





where vision meets integrity Structural and Envelope Solutions Multifamily & Commercial







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



### 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, 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,<sup>1</sup> you can rest assured of the subfloor's structural integrity.

#### Designed For Longer Exposure<sup>1</sup>

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,<sup>2</sup> AdvanTech<sup>®</sup> flooring has performance values published in ESR-1785<sup>3</sup> for better design bending strength, stiffness and fastening holding power.<sup>4</sup>

#### Panel Strength and Stiffness

Long lasting strength and stiffness means AdvanTech<sup>®</sup> flooring panels are specifically engineered to outperform commodity OSB and traditional plywood\* giving you a solid base you can build on.

#### Fastener Holding Power

The high wood density and advanced resins inside AdvanTech<sup>®</sup> 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 Lifetime Limited Warranty and 500-day No Sanding Guarantee.
- 2 2002-2018 Builder Magazine's Brand Use Study; OSB category.
- 3 AdvanTech® flooring is substantiated by third party evaluation services for published design values for strength, stiffness and fastener holding power above PS-2 minimums. ESR-1785 documents design values for AdvanTech® panels above commodity-grade panels. Please see ESR-1785 for published design values for AdvanTech® panels. Only 23/32 thickness AdvanTech® flooring, and 1/2 and 5/8 thicknesses of AdvanTech® roof and wall sheathing are included in ICC-ES report ESR-1785.
- 4 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 See AdvanTech Flooring Product Data Sheet on AdvanTechPerforms com for available thicknesses stamped as Structural 1
- 5 See AdvanTech Flooring Product Data Sheet on AdvanTechPerforms.com for available thicknesses stamped as Structural 1.
- References to OSB and plywood are to traditional OSB and traditional plywood.











<sup>44</sup> AdvanTech<sup>®</sup> 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<sup>®</sup> 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 Standard<sup>3</sup>

AdvanTech<sup>®</sup> flooring is built to a higher standard, substantiated by third party evaluation services for published design values for strength, stiffness and fastener holding power above PS-2 minimums.<sup>4</sup> These values are documented in ESR-1785<sup>3</sup>; visit www.icc-es.org for the full report.

#### Lifetime Limited Warranty<sup>1</sup>

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

#### No Sanding Guarantee<sup>1</sup>

AdvanTech® panels will stand up to your most demanding jobsites and are backed by a 500-day no-sanding guarantee<sup>1</sup>. 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 34 for details.)

#### Voted #1 In Quality<sup>2</sup>

Builders from across the nation have voted AdvanTech<sup>®</sup> flooring #1 in quality in its category every year for more than a decade.<sup>2</sup> 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.<sup>5</sup>

	AdvanTech <sup>®</sup> flooring <sup>6</sup>											
Performance Category	Panel Size	PS-2 Span Rating	Code Evaluation Report	Edge Profile	Panel Grade	Approx. Weight Per Panel <sup>7</sup>	Panels Per Unit					
19/32	4' x 8'	20 o.c.			rated for 19/32"	66 lbs.	55 pcs.					
23/32	4' x 8'	24 o.c.	ESR-1785	T&G			78 lbs.	45 pcs.				
7/8	4' x 8'	32 o.c.			Structural 1	96 lbs.	40 pcs.					
1	4' x 8'	32 o.c.			Structural 1	Structural I	109 lbs.	35 pcs.				
1-1/8	4' x 8'	48 o.c.				125 lbs.	30 pcs.					

6 Net face width is 47-1/2" on tongue and groove panels.

7 Estimated panel weight. Actual weight may vary by mill.







## Structural durability and proven quality make an easy choice.

### FOR SUBFLOORING YOU CAN COUNT ON TO PERFORM FOR THE LIFE OF A BUILDING<sup>1</sup>, SPECIFY ADVANTECH<sup>®</sup> 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,<sup>1</sup> AdvanTech<sup>®</sup> flooring gives all the advantages of a high performing product,<sup>2</sup> 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.



2

### Mitigate moisture risks.

ADVANTECH FLOORING STANDS UP TO ELEMENTS AND

DEFENDS AGAINST MOISTURE. AdvanTech® flooring is backed by a 500-day no sanding guarantee,<sup>1</sup> perfect for the longer exposure times in multifamily or light commercial projects.

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

Advanced resins coat every wood strand and create a highly moisture-resistant substance similar to polyurethane, protecting fresh cut edges on-site.

Sealed edges help prevent swelling during long-term storage or exposure to the elements.





- Water Absorption<sup>3</sup>
  - 24 o.c. floor panels

- L 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.
- \* References to OSB and plywood are to traditional OSB and traditional plywood.

## ESR-1785 designation assures a higher quality subfloor panel.<sup>1</sup>

#### ADVANTECH® FLOORING IS BUILT TO A HIGHER STANDARD WITH PUBLISHED DESIGN VALUES ABOVE CODE MINIMUM (PS-2)<sup>2</sup> REQUIREMENTS. ESR-1785<sup>1</sup> 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 dimension<sup>3</sup>



- 28% better design bending stiffness than commodity OSB<sup>3</sup>
- 16% better design bending stiffness than commodity plywood<sup>3</sup>
- Overall, 10% better design fastener holding power than both commodity OSB and plywood<sup>4</sup>
- 1 AdvanTech® flooring is substantiated by third party evaluation services for published design values for strength, stiffness and fastener holding power above PS-2 minimums. ESR-1785 documents design values for AdvanTech® panels above commodity-grade panels. Please see ESR-1785 for published design values for AdvanTech® panels. Only 23/32 thickness AdvanTech® flooring, and 1/2 and 5/8 thicknesses of AdvanTech® roof and wall sheathing are included in ICC-ES report ESR-1785.
- 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 Based on minimum design values published in ICC ES Evaluation Service Report ESR-1785. 2012 APA Panel Design Specification, Form No. D510C.
- 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.
- \* References to OSB and plywood are to traditional OSB and traditional plywood.



#### 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 2002<sup>5</sup>
- Builders and remodelers named AdvanTech flooring 1 of 16 of their favorite building products on the market<sup>6</sup>
- 9 out of 10 builders who try AdvanTech flooring more than once stay loyal<sup>7</sup>

- 5 2002-2018 Builder Magazine's Brand Use Study; OSB category.
- 6 Builder Magazine 2013 Readers Choice Product Survey.
- 7 Burke Research. "Discrete Choice Pricing Research Report for AdvanTech" (commissioned research, Charlotte, NC, 2013)

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## The strength and power to keep floors flat and quiet.

#### ADVANTECH® FLOORING BRINGS TOGETHER A COMBINATION OF BENDING STRENGTH, STIFFNESS AND FASTENER HOLDING POWER.

From finished floor coverings to flat roof applications, AdvanTech flooring is FLAT OUT BEST<sup>™</sup> for a quiet stiff floor.

Exceptional strength and durability produce a sturdier, quieter floor that can add to the performance of your overall floor system.

Precision engineering helps keep your projects on schedule with our patented fastening guide and self spacing tongue and groove edge profile.

Everything about AdvanTech flooring is engineered for maximum strength, stiffness and fastener holding power that will last for the life of the building.

Consistent thickness and density allow panels to lay flat and helps grip fasteners for a secure finished floor installation.



## The right choice now for a lifetime of performance.<sup>4</sup>



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 traditional plywood and OSB competitors.\*



1 Based on the minimum 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 2015 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.
 Limitations and restrictions apply. Visit AdvanTechPerforms.com for details.

\* References to OSB and plywood are to traditional OSB and traditional plywood.

## A solid choice for a variety of flooring applications.



#### HARDWOODS OVER ADVANTECH® FLOORING

Unique combination of high-wood density and advanced resins help grip fasteners in place and keep hardwood flooring flat and quiet.



#### TILE AND STONE OVER ADVANTECH® FLOORING

High performance strength and stiffness help reduce the risk of cracked tile and stone.



#### CARPET OVER ADVANTECH® FLOORING

Fully sanded surface and precision tongue and groove profile 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 gypsum concrete underlayment assemblies.

#### ADVANTECH™ SUBFLOOR ADHESIVE

# Floor squeaks have met their match.

#### FROM THE MAKER OF #1 QUALITY<sup>2</sup> ADVANTECH<sup>®</sup> SUBFLOORING COMES NEW ADVANTECH<sup>™</sup> SUBFLOOR ADHESIVE, FOR SUBFLOOR ASSEMBLIES SO STRONG YOU WON'T HEAR A SQUEAK.<sup>1</sup>

When it comes to choosing subflooring that installs fast and stays flat, builders turn to AdvanTech<sup>®</sup> panels. Now when you combine the trusted performance of AdvanTech<sup>®</sup> subfloor panels with the polyurethane bond of NEW AdvanTech<sup>™</sup> subfloor adhesive, the result is a panel-to-joist connection so strong it's backed by a 10year Squeak-Free Guarantee.<sup>™1</sup> Cover more panels<sup>4</sup> faster with the speed and ease of the gun-applied foam that quickly collapses into a high-strength gel. With a bond that's 2-5 times greater than industry standards and moisture-curing formula, AdvanTech subfloor adhesive is ideal for use on wet or frozen wood.<sup>3</sup> Use on any wood-to-wood assemblies, glued-floor systems, plywood or OSB. See SqueakFreeGuarantee.com for details on building an AdvanTech<sup>™</sup> Subfloor Assembly backed by a Squeak-Free Guarantee.<sup>1</sup>

Quiet subfloors can help keep the peace from jobsite to homesite. Put AdvanTech subflooring and AdvanTech subfloor adhesive to work on your next job with a Squeak-Free Guarantee.<sup>1</sup>







Squeak-Free Guarantee<sup>1</sup>



Polyurethane bonding strength



Adheres to wet and frozen wood<sup>3</sup>



Quick and easy application



Apply between 20° to 105° F (-6° to 41° C)



20 minute open time



#### ADVANTECH<sup>™</sup> SUBFLOOR ADHESIVE

### Extreme holding power for the flat out best<sup>™</sup> AdvanTech<sup>®</sup> subfloors.



#### MORE COVERAGE IN EACH CAN

8x greater yield than traditional adhesive caulks<sup>4</sup> means advanced strength with less product - a cost-effective, speedy application for your subfloor installations.



#### IDEAL FOR COLD AND WET CONDITIONS

Formulated to adhere to wet and frozen structural subfloor panels and joists,<sup>3</sup> this moisture curing polyurethane adhesive is the ideal solution for not so ideal weather conditions.



#### FILLS GAPS FOR A TIGHTER BOND

The foam to gel polyurethane formula expands into minor gaps between the subflooring panel and joist, maximizing adhesion for a tighter overall subflooring assembly.



#### POLYURETHANE BONDING STRENGTH

Polyurethane formula helps create a solid, firmly-bonded surface - exceeding ASTM D3498 and APA-AFG-01 subfloor adhesive standards. Floors stay put, and guiet, helping reduce the chance of callbacks. When tested to ASTM requirements, AdvanTech™ subfloor adhesive consistently performs 2 to 5 times above standards.

Teo	chnical Data		Versatile Application Strength			
Shelf Life	18 months		ASTM D3498	Pass Criteria		
Open Time	20 minutes		Shear Strength — Dry Lumber	> 500 psi (requirement >150)		
Fully Cured	24 hours		Shear Strength — Wet Lumber	> 300 psi — Douglas Fir (req > 150) > 400 psi — Southern Pine (req > 150)		
Yield at 1/2" bead size <sup>4</sup>	400 linear feet			> 300 psi — Douglas Fir (reg > 100)		
Appl. Temperature Range	20° – 105°F		Shear Strength — Frozen Lumber	> 500 psi — Southern Pine (req > 100)		
VOC Content	15 wt. %		Moisture Resistance	> 500 psi (req > 150)		
VOC Content (California)         155 g/L           VOC Compliant <sup>5</sup> Yes			Gap	> 400 psi (req > 100)		
			Oxidation Resistance	Pass		

1 Squeak-Free Guarantee for AdvanTech subfloor assembly at joist connection: Limitations and restrictions apply. Must use AdvanTech subfloor panels with I-joists or trusses and deformed fasteners with AdvanTech subfloor adhesive. Not applicable over dimensional lumber framing, non-wood based framing (including light gauge metal) or with other subfloor panels. Applies only to one- and two-family dwellings, townhomes and structures permitted under IRC or governing residential code. See SqueakFreeGuarantee.com for complete details. 2

Builder Magazine 2002-2018 Brand Use Studies; #1 in OSB category. Exceeds ASTM D3498 Standard Specification for Field-Gluing Plywood to Lumber Framing for Floor Systems, dry, wet, frozen, and gap filling adhesion tests 3

Coverage: One 24 oz. can of AdvanTech subfloor adhesive yields approximately 400 linear feet of gel adhesive at 1/2" bead compared to applying a 28 oz. cartridge adhesive at 3/8" bead 4

yielding approximately 38 linear feet. Coverage will vary based on bead size and weather conditions. 5 California Air Research Board, CARB, has classified AdvanTech Subfloor Adhesive as a Web Spray Adhesive. AdvanTech Subfloor Adhesive satisfies governing VOC limitations for web spray adhesives.

#### ADVANTECH® ROOF AND WALL SHEATHING

# Performance that goes beyond the floor.

#### STRENGTH AND MOISTURE RESISTANCE FOR FLOORS AND

ROOFS. AdvanTech<sup>®</sup> 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<sup>®</sup> products.

#### PERFORMANCE FEATURES:

#### Structural 1 Rated

Provides up to 10% more allowable shear strength than rated sheathing with the same thickness and nailing pattern.<sup>4</sup> Designed for greater resistance to wind and seismic loads in wall/roof applications. Ideal for regions with heavy wind, rain, snow and ice.

#### Higher Strength, Stiffness And Fastener Holding Power

Unlike traditional OSB or plywood, AdvanTech® panels are built to a higher standard with an Evaluation Service Report<sup>3</sup> documenting above-code performance for strength, stiffness and fastener holding power. So you can count on panels to install flat and stay flat. These values are documented in ESR-1785.<sup>2</sup> Visit icc-es.org for the full report.

#### Defends Against Moisture

Designed for a longer exposure during construction, backed by a 500-day weather resistance guarantee<sup>1</sup>. So unlike OSB and plywood,\* AdvanTech sheathing is engineered to resist swelling, cupping and delamination.

#### Backed By A Lifetime Limited Warranty<sup>1</sup>

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



#### BUILT TO A HIGHER STANDARD ESR-1785



- 1 Limitations and restrictions apply. Visit AdvanTechPerforms.com for details.
- 2 AdvanTech® roof and wall sheathing is substantiated by third party evaluation services for published design values for strength, stiffness and fastener holding power above PS-2 minimums. ESR-1785 documents design values for AdvanTech® panels above commodity-grade panels. Please see ESR-1785 for published design values for AdvanTech® panels. Only 23/32 thickness AdvanTech® flooring, and 1/2 and 5/8 thicknesses of AdvanTech® roof and wall sheathing are included in ICC-ES report ESR-1785.
- 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.
- $\begin{array}{l} \mbox{4} & \mbox{Increased shear values achieved through higher} \\ \mbox{bending strength} (F_{b}S), stiffness (EI) values than required by PS-2 to acquire Structural 1 rating. \\ \mbox{Non-proprietary DOC PS-2 Standard Test.} \end{array}$
- \* References to OSB and plywood are to traditional OSB and traditional plywood.

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

Traditional OSB and plywood simply can't compare. What's inside the AdvanTech® sheathing panels 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 <sup>®</sup> roof and wall sheathing <sup>6</sup>										
Performance Category     Panel Size     PS-2 Span Rating     Code Evaluation Report     Edge Profile     Panel Grade     Approx. Weight Per Panel <sup>7</sup>										
1/2	4' x 8'	32/16	ESR-1785	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.			

6 Net face width is 47-1/2" on tongue and groove panels.

7 Estimated panel weight. Actual weight may vary by mill.

#### ADVANTECH® ROOF AND WALL SHEATHING

### Designed to a higher standard.

#### ADVANTECH PANELS BRING TOGETHER A COMBINATION OF

BENDING STRENGTH, stiffness and fastener holding power, helping to deliver exceptional structural performance for roof, wall and flooring applications to protect the integrity of the entire building.





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

Allowable nail withdrawal values were calculated in accordance with the 2015 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.

\* References to OSB and plywood are to traditional OSB and traditional plywood.

#### ADVANTECH® FLOORING AND SHEATHING

## Engineered for long-lasting quality and performance



### SHEAR WALL DESIGNS WITH ADVANTECH® SHEATHING

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



#### TILE ROOFS ABOVE ADVANTECH® SHEATHING

Panel 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

Combined stiffness and moisture resistance defend against edge swell helping reduce low spots that pond water.



## ZIP IT TIGHT.

#### IN TODAY'S BUILDING CLIMATE. YOU NEED A TIGHT BUILDING ENVELOPE THAT WILL STAND UP TO THE EXEMENTS REFORE DURING AND AFTER CONSTRUCTION.

To spec it right, ZIP IT TIGHT<sup>™</sup> with the protection of ZIP System<sup>®</sup> sheathing and tape. It's the one-of-a-kind structural roof and wall system with a built-in, air and water-resistive 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<sup>™</sup> tape installs 40% faster** when compared to traditional housewrap and tape.

#### THE ANATOMY OF ZIP SYSTEM® SHEATHING AND TAPE:

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 building wrap and felt.
  - A continuous, rigid air barrier decreases unwanted air leakage for greater energy efficiency.

ZIP System<sup>™</sup> tape, with a specially engineered, high performance acrylic adhesive, bonds with ZIP System<sup>®</sup> panels for a permanent protective seal.





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## For a high performing building.









#### Speed and Ease of Installation

ZIP System<sup>®</sup> 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-Resistive Barrier

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

#### Energy Efficient Air Barrier

ZIP System<sup>®</sup> sheathing and tape forms a tight barrier against unwanted air leakage, for a durable building envelope that helps promote energy efficiency and increase interior comfort.

#### Enhanced Structural Durability

ZIP System<sup>®</sup> 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<sup>®</sup> R-sheathing panel with a built-in layer of insulation helps add R-value to exterior sheathing with a single, easy-to-install panel.

## 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<sup>®</sup> 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 180-day Exposure Guarantee and 30-year System Limited Warranty.\*

\* Limitations and restrictions apply. Visit HuberWood.com/ZIP/ResidentialWarranty to learn more.





#### ENGINEERED FOR OPTIMAL BREATHABILITY

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



## 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<sup>®</sup> sheathing and tape reduces air leakage, while outperforming traditional sealing methods involving building wrap.

Taping the panel seams with ZIP System<sup>™</sup> tape effectively seals the building envelope, decreasing unwanted air leakage into and out of the home. ZIP System<sup>®</sup> 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<sup>®</sup> sheathing and tape better protects the wall system and prevents air leakage from degrading R-Value.

### Spec it right. ZIP it tight."



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", 1/2" and 5/8" ZIP System <sup>®</sup> roof and wall sheathing										
Performance Category	Panel Size	Panel Count	PS-2 Span Rating	Vapor Transmission of WRB Layer	Air Barrier						
7/16	4' x 8'	80	24/16 Structural 1*								
1/2	4' x 8'	70	32/16 Structural 1	12-16 perm ASTM E 96 Procedure B	ASTM E 2178 <0.02 L/(s·m²) @ 75 Pa ASTM E 2357						
5/8	4' x 8'	55	40/20 Structural 1		<0.2 L/(s·m²) @ 75 Pa						



ESR-1473 ESR-1474



Limitations may apply.

\*

Although all projects are unique, experience has shown that 1 roll of 3 3/4" ZIP System<sup>™</sup> flashing tape is needed for approximately 7 sheets of 4' x 8' ZIP System<sup>®</sup> 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

with the built-in moisture and air leakage protection of ZIP System<sup>®</sup> sheathing and tape. ZIP System<sup>®</sup> long length sheathing and wind zone panels provide flexibility of a longer panel with the ability to completely eliminate building wrap.

#### 7/16 LONG LENGTH

Ideal for single- and multi-story projects. Helps reduce blocking and eliminate horizontal seams in wall applications.

- 4' x 9' - 4' x 10' - 4' x 12'\*



#### 7/16 WIND ZONE

With an extra 1-1/8" in length, these panels span from sill plate to top plate to help defend against wind uplift.



#### 1/2 LONG LENGTH

For single- and multi-story projects where the extra strength of a 1/2" thick panel is required.

- 4' x 9' - 4' x 10'



11 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 <sup>®</sup> long length panels	ZIP System <sup>®</sup> 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 <sup>1</sup>	Х	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 a 30-year system warranty <sup>2</sup>		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 <sup>3</sup>		X	Х

	ZIP System <sup>®</sup> 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' 4' x 12'*	70 60 52				ASTM E 2178					
	1/2	4' x 9' 4' x 10'	62 56	24/16 Structural 1	ESR 1473 ESR 1474	12-16 perm ASTM E 96	<0.02 L/(s·m²) @ 75 Pa					
Wind Zone	7/16	4' x 8' 1-1/8"* 4' x 9' 1-1/8" 4' x 10' 1-1/8" 4' x 12' 1-1/8"*	80 70 60 52			Procedure B	ASTM E 2357 <0.2 L/(s·m²) @ 75 Pa					

\*Available with minimum order quantity. Contact your Huber representative for more details.

See the American Wood Council, Special Design Provisions for Wind and Seismic, AWC SDPWS-2015.
 Limitations and restrictions apply. Visit HuberWood.com/ZIP/ResidentialWarranty to learn more.
 5/8" 9' and 10' panels available by special order.

#### ZIP SYSTEM® R-SHEATHING

## A single panel with multiple advantages.

#### ZIP SYSTEM® R-SHEATHING IS THE SIMPLE ALL-IN-ONE

STRUCTURAL PANEL with built-in exterior insulation. Featuring integrated moisture, air and thermal protection, ZIP System R-sheathing completely reimagines traditional wall assemblies by streamlining exterior water, air and thermal management.

Available in R-3, R-6, R-9 and R-12 values and three lengths – 8ft, 9ft and 10ft – to suit all climate zones.



#### LAYERS OF INNOVATION IN A SINGLE-PANEL SYSTEM

Use ZIP System R-sheathing to meet new continuous insulation requirements in the 2015 International Energy Conservation Code. For high-performance structures, ZIP System R-sheathing is a simplified solution for moisture and thermal management in exterior walls.

#### Built-In Exterior Insulation

Designed to meet new energy codes, each panel features integrated continuous foam insulation to increase thermal performance and minimize thermal bridging.

### 2

#### Structural Durability

An exterior engineered wood panel meets wall bracing requirements, contributes to shear wall designs and provides a nailable, flashable base for cladding, trim and windows.

#### Integrated Water-Resistive Barrier

A built-in water-resistive barrier eliminates the need for housewrap and helps achieve a quick rough dry-in backed by a 180-day Exposure Guarantee and 30-year Limited Warranty.<sup>1</sup>

#### Continuous Air Barrier

Taped seams create a continuous air barrier that helps prevent air leakage and protects insulation R-value as part of an energyefficient enclosure.

1 Limitations and restrictions apply. Visit HuberWood.com/ZIP/ResidentialWarranty to learn more.



	1", 1-1/2", 2", 2-1/2" ZIP System <sup>®</sup> R-sheathing										
Panel Type <sup>2</sup>	Total Thickness	Panel Size	Panel Count	R-value	Code Evaluation Report	Air Barrier					
R-3	1"		32	3.6		ASTM E 2178					
R-6	1-1/2"	4' x 8'	31	6.6	ESR 3373	<0.02 L/(s·m²) @ 75 Pa					
R-9	2"	4' x 9' 4' x 10'	23	9.6	ER 482	ASTM E 2357 <0.2 L/(s·m <sup>2</sup> )					
R-12	2-1/2"		18	12.6		@ 75 Pa					

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

#### ZIP System<sup>®</sup> Performance

Water Resistance of Coatings	ASTM D 2247 (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	Passed
Air Barrier Assembly	ASTM E 2357 at 75 Pa	0.037 L/(s·m²)
Wind Driven Rain	TAS-100	Passed 100mph
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.

#### FASTENING REQUIREMENTS FOR PRESCRIPTIVE BRACING<sup>1,2</sup> AND ENGINEERED SHEAR WALL DESIGN<sup>3</sup>





	Framing⁴			Fasteners			Shear Values		
ZIP System <sup>®</sup> R-sheathing Type	Nominal Stud Spacing (min.)	Maximum Stud Spacing (in.)	Fastener Specifications⁵	Edge/Field Spacing (in.)	Minimum Penetration into Framing (in.)	Allowable Seismic Controlled Shear Values <sup>6.8</sup> (plf)	Allowable Wind Controlled Shear Values <sup>6</sup> (plf)		
R-3	2-by-4	24	0.131" shank nails	4/12	1.5	245	343		
R-3	2-by-4	24	0.131" shank nails	3/12	1.5	280	393		
R-3	2-by-4	16	16ga staples, 7/16" crown, 2" length	3/6	1.0	210	294		
R-6	2-by-4	24	0.131" shank nails	4/12	1.5	230	322		
R-6	2-by-4	24	15ga staples, 7/16" crown, 2.5" length	3/6	1.0	NA <sup>7</sup>	NA		
R-6	2-by-4	24	0.131" shank nails	3/12	1.5	255	357		
R-9	2-by-4	24	0.131" shank nails	3/12	1.5	240	336		
R-12	2-by-4	24	0.131" shank nails	3/12	1.5	215	301		

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

Prescriptive bracing requirements with Douglas Fir-Larch Framing under the 2015, 2012, and 2009 IRC.

Not approved for use as prescriptive wall bracing where wind design is required by R301.2.1.1. 2

3

Engineered shear wall requirements with Douglas Fir-Larch Traming under the 2015, 2012, and 2009 IBC. For framing with other than Douglas Fir-Larch, the shear value above must be multiplied by the Specific Gravity Adjustment Factor = [1 - (0.50 - SG)], where 4

SG=Specific Gravity of the framing lumber in accordance with the ANSI/AWC NDS. This adjustment factor must not be greater than 1.

5 Fasteners must be common nails or equivalent, or staples, of a type generally used to attach wood sheathing.

The shearwalls must have a maximum height-to-width aspect ratio of 2:1. 6

This panel and fastening configuration is only applicable to the prescriptive bracing requirements under the 2015 IRC. ZIP System R-sheathing used as the lateral resistance system in seismic zones  $D_0$ ,  $D_1$ ,  $D_2$  and E should be designed in accordance to ER-482. 8

#### ZIP SYSTEM<sup>™</sup> FLASHING TAPE

## A tight seal for long-term performance.

AN INTEGRAL PART OF ZIP SYSTEM™ ROOF AND WALL ASSEMBLIES, ZIP System™

flashing tapes feature pressure-activated advanced acrylic adhesive. When used with ZIP System<sup>™</sup> panels, ZIP System flashing tapes help form a strong, weather-resistant, continuous barrier backed by a 30-year Limited Warranty and 180-day Exposure Guarantee.<sup>1</sup>



We are a husband/wife architectural firm and this was the second studio residence we built for ourselves. ZIP System<sup>®</sup> 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

#### Weather Protection

- Thick inner layer offers dimensional stability
- Carbon black for "sunscreen" that protects other layers
- Antioxidants for durability

### 3

4

2

#### Long-Term Durability

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

#### Advanced Adhesion

- Consistent adhesion even under harsh weather conditions
- Backed by 30-year Limited Warranty and 180-day Exposure Guarantee, when used with ZIP System<sup>®</sup> sheathing<sup>1</sup>
- Resists heat and UV light and creates permanent bond strength

	1
	2
3	
	4

	ZIP System <sup>™</sup> flashing tape											
Nominal Width		oll Igth	Tape Thickness	Adhesive Technology	Code Evaluation Report	Installation Temperature Range	Exposure	Tensile Strength	Elongation			
3-3/4"	30'	90'										
6"	7	5'	12 mils	Acrylic	ESR 2227 AAMA 711-07:	0°F – 120°F	180 Days	938 psi	400%-800%			
9"	50'		12 11113	Adiyilo	Pass	0 F - 120 F	100 Days	900 psi	400 /0-000 /0			
12"												

1 Limitations and restrictions apply. Visit ZIPSystem.com to learn more.

#### ZIP SYSTEM<sup>™</sup> STRETCH TAPE

### Single Piece Installation Stretches, Curves, Sticks and Seals.

#### SINGLE PIECE INSTALLATION

STRETCHES, CURVES, STICKS AND SEALS.

Revolutionary ZIP System<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> STRETCH TAPE WORKS ON A VARIETY OF APPLICATIONS.



	ZIP System <sup>™</sup> stretch tape										
Nominal Width Roll Length			Tape Thickness	Installation Temperature Range	Exposure	Tensile Strength	Elongation				
3"	2	0'			180 Days	225 psi	800%-1200%				
6"	20'	75'	42 mils	0°F – 120°F							
10"	20	75									

#### ZIP SYSTEM<sup>™</sup> LIQUID FLASH

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

ZIP SYSTEM<sup>™</sup> LIQUID FLASH IS A LIQUID-APPLIED FLASHING MEMBRANE made of STPE (silyl-terminated-polyether) technology. This high-performance formulation combines the durability of





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:

**Optimal Viscosity** Flows easily to seal irregular shapes and surfaces.

#### Quick Cure Time

Weather-resistant and tack-free in as quick as 20-40 minutes,<sup>3</sup> depending on conditions. Target thickness achieved when substrate is no longer visible.

#### Weather Protection

Backed by 30-year Limited Warranty and 180-day Exposure Guarantee, when used with ZIP System® sheathing.1

#### 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 Svstem<sup>™</sup> liquid flash<sup>2</sup>

Packaging Options	Typical Coverage: Window Sill Flashing (2x4 Framing)	Cured Thickness	Compound Technology	Water and Air Penetration	Installation Temperature Range	Exposure	Tack Free Time	Cure Time	Vapor Permeance		
29 oz. Cartridge	29 lf (approx. nine 3'0" window sills)	12 mils	STPE Polymer	ASTM E331:	35°F – 110°F	180 Days	20 - 40 Minutes <sup>3</sup>	12 mils = 4 Hours <sup>3</sup>	23-24 perms at 15 mils thickness		
20 oz. Sausage	20 lf (approx. six 3'0" window sills)			Pass ASTM E2357: Pass							
10.3 oz. Cartridge	10 lf (approx. three 3'0" window sills)										

Limitations and restrictions apply. Visit ZIPSystem.com to learn more. Complies with AAMA 711-16. 1

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.

# Helping you design sustainable buildings.

#### GREEN BUILDING PROGRAMS AND CREDITS OVERVIEW

AdvanTech<sup>®</sup> panels and ZIP System<sup>®</sup> products can help you keep pace with code bodies and earn points toward green building programs such as:

- International Green Construction Code
- California Green Building Standards Code
- National Green Building Standard
- USGBC's LEED v4 Homes Design and Construction
- USGBC's LEED v4 Building Design and Construction

In general, points can be awarded in the following areas:

- Use of certified wood and engineered wood products
- Use of local and regionally harvested and manufactured materials
- Use of bio-based and low-emitting materials
- Use of energy-efficient products or construction practices
- Use of water-resistive barriers and proper moisture management and practices
- Use of manufacturing practices that use energy from renewable sources

### **Environmental Product Declaration**

- AdvanTech<sup>®</sup> flooring and ZIP System<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> R-6 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 23/32" flooring did not drop below the PS-2 industry standard for subfloor stiffness when tested.

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



## Design in energy-efficiency that takes the LEED.



### ACCORDING TO THE U.S. DEPARTMENT OF ENERGY, BUILDINGS USE 39% OF THE ENERGY AND 74% OF THE ELECTRICITY

PRODUCED EACH YEAR IN THE UNITED STATES. Leadership in Energy and Environmental Design's (LEED) Energy & Atmosphere category encourages a wide variety of energy-wise strategies — commissioning; energy use monitoring; efficient design and construction; efficient appliances, systems and lighting; the use of renewable and clean sources of energy, generated on-site or off-site, and other innovative measures.

A higher level of energy efficiency comes standard when you specify and build with ZIP System<sup>®</sup> wall sheathing and ZIP System<sup>™</sup> flashing tape. By significantly reducing air leakage, ZIP System wall sheathing contributes to greater occupant comfort and energy efficiency in a building. By simply taping panel seams with ZIP System tape, ZIP System wall sheathing effectively seals the wall system, decreasing unwanted air leakage into and out of the building shell. This helps protect the R-Value of insulation, which reduces heating and cooling costs. Manufactured with the environment in mind, AdvanTech<sup>®</sup> flooring and sheathing also contributes points toward green building programs such as LEED<sup>®</sup> and the National Green Building Standard.

Read on to learn why AdvanTech® flooring and sheathing and ZIP System® sheathing and tape products are superior choices under the various green certification programs. For more detailed and up-to-date information, visit **www.HuberArchitectLibrary.com**. Read on to learn how AdvanTech<sup>®</sup> flooring and sheathing and ZIP System<sup>®</sup> sheathing and tape contribute to various sustainable building programs.

For more detailed and up-to-date information, visit www.HuberArchitectLibrary.com.

## Leadership in Energy and Environmental Design (LEED).

#### DEVELOPED BY THE U.S. GREEN BUILDING COUNCIL (USGBC) IN

MARCH 2000, LEED promotes sustainable building and development practices through a suite of rating systems that recognize projects that implement strategies for better environmental and health performance. There are different areas of eligibility for single-family vs. multifamily/light construction, as shown below.

#### Verified attribute O Eligible for points Table 1: Summary of Areas of Eligibility with USGBC's LEED v4 Homes

ZIP System<sup>6</sup> Roof ZIP System® Wall Conditions of Use to Qualify AdvanTech<sup>®</sup> Sheathing AdvanTech<sup>®</sup> Flooring Possible Points ZIP System<sup>®</sup> R-sheathing 2 max To earn 1 or 2 points 0 0 based on air leakage rates determined by testing and verification. Prerequesite All wood must be 2 2 2 2 2 nontropical or certified by FSC or USGBC-approved equivalent.2 Option 1: To earn points use framing that 0.5 each 0 0 0 0 8 max products for roof, is extracted, processed wall & floors; interior & exterior and manufactured within 100 miles (160 km) of the site for a minimum of 50% (by weight or volume) of the component.6

This provision does not apply to this product

		_	Option 2: Use wood products certified by FSC or USGBC-approved equivalent. <sup>2</sup>	2	2	2	2	2
EQc2	Low emitting materials	1	To earn 1 point use wood composite products containing no-added urea-formaldehyde resins.	•	•	•	٠	•

Section Number

Air Infiltration

FSC certified

tropical wood

Environmentally

preferable

framing &

sheathing

EAc7

MR

MRc3


### Table 2:

This provision does not apply to this product

### Summary of Areas of Eligibility with USGBC's LEED v4 Building Design and Construction (BD+C)

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
MRc3	Sourcing of raw materials - certification of new wood products	1	Option 2: Use wood-based materials/products certified by FSC or USGBC-approved equivalent. <sup>2</sup>	2	2	2	2	2
MRc3	Sourcing of raw materials - source location	N/A	Products meeting the requirements of MRc3 Option 2 may be eligible for additional credit based on source location (extraction, manufacture and purchase point) based on location relative to project site. <sup>2,6</sup>	6	6	6	6	
IEQc2.2	Low emitting materials	N/A	EWP and lumber products do not apply to the composite wood product definition. <sup>4</sup>					

2 Forest certification credit for LEED 2009 resources FSC exclusively and LEED v4 resources either FSC or USGBC-approved equivalent. Contact USGBC for a list of approved equivalent programs.

4 This area is not to be confused with the provisions of EQ 4.4 in LEED (Table 4) because the California Air Resources Board (CARB) does not regulate engineered wood product emissions.

6 Regional material calculations based on project location provided by Huber upon request.

## International Green Construction Code (IgCC).

THE IGCC IS THE FIRST MODEL CODE TO INCLUDE SUSTAINABILITY MEASURES FOR THE ENTIRE CONSTRUCTION PROJECT AND ITS SITE — from design through construction, certificate of occupancy and beyond. The new code is expected to make buildings more efficient, reduce waste, and have a positive impact on health, safety and community welfare.



## Table 3: Verified attribute O Eligible for points This provision does not apply to this product Summary of Areas of Eligibility with 2012 International Green Construction Code

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
505.2.4	Bio-based products	N/A	All Huber wood products are qualified as bio-based.	٠	٠	٠	•	O <sup>5</sup>
505.2.5	Indigenous materials	N/A	Products shall be recovered, harvested, extracted & manufactured within a 500 mile (800 km) radius of the building site. Where only a portion of a material or product is recovered, harvested, extracted & manufactured within 500 miles (800 km), only that portion shall be included. Where resources are transported by water or rail, the distance to the building site shall be determined by multiplying the distance the resources are transported by water or rail by 0.25, & adding that number to the distance to the distance transported by means other than water or rail. <sup>6</sup>	0	0	0	0	
605.1.2.1.1	Air barrier installation	N/A	Install the system in accordance with the manufacturer's installation instructions and ICC-ES evaluation report ESR-1474.				•	•
806.1	Formaldehyde emissions	N/A	Huber wood structural panels comply with US DOC PS 2 (See ESR-1785, ESR-1473, ESR-1474 and ESR-2227) and are exempt from formaldehyde emissions testing.	٠	٠	•	•	O <sup>5</sup>

5 Eligibility applies only to the wood-based sheathing portion of the panel.

6 Regional material calculations based on project location provided by Huber upon request.

## National Green Building Standard.

### THE NATIONAL GREEN BUILDING STANDARD (ICC 700 OR "THE STANDARD") IS THE ONLY RESIDENTIAL GREEN BUILDING RATING

SYSTEM approved by ANSI, the American National Standards Institute, as an American National Standard. Single family, multifamily, residential renovation and site development projects are eligible. Certification is provided by the NAHB Research Center.

## Table 4:• Verified attribute• C Eligible for pointsThis provision does not apply to this productSummary of Areas of Eligibility with the National Green Building Standard (ICC 700-2012)

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
602.1.8	Water-resistive barrier	Mandatory	Install a water-resisitve barrier and/or drainage plan system behind exterior veneer and/or siding.				•	•
606.1(2) 11.606.1(b) 12.1(A).606.1	Two types of biobased materials are used, each for more than 1% of the project's projected building material cost	6	To earn 6 points products must be at least 1% of the construction material cost AND another biobased product at 1% of material cost must be used. 1 or 3 points are available for greater than 0.5%.	٠	٠	•	•	O <sup>₅</sup>
606.2(1) 11.606.2(1) 12.1(A).606.1	Two certified wood-based products are used for minor elements of the building, such as all walls, floors or roof	3	To earn 3 points a second certified wood product must also be used as a minor element <sup>1</sup>	٠	٠	٠	٠	O°

## Table 4: continued Verified attribute O Eligible for points This provision does not apply to this product Summary of Areas of Eligibility with the National Green Building Standard (ICC 700-2012)

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
606.2(2) 11.606.2(2) 12.1(A).606.2	Two certified wood-based products are used for major elements of the building, such as all walls, floors or roof	4	To earn 4 points a second certified wood product must also be used as a major element. <sup>1</sup>	•	•	•	•	O <sup>5</sup>
606.3 11.606.3	Materials are used for major components of the building are manufactured using a minimum of 33% of primary manufacturing process energy derived from renewable sources, combustible waste sources, or renewable energy credits	2 each 6 max	To earn 6 points the products must be used for at least 3 major components of the building. 2 points may be earned when used for each major component.	•	•	•	•	05
609.1 11.609.1 12.1(A).609.1	Regional materials	2 each 10 max	To earn 2 points verify material is produced, grows naturally, or occurs naturally, or occurs naturally within 500 miles (805 km) of the job site if transported by truck or 1500 miles (2414 km) if transported for at least 80% of the total distance by rail or water. Products that are assembled or produced from multiple raw materials qualify if the weighted average (by weight or volume) of the distance the raw materials have been transported meet the distance criteria. <sup>6</sup>	0	0	0	0	
701.4.3.2 11.701.4.3.2 12.1.701.4.3.1	Insulation and air sealing	3 15 max	Insulation and air sealing is installed in accordance with all the following, as applicable: (1) third-party verification performed 15 pts, (2) no third-party verification performed 3 pts				0	0

1 Certification is required of the manufacturer only. Vendor Chain of Custody is not required to qualify for this point.

5 Eligibility applies only to the wood-based sheathing portion of the panel.

6 Regional material calculations based on project location provided by Huber upon request.

## National Green Building Standard.

Table 4: continued

Verified attribute
 OEligible for points

Summary of Areas of Eligibility with the National Green Building Standard (ICC 700-2012)

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
901.4(1) 11.901.4(1) 12.1.901.4(1)	Structural plywood used for floor, wall, and/or roof sheathing complies with DOC PS 1 and/or DOC PS 2. OSB used for floor, wall, and/or roof sheathing complies with DOC PS 2. Panels are made with moisture-resistant adhesives & the trademark indicates the adhesives are Exposure 1 or Exterior (plywood) & Exposure 1 (OSB)	Mandatory	To meet this a minimum of 85% of OSB or plywood in the building must consist of Huber products.	•	•	•	•	•
901.4(6) 11.901.4(6)	Non-emitting products, which can include structural wood components	4	A minimum of 85% of product in the building are the identified Huber products.	٠	•	٠	٠	O <sup>5</sup>

## Table 5:Verified attributeO Eligible for pointsThis provision does not apply to this productSummary of Areas of Eligibility with the National Green Building Standard (ICC 700-2008)

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>*</sup> R-sheathing
602.9	Water-resistive barrier	Mandatory	Install a water-resisitve barrier and/or drainage plan system behind exterior veneer and/or siding.				•	•
606.1(2)	Two types of biobased materials are used, each for more than 1% of the project's projected building material cost	6	To earn 6 points products must be at least 1% of the construction material cost AND another bio-based product at 1% of material cost must be used. 1 or 3 points are available for greater than 0.5%.	٠	٠	•	•	O⁵
606.2(1)	Two certified wood-based products are used for minor elements of the building, such as all walls, floors or roof	3	To earn 3 points a second certified wood product must also be used as a minor element. <sup>1</sup>	•	٠	•	•	O⁵
606.2(2)	Two certified wood-based products are used for major elements of the building, such as all walls, floors or roof	4	To earn 4 points a second certified wood product must also be used as a major element. <sup>1</sup>	•	٠	•	•	O⁵
606.3	Materials are used for major components of the building that are manufactured using a minimum of 33% of primary manufacturing process energy derived from renewable sources, combustible waste sources, or renewable energy credits	2 each 6 max	To earn 6 points the products must be used for at least 3 major components of the building. 2 points may be earned when used for each major component.	•	•	•	•	<b>○</b> <sup>5</sup>
608.1	Indigenous materials	2 each 10 max	To earn 2 points verify local products are originated, produced, grow naturally or occur naturally within 500 miles (805 km) of job site. <sup>6</sup>	0	0	0	0	

1 Certification is required of the manufacturer only. Vendor Chain of Custody is not required to qualify for this point.

5 Eligibility applies only to the wood-based sheathing portion of the panel.

6 Regional material calculations based on project location provided by Huber upon request.

## National Green Building Standard.

Table 5: continuedVerified attributeO Eligible for pointsThis provision does not apply to this productSummary of Areas of Eligibility with the National Green Building Standard (ICC 700-2008)

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech® Sheathing	AdvanTech® Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
703.2.1	Insulation and air sealing	3 15 max	Insulation and air sealing is installed in accordance with all the following, as applicable: (1) third-party verification performed 15 pts, (2) no third-party verification performed 3 pts				0	0
901.4(1)	Structural plywood used for floor, wall, and/or roof sheathing complies with DOC PS 1 and/or DOC PS 2. OSB used for floor, wall, and/or roof sheathing complies with DOC PS 2. Panels are made with moisture-resistant adhesives & the trademark indicates the adhesives are Exposure 1 or Exterior (plywood) & Exposure 1 (OSB)	Mandatory	To meet this a minimum of 85% of OSB or plywood in the building must consist of Huber products.	•	•	•	•	•
901.4(6)	Non-emitting products, which can include structural wood framing	4	A minimum of 85% of product in the building are the identified Huber products.	٠	٠	٠	٠	•

## California Green Building Standards Code.

### CALIFORNIA LEADS THE COUNTRY IN THE REGULATION OF THE

BUILDING INDUSTRY. Referred to as CALGreen Code, the California Green Building Standards Code establishes green building standards for residential and commercial building in the state. As part of the larger California Building Standards Code, CALGreen Code regulations are updated every three years.

## Table 6: Verified attribute O Eligible for points This provision does not apply to this product Summary of Areas of Eligibility with 2013 California Green Building Standards Code

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System <sup>®</sup> Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
A5.405.1	Regional materials	Elective	Verify local products that are extracted, processed and manufactured within California or 500 miles (805 km) of the job site. <sup>6</sup>	0	0	0	0	
A4.405.4 A5.405.2	Bio-based materials	Elective	All Huber wood products are qualified as bio-based.	٠	٠	٠	•	O⁵
A4.405.4(3) A4.405.4(5)	Renewable sources	Elective	Materials from renewable sources (such as engineered wood).	٠	٠	٠	٠	<b>O</b> <sup>5</sup>
A5.405.2.1	Certified Wood	Elective	Under review by California Building Standards Commision. <sup>3</sup>	N/A	N/A	N/A	N/A	N/A

3 CGBSC recognizes importance of use of certified forest products, however the specific requirements are currently under development.

5 Eligibility applies only to the wood-based sheathing portion of the panel.

6 Regional material calculations based on project location provided by Huber upon request.

## California Green Building Standards Code.

Table 6: continuedO Eligible for pointsThis provision does not apply to this productSummary of Areas of Eligibility with 2013 California Green Building Standards Code

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System® Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
5.407.1	Water-resistant exterior wall assembly	Mandatory	Huber products provide a water-resistant exterior wall envelope.				0	0
4.504.5 5.504.4.5	Composite wood product emissions	Mandatory	EWP products do not apply to the composite wood product definition. <sup>4</sup>					

## American National Standards Institute (ANSI)/Green Building Initiative (GBI).

Table 7:• Verified attributeO Eligible for pointsSummary of Areas of Eligibility with ANSI/GBI 01-2010 –Green Building Assessment Protocol for Commercial Buildings

Section Number	Section Intent	Possible Points	Conditions of Use to Qualify	AdvanTech <sup>®</sup> Sheathing	AdvanTech <sup>®</sup> Flooring	ZIP System® Roof Sheathing	ZIP System <sup>®</sup> Wall Sheathing	ZIP System <sup>®</sup> R-sheathing
10.1.2.2	Bio based Products - building assemblies	7 max	All Huber wood products are qualified as biobased.	٠	٠	٠	•	O <sup>5</sup>
10.1.4.1	Regional Materials - building assemblies	5 max	To earn credits use products that are extracted, processed and manufactured within 500 miles (805 km) of the site for a minimum of 90% (by weight or volume of the component. <sup>6</sup>	0	0	0	0	
10.3.2.1	Certified wood	6	Between 10% and 60% or more of wood-based products used in the building are third party certified.	٠	٠	٠	٠	O <sup>5</sup>

4 This area is not to be confused with the provisions of EQ 4.4 in LEED (Table 4) because the California Air Resources Board (CARB) does not regulate engineered wood product emissions.

- 5 Eligibility applies only to the wood-based sheathing portion of the panel.
- 6 Regional material calculations based on project location provided by Huber upon request.

This provision does not apply to this product

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PRODUCT AND TECHNICAL INFORMATION. Through the Huber Architect Library, you'll find a vast array of valuable resources including product data, continuing education, 3-part specs, sustainability/environmental information and other valuable resources. In addition, you'll find a variety of AIA approved courses covering flooring, roofing and building envelope topics. Discover resources at **www.HuberArchitectLibrary.com**.

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- Sustainability reports
- Technical tips
- Installation manuals
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- FAQs

#### 3-part Specs:

(Available at www.HuberArchitectLibrary.com/specify-our-products)

- AdvanTech® Subflooring and Sheathing (061600 Short Form)
- AdvanTech® Subflooring and Sheathing (Masterspec 2004 Formatting)
- ZIP System<sup>®</sup> R-sheathing (061613 Short Form)
- ZIP System® Sheathing (061600 Short Form)
- ZIP System® Sheathing (061600 Masterspec 2004 Formatting)
- ZIP System<sup>®</sup> Wall Air Barrier (072723 Masterspec 2004 Formatting)
- ZIP System<sup>®</sup> Wall Weather Barrier (072500 Short Form)



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Reviews subflooring as a structural layer of support between the joists and the finished floor. Covers why floors squeak, creak, move, sag, or separate as an effect of a faulty subfloor. Also explains how sub-par subflooring can contribute to multiple performance failures resulting in costly callbacks or reworks that can effect a reputation. Upon completion, architects will understand the fine points of what constitutes a good subfloor.

#### **HEW 502** Air, Water and Moisture Management in Light Commercial Building Envelopes

Identifies vapor differences in both physical properties and behavior; identifies the four D's of water management; explores the physics of air and moisture movement through the building enclosure; recognizes pitfalls with how today's buildings are being designed and built; identifies alternative moisture and air barrier design solutions; and identifies potential liabilities and solutions of typical commercial walls.

#### HEW 602 Building Envelope Technologies for Energy Efficient Designs

Identifies energy codes or standards used in the United States; identifies concerns that impact the energy efficiency performance of the building envelope; discusses reducing air leakage and thermal bridging in the building envelope and defines energy-efficient wall sheathing solution options.

#### HEW 603 The Energy Efficiency Challenge

Reviews residential energy use and how changes in building codes and standards are driving improved energy performance in residential construction. Identifies new design and construction methods, materials, and systems that can be used to help reduce the energy requirements of homes and make them more efficient.

## Frequently asked questions.

### **Q:** Can Gypcrete underlayment be applied directly to AdvanTech<sup>®</sup> flooring?

A: AdvanTech® flooring is an excellent substrate for gypsum underlayment. AdvanTech flooring is manufactured to have a higher wood and resin density than commodity OSB or traditional plywood subflooring, resulting in high performing strength, stiffness and moisture resistance. With a lower water absorption rate, AdvanTech flooring is resistant to edge swell and strand delamination, resulting in a flatter, smoother subfloor. For additional information on gypsum application over AdvanTech subflooring, please see our technical bulletin, *AdvanTech's Advantage with Gypsum Underlayment*. This can be found in the Technical Tips section of www.HuberArchitectLibrary.com/advantech

### **Q:** Can I install AdvanTech<sup>®</sup> flooring over a concrete slab?

A: There are two acceptable methods for installing AdvanTech<sup>®</sup> flooring over a concrete slab; direct application to the slab and application to sleeper system. Both applications require a vapor barrier be installed over the concrete slab prior to the application of AdvanTech flooring. For fastening guidelines and additional installation information, please see our technical bulletin, *Installing AdvanTech over a Concrete Slab*. This can be found in the Technical Tips section of www.HuberArchitectLibrary.com/advantech

#### **Q:** Does AdvanTech<sup>®</sup> flooring provide a Sound Transmission Class (STC) rating?

A: Sound Transmission Class is a rating of how well a building partition attenuates airborne sound. The rating is dependent on the components of the assembly, i.e., flooring or sheathing thickness, insulation type/thickness and floor covering. AdvanTech® flooring does not carry an individual STC rating but will provide equivalent sound deadening performance to other OSB and plywood subflooring panels.

### **Q:** Can engineered hardwood floors be glued down directly to AdvanTech<sup>®</sup> flooring?

A: Yes, engineered hardwood flooring may be glued directly to AdvanTech flooring. Due to the water resistance of AdvanTech flooring, latex and water-based adhesives will not bond well to the panel surface. We recommend using a moisture-cured urethane for glue-down hardwood applications.

#### **Q:** Does AdvanTech<sup>®</sup> flooring carry a fire rating?

A: AdvanTech® flooring will provide the same fire resistance as commodity OSB or plywood subfloor with an equivalent panel thickness. AdvanTech flooring is a fully combustible wood structural panel and may be used in fire rated assemblies wherever a standard "wood structural panel" is specified.

### **Q:** Can AdvanTech<sup>®</sup> flooring be installed as a floating floor system?

A: When installed per the National Wood Flooring Association's floating subfloor guidelines, AdvanTech<sup>®</sup> flooring can be used as a floating subfloor system. With unique strength, stiffness and dimensional stability, AdvanTech flooring is an excellent choice for floating subfloor applications.

### **Q:** Can AdvanTech<sup>®</sup> panels be installed as a 2-layer floating floor system?

A: Yes, you can install AdvanTech<sup>®</sup> panels as a 2-layer floor system. For information on how to install AdvanTech panels as a 2-layer system, please see our technical bulletin, *AdvanTech<sup>®</sup> Panels Installed as a 2-Layer Floating Subfloor*. This can be found in the Technical Tips section of www.HuberArchitectLibrary.com/advantech

## Frequently asked questions.

- **Q:** Do overdriven fasteners void the ZIP System<sup>®</sup> sheathing warranty or need to be taped over?
- A: Overdriven fasteners do not necessarily void the ZIP System<sup>®</sup> sheathing warranty. However, when a fastener misses the framing and results in a "shiner" or if a fastener penetrates roughly half way or more through the panel, steps must be taken to seal these penetrations. Shiners should be removed and holes should be covered with ZIP System<sup>™</sup> tape or ZIP System<sup>™</sup> liquid flash. Fasteners that penetrate roughly half way or more through the panel should also be covered with tape or liquid flash.

### **Q:** Can ZIP System<sup>®</sup> sheathing be used in both roof and wall applications?

A: Previously, 1/2" and 5/8" ZIP System sheathing panels were only code-recognized for use on the roof and branded "ROOF USE ONLY." Likewise, 7/16" panels were code-recognized for wall use and stamped "WALL USE ONLY." In 2012, Huber Engineered Woods obtained code-recognition for all ZIP System<sup>®</sup> sheathing panel thicknesses to be used for both roof and wall applications. Please note that ZIP System sheathing panels now reference both ICC-ES code recognition reports, ESR-1473 (wall) and ESR-1474 (roof). Currently, the green water-resistive overlay is on the 7/16" panel thickness, while the sienna overlay is on the 1/2" and 5/8" thicknesses.

### **Q:** What type of roof and wall coverings can be installed directly to ZIP System<sup>®</sup> sheathing?

A: ZIP System<sup>®</sup> sheathing panels may be covered with any code-complying wall covering or one carrying a current ICC-ES Evaluation Service Report. For roof applications, ZIP System sheathing is approved for use with the following roof coverings: asphalt-fiberglass shingles, metal roofs, clay and concrete tile, slate and slate-type shingles, wood shakes and wood shingles. For roof and wall coverings that require multiple, water-resistive layers, ZIP System sheathing is intended to replace the first layer. For additional information, please see our technical bulletin, *Acceptable* 

Roof and Wall Coverings on ZIP System Sheathing. This can be found in the Technical Tips section of www.HuberArchitectLibrary. com/zip-system

#### Q: Can I use ZIP System<sup>™</sup> tape as a flashing tape?

- A: Yes, ZIP System<sup>™</sup> tape is code recognized in ESR-2227 as a pressure-sensitive, self-adhering, cold-applied tape to be used as flashing around windows, door frames, wall penetrations and roof penetrations. ZIP System tape is not warranted when used on substrates other than ZIP System sheathing.
- **Q:** How long can I leave the ZIP System<sup>®</sup> sheathing exposed before I install roof and wall coverings?
- A: ZIP System<sup>®</sup> sheathing can be exposed for up to 180 days.\*

### **Q:** What type of fasteners should be used to install ZIP System<sup>®</sup> R-sheathing?

- A: When installing ZIP System® R-sheathing, fasten the panels to the framing members with code-approved fasteners. When used to resist lateral forces, nail fastener penetration into the wood wall stud should be a minimum 1½" (i.e., 1½" R-sheathing requires minimum 10d common nails). If staples are used, fasteners must penetrate a minimum 1" into the framing. When used as a braced wall panel or engineered shear wall, ZIP System R-sheathing must be fastened according to Table 1 in ICC-ES Evaluation Service Report 3373.
- **Q:** At what temperatures can ZIP System<sup>™</sup> liquid flash and ZIP System<sup>™</sup> tape be installed?
- A: When installing ZIP System<sup>™</sup> liquid flash, the ambient and panel surface temperatures should be between 35°-110° F (2°-43° C).

When installing ZIP System<sup>M</sup> tape, the ambient and panel surface temperatures should be between 0° – 120° F (-17° – 49° C).

## Portfolio



## Assisted living



Left: The Views at Harbortown, Jacksonville, FL; Fairfield Residential, Developer/Owner Above: Abundant Life Living Springs, Delanco, NJ; Domus, General Contractor; Kitchen & Associates, Architect

## Mixed use development





- 66 Building paper seems to always end up flapping in the breeze and pulling and tearing. Or, the siding guy puts the paper on late and covers it up right away so there is no way to know if it's done correctly. ZIP System<sup>®</sup> sheathing adds a lot of value. It's easy to install correctly. <sup>79</sup>
  - Keith Anderson, Clark Builders Group, Arlington, VA



Top Left: Loudoun Station Apartments, Ashburn, VA; Comstock Companies, Owner; DSC Design, Architect; Davis Construction, General Contractor; RPM Framing, Framer Opposite Page and Bottom: 77H (Walmart Apartments), Washington, DC; Clark Builders Group, General Contractor; Modu Tech, Framer; The JBG Companies, Owner

## Multifamily



Above: Alta Alameda Station, Denver, CO; Wood Partners, Developer/Owner; Alameda Builders, LLC, General Contractors



- The ZIP System<sup>®</sup> sheathing and tape was a great choice to accomplish the goal of an energy-efficient home.
  Working together with other components such as spray foam insulation, geothermal HVAC, superior walls and good windows, ZIP System sheathing and tape performs its function well to work as one unit. It has held up extremely well. **?**
  - Darrell Nichols

Top Left: Bexley Village at Concord Mills, Charlotte, NC; Weinstein, Owner; Carocon Corporation, General Contractor Bottom: AMLI, Broomfield, CO; Wood Partners, Owner

## Single family/residential



Above: Mandarin Oaks Reserve, Jacksonville, FL; DreamFinders Homes, Owner



For my energy-efficient homes, I rely on the exterior sheathing system that helps me manage labor time and costs — ZIP System<sup>®</sup> sheathing and tape.
The system is engineered to install quick and easy to get the job done right.
Patrick Zalupski, DreamFinders Homes, Orange Park, FL



Top: Iron Creek Homes, Edmond, OK Bottom: Mandarin Oaks Reserve, Jacksonville, FL; DreamFinders Homes, Owner

### ADVANTECH® FLOORING AND SHEATHING

## Portfolio



# ADVANTECH® FLOORING

- I've seen puddles of water on subfloors of some jobsites. I'll walk in and see drywall mud all over the floor and silicone caulking, construction debris everywhere. With AdvanTech® flooring, we don't need to go back and repair. All we do is just clean it up and apply the floor.
  - Patric Santerre, ARCADIA designworks LLC, Portland, Maine



Opposite Page and Above: The Lofts at Seigle Point, Charlotte, NC; Charlotte Housing Authority, Owner; Cline Design, Architect; Bovis, General Contractor

ADVANTECH® FLOORING AND SHEATHING

## Commercial





AdvanTech<sup>®</sup> flooring is a strong, sturdy product that helps us provide homes with a solid feeling. This translates into a quieter living area. 
 Kevin Rogerson, VP of Lindsey Construction Co., Inc.



Opposite Page and Top Right: St. Anthony's Garden, Covington, LA; Gibbs Construction Top Left and Bottom: The Lofts at Seigle Point, Charlotte, NC; Charlotte Housing Authority, Owner; Cline Design, Architect; Bovis, General Contractor

### ADVANTECH® FLOORING

## Single family/residential





**1** build strong with AdvanTech® because I want to be confident that the materials I use will not only stand up to abuse but also stand up to weather issues, which we have a lot of in New England. So AdvanTech has seemed to be the product that I would choose over any plywood product. **11** 

 Frank Whitty, TMR Development, Middleboro, MA

Top: Steven Baczek, Architect, Rochester, MA Bottom: Michael St. Hilaire (Builder), Burlington, VT Opposite Page: Greg Shover, Shover Construction, Shelbourne, VT

### NOTES





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**ZIP**system<sup>™</sup>

SHEATHING & TAPE

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