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GENERAL INFORMATION

This section provides general information which must be read and considered in order to understand the report. The report format incorporates the information provided in each section. The information explains the limits of a visual inspection. It explains the limits created by the houses themselves.

There is no such thing as a perfect house. All houses have things that are in some stage of disrepair or failure. There are houses that meet the needs and desires of people who choose to live in them. To some a house may be considered their "perfect" home.

No two houses are alike, even though they may look alike. They were put together by different people, on different days, under differing weather conditions, using different materials and are located on different pieces of land. Existing houses have been subjected to different degrees of wear and tear and maintenance.

There can be no single form which will adequately report what is observed in every house. The variables are too many. This report has been designed to be flexible. In some areas the inspector will check items, in other areas the inspector will write in comments.

The format is computerized.

DEFINITIONS: Some words that will be used must be explained. They are explained in this section.

NO ACCESS: This is an entire concept and indicates the inspector was not able to enter into a space or area and therefor was not able to inspect or report on any conditions therein. If the CUSTOMER wishes to know about conditions in the area of no access, then access should be arranged. To create access may involve cutting holes in walls, floor, ceilings or foundations or it may just involve moving something which blocks an opening. Inspectors do not move stored items, as to so do could damage something or injure the inspector. Sometimes an inspector will not find a hidden opening. Often times, when a buyer moves into a home a previously hidden access will be readily accessible, because something has been removed. In such a case, the inspector would have reported no access.

AGE: indicates a general indication of the age of a component, usually in relationship to its life expectancy. It is not possible for an inspector to know the actual age of a component. Sometimes a manufacture date can be obtained from a tag, but that does not say how long the component stayed in the box before it was used.

LOCATION: indicates the general whereabouts where the item was observed. The item may exist in other locations, but not be observed during the inspection. This often happens, especially with some smaller items.

NONE NOTED: indicates the item was not observed during the inspection. The item may exist and not be found. The item may not exist. The item may be hidden from view, often times coming into view when contents of the house are moved. Typically, "None Noted" is used after looking for something and not finding it.

NOTED: indicates "something" was observed.

LIMITS OF VISUAL INSPECTION: Simply put, the inspector will look, feel, smell listen and sense things in and around the home. The inspection will be a visual inspection. Home Inspectors do not perform invasive procedures. Home Inspectors can not see inside of walls or through or past things which block the view. Home Inspectors do not have super human powers. Their inspections is limited to viewing those things that are in view. They can not be expected to see or report on things which are not readily visible.

ESTABLISHED STANDARDS OF PRACTICE

The Home Inspection profession is still young, growing profession with several different groups establishing Standards of Practice. Some of these groups are: American Society of Home Inspectors, Inc. (ASHI), the oldest group; National Association of Home Inspectors, Inc. (NAHI); Society of Professional Real Estate Inspectors (SPREI).

STANDARD OF CARE

The Standard of Care for the Home Inspection Profession is provided to establish a standard by which Home Inspectors should operate their business and by which they may be measured.

ACKNOWLEDGMENT

Acknowledgment is given to Home Inspection Institute of America, Inc., American Society of Home Inspectors, Inc., the National Association of Home Inspectors, Inc. the North Carolina Home Inspector Licensure Board, the Oregon Construction Contractors Board, the Society of Professional Real Estate Inspectors, the South Carolina Residential Builders Commission and other home inspector groups and organizations for their precursors to the standard of care. The Standard of Care for the HOME Inspection Profession is provided in the public domain and, provided it is copied and used in its full context, may be copied and used by people without concern of copyright violation.

Copies are available from the home Inspection Institute of America, Inc., 314 Main Street, P.O. Box 4174, Yalesville, CT 06492 phone: 203-284-2311, fax 203-284-0288, email: homeinspi@worldnet.att.net, web site: or the "COMPANY".

"ERC" AND / OR "EDI" PROTOCOL REPORT

Property Inspection Service, Inc.

P. O. Box 23581
Hilton Head Island, SC 29925

1-843-681-8047 ph/fax

INSPECTOR:

ADAM MCCLUSKY, PRESIDENT

S. C. R. C. license # 627

HOME INSPECTION INSTITUTE OF AMERICA, INC. certification # 981226.1

EXTERIOR DESIGN INSTITUTE certification # edisc36.

REPORT DATE:

March 25, 2002.

"ERC" AND OR "EDI" PROTOCOL TESTING AND REPORTING FOR MOISTURE INTRUSION

JOB # ORDER PER CUSTOMER

REFER TO THE BOTTOM LEFT CORNER OF THIS REPORT.

INSPECTION PROPERTY MAILING ADDRESS

ADDRESS.

CLIENT:

CLIENT NAME.

CLIENT MAILING ADDRESS:

CURRENT MAILING ADDRESS.

CITY/STTATE/ZIP

CITY, STATE, ZIP.

PHONE NUMBERS:

000-000-1111 HOME.

YEAR BUILT - AS REPORTED

1996 / 97 AS REPORTED BY OWNER.

INSPECTION DATE:

March 25, 2002.

INSPECTION ATTENDEES:

INSPECTOR

HOME OWNER.

RECENT WEATHER CONDITIONS EFFECTING THE INSPECTION

LAST RAIN EVENT OCCURRED 3-21-02.

WEATHER CONDITION(S) AT START OF INSPECTION

SUNNY, CLEAR.

APPROXIMATE OUTSIDE TEMPERATURE DURING THE INSPECTION

AT START - DEGREES FAHRENHEIT 66.0, HUMIDITY - RELATIVE % 86.9

AT ENDING - DEGREES FAHRENHEIT 76.4, HUMIDITY - RELATIVE % 63.0.

APPROXIMATE INSPECTION START TIME

START 8:04 AM, STOP TIME 3:04 PM.

FRONT DOOR FACES:

SOUTHEAST 140 DEGREES +/-

TYPE OF BUILDING DESIGN

RAISED CONTEMPORARY, WITH CRAWL SPACE.

NUMBER OF STORIES

1 AND 1/2 BONUS ROOM OVER GARAGE.

FOUNDATION TYPE

RAISED, MASONRY BLOCK TYPE WITH COLUMNS.

APPARENT MODIFICATION TO ORIGINAL DESIGN

NONE NOTED.

GENERAL NOTES:

NOTE(S):

ALTERNATIVE INSPECTIONS OR MORE SPECIFIC DATA COLLECTION(S) MAYBE RECOMMENDED FROM TIME TO TIME WITH RESPECT TO OBSERVED "REDFLAG" ISSUES. OBSERVED AND / OR SENSORY EVIDENCE MAY TRIGGER AN INSPECTORS GENERAL DEFECT LISTING AND THE INSPECTOR MAY RECOMMEND OTHER DISCLOSER WITH REGARD TO ISSUE(S) SITED. RESPECTIVE AGREEMENT ADDENDUM'S MAYBE REQUIRED.

FURTHER EVALUATION(S) MAYBE RECOMMENDED TO MORE KNOWLEDGEABLE PROFESSIONAL(S) AND/OR THEIR EQUIPMENT CAPABILITIES WHICH PROVIDE REQUISITE SKILLS AND/OR CERTIFICATIONS TO PROVIDE CAPABILITIES ABOVE THE GENERAL INSPECTORS. CHANGED PROBES TO NEW SET AT START OF INSPECTION, USED DOW CORNING 790 / 795 SERIES SEALANT TO CHARGE PROBED HOLES AFTER PROBING. **REMINDER / ADVISORY: MAINTAIN IN FUTURE.**

REPAIR FOLLOW UP AND ANNUAL INSPECTIONS:

IF REMEDIAL REPAIRS ARE CONDUCTED **A THIRD PARTY INSPECTION COMPANY SHOULD *MONITOR* AND DOCUMENT REPAIRS** FOR FUTURE REFERENCE. A REPAIR FOLLOW UP INSPECTION SHOULD BE CONDUCTED WITHIN THREE MONTHS AFTER COMPLETION OF THE REPAIRS TO ASSESS THE EFFECTIVENESS OF THE MODIFICATIONS.

ANNUAL INSPECTIONS SHOULD BE SCHEDULED. TESTING AND MAINTAINING THE HOME ON A REGULAR BASIS IS THE BEST WAY TO PREVENT MAJOR COSTLY REPAIRS ASSOCIATED WITH SYNTHETIC STUCCO CLADDING SYSTEM FAILURES.

IF IN THE EVENT THE HOME IS SOLD, ANNUAL INSPECTIONS AND MAINTENANCE DOCUMENTATION COULD BE A VALUABLE TOOL. PROVIDING THIRD PARTY EVIDENCE SHOWS THAT THE HOME WAS INSPECTED ON A REGULAR BASIS BY A QUALIFIED FIRM.

BACKGROUND AND DATA REQUEST

SYSTEM COMPONENTS - OVERVIEW

AN "EIFS" SYSTEM IS THE RESULT OF THE ASSEMBLY OF VARIOUS COMPONENTS, CAREFULLY CHOSEN FOR THEIR INDIVIDUAL PERFORMANCE AS WELL AS THEIR COMPATIBILITY WITH EACH OTHER. EACH COMPONENT HAS A FUNCTION FOR THE OVERALL PERFORMANCE, DURABILITY AND APPEARANCE.

ATTACHMENT - TO ANCHOR THE SYSTEM, ADHESIVES ARE OFTEN USED. MECHANICAL FASTENERS ARE PARTICULARLY RECOMMENDED WHEN THE SUBSTRATE TYPE OR CONDITION PREVENTS ADHESION OR THE ADHESION IS IN QUESTION. ATTACHMENTS ARE DESIGNED TO RESIST WIND LOAD, GRAVITY AND THE EFFECTS OF THERMAL MOVEMENT.

INSULATION BOARDS - BUILDING BLOCKS OF AN "EIFS" SYSTEM, ONE MAJOR CONTRIBUTION IS ENERGY EFFICIENCY. THE SYSTEM IS DESIGNED TO CREATE AN ENVELOPE OF EXTERIOR INSULATION THAT REDUCES THERMAL BRIDGING AND ALLOWS FOR EXPANSION AND CONTRACTION WHILE MAINTAINING INTEGRITY OF THE FINISH.

BASE COAT - CREATE THE BARRIER AGAINST WEATHER AND STRENGTHENS THE LAMINA AGAINST IMPACT AND THERMAL MOVEMENT.

REINFORCEMENT MESH - MESH IS REQUIRED ON ALL "EIFS" SYSTEMS. THIS IS THE INTERNAL REINFORCEMENT FOR IMPACT RESISTANCE AND TENSILE STRENGTH.

PRIMER - PROMOTES ADHESION AND REDUCES THE CHANCE OF EFFLORESCENCE IN CEMENTITIOUS BASE COATS. IMPROVES AND STABILIZES THE COLOR AND APPEARANCE OF THE FINISH.

FINISH - A DECORATIVE TEXTURED FINISH IS APPLIED OVER THE BASE COAT. INTEGRALLY COLORED AND FORMULATED TO RESIST THE ELEMENTS.

RESPECTIVELY, REFER TO THE MANUFACTURER'S SPECIFICATION.

TESTING EQUIPMENT

TRAMEX WET - DEEP WALL SENSOR - NONDESTRUCTIVE SCANNING CAPACITANCE TYPE METER, DELMHORST MODEL BD-9 OR BD-2100, DESTRUCTIVE PIN PROBE RESISTANCE TYPE METER

DELMHORST USES THE USDA STANDARD - DOUGLAS FIR - AS THE BASIS FOR ALL CALIBRATIONS. BECAUSE THE ELECTRICAL CHARACTERISTICS OF DIFFERENT SPECIES VARY, SOME SPECIES MAY READ DIFFERENTLY AT THE SAME MOISTURE CONTENT. HOWEVER, IN MOST CASES, THE DOUGLAS FIR READING CAN BE FACE VALUE ON CONSTRUCTION-GRADE LUMBER.

AN CONCERNS CONTACT DELMHORST AT 800-222-0638 OR E-MAIL @ info@DELMHORST.com, THE TEST EQUIPMENT IS USED TO HELP LOCATE PROBLEM AREAS. IT MUST BE UNDERSTOOD THAT THE TEST EQUIPMENT IS NOT AN EXACT SCIENCE BUT RATHER GOOD TOOLS USED AS INDICATORS OF POSSIBLE PROBLEMS. AT TIMES, BECAUSE OF HIDDEN CONSTRUCTION WITHIN THE WALL CAVITY, THE METERS GET FALSE READINGS OR NO READINGS AT ALL. SOME METERS WILL PICK UP ON METALS, WIRING, UNIQUE WALL FINISHES, CONDUCTOR TYPES, ETC. (FALSE POSITIVES) POSITIVE READINGS DO NOT ALWAYS MEAN THERE IS A PROBLEM, NOR DO NEGATIVE READINGS NECESSARILY MEAN THERE IS NOT A PROBLEM. THE EQUIPMENT IS NOT USED TO OBTAIN EXACT MOISTURE CONTENT, BUT RATHER TO OBTAIN RELATIVE TEST RESULTS BETWEEN SUSPECTED PROBLEM AREAS AND NON PROBLEM AREAS. THE GATHERED INFORMATION IS THEN USED TO HELP DETERMINE PROBLEMS AREAS WHICH MAY WARRANT MORE INVESTIGATION. SOMETIMES INVASIVE CORE SAMPLING COULD BE RECOMMENDED.

Refer to all material distributed:

Moisture scanner devices (as informed) provide a useful tool to locate general areas of moisture in walls. The device provides relative indication of moisture and is not designed to quantify moisture percentages. The device can frequently give false positive indications of moisture being present and depending on the wall detail, it can also give false negative indications of no elevated moisture when moisture is present.

Follow-up any high moisture indications by a scanner with a probe meter to get an accurate moisture level (at the site) and to get a physical feel for the condition of the substrate. Is it soft or firm? Core sample may be ordered and/or recommended for a particular site. One core sample method is a hand auger screwed into the substrate to determine the condition of the substrate.

Scanning Calibration Techniques: One way of dealing with calibration is to place the scanner on the (random) surface at the least likely site to have moisture behind it. Calibrate the scanner by turning the sensitivity up until the relative reading on the scale is between 15 and 25 (double band) and between 3 and 6 (single 1" type wall area). This number now becomes the acclimated moisture reading in the respective areas (double band or single 1" type wall area). Inspection is conducted in the respective areas per calibration setting. The selected point becomes the base point of reference.

ie: Tramex Meter reported indications (double band) of 80 and above indicate high moisture content. A 80 reading and above reports about

25% moisture content per meter manufacturer. (above 25% moisture supports decay per the meter manufacturers instruction data)
However, any high scanning should be followed up with a probed moisture test and/or core sample. (note: mechanical type fasteners may affect readings)

During the inspection the scanner will be calibrated on single layer (yellow level setting - single) and thicker layer (red level - double). Re-calibration checks are conducted throughout the inspection period.

PREVIOUS OWNER:

UNKNOWN.

ARCHITECT:

UNKNOWN.

BUILDER/GENERAL CONTRACTOR

NOT RESEARCHED AT THIS TIME.

"EIFS" MANUFACTURE:

BE ADVISED NAME(S) AND ADDRESS MAY HAVE CHANGED - INSPECTION COMPANY DOES NOT RESPONSIBLE FOR UPDATES.

NOTED VIOLET MESH AND PAIL AT SITE BELIEVED TO BE "UNIVERSAL POLYMERS OR EXCELL MANUFACTURER"

SYSTEM TYPE APPEARS TO BE OR WAS REPORTED AS:

CONSULT MANUFACTURER SPECIFICATIONS AND DETAILS FOR ACTUAL SYSTEM DESIGN. ORIGINAL AS BUILT ARCHITECTURAL PLANS (IF AVAILABLE) WOULD BE ANOTHER ALTERNATIVE SOURCE FOR DETERMINING SYSTEM OVERVIEW.

"EIMA" OFFERS THE FOLLOWING DEFINITION OF "EIFS".

DESCRIPTION:

1. INSULATION BOARD
2. AN ADHESIVE AND/OR MECHANICAL ATTACHMENT OF THE INSULATION BOARD TO A SUBSTRATE.
3. GLASS FIBER REINFORCING MESH.
4. BASE COAT ON THE FACE OF THE INSULATION BOARD THAT FUNCTIONS AS THE WEATHER BARRIER.
5. A TEXTURED PROTECTIVE FINISH COAT.

"EIFS" COMPONENTS FUNCTION COLLECTIVELY TO PROVIDE WEATHER PROTECTION, DURABILITY AND AESTHETIC VERSATILITY. "EIFS" MANUFACTURED BY "EIMA" MEMBERS MEET INDUSTRY PERFORMANCE STANDARDS AND ARE RECOGNIZED BY MAJOR MODEL BUILDING CODES.

PB

THE BASE COAT THICKNESS VARIES DEPENDING UPON THE NUMBER OF LAYERS OR THICKNESS OF REINFORCING MESH. THE REINFORCING MESH IS EMBEDDED INTO THE BASE COAT PER "EIFS" MANUFACTURER RECOMMENDATIONS AND WITH NO MESH COLOR VISIBLE.

PROTECTIVE FINISH COATS, OF VARIOUS THICKNESS, IN A VARIETY OF TEXTURES AND COLORS, ARE APPLIED OVER THE BASE COAT.

"EIMA" PUBLISHES GUIDELINE SPECIFICATIONS FOR CLASS PM SYSTEMS AND OTHER TECHNICAL DOCUMENTS. CONTACT "EIMA" FOR A COMPLETE LISTING OF PUBLICATIONS.

FOAM TYPE APPEARS TO BE OR WAS REPORTED AS:

(EPS) EXPANDED POLYSTYRENE

GENERAL OVERVIEW:

ONE POUND PER CUBIC FOOT EXPANDED POLYSTYRENE:

- MANUFACTURED FROM VIRGIN BEADS (GRANULES ABOUT THE SIZE OF GRAINS OF SUGAR)
- AGED OR CURED TO REMOVE ALL MOISTURE PRIOR TO CUTTING, 6 WEEKS AIR DRIED OR 5 DAYS IN KILN
- +/- 1/16 INCH IN THICKNESS
- +/- 1/16 INCH SQUARE (MEASURE DIAGONALS TO VERIFY)
- MAXIMUM SIZE, 2' X 4' RECTANGLE
- MAXIMUM THICKNESS - 4"
- MINIMUM THICKNESS - 3/4"

APPLICATOR:

NOT RESEARCHED AT THIS TIME.

WINDOW MANUFATURER:

NOTED "MALTA 335" STAMPED INSIDE ONE WINDOW FRAME.

WINDOW TYPE:

FIXED AND CASEMENT APPEAR TO BE METAL FRAME.

DOOR MANUFACTURER:

BELIEVED TO BE "ANDERSEN" SLIDERS AT REAR DECK AREA - NOTED MARKINGS.

SHEATHING

UNKNOWN - MOSTLY CONCEALED - CONCEALED FROM IDENTIFICATION.

OVERHANG:

VARIOUS FROM 24 INCHES +/- TO MINIMAL.

ESTIMATED ROOF ANGLE

ANGLE OR RISE - ABOUT 30 DEGREES.

ESTIMATED SQUARE FOOTAGE

NOT DETERMINED AT THIS TIME.

PEST CONTROL NOTICE

.

PEST INSPECTION IS NOT PART OF THIS INSPECTION. THE INSPECTOR DID NOT INSPECT FOR INFESTATION(S).

Analysis: **A TERMITE OR WOOD BORING INFESTATION REPORT IS EXCLUDED FROM THIS REPORT PER CONTRACT.** Wood boring insects tend to favor conditions in which untreated wood is in soil contact or close proximity to the soil along with a source of moisture. Be advised that chemical treatment and carpentry repairs can quickly represent major expenses and that inspection by a pest control company or exploratory demolition to determine the true extent of needed repair may reveal areas of decay not documented in this report. The true extent of decay is undetermined due to obstructions, wall coverings etc.

Recommendation: Ask the owner about the past history of the home and **HIRE A LICENSED PEST CONTROL INSPECTOR TO EXAMINE THE ENTIRE PROPERTY.** If any chemical treatment or repairs are needed, the facts should be determined prior to commitment.

OTHER NOTICES:

REFER TO:

"EIMA" EIFS INDUSTRY MEMBERS ASSOCIATION
300 CORPORATE CENTER DRIVE, SUITE 270
MORROW, GA 30260

770-968-7945 PH
770-968-5818 FAX
800-294-3462 WATTS

internet:

<http://www.eifsfacts.com/eima/eima.htm>, MOST PROBABLY THE BUILDER OR BUILDER'S COMPANY HAS THE MOST FABRICATION KNOWLEDGE ABOUT THE HOME. IF ANY REMEDIAL ACTION IS NEEDED AND/OR IF YOU HAVE CONCERN(S), ASK THE EXPERT FOR THE TRUE CONDITION,

CAUSE AND CORRECTIVE ACTION(S).

RECOMMEND: THE BUILDER'S EXPERT INVOLVEMENT, WITH ANY AND ALL REMEDIAL SOLUTION AND/OR EVALUATION. THE BUILDER OR BUILDER'S COMPANY SHOULD BE PART OF ANY BUILDING FABRICATION SOLUTION. **CONSIDERATION:**

USE THE SEALANTS RECOMMENDED BY THE SYSTEM MANUFACTURER IN THE MANNER WHICH IS PRESCRIBED BY THE SEALANT MANUFACTURER. SEALANTS THAT DO NOT PERFORM AS REQUIRED MIGHT LIMIT THE DEGREE OF PROTECTION THAT THE PRESCRIBED APPROACH WOULD HAVE PROVIDED.

DEFINITIONS - GLOSSARY

DEFINITION OF TERMS

UNDERSTANDING THE "DEFINITIONS - GLOSSARY" IS NECESSARY BEFORE ANALYSIS.

Understanding Moisture Percentages

- Acclimated Moisture Reading (typically 10% to 14%) indicates a normal moisture content with a complete absence of water intrusion.
- Elevated Moisture Readings with firm substrate indicated water intrusion has occurred. Owner must locate the source of intrusion and stop it. Low moisture readings indicates the likelihood of a small leak occurring over a longer period of time, while higher moisture readings would indicate a larger leak over a shorter period of time.
- Elevated Moisture Readings with soft substrate indicates water intrusion has occurred over a long period of time. The degree of damage is determined by the quantity of water and the length of time this quantity has entered the wall. Moisture percentages can vary greatly in areas of soft substrate depending on the frequency of rain events. Accordingly, you may discover soft substrate indicating damage with lower moisture readings with leaks that have been occurring for a long period of time when there has been no recent rain event.

Acclimated Moisture Readings - Normal moisture content of building materials absent any moisture intrusion. These readings typically range between 10% and 14% in organic materials like OSB, plywood and framing members. These readings should be < 10% in exterior gypsum products (exterior grade sheet rock - dry wall - and Densglass Gold).

Damage Time Line - Quantity X Time = Damage. This equation helps you understand the time line in which damage can occur. For example: a large quantity of water over a short period of time can produce similar damage as a small amount of water over a long period of time. ie: Reported; deteriorated substrate has been detected in as little as 6 week periods and serious degradation of component members in 1 to 2 years, depending on the quantity of the leak.

Soft Substrate - Indicates building material experiencing loss of structural integrity due to excessive moisture exposure over time.

Firm Substrate - Indicates building material retaining integrity even with indications of high moisture levels. This frequently occurs when the source of water intrusion has recently occurred, not yet having enough time to produce damage. Firm substrate can also be detected if the quantity of water intrusion is minor even over a longer period of time.

Non-Destructive Scanning with Impedance Meter - This type data collection inspection uses a low frequency electronic signal to detect moisture. This type meter does not require contact with the sheathing or framing allowing an independent Inspector to take a moisture reading without puncturing the "EIFS" Exterior Insulation and Finish Systems.

Moisture scanning devices provide a useful tool to locate general areas of moisture in walls. The device provides relative indication of moisture and is not designed to quantify moisture percentages. The device can frequently give false positive indications of moisture being present and depending on wall detail, it can also give false negative indications of no elevated moisture when moisture is present. "The W.W.D. is designed to read through (electrically) nonconductive materials that are positioned between the electrodes and the substrate. ie: A conductive layer could be metal lath or wet surface or lamina metal fastener could give a false positive reading.

Follow up any high moisture indications by a scanner with probe meter to get an accurate moisture level and to get a physical feel for the condition of the substrate. Is it soft or firm?

Tramex Scanner Meter data reported of 80 and above indicate possible high moisture content. An 80 reading and above indicates an equivalent of about 25% moisture content, per the meter manufacturer. (25% and above supports decay per the meter instruction data)

Destructive Resistance Probe Meter - This type data collection inspection uses needles driven through the "EIFS" Exterior Insulation and Finish Systems and to the substrate site, the device measures the electrical resistance between the two needle points at that sampling site. Probing using this device allows the independent Inspector to identify any wood substrate materials that has little or no tactile resistance which is an indicator of possible degradation of the material. Additionally feels the substrate - Is it soft or firm?

NOTE: (after inspection readings - probed holes are charged with DOW CORNING 790 caulk, advisory home owner maintain in future)

GLOSSARY

TERMS:

ASTM - American Society For Testing And Materials, Philadelphia, PA.

EIFS - Exterior Insulation and Finish Systems

ERC - EIFS Review Committee

EPS Board - Extruded Polystyrene Board (ie., from of Styrofoam)

NCBCC - North Carolina Building Code Council

PB Polymer - Polymer-Based Polymer

PM Polymer - Polymer-Modified Polymer

FURTHER READING AND RESOURCES:

This is an accumulation of resource documents on building science related to design and performance of "EIFS" and other cladding materials. NOTE: documents are not arranged in any particular order and from time to time edited.

Idiot's Guide to Water Testing Windows, Daniel Urroz, Builder's Book, Inc. Canoga Park, CA, (818) 887-7828

Getting The Best From EIFS, R. Thomas, Jr., *The Construction Specifier* (February): 19-28, 1995

Exterior Insulation Finish Systems, ASTM STP-1187, eds. Mark F. Williams, FAIA & Richard G. Lampo, Philadelphia, PA, American Society for Testing and Materials, (610) 832-9500

Exterior Insulation and Finish System Design Handbook, Robert G. Thomas, Jr., 1992, CMD Associates, Inc. (206) 832-9500

Exterior Insulation and Finish Systems ASTM Manual Series MNL 16, Current Practices and Future Considerations, Mark F. Williams, FAIA and Barbara Lamp Williams, AIA, 1994, American Society for Testing and Materials, (508) 705-8400

Exterior Insulation and Finish Systems - STP 1269, Peter Nelson and Richard Kroll, 1996, American Society for testing and Materials, (508) 705-8400

Synthetic Stucco Problem is Talk of Builder's Show, *Professional Builder* (March 1996): 16-22, D. McLeister

Troubleshooters Target EIFS, *Builder* (March 1996): 168-171, Rick Schwolsky

J. B. (Jay) Graham, AIA, New Hanover County Inspection Department (910) 341-7175

J. Allen Golden, CEO, New Hanover County Inspection Department (910) 341-7456 - agolden@co.new-hanover.nc.us OR agolden@wilmington.net

Home Base Hotline, NAHB Research Center, nc. (800) 898-2842

Mark F. Williams, FAIA, Williams Building Diagnostics, Inc. (215) 628-8210

Senator Glenn Reese of Spartanburg, SC (as of 4-99) (introduced) filed S.678 providing that beginning January 1, 2000, no commercial or residential buildings or structures may be constructed using synthetic stucco.

Michael Dontje, Executive Officer - Hilton Head Island HBAHHL, 386 Spanish Wells Road, Business Center II Unit C-1, P. O. Box 22360, Hilton Head Island, SC 29925 843-681-9240 ph, 843-689-5780 fax

Frank Clark, President - South Carolina Home Builders Association

Sealants in Construction, Klosowski, Jermoe M., Marcel Dekker, Inc., New York 1989

Sealants: The Professionals' Guide, Sealant, Waterproofing & Restoration Institute, 1995

Weatherproofing Sealant Guide, Dow Corning Corporation, Midland, MI 1994

Exterior Insulation and Finish Systems: Current Practices and future ConsiderationS, William, Mark F. and Barabra Lamp Williams, ASTM Manual Series: MNL 16, American Society for Testing and Materials, Philadelphia, 1994

EIMA Guide for Use of Sealants with Exterior Insulation and Finish Systems, Class PB EIFS Industry Members Association (EIMA), Clearwater, FL, May 1994

Sick Buildings, definition, Diagnosis and Mitigation, by Thad Godish, Lewis Publishers of CRC Press

WEB SITES:

<http://www.sfstucco.com/html/problems.html>
<http://www.co.new-hanover.nc.us/ins/eifs011.htm>
<http://builder.hw.net/news/1997/eifs/eifs.htx>
<http://www.eifs.com/default.htm>
<http://www.wagatv.com/I-Team/stucco.html>
<http://www.gahi.com>
<http://www.eifsfacts.com/synthes.html>
<http://www.eifsfacts.com/remed.html> (remediators key)
<http://www.eifsfacts.com>
<http://www.askthebuilder.com/cgi-bin/bulletin?130:00125>
<http://www.eifsalliance.com/>

TRY - ANY WEB SEARCH ENGINE - TYPE "**EIFS**"

REVIEW ALL DISTRIBUTED MATERIAL(S)

REFER TO CONTRACT AGREEMENT.

GENERAL OBSERVATION AS COMPARED TO "EIMA"

REFER TO OTHER SECTIONS OF THIS REPORT FOR MORE DETAIL OBSERVED OR NOTED. THIS SECTION IS PROVIDED AS A GENERAL OVERVIEW.

MANUFACTURER'S SPECIFICATION TAKE PRESIDENCY - RECOMMEND REFER TO ALL MANUFACTURER'S SPECIFICATION.

DISCERNABLE REMODEL AND/OR ADDITION FROM ORIGINAL DESIGN

NONE NOTED.

GENERAL APPEARANCE

INCONSISTENCY'S AS COMPARED TO "EIMA" STANDARD RECOMMENDATIONS

NOTED STAIN AT THE CHIMNEY CAP AREA.

IMPACT DAMAGE

NONE NOTED.

HORIZONTAL SURFACES

SLIGHTLY ANGLED - NOTED MOST HORIZONTAL LEDGES ARE ANGLED AWAY FROM THE PARENT WALL MATERIAL.

"EIMA" AND MOST "EIFS" MANUFACTURER'S RECOMMEND A 6" ON 12" OR 45 DEGREE ANGLE. PURPOSE IS TO DIRECT DRAINAGE AWAY FROM THE PARENT WALL.

AREAS AT THE HOUSE HAVE A SLIGHT ANGLE.

SHUTTERS

NONE NOTED.

WINDOWS

DOUBLE INSULATED, YES

HEAD FLASHING, NONE OBSERVED

SILL PAN FLASHING, NONE OBSERVED

ALARM SENSOR, NONE OBSERVED

"EIMA" RECOMMENDED BACKER ROD JOINT, NONE OBSERVED

ADVISORY: SOME MANUFACTURER'S HAVE A CONCEALED SEALING JOINT DETAILED WHICH CAN NOT BE SEEN. IT IS INSTALLED UNDER THE ACCENT BAND SURROUNDING FENESTRATION (OPENINGS) IN THE HOUSE WALL. RECOMMEND ASK THE BUILDER AND / OR INSTALLER AND / OR CORE SAMPLE IN ORDER TO CONFIRM IF THE SEAL EXIST.

APPEARS ALUMINIUM CLAD.

DOORS

HEAD FLASHING, YES @ REAR SLIDERS

THRESHOLD PAN FLASHING, NONE OBSERVED

"EIMA" RECOMMENDED BACKER ROD JOINT, NONE OBSERVED

ADVISORY: SOME MANUFACTURER'S HAVE A CONCEALED SEALING JOINT DETAILED WHICH CAN NOT BE SEEN. IT IS INSTALLED UNDER THE ACCENT BAND SURROUNDING FENESTRATION (OPENINGS) IN THE HOUSE WALL. RECOMMEND ASK THE BUILDER AND / OR INSTALLER AND / OR CORE SAMPLE IN ORDER TO CONFIRM IF THE SEAL EXIST.

SUBSTRATE

UNDETERMINED - CONCEALED.

WALL TERMINATION(S)

SEE MESH @ REAR DECK - BACK WRAP, NO.

ROOF RAKE(S)

KICK OUT FLASHING, YES @ ONE LOCATION

NO @ TWO LOCATIONS (CHIMNEY)

DISSIMILAR MATERIALS IN CONTACT - SEALING JOINT (EXCLUDING WINDOWS AND DOORS)

SOFFIT (HORIZONTAL) TO WALL (VERTICAL) NONE NOTED

OUTLETS - FLUSH AND / OR SURFACE MOUNT, NONE NOTED

EXTERIOR WALL MOUNTED LIGHT FIXTURES, NONE NOTED

SERVICES: ie: REFRIGERANT LINES, TV, CABLE, CONDENSATE PIPES, IRRIGATION CONTROL CONDUIT OR WIRE, NONE NOTED

VENT(S) NONE NOTED

KICK OUT FLASHING AT ROOF RAKE(S) NONE NOTED

TYPICALLY FOUND AT THE HOUSE MISSING RECOMMENDED SEALING CONFIGURATION AT DISSIMILAR MATERIAL CONTACT.

MESH COLOR

HOW THE INSPECTOR REMOVED TO VERIFY MESH COLOR: VIOLET / PURPLE NOTED IN PROBE HOLES.

DECK(S) FLASHING

YES - SEEN UNDER DECK - BLACK FELT OR MEMBRANE. RECOMMENDED STYLE AND FLASHING IS NOT PRESENT.

GUTTERS / DOWNSPOUTS

YES - NO BRACKETS FASTENERS PENETRATE CLADDING SYSTEM.

SPRINKLER SYSTEM

YES AT GRADE - RAISED FOUNDATION.

WINDOW DATA COLLECTION

PROCEDURE - DATA COLLECTION

Windows are numbered generally starting at the front door and moving around the house to the right - second floor windows and above are numbered after first floor.

Photographs are taken and copy grids are applied.

Coordinate numbered photo grid of house component with actual house features and location, for the purpose of identifying data collection site, as reported below. Note: windows are identified as single and multiple - refer to "ERC" protocol inspection procedure.

NOTE: Sliding door windows are considered doors.

SINGLE WINDOW SECTION

GENERAL NOTES:

ALL WINDOWS PROBE TEST RESULT - MOISTURE WAS BELOW THE 24 % THRESHOLD, WITH FIRM FEELS.

DOOR DATA COLLECTION

GENERAL NOTES:

ALL DOOR PROBE TEST RESULT - MOISTURE WAS BELOW THE 24 % THRESHOLD, WITH FIRM FEELS.

WALL INSPECTION

Penetrations such as hose bibs, air conditioner lines, electrical boxes, dryer vents, light fixtures, telephone and cable penetrations, railing attachments and other miscellaneous penetrations will be tested if potential moisture areas are detected using the scanning meter.

Spot checks of at least one penetration per penetration wall plane will be mandatory.

HOSE BIBB

OBSERVED:

MISSING SEALING CONFIGURATION - REFER TO PHOTO.

AIR CONDITIONER LINES

HEATING - COOLING TRANSFER LINES:

NOTED MISSING SEALING CONFIGURATION AT WALL PENETRATION - RECOMMEND SEALING - REFER TO SECTION FOUR OF THIS REPORT FOR MORE DETAIL.

VENTILATION - FANS, DRYERS, CRAWL SPACE LOUVERED OPENINGS

OBSERVED:

NOTED MISSING SEALING CONFIGURATION AT VENT - RECOMMEND SEAL PER RECOMMENDATION IN SECTION FOUR OF THIS REPORT.

"EIFS" ENTERS, TOUCHES AND/OR CLOSE TO GRADE

OBSERVED:

SLIGHT CONTACT AT GARAGE AUTOMOBILE DOOR.

RANDOM WALL PROBE READINGS

OBSERVED:

PURPOSE: RANDOM WALL READINGS HELP YOUR ANALYSIS PROCESS. READINGS ARE RANDOM AROUND THE STRUCTURE, WHICH WHEN AVERAGED PROVIDE A MEAN MOISTURE FOR THE HOME DURING THE INSPECTION PERIOD. THE MEAN IS PROVIDED AS A REFERENCE ONLY AS COMPARED TO TEXT BOOK MOISTURE CONTENT. (A PRACTICAL VIEW)

COMPUTED MEAN

AVERAGE = 13.625 %

ROOF RAKE FLASHING

Three readings shall be taken below every major kick out, including those at chimneys:

- One six inches below the roof rake termination.
- One two inches below the roof rake termination.
- One at the nearest floor line below the roof rake termination.

GENERAL COMMENTS NOTES

NOTES:

RECOMMEND "LEVEL ONE MOLD ASSESSORS"

MOLD PROTOCOL TESTING SUMMARY

NON VIABLE SAMPLING

REFER TO ADDENDUM "MOLD TEST COLLECTION"

SOME REASONS FOR RECOMMENDING DATA COLLECTION:

- VISIBLE MOLD AND MILDEW ESPECIALLY ON HIGH CELLULOSE LOW NITROGEN MATERIALS
- WATER STAINS OR OTHER INDICATORS OF PAST OR PRESENT LEAKAGE
- ODORS, DANK MUSTY SMELLS
- CRAWL SPACE OR ATTICS WITH MOISTURE AND / OR POOR VENTILATION.



ROOF RAKE - KICK OUTS

ROOF RAKE - KICK OUTS:

CHIMNEY & ROOF RAKES.



OBSERVED:

PHOTO COORDINATE # C/D - 8, AWL PROBE - SINGLE ENTRY TO FEEL SUBSTRATE ONLY, FELT FIRM, PROBE % 30 - WITH ACTIVE WATER LEAKING FROM PROBE HOLE

RECOMMEND CORE SAMPLE D THRU F - CHIMNEY FACE.

