

THEY WON'T ALWAYS SEE IT...



...BUT THEY'LL BE GLAD IT'S THERE.



Your homeowners might never see the Huber Engineered Woods products you install. But they will always feel their benefits – greater indoor comfort, quiet, solid floors and lasting peace of mind.

We hold our products to a higher standard, so you can too. Your beautiful surfaces deserve an exceptional base. And your homeowners, an exceptional home.



4.....Huber Engineered Woods



6.....AdvanTech® Flooring and Sheathing

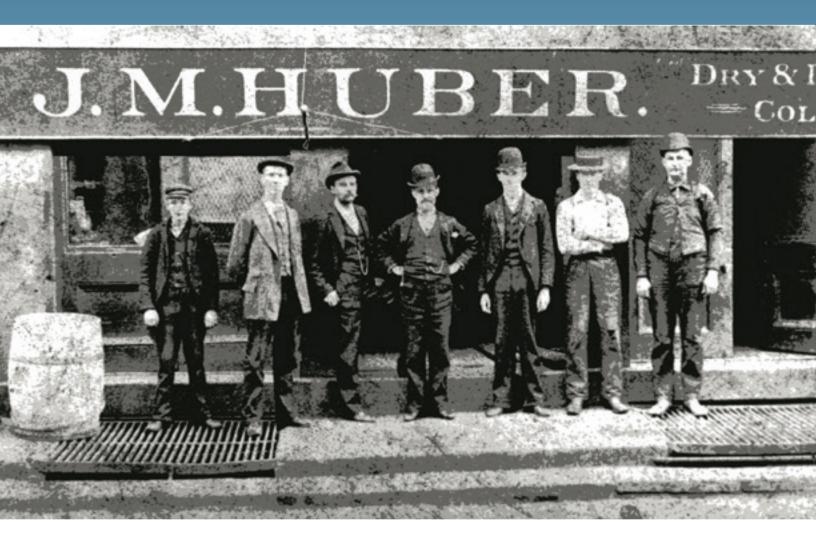


16....ZIP System® Sheathing and Tape



34....Sustainable Practices

A TRADITION OF STRONG, RESPONSIBLE BUILDING.



A Tradition of Strong, Responsible Building

Founded in 1883, the J.M. Huber Corporation has grown to be one of the largest family-owned companies in the U.S. We're now a global company with approximately 4,000 employees in more than 20 countries. We are guided by a spirit of creativity and innovation that transforms ideas into products that meet the challenges of an evolving world. And we do all this while honoring a commitment to the Huber Principles:

- Environmental Health & Safety (EHS) Sustainability
- Ethical Behavior
- Respect for People
- Excellence

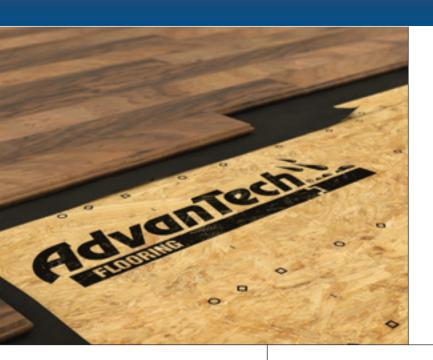


At Huber Engineered Woods, we create innovative, high performance and environmentally responsible products that allow your roofs, walls and floors to live up to their full potential.

Our engineered wood sheathing and subfloor products help homes and buildings meet today's increasingly demanding codes and discerning property owners, while allowing builders to differentiate from their competition. Our products are specifically engineered to enhance the performance of the building and the lives of the people who live and work inside them – for every draft they'll never feel, and every creaking floor they'll never hear.



GIVE YOUR FLOORS AN EXCEPTIONAL BASE THAT KEEPS ON GIVING.



The FLAT OUT BEST™

AdvanTech® flooring panels stand up to the toughest jobsite conditions during a home's construction and provide homeowners with a solid-feeling and quiet floor for years to come.

Build with the award-winning industry-leader and rest assured you'll get the most from your subfloors and everything you build on top of them.









Built To A Higher Standard

AdvanTech flooring is the only wood structural panel substantiated by third party evaluation services for published design values for strength, stiffness and fastener holding power above PS-2 minimums. These values are documented in ESR-1785; visit www.icc-es.org for the full report.

Best In Class Warranty²

Backed by a limited lifetime warranty that is transferable to future homeowners, AdvanTech flooring delivers performance you can trust.

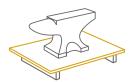
No Sanding Guarantee²

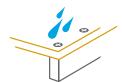
AdvanTech panels will stand up to your most demanding jobsites and are backed by a 500-day no-sanding guarantee. Say goodbye to swelling, cupping and delamination.

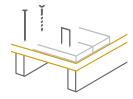
Voted #1 In Quality

Builders from across the nation have voted AdvanTech flooring #1 in quality every year for over a decade.³ That's a reputation you can build on.

ENGINEERED TO BRING PERFORMANCE, QUALITY AND CONFIDENCE INTO EVERY FLOOR.











Industry-Leading Strength and Stiffness

High wood density, paired with advanced engineering, provide the bending strength and stiffness needed to deliver a quiet, stiff floor.

Superior Moisture Resistance

Advanced moisture-resistant resins seal every strand of wood, for outstanding water resistance and panels that won't swell, delaminate or cup.

Fastener Holding Power

The high wood density and advanced resins inside AdvanTech® flooring securely hold floor fasteners in place, helping to reduce nail pops and floor squeaks.

Installation Speed and Ease

Consistent manufacturing, plus pre-printed fastening guides and a precisely engineered tongue and groove profile, helps ensure every panel of AdvanTech flooring installs quickly and easily.

Structural 1 Rated

AdvanTech flooring offers industry-leading design strength and stiffness capacities — beyond those required by PS-2 — delivering a subfloor with greater resistance to wind and seismic loads.

	AdvanTech® Flooring*							
Performance Category	Panel Size	PS-2 Span Rating	Code Evaluation Report	Edge Profile	Panel Grade	Approx. Weight Per Panel**	Panels Per Unit	
19/32	4' x 8'	20 oc	×		Х	66 lbs.	55 pcs.	
23/32	4' x 8'	24 oc	ESR-1785		Structural 1	78 lbs.	45 pcs.	
7/8	4' x 8'	32 oc	×	T&G	Х	96 lbs.	40 pcs.	
1	4' x 8'	32 oc	Х		Х	109 lbs.	35 pcs.	
1-1/8	4' x 8'	48 oc	×		X	125 lbs.	30 pcs.	

^{*}Net face width is 47-1/2" on tongue and groove panels.

^{**}Estimated panel weight. Actual weight may vary by mill.



ESR-1785, BECAUSE QUALITY HOMES DEPEND ON QUALITY SUBFLOORS.



HIGHER STANDARD ESR-1785

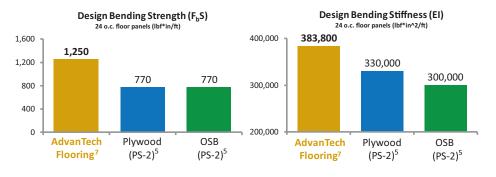
AdvanTech® flooring is the ONLY wood-structural panel with published design values above code minimum (PS-2)¹ requirements.

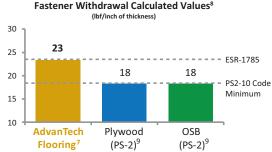
ESR-1785⁴ documents design values for AdvanTech flooring above commodity-grade panels:

- Overall, 62% better design bending strength⁵
- 28% better design bending stiffness than commodity OSB⁵
- 16% better design bending stiffness than commodity plywood⁵
- Overall, 10% better design fastener holding power⁶

These values are available in ESR-1785 and can be viewed at www.icc-es.org.

Industry Leading Strength, Stiffness and Fastener Holding Power





STRENGTH AND STIFFNESS WHERE YOU NEED IT MOST.

Industry-Leading Performance

AdvanTech® flooring brings together a superior combination of bending strength, stiffness and fastener holding power so you can get the most from your flooring system.

The result is a solid-feeling floor that can enhance the quality of the entire home.



HOW EXCEPTIONAL STRENGTH IS ENGINEERED INTO EVERY BOARD

High Wood Density

More wood is packed into each panel of AdvanTech engineered flooring.

This produces an ultra-dense, ultra-strong panel that securely grips fasteners.

Advanced Resins and Blending

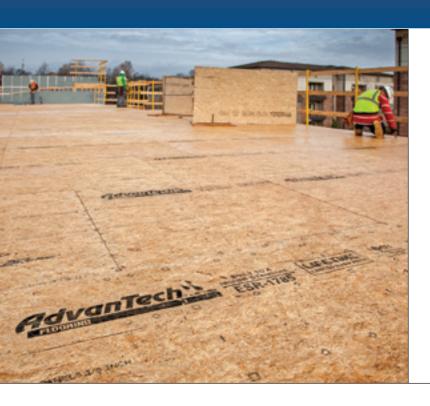
A sophisticated blending process coats every wood strand with advanced resins, ensuring a consistent and exceptionally strong bond throughout every square inch of the panel.

Optimal Wood Strand Orientation Wood strand orientation is carefully engineered and tightly controlled to achieve maximum strength, stiffness and fastener holding power.

4 Tight Thickness Tolerance
Precision sanding on both the top and bottom surfaces produces a consistent thickness so every panel lays flat and installs easily.



SUPERIOR MOISTURE RESISTANCE DURING AND AFTER CONSTRUCTION.



Moisture-Related Peace of Mind

The average jobsite receives rain three times during construction. And other factors such as high humidity, snow and ice can expose your projects to even more moisture.

Rest assured, AdvanTech® flooring's moisture resistance helps prevent headaches such as warping, swelling and delamination – leaving your finished floors smooth, flat and quiet.

HOW ADVANTECH FLOORING IS SPECIALLY ENGINEERED TO RESIST MOISTURE

Highly Compressed Material

High panel density helps reduce the rate of water absorption into the panel, even under harsh weather conditions.

2 | A

Moisture-Resistant Resins

Advanced resins react chemically with the natural moisture in the wood, creating a highly moisture-resistant substance, similar to polyurethane.

3

Protection Throughout Entire Panel

Every wood strand is coated with advanced moisture-resistant resins that provide superior protection even along freshly cut edges.

4

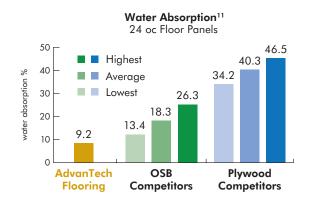
Edge Sealant

For added protection, every edge is coated with sealant to help prevent swelling during long-term storage or exposure to the elements.



DEFENDS AGAINST WATER¹⁰

AdvanTech® flooring's best-in-class water resistance protects against swelling, cupping and delamination. This helps improve cycle time by reducing costly rework, construction delays and homeowner callbacks.





NO SANDING GUARANTEE

AdvanTech® flooring is backed by a 500-day no-sanding guarantee. With a guarantee like this, your moisture-related jobsite headaches are long gone.

The Moisture Advantage You Can See

VS. OSB

Oriented Strand Board (OSB) has a bad reputation for its frequent swelling and weakening after being exposed to moisture. But AdvanTech engineered floor panels are made to withstand the elements – guaranteed.

24 Hour Edge Swell Demonstration

OSB Flooring AdvanTech Flooring



VS. PLYWOOD

When soaked in 1 inch of red water, the water line on the AdvanTech sample barely moves, while the water line on the plywood sample moves up significantly. Water absorption can lead to swelling, cupping, delamination and other moisture-related damage.

3 Hour Wicking Demonstration

AdvanTech Flooring

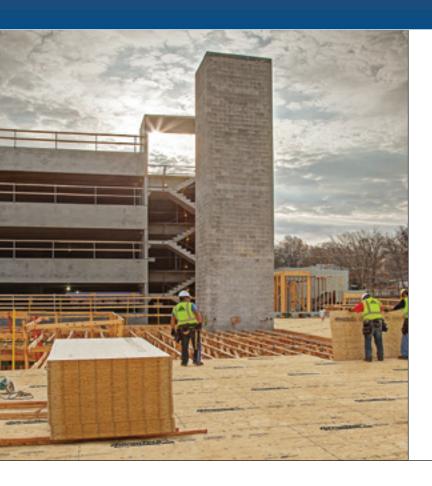
Plywood Flooring







PRECISION ENGINEERED TO LAY DOWN FAST AND STAY DOWN FLAT.



Attention to Details

AdvanTech® panels are precisely engineered to be flat, dimensionally accurate and consistent from one panel to the next.

Plus, the smooth-fitting tongue-and-groove profile and patented fastening guide help jobs get done faster with fewer hassles, errors and callbacks.

HOW ADVANTECH FLOORING HELPS YOU GET THE JOB DONE EFFICIENTLY



Self-Spacing Tongue-and-Groove Profile

The precisely engineered and durable profile helps ensure every panel fits together easily.

Patented Fastening Guide

Printed fastening guides on every panel help improve accuracy and speed during installation.

Lays Flat and Installs Easily

Precision engineering and tight quality controls help ensure every panel goes down with ease.

ENGINEERED FOR LONG-LASTING QUALITY AND PERFORMANCE.

From footsteps, to finished floor coverings, to home furnishings and even the walls, everything in a home relies on the subfloor. Give your homes a solid start with AdvanTech® flooring.

A SOLID CHOICE FOR A VARIETY OF APPLICATIONS



Flat Roof Application

- AdvanTech® sheathing
- Adhesive
- EPDM or like material



2-Layer Floating Subfloor Application

- Concrete
- Vapor barrier
- AdvanTech® flooring (layer 1)
- AdvanTech® flooring (layer 2)
- Underlayment
- Finished flooring

Assembly in accordance with National Wood Flooring Association guidelines. Chapter 6, Part II.



Gypsum Concrete over AdvanTech® Flooring

- AdvanTech® flooring
- Prime
- Gypsum concrete
- Underlayment
- Finished flooring

Primer should be installed in accordance with gypsum concrete manufacturer specifications.



Hardwoods over AdvanTech® Flooring

- AdvanTech® flooring
- Underlayment
- Hardwoods



Tile over AdvanTech® Flooring

- AdvanTech® flooring
- Thin-set
- Approved tile underlayment
- Thin-set
- Tile or stone

*Thin-set in accordance with tile underlayment manufacturer's recommendation

General Information

Square Edge Panel Size: 4' x 8'

Tongue & Groove Panel Size: 4' x 8' (Actual face dimensions for tongue & groove panel are approximately 47-1/2" x 95-7/8")

Edge: Tongue & groove

Flooring Mill Specifications							
Mill	Panel Thickness (in)	Approx.* Weight Per Panel	Panels Per Unit				
Easton, ME	19/32 23/32	61 lbs. 72 lbs.	55 pcs. 45 pcs.				
Commerce, GA	19/32 23/32 7/8	68 lbs. 78 lbs. 94 lbs.	55 pcs. 45 pcs. 40 pcs.				
Crystal Hill, VA	19/32 23/32 7/8 1 1 1/8	68 lbs. 78 lbs. 94 lbs. 110 lbs. 124 lbs.	55 pcs. 45 pcs. 40 pcs. 35 pcs. 30 pcs.				
Broken Bow, OK	19/32 23/32 7/8 1 1 1/8	68 lbs. 85 lbs. 100 lbs. 108 lbs. 126 lbs.	55 pcs. 45 pcs. 40 pcs. 35 pcs. 30 pcs.				

^{*} Estimated panel weight. Actual weight may vary by mill.

COVER YOUR HOMES IN STRENGTH & PROTECTION.



AdvanTech® Roof and Wall Sheathing

OSB and plywood simply can't compare. What's inside the panel makes all the difference: built-in resins resist the damaging effects of weather during construction and over time. Structural 1 rated to provide excellent shear resistance and added strength to your walls and roofs. Build with the lasting durability of AdvanTech® sheathing.

CDX PLYWOOD CAN'T STAND UP TO RAIN, SLEET AND SNOW THE WAY ADVANTECH® SHEATHING CAN.





Unmatched Moisture Resistance

Designed for a longer exposure during construction, backed by a 500-day weather resistance guarantee². So unlike OSB and plywood, AdvanTech sheathing is engineered to resist swelling, cupping and delamination.

Backed By An Industry-Leading Warranty²

AdvanTech sheathing is backed by the best warranty in the business — a limited lifetime warranty — for added assurance both during and after construction.

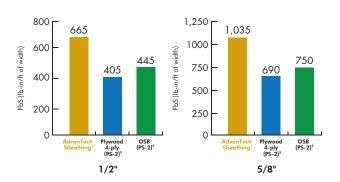
Higher Strength, Stiffness And Fastener Holding Power
ESR-1785 documents industry-leading strength and stiffness and better
fastener holding power than competitive OSB and plywood⁴ providing
an exceptional nail base. Panels install flat and stay flat to help exterior
materials look and perform their best.

Structural 1 Rated

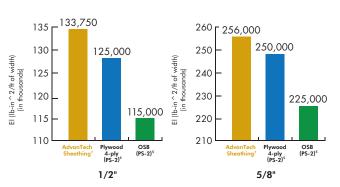
Provides up to 10% more allowable shear strength than rated sheathing with the same thickness and nailing pattern. Designed for greater resistance to wind and seismic loads in roof applications. Ideal for regions with heavy wind, rain, snow and ice.

THE CLEAR LEADER IN STRENGTH AND STIFFNESS.

Superior Bending Strength (FbS)



Superior Bending Stiffness (EI)



Structural 1 Sheathing Mill Specifications							
Mill	Performance Category	Approx.* Weight Per Panel	Panels Per Unit				
Easton, ME	1/2 in.	52 lbs.	70 pcs.				
	5/8 in.	64 lbs.	55 pcs.				
Commerce, GA	1/2 in.	52 lbs.	70 pcs.				
Crystal Hill, VA	5/8 in.	67 lbs.	55 pcs.				
Broken Bow,	1/2 in.	58 lbs.	70 pcs.				
OK	5/8 in.	70 lbs.	55 pcs.				

	AdvanTech® roof & wall sheathing*									
Performance Category	Panel Size	PS-2 Span Rating	Code Evaluation Report	Edge Profile	Panel Grade	Approx. Weight Per Panel**	Panels Per Unit			
1/2	4' x 8'	32/16	EOD 1705	SE		54 lbs.	70 pcs.			
5/8	4' x 8'	40/20	ESR-1785	T&G, SE	Structural 1	67 lbs.	55 pcs.			
23/32	4' x 8'	48/24	-	SE		78 lbs.	45 pcs.			

^{*}Net face width is 47-1/2" on tongue and groove panels.

^{*} Estimated panel weight. Actual weight may vary by mill. 5/8" sheathing is available in tongue & groove and square edge.



References: 1. AdvanTech flooring is the only wood structural panel substantiated by third party evaluation services for published design values for strength, stiffness and fastener holding power above PS-2 minimums. Please see ESR-1785 for AdvanTech flooring published design values. 2. Limitations and restrictions apply. Visit advantechperforms.com for details. 3. Based on Builder Magazine's 2012 Brand Use Study which surveyed 6,000 builders. 4. Based on design values documented in ESR-1785. ESR-1785 is an Evaluation Services Report (ESR) issued by the International Code Council Evaluation Service. Evaluation reports from ICC Evaluation Service are frequently used by code officials to verify that new and innovative building products comply with code requirements. 5. ICC ES Evaluation Service Report, ESR-1785. 2012 edition of the AF&PA American Wood Council's, Allowable Stress Design (ASD)/ LRFD Manual for Engineered Wood Construction. 6. Based on the equivalent specific gravity values published in ICC-ES Evaluation Service Report, ESR-1785 and the 2012 APA Panel Design Specification, Form No. D510C. 7. ICC-ES Evaluation Services Report ESR-1785. 8. Based off performance category 23/32. 9. APA Technical Topic TT-039C, Recommended Design Values for Nail Withdrawal from APA Plywood and OSB. Refer to advantechperforms.com technical tip "AdvanTech Nail Withdrawal vs Plywood & OSB" for conversion calculations. 10. During the construction process as related to dimensional stability (thickness swell, linear expansion, edge swell, water absorption or surface quality) of the product. 11. All testing was conducted by an independent IAS accredited testing facility in September 2008. This small sample testing was done in accordance with the applicable ASTM standards and test methods. OSB values are based on lowest, average and highest water absorption levels of four competitors. Plywood value is based on the lowest, average and highest water absorption levels of three competitors. Competitor testing samples correspond to s

^{**} Estimated panel weight. Actual weight may vary by mill.







KEEP THE ELEMENTS OUT AND SEAL COMFORT AND SAVINGS IN.





Discover ZIP System® sheathing & tape. It's a one-of-a-kind structural roof and wall system with a built-in energy-efficient barrier that keeps moisture out and reduces air leakage while still allowing panels to properly dry. Plus, it goes up in just two easy steps:

- 1. Install the panels
- 2. Tape the seams

Fewer steps result in **40% faster installation** when compared to traditional housewrap and felt.



SIMPLY INSTALL ZIP SYSTEM® PANELS AND TAPE THE SEAMS FOR MOISTURE AND AIR PROTECTION.

- High quality structural sheathing panel made of engineered wood delivers strength and durability.
- Built-in vapor permeable, water-resistive barrier enhances drainage and eliminates the hassles of housewrap and felt.
- A continuous, rigid air barrier decreases unwanted air leakage for greater energy efficiency.
- ZIP System™ flashing tape with a specially engineered, high performance acrylic adhesive bonds with ZIP System® panels for a permanent protective seal.

ZIP SYSTEM® SHEATHING & TAPE IS THE FASTEST WAY TO ACHIEVE:













Installation Speed and Ease

ZIP System® sheathing is easier to install than traditional housewrap and felt, helping save money on labor costs and improve project cycle times.

Superior Moisture Protection

By achieving optimal levels of permeability and drainage, ZIP System® sheathing & tape protects against water intrusion while still allowing the panels to properly dry.

Superior Air Protection

ZIP System® sheathing & tape forms a tight barrier against unwanted air leakage, for a durable building envelope that promotes energy efficiency and increases interior comfort.

Structural Durability

All ZIP System® panels are available as Structural 1* rated, so you always get the ultimate strength that helps meet seismic and high wind zone code requirements.

PLUS OPTIONS THAT PROVIDE:

Enhanced Thermal Resistance

The all-in-one ZIP System® r-sheathing adds an insulated layer that enhances the building envelope and increases its total R-Value.

Radiant Barrier Efficiency

Our ZIP System® radiant barrier panels are the fastest way to add superior radiant protection from extreme sun and heat to your roofs.

*4'x8' 7/16" ZIP System® sheathing panels are Structural 1 rated from the Broken Bow, OK mill only.



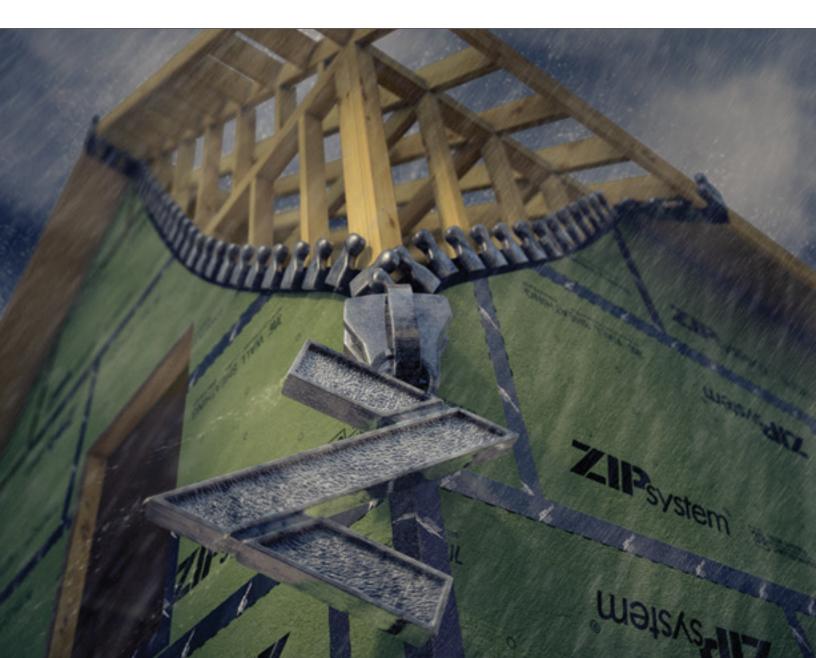






Three thicknesses. Two colors. It's one panel that can do it all.

ZIP System® sheathing & tape is designed to streamline work on the jobsite. It's a one-of-a-kind structural roof and wall system with a built-in energy-efficient barrier that keeps moisture out and reduces air leakage, while still allowing panels to properly dry. Three panel thicknesses let you choose the strength and protection you need for your build. Each one is engineered for use on both roof and wall applications, meaning one panel is all you need.



PANELS ARE CONVENIENTLY COLOR-CODED

Green panels signify a thickness of 7/16" while red panels signify a thickness of 1/2" and 5/8". All three thicknesses can be used in both roof and wall applications, making it the perfect choice for any job.

7/16" Combo Panel



1/2" and 5/8" Combo Panels

SAMPLE COMBINATIONS:

Refer to detailed installation instructions at ZIPsystem.com



	7/16" ZIP System® roof & wall sheathing							
Performance Category	Panel Size	Panel Count	PS-2 Span Rating	Code Evaluation Report	Vapor Transmission of WRB Layer	Air Barrier*		
7/16	4' x 8'	80	24/16			ASTM		
7/16 Extended Lengths*	4' x 9' 4' x 10' 4' x 9' 1-1/8" 4' x 10' 1-1/8"	70 60 70 60	24/16 Structural 1	ESR 1473 ESR 1474	12-16 perm ASTM E 96-00 Procedure B	E 2178 <0.02L(s•m²)		

^{*}When used with ZIP System™ flashing tape.

Although all projects are unique, experience has shown that 1 roll of 3 3/4" ZIP System[®] flashing tape is needed for approximately 7 sheets of 4' x 8' ZIP System[®] sheathing. This should only be considered a general "rule of thumb" when ordering materials with the understanding that some jobs may require more or less depending on the specific project.

	1/2" & 5/8" ZIP System [®] roof & wall sheathing							
Performance Category	Panel Size	Panel Count	PS-2 Span Rating	Code Evaluation Report	Vapor Transmission of WRB Layer	Air Barrier*		
1/2	4' x 8'	70	32/16 Structural 1	ESR 1473	12-16 perm ASTM	ASTM E 2178 <0.02L(s•m²) @ 75 Pa ASTM		
5/8	4' x 8'	55	40/20 Structural 1	ESR 1474	E 96-00 Procedure B	ASTM E 2357 <0.2 L(s•m²) @ 75 Pa		

^{*}When used with ZIP System™ flashing tape.

Although all projects are unique, experience has shown that 1 roll of 3 3/4" ZIP System™ flashing tape is needed for approximately 7 sheets of 4' x 8' ZIP System® sheathing. This should only be considered a general "rule of thumb" when ordering materials with the understanding that some jobs may require more or less depending on the specific project.







KEEP MOISTURE PROBLEMS OUT OF YOUR WALLS.

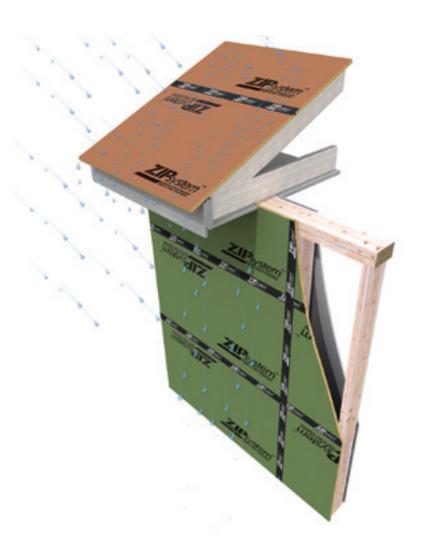
ZIP System® sheathing is a code-recognized water resistive barrier that achieves greater than 90% drainage efficiency when tested in accordance with ASTM E-2273.

ZIP System® sheathing installs without the hassles of housewrap and felt. Since the weather barrier is integrated directly onto the sheathing panels, it doesn't tear or blow off – even when exposed to harsh wind-driven rain tests. This built-in barrier also helps eliminate the risk of water becoming trapped between building wrap and sheathing. Plus, the system seals tightly to provide a durable, rigid air barrier to reduce unwanted air leakage and increase energy efficiency. That's performance we back with a 30-year system limited warranty and products that can withstand up to 180 days of exposure.



Engineered For Optimal Breathability

The ZIP System® sheathing overlay protects against water intrusion while providing an optimal vapor permeance level (12-16 perms) to allow panels to properly dry out.











STOP AIR LEAKAGE AND MAXIMIZE ENERGY EFFICIENCY.

Air leakage is one of the most significant causes of energy loss, because it works against expensive heating and cooling equipment by disrupting inside temperature. By forming a continuous, rigid air barrier, ZIP System® sheathing & tape reduce air leakage, while outperforming traditional sealing methods involving housewrap.

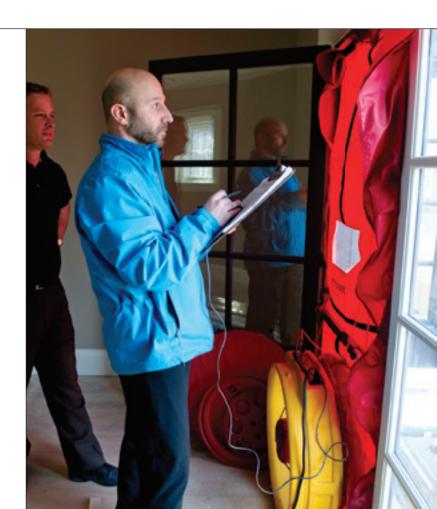
Why ZIP System® Sheathing

By simply taping the panel seams with ZIP System[™] flashing tape, the system effectively seals the building envelope, decreasing unwanted air leakage into and out of the home. ZIP System[®] panels are structural PS-2 rated panels with permanently integrated protective barriers. They're engineered to withstand the demands of the jobsite and provide long-term performance within the building structure. That's superior performance we ensure through extreme tests.



A Tighter Seal That Protects R-Value

Air leakage lessens the ability of insulation to resist heat flow, reducing its effective thermal resistance (R-Value). By eliminating gaps in the building envelope for a tighter seal, ZIP System® sheathing better protects the wall system and prevents air leakage from degrading R-Value.





See What You Could Save

Less energy consumption and lower utility bills are key factors in today's housing market. ZIP System® sheathing & tape can play a key role in achieving both. Visit our online map to see estimated annual energy savings in a city near you.

ZIPsystem.com/energyefficiency



City	Average Annual Savings on Heating and Cooling Costs	Annual ZIP System Wall Savings (\$ Savings)	City	Average Annual Savings on Heating and Cooling Costs	Annual ZIP System Wall Savings (\$ Savings)	City	Average Annual Savings on Heating and Cooling Costs	Annual ZIP System Wall Savings (\$ Savings)
Boise	13%	\$189	New Orleans	5.8%	\$74	Washington	9.1%	\$187
Chicago	12%	\$194	Dallas	6.7%	\$125	Philadelphia	10.5%	\$225
Denver	11%	\$156	Little Rock	7.2%	\$136	Boston	13%	\$353
Fargo	16%	\$306	Oklahoma	9.4%	\$136	Detroit	12.5%	\$242
Madison	13%	\$275	City			Syracuse	12%	\$318
Milwaukee	14%	\$282	Omaha	11.6%	\$177	Portland	13.7%	\$380
Minneapolis	14%	\$252		Average Annual	Annual ZIP System			
Omaha	12%	\$177	City	Savings on Heating	Wall Savings	-//	1 2	TM
Portland	10%	\$166		and Cooling Costs	(\$ Saviñgs)		Psystem	,
Salt Lake City	11%	\$155	Orlando	3.8%	\$58		SHEATHING	j & IAPE
Seattle	11%	\$175	Atlanta	7.5%	\$165		e estimated, based	
St. Louis	11%	\$191	Charlotte	7.5%	\$151	gas heat and ce	q./ft home on slab fo entral air. Based on erices: Electricity; 0.	the following
Wichita	10%	\$177	Nashville	9.1%	\$130	Gas: 10.67 \$/m		υ, ου φ/κνιι

THE FASTEST WAY TO A ROOF THAT STANDS UP TO THE ELEMENTS.

When it comes to building a quality roof that can stand up to the elements, nothing beats the tough, efficient protection of ZIP System® sheathing & tape. As an all-in-one structural panel system with a built-in water-resistive barrier, ZIP System sheathing & tape creates an airtight seal and eliminates the need for felt, synthetic underlayment or peel & stick options, saving significant labor time and costs. The simple panel-and-tape system installs quickly creating a rough dry-in that helps keep construction progress on track.



Speeds Installation

ZIP System® sheathing & tape installs faster than traditional roof underlayment options. Simply install the panels, tape the seams and roof installation is ready to begin.

Superior Moisture Resistance

Engineered to prevent moisture while providing optimal permeability that allows water vapor to pass through and promote drying.

Quicker Rough Dry-In

Saves valuable construction time, eliminating the need to install felt or an underlayment to produce rough dry-in status.

Structural Durability

Enjoy the peace of mind of a secure roof that meets seismic and high-wind zone code requirements. The 7/16" panel is Structural 1 rated.

180-Day Exposure Allowance

ZIP System® sheathing & tape protects against water intrusion for a rough dry-in unmatched by any other roof sheathing.

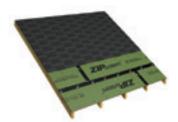
Eliminates Rework

With an integrated roof underlayment, ZIP System sheathing & tape provides a tight, durable system, eliminating costly rework and repairs typical to traditional felt systems.



JUST INSTALL THE PANELS AND TAPE THE SEAMS FOR ROOF SHEATHING THAT INSTALLS FAST AND TIGHT.

ZIP IT TIGHT™ WITH A VARIETY OF ROOFING MATERIALS.







Asphalt Shingles

Metal Shingles & Panels

Clay & Concrete Tile

ZIP System® sheathing & tape provides an excellent roof underlayment to receive many finished roof coverings including metal, tile and asphalt, fiberglass or cedar shingles. The panels lay flat and stay flat, ensuring a finished roof that looks as good as it performs.

	7/16" ZIP System® roof & wall sheathing						
Performance Category	Panel Size	Panel Count	PS-2 Span Rating	Code Evaluation Report	Vapor Transmission of WRB Layer	Air Barrier*	
7/16	4' x 8'	80	24/16			ASTM	
7/16 Extended Lengths*	4' x 9' 4' x 10' 4' x 9' 1-1/8" 4' x 10' 1-1/8"	70 60 70 60	24/16 Structural 1	ESR 1473 ESR 1474	12-16 perm ASTM E 96-00 Procedure B	E 2178 <0.02L(s•m²) @ 75 Pa ASTM E 2357 <0.2 L(s•m²) @ 75 Pa	

^{*}When used with ZIP System™ flashing tape.

Although all projects are unique, experience has shown that 1 roll of 3 3/4" ZIP System™ flashing tape is needed for approximately 7 sheets of 4' x 8' ZIP System® sheathing. This should only be considered a general "rule of thumb" when ordering materials with the understanding that some jobs may require more or less depending on the specific project.

	1/2" & 5/8" ZIP System [®] roof & wall sheathing							
Performance Category	Panel Size	Panel Count	PS-2 Span Rating	Code Evaluation Report	Vapor Transmission of WRB Layer	Air Barrier*		
1/2	4' x 8'	70	32/16 Structural 1	ESR 1473	12-16 perm ASTM	ASTM E 2178 <0.02L(s•m²) @ 75 Pa ASTM		
5/8	4' x 8'	55	40/20 Structural 1	ESR 1474	E 96-00 Procedure B	ASTM E 2357 <0.2 L(s•m²) @ 75 Pa		

 $^{^*}$ When used with ZIP System[™] flashing tape.

Although all projects are unique, experience has shown that 1 roll of 3 3/4" ZIP System™ flashing tape is needed for approximately 7 sheets of 4' x 8' ZIP System® sheathing. This should only be considered a general "rule of thumb" when ordering materials with the understanding that some jobs may require more or less depending on the specific project.







ZIP SYSTEM® LONG LENGTH SHEATHING: TALLER, TOUGHER AND FEWER SEAMS.

Get all the benefits of long length wall sheathing along with the superior moisture protection and air barrier that only ZIP System® sheathing provides. Only ZIP System® long length sheathing and wind zone panels combine the benefits of a longer panel with the ability to completely eliminate housewrap.











ZIP System® wind zone panels are 1-1/8" taller, accommodating roof uplift in single-story projects without requiring additional paneling above.

Compare For Yourself	Other long length panels	ZIP System [®] long length panels	ZIP System® wind zone panels
More efficient panel installation	Х	X	X
Can eliminate blocking at horizontal panel seams	X	X	X
Fewer horizontal seams	Х	X	X
Less panel cutting and waste	Х	X	Х
Can be designed to resist combined uplift and shear	Х	X	Х
Eliminate need for housewrap with built-in vapor permeable water-resistive barrier		X	х
Continuous rigid air barrier decreases unwanted air leakage for greater energy efficiency		X	Х
Backed by 30-year system warranty		X	Х
40% faster installation when compared to other long length systems using housewrap		X	X
Long length panel, water-resistive barrier, air barrier and seam sealer are an engineered system from the same manufacturer		X	X
Structural 1 rating for 7/16," 1/2" and 5/8" sizes"		X	X

- See the American Wood Council, Special Design Provisions for Wind and Seismic, AWC SDPWS-08
- ** 1/2" and 5/8" panels available by special order.

	ZIP System® long length sheathing and wind zone panels						
Product	Performance Category	Panel Size	Panel Count	PS-2 Span Rating	Code Evaluation Report	Vapor Transmission of WRB Layer	Air Barrier
Long Length	7/16	4' x 9' 4' x 10'	70 60	24/16	ESR 1473	12-16 perm	ASTM E 2178-03 <0.02L(s•m²) @ 75 Pa
Wind Zone	7/16	4' x 9' 1-1/8" 4' x 10' 1-1/8"	70 60	Structural 1	ESR 1474	ASTM E 96-00 Procedure B	ASTM E 2357-05 <0.2 L(s•m²) @ 75 Pa



ZIP SYSTEM® RADIANT BARRIER: CAN TAKE A SCORCHING AND A DRENCHING.



ZIP System® radiant barrier roof panels are the fastest way to beat heat and moisture. These easy-to-install, all-in-one structural panels feature a built-in water resistive layer along with a new radiant barrier.

Reduces radiant heat transfer as much as 97%

Decreases attic temperatures up to 30°

Reduces home cooling costs up to 12%*

A Faster, Stronger Radiant Barrier Solution	Other radiant barrier panels	ZIP System® radiant barrier panels
Reduces heat load on attic mounted A/C systems	Х	Х
Less heat transfer to the living space	Х	X
Energy usage is reduced	Х	Х
Faster installation when compared to other radiant barrier systems using roofing felt		X
Eliminates the need for felt with a built-in vapor permeable water-resistive barrier		X
Durability reduces re-work and long term performance		X
Backed by a 30-year system warranty		Х

	7/16", 1/2" & 5/8" ZIP System [®] radiant barrier roof sheathing									
Performance Category	Panel Size	Panel Count			Vapor Transmission of WRB Layer	Air Barrier**				
7/16	4' x 8'	80	24/16 Structural 1			ASTM E 2178 <0.02L(s•m²)				
1/2	4' x 8'	70	32/16 Structural 1	12-16 perm ESR 1473 ASTM ESR 1474 E 96-00 Procedure B		@ 75 Pa ASTM E 2357				
5/8	4' x 8'	55	40/20 Structural 1			<0.2 L(s•m²) @ 75 Pa				

^{*} The Florida Solar Energy Center/University of Central Florida Publication #FSEC EN-15-87 titled "Radiant Barriers: A Question & Answer Primer." Studies represent cases in the Southeast and may not be representative of other regions. Savings also depend on the amount of heat the roof and attic contribute to a homes cooling load.

Although all projects are unique, experience has shown that 1 roll of 3 3/4" ZIP System[™] flashing tape is needed for approximately 7 sheets of 4' x 8' ZIP System[®] sheathing. This should only be considered a general "rule of thumb" when ordering materials with the understanding that some jobs may require more or less depending on the specific project.

^{**} When used with ZIP System™ flashing tape.









ZIP SYSTEM® R-SHEATHING. INSULATES AND PROTECTS.

For installation convenience and exceptional, long-term performance, the all-in-one ZIP System® r-sheathing panel provides a new approach to sealing and insulating the building envelope. One panel delivers thermal, air and moisture resistance, while providing excellent strength and durability. This single-piece design lets you avoid the hassles of multi-level systems. Just install the panels and tape the seams for a wall system that provides structure, moisture protection, air tightness and insulation in a single installation.



5-in-1 System with Layers of Innovation

Continuous Foam Insulation Provides Higher R-Value

- Increases thermal performance while minimizing thermal bridging
- Designed to meet new energy codes
- Engineered Wood Provides Structure and Durability
 - Nailable wood base for trim and accessories
 - Provides security against easy home intrusion
 - **Built-In Water Resistive Barrier Eliminates Housewrap and Felt**
 - Eliminates costly rework
 - Instant rough dry-in can withstand up to 180 days of exposure
 - Superior drainage efficiency that channels moisture downward off the panel face
 - Permeable overlay promotes panel drying
 - **Continuous Air Barrier Creates Greater Energy Efficiency**
 - Decreases unwanted air leakage into and out of a building
 - Helps protect the R-Value of insulation, reducing heating and cooling costs

ZIP System™ Flashing Tape Permanently Seals All Panel Seams

- Acrylic formulation provides superior adhesion
- Rigorously tested for long-lasting performance
- Easily applied with tape gun and accessories

	1" & 1 1/2" ZIP System® R-Sheathing									
Panel Type	Total Thickness	Panel Size	Panel Count	R-Value	Code Evaluation Report	Air Barrier				
R-3	1"	4' x 8'	32	3.6	ESR 3373	ASTM E 2357 <0.2 L(s•m²)				
R-6	1-1/2"	4' x 8'	31	6.6	E3N 3373	@ 75 Pa				

PHYSICAL PROPERTY DATA CHART

ZIP System® Properties	R-3 (1")	R-6 (1-1/2")
TECO Rated OSB	7/16"	7/16"
Foam	1/2"	1"
R-Value	3.6	6.6
Pieces Per Package	32 (4'x8' sheet)	31 (4'x8' sheet)
Square Feet Per Package	1024	992

Foam Performance								
Property	Test Method	Typical Results						
Dimensional Stability	ASTM D 2126	< 2%						
Compressive Strength	ASTM D 1621	20 psi						
Water Absorption	ASTM C 209 ASTM D 2842	< 1% < 3.5%						
Water Vapor Transmission	ASTM E 96	< 1.0 perm						
Density	ASTM D 1622	Nominal 2.0 pcf						
Flame Spread	ASTM E 84	40-60						
Smoke Developed	ASTM E 84	50-170						
Tensile Strength	ASTM D 1623	> 730 psf						
Service Temperature		-40° – 200° F						

ZIP System® Performance								
Water Resistance of Coatings	ASTM D 2247-97	Passed 14-day exposure test						
Drainage Efficiency	ASTM E 2273	> 90%						
Water Vapor Transmission	ASTM E 96B	12-16 perms (overlay)						
Water Penetration	ASTM E 331-00	Passed						
Air Barrier Assembly	ASTM E 2357-05 at 75Pa	0.037 L/(s•m²)						
Wind Driven Rain	TAS-100	Passed 100 mph						
Accelerated Weathering	ASTM G 154	Passed						

Long term thermal resistance values of the foam were determined in accordance with ASTM C 1289-02. The R-Value of 0.55 for 7/16" OSB was obtained from ASHRAE Handbook, Fundamentals.

ESR-3373

Allowable Shear Capacity for ZIP System® R-Sheathing with Framing of Douglas Fir-Larch¹ For Wind or Seismic Loading Under the 2012 and 2009 IBC

	Fram	ning	F	Fasteners				
R-Sheathing Type³	Nominal Stud Size (min.)	Maximum Stud Spacing (in.)	Fastener Specifications ²	Edge/Field Spacing (in.)	Minimum Penetration into Framing (in.)	Allowable Shear Capacity ^{4,5} (plf)		
R-3	2-by-4	24	24 0.131" shank nails		1.5	245		
R-6	2-by-4	24	0.131" shank nails	4/12	1.5	NA ⁶		
R-6	2-by-4	24	0.131" shank nails	3/6	1.5	215		
R-3	2-by-4	16	16ga staples, 7/16" crown, 2" length	3/6	1.0	210		
R-6	2-by-4	24	15ga staples, 7/16" crown, 2.5" length	3/6	1.0	NA ⁶		

For SI: Inch = 25.4mm; 1 pound per foot (ppf) = 14.59 N/m.

- 1 For framing of other species, the shear value above must be multiplied by the Specific Gravity Adjustment Factor = [1 (0.50 SG)], where SG=Specific Gravity of the framing lumber in accordance with the AF&PA NDS. This adjustment factor must not be greater than 1.
- 2 Fasteners must be common nails or equivalent, or staples, of a type generally used to attach wood sheathing.
- 3 Type R-6 r-sheathing panels have a foam plastic insulation thickness of 1". Type R-3 r-sheathing panels have a foam plastic insulation thickness of .5".
- 4 The shearwalls must have a maximum height-to-width aspect ratio of 2:1.
- 5 The allowable shear capacity may be increased by 40% for wind in Allowable Stress Design in accordance with Section 2306.3 of the 2012 and 2009 IBC.
- 6 This panel and fastening configuration is applicable to the prescriptive bracing requirements under the 2009 IRC.



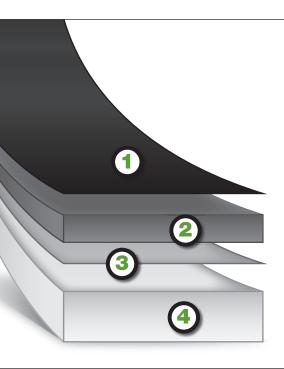






ZIP SYSTEM™ FLASHING TAPE: OUTSTANDING ADHESION, RESILIENCE AND EFFICIENCY.

ZIP System[™] flashing tape is made of an advanced acrylic adhesive, proven to deliver a superior airtight and watertight seal that withstands many years of harsh weather. It installs quickly by hand and roller or by using the ZIP System[™] tape gun, and is ideal for both seam sealing and flashing applications.



EVERY LAYER WORKS TOGETHER FOR TOTAL PERFORMANCE AND PROTECTION.

Slip Resistant

Top layer provides good tack during installation for safety

Weather and UV Protection

Thick inner layer offers dimensional stability

- Carbon black for "sunscreen" that protects other layers
- Antioxidants for durability
- Warranted for up to 180 days of extreme weather and UV exposure
- 3 Long-Term Durability
 Bonding layer specially formulated to bond with the adhesive for durability

All Weather Adhesion

- Best performing tape in all weather conditions

- Advanced acrylic adhesive delivers a lifetime of superior adhesion
- Resists heat and UV light and creates permanent bond strength

ZIP SYSTEM™ FLASHING TAPES OFFER SUPERIOR ADHESION AT BROAD TEMPERATURE RANGE.





Works on a VARIETY OF SURFACES







Cold temperature application AS LOW AS 20 DEGREES F



SUPERIOR ACRYLIC ADHESION better than butyl/asphalt



180-DAY EXPOSURE guarantee

ZIP System [™] flashing tape										
Nominal Roll Tape Adhesive Code Installation Tem- Width Length Thickness Technology Evaluation Report perature Range					Allowable UV Exposure	Tensile Strength	Elongation			
3-3/4"				ESR 2227						
6"	75'	12 mils	Acrylic	AAMA 711-07: Pass	20°-120°F	180 Days	938 psi	400%-800%		



ZIP SYSTEM™ STRETCH TAPE: STRETCHES, CURVES, STICKS AND SEALS.

ZIP System™ stretch tape easily stretches to fit sills, curves and corners with a single piece without having to piece tape segments together. Made of a high-performance composite acrylic, the tape conforms to challenging applications and locks out moisture even over mismatched surfaces.



SPEED THROUGH APPLICATIONS WITH TAPE THAT STRETCHES.

ZIP System[™] stretch tape is fast and effective. Nothing seals around curves and corners better. So you can zip through tricky installations with ease.

Stretches to fit

Easily stretches to conform to corners and curves

Excellent moisture barrier

Provides a strong tight bond for an effective ZIP IT TIGHT™ seal, even around fasteners

Labor saving

Eliminates the need to piece tape segments together in challenging applications

Repositionable

Can be pulled up and reapplied for hassle-free installation

Versatile

Ideal for your toughest applications including curved windows and wall penetrations

ZIP SYSTEM™ STRETCH TAPE WORKS ON A VARIETY OF APPLICATIONS.



Stretches In Any Direction





Wall Penetration



ZIP System [™] stretch tape								
Nominal Width	Roll Length	Roll Length Tape Thickness Installation Temperature Range		Allowable Weather Exposure	Tensile Strength	Elongation		
6"	75'	42 mils	20°-120°F	180 Days	225 psi	800%-1200%		







ZIP SYSTEM™ LIQUID FLASH: VERSATILITY FOR SEALING EVERY ROUGH OPENING.

ZIP System™ liquid flash is a liquid-applied flashing membrane made of STPE (silyl-terminated-polyether) technology. This high-performance formulation combines the durability of silicones with the toughness of urethanes.



ENGINEERED FOR SEALING IRREGULAR, CURVED OR HARD TO FLASH AREAS.

1 Optimal Viscosity
Flows easily to seal irregular shapes and surfaces

Quick Cure Time

- 2 Immediately weather resistant and tack free in as little as 20–40 minutes depending on conditions. Target thickness achieved when substrate is no longer visible
- Weather and UV Resistant
 Warranted for up to 180 days of extreme weather and UV exposure
- Proper Adhesion to a Wide Range of Surfaces

 Bonds to wood, concrete, masonry, architectural metals, glass, PVC, FRP, EPDM and most other building materials

FORMS AN INSTANT SEAL, UNDER THE MOST DEMANDING CONDITIONS.



Flows easily to seal difficult areas, such as rough openings and wall penetrations.



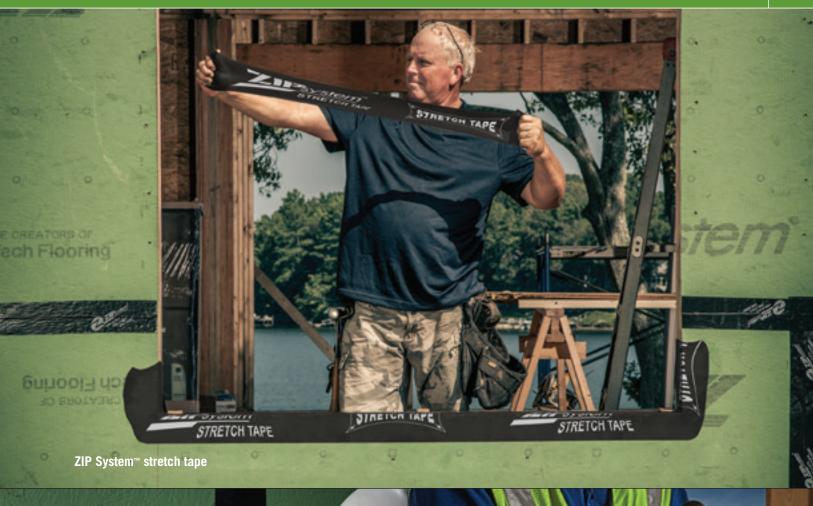
Bonds and cures in wet weather and on damp substrates.



Becomes waterproof immediately after installation, providing fast rough dry-in.

ZIP System [™] liquid flash								
Packaging Options	Typical Coverage: Window Sill Flashing (2x4 Framing)	Cured Thickness	Compound Technology	Water and Air Penetration	Installation Temperature Range	Allowable UV Exposure	Tack Free Time	Cure Time
20 oz. Sausage Pack	20 lf (approx. six 3'0" window sills)	12 mils	STPE	ASTM E331: Pass	35°-110°F	180 Davs	20-40	12 mils =
29 oz. Cartridge	29 If (approx. nine 3'0" window sills)	12 111113	mils Polymer	mer ASTM E2357: Pass	35°-110°F	160 Days	Minutes*	24 Hours*

^{*} At 70°F and 50% relative humidity. Low temperatures and low relative humidity slow dry time; high temperatures and high relative humidity accelerate dry time.

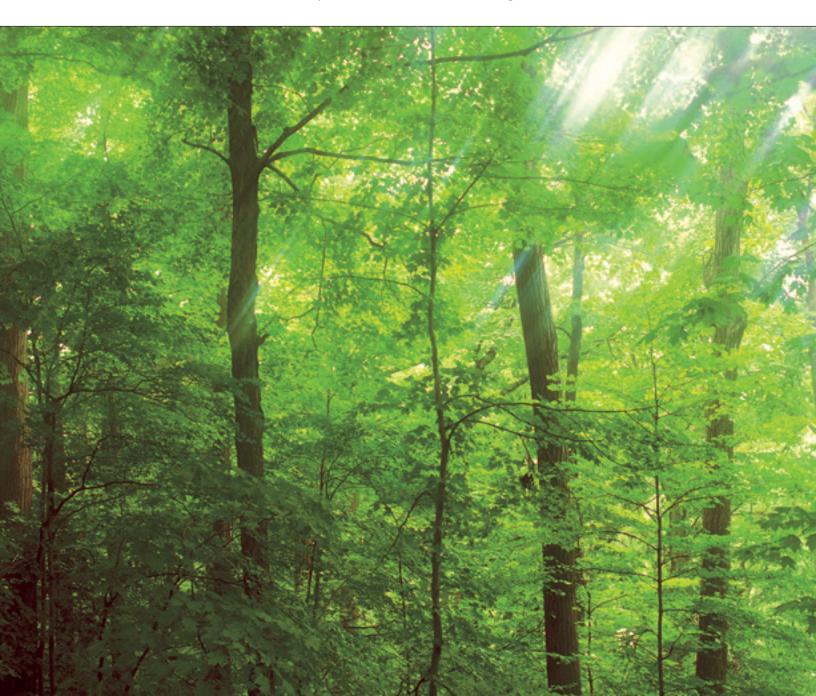




ENVIRONMENTAL PRODUCT DECLARATION.

ZIP System® sheathing is the only combination structural panel of its kind to achieve a cradle-to-grave environmental product declaration.

AdvanTech® sheathing is the first premium wood structural panel with code recognized design values that exceed traditional PS-2 panels to release a cradle-to-grave EPD.







- AdvanTech® flooring and ZIP System® sheathing and tape manufacturing processes are greater than 99% landfill free. Just 2% of waste is produced, with most of it being recycled.
- Wood, which is 100% biodegradable, is the main component of Huber
 Engineered Woods products, comprising more than 90% of each product.
- Huber Engineered Woods utilizes manufacturing plants located in Commerce,
 GA; Broken Bow, OK; Crystal Hill, VA; and Easton, ME, reducing the distance
 materials travel to and from the plants.
- ZIP System sheathing and tape and AdvanTech flooring require no energy or water during the use stage, and require no maintenance, repair, replacement, or refurbishment during their service lives.
- ZIP System roof and wall sheathing provides air sealing potential for buildings.
 ZIP System® r-sheathing provides air sealing and thermal resistance.
- All ZIP System sheathing products include built-in water resistive barriers to prevent moisture leakage in homes.
- ZIP System r-sheathing requires just 10-16 months of service to make up for its global warming impacts, thanks to its built-in continuous foam insulation.
- In a 30-day exposure test, AdvanTech flooring had less water absorption or less moisture content on average than the competitive OSB and plywood panels tested. AdvanTech flooring is the only 23/32" OSB product tested that did not drop below the PS-2 industry standard for subfloor stiffness. This stiffness retention could be an indicator of a longer product service life.

To get the whole Huber Engineered Woods sustainability story visit www.huberwood.com/about-huber/environmental/sustainable-practices







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