

ZIP IT TIGHT™ // JUST THE FACTS

Industry testing proves that ZIP System® sheathing and tape are the fastest way to achieve a perfect, tight house.

Creating more efficient, more resilient, and healthier homes starts with the building envelope—and the key to a successful and tight envelope is proper management of air and moisture. Today's building professionals need an envelope system that they can trust to perform under a variety of weather and site conditions, without sacrificing their bottom line.

ZIP System® sheathing and tape offers builders a one-of-a-kind structural roof and wall system with a built-in energy-efficient, water-resistive barrier that reduces air leakage and provides outstanding moisture management. Code-recognized and third-party tested, ZIP System sheathing and tape establishes new performance benchmarks and offers superior performance compared to traditional housewrap through:



Faster and Easier
installation



Superior structural integrity
and durability



Unsurpassed moisture
management



Outstanding air
barrier protection



Industry-leading
warranty protection

ZIP System sheathing and tape has undergone extensive testing that shows the combination of ZIP System all-in-one structural panels sealed with ZIP System™ tape is the fastest way to achieve a perfect tight house.

The test results are in. ZIP IT FAST. ZIP IT TIGHT. ZIP IT RIGHT.™ And let the facts speak for themselves.





ZIP SYSTEM™ TAPE IS EASIER TO INSTALL THAN TRADITIONAL HOUSE WRAP SYSTEMS.

Proper installation is critical to the long-term success of any exterior wall system, and ZIP System® sheathing and tape offers a streamlined installation process that is easier than the traditional housewrap installation process. In contrast to traditional house wrap systems that require multiple crew members to wrap a full structure, ZIP System sheathing and tape is installed in two easy steps:

1 Install the panels 2 Tape the seams

This straight-forward, all-in-one installation process simplifies the sometimes clumsy, two-man installation of traditional housewrap systems into an easier job that only requires one installer for taping. The ZIP System sheathing and tape installation process also makes windy day installations a breeze because the system's protective layer is permanently fused to each panel, eliminating the risk of rips or tears from weather or other tradesmen during installation that comes with traditional housewrap.

ZIP System™ tape quickly seals the sheathing panels together. Used for both seam sealing and flashing applications, ZIP System™ tape creates a permanent bond that ensures a cohesive weather-resistive barrier. Weather protection is enacted immediately, and crew members can quickly assemble and tape the sheathing panels. There's no need to worry about exposure to the elements after installation. Together, the sheathing and tape system is warranted for 30-years¹ and offers a 180-day exposure¹ guarantee against exposure to the elements during construction.



ZIP System sheathing and tape installs quickly and easily on the job site, requiring only one installer to tape the system and create an air and moisture barrier.



Traditional housewrap systems are often clumsy and require two installers, making multistory applications and windy environments especially tricky.

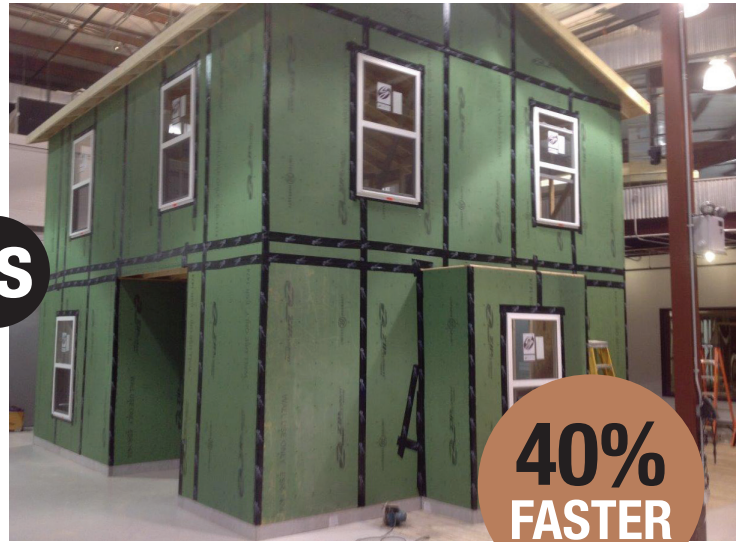


ZIP SYSTEM™ TAPE INSTALLS FASTER THAN TRADITIONAL HOUSEWRAP.

ZIP System™ tape drives significant time savings on a jobsite. Independent, third-party testing confirms that ZIP System™ tape installs over 40% faster than traditional housewrap.



VS



In a third-party test, ZIP System™ tape installed over 40% faster than traditional housewrap.

The facts confirm that ZIP System sheathing and tape is the fastest way to achieve a tight house: Under observation by Home Innovation Research Labs, a professional framing crew was tasked with completing full-scale installations of both the ZIP System sheathing and tape and that of a traditional housewrap system. To ensure an even performance field, a three-man framing crew with in-the-field experience in the proper installation techniques of both exterior products was recruited to install both systems on a two-story mock-up of a typical residential house. Recognizing that building site and weather conditions vary from location to location, testing was conducted in a controlled indoor environment to ensure that the two products were installed, as recommended by the manufacturers' instructions, with limited exterior influences. To reflect a new American home, the test structure featured 12 windows, two door openings, a typical mix of inside and outside wall corners and walls with and without openings, alcoves, and bump-outs.

The Home Innovation Research Labs third-party test confirmed that the ZIP System tape installs substantially faster than traditional housewrap. While ZIP System sheathing and traditional OSB install in similar time frames, the full-scale test found that significant time savings are gained in the time required to create a weather-resistive barrier: the ZIP System tape installed more than 40% faster than the housewrap. In addition, the testing also found that installing windows and head flashing in the ZIP System sheathing and tape was a simpler process than traditional housewrap and required fewer steps and less installation time.

“ ZIP System™ tape drives significant time savings on a jobsite. Independent, third-party testing confirms that ZIP System™ tape installs over 40% faster than traditional housewrap. ”



ZIP SYSTEM® SHEATHING AND TAPE ARE MORE DURABLE THAN TRADITIONAL HOUSEWRAPS.

ZIP System® sheathing and tape offers superior durability compared to traditional housewrap. Benefits include:

Lower risk of rips and tears.

ZIP System sheathing and tape offers the benefits of multiple products in one, combining the strength of wood structural panels with the protection of an integrated water-resistive barrier (WRB) that is fused onto the panel during the manufacturing process, rather than applied as a secondary laminate or coating. In contrast, traditional housewrap is often a separate component from OSB sheathing that is then installed on site as an extra step in the framing process. Under this method, traditional housewraps can rip or tear under common jobsite conditions, such as high winds or as an accidental byproduct of the work of other building professionals, resulting in additional time, work, and expense spent on repair.

Lower risk of wood exposure.

Because ZIP System sheathing's WRB is permanently fused to each panel, there is virtually no risk of it being ripped or torn, ensuring that the wood structure of the panel itself is not exposed to potential damage or detrimental weather. In addition, ZIP System sheathing and tape comes with a 180-day exposure guarantee¹ during construction. The wood surface of a traditional OSB and housewrap system can be compromised when housewrap is ripped or torn, as a break in the wrap may expose the entire wood surface underneath to unfavorable weather or moisture.

No risk of trapped water.

There is no risk of water being trapped between a ZIP System panel's water-resistive layer and the panel face. In contrast, water can be trapped between traditional housewrap and an OSB panel since the wrap is not fully sealed to the surface of the panel.

Higher wind resistance.

As extreme weather events increase in frequency and range, resilience against high winds grows more important to builders nationwide. Third-party testing conducted by PRI Construction Materials Technologies, LLC of a modified Florida Building Code Housing Testing Application Standard (TAS) 100-95, Test Procedure for Wind and Wind Driven Rain Resistance shows that ZIP System sheathing and tape is more effective than traditional housewraps. The TAS-100 test as applied to roof application measures the ability of systems to resist water infiltration under wind. Modified for testing on wall, ZIP System sheathing and tape remained intact and performed to the highest test setting while the leading traditional housewrap system failed under wind speeds between 70 miles per hour (mph) and 90 mph.



In the event that the housewrap layer is compromised all underlying sheathing could then be exposed to moisture.



It is common for housewraps to be damaged and require rework after a wind event.

ESR 1473
ESR 1474

ZIP SYSTEM® SHEATHING AND TAPE ARE CODE RECOGNIZED.

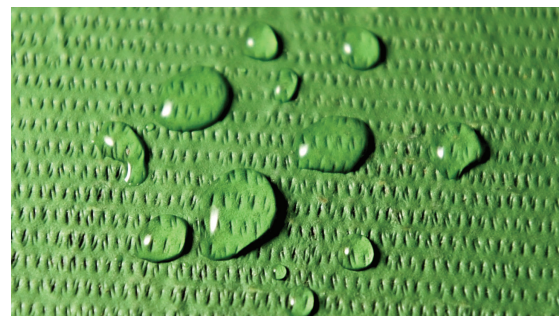
Standardized industry tests confirm that ZIP System® sheathing and tape are products building professionals can trust.

On the Wall

An Evaluation Services Report (ESR-1474) published by the International Code Council Evaluation Service (ICC-ES), recognizes ZIP System® wall sheathing as an alternate to the water-resistive barrier required by the International Building Code (IBC) and the International Residential Code (IRC) and satisfies the air barriers requirements of the Codes.

On the Roof

ZIP System® roof sheathing is code recognized as an alternate to traditional roofing underlayment (felt paper) required by the IBC and IRC (ICC-ES ESR-1473).



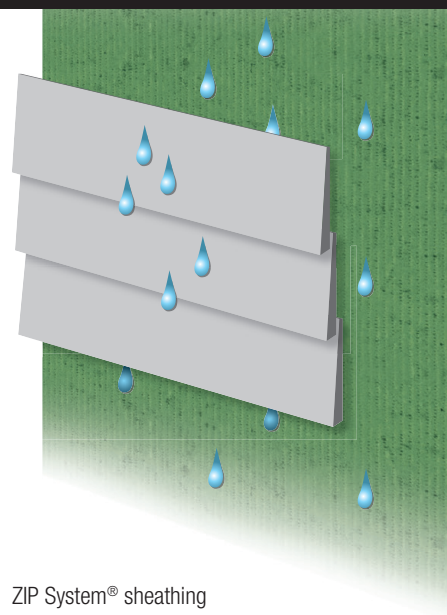
ZIP System® panels provide a code recognized water resistant barrier.



ZIP SYSTEM® SHEATHING AND TAPE DELIVERS SUPERIOR MOISTURE MANAGEMENT.

A home's first line of defense against moisture is its exterior cladding, but should that fail, ZIP System sheathing panels' water resistive barrier provides a secondary line of moisture management to guard against water intrusion. The unique textured surface of ZIP System sheathing is engineered to promote proper and enhanced drainage of bulk water, and testing under ASTM E2273, the Standard Test Method for Determining the Drainage Efficiency of EIFS Clad Wall Assemblies, confirms that properly installed panels and tape perform substantially better than traditional housewrap offerings. Under third-party testing conducted by Architectural Testing, Inc, **ZIP System sheathing and tape achieved greater than 90% drainage, while the leading branded housewrap achieved less than 10% drainage.**

While protecting against water intrusion, ZIP System sheathing is also crafted to allow walls to dry. To promote outward drying, a water resistive barrier must have a higher permance, or permeability level, than the OSB panel behind it. With a permeability of 12 to 16 perms, ZIP System sheathing's water resistive barrier is engineered to promote outward drying of the system. Because it is engineered to promote drying, a water resistive barrier does not trap water and, again, because it is fused directly to the OSB during the manufacturing process, no water gets between the WRB and the panel face.



ZIP System® sheathing surface drains more efficiently than traditional housewrap.



ZIP SYSTEM® SHEATHING STANDS UP TO WATER INTRUSION.

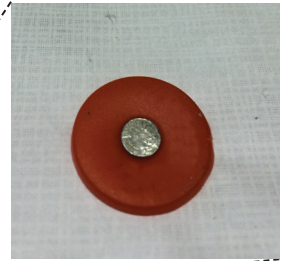
All systems, whether they are ZIP System® sheathing and tape or traditional OSB panels installed with housewrap, require fasteners to secure them in place. Although fastener penetrations create opportunities for possible water intrusion, testing confirms that ZIP System sheathing and tape provides superior water management as an overall system over traditional housewrap.

In a ZIP System sheathing and tape test conducted using modified ASTM E331 criteria, testing simulated heavy rain with a constant wind of 35 mph on ZIP System sheathing and tape and the leading industry house wrap, both properly installed to manufacturer specifications. The ASTM E331 test, the Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference, is commonly used on window openings. For this test, however, it was modified to spray directly on the wall systems to examine how the fastener penetrations held up against water intrusion. In one test, a leading branded housewrap was secured using the 1-inch crown staples recommended in manufacturer instructions, while the ZIP System sheathing was installed with the recommended pneumatic framing nails. A separate housewrap test also was run using button cap staples, a second manufacturer-recommended fastener.

In both tests, ZIP System sheathing fastener penetrations outperformed the housewrap fastener penetrations. With each of the housewrap recommended fasteners, bulk water freely entered the staple holes, and, wetted the exposed wood panel face beneath the wrap. However, moisture exposure in the ZIP System sheathing was kept in check and limited to the wood fibers visible around the nail heads, as manifested by slight swelling. Unlike the bulk water intrusion of the housewrap system, the water exposure of the ZIP System panel was easily managed by the panel itself and the wall system's drying capabilities. In addition, no visible water entered the products' wall cavity protected by ZIP System sheathing and tape.

Furthermore, in-the-field testing under ASTM E1105, Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference, confirmed ZIP System sheathing's water management capabilities, noting that even with over-driven fasteners, the sample wall passed the test at over 25 times the required pressure.

For more information, view the ZIP System® sheathing and tape waterproofer testimonial video.



Test results show that fastener penetrations in traditional house wraps allow water intrusion.



Spray rack testing shows how moisture intrusion can spread under the house wrap layer.



ZIP SYSTEM® SHEATHING AND TAPE PROVIDES A TIGHTER AIR BARRIER.



Blower door tests are a common diagnostic tool used to determine a home's air tightness. By pulling air out of the house, the fan lowers the air pressure inside the home. Testers can then measure how much outside air flows into the house through unsealed cracks and openings.



Leading house wrap system did not pass testing required for air barrier assemblies.

According to the Department of Energy, air leakage accounts for 25% to 40% of the energy used for heating and cooling in a typical home. This can result in lower occupant comfort, poorer indoor air quality, and higher heating and cooling costs. Recognizing this, many homes today now require air leakage testing to confirm that their air barrier assemblies meet code-recognized performance targets. Air barrier systems are critical in managing air infiltration (outdoor air that leaks into a house) and exfiltration (indoor air that leaks out of a house) in a building envelope, and ZIP System components have been put to the test.

Using ASTM E2357, a common, standardized test method for measuring the air leakage of air barrier assemblies, third-party testing by Home Innovation Labs confirms that ZIP System® sheathing and tape provides a tighter air barrier assembly than traditional housewrap. What's more, the leading traditional house wrap did not pass the testing required for recognition as an air barrier assembly. While ZIP System sheathing and tape passed testing at seven different air pressure levels required under the code-recognized test methodology, the name-brand residential housewrap failed at higher pressures, ripping or puncturing to expose the OSB surface beneath the wrap. Sturdier, commercial versions of the name-brand wrap were required to successfully pass the test.

ZIP System sheathing and tape creates a durable, rigid air barrier protecting against both air infiltration and exfiltration. Traditional wrap systems do little to protect against exfiltration, allowing conditioned air to escape the home.

The facts show that ZIP System sheathing and tape helps builders achieve a tight house, providing superior air barrier protection for both infiltration and exfiltration. For more information on the third-party air barrier test, a complete summary report is available upon request.

CONCLUSION

The one-of-a-kind combination of ZIP System sheathing and tape provides building professionals with a durable, energy-efficient wall and roof system that is fast and easy to install and provides superior resistance to water intrusion and air infiltration. Builders can rest assured in their choice, as well, as the system also comes backed by a 30-year system limited warranty¹ from Huber Engineered Woods—protection that is three times longer than that of the leading housewrap warranties.

The tests have been done and the facts speak for themselves: ZIP System sheathing and tape provides the fastest way to achieve a perfect tight house. To learn more about how ZIP System sheathing and tape can improve your next project, visit ZIPSystem.com.

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