



Inspector: Jon Walz TN - 1126 P.O. Box 14205 Knoxville, TN 37914 Tel: 865-804-2422

2/27/2019

# **Table of Contents**

Cover Page	<u>1</u>
Table of Contents	
Intro Page	3
1 WINDOW DATA	4
2 SUMMARY	4
3(A) FRONT ELEVATION	9
3(B) FRONT ELEVATION	9
4 RIGHT ELEVATION	16
5(A) REAR ELEVATION	18
5(B) REAR ELEVATION	18
5(C) REAR ELEVATION	18
6(A) LEFT ELEVATION	26
6(B) LEFT ELEVATION	26

Date: 2/27/2019 Page 2 of 30

Date: 2/27/2019	Time: 08:00:0	00 AM Report	ID: 022719JW624
Property:	Customer:		
Owner I	nformation	Buyer Inform	ation
Owners		Client	
Property Address		Client Address	
City, State, Zip		City, State, Zip	
Phone	N/A	Phone	N/A
Fax	N/A	Fax	N/A
Sellers Realtor	N/A	Buyers Realtor	N/A
Realty Company	N/A	Realty Company	N/A
Phone	N/A	Phone	N/A
Fax	N/A	Fax	N/A
Property	Information	Inspection Info	rmation
Exterior Cladding	Hardcoat W/ EIFS Trim	Date of Inspection	2/27/19
System Manufacturer	Undetermined	Inspector	Jon Walz
Mesh Color	Galvanized Lath	Present at Inspection	Jon Walz
Underlying Substrate	Plywood or OSB	Temperature/Humidity	55 F, 55%
Age of Property	18 Years	Weather	Clear
Square Footage	2,392	Last Rain	2/23/19

Date: 2/27/2019 Page 3 of 30

# 1. WINDOW DATA

Items

#### 1.0 EIFS INSPECTION SUMMARY

Window Data				
Type of Windows	Quantity	Comments		
Single / Double Hung Vinyl Frame	35			
Service Doors	2			
Overhead Doors	1			
Total Number of Window and Door Units	38			

# 2. SUMMARY

Items

#### 2.0 EIFS INSPECTION SUMMARY

Su	mma	ry Ch	eck	List
Caulking	Good	Not Adequate	N/A	Comments
Caulking Around Window Frame		X		Caulk failing at most windows.
Caulking At Window Joints/ Miters	x			Verify Integrity of factory seal at inside miter joints. These tend to break down with age.
Caulking Around Door Frame		X		Caulk failing at some doors.
Caulking At Door Joints/Miters	x			Verify Integrity of factory seal at inside miter joints. These tend to break down with age.
Caulking Around Other Breaches		x		Caulk failing at various areas.
Flat Accents Caulked or Angled		х		Two accents that project more than 1 and 1/2 inch are flat.
Soffit, Frieze, And Fascia Boards Caulked		х		Caulk failing at various areas.
Flashings / Diverters	Good	Not Adequate	N/A	Comments
Kickout Flashings / Roof / Wall		х		Kickout missing at one area.  Detailed in report.
Deck Flashings		1	X	

Date: 2/27/2019 Page 4 of 30

Other Attachment Flashings	X			
Porches / Stoop Flashing		x		Caulk failing at porch joint with dissimilar materials.
Chimney Cap		x		Chimney cap bent. Damage to stucco possible.
Chimney Cricket			X	
Window Head Flashing		x		Window head flashing not installed at sunroom windows and at one left side window.  Detailed in report.
Door Head Flashing		x		Door head flashing not installed at rear sunroom door.
Column Flashing			X	
Terminations	Good	Not Adequate	N/A	Comments
Stucco Is Terminated Above Grade		х		Stucco appears to terminate at or below grade and needs to be modified to protect against insect infestations.
Stucco Is Sealed At Bottom		х		No visible J-Channel or drip screed at bottom edge.
Stucco Is Terminated At Porches			X	Unable to determine
Miscellaneous	Yes	No	N/A	Comments
Evidence Of Sprinkler Overspray		х		
Gutters Clean & Functioning		х		Some gutters appear clogged. Spot checked only.
Downspout Fasteners Sealed	X			
Cracks Or Impact Damage	X	37		Cracks and damage at various areas.
Delaminating At Foam / Substrate		х		
Exterior Evidence Of Pest Infestation		х		
Adequate Slope Of Grade Away			X	Not inspected.
Crawlspace Inspection Made	x			Moisture stains on floor joists, rim joist, and subfloor at chimney.
Property Located Near Body Of Water If Yes, Describe		x		

(2)

Date: 2/27/2019 Page 5 of 30

# STUCCO INSPECTION SUMMARY

Please be advised this summary is provided as a courtesy and is not intended to be a substitute for thoroughly reading the entire report. BEST CHOICE INSPECTIONS, INC. ASSUMES NO LIABILITY FOR FAILURE TO READ THE ENTIRE REPORT. BE ADVISED OUR SOLE RESPONSIBILITY IS TO IDENTIFY DEFICIENCIES. THIS IS NOT A BID DOCUMENT, IT IS A GENERAL OVERVIEW OF THE CONDITION OF THE SYSTEM. WE ARE NOT RESPONSIBLE FOR PROPER REPAIR OF THE SYSTEM. WE DO NOT ACT AS PROJECT MANAGERS, ARCHITECTS, ENGINEERS, CONSTRUCTION MANAGERS OR CONTRACTORS. IT IS THE RESPONSIBILITY OF THE BUYER/SELLER/HOMEOWNER TO HIRE LICENSED CONTRACTORS AND OTHER PROFESSIONALS NECESSARY TO PERFORM THE WORK IN ACCORDANCE WITH INDUSTRY STANDARDS.

This report consist of a project information section, a general observation section, photo pages and summary. The photo pages contain the bulk of the report information and are presented as follows: A full elevation page first, followed by grided sectional views of the elevation. The moisture probe readings are represented by the blue and red dots and the grid coordinates for the probe locations are listed in the table on the grid pages.

The detail photos following the grid pages are specific to that grided sectional view. The grid coordinates are given for each detail photo.

The saturation point of wood fibers is approximately 30% moisture content. Generally wood rot and decay can begin at approximately 25% moisture content. The following range should be used as a general guide in determining further course of action: 10 - 12% = low, 13 - 19% = medium, 20 - 35% high.

This residence is a two story asphalt composition shingle roofed home with a 1/2" to 3/4" Hardcoat Stucco System on all sides. The composition of the system was observed by removing a crawl space vent cover. The system consist of 1/2" OSB or plywood substrate, building felt, galvanized wire lath, 1/2" to 3/4" hardcoat stucco and a finish coat.

Historically problematic areas were probed and the readings are recorded on the grid elevation pages of this report.

It should be noted that most of the moisture problems associated with Stucco and EIFS cladding are directly related to improper installation details of the product. Manufacturer's details and specifications may vary slightly however, the basic details are similar. In the past few years, organizations such as the Northwest Wall and Ceiling Bureau, the Stucco Manufacturer's Association (SMA), the Portland Cement Association (PCA), the EIFS Industry Members Association (EIMA), the EIFS Alliance, the Exterior Design Institute (EDI), the EIFS Review Committee (ERC) and others have spent a great deal of time and money developing standards for new construction and remediation of existing systems.

The following list of items are suggestions of Best Choice Inspections, Inc.

Caulk breaches:

Date: 2/27/2019 Page 6 of 30

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

#### Caulk windows/doors:

Touch up or re caulk doors and windows as indicated in the report. 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.

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. Recommended sealants include Sonneborn NP-1, Dow-Corning 700 series and Pecora 890 series.

#### Elevated moisture:

You have areas below windows and kickout flashing that are showing signs of elevated moisture. These areas should be evaluated by a qualified Stucco repair contractor.

#### Soft substrate:

You have an area or areas where the substrate appeared to be soft when probed. Soft substrate may indicate the presence of wood destroying insects. These areas should be be evaluated by a qualified EIFS repair contractor. Probing is intended to indicate there may be damage present in a general area. Once the system is removed damage may be much more widespread.

#### Kickouts:

Kickouts appear to be missing at some locations.

#### Damage/cracks:

There are areas indicated in the report where some cracking is present. There was no wide spread cracking present at this time.

#### Cracks and openings:

There are areas indicated in the report that have gaps, cracks and exposed mesh. These areas should be repaired to prevent moisture intrusion.

#### Floor line expansion/control joints:

Floor line control/expansion joints not visible. There were no visible control joints at the corners of windows and doors.

Date: 2/27/2019 Page 7 of 30

#### Head and sill flashing:

There was no visible head or sill flashing at some windows and doors. Detailed in report

#### Bottom of system:

There was no visible drip screed at the base of the stucco system.

# Conclusion

Please note that the moisture readings included in this report are the raw data recorded by the Tramex 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 wood 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. During prolonged periods of dry weather areas that would normally have elevated readings may read "dry".

Wood double hung, wood fixed and wood casement windows are historically problematic. We recommend sill pans be installed under ALL doors and windows especially if your home has these types of windows

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. No judgment is intended or given for any areas not reported on.

All deficiencies appearing in this report should be evaluated by a qualified EIFS/Stucco repair contractor This report should not be relied upon as the total scope of work to be performed. The total scope of work defined is the responsibility of the contractor and the manufacturer and should be carried out in strict accordance with the manufacturer's specifications and recommendations.

It is recommended to visit the following trade organizations' websites and view current published details and recommendations for Stucco installation.

- 1. Northwest Wall And Ceiling Bureau
- 2. Stucco Manufacturer's Association.
- 3. Portland Cement Association.

This report and its content are exclusively the property of the client whose name appears herein and Best Choice Inspections, Inc. Any use or reliance on this report by any party without authorization is strictly prohibited.

Date: 2/27/2019 Page 8 of 30

# 3(A) . FRONT ELEVATION



Items

### 3.0.A Grid View



Date: 2/27/2019 Page 9 of 30

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
C2	Window	11	Firm	Area where moisture reading was obtained.
C3	WIndow	9	Firm	Area where moisture reading was obtained.
C5	WIndow	11.2	Firm	Area where moisture reading was obtained.
В6	Window	6.2	Firm	Area where moisture reading was obtained.
D6	Kickout	11.7	Firm	Area where moisture reading was obtained.
F6	Kickout	9.1	Firm	Area where moisture reading was obtained.
F2	Kickout	7.2	Firm	Area where moisture reading was obtained.
F3	Window	0, 11.1	Firm	Area where moisture reading was obtained.
F5	Window	6.7	Firm	Area where moisture reading was obtained.

#### 3.1.A B5

Comments: Repair or Replace

Gutter outlet above kickout which empties onto roof appears clogged. Clean all debris from gutters to allow water to drain properly.



### 3.2.A B6

Comments: Repair or Replace

Date: 2/27/2019 Page 10 of 30

 Wood rot under kickout at left side of front entry. Repair / replace all damaged wood.







(2) No kickout installed at this location. This area is sheltered, however, poor drainage and / or blown rain may still need to be directed away from sidewall. Recommend repair.

#### 3.3.A F3

Comments: Repair or Replace

Date: 2/27/2019 Page 11 of 30





Damage / visible mesh at EIFS window trim detail. Repair all damage.

#### 3.4.A F4

Comments: Repair or Replace





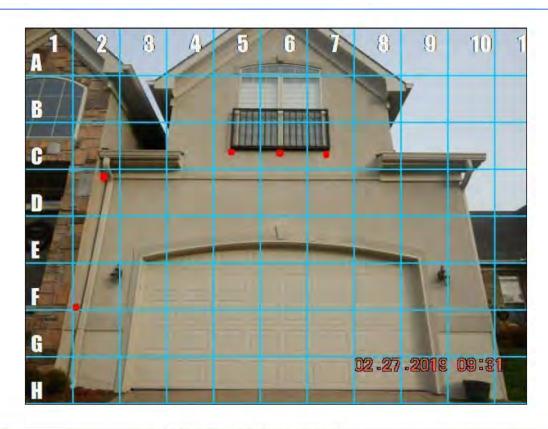
Caulking failing at window. Typical at most window. Recommend repair / caulk as needed.

# 3(B). FRONT ELEVATION

Items

3.0.B Grid View

Date: 2/27/2019 Page 12 of 30



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
D2	Kickout	10.7	Firm	Area where moisture reading was obtained.
F2	Kickout	9.4	Firm	Area where moisture reading was obtained.
C5	Window	30.9	Firm	Elevated moisture below window.
C6	Window	32.2	Soft	Elevated moisture below window.
C7	Window	41.2	Soft	Elevated moisture below window.

3.1.B C2

Comments: Repair or Replace

Date: 2/27/2019 Page 13 of 30

Wood rot under kickout at left side of front entry. Repair / replace all damaged wood.



#### 3.2.B C4

Comments: Repair or Replace





Caulk failing at frieze board. Typical at most areas. Recommend repair / caulk as needed.

#### 3.3.B E6

Comments: Repair or Replace

Flat accent above garage door. Slope recommended to properly drain water on all accents that extend more than 1 and 1/2 inch from wall. Recommend repair.



Date: 2/27/2019 Page 14 of 30

#### 3.4.B G9

Comments: Repair or Replace



#### 3.5.B H2

Comments: Repair or Replace



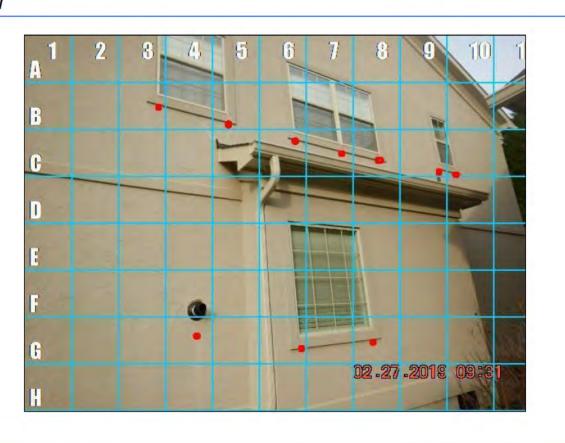
Date: 2/27/2019 Page 15 of 30

# 4. RIGHT ELEVATION



Items

# 4.0 GRID VIEW



Date: 2/27/2019 Page 16 of 30

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
G4	Vent Duct	7.8	Firm	Area where moisture reading was obtained.
В3	Window	7.9	Firm	Area where moisture reading was obtained.
B5	Window	40.6	Firm	Elevated moisture below window.
C6	Window	33.7	Firm	Elevated moisture below window.
C7	Window	13.9	Firm	Area where moisture reading was obtained.
C8	Window	11.6	Firm	Area where moisture reading was obtained.
C9	Window	19.1	Firm	Elevated moisture below window.
C10	Window	21.7	Firm	Elevated moisture below window.
G6	Window	10.1	Firm	Area where moisture reading was obtained.
G8	Window	13.2	Firm	Area where moisture reading was obtained.

### 4.1 C7

Comments: Repair or Replace

Caulk failing at million at joined windows. Typical at all joined windows. Recommend repair / caulk as needed.



#### 4.2 F4

Comments: Repair or Replace

Date: 2/27/2019 Page 17 of 30

Large gap above exhaust / intake pipe. Repair / caulk as needed.



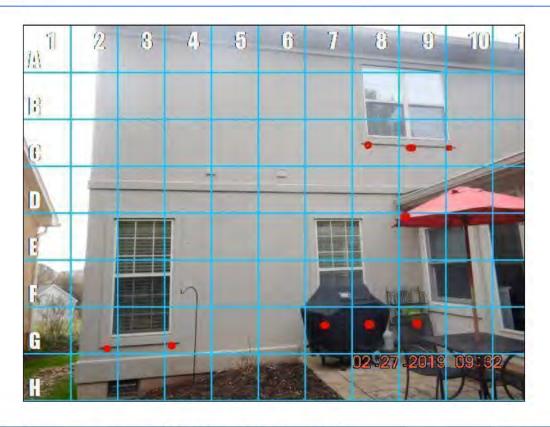
# 5(A). REAR ELEVATION



Items

5.0.A GRID VIEW

Date: 2/27/2019 Page 18 of 30



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
G2	Window	9.2	Firm	Area where moisture reading was obtained.
G4	Window	8.2	Firm	Area where moisture reading was obtained.
G7	Window	7.4	Firm	Area where moisture reading was obtained.
G8	Window	24.5	Firm	Elevated moisture below window.
C8	Window	12	Firm	Area where moisture reading was obtained.
C9	Window	14.8	Firm	Area where moisture reading was obtained.
C10	Window	10.2	Firm	Area where moisture reading was obtained.
E9	Kickout	8.4	Firm	Area where moisture reading was obtained.
G9	Kickout	12.4	Firm	Area where moisture reading was obtained.

5.1.A D9

Comments: Repair or Replace

Date: 2/27/2019 Page 19 of 30

Mesh visible at bottom of EIFS.



#### 5.2.A D10

Comments: Repair or Replace



Drainage outlet should remain unobstructed to allow proper drainage of system. No visible J-channel or drip screed at bottom edge, typical at all wall to roof locations.

#### 5.3.A G7

Comments: Repair or Replace

Date: 2/27/2019 Page 20 of 30





Caulk installed at stucco to concrete joint. No visible J-Channel or drip screed. Caulk failing.

#### 5.4.A H6

Comments: Repair or Replace

EIFS is installed below grade at this area. Manufacturers recommend that stucco is terminated above grade to prevent moisture and pest intrusion. Pull mulch back and ensure positive slope away from home. Recommend repair.

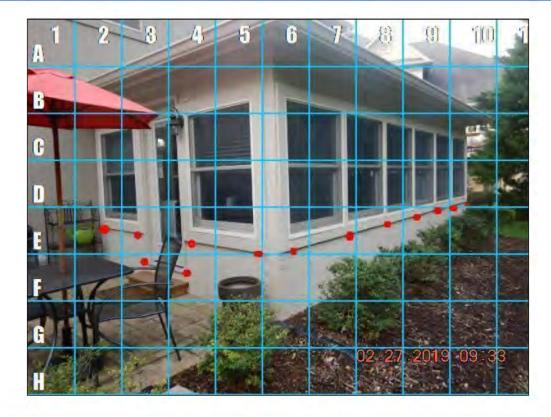


# 5(B). REAR ELEVATION

Items

5.0.B GRID VIEW

Date: 2/27/2019 Page 21 of 30



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
E2	Window	10.9	Firm	Area where moisture reading was obtained.
E3	Window	8.7	Firm	Area where moisture reading was obtained.
E4	Window	8.5	Firm	Area where moisture reading was obtained.
E5	Window	9.4	Firm	Area where moisture reading was obtained.
E6	Window	7.3	Firm	Area where moisture reading was obtained.
E7	Window	7.5	Firm	Area where moisture reading was obtained.
E8	Window	7.6	Firm	Area where moisture reading was obtained.
E9	Window	10.4, 8.6	Firm	Area where moisture reading was obtained.
E10	Window	7.4	Firm	Area where moisture reading was obtained.
D10	Window	7.6	Firm	Area where moisture reading was obtained.
F3	Door	12.4	Firm	Area where moisture reading was obtained.
F4	Door	13.8	Firm	Area where moisture reading was obtained.

Date: 2/27/2019 Page 22 of 30

#### 5.1.B C3

Comments: Repair or Replace

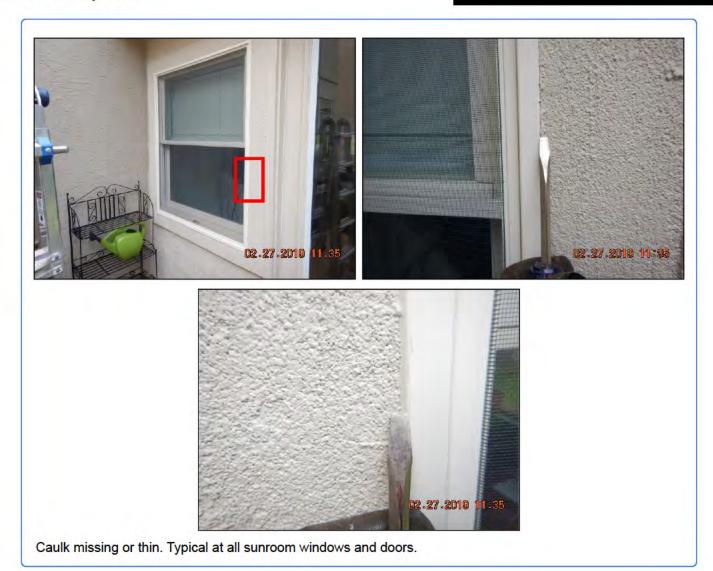
No head flashing installed at windows and doors at sunroom.



#### 5.2.B D3

Comments: Repair or Replace

Date: 2/27/2019 Page 23 of 30



#### 5.3.B F2

Comments: Repair or Replace

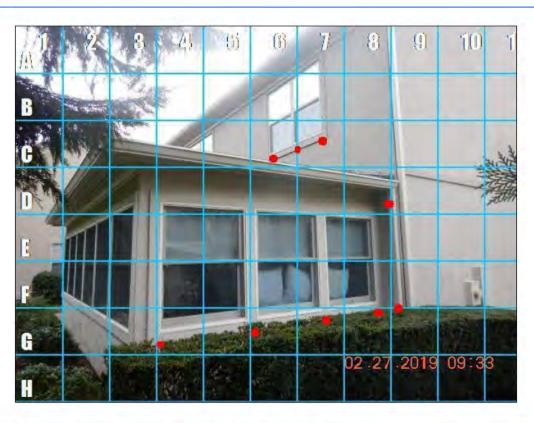


Page 24 of 30 Date: 2/27/2019

# 5(C). REAR ELEVATION

Items

### 5.0.C GRID VIEW



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
C6	Window	11.2	Firm	Area where moisture reading was obtained.
C7	Window	14.2, 9.1	Firm	Area where moisture reading was obtained.
G4	Window	8.0	Firm	Area where moisture reading was obtained.
G6	Window	8.3	Firm	Area where moisture reading was obtained.
G7	Window	8.5	Firm	Area where moisture reading was obtained.
G8	Window	9.8	Firm	Area where moisture reading was obtained.
D8	Kickout	9.9	Firm	Area where moisture reading was obtained.
G9	Kickout	9.2	Firm	Area where moisture reading was obtained.

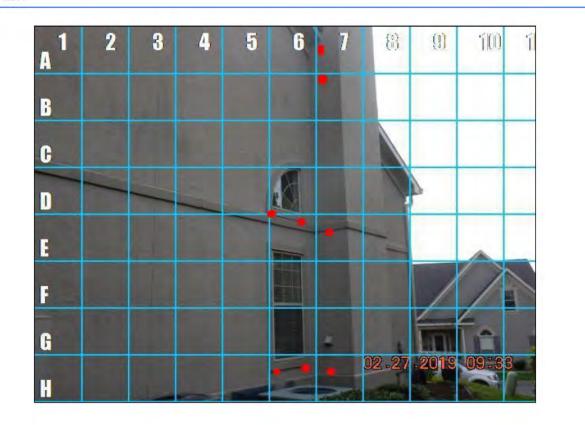
Date: 2/27/2019 Page 25 of 30

# 6(A). LEFT ELEVATION



Items

### 6.0.A GRID VIEW



Date: 2/27/2019 Page 26 of 30

Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
A7	Kickout	30.2	Firm	Elevated moisture below kickout.
В7	Kickout	13.6	Firm	Area where moisture reading was obtained.
D7	Kickout	11.5	Firm	Area where moisture reading was obtained.
H7	Kickout	24	Soft	Elevated moisture below kickout.
D6	Window	29.7	Firm	Elevated moisture below window.
E6	Window	8.2	Firm	Area where moisture reading was obtained.
H6	Window	<b>19.2</b> , 14.9	Firm	Elevated moisture below window.

### 6.1.A A7

Comments: Repair or Replace

(1) Wood rot below kickout on left side of chimney.



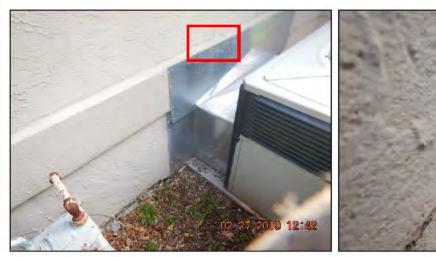
(2) Caulk missing / thin below kickout. Mesh visible. Repair needed.



#### 6.2.A H6

Comments: Repair or Replace

Date: 2/27/2019 Page 27 of 30





(1) Caulk failing at HVAC ductwork shroud. Recommend repair / caulk as needed.





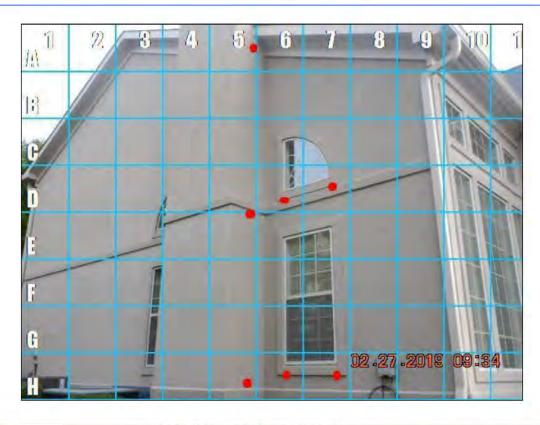
(2) Some cracking at various areas around home.

# 6(B). LEFT ELEVATION

Items

6.0.B GRID VIEW

Date: 2/27/2019 Page 28 of 30



Grid Location	Item Description	Moisture Readings	Substrate Condition	Observations
A5	Kickout	32.7	Firm	Elevated moisture below kickout.
D5	Kickout	46	Firm	Elevated moisture below kickout.
H5	Kickout	46	Soft	Elevated moisture below kickout.
H6	Window	9.7	Firm	Area where moisture reading was obtained.
H7	Window	9.0	Firm	Area where moisture reading was obtained.
D6	Window	46	Firm	Elevated moisture below window.
D7	Window	14.8	Firm	Area where moisture reading was obtained.

6.1.B A4

Comments: Repair or Replace

Date: 2/27/2019 Page 29 of 30

Chimney cap is bent and may have damaged stucco. A stucco repair contractor should evaluate and repair as needed.



#### 6.2.B E7

Comments: Repair or Replace

Window head flashing not installed on bottom window nearest corner on left side of home.



### 6.3.B H5

Comments: Repair or Replace

Moisture stains near chimney on rim joist, floor joists, and subfloor in crawlspace.



Date: 2/27/2019 Page 30 of 30