Cliff Kapson Consulting, Ltd

February 5, 2015

CLIENT
CLIENT STREET ADDRESS
cLIENT CITY, ST, ZIP

PROPERTY INFORMATION:

Street Address, City, ST ZIP
File No.: CC-55-EIFS-Stucco-SV-XXXXXX

VENDOR/CONTRACTOR INFORMATION:

Company: Cliff Kapson Consulting, LLC
Inspector: XXXXXXX

EVALUATION INFORMATION:

Date of Inspection:	2/5/2015
Time of Inspection:	10:00 AM
Weather/Temp:	Sunny/30ºF
Age of Envelope System:	5 years, built 2009
Windows:	Aluminum Clad Casement, Aluminum Clad Double-Hung, Aluminum Clad Fixed
Product(s):	(ACMV) Adhered Concrete Masonry Veneer - Non-Load-bearing wall system, applied over exterior sheathing & framing, Hard-Coat/Traditional Stucco - Typically Comprised of a Weather Resistive Barrier (WRB), Diamond Wire or Metal Lath, Portland Cement Base Coat and an Acrylic or Siliconized Finish Coat, Parex Class PB System comprised of 1½" Expanded Polystyrene (EPS) foam board w/EPS Trim, Beige Mesh, and Gray Base Coat applied over Plywood sheathing substrate
Inspection Equipment:	Delmhorst BD2100, with 6" probe

OVERVIEW:

The primary purpose of this inspection is to evaluate the current performance of the stone, stucco and EIFS on the front, left and right side exteriors on this structure. **The rear of the home is vinyl siding.**

The entire stone, stucco and EIF systems were inspected visually. Installation defects were noted, and probe readings were performed at the discretion of the survey professional. These probe readings are typically performed at all areas of potential moisture penetration based on the previous visual inspection.

Moisture readings should be interpreted as outlined in the attached document titled "Understanding Moisture Readings".

Areas of the system where moisture readings are 20% or less, or where readings are not recorded should be considered to be acceptable.

The photos included in this report are intended to facilitate the understanding of the defects cited herein. They are a sample representation of said defects, and may not include all the deficiencies cited in the body of this report.

The following is a detail of our observations at the time of this inspection:

Front Elevation

Right Side Elevation

Siding on Rear Elevation

Left Side Elevation

Photos	Remarks

Improper Kickout Flashing

Improper Kickout Flashing

Improper Kickout Flashing

Improper Kickout Flashing

Improper Kickout Flashing:

Evaluation and/or Description of Problem:
Kickout flashing is improperly installed and/or sealed at roof/wall intersection as depicted in the attached photos.

Although other kickouts are improperly installed, moisture probing did not reveal any elevated moisture readings.

Mositure probing beneath improper kickout flashing revealed elevated moisture readings with soft substrate. These readings are depicted in the photo(s) on the following page(s). See the attached document titled "Understanding Moisture Readings" for further information.

Solution:
In areas where the moisture detected exceeds 29% and/or where soft substrate is detected during probing, additional hidden damage to substrate and/or framing may exist. (See attached document "Understanding Moisture Readings" for more details.)

Remove the stucco below improper kickout location on front left elevation where moisture readings are in excess of 29% and/or the substrate is soft to allow the inspection and repair of the damaged substrate and affected structural members. (See attached document "Understanding Moisture Readings" for further detail.)

Properly install and seal new kickout flashing at all roof wall intersections per stucco and stone industry standards (see attached details).

Moisture probing through stucco, beneath improper kickout flashing on front left elevation revealed elevated moisture (25%) and soft substrate (NR Indicates No Reading)

Hairline cracks in EIFS under garage windows

Harline cracks under garage windows

Hairline Cracking in EIFS:

Evaluation and/or Description of Problem:
Hairline cracking was noted beneath garage windows as depicted in the attached photos.

Cracking can occur in EIF systems for various reasons. It is usually related to the absence of proper expansion or isolation joints, or the misapplication or omission of reinforcing mesh, as required in the manufacturer's installation details.

Moisture probing Below garage windows revealed acceptable moisture readings and firm substrate.

Solution:
Small cracks such as these, less than 1/32" (approximately the width of a dime) can be bridged with an elastomeric coating per manufacturer's recommendations.

All larger compression cracking should be repaired by grinding back the finish coat to the base coat; installing reinforcing mesh to bridge the crack, overlapping a minimum 2" and refinishing wall to match.

Flat EIFS details above windows with delamination

Delamination of sill on EIFS Detail

Cracks and delamination of window detail sill

Flat sill with delamination

Finish Coat Delamination:

Evaluation and/or Description of Problem:
Finish coat delamination was noted at several locations as depicted in the attached photos.

In addition to flat detailing, other common causes include: (a) applying the finish under temperatures that are too low, (below the recommended 40F), (b) contamination of the base coat that may inhibit adhesives, or (c) adding fillers to the finish that dilutes it (water, sand, etc.).

Solution:
Repair contractor should identify all areas of finish coat delamination and repair, as follows.

Using a power washer, remove the existing loose finish to expose the base coat layer. Some areas of finish may be difficult to remove. These areas should be thoroughly saturated with hot water until soft, and then scrape away finish with margin trowel or similar tool. Apply a "skim coat" of base over the existing finish to smooth it out, allow the base coat to cure, and apply a new finish coat to match the existing finish.

Impact damage to EIFS sill

Impact damage by garage doors

Impact damage by front door

Physical Damage to EIFS:

Evaluation and/or Description of Problem:
Physical damage was noted at several locations as depicted in the attached photos. This damage is not considered to be the result of improper application of the EIFS or a defect in the product materials, and no moisture intrusion was detected as a result of this damage.

Solution(s):
All areas of impact damage should be identified and repaired per EIFS industry recommended repair details to prevent long-term exposure of the system to outside elements.

Inadequate Base Coat @ Base of System

Inadequate Base Coat @ Base of System

Inadequate Base Coat @ Base of System

EIFS Termination @ Grade:

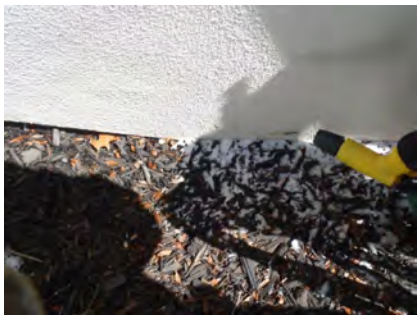
Evaluation and/or Description of Problem:
EIF system is in close proximity to grade as depicted in the attached photos. Experience data has shown EIFS in contact with grade provides means of conveyance for moisture and wood-destroying insect egress to the structure.

Additionally, inadequate base coat application at system termination at grade was observed in some locations. Fiberglass mesh should be fully encapsulated in base coat.

Solution:
At all locations where EIFS is in contact with landscaping materials, remove mulch and soil so that EIF system is at an elevation at least 4-8 inches above finish grade.

Additionally, repair contractor should inspect entire perimeter of system at grade, and properly base coat system termination where necessary.

Improper Termination @ Grade



Improper Termination @ Grade

Flat surface of Quoins

Flat surface on entire front detail

Flat Decorative Details:

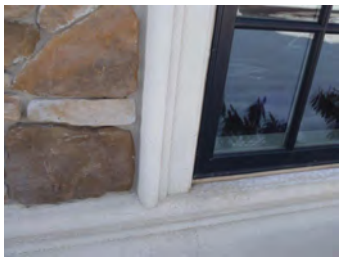
Evaluation and/or Description of Problem:
Decorative details are not properly sloped as depicted in the attached photos. Manufacturers of water-managed EIF systems require all decorative details to be sloped at a minimum 3:12 pitch. When EIFS details are improperly sloped, the system is susceptible to shelving of water, especially snow and ice in winter months, which can cause moisture intrusion and finish coat delamination.

Solution:
Repair contractor should apply a polymer-based, waterproof base coat (such as Dryvit Dryflex) over existing finish. Then apply the new finish to seal system and prevent finish coat delamination and/or caulk along tops of decorative details where detail meets EIFS wall to prevent moisture intrusion.

Stone Intersection w/EIFS

Stone Intersection w/Stucco

Stone Intersection w/EIFS Detail



Stone Intersection w/EIFS Detail

EIFS and Stucco Intersections with Stone:

Mortar joints present at EIFS and stucco intersections with stone as depicted in the attached photos. No sealant, backer rod, or bond breaker of any type present.

EIFS and stucco industry details require a minimum 1/2" - 5/8” caulk joint with a closed-cell backer rod and sealant at all stone intersections with dissimilar materials.

Solution:
Apply bond breaker tape or triangular backer rod along EIFS/stone intersections, and then apply a fillet bead of approved sealant over the bond breaker (Note: There should be enough bearing area on each adjoining surface to adhere a minimum 1/4 inch width of sealant to each surface).

Hairline Cracking in Stucco

Hairline Cracking in Stucco

Cracking:

Evaluation and/or Description of Problem:
Hairline cracking was noted as depicted in the attached photos.

Cracking can occur in stucco systems for various reasons, usually related to the absence of proper control joints.

Solution:
Cracking should be repaired using the following industry guidelines.

Small structural cracks, less than 1/32" (approximately the width of a dime) can be bridged with an elastomeric coating. General application guide is 12-14 wet mil thickness per coat. Coating should be applied up to an architectural break or to the full elevation as necessary to obtain a satisfactory aesthetic appearance.

Larger structural cracks should be repaired per stucco industry standards as follows: Embed glass fiber reinforcing mesh in acrylic base coat. Overlay cracks individually with a 4-6 inch wide strip of mesh centered over the crack. If cracks are prevalent throughout an area, treat the whole area with mesh. Overlap all mesh seams minimum 2½". Resurface up to an architectural break or resurface the full elevation as necessary to obtain a satisfactory aesthetic appearance.

Lack of Mortar Between Stone Units

Lack of Mortar Between Stone Units

Lack of Mortar Between Stone Units

Cracking Through Mortar Joints

Mortar Joints:

Evaluation and/or Description of Problem:
Several locations were observed where mortar joints have failed or there is a lack of mortar between stone masonry units. This deterioration does not appear to be the result of a system failure, but rather an original construction defect or maintenance issue. No evidence of moisture intrusion was observed as a result of the areas of failure.

Solution:
Tuck pointing should be performed according to Masonry Industry Standards. Contractor should grind out areas of failing mortar, cutting down mortar to a minimum of ½" or to solid mortar, and install new mortar joints. Care must be taken in specifying compatible replacement mortar. Contractor should attempt to match new mortar to existing for pointing and repair, and be cautious about lime content of existing mortar. Consider testing existing mortar to facilitate specifying compatible new mortar. Pointing mortar should be pre-hydrated and of low cement content.

AC disconnect improperly attached

Water meter & hose bibb improperly attached

Improper light fixture attachment

Improper light fixture attachment

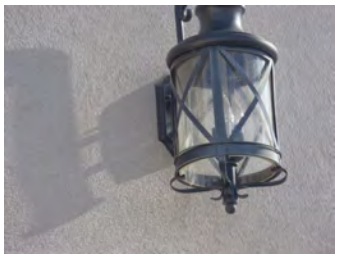
Attachments & Penetrations:

Evaluation and/or Description of Problem:
Attachments and/or penetrations are not adequately sealed as depicted in the attached photos.

All system penetrations such as light fixtures, electrical outlets, and utility conduit or utility boxes should be properly attached and/or sealed with an approved sealant regardless of the cladding, to prevent moisture penetration.

Solution:
Properly seal or re-seal all attachments and penetrations through the stone, stucco or EIFS per stone, stucco or EIFS industry standards.

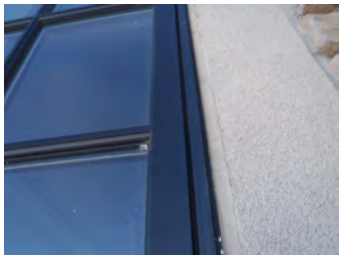
Vent penetration not sealed



Improper light fixture attachment

Photos	Remarks

Stucco and EIFS Intersections w/Window



EIFS Intersection w/Window

Stucco Intersection w/Window

EIFS and Stucco Intersections with Windows:

Evaluation:
Sealant at EIFS intersection with windows appears to be in sound condition.

Moisture probing beneath windows revealed acceptable moisture readings and firm substrate.

Conclusion:
No remedial action is required at this time.

Moisture probing beneath windows revealed acceptable moisture readings and firm substrate.

Moisture probing beneath windows revealed acceptable moisture readings and firm substrate.

Moisture probing beneath windows and above garage doors revealed acceptable moisture readings and firm substrate.

SUMMARY:

Homeowner should contact a qualified stone, stucco and EIFS repair contractor to address the deficiencies outlined herein and implement remedial recommendations.

Moisture probing in critical areas on this structure did reveal one area of high moisture (25%) and soft substrate on the front left elevation. Moisture probing at all other locations did not reveal any elevated moisture readings.

In addition to these elevated moisture readings, other conditions are present that may cause moisture problems in the future. Action should be taken now to correct these other conditions before additional moisture intrusion and/or damage occurs.

Following is a summary of the recommended repairs:

Improper Kickout Flashing

Solution:
In areas where the moisture detected exceeds 29% and/or where soft substrate is detected during probing, additional hidden damage to substrate and/or framing may exist. (See attached document "Understanding Moisture Readings" for more details.)

Remove the stucco below improper kickout location on front left elevation where moisture readings are in excess of 29% and/or the substrate is soft to allow the inspection and repair of the damaged substrate and affected structural members. (See attached document "Understanding Moisture Readings" for further detail.)

Properly install and seal new kickout flashing at all roof wall intersections per stucco and stone industry standards (see attached details).

Hairline Cracking in EIFS

Solution:
Small cracks such as these, less than 1/32” (approximately the width of a dime) can be bridged with an elastomeric coating per manufacturer’s recommendations.

All larger compression cracking should be repaired by grinding back the finish coat to the base coat; installing reinforcing mesh to bridge the crack, overlapping a minimum 2” and refinishing wall to match.

Finish Coat Delamination

Solution:
Repair contractor should identify all areas of finish coat delamination and repair, as follows.

Using a power washer, remove the existing loose finish to expose the base coat layer. Some areas of finish may be difficult to remove. These areas should be thoroughly saturated with hot water until soft, and then scrape away finish with margin trowel or similar tool. Apply a "skim coat" of base over the existing finish to smooth it out, allow the base coat to cure, and apply a new finish coat to match the existing finish.

Physical Damage to EIFS

Solution(s):
All areas of impact damage should be identified and repaired per EIFS industry recommended repair details to prevent long-term exposure of the system to outside elements.

EIFS Termination @ Grade

Solution:
At all locations where EIFS is in contact with landscaping materials, remove mulch and soil so that EIF system is at an elevation at least 4-8 inches above finish grade.

Additionally, repair contractor should inspect entire perimeter of system at grade, and properly base coat system termination where necessary.

Flat Decorative Details

Solution:
Repair contractor should apply a polymer-based, waterproof base coat (such as Dryvit Dryflex) over existing finish. Then apply the new finish to seal system and prevent finish coat delamination and/or caulk along tops of decorative details where detail meets EIFS wall to prevent moisture intrusion.

EIFS and Stucco Intersections with Stone

Solution:
Apply bond breaker tape or triangular backer rod along EIFS/stone intersections, and then apply a fillet bead of approved sealant over the bond breaker (Note: There should be enough bearing area on each adjoining surface to adhere a minimum 1/4 inch width of sealant to each surface).

Cracking in Stucco

Solution:
Cracking should be repaired using the following stucco industry guidelines.
Small structural cracks, less than 1/32" (approximately the width of a dime) can be bridged with an elastomeric coating. General application guide is 12-14 wet mil thickness per coat. Coating should be applied up to an architectural break or to the full elevation as necessary to obtain a satisfactory aesthetic appearance.

Larger structural cracks should be repaired per stucco industry standards as follows: Embed glass fiber reinforcing mesh in acrylic base coat. Overlay cracks individually with a 4-6 inch wide strip of mesh centered over the crack. If cracks are prevalent throughout an area, treat the whole area with mesh. Overlap all mesh seams minimum 2½". Resurface up to an architectural break or resurface the full elevation as necessary to obtain a satisfactory aesthetic appearance.

Mortar Joints

Solution:
Tuck pointing should be performed according to Masonry Industry Standards. Contractor should grind out areas of failing mortar, cutting down mortar to a minimum of ½" or to solid mortar, and install new mortar joints. Care must be taken in specifying compatible replacement mortar. Contractor should attempt to match new mortar to existing for pointing and repair, and be cautious about lime content of existing mortar. Consider testing existing mortar to facilitate specifying compatible new mortar. Pointing mortar should be pre-hydrated and of low cement content.

Attachments & Penetrations

Solution:
Properly seal or re-seal all attachments and penetrations through the stone, stucco or EIFS per stone, stucco or EIFS industry standards.

EIFS and Stucco Intersections with Windows

Conclusion:
No remedial action is required at this time.

This report was prepared for the exclusive use of Relocation Company and the seller's employer. This report is not intended as a substitute for a prospective purchaser of the subject property obtaining their own inspection from an independent inspector of their choice. This report is neither assignable to nor assumable by any third party and should not be relied upon by any party other than the Relocation Company and/or seller.

The scope of this inspection was limited to reasonable testing for moisture within defined protocol and relies on matters of due diligence reported by others for correctness in it's content. High moisture content can only be determined by the use of a penetrating probe meter. Any areas not probed cannot be evaluated and no judgment is intended or given for any areas not tested.

This report was not a technically exhaustive study of its subject matter and its purpose was to alert the client to major deficiencies in the condition of the property. We assume no liability or responsibility for the cost of repairing or replacing any unreported defects or deficiencies, either current or arising in the future, or for any property damage, consequential damage or bodily injury of any nature.

This inspection is based on our interpretation of the product details and the intent of these details and relies on conclusions compiled from numerous other inspections, repairs and construction practices. The findings and recommended solutions outlined in this report are based on the photo-documentation, observations and field notes submitted to Cliff Kapson Consulting, Ltd. by the field inspector. We certify that this inspection was performed by visual observation and the physical operation of our equipment and our findings are as stated above. There are no warranties expressed or implied. Additionally, we reserve the right to amend and/or supplement our findings and opinions if further information becomes available.

Field Inspector - XXXX

EDI # ST-01

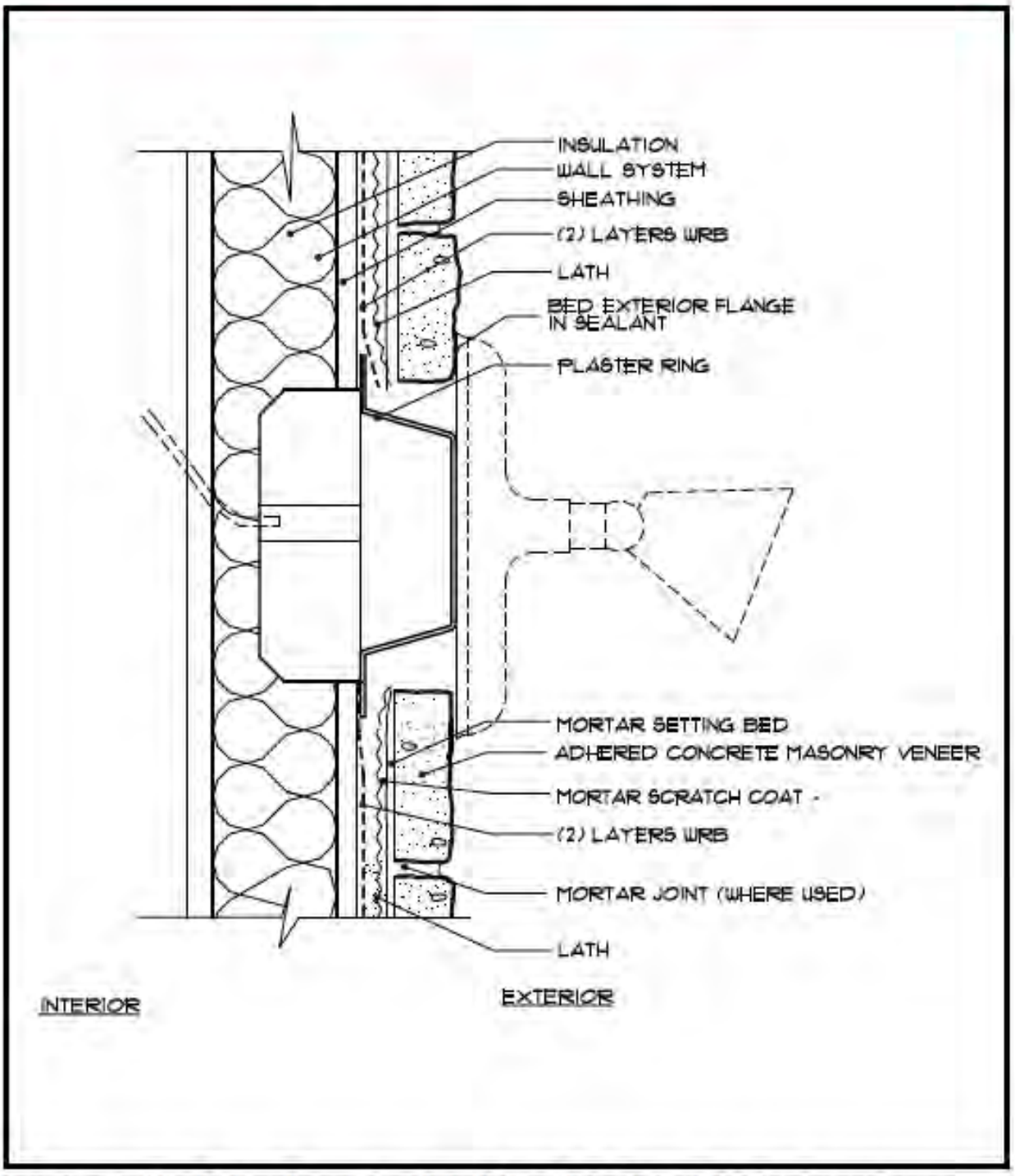
Report Date: 2/5/2015

Reviewer - Cliff Kapson
EDI # IL-42
AWCI # 1088802

Attachments:

1) Details
2) Moisture Readings
3) Inspector/Reviewer CV
4) Understanding Moisture Readings
5) Glossary

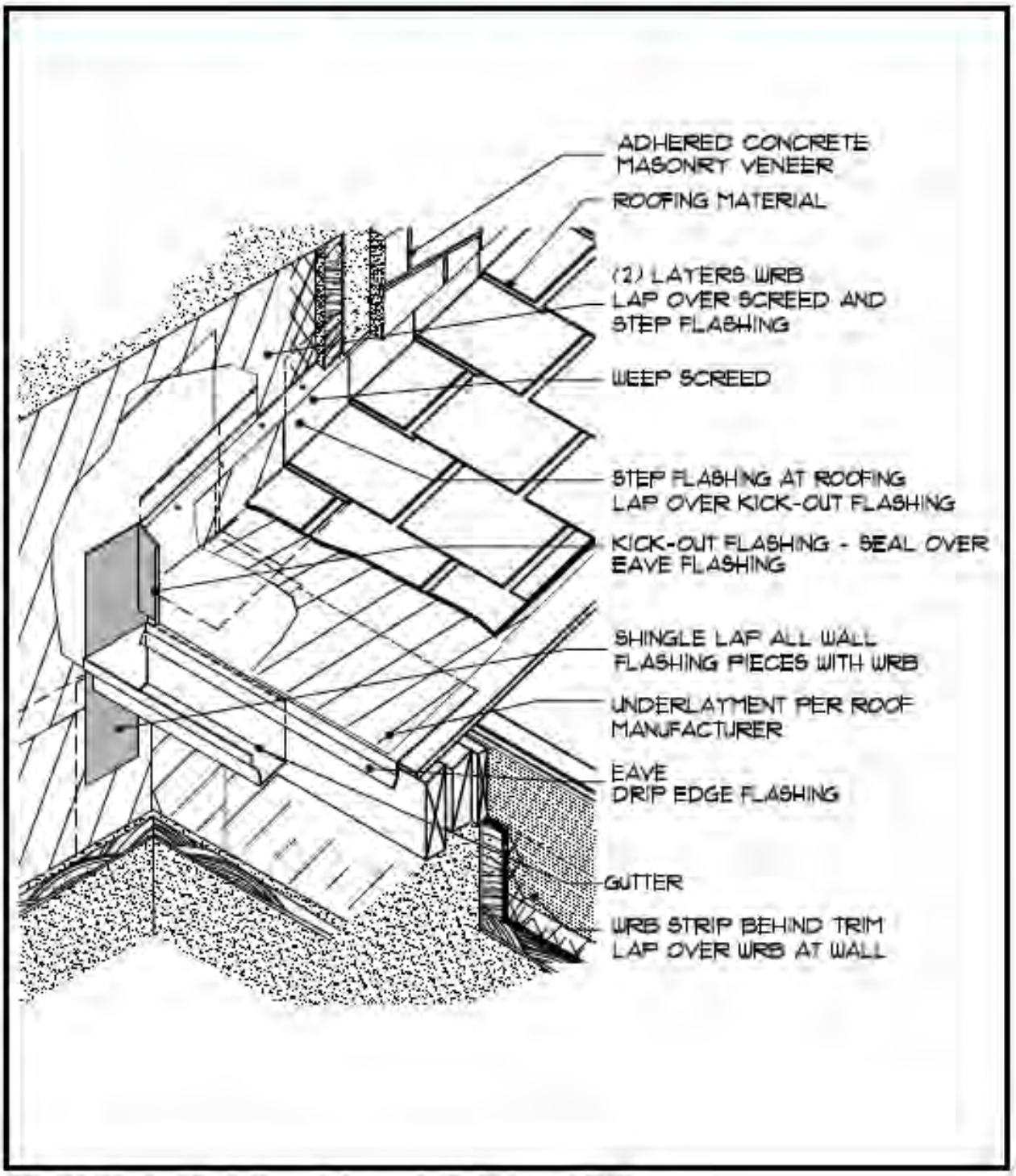
Fig. 30. Penetration, Fixture



Plaster rings should be affixed over the service box to bring the face of the box flush with the adhered concrete masonry veneer. Bed the exterior flange in sealant. Water resistive barrier should be installed snugly around the plaster ring flange.

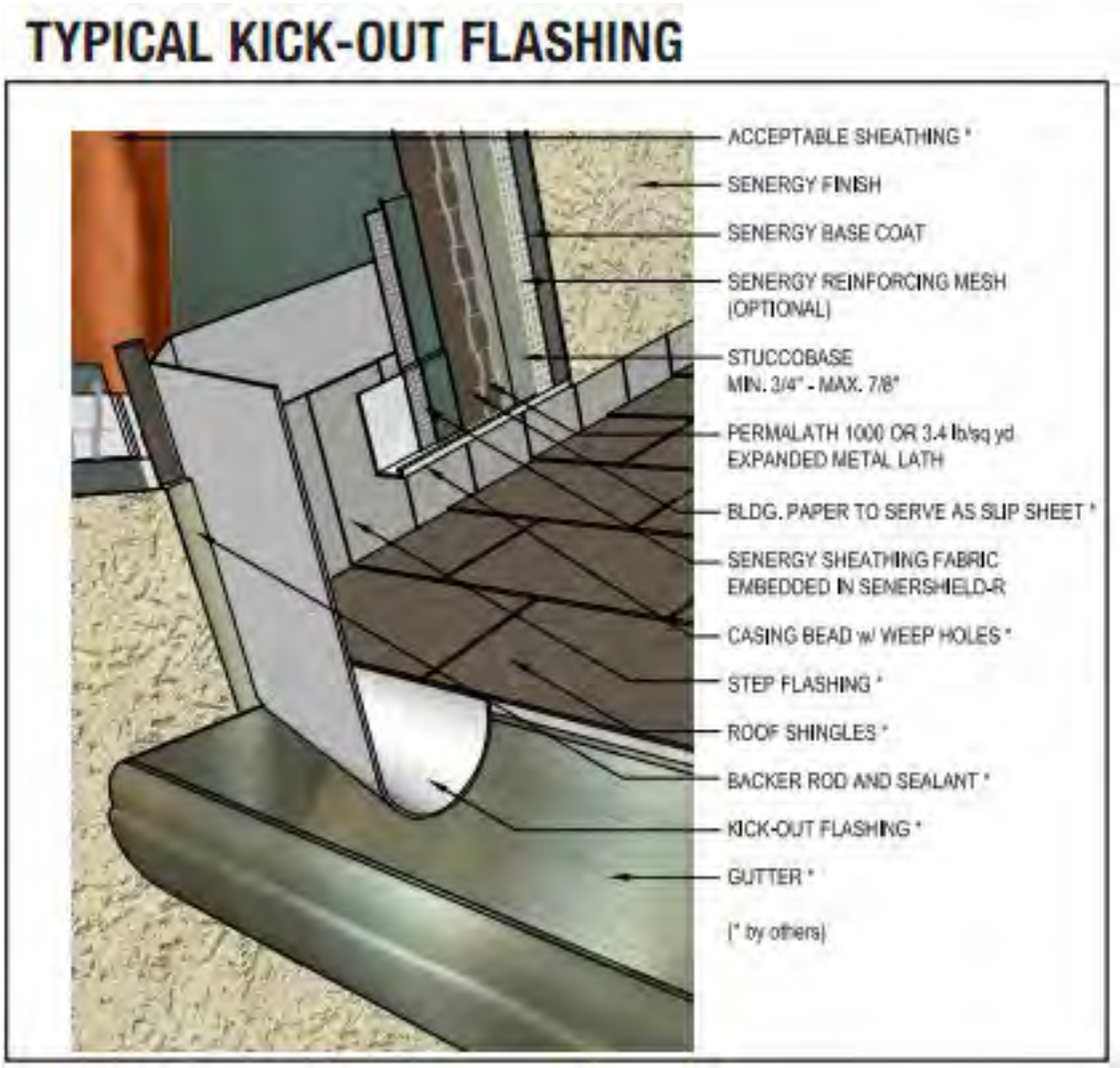
Proper Fixture Attachment

Fig. 22. Kick-Out Flashing



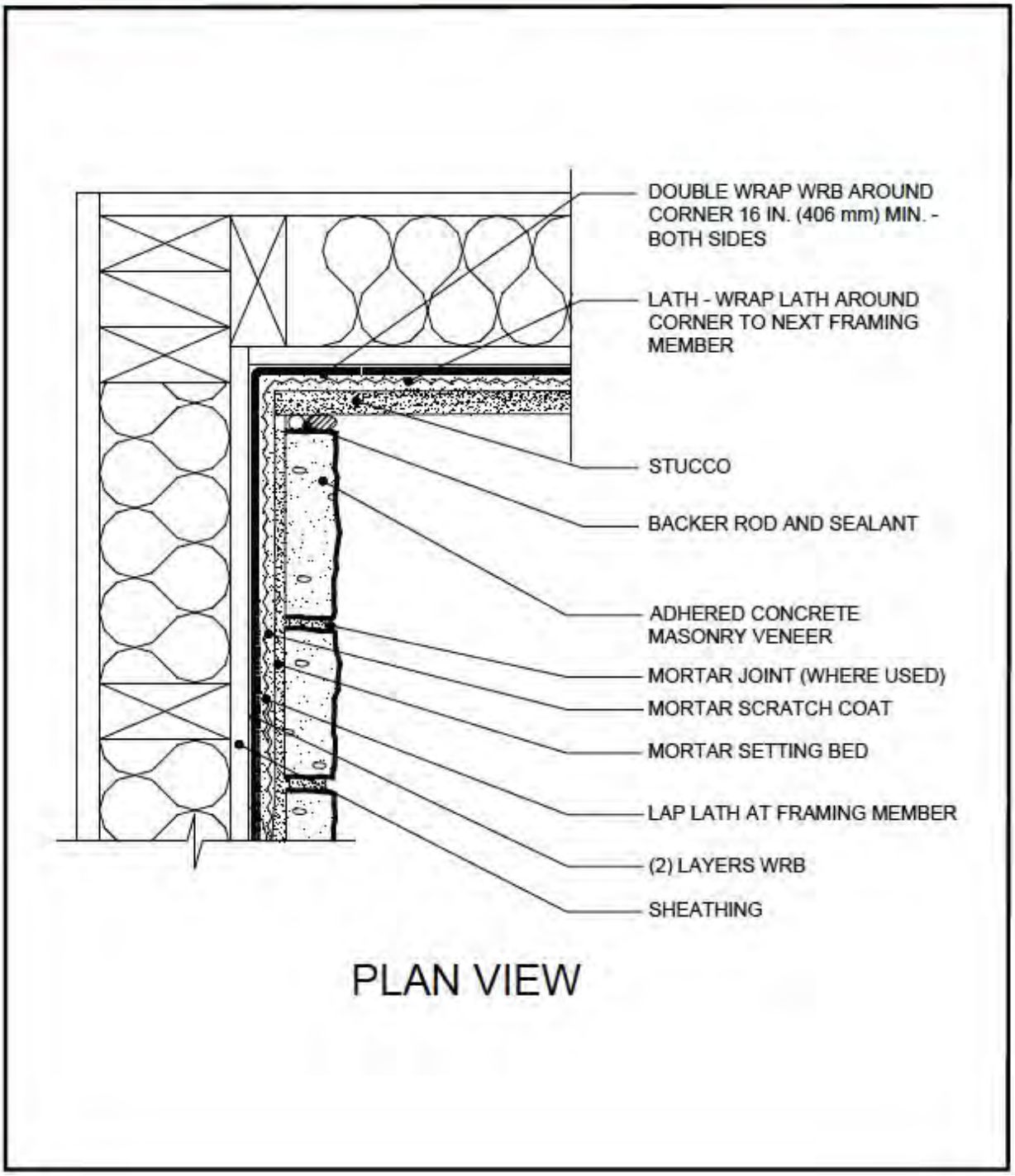
Kickout flashing should be sized properly to accommodate thickness of ACMV.

Stone Veneer - Proper Kickout Flashing Detail



Stucco - Proper Kickout Flashing Detail

Figure 49. Wall-Section Inside Corner with Stucco–Top View



Stone Intersection w/Stucco

Curriculum Vitae of
Clifford A. Kapson

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- Owner/Operator of Cliff Kapson Consulting, Ltd. (f/k/a EnviroSpec, Inc.) since 1996. A firm specializing in the evaluation and performance of various Exterior Building envelopes focusing on investigations of moisture intrusion in exterior building envelopes including Stucco, EIFS (Dryvit®), Stone Veneer, James Hardie and other claddings. As well as 3rd party inspections for new construction
- Certified third party Inspector for Moisture analysis and Building Envelopes (#IL-42) through E.D.I. (Exterior Design Institute), a nationally recognized training and certification organization
- Listed as an approved third-party inspector after successfully completing the Stucco and EIFS Inspector Training Program offered by Northwest Wall & Ceiling Bureau in Seattle, WA in September, '98 and the NWCB Inspection Maintenance and Repair Seminar in September, 2000
- Certified Third Party EIFS Inspector (Certificate #108802) through AWCI (Association of the Wall & Ceiling Industry) EIFS Education & Certificate Program.
- Completed applicator training seminars/classes (1997) by Sto Corp. in Atlanta, GA, one of the most prominent manufacturers of EIF systems
- Completed applicator training seminars/classes (1998) by Dryvit® Systems Inc. of West Warwick, RI, the largest manufacturer of EIF systems
- Participated in ASTM Symposium in Seattle, WA, (April, 1999) on Water Management in EIFS clad homes
- Certified Moisture Warranty® Inspector
- Certified Inspector for the Nationwide Dryvit® Class Action Settlement
- Presented on EIFS Design, Installation & Inspection for the New England Chapter of the American Society of Home Inspectors 7th Annual Meeting September '11, Brick Kicker's Inspection Services Annual Meeting, August '12 and Casey, O'Malley & Assoc. Conference, Las Vegas, October '12

In addition to the training and experience listed above, Mr. Kapson has performed thousands of exterior inspections for commercial building owners, homeowners, buyers, and corporate relocation entities in Georgia, Illinois, Indiana, Iowa, Kansas, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, North Dakota, North and South Carolina, Ohio, Oklahoma, Pennsylvania, Texas, Washington, DC and Wisconsin.

Mr. Kapson has also performed Independent Third-Party EIFS inspections of new residential and commercial construction projects for compliance with local code requirements in numerous Municipalities as well as Expert witness testimony for both residential and commercial clients. Clients include such prestigious names as Life Care Services, LLC, Extended Stay America, Hampton Inn, Adams Mark Hotel, Realen Homes, CORE Construction, Pepper Construction, Wohlsen Construction, Wingate Inn, Holiday Inn, Comfort Inn, Cartus Relocation, Prudential Relocation, Sirva Relocation, Toll Brothers Builders, Rush Copley Medical Center, United Parcel Service (UPS) and The International Monetary Fund.

CV of Inspector

Cliff Kapson Consulting, Ltd

Understanding Moisture Readings

The Cliff Kapson Consulting, Ltd inspection protocol requires that the entire EIF system is inspected visually, as well as with the use of an electronic impedance meter (Tramex Wet Wall Detector). The Electronic impedance meter is used in a grid fashion to identify areas necessary for testing with deep wall probes. High moisture content can only be determined by the use of a penetrating probe meter. Any areas not probed cannot be evaluated.

Additionally, the protocol requires that the entire Stone or Stucco systems be inspected visually. However, because of the nature of the components utilized in Stone or Hard-Coat Stucco Systems, such as metal lath and Portland cement, the Tramex Wet Wall Detector (surface scanner), which is commonly used to detect moisture behind Exterior Insulation & Finish Systems, cannot be effectively utilized; therefore detection of moisture intrusion can only be conducted through the use of a penetrating probe meter.

In most cases moisture readings are recorded in wood scale as determined by the substrate material being tested. If it is determined that the substrate is a product other than wood-based moisture testing will be adjusted accordingly. Wood scale moisture readings may vary slightly based on regional considerations and which moisture meter is being utilized and should be should be interpreted as follows:

In all areas where moisture readings are in excess of 29% consideration should be given to the removal of the EIFS, Stone or Stucco System to allow the assessment and repair of the damaged substrate and affected structural members.

Wood Scale

In all areas where moisture readings are in excess of 29% consideration should be given to the removal of the EIF System to allow the assessment and repair of the damaged substrate and affected structural members.

Experience data has shown that when moisture levels are above 29%, there is frequently damaged substrate, if not at the exact probe location, in the adjacent sheathing and/or framing. It is believed that most damage can be repaired, and proper remediation with ongoing maintenance should prevent future moisture intrusion. Upon completion of said repairs, a new water-managed EIF System, or other cladding should be installed.

Occasionally moisture readings will indicate "acceptable" levels, however, upon probing; the substrate is soft or will offer little or no resistance. This may be an indication of "dry rot", a condition that can occur when wood is exposed to excessive moisture over an extended period of time and the wood fibers have decayed to the point that the wood can no longer hold moisture. When this condition is discovered the EIF System should be removed to allow the inspection and repair of the damaged substrate and affected structural members.

In areas of the system where moisture readings are between 21% and 29% and probing has indicated that the substrate was in sound condition, although some moisture penetration has occurred, it is believed that through proper remediation, containment and isolation of points of moisture entry, would allow the previous effects of moisture to dry, producing no negative impact to the structure.

Areas of the system where moisture readings are below 21% or where readings are not recorded should be considered to be acceptable

Gypsum Scale

In areas of the structure where probing has indicated that the substrate is soft and moisture readings are in excess of 2.5% on the gypsum scale, the EIF System should be removed to allow the assessment and repair of the damaged substrate and affected structural members. It is believed that most damage can be repaired, and proper remediation with ongoing maintenance should prevent future moisture intrusion. Upon completion of said repairs, a new barrier EIF system, water-managed EIF System, or other cladding should be installed.

At all locations where damaged gypsum board sheathing and/or framing members are discovered, sheathing should be replaced with Georgia-Pacific DensGlass Gold® Exterior Sheathing.

In areas of the structure where moisture readings are between 1.5% and 2.5% on the gypsum scale, some moisture penetration has occurred. However, it is believed that containment and isolation of moisture entry through remediation, particularly at windows, would allow the previous effects of moisture to dry, producing no negative impact to the structure.

Areas of the structure where moisture readings are below 1.5% on the gypsum scale are considered to be "acceptable".

Glossary

Adhesive	A material used to attach the insulation board to the substrate.
Aesthetic Joint or Groove	A groove cut into EPS board for appearance purposes. It also may provide a place for the applicator to stop and start the application process.
Applicator	An independent contractor who installs EIF systems. They are instructed and sometimes certified by specific EIFS manufacturers in the proper handling and use of their products.
ASTM	American Society for Testing and Materials. An independent organization that is involved with setting standards and practices for all materials, including those used in EIFS. ASTM standards have recently been developed specifically for EIFS construction.
Backer Rod	Closed cell, flexible, polyethylene foam rod. It is sized for specific joint widths and is inserted into a joint cavity to a specific depth from the face of the joint. The rod limits the depth of the sealant joint, helps produce an hourglass sealant shape that helps to distribute stresses in the sealant, and prevent three-sided adhesion of the sealant.
Back Wrapping	The practice of attaching a strip of reinforcing mesh to the wall substrate, adhesively attaching EPS insulation board to the substrate, then wrapping the mesh around to the face of the EPS board and embedding it in the base coat. When the base coat is applied in this manner and totally encapsulates the system, the system is resistant to water penetration.
Base Coat	A material applied to the face of the insulation board that functions as the weather barrier.
Class PB System	A class of EIFS applied over various types of insulation board where the base coat varies in thickness depending on the number of layers, or thickness, of reinforcing fiberglass mesh which is embedded into the base coat per EIFS manufacturer's recommendations and with no mesh color visible. Protective finish coats of various thicknesses, in a variety of textures and colors are then applied over the base coat.

Class PM System	A class of EIFS where the base coat is applied to a uniform thickness, which can range from a nominal 1/4 inch to 3/8 inch. The base coat thickness is not dependant upon the number of layers or thickness of reinforcing mesh. The reinforcing mesh is installed over the surface of the insulation board. The base coat is applied over the reinforcing mesh.
Deflection	The amount of movement in a wall as a result of the loads applied to it.
EIFS	Exterior Insulation and Finish System
EPS	Expanded Polystyrene. Type I Rigid EPS insulation board is typically used in Class PB EIFS. Thickness ranges from 3/4 inch to 4 inches. EPS is also used for decorative detailing on stucco installations.
Expansion Joints	Gaps that extend through the entire depth of the EIFS or stucco and allow movement of the wall system without damage to the EIFS or stucco. They are usually coincidental with expansion joints in the substrate and are sealed with the proper sealant to prevent water intrusion into or behind the system.
Finish	A decorative and protective textured coating applied over the base coat.
Flashing	Metal or plastic accessories used to restrict the seepage of moisture around any intersection or projection of materials in an assembly. They are used at parapet tops, window and door heads, windowsills and the like.
Insulation Board	A preformed insulating material of a specific type and density that functions to reduce heat flow through the wall. Additionally, the insulation provides the surface to receive the base coat.
Isolation Joint	A joint provided around penetrations through the exterior cladding system such as window and door openings, scuppers, etc. It may or may not incorporate flashings and is sealed with the appropriate backer rod and sealant.
Kickout Flashing	A diverter flashing that is installed as the first piece of flashing at the end of the roof where it intersects the wall. Intended to prevent channeling of moisture behind system at roof/wall or roof/chimney intersections.

Lamina	The combinations of the base coat, embedded mesh and finish coat. The lamina provides strength and resistance to damage and gives the system its appearance, durability and resistance to water penetration.
Mechanical Fasteners	A device used to attach the insulation boards to the substrate.
Primer	A material that may be used to prepare surfaces prior to the application of another system component.
Reinforcing Mesh	Balanced, open weave fabric, treated for compatibility with other materials of the system, which functions to strengthen the system.
Sealant (also referred to as caulk)	A specially designed sealant used with backer rod to fill joints and make them waterproof. The sealant used must be flexible enough to expand and contract with the wall system while maintaining its bond to both sides of the sealant joint.
Substrate or Sheathing	The surface to which a cladding is attached.
Terminations	Any place a wall system ends. Terminations can be window or door openings, the bottom or top of a wall or both sides of an expansion joint. In any case, all terminations must be totally encapsulated with base coat and mesh and a sealant or flashing with appropriate backer rod installed to prevent water infiltration.
Adhered Concrete Masonry Veneer (ACMV)	Masonry veneer, secured to and supported through adhesion to an approved backing, which is typically a wood-framed structure, with a plywood or OSB sheathing. It should be noted that "Natural Stone" can also be applied adhesively, if cut dimensionally (less than 2.5 inches thick) to meet the necessary load requirements.
Anchored Masonry Veneer	Masonry veneer, secured to and supported laterally by the backing through anchors and supported vertically by the foundation or other structural element. This type of Stone is also referred to as "Real Stone", or "Full Dimensional Stone" and is typically a "Natural" or "Quarried" stone product.
Anchor	A corrosion resistant metal fastener used for securing dimension stone to a structure or adjacent stone units.
Angle Iron	A structural steel angle; used for lintels to support masonry over openings, such as doors and windows.

Bond Breaker	Normally in tape form. Used to ensure adhesion on both sides of the joint in joints of limited depth, and where a backer rod or other joint filler is not practical.
Cast Stone	(See Manufactured Stone Veneer)
CMU	Concrete masonry unit
Drystack	Stone masonry technique of fitting and trimming to construct free-standing walls, veneer walls, or structural walls, with little or no mortar showing.
Efflorescence	A deposit or encrustation of soluble salts, generally a white staining that may form on the surface of stone, brick, concrete or mortar when moisture moves through and evaporates from the masonry.
Fascia	Any flat horizontal member, generally between moldings, most frequently used when referring to elements of a classical architecture cornice, adjacent to roof/soffit.
Gable	The exterior triangular section of a wall extending upward from the level of the eaves to the apex. Also, a member resembling the triangular end of a roof.
House Wrap	(See Weather Resistive Barrier)
Lintel	A horizontal beam or stone over the opening of a door or window that carries the weight of the wall above it. Lintels are a required component of full dimension stone installations, and are usually not present in adhered or thin veneer installations.
Manufactured Stone Veneer (MSV)	Also known as "Cast Stone". A precast concrete building stone manufactured to simulate dimension stone.
Metal Lath	A thin sheet of metal nailed to rafters, joists, sheathing or studding as a groundwork for stucco or masonry application.
Mortar	A workable paste mixture of cementitious material, water, and aggregate used to bond masonry construction materials together and fill spaces between.

Natural Stone	A product of nature. A stone such as granite, marble, limestone, slate, travertine, or sandstone that is formed by nature, and is not artificial or man-made.
Non-Load Bearing Wall	A wall that supports no load other than its own weight.
Quarried Stone	A natural stone which has been extracted from the earth by means of man power and machines.
Wainscot	A veneer of stone or other finish that only covers the lower portion of an exterior or interior wall.
Weather Resistive Barrier (WRB, House Wrap, Building Paper)	Also referred to as "House Wrap" or "Building Paper". Material used to restrict the transmission of moisture to the surface behind.
Weep Holes	Opening placed in mortar joints of facing material at the level of flashing to permit the escape of moisture.
Weep Screed	A building accessory, usually made of galvanized steel or thermoplastic material, installed along the base of an exterior stone or stucco wall. Most commonly on roofs and above grade, the weep screed allows incidental moisture to escape. Generally, stone or stucco industry guidelines and/or local building codes specify where these screeds should be placed in relation to the ground or roof to ensure sufficient drainage.