	Firm		
G6	Window	18	Firm		

Elevation Details / Moisture Readings





Repair cracking under rear window.

Install new flashing to meet manufacturer specifications.

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
C4	Kickout	8.1	Firm		
C8	Kickout	7.0	Firm		
F7	Window	7.9	Firm		
G7	Window	8.0	Firm		
H7L	Window	9.1	Firm		
H7R	Window	10	Firm		

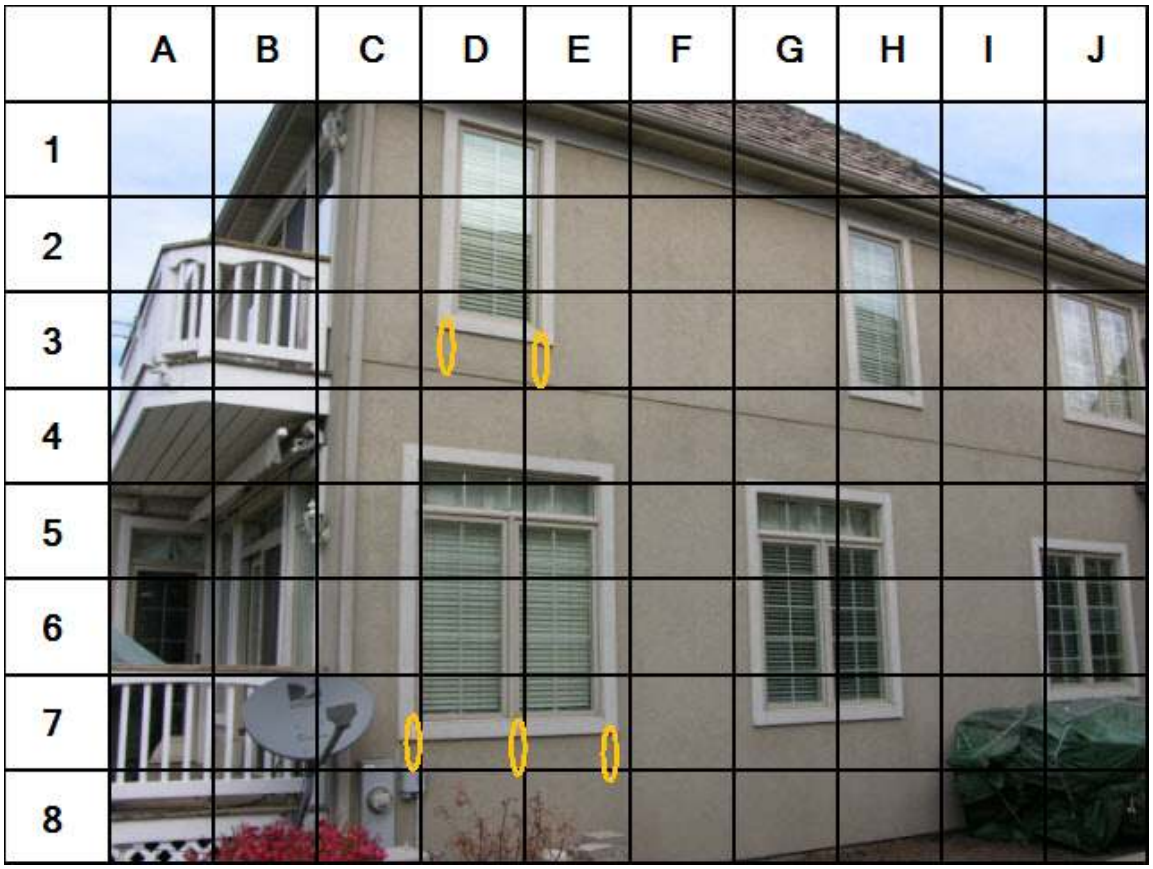
Elevation Details / Moisture Readings

Crack in balcony sealants. No evidence of wall flashing.

Deck is attached to the eifs. No evidence of flashing.

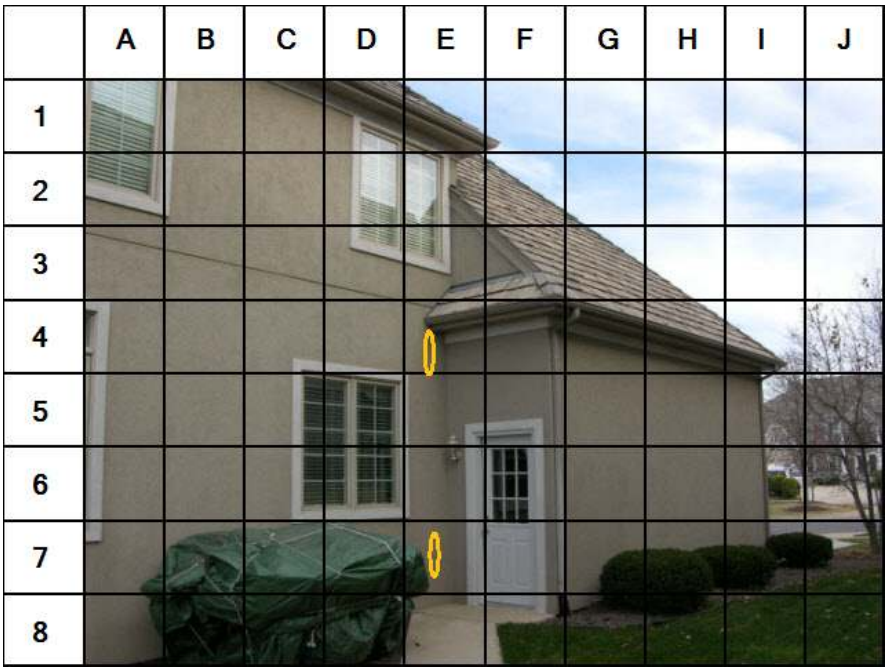
Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
C4	Kickout / Balcony	9.2	Firm		
H4	Balcony	8.4	Firm		
E5	Balcony	25	Soft	Further evaluation needed by the contractor under balcony.	
G5	Balcony	18	Firm		
C7	Window	14	Firm		
D7	Window	40	Soft		
G7	Window	18	Soft		
H7	Window	16	Soft		

Elevation Details / Moisture Readings



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
D3	Window	5.9	Firm		
E3	Window	6.8	Firm		
C7	Window	14.4	Firm		
D7	Window	8.0	Firm		
E7	Window	15	Firm		

Elevation Details / Moisture Readings




Missing flashing. Install proper kickout flashing.


Repair cracking and correct termination at rear garage door.


Seal all downspout fasteners.

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations/Comments	
E4	Kickout	10	Firm		
E7	Kickout	7.2	Firm		

Moisture Readings & General Condition Summary

Moisture readings
Moisture readings < 20% are generally considered to be at ambient levels and are not likely to be of long term concern provided the area remains free from moisture penetration. Moisture reading between 20% and 30% are considered elevated and an investigation should be conducted to determine the source of moisture intrusion. Once the source has been properly remediated a follow up inspection should be conducted 6 months from the time of repair to be certain the repair is functioning.

Moisture readings > 30% may require further investigation by the contractor if the source is not apparent. Further investigation may include core sampling or additional probing to make an overall determination of the affected area(s).

Areas indicated in this report to have soft or rotted substrate need to be opened up and visually inspected by the repair contractor to determine the extent of underlying damage to the substrate and or framing materials. Core samples should be taken of the suspected areas before removing a large wall section. Once the damage areas are repaired, the siding materials can be replaced and properly finished.

Standard caulking procedure for EIFS homes
Caulk or re-caulk any place below the soffit line where stucco meets another material. This may include utility penetrations, light fixtures, vents, downspout fasteners or other types of breaches to the stucco system.

Caulk or re-caulk all doors and windows. For single or double hung windows, seal the tracks on all vertical joints from the head of the window to the sill and along the bottom joint of the track to the sill and at least 6” up the vertical joints behind the track. For casement windows, caulk or re-caulk all exposed joints, including the miter joints of the window. (SEE THE CHECK LIST FOR ITEMS THAT REQUIRE NEW SEALANT APPLICATION)

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.

Elevated moisture
There are areas indicated in this report that are showing signs of elevated moisture. These areas should be modified according to current industry repair standards and options.

Soft substrate
You have an area or areas where the substrate appeared to be soft when probed. These areas will need to be explored further to determine the extent of damage present. Further investigation may include core sampling or additional probing to make an overall determination of the affected area.

A note about windows
Windows are typically not installed in a properly prepared (waterproofed) opening. It is difficult to keep window construction joints sealed well enough over the long term to prevent future moisture intrusion and damage. Based on the contractors findings when making repairs window sill flashing will likely need to be installed with a drainage plane under all windows. This correction should effectively drain moisture getting through the window joints to the outside of the home.

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 or framing 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 or framing wood.

This report only reports on the condition of the structure at the specific locations indicated. Locations were determined by the inspector according to probable areas of possible moisture intrusion and in accordance with accepted industry standards.

In summary, we found this siding installation and materials to be in need of professional repairs as outlined in this report. These repairs are essential to correcting the current deficiencies and reducing future moisture penetration. We want to emphasize that the EIFS system installed on this home is a barrier system and relies on the cladding system remaining water tight to avoid damage to the substrate. This means that the sealants around all fixtures, penetrations, windows, and doors must remain leak tight. It is recommended that the homeowner have the siding checked annually, by a professional, to help in maintaining the moisture barrier as tight as possible and in reducing long-term damage.

We trust that this report adequately addresses these areas of concern. If you have any questions about any aspect of this report, please call me.

Sincerely,

Charles D. Johnson

Buyers Protection Group
Direct: 815-751-3828
cjohnson@bpgwi.com
IL Licensed Home Inspector: # 450.000268
EDI Certified Moisture Inspector :# IL - 60