Inspection Report

John Doe

Property Address:
4478 SW Sample Dr
Columbia MO 65203

Dan Bowers Company

Dan Bowers, CMI, CRI, EDI
816.401.9988

Table of Contents

Date: 1/11/2022	**Time:** 10:00 AM	**Report ID:** Sample EIFS
Property: 4478 SW Sample Dr Columbia MO 65203	**Customer:** John Doe	**Real Estate Professional:** NONE

In our opinion, many of the accessory details were **NOT** done correctly **OR** are missing on the **EIFS** type stucco system. Because of the type of cladding system that **EIFS** is, the initial signs of moisture intrusion may be hidden inside the wall cavities and not immediately visible (this includes mold). On **EIFS** systems, rot can work from the inside out, rather than working its way inward, such as on a structure clad with wood siding.

In our opinion **MAJOR SIGNIFICANT** Repair or Modification will be Needed on this building (all sides and most details).

In the enclosed Report you will see our findings of our recent stucco inspection at the subject property. **At the owners request and for a reduced fee, we did NOT inspect the entire Stucco or EIFS system on the building BUT only examined or did a moisture test on approximately 1/3rd of the 2-Story building.** *Nothing is known of the absence or presence of any deficiencies at areas **NOT** inspected or tested for moisture, etc.*

As with any building there are always repairs, maintenance and upgrades one may choose to do. Sometimes even well built and well maintained buildings have repairs or service needed. If you have questions about the building or need clarification on items in the report, please email or call.

Please note that this report is **NO**T intended for use as a complete work order of every concern present in the building, **BUT** is intended to be a representative **SAMPLE** of improper or unreliable conditions that should be considered in owning and maintaining a building like this. **AND** it is our opinion that after reviewing the comments in this letter, the attached photo's, and then examining the building themselves, a competent and licensed Stucco or EIFS contractor(s) should be able to make an educated decision about any service, maintenance, remedial actions or modifications that need to be done.

Regards,

Dan Bowers, EDI

Certified Stucco / Moisture Analyst, EDI

Approximate Age Of Building:	**Weather:**	**Temperature:**
47 Yrs p/Clients Contractor	Clear	High 30's to Start
Rain / Snow or Ice in Past Week:	**Type Building:**	**Occupied:**
Yes / Snow	2-Story Hotel on Slab	Yes
Owner Disclosure:	**Stories / Levels:**	**Soil Condition:**
We DID NOT see a "Seller Disclosure" (this limits access to known facts).	2 Story	Partly Snow Covered
Owner Present:	**Contractor Present:**	**Others Present:**
No	No	Staff and Guests

Faces Mostly:	**Sides With EIFS or Stucco Present:**
East	All Sides

1. SCOPE AND PURPOSE

Items

1.0 What Is the Scope and Purpose of The Inspection?

Comments: Yes

It should be pointed out up front that few if any building **clad with either Stucco or EIFS in our area, have every architectural detail done perfectly. Most of the Conventional Hardcoat Stucco or EIFS clad buildings that we inspect, are missing one or more architectural details, or some of the details present were not done totally correctly by the most current industry standards.**

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 **OR** which ones might become problematic, nor if they do create a problem when the problem might occur. Therefore we recommend you read the Report and then consult with a stucco contractor for his repair recommendations on what would be cost effective and most needed.

Per your request a limited moisture probing of the above building 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 stucco cladding system being reviewed as possible, given the limitations of time and accessibility. This report is our opinion of a description of the visible and apparent condition of the applicable stucco cladding system and visible accessories.

When making this type 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. The condition of the hidden systems (insulation, framing, moisture barrier, mesh, fasteners, etc.) is not known. Because of the type of cladding system that certain stucco systems are, the initial signs of moisture entry may be concealed within the walls and not immediately visible.

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 (such as 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: If installed properly with the proper architectural details, **Conventional Stucco** or **EIFS** are a sturdy and good quality material. Some concerns noted with these systems today may not have been required architectural details a few

years ago, **OR** local code inspectors may not have enforced their presence. Some details however, were known and were left off or may be done incorrectly.

Note #2: See the attached photos to better understand our observations and comments.

Regards,

Dan Bowers, EDI

Exterior Design Certified 3rd Party Stucco Analyst

2. SYSTEM COMPONENTS

Styles & Materials

Type of Siding System:
EIFS
Wood Trim
EIFS Accents

Type Mesh / Lath:
Plastic

Window:
Aluminum
Sliders
Thermal Pane
Other

Foundation:
Slab

Substrate:
Some Gypsum Board - Courtyard
Wood

Mesh Color:
Blue Where Visible

We verified system components by:
Looking Under Wall
Holes / Openings in Wall
Other

Items

2.0 Is a Moisture Barrier Installed?

Comments: Not visible

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

2.1 Are Vertical Control Joints Present?

Comments: Not Applicable

At the Courtyard for High Rise building we observed vertical joints at the Hardcoat Stucco ..... Not Present and Not Applicable on the 2-story building with EIFS that we were inspecting.

2.2 Are Horizontal Control Joints Present?

Comments: Yes

The typical architectural details for an **EIFS type Stucco**, such as on this building, is the presence of **"Horizontal Control Joints"** at certain 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. Their location is usually determined by the Design Architect or installer.

This detail was present at one or more locations on this building.

See Example

2.2 Picture 1

2.3 Does Any Drive, Stoop, Walk, Flatwork, Etc Touch the Stucco?

Comments: Partial, Improper

(1) There were multiple locations where concrete slabs or other flatwork were too close and/or touching the stucco wall(s). This is a common but improper building practice. There should have been about a 2' space or gap where they meet to allow any future movement (like soil heaving) of the flatwork from causing cracks or moisture damage to the stucco walls. It can also help prevent moisture "wicking" up into the wall cavities. Some stucco is porous and this can help allow moisture to escape from behind the stucco rather than accumulating in the wall cavity.

The slab/walls show damage at some areas. Repairs or modifications are needed.

See Examples

Solution: Stucco industry details have flashing at the base of the wall, **OR** alternatively, a 2” clearance above the hard surface or an integrated weep screed. Install proper flashing and/or weep screed per stucco manufacturer’s recommended repair details and specifications.

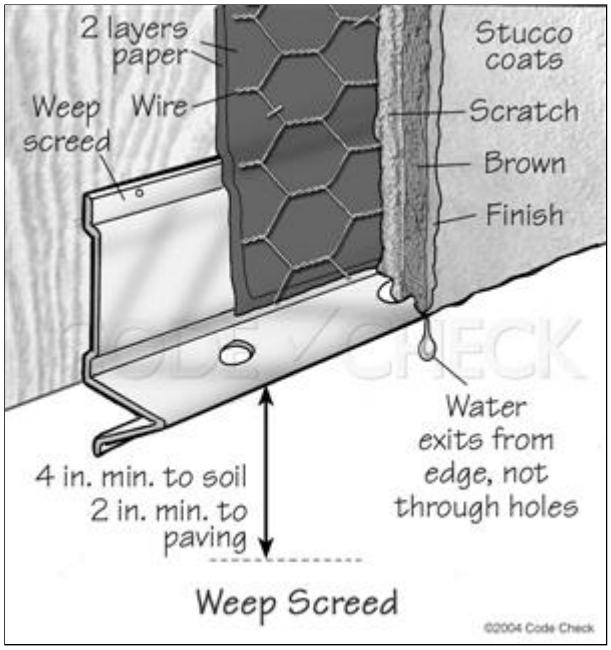
2.3 Picture 1

2.3 Picture 2

2.3 Picture 3

2.3 Picture 4

(2) Example of a proper Weep Screed



2.3 Picture 5

2.4 Are Roof Coverings Close To or Touching Stucco?

Comments: Not visible

Due to snow they were not fully visible, but most of the ones we observed had visible step flashings.

There was an area at the right wall and the small gable roofs over entry doors with no visible step flashing. Have stucco contractor verify presence, modify or install.

See Examples

2.4 Picture 1

2.4 Picture 2

2.5 Can You Verify the 2-Story Bldg Stucco System Type?

Comments: Yes

EIFS with EIFS Accents, Foam, Wood Substrate, Plastic Mesh, etc at most areas on the 2-story bldg.

At some areas in the Courtyard it looks like they may have used Drywall for sheathing instead of wood. See Bulged Areas. This will need further evaluation from your stucco repair contractor and a Repair of some type.

3. CAULKING / SEALANTS

Items

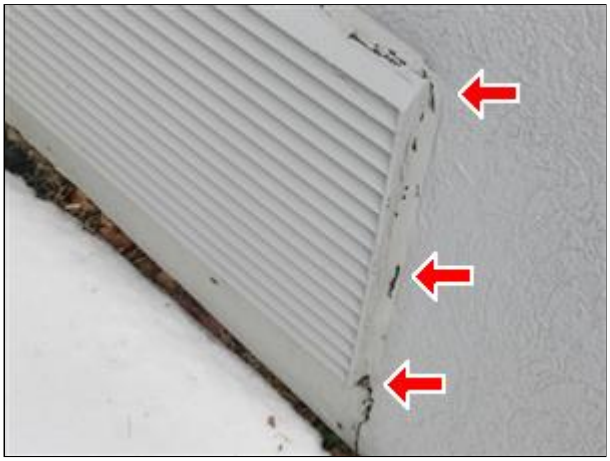
3.0 Is Caulking Satisfactory at Windows / Doors / Frames / Joints / Perimeters / Sashes / Trim?

Comments: No, Improper

Caulking looks like it might have been adequate to start, but now has multiple places on all sides of the building where it is worn, separating, the wrong type, split, etc (all of which can allow moisture intrusions into the wall cavity). 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.

See Examples

3.0 Picture 1

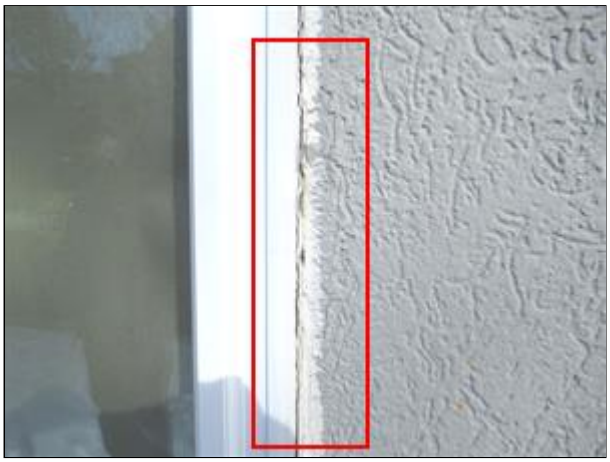


3.0 Picture 2

3.0 Picture 3

3.0 Picture 4

3.0 Picture 5



3.0 Picture 6

3.0 Picture 7

3.0 Picture 8

3.1 Is the Caulking Satisfactory Around all Breaches?

Comments: No, Improper

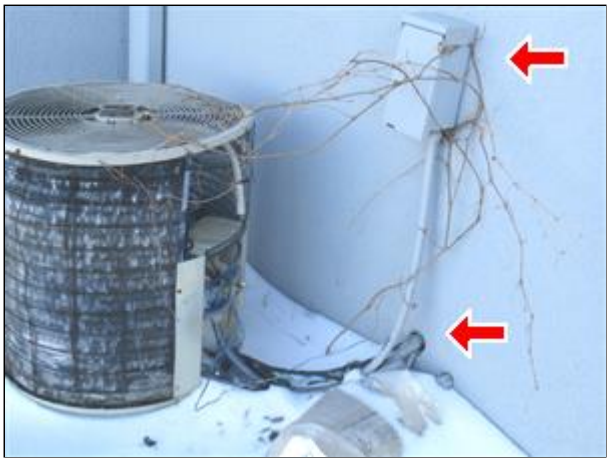
Anywhere an electrical line, gas line, light fixture, plumbing hose bibb, etc. penetrate the exterior walls they are commonly called a **"breech location"** in the stucco world. Most breech locations were improperly sealed OR not sealed. Have a competent stucco contractor caulk or re-seal any place below the soffit line where stucco meets another material such as around light fixtures, electrical outlets, hose bibbs, gas lines, freon lines, dryer vents, cable TV openings, and other penetrations of the wall cladding materials.

See Examples of Breeches.

3.1 Picture 1

3.1 Picture 2

3.1 Picture 3



3.1 Picture 4

3.1 Picture 5

3.1 Picture 6

3.2 Additional Comments

Comments: Yes

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.

4. FLASHINGS

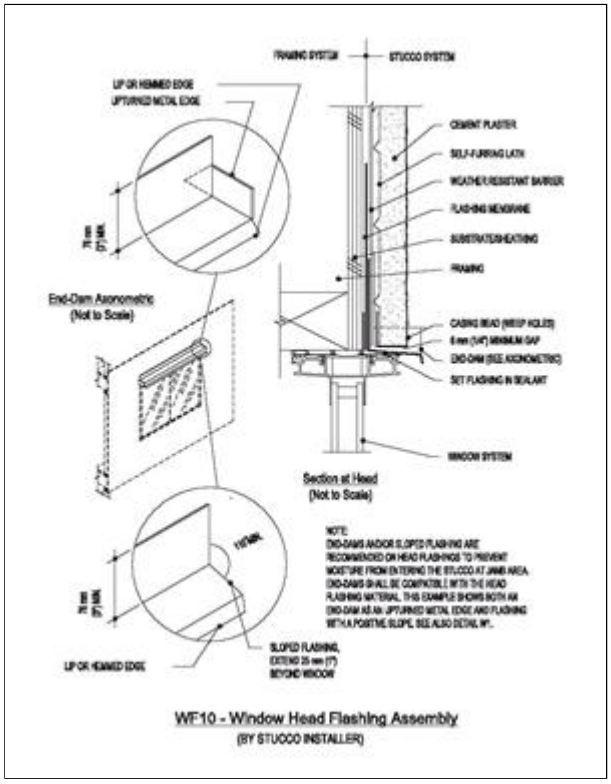
Items

4.0 Do Window and Door Areas Have Head Flashings?

Comments: No, Improper, Not visible

(1) Most areas we observed had no visible head flashing (like windows, doors or trim). Installation and/or repair of these is recommended. Installation, modification and/or repairs could include; installing flashing, creating end dams, caulking the bottoms, or other service, etc.

(2) See the Example of a proper Head Flashing with an "End Dam"



4.0 Picture 1

4.1 Are Window Sill Pan Flashings Present?

Comments: No, Not visible

Water intrusion through the window assembly appeared to be occurring. Specially designed window sill pan flashings are available to repair this.

See Moisture Probing results

4.2 Are Door Pan Flashings Present?

Comments: No, Not visible

Water intrusion through the door assembly(s) may be occurring at deck or balcony door areas. Specially designed pan flashings are available to repair this if it is occurring.

See Moisture Probing results

4.3 Are Kickout Flashings Present?

Comments: Partial, Improper

(1) In a building 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 building "kickout flashings" were not present at all required locations; there were kickouts not properly installed AND kickouts not properly sized (too small) according to industry design criteria at multiple areas. A competent stucco contractor can install proper "kickout flashings" for about $325-$395 each.

Missing or improperly installed "kickout flashings" have been a very common moisture entry point on stucco buildings. We recommend installing proper kickout flashings where applicable.

See Examples of Missing or Inadequate Kickout Flashings or Kickout Flashing Areas.

4.3 Picture 1

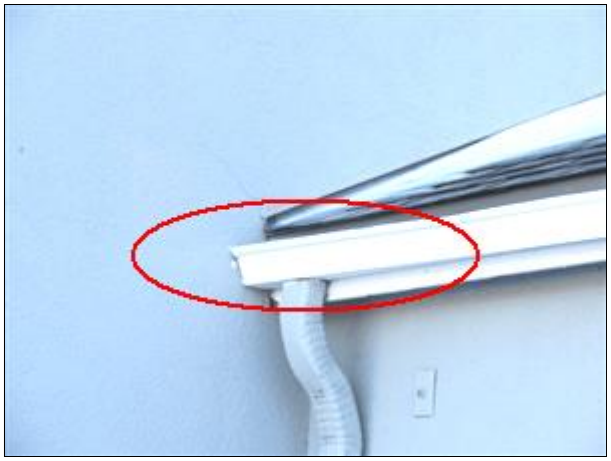
4.3 Picture 2

4.3 Picture 3

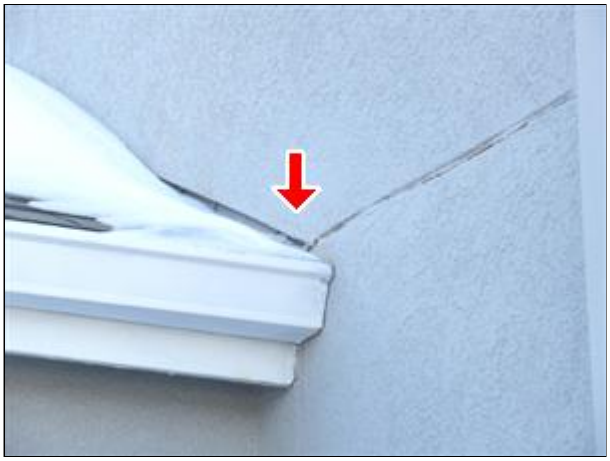
4.3 Picture 4

4.3 Picture 5

4.3 Picture 6



4.3 Picture 7



4.3 Picture 8

4.3 Picture 9

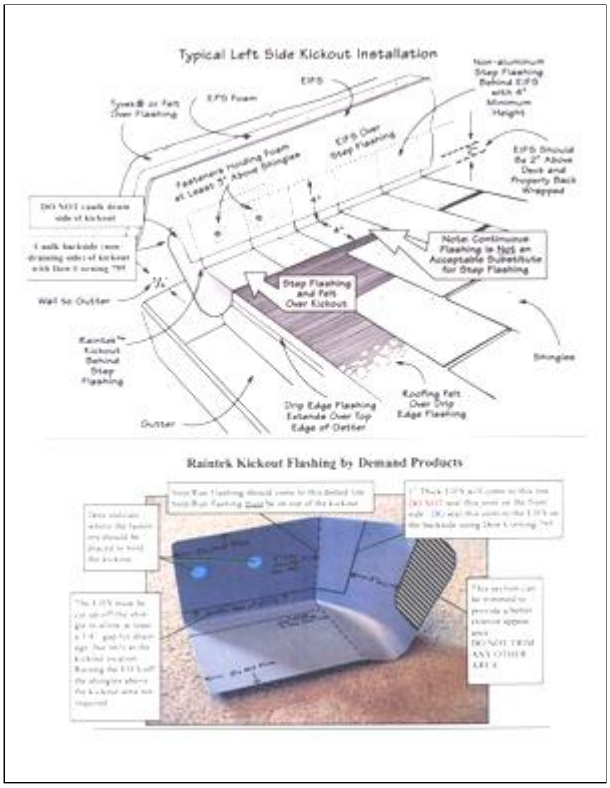
4.3 Picture 10

4.3 Picture 11

4.3 Picture 12

(2) See the Example of a proper Kickout Flashing

4.3 Picture 13



4.3 Picture 14

4.4 Are Deck/Balconies Flashing / Connections Correct?

Comments: Not visible

The underside of decks or balconies was finished out and the presence or absence of a deck flashing **OR** connections was not visible or determined. We recommend stucco repair contractor validate the presence or absence of of this detail .... and determine if repair or modification is needed.

4.4 Picture 1

4.5 Are All Trim Flashing Details Correct / Present?

Comments: No, Improper

Proper flashings were not present all recommended locations. There were various locations at most areas where missing and/or improper flashings and/or trim details were observed (gaps at joints, separations, no cover at the trim, missing flashing, etc). Areas where flashings are typically installed are: over doors, windows, trim or decorative pieces extending out from the siding or building wall over 3/8". Flashing is installed to help prevent ponding moisture from

entering the structure and/or causing water damage, etc. Modification of areas with missing or improper flashing is recommended. Repairs may include; creating end dams; sealing gaps, caulking, installing flashing; etc.

5. WINDOWS AND DOORS

Items

5.0 Are Window Details Potential Moisture Intrusion Spots?

Comments: Yes, Improper

(1) Gaps, improper caulking, missing flashings, flat surfaces, inadequate prior repairs noted, can allow moisture into the window assembly. Repair and/ or Modify window assembly's as needed to keep out the moisture.

(2) Although not part of the stucco inspection, we noted you have one or more windows with a possible glazing / failed thermal seal problem (See Example in Courtyard area).

5.0 Picture 1

5.1 Are Door Details Potential Moisture Intrusion Spots?

Comments: Yes, Improper

There was new, worn or missing caulking noted at various locations. This appeared to be a retrofit to areas that were missing proper caulk joints. Service and Repair as Needed.

5.2 Are Caulk Joints Present at Windows, Doors and Other Recommended Areas?

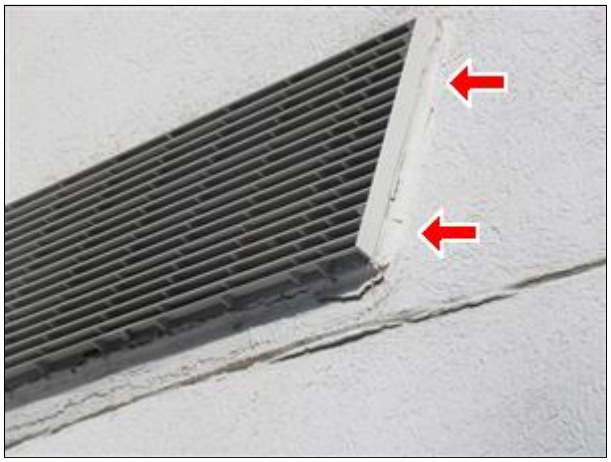
Comments: No, Improper

(1) Caulk Joints were not visible at areas like windows, doors, the junction of 2 different building materials, etc.

See Examples.

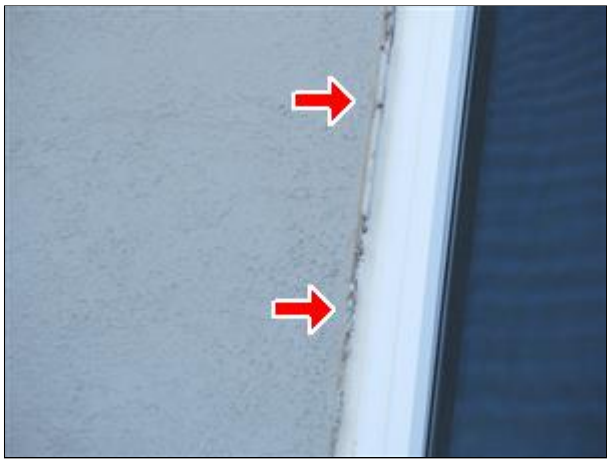
Typically on a building clad with stucco we should see a minimum 3/8"-7/16" gap around areas like the windows, doors and the junctions of different building materials - a "backer rod" is then placed in the gap and this area is properly sealed - this detail did not appear to be present on this building. We recommend having your stucco contractor Install and Modify the applicable areas

Solution: When there is no sealant at trim intersections with windows, doors, etc and no sealant, backer rod, or bond breaker noted at stucco intersection with windows, doors, trim, etc ..... Stucco industry details require a minimum 3/8" caulk joint with a closed-cell backer rod and sealant at all stucco intersections with dissimilar materials. Install this.

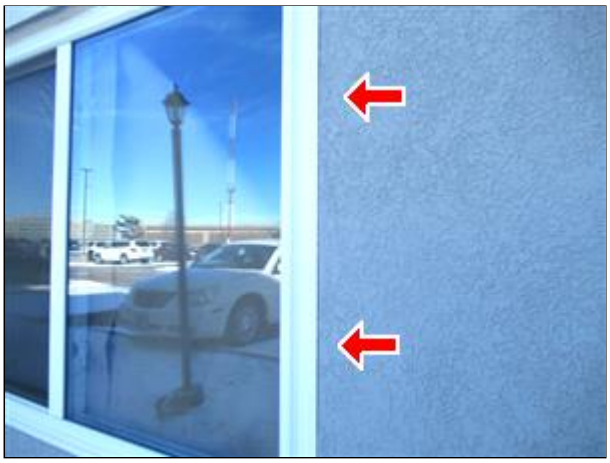


5.2 Picture 1

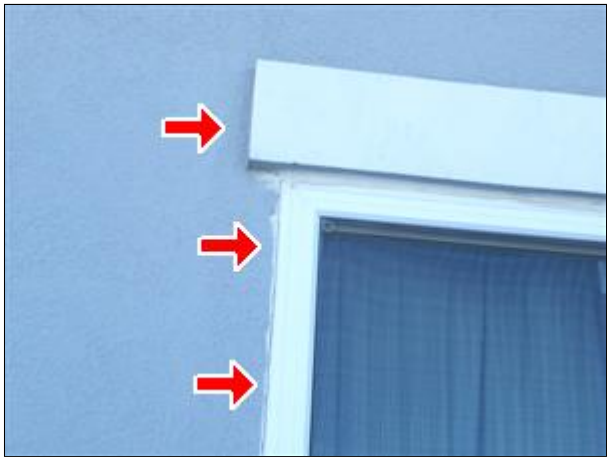
5.2 Picture 2



5.2 Picture 3

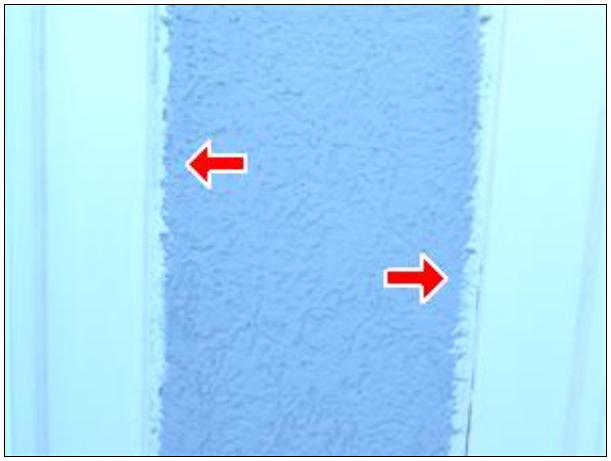


5.2 Picture 4



5.2 Picture 5

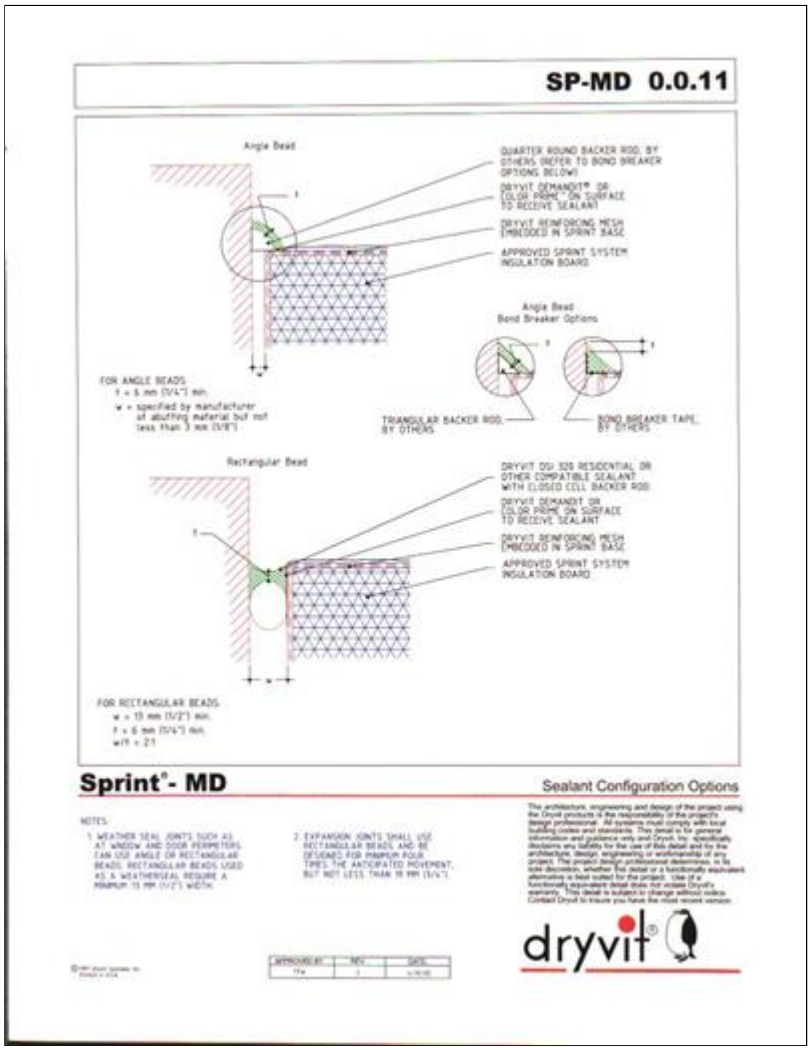
5.2 Picture 6



5.2 Picture 7

5.2 Picture 8

(2) See the Graphic Example of a Proper Caulk Joint



5.2 Picture 9

6. GUTTERS / DOWNSPOUTS

Items

6.0 Are Gutters / Downspouts Present?

Comments: Yes, Improper

The gutters leak at some areas and there are holes near them. This can allow moisture to get into the stucco clad wall cavities or the fascia board below them. Service and Repair as Needed.

Your downspouts are attached or screwed to the walls in a manner that can allow moisture penetration. Downspout installation can be modified to provide better protection from possible moisture intrusion. The use of clip-on brackets provide a better protection from moisture. The brackets are attached to the stucco cladding - sealed - and then the downspout can be attached to this.

We noted some gutters or downspouts improperly depositing the roof run-off water next to the foundation. This can lead to leaks or foundation movement. We recommend extending them further away from the building (6' or more).

Underground downspouts and/or drains were noted but not tested as part of a visible building inspection. The daylight openings of these drains were not seen. Verify with the seller their location and ensure they are not clogged and they're free-flowing.

Loose or missing downspouts and elbows were noted at various locations on the building. Service and Correct.

6.0 Picture 1

6.0 Picture 2

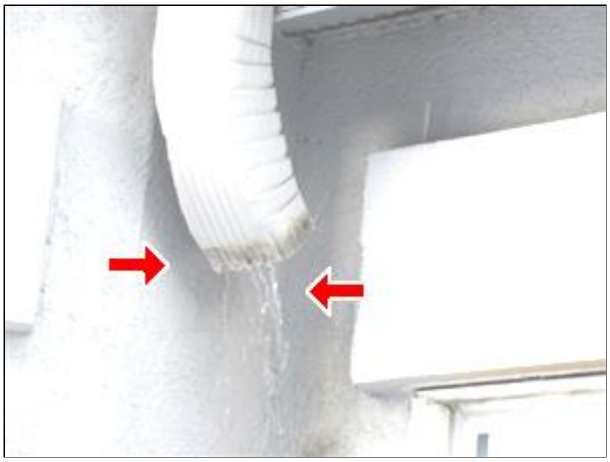
6.0 Picture 3

6.0 Picture 4

6.0 Picture 5

6.0 Picture 6

6.0 Picture 7



6.0 Picture 8

6.0 Picture 9

6.0 Picture 10

7. MOISTURE

Items

7.0 Are There Signs of Moisture Penetration?

Comments: Yes, Improper

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. **Stucco Contractor to evaluate and repair.**

There were **MANY** areas we probed that although the moisture readings were low, the substrate was soft, spongy or not found. This would most likely indicate **dry rot** (moisture has gotten into the wall cavity previously and rotted the substrate). Anywhere in the Report it discusses **SOFT substrate** is an area that needs further evaluation by the Stucco Contractor to determine the full extent of any underlying damage and then to Repair or Modify as Needed.

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.

7.1 Is There Wood Rot / Moisture Deterioration Visible?

Comments: Yes, Improper

Wood rot and/or moisture damage was present at multiple locations. More rot or moisture damage may be revealed at other areas when the stucco contractor is repairing the stucco. Have the contractor evaluate and repair these areas as needed.

7.2 When Moisture Probing Was Substrate Soft / Spongy?

Comments: Yes, Improper

You have multiple area's where the substrate appeared to be soft when probed. These area's need to be explored further by a competent stucco contractor to determine the full extent of the underlying damage present.

8. WOOD DESTROYING INSECTS AND ORGANISMS

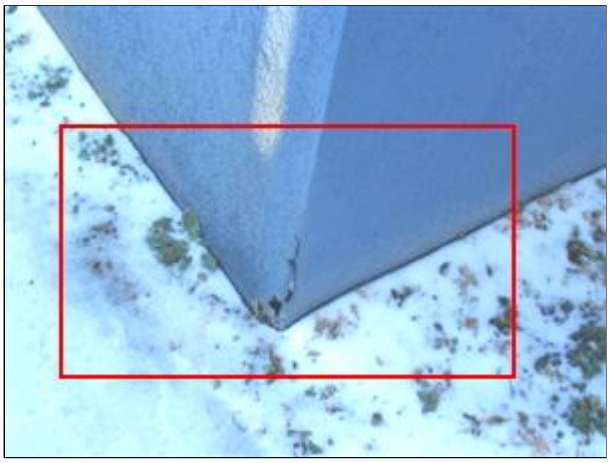
Items

8.0 Is The Stucco OR Foam Close to OR in Contact With The Ground?

Comments: Yes, Improper

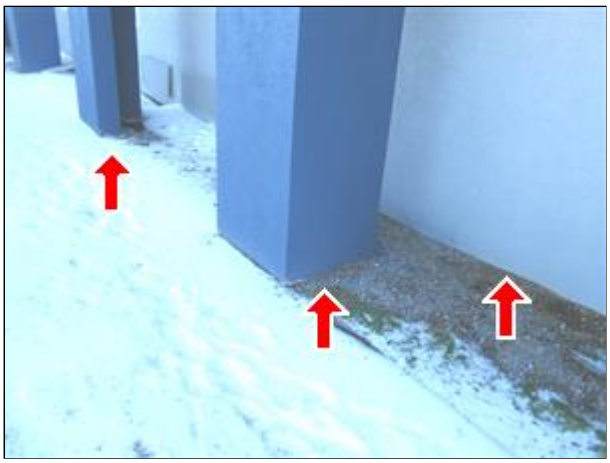
The stucco is touching and/or too close to the ground at many location(s). **Damage has occurred at many of these areas.** The location(s) where the soil to stucco distance is less than 6" should be regraded to provide a proper gap of 6" or more.

8.0 Picture 1



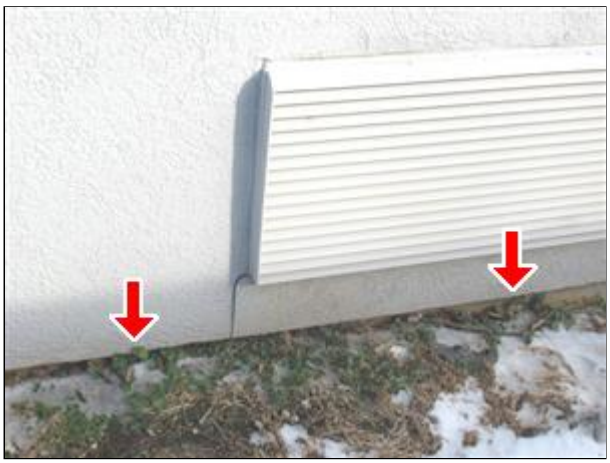
8.0 Picture 2

8.0 Picture 3



8.0 Picture 4

8.0 Picture 5



8.0 Picture 6

8.1 Is Foam Insulation and/or Stucco Below Soil Grade?

Comments: Partial, Improper

Your foam is in direct contact with the ground at some areas. These areas should be re-graded or a termite band installed to prevent insect infestations and the possibility of moisture intrusion.

8.2 Are Bushes or Shrubs in Contact With Stucco?

Comments: Partial, Improper

Although it is winter and they are dead at this time and not in bloom, etc ..... Bushes or other foliage are close **OR** rub the stucco walls at a few locations around the buildings exterior. This can give pests an easy bridge into the structure and can also allow for moisture damage. Trim the bushes or other foliage back at least 2' or more from the walls.

See Example

8.2 Picture 1

8.3 Any There Signs of Wood Destroying Organisms?

Comments: Not Applicable

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

8.4 Additional Comments

Comments: Yes

Have a Wood Destroying Insect Inspection after re-grading or a termite band is installed at stucco soil contact areas.

9. STUCCO SURFACE

Items

9.0 Is There Flat Accents or Flat Trim?

Comments: Yes, Improper

Although some accents or trim was sloped, there were flat accents present at most places on the building (the EIFS or trim, etc). All flat accents need to be kept sealed and well caulked. Ideally EIFS would not have flat accents, but should have been adequately sloped to allow moisture to run-off and prevent it from ponding on the accent.

See Example

9.0 Picture 1

9.1 Is Caulking or Slope Satisfactory On Flat Accents?

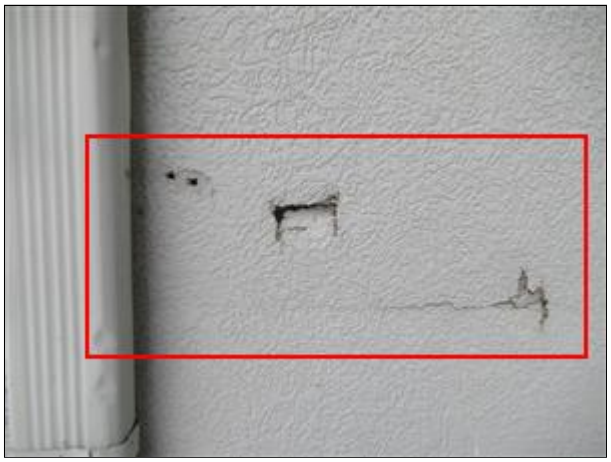
Comments: No, Improper

Not all of the flat accents and/or quoins 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, trim and/or quoins.

9.2 Is There Visible Stucco Damage?

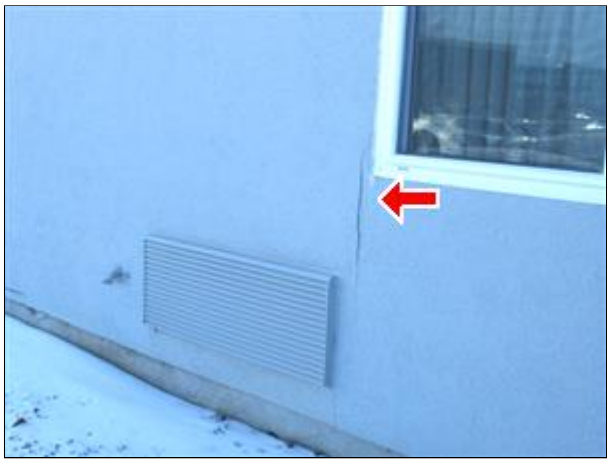
Comments: Yes, Improper

There were many areas at most all sides of the building where impact damage, cracks and/or holes were noted.
These may allow moisture intrusion and should be repaired.



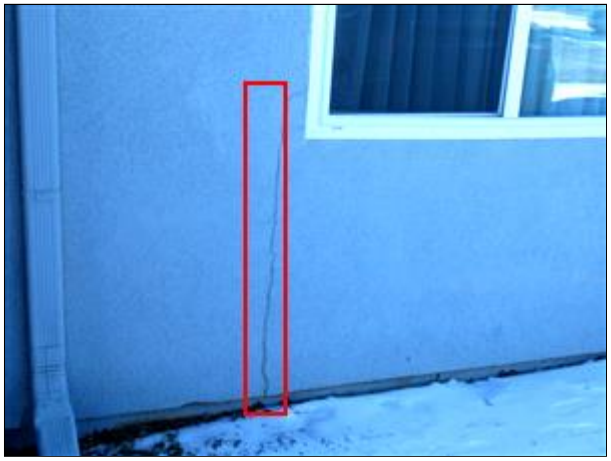
9.2 Picture 1

9.2 Picture 2



9.2 Picture 3

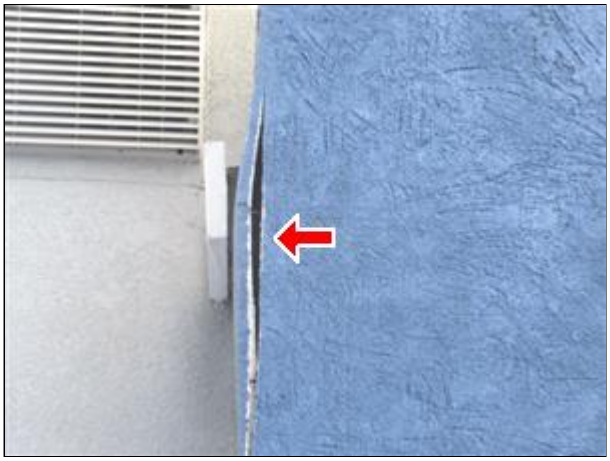
9.2 Picture 4



9.2 Picture 5

9.2 Picture 6

9.2 Picture 7



9.2 Picture 8

9.2 Picture 9

9.2 Picture 10

9.3 Is Foam and/or Reinforcing Mesh Exposed?

Comments: Yes, Improper

There are multiple locations on most sides of the building where plastic mesh or foam is exposed. When the foam and / or reinforcing mesh is visible the stucco could have moisture penetration. These areas should be Repaired to protect the system from potential moisture intrusion.

See Examples

9.3 Picture 1

9.3 Picture 2

9.3 Picture 3

9.3 Picture 4

9.4 Is a Lawn Irrigation System Present?

Comments: Yes, Improper

All sprinkler heads should be directed away from the stucco and windows to prevent moisture intrusion and damage to the Stucco System.

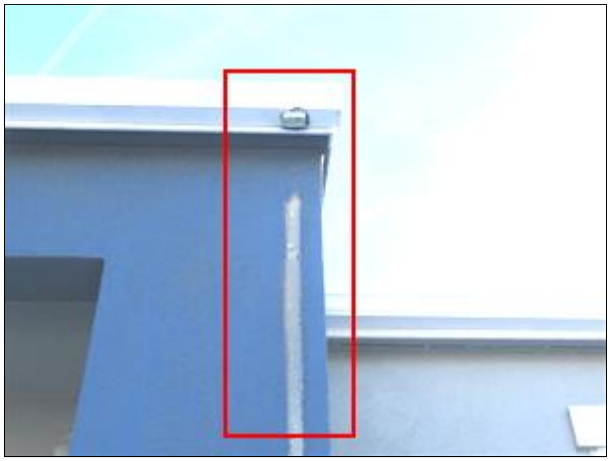
9.4 Picture 1

9.5 Are Surface Stains Present?

Comments: Partial, Improper

There are areas where stains are present on the Stucco walls and/or trim. These areas should be cleaned with a mild soap or cleaner recommended by the stucco manufacturer. Careful or no use of a high-pressure sprayer is advised Apply the cleaner using a sponge or brush.

See Examples

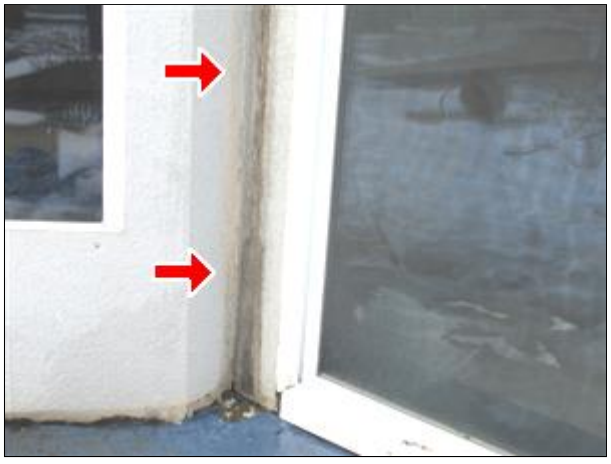


9.5 Picture 1

9.5 Picture 2

9.5 Picture 3

9.5 Picture 4



9.5 Picture 5

9.5 Picture 6

9.6 Other Comments?

Comments: Yes, Improper

(1) It appears the Tower parts of the building are Hardcoat Stucco versus the EIFS on the 2-story building.

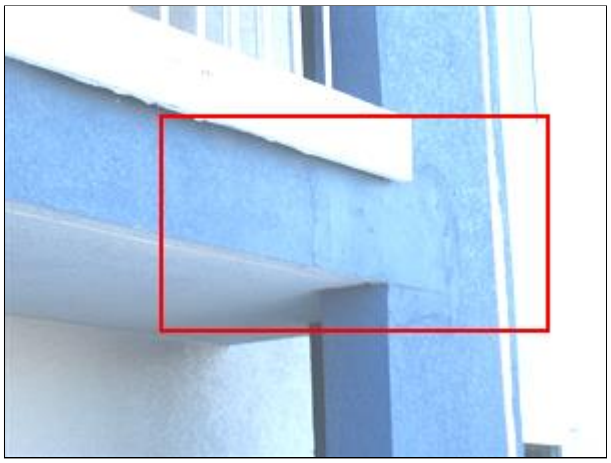
We were not retained to inspect the Tower high-rise building. Nothing is known of its conditions.

Hardcoat Stucco is a type of cementious stucco.It is a compound material made out of sand, cement, resin and water. With this hardcoat type of stucco system, you will periodically get small cracks at the walls, around windows, doors, etc.

Regularly seal around all edges (at windows, doors, utility breaches in the walls, roof lines not protected by overhangs, etc) with the proper type of caulking to help prevent water penetration into the building and subsequent structural wood rot and/or spalling of the stucco.

(2) Prior repairs were noted, that in our opinion look like an amateurish type ..... See Examples in Courtyard area.

Have your stucco contractor evaluate then provide a proper Repair as Needed.



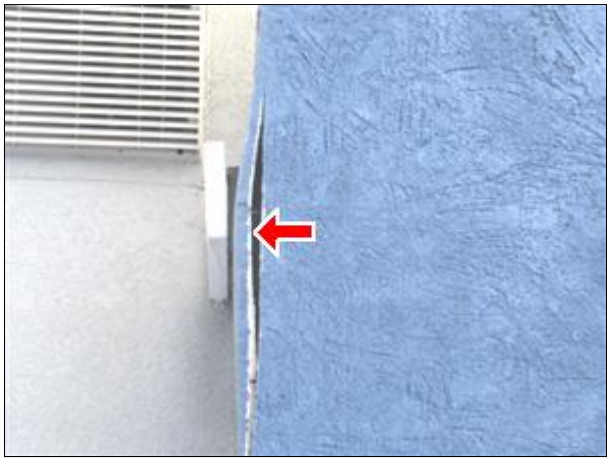
9.6 Picture 1

9.6 Picture 2

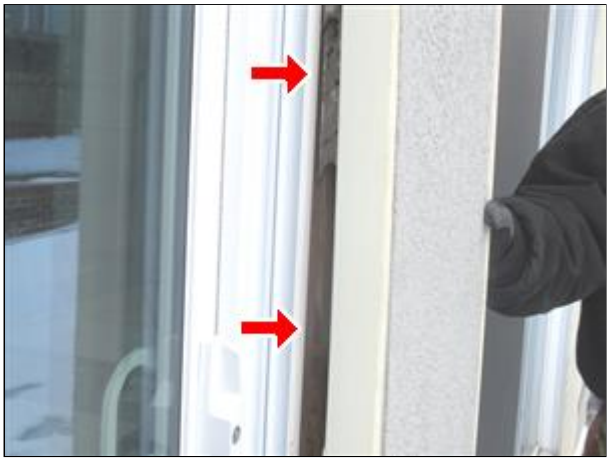
9.6 Picture 3

(3) Several areas in the Courtyard area have bulging and/or separated stucco. **It looks like Drywall was used at some areas for a substrate instead of wood.** Have your stucco contractor evaluate then provide a proper Repair as Needed.

See Examples



9.6 Picture 4



9.6 Picture 5

9.6 Picture 6

9.6 Picture 7

10. MISCELLANEOUS

Items

10.0 Industry Standards for Moisture Levels

Comments: Yes

The industry standard considers moisture readings **over 19%** as being in the **elevated range**.

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.

10.1 Moisture Meter Readings / Levels

Comments: Yes

	LOW	MEDIUM	HIGH	SETTINGS
Tramex Pinless "Wet Wall"	10-20	21-50	51-100	4-5
Tramex Probe Meter	<14	15-18	19>	2
Delmhorst Probe Meter	<14	15-18	19>	1

10.2 Are There Other Areas of Concern

Comments: Yes

(1) **REPAIR FOLLOW-UP AND Bi-ANNUAL INSPECTIONS:**

A repair follow-up inspection should be conducted within about 5 to 6 months after completion of any repairs to assess the effectiveness of the modifications for preventing moisture intrusion, wood rot and/or pest infestation or damage. **This is extremely important.** Bi-Annual inspections with a competent stucco contractor should also be scheduled to ensure that your Stucco or 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 the property, Bi-Annual inspections and maintenance documentation will be a valuable selling tool, providing evidence to show that your property has been inspected and maintained on a regular basis by a competent stucco repair contractor.

(2) We **DID NOT** perform any mold tests or mold / air sampling evaluations at this property.

An exterior stucco inspection can not verify the absence or presence of mold. Almost all building have some form of mold spores present, most of which are not harmful. Mold however, can cause health or respiratory problems for some people. Mold types and their significance can only be discovered through sampling and laboratory analysis. When you have either elevated moisture levels, damaged stucco **OR** missing substrate it would be prudent to have a competent certified mold specialist provide testing or evaluation for you.

10.3 Stucco Contractors

Comments: Yes

Stucco Contractors - If needed, 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 Stucco or EIFS systems. You may also find other contractors by calling distributors, the homebuilder association or in the Yellow Pages.

1) Chuck Kincaid / (816) 510-6375 / (816) 509-4860

2) Stucco Repair / (913) 397-0601 (Randy Reynolds or Dennis Pearce)

3) Corey Cantrell (816) 918-2762

10.4 Suggested Actions

Comments: Yes

Contact at least 2-3 stucco contractors to obtain service or repair bids. In our opinion MAJOR SIGNIFICANT Repair or Modification will be Needed on this building (at all sides and most details).

A stucco or other contractor may have their own preferred service actions, however in our opinion some of the more important issues we recommend are addressed in the report and the photos and would include at the minimum:

1) Stucco Contractor to Recaulk / Reseal the entire building, breeches, flashings, etc as needed.

2) Stucco Contractor to install proper kickout flashings at all applicable areas.

3) Stucco Contractor to Remove Stucco / Evaluate / Repair areas with high moisture / deterioration / soft substrate

4) Stucco Contractor to Service / Install proper caulk joints where missing and applicable.

5) Stucco contractor to install proper gap/flashing/etc, etc at concrete to stucco contact areas. Repair any damage.

6) Contractor to repair all wood rot/ moisture deterioration as needed.

7) Install flashing where missing at flat trim and/or reslope all applicable trim, etc.

8) Have seller verify when the prior repairs were done; by whom; if there is a warranty; etc. Get all workorders.

9) Repair where possible but in our opinion it will be needed to open walls and remove the stucco at some areas to determine the extent of any underlying damage and why its happened. *We recommend that your stucco contractor evaluate the conditions and then determine how best to address their issues for cost effectiveness and so this does not become a larger more costly issue down the road.*

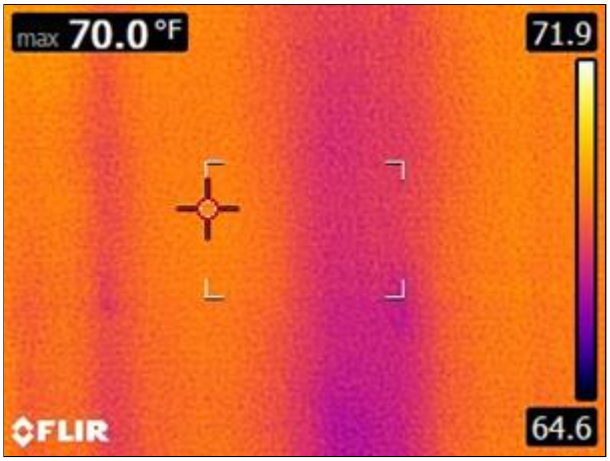
10.5 Infrared Scans

Comments: Not Applicable

Although not part of the stucco moisture probing outside, the clients sister indicated they have had moisture leaks in several rooms ..... and as a courtesy we looked into 5 rooms and did an Infrared Scan of areas we were told had leaks.

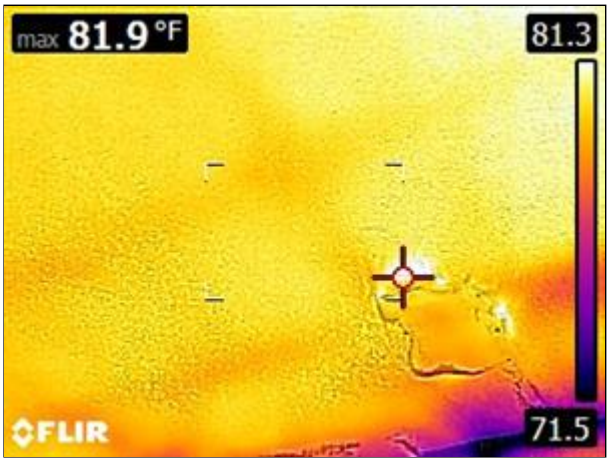
There were visible signs of moisture leakage, deterioration and anomalies .... however we did not observe signs of active leakage at this time. Our recommendation is to address the exterior problems first and see if that stops leakage. If it does not then further evaluation or repairs would be needed.

See Examples of Infrared Pics at Rooms 117, 119, 121, 124 and 125



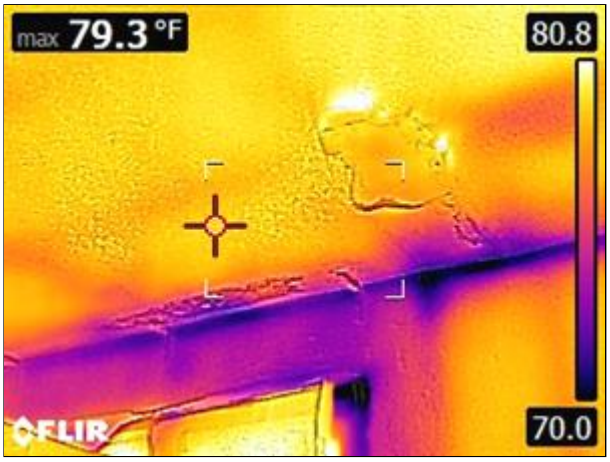
10.5 Picture 1

10.5 Picture 2



10.5 Picture 3

10.5 Picture 4

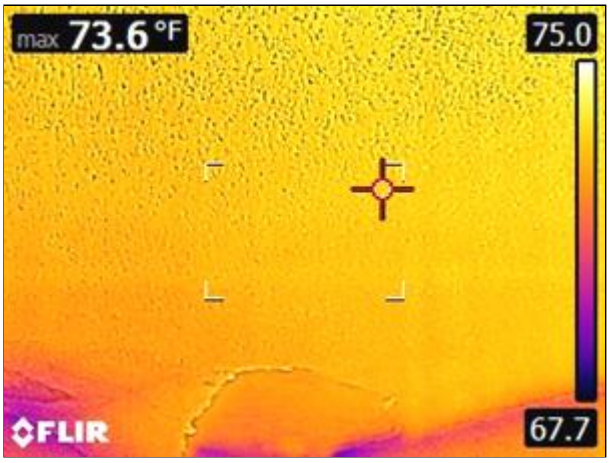


10.5 Picture 5

10.5 Picture 6

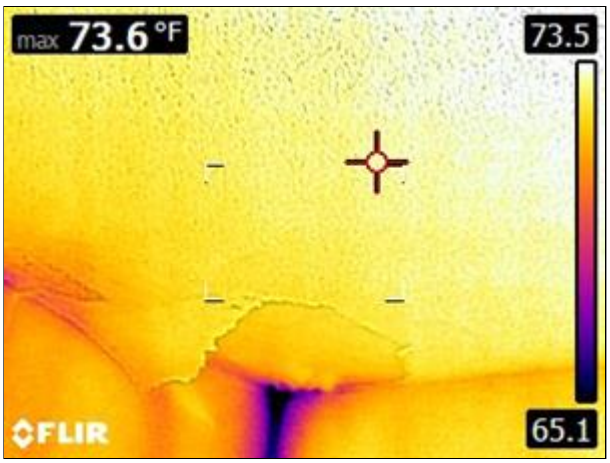
10.5 Picture 7

10.5 Picture 8



10.5 Picture 9

10.5 Picture 10



10.5 Picture 11

10.5 Picture 12

11. PHOTOS AND MOISTURE READINGS

Items

11.0 Front Photos / Moisture Probing

Comments: No, Not Applicable

Front Elevation of Tower and Left Side of Tower (not inspected)

11.0 Picture 1 Tower (not inspected)

11.1 Right Side Photos / Moisture Probing

Comments: Yes, Improper

(1) Right Elevation ..... Right Side of 2-Story Bldg

11.1 Picture 1

11.1 Picture 2

11.1 Picture 3

11.1 Picture 4

(2) The moisture content when probed was: 7.7%

The substrate was SOFT when probed.

11.1 Picture 5

11.1 Picture 6

(3) The moisture content when probed was: 8.3%

The substrate was SOFT when probed.

11.1 Picture 7

11.1 Picture 8

(4) The moisture content when probed was: 6.3%

The substrate was SOFT when probed.

11.1 Picture 9

11.1 Picture 10

(5) The moisture content when probed was: **17.3% (Almost High)**

The substrate was SOLID when probed.

11.1 Picture 11

11.1 Picture 12

(6) The moisture content when probed was: 7.6%

The substrate was SOFT when probed.

11.1 Picture 13

11.1 Picture 14

(7) The moisture content when probed was: **17.2% (Almost High)**

The substrate was SOFT when probed.

11.1 Picture 15

11.1 Picture 16

(8) The moisture content when probed was: 8.7%

The Substrate appears SOLID where probed.

11.1 Picture 17

11.1 Picture 18

11.2 Rear Left Photos / Moisture Probing

Comments: Yes, Improper

(1) Rear Elevation (Left Side of Rear Facing 2-Story Bldg)

11.2 Picture 1

11.2 Picture 2

11.2 Picture 3

11.2 Picture 4

(2) The moisture content when probed was: 9.4%

The Substrate appears SOLID where probed.

11.2 Picture 5

11.2 Picture 6

(3) The moisture content when probed was: 9.0%

The Substrate appears SOLID where probed.

11.2 Picture 7

11.2 Picture 8

(4) The moisture content when probed was: 6.1%

The Substrate appears SOLID where probed.

11.2 Picture 9

11.2 Picture 10

(5) The moisture content when probed was: 6.4%

The substrate was **SOFT** when probed.

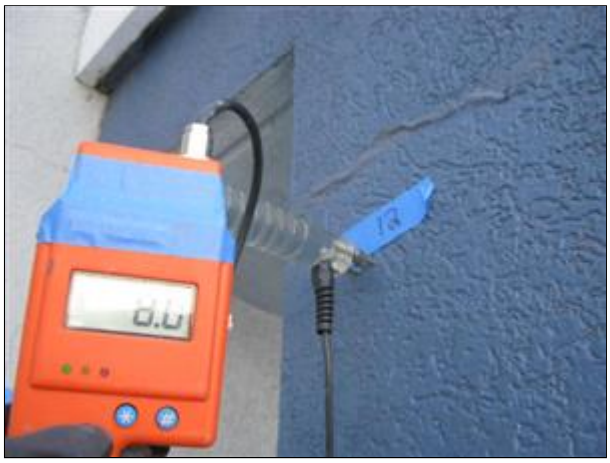
11.2 Picture 11

11.2 Picture 12

(6) The moisture content when probed was: 8.0%

The substrate was **SOFT** when probed.

11.2 Picture 13



11.2 Picture 14

(7) The moisture content when probed was: 9.4%

The Substrate appears SOLID where probed.

11.2 Picture 15

11.2 Picture 16

(8) The moisture content when probed was: 6.9%

The substrate was **SOFT** when probed.

11.2 Picture 17

11.2 Picture 18

11.3 Rear Center Photos / Moisture Probing

Comments: Yes, Improper

(1) Rear Elevation (Center of Rear Facing 2-Story Bldg)

11.3 Picture 1

(2) The moisture content when probed was: 9.4%

The Substrate appears SOLID where probed.

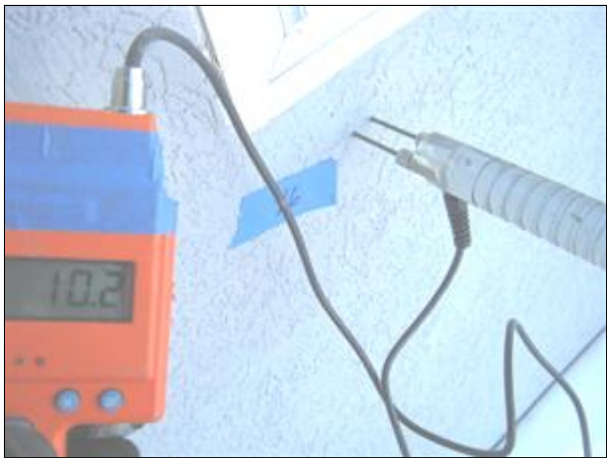
11.3 Picture 2

11.3 Picture 3

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

The Substrate appears SOLID where probed.

11.3 Picture 4



11.3 Picture 5

(4) The moisture content when probed was: 14%

The Substrate appears SOLID where probed.

11.3 Picture 6

11.3 Picture 7

(5) The moisture content when probed was: 11.1%

The Substrate appears SOFT where probed.

11.3 Picture 8

11.3 Picture 9

(6) The moisture content when probed was: **40% (High)**

The Substrate appeared still SOLID where probed.

11.3 Picture 10

11.3 Picture 11

11.4 Rear Right Photos / Moisture Probing

Comments: Yes, Improper

(1) Rear Elevation (Right of Rear Facing 2-Story Bldg)

11.4 Picture 1

11.4 Picture 2

(2) The moisture content when probed was: **40% (High)**

The Substrate appears **SOFT** where probed.

11.4 Picture 3

11.4 Picture 4

(3) The moisture content when probed was: **40% (High)**

The Substrate still appeared SOLID where probed.

11.4 Picture 5

11.4 Picture 6

(4) The moisture content when probed was: **17.8% (Very Close to High)**

The Substrate appears SOLID where probed.

11.4 Picture 7

11.4 Picture 8

(5) The moisture content when probed was: 7.7%

The Substrate appears SOLID where probed.

11.4 Picture 9

11.4 Picture 10

(6) The moisture content when probed was: 9.9%

The Substrate appears SOLID where probed.

11.4 Picture 11

11.4 Picture 12

(7) The moisture content when probed was: 14.8%

The Substrate appears SOLID where probed.

11.4 Picture 13

11.4 Picture 14

11.5 Left Side Photos / Moisture Probing

Comments: Yes, Improper

(1) Left Side ..... Left Side of 2-Story

11.5 Picture 1

(2) The moisture content when probed was: 9.3%

The substrate was **SOFT** when probed.

11.5 Picture 2

11.5 Picture 3

(3) The moisture content when probed was: **21.1% (High)**

The substrate was still SOLID when probed.

11.5 Picture 4

11.5 Picture 5

11.6 Courtyard Elevation Photos #1

Comments: Not Applicable

Courtyard Elevations / Inside Courtyard .....Courtesy Pics of Courtyard

Probing in the Courtyard Areas at various places it felt or looked like they used Drywall for a substrate versus wood.

11.6 Picture 1

11.6 Picture 2

11.6 Picture 3

11.6 Picture 4

11.6 Picture 5

11.6 Picture 6

11.7 Courtyard Photos #2 / Moisture Probing

Comments: Yes, Improper

(1) Inside Courtyard ..... Facing Toward the Parking Lot

Probing in the Courtyard Areas at various places it felt or looked like they used Drywall for a substrate versus wood.

11.7 Picture 1

(2) The moisture content when probed was: 8.6%

The substrate was SOLID when probed.

11.7 Picture 2

11.7 Picture 3

(3) The moisture content when probed was: **0.0% (Probes hit nothing)**

The substrate was **SOFT** when probed.

11.7 Picture 4

11.7 Picture 5

(4) The moisture content when probed was: 8.3% **(EIFS is Bowing under Balcony)**

The substrate was **SOFT** when probed.

11.7 Picture 6

11.7 Picture 7

11.7 Picture 8

11.8 Courtyard Photos #3 / Moisture Probing

Comments: Yes, Improper

(1) Courtyard Elevations / Inside Courtyard ..... In Courtyard Facing the Right Side of Bldg Drive

Probing in the Courtyard Areas at various places it felt or looked like they used Drywall for a substrate versus wood.

11.8 Picture 1

(2) The moisture content when probed was: 9.6%

The Substrate appears SOLID where probed.

11.8 Picture 2

11.8 Picture 3

(3) The moisture content when probed was: 13.9% (By Cracks)

The Substrate appears SOLID where probed.

11.8 Picture 4

11.8 Picture 5

(4) The moisture content when probed was: **20.5% (High Under Missing Kickout)**

The Substrate appears **SOFT** where probed.

11.8 Picture 6

11.8 Picture 7

11.9 Courtyard Photos #4 / Moisture Probing

Comments: Yes, Improper

(1) Courtyard Elevations / Inside Courtyard ..... In Courtyard Facing left Side

Probing in the Courtyard Areas at various places it felt or looked like they used Drywall for a substrate versus wood.

11.9 Picture 1

(2) The moisture content when probed was: 11.1%

The Substrate appears SOLID where probed.

11.9 Picture 2

11.9 Picture 3

(3) The moisture content when probed was: 8.1%

The Substrate appears SOLID where probed.

11.9 Picture 4

11.9 Picture 5

(4) The moisture content when probed was: 11.2%

The Substrate appears **SOFT** where probed.

11.9 Picture 6

11.9 Picture 7

11.10 Courtyard Photos #5 / Moisture Probing

Comments: Yes, Improper

(1) Courtyard Elevations / Inside Courtyard ..... In Courtyard Facing toward the Office Area

Probing in the Courtyard Areas at various places it felt or looked like they used Drywall for a substrate versus wood.

11.10 Picture 1

(2) The moisture content when probed was: 11.2%

The Substrate appears **SOFT** where probed.

11.10 Picture 2

11.10 Picture 3

(3) The moisture content when probed was: 10.8%

The Substrate appears SOLID where probed.

11.10 Picture 4

11.10 Picture 5

(4) The moisture content when probed was: 6.9%

The Substrate appears SOLID where probed.

11.10 Picture 6

11.10 Picture 7

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