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About the Author

Jeff Hoch

Architect and Field Consultant

Jeff Hoch received his architectural degree from New School of Architecture in San Diego, California. He is a State of California licensed architect and also holds several certifications including, but not limited to:

- ICC Certified Residential Inspector
- InterNACHI Certified
 - Professional Inspector
 - Energy Inspector
 - Renovator Inspector
 - Lead Inspector
- OSHA
 - 30 Hour certified
 - Scaffold Safety
 - Ladder Safety
- IAC2 Certified Mold Inspector

Jeff has been involved in the inspection industry and related fields for over 23 years. He has inspected thousands of properties ranging from small single-family home remodels to 50-story apartment buildings and large commercial properties performing QA inspections on projects during construction for builders in Southern California as well as Risk Assessment inspections across the country.

Jeff has performed forensic testing per standards promulgated by various organizations including, but not limited to, ASTM, AAMA and APA. Along with other types of

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You are receiving our "Quality Built Tech Alert" newsletter. We look forward to keeping you informed of industry related news at Quality Built. If you would prefer to not receive these communications, please follow the link at the bottom of this email to remove your name from future mailings.

Seam Seal Tape

Every year we inspect thousands of homes with one brand or another of house wrap installed as the weather-resistive barrier. As energy costs increase and energy code requirements become more stringent, we are seeing house wrap installations where the seams are sealed.



Many house wrap manufacturers have proprietary seam seal tapes that they sell for exclusive use with their house wrap system. As implied by the name, the tape is used for sealing the seams of the house wrap. The purpose of sealing the seams is to create a continuous air barrier. Some of the manufacturers imply that the use of their tape will also reduce moisture intrusion.

testing, Jeff has performed water-intrusion testing on thousands of assemblies on national projects. Jeff is trained on the ASTM E2018 Standard Guide for Property Condition Assessment, Baseline Property Condition Assessment Process and has performed inspections following this standard for clients nationally.

Jeff has performed hundreds of peer plan reviews for projects nationwide in order to reduce builders risk by checking plans for completeness, compliance with manufacturers' recommendations and best construction practices.

Jeff has been involved in hundreds of defect litigation cases as an inspector and/or a consultant for cases in various states. He has, on several occasions, been designated as the architectural expert witness for cases in California and Kansas.

Jeff and Quality Built's goal is to improve the quality of construction thereby reducing builders risk and improving the home purchasers' experience. Jeff is proud to be part of a team that is working hard to achieve this goal.

Jeff can be reached at the QB San Diego office at (800) 547-5125 or cell (858) 220-0538 or through email at jhoch@qualitybuilt.com.

Quality Built's Commitment

Quality Built is committed to being a visionary leader in the insurance, financial and construction industry by providing reliable and innovative Third Party Quality Assurance Services to our clients and by providing those services in the most professional and efficient manner utilizing cutting-edge technology, proprietary software and employees who maintain the



The installation procedure for house wrap, regardless of the manufacturer, is fairly standard across the board. Installation begins with a course at the base of the wall and that course is overlapped horizontally with the next course. The amount of the horizontal overlap varies by manufacturer. Additionally, vertical seams must also be overlapped. Many of the problems related to the seam seal tape start with the wrap installation, particularly the fastener placement.



If the seams are going to be taped this generally occurs after the entire house is wrapped or after several courses of wrap are installed. Since most areas of house wrap are over wood-based sheathing, leaks at the seams may go undiscovered for years.



The horizontal seam tape is installed lapping over both layers of wrap. This means that the seam tape installation creates a reverse lap at the top of the tape. While this reverse lap might not result in leakage in laboratory conditions, in the field the installation of the tape is not always done properly. At times the wrap is not clean when the tape is

highest level of integrity and expertise.
Contact Quality Built today at 800-547-5125 or
email: sales@qualitybuilt.com

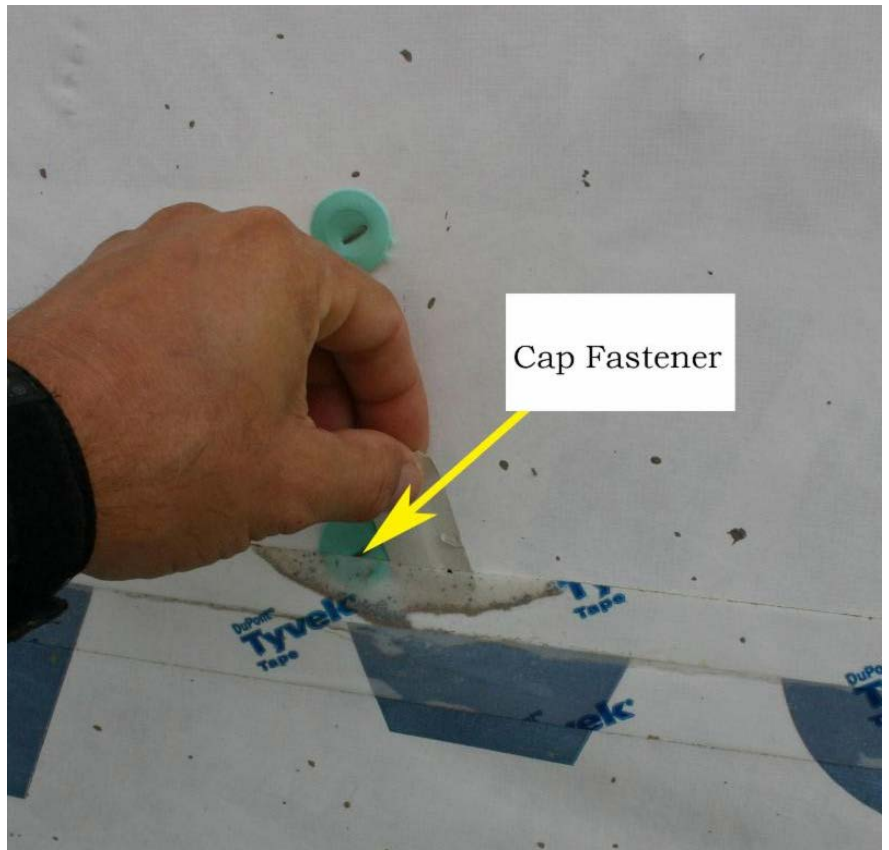
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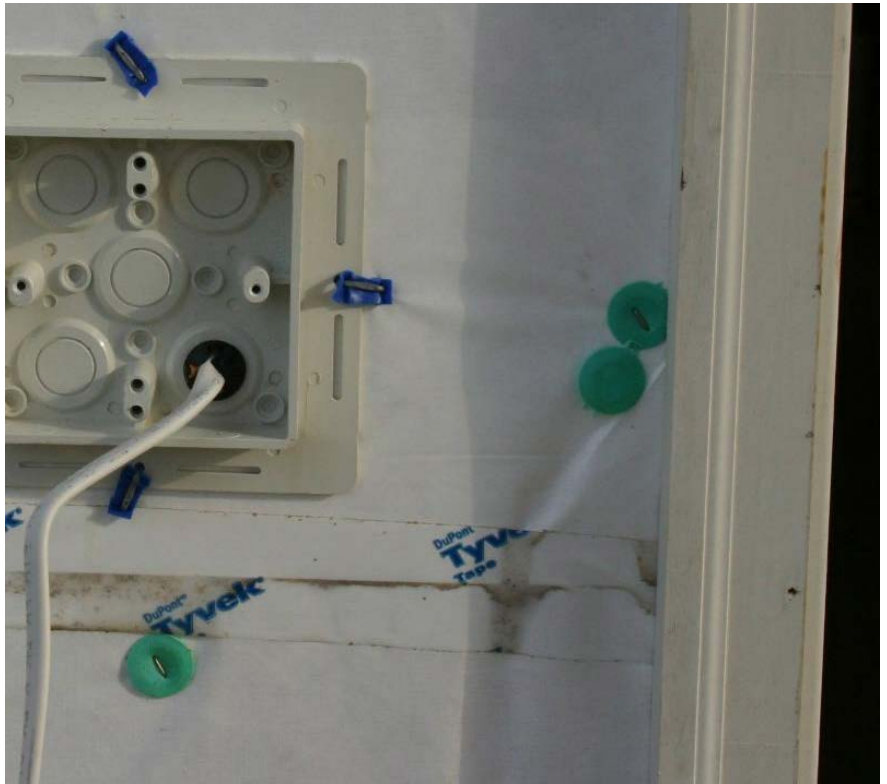
applied. Other times the surface is damp preventing the tape from adhering properly. Oftentimes cap fasteners installed at the tape edge prevent a complete seal. Wrinkles in the wrap can leave voids at the tape contact surface. All of these conditions can allow water to migrate behind the tape, follow the horizontal seam to the nearest vertical seam, and ultimately into the structure.



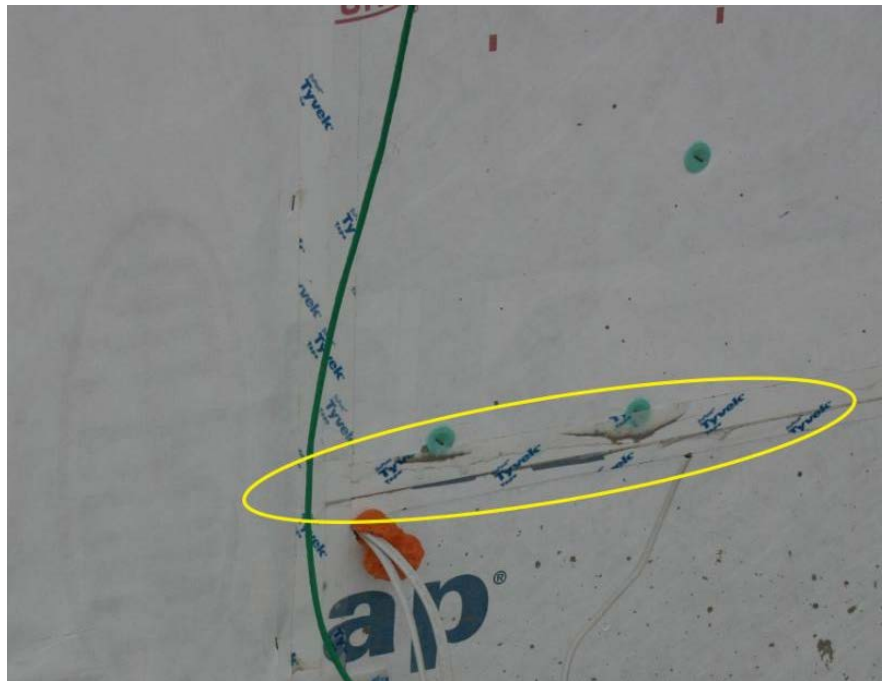
In the photo above you can see that the seam tape did not bond to the wrap.



In the photo above you can see the debris carried by the water that has penetrated the "seal" created by the seam seal tape due to the cap fastener preventing the tape from making a complete seal. You can see that the water has run horizontally along the seam taking the path of least resistance.



In the photo above the debris from the water intrusion can be seen at the wrinkle in the wrap. Note that the wrap is wrapped into the door frame so water can migrate horizontally past the door frame and into the interior.



In the above photo note the dark line of debris at the horizontal seam which continues to the vertical seam.

There have been litigation cases where the major contributing factor was improper sealing of the house wrap causing major structural damage to the wood sheathing and other building components. Except under rare circumstances where the reverse lap is part of a small repair, Quality Built would never recommend the reverse lap installation. Manufacturer's window installation details no longer

recommend wrapping the wrap into the opening and then taping the window head nailing flange to the wrap as an effective means of sealing the window. They now indicate a weatherboard installation.

We have contacted one of the larger manufacturers about this and asked about the possibility of a double-sided tape for use on the horizontal seams and were informed that they make such a tape, but it is not for sale in the US. We will be contacting all of the manufacturers to attempt to encourage them to provide a double-sided tape or other method to eliminate the reverse lap. Until then when you are sealing the horizontal seams, make sure to follow all of the manufacturer's instructions and recommendations, including making sure the wrap is clean and dry and that you are installing the tape within the effective temperature range of the tape as stated by the product manufacturer. Additionally, make certain fasteners and other objects are not installed in a location that will prevent or compromise the complete seal of the tape. Always use a roller to bond the tape and never rely on smoothing it out with your hand. Care must be taken and attention to detail is critical when installing the seam tape at transitions to avoid gaps between the tape and the wrap.

For any additional information or details always consult your house wrap system manufacturer's details and specifications.

About Quality Built

Quality Built, headquartered in Fort Lauderdale, Florida, is a leading national construction quality assurance and inspection management company. Quality Built provides third-party quality assurance services and a full spectrum of quality and risk management solutions such as property condition assessments, tainted drywall assessments, building evaluations, data collection tools, collateral inspection services, reporting and support services on high-quality residential and commercial construction projects nationwide.

Quality Built is well known for its work in Total Quality Management and was one of first firms to transition from using a traditional quality assurance approach into implementing a proven, user-friendly and fully automated, online inspection system. Quality Built's proprietary software is cost efficient, paperless, fully customizable and completely scalable to handle the demands of most inspection and quality assurance protocols.

Quality Built's Quality Management System is ISO 9001:2008 registered

For more information about Quality Built and its services, contact Beth R. Michaelis, President, at bmichaelis@qualitybuilt.com. Quality Built, 401 SE 12th Street, Suite 200, Ft. Lauderdale, FL, 33316, 954.358.3500, www.qualitybuilt.com.

To stay connected with us at Quality Built, visit us at www.qualitybuilt.com.

Sincerely,



Elizabeth Michaelis - President
Quality Built LLC