

ZIPsystem™
SHEATHING & TAPE

AdvanTech.
FLOORING & SHEATHING



WHERE VISION MEETS INTEGRITY
Structural and Envelope Solutions
Multifamily & Commercial



HUBER ENGINEERED
WOODS



TABLE OF CONTENTS

3	Company Introduction	32	Sustainability	48	Frequently Asked Questions
4	AdvanTech® Flooring and Sheathing	46	Architect Library	50	Portfolio
16	ZIP System® Sheathing and Tape	47	Continuing Education		

MULTIFAMILY • LIGHT COMMERCIAL AND RETAIL • HOSPITALITY • ASSISTED LIVING • MILITARY HOUSING
MIXED USE • STUDENT HOUSING • SINGLE FAMILY/RESIDENTIAL



The background of the entire page is a detailed architectural blueprint of a large industrial or commercial building. The drawing is rendered in white lines on a dark grey background. It shows various rooms, corridors, and structural elements. There are several circular callouts with numbers like '1', '2', and '3' scattered throughout the drawing. The overall style is technical and precise.

HUBER ENGINEERED WOODS

Where creativity breeds innovation.

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.

As a company, we are guided by a spirit of successful creativity that transforms ideas into products that meet the challenges of an evolving world. We never settle for the expected or accepted norm, and always search for methods that will help us deliver the highest quality products and service possible. It's a different way of doing business. Not just innovative thinking, not simply maverick approaches, but creativity that makes a difference.

With a company culture deeply rooted in innovation, we develop products to solve specific problems and to meet specific customer needs. We operate under a philosophy of continuous improvement in quality products, and value customer input, seeking their ideas on product enhancements or new products needed to fill market voids. Imagine a company that consistently surprises its customers with innovative products, yet keeps those products affordable. People want to do business with a company that delivers on their promises. That company is Huber Engineered Woods.



BUILD STRONG.

DELIVERS ON YOUR VISION FOR A DURABLE, QUALITY BUILDING.

ADVANTECH® FLOORING IS FLAT OUT BEST™ FOR A QUIET, STIFF FLOOR THAT ENDURES THE CONSTRUCTION PROCESS AND BEYOND. As an innovative subflooring solution, AdvanTech® flooring brings structural integrity into every project with a unique combination of durability, superior moisture resistance, strength and stiffness. Design AdvanTech® flooring into your multi-family and light commercial projects, and you can feel confident your subfloors will stand strong for years.



DESIGNED TO PERFORM

Structural Durability

AdvanTech® flooring delivers on your vision for a durable, lasting building. Backed by its lifetime limited warranty,¹ you can rest assured of the subfloor's structural integrity.

Designed For Longer Exposure¹

Built-in resins resist the damaging effects of weather during construction for a floor that reduces the risk of swelling, cupping or delamination and can eliminate costly rework. Less rework equals faster cycle times.

Proven Quality

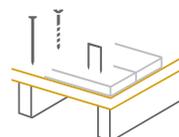
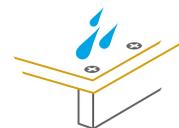
Voted #1 in quality in its category for more than a decade,² AdvanTech® flooring has superior performance published in ESR-1785 for better design bending strength, stiffness and fastener holding power.³

Panel Strength and Stiffness

Long lasting strength and stiffness means AdvanTech® flooring panels are specifically engineered to outperform commodity OSB and plywood giving you a solid base you can build on.

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.



1 Limitations and restrictions apply. Visit AdvanTechPerforms.com for details on AdvanTech® panel Limited Lifetime Warranty and 500-day No Sanding Guarantee.
2 2002-2015 *Builder Magazine's* Brand Use Study.
3 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.
4 See AdvanTech Flooring Product Data Sheet on AdvanTechPerforms.com for available thicknesses stamped as Structural 1.

“ AdvanTech® flooring is durable and well-made. A lot of times in new construction, we have an extended period of time with weather, and water, snow and ice build up on the substrate. AdvanTech® flooring doesn't move, it doesn't give, it doesn't swell. It's a great product for that. ”

— John Lipari, JFL Construction Management, Farmington, CT

PERFORMANCE ADVANTAGES:

Built To A Higher Standard³

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.



Lifetime Limited Warranty¹

Backed by a lifetime limited warranty, AdvanTech® flooring delivers performance you and building owners can trust.

No Sanding Guarantee¹

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, avoiding costly reworks.



Environmentally Friendly

AdvanTech® flooring is a sustainable subflooring system that contributes points toward green programs. (See Sustainability section starting on page 32 for details.)

Voted #1 In Quality²

Builders from across the nation have voted AdvanTech® flooring #1 in quality in its category every year for more than a decade. That's a reputation you can count on.



Structural 1 Rated

AdvanTech flooring delivers on your vision for a subfloor with structural integrity. It's manufactured with design strength and stiffness capacities beyond those required by PS-2, for greater resistance to wind and seismic loads.⁴



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	—	T&G	Structural 1	66 lbs.	55 pcs.
23/32	4' x 8'	24 oc	ESR-1785			78 lbs.	45 pcs.
7/8	4' x 8'	32 oc	—			96 lbs.	40 pcs.
1	4' x 8'	32 oc	—			109 lbs.	35 pcs.
1-1/8	4' x 8'	48 oc	—			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.

ADVANTECH® FLOORING

Structural durability and proven quality make an easy choice.

FOR SUBFLOORING YOU CAN COUNT ON TO PERFORM FOR THE LIFE OF A BUILDING¹, SPECIFY ADVANTECH® FLOORING.

Staying on schedule and within budget can be critical to the success of any project. Rework due to inferior product performance not only costs additional time and labor, but also makes it difficult to keep construction progress on track. Backed by a lifetime limited warranty,¹ AdvanTech® flooring gives all the advantages of a superior performing product,² and none of the headaches that can lead to costly and time-consuming rework. Panels install flat, stand up to the elements and are guaranteed to perform over the life of the building.



ADVANTECH® FLOORING

Superior moisture resistance mitigates the risks of moisture issues.

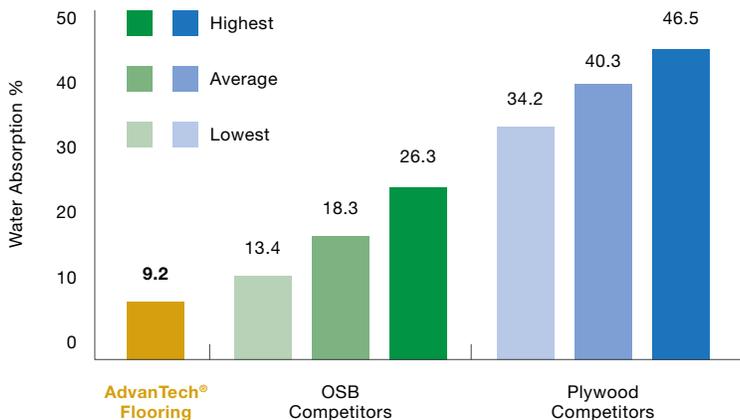
ADVANTECH FLOORING STANDS UP TO ELEMENTS AND DEFENDS AGAINST MOISTURE. AdvanTech® flooring is backed by a 500-day no sanding guarantee,¹ perfect for the longer exposure times in multifamily or light commercial projects.

- 1 High panel density helps **reduce the rate of water absorption** into the panel even under harsh weather conditions.
- 2 Advanced resins coat every wood strand and create a **highly moisture-resistant** substance similar to polyurethane, protecting fresh cut edges on-site.
- 3 **Sealed edges help prevent swelling** during long-term storage or exposure to the elements.



Water Absorption³

24 oc floor panels



- 1 Limitations and restrictions apply. Visit AdvanTechPerforms.com for details.
- 2 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.
- 3 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 single manufacturing locations from one production date.

ESR-1785 designation assures a higher quality subfloor panel.¹

ADVANTECH® FLOORING IS THE ONLY WOOD-STRUCTURAL PANEL WITH PUBLISHED DESIGN VALUES ABOVE CODE MINIMUM (PS-2)² REQUIREMENTS. ESR-1785¹ documents design values for AdvanTech flooring above commodity-grade panels:

- Largely, **62%** better design bending strength than commodity OSB or plywood panels of the same dimension³
- **28%** better design bending stiffness than commodity OSB³
- **16%** better design bending stiffness than commodity plywood³
- Overall, **10%** better design fastener holding power than both commodity OSB and plywood⁴



1 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. ICC ES Evaluation Service Report, ESR-1785.
2 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.
3 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.
4 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.

PROVEN QUALITY YOU CAN BUILD ON.

Once architects or builders use AdvanTech® flooring, they realize the product's benefits firsthand. AdvanTech flooring is a proven performer trusted by building professionals:

- Voted #1 in quality in its category every year since 2002⁵
- Builders and remodelers named AdvanTech flooring 1 of 16 of their favorite building products on the market⁶
- 9 out of 10 builders who try AdvanTech flooring more than once stay loyal⁷



5 2002-2015 *Builder Magazine's* Brand Use Study.
6 *Builder Magazine* 2013 Readers Choice Product Survey.
7 Burke Research. "Discrete Choice Pricing Research Report for AdvanTech" (commissioned research, Charlotte, NC, 2013)

ADVANTECH® FLOORING

The strength and power to keep floors flat and quiet.

ADVANTECH® FLOORING BRINGS TOGETHER A UNIQUE COMBINATION OF BENDING STRENGTH, STIFFNESS AND FASTENER HOLDING POWER FOR ANY APPLICATION.

From finished floor coverings to flat roof applications, AdvanTech flooring is FLAT OUT BEST.™

- 1 | **Exceptional strength and durability** produce a sturdier, quieter floor that can add to the performance of your overall floor system.
- 2 | **Precision engineering** helps keep your projects on schedule with our patented fastening guide and self spacing tongue and groove edge profile.
- 3 | Everything about AdvanTech flooring is engineered for **maximum strength, stiffness and fastener holding power** that will last for the life of the building.
- 4 | **Consistent thickness and density** allow panels to lay flat and helps grip fasteners for a secure finished floor installation.



ADVANTECH® FLOORING

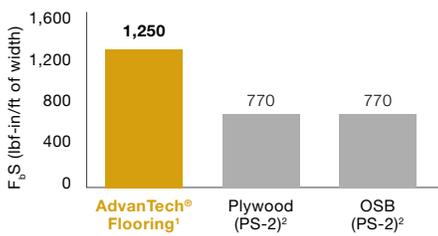
The right choice now for a lifetime of performance.⁴



ADVANTECH PANELS ARE ENGINEERED TO BE STRONG, STIFF AND HOLD FASTENERS IN PLACE. See the test results below on how AdvanTech® flooring stacks up against plywood and OSB competitors.

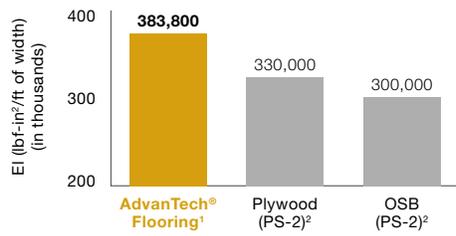
Design Bending Strength (F_bS)

24 oc flooring panels (lbf-in/ft)



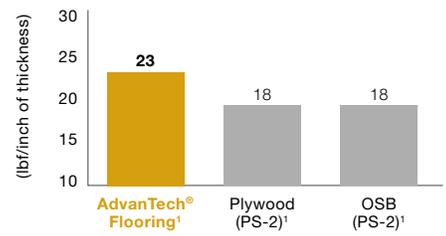
Design Bending Stiffness (EI)

24 oc flooring panels (lbf-in²/ft)



Fastener Withdrawal Calculated Values³

(lbf/inch of thickness)



1 Based on the design values published in ICC-ES Evaluation Service Report, ESR-1785 and the 2012 APA Panel Design Specification, Form No. D510C.
 2 2012 APA Panel Design Specification, Form No. D510C.
 3 Allowable nail withdrawal values were calculated in accordance with the 2012 National Design Specification for Wood Construction using a 0.131 inch diameter nail for flooring and 0.148 inch diameter nail for roof and wall sheathing calculations. American Wood Council ASD/LRFD.
 4 Limitations and restrictions apply. Visit AdvanTechPerforms.com for details.

ADVANTECH® FLOORING

A solid choice for a variety of flooring applications.



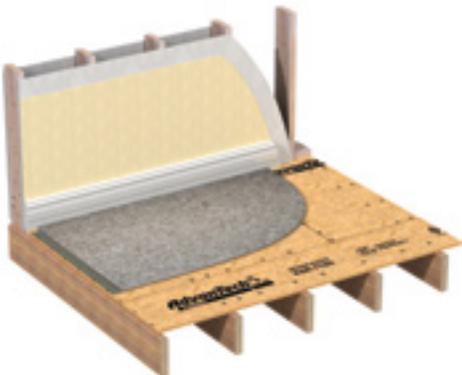
HARDWOODS OVER ADVANTECH® FLOORING

Fastener holding power and panel strength keep hardwood flooring flat and quiet.



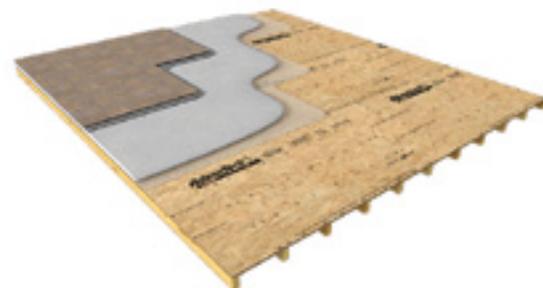
TILE & STONE OVER ADVANTECH® FLOORING

Design stiffness and long-lasting durability help reduce the risk of cracked tile and stone.



CARPET OVER ADVANTECH® FLOORING

Fully sanded surface and high wood density helps eliminate visible seams while keeping tack-strips firmly in place.



GYPSUM CONCRETE OVER ADVANTECH® FLOORING

An excellent substrate for heavy traffic areas, AdvanTech® panels provide a durable, strong base ideal for gyp-crete assemblies.

ADVANTECH® ROOF AND WALL SHEATHING

Performance that goes beyond the floor.

BEYOND PROVIDING SUPERIOR STRENGTH AND MOISTURE RESISTANCE FOR YOUR FLOORS, AdvanTech® sheathing is available to bring the same level of quality to roof and wall systems. Now you can cover an entire project with the strength and protection of AdvanTech products.



PERFORMANCE FEATURES:

1

Structural 1 Rated

Provides up to 10% more allowable shear strength than rated sheathing with the same thickness and nailing pattern.³ Designed for greater resistance to wind and seismic loads in wall/roof applications. Ideal for regions with heavy wind, rain, snow and ice.

2

Higher Strength, Stiffness And Fastener Holding Power

ESR-1785 documents industry-leading strength and stiffness and better fastener holding power than competitive OSB and plywood² providing an exceptional nail base. Panels install flat and stay flat to help exterior materials look and perform their best.

3

Defends Against Moisture

Designed for a longer exposure during construction, backed by a 500-day weather resistance guarantee¹. So unlike OSB and plywood, AdvanTech sheathing is engineered to resist swelling, cupping and delamination.

4

Backed By A Lifetime Limited Warranty¹

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



1 Limitations and restrictions apply. Visit AdvanTechPerforms.com for details.

2 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

3 Increased shear values achieved through higher bending strength (F_bS), stiffness (EI) values than required by PS-2 to acquire Structural 1 rating. Non-proprietary DOC PS-2 Standard Test.

**OSB AND PLYWOOD
SIMPLY CAN'T COMPARE.**

AdvanTech® 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.



AdvanTech® roof and wall sheathing*

Performance Category	Panel Size	PS2 Span Rating	Code Evaluation Report	Edge Profile	Panel Grade	Approx. Weight Per Panel**	Panels Per Unit
1/2	4' x 8'	32/16	ESR-1785	SE	Structural 1	54 lbs.	70 pcs.
5/8	4' x 8'	40/20		T&G, SE		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.

ADVANTECH® ROOF AND WALL SHEATHING

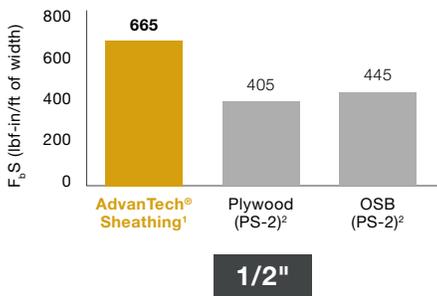
The clear leader in strength and stiffness.

ADVANTECH PANELS BRING TOGETHER A UNIQUE COMBINATION OF BENDING STRENGTH, stiffness and fastener holding power, helping to deliver exceptional structural performance for roof, wall and flooring applications and improve the integrity of the entire building.



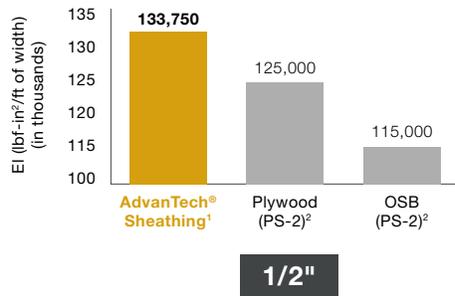
Design Bending Strength ($F_b S$)

sheathing panels (lbf-in/ft)



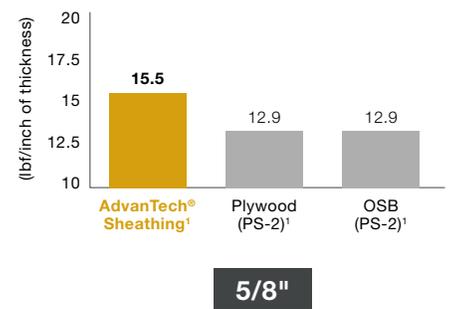
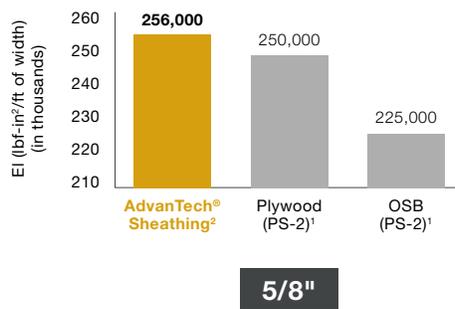
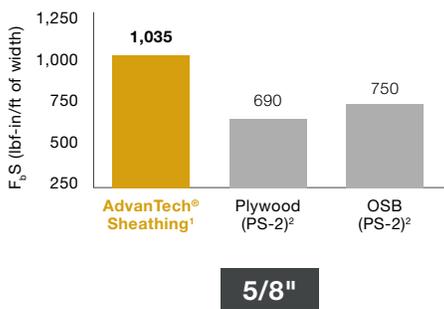
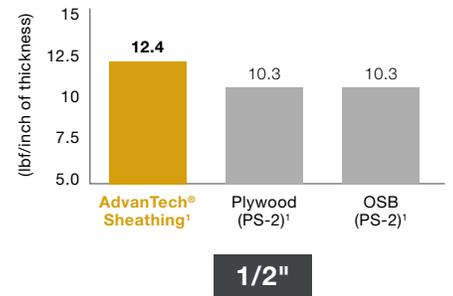
Design Bending Stiffness (EI)

sheathing panels (lbf-in²/ft)



Fastener Withdrawal Calculated Values³

(lbf/inch of thickness)



¹ Based on the design values published in ICC-ES Evaluation Service Report, ESR-1785 and the 2012 APA Panel Design Specification, Form No. D510C.

² 2012 APA Panel Design Specification, Form No. D510C.

³ Allowable nail withdrawal values were calculated in accordance with the 2012 National Design Specification for Wood Construction using a 0.131 inch diameter nail for flooring and 0.148 inch diameter nail for roof and wall sheathing calculations. American Wood Council ASD/LRFD.

ADVANTECH® FLOORING AND SHEATHING

Engineered for long-lasting quality and performance



SHEAR WALL DESIGNS WITH ADVANTECH® SHEATHING

Structural-1 rating deliver greater shear resistance to wind and seismic loads.



TILE ROOFS ABOVE ADVANTECH® SHEATHING

Strength, durability and fastener holding power provide an exceptional base for heavy roofing materials.



SHINGLES ABOVE ADVANTECH® SHEATHING

Strong, moisture resistant panels install flat and stay flat to help eliminate visible seams so exterior materials look their best.



DOUBLE-LAYER FLOATING SUBFLOORS USING ADVANTECH® PANELS

Dimensional stability and consistent quality provides a flat, stable base to keep hardwoods firmly in place.



FLAT ROOF APPLICATION USING ADVANTECH® PANELS

Stiffness and moisture resistance against edge swell help reduce low spots that pond water.

ZIP IT TIGHT.TM

IN TODAY'S BUILDING CLIMATE, YOU NEED A TIGHT BUILDING ENVELOPE THAT WILL STAND UP TO THE ELEMENTS BEFORE, DURING AND AFTER CONSTRUCTION.

To spec it right, ZIP IT TIGHTTM with the protection of ZIP System[®] sheathing and tape. It's the 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. The system is installed in two easy steps: just install the panel and tape the seams. As a result, **ZIP System[®] sheathing and tape installs 40% faster** when compared to traditional building wrap and tape.



THE ANATOMY OF ZIP SYSTEM[®] SHEATHING AND TAPE:

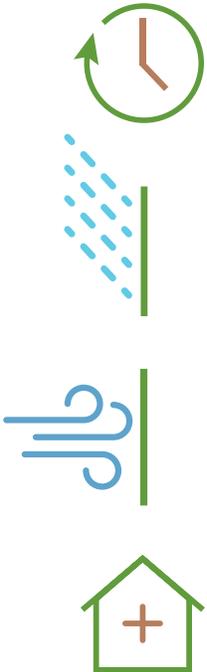
SIMPLY INSTALL ZIP SYSTEM[®] PANELS AND TAPE THE SEAMS FOR MOISTURE AND AIR PROTECTION

- 1 High quality structural sheathing panel made of engineered wood delivers strength and durability.
- 2 Built-in vapor permeable, water-resistant barrier enhances drainage and eliminates the hassles of building wrap and felt.
- 3 A continuous, rigid air barrier decreases unwanted air leakage for greater energy efficiency.
- 4 ZIP SystemTM tape, with a specially engineered, high performance acrylic adhesive, bonds with ZIP System[®] panels for a permanent protective seal.



ZIP SYSTEM® SHEATHING AND TAPE

For a high performing building.



PERFORMANCE FEATURES:

Speed and Ease of Installation

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

Built-In Water Resistant Barrier

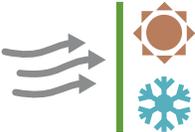
By achieving optimal levels of permeability and drainage, ZIP System® sheathing and tape protects against water intrusion while still allowing the panels to properly dry.

Energy Efficient Air Barrier

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

Enhanced Structural Durability

ZIP System® panels are available with a Structural 1 rating, so you can get the ultimate shear strength to meet seismic and high-wind-zone requirements. See website for details.



PLUS, AN OPTION TO 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.

ZIP SYSTEM® SHEATHING AND TAPE

Keeps moisture out of the building envelope.

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 building wrap 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.*

* Limitations and restrictions apply. Visit ZIPSystem.com for details.



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.



ZIP SYSTEM® SHEATHING AND TAPE

Reduces air leakage for maximum 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 and tape reduces air leakage, while outperforming traditional sealing methods involving building wrap.

Taping the panel seams with ZIP System™ tape 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 back 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 and tape better protects the wall system and prevents air leakage from degrading R-Value.



ZIP SYSTEM® SHEATHING AND TAPE

Spec it right. ZIP it tight.™



“ ZIP System® R-sheathing reduces air leakage, which ultimately decreases energy costs. I also love that it's so durable. With other sheathing products that use housewrap, builders frequently have to repair tears. With ZIP System sheathing and tape, I don't see those issues.”

—Steven Baczek, Residential Architect, Boston, MA

7/16" ZIP System® roof and wall sheathing

Performance Category	Panel Size	Panel Count	PS2 Span Rating	Code Evaluation Report	Vapor Transmission of WRB Layer	Air Barrier**
7/16	4' x 8'	80	24/16***	ESR 1473 ESR 1474	12-16 perm ASTM E 96-00 Procedure B	ASTM E 2178 <0.02 L(s•m²) @ 75 Pa
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			ASTM E 2357 <0.2 L(s•m²) @ 75 Pa

1/2" & 5/8" ZIP System® roof and wall sheathing

Performance Category	Panel Size	Panel Count	PS2 Span Rating	Code Evaluation Report	Vapor Transmission of WRB Layer	Air Barrier**
1/2	4' x 8'	70	32/16 Structural 1	ESR 1473 ESR 1474	12-16 perm ASTM E 96-00 Procedure B	ASTM E 2178 <0.02 L(s•m²) @ 75 Pa
5/8	4' x 8'	55	40/20 Structural 1			ASTM E 2357 <0.2 L(s•m²) @ 75 Pa

* Contact your Huber Sales Professional for availability in your area.

** When used with ZIP System™ flashing tape.

*** Some Structural 1 rated panels available in certain geographical regions.

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® R-SHEATHING

A single panel with multiple advantages.

FOR EXCEPTIONAL LONG-TERM PERFORMANCE IN A SINGLE PANEL, 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. The single-piece design provides structure, moisture protection, air tightness and insulation in a single installation, while eliminating the need for multi-level systems.



5-IN-1 SYSTEM WITH LAYERS OF INNOVATION

- 1** | **Continuous Foam Insulation Provides Higher R-Value**
 - Increases thermal performance while minimizing thermal bridging
 - Designed to meet new energy codes
- 2** | **Engineered Wood Provides Structure and Durability^{7,8,9}**
 - Nailable wood base for trim and accessories
 - Provides security against easy home intrusion
- 3** | **Built-In Water Resistive Barrier Eliminates Building Wrap 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
- 4** | **Continuous Air Barrier Contributes to 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
- 5** | **ZIP System™ Flashing Tape Securely Seals Panel Seams**
 - Acrylic formulation provides superior adhesion
 - Rigorously tested for long-lasting performance
 - Easily applied with ZIP System® tape gun and accessories

* Limitations and restrictions apply. Visit ZIPSystem.com for details.



1", 1 1/2", and 2 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 2178 <0.02L(s•m ²) @ 75 Pa ASTM E 2357 <0.2 L(s•m ²) @ 75 Pa
R-6	1-1/2"	4' x 8'	31	6.6		
R-12 ⁷	2-1/2"	4' x 8'	18	12.6		

ZIP System® Properties	R-3	R-6	R-12
TECO Rated OSB	7/16"	7/16"	7/16"
Foam	1/2"	1"	2"
R-Value	3.6	6.6	12.6
Pieces Per Package (4' x 8' sheet)	32	31	18
Square Feet Per Package	1024	992	576

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 (for 14 days)	Passed
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•m ²)
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.

DESIGN RATED
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^{8,9}

ZIP System® R-sheathing Type ³	Framing		Fasteners			Allowable Shear Capacity ^{4,5} (plf)
	Nominal Stud Size (min.)	Maximum Stud Spacing (in.)	Fastener Specifications ²	Edge/Field Spacing (in.)	Minimum Penetration into Framing (in.)	
R-3	2-by-4	24	0.131" shank nails	4/12	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.

* When used with ZIP System™ flashing tape.

- 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.
- Fasteners must be common nails or equivalent, or staples, of a type generally used to attach wood sheathing.
- 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". Type R-12 R-sheathing panels have a foam plastic insulation thickness of 2".
- The shearwalls must have a maximum height-to-width aspect ratio of 2:1.
- 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.
- This panel and fastening configuration is applicable to the prescriptive bracing requirements under the 2009 IRC.
- Type R-12 R-sheathing panels are non-structural sheathing panels.
- Not approved for use as prescriptive wall bracing where the design wind speed is greater than 110mph or in Seismic Design Categories D or E.
- Not approved to resist shear in wood framed shear walls located in Seismic Design Categories D or E.

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 building wrap.



4' x 9'



4' x 10'

ZIP System® long length sheathing is ideal for single and multi-story projects.



4' x 9' + 1-1/8"



4' x 10' + 1-1/8"

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



“ The built-in, water-resistive, vapor-permeable barrier is ideal for waterproofing, which is of the utmost importance for any construction project. ”

—Keith Anderson, President of Clark Builders Group, Arlington, VA

Compare For Yourself	Other long length panels	ZIP System® long length panels	ZIP System® wind zone panels
More efficient panel installation	X	X	X
Can eliminate blocking at horizontal panel seams	X	X	X
Fewer horizontal seams	X	X	X
Less panel cutting and waste	X	X	X
Can be designed to resist combined uplift and shear*	X	X	X
Eliminate need for housewrap with built-in, vapor permeable, water-resistive barrier		X	X
Continuous rigid air barrier decreases unwanted air leakage for greater energy efficiency		X	X
Backed by 30-year system warranty**		X	X
Faster installation, built-in weather-resistant barrier eliminates the need for 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

** Limitations and restrictions apply. Visit ZIPSystem.com for details.

*** 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	PS2 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 Structural 1	ESR 1473 ESR 1474	12-16 perm ASTM E 96-00 Procedure B	ASTM E 2178 <0.02 L(s•m²) @ 75 Pa
Wind Zone	7/16	4' x 9' 1-1/8" 4' x 10' 1-1/8"	70 60				ASTM E 2357 <0.2 L(s•m²) @ 75 Pa

† When used with ZIP System™ flashing tape.

ZIP SYSTEM™ FLASHING TAPE

A tight seal for long-term performance.

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.



WATER RESISTIVE BARRIER when used with ZIP System® sheathing



Works on a VARIETY OF SURFACES



REPOSITIONABLE material



Cold temperature application AS LOW AS 20 DEGREES F



SUPERIOR ACRYLIC ADHESION better than butyl/asphalt



180-DAY EXPOSURE guarantee*



“ We are a husband/wife architectural firm and this was the second studio residence we built for ourselves. ZIP System® sheathing & tape very quickly had the building watertight and on our way to the LEED Silver rating. ”

— Jose E. Tavel & Cara B. Cummins, Architects, TaC Studios, Atlanta, GA

EVERY LAYER WORKS TOGETHER FOR TOTAL PERFORMANCE AND PROTECTION

- 1** | Slip Resistant

 - Top layer provides good tack during installation for safety

- 2** | Weather and UV Protection

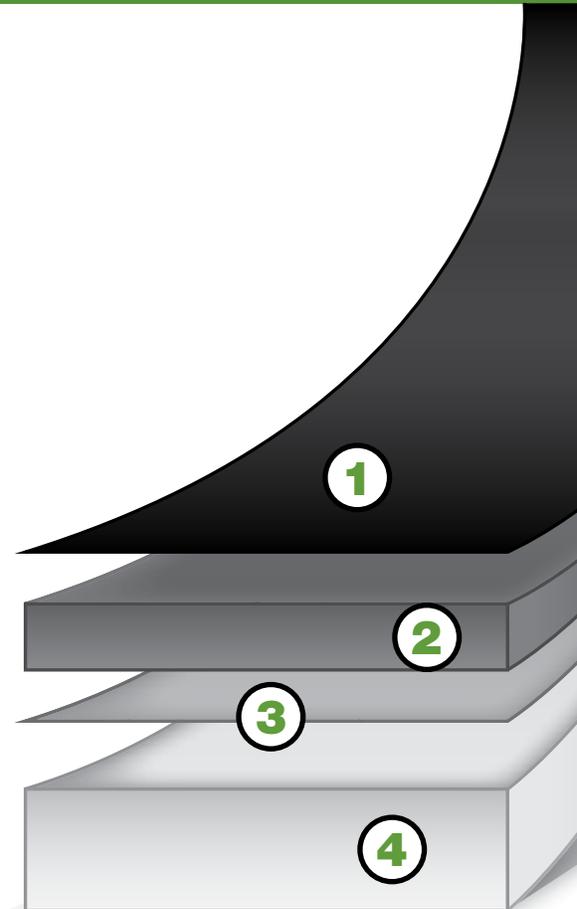
 - Thick inner layer offers dimensional stability
 - Carbon black – for “sunscreen” that protects other layers
 - Antioxidants for durability
 - Warranted for up to 180 days of extreme weather and UV exposure*

- 3** | Long-Term Durability

 - Bonding layer specially formulated to bond with the adhesive for durability

- 4** | 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 tape								
Nominal Width	Roll Length	Tape Thickness	Adhesive Technology	Code Evaluation Report	Installation Temperature Range	Allowable UV Exposure	Tensile Strength	Elongation
3-3/4"	90'	12 mils	Acrylic	ESR 2227 AAMA 711-07: Pass	20°–120°F	180 Days*	938 psi	400%-800%
6"	75'							

* Limitations and restrictions apply. Visit ZIPSystem.com for details.

ZIP SYSTEM™ STRETCH TAPE

Single Piece Installation Stretches, Curves, Sticks and Seals.

SINGLE PIECE INSTALLATION STRETCHES, CURVES, STICKS AND SEALS.

Revolutionary ZIP System™ stretch tape easily stretches to fit sills, curves and corners with a single piece without having to piece tape segments together. This avoids seams or joints. Made of a high-performance composite acrylic, the tape conforms to challenging applications and locks out moisture even over mismatched surfaces. And ZIP System stretch tape can be pulled up and reapplied for hassle-free installation, providing a tight, energy-efficient seal in no time!



SPEED THROUGH APPLICATIONS WITH TAPE THAT STRETCHES

ZIP System™ stretch tape is fast and effective, 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

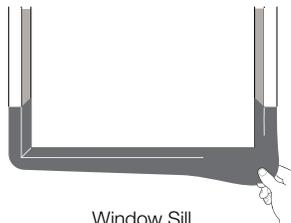
Versatile

Ideal for your toughest applications including curved windows and wall penetrations

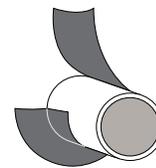
ZIP SYSTEM™ STRETCH TAPE WORKS ON A VARIETY OF APPLICATIONS.



Stretches in Any Direction



Window Sill



Wall Penetration



Curved Window



WATER RESISTIVE BARRIER when used with ZIP System® sheathing



Works on a **VARIETY OF SURFACES**



REPOSITIONABLE material



Cold temperature application **AS LOW AS 20 DEGREES F**



SUPERIOR ACRYLIC ADHESION better than butyl/asphalt



180-DAY EXPOSURE guarantee*

ZIP System™ stretch tape

Nominal Width	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%
10"						

* Limitations and restrictions apply. Visit ZIPSystem.com for details.

ZIP SYSTEM™ LIQUID FLASH

Ideal for sealing irregular,
curved or hard-to-flash areas.

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.

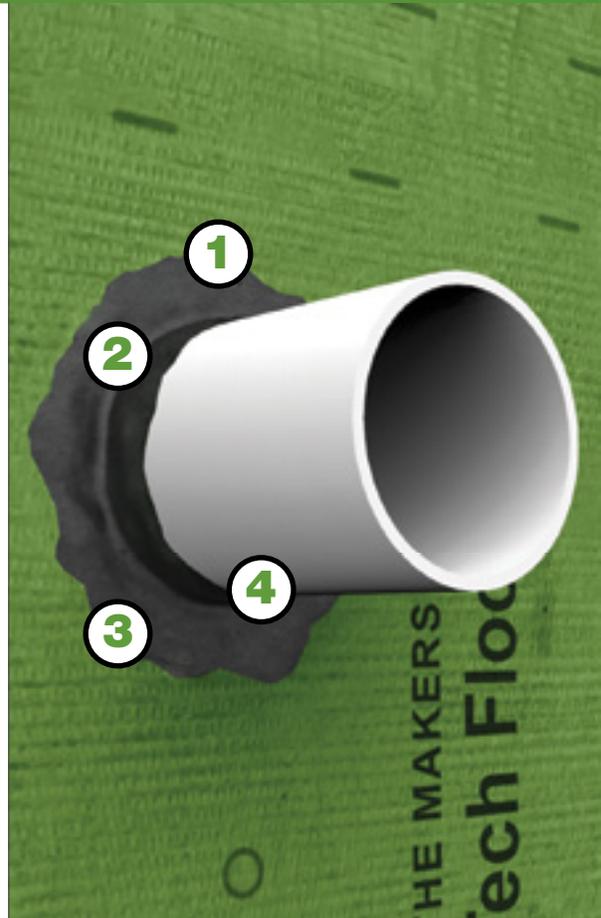


“ I live in New England, and we were hammered with over 6 inches of rain in the past three or four days during my construction. Through all the rain, not one leak. ZIP System® sheathing & tape held up beyond my expectations! ”

— Chris Ball, Architect

PERFORMANCE FEATURES:

- 1 | **Weather and UV Resistant**
Warranted for up to 180 days of extreme weather and UV exposure.*
- 2 | **Optimal Viscosity**
Flows easily to seal irregular shapes and surfaces.
- 3 | **Quick Cure Time**
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.
- 4 | **Proper Adhesion to a Wide Range of Surfaces**
Bonds to wood, concrete, masonry, architectural metals, glass, PVC, FRP, EPDM and most other building materials.



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. Re-fill tube	20 lf (approx. six 3'0" window sills)	12 mils	STPE Polymer	ASTM E331: Pass	35°–110°F	180 Days*	20-40 Minutes**	12 mils = 4 Hours**
29 oz. Cartridge	29 lf (approx. nine 3'0" window sills)			ASTM E2357: Pass				

* Limitations and restrictions apply. Visit ZIPSystem.com for details.

** 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.