ADVANTECH® SHEATHING

MANUFACTURER

Huber Engineered Woods LLC
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BASIC USE AND APPLICATIONS

AdvanTech® sheathing is a high-performance engineered panel designed to replace plywood and commodity oriented strand board (OSB) for roof, wall, and 2-layer floating subfloor system applications. Fabricated in highly-controlled production facilities utilizing advanced resin technology, AdvanTech sheathing exhibits higher strength, greater stability and enhanced moisture resistance. AdvanTech sheathing exceeds the code minimums representing other sheathing products, providing owners with a more stable sheathing and builders with a more reliable product that retains its qualities under environmental exposure during construction.

AdvanTech sheathing panels are appropriate for a wide range of applications, including, but not limited to:

- Wall sheathing
- Roof sheathing
- 2- Layer floating subfloor
- Shear walls

LIMITATIONS ON USE

When installing AdvanTech sheathing, designers should incorporate a 1/8" expansion joint to accommodate panel expansion. This is an industry recommendation and is not unique to AdvanTech sheathing. AdvanTech sheathing is an Exposure 1 rated panel, and should not be used in permanent exterior applications.

AVAILABLE SIZES AND RATINGS

AdvanTech sheathing panels are offered in three thicknesses (1/2", 5/8", 23/32") for a wide range of conditions. All panels are available in nominal 4 by 8 foot sheets†† with square edge profiles, and a tongue and groove edge profile is also available in the 5/8" thickness. AdvanTech sheathing is available in the following DOC PS 2 Sheathing span ratings and performance categories. All panels are Exposure 1 rated.

††Net Face width is 47-1/2" on tongue-and-groove panels

- 32/16, Structural 1, 1/2 PERF CAT
- 40/20, Structural 1, 5/8 PERF CAT
- 48/24, Structural 1, 23/32 PERF CAT

Third party independent compliance testing of AdvanTech sheathing performed by Timberco, Inc. (TECO).

Product Advantages

- Superior design strength and stiffness versus plywood and commodity OSB
- Structural-1 Panel grade
- Superior moisture resistance during construction
- Dimensional stability to minimize movement below wall, roof or floor finishes
- Higher density to deliver greater nail and staple holding power
- Installs flat and stay flats for floating floor assemblies
- Consistent quality with each panel manufactured to ESR-1785† specification

† ESR-1785 does not currently apply to 23/32", 48/24 span rating sheathing.

POTENTIAL LEED CREDIT CONTRIBUTION

- Credit IEQ 4.4 Low-Emitting Materials, Composite Wood and Agrifiber: AdvanTech contains no added urea formaldehyde
- Credit MR 5.1 or 5.2 Regional Materials: Materials harvested, processed, and manufactured within 500 miles of project site.
- Credit MR 2.2 Environmentally Preferable Products – Local Production (LEED for Homes)

GENERAL SUSTAINABLE DESIGN CONTRIBUTIONS

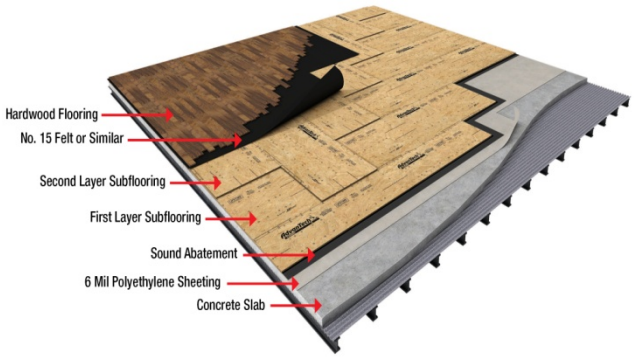
- Low-Emitting Material: No added urea formaldehyde or VOC constituents
- Sustainable Forestry Initiative Certified Wood: Harvested, transported, manufactured, and distributed utilizing sustainable practices
- Renewable Forest Resources: Composed of primarily young growth bio-based resources
- Regional Materials: Made in the United States at one of our four regional manufacturing facilities: Commerce, GA; Broken Bow, OK; Crystal Hill, VA; and Easton, ME

AVAILABLE RESOURCES

Section 06 16 00 SHEATHING guide specification for AdvanTech® flooring and sheathing products in CSI 3-part format is available at HuberWood.com or HuberArchitectLibrary.com.

STORAGE AND HANDLING

Store and handle products according to manufacturer's written recommendations. Support panel bundles off the ground. Cover stored panels with weatherproof protective material; allow sides of protective material to remain loose to assure adequate air circulation. In high moisture conditions, cut bundle banding to prevent edge damage to the panels.



ROOF/WALL SHEATHING INSTALLATION

Before beginning installation, verify framing is properly spaced and aligned to support panel edges. Install AdvanTech® sheathing in accordance with:

- AdvanTech sheathing installation instructions
- ICC-ES ESR 1785
- Requirements of authorities having jurisdictions

When used as roof sheathing, install panels with the long edge perpendicular to framing members, spanning at least three framing members, and with short edges fully supported. Stagger short edge seams.

When used as used as wall sheathing, the panels may be installed with the long side of the panel oriented either horizontally or vertically to the framing members. Walls that are designed to resist lateral shear forces and sheathed with wood structural panels typically require solid framing or blocking behind all panel edges. For both roof and wall applications, all panel edges should be manually spaced approximately 1/8 inch (3 mm) apart.

AdvanTech sheathing can be installed over wood or cold-formed metal framing. Install over wood using nail or screw fasteners. For metal framing applications, reference our Tech Tip *Installing AdvanTech over Metal Framing.*

Install fasteners approved by applicable building code. Install fasteners 3/8 inch (9.5 mm) from panel edges. Space fasteners 6-inches (152 mm) on-center on supported panel ends and 12-inches (305mm) on-center at intermediate supports in the field unless otherwise specified. AdvanTech sheathing panels have a printed fastening guide for 16-inch (406 mm) and 24-inch (610 mm) on-center fastener locations.

FLOATING SUBFLOOR INSTALLATION

When used as a floating subfloor system, verify the concrete slab is fully cured per the applicable building code with the building fully dried in. Floating subfloor systems can be installed on sub-grade, on-grade, or above-grade concrete slab. A vapor-retarder should be installed anytime solid wood flooring is being installed over a concrete slab per National Wood Flooring recommendation.

The minimum AdvanTech panel thickness on the first layer should be 1/2” with 1/8” spacing between panels and 3/4” spacing between vertical obstructions.

The second layer of AdvanTech® panels are to be installed perpendicular or at a 45 degree angle to the first layer. The same 1/8” spacing between panels and 3/4” spacing between vertical obstructions should be applied. The second layer should be fastened to the first layer using staples or staple and glued fastening method using a 12” interior grid pattern and a 6” spacing around the perimeter. Screws or screws and glue may also be used in lieu of staples.

For complete installation instructions for AdvanTech panels as a 2-layer floating subfloor system please see our Tech Tip *AdvanTech® Panels Installed as a 2-Layer Floating Subfloor.*

WARRANTY

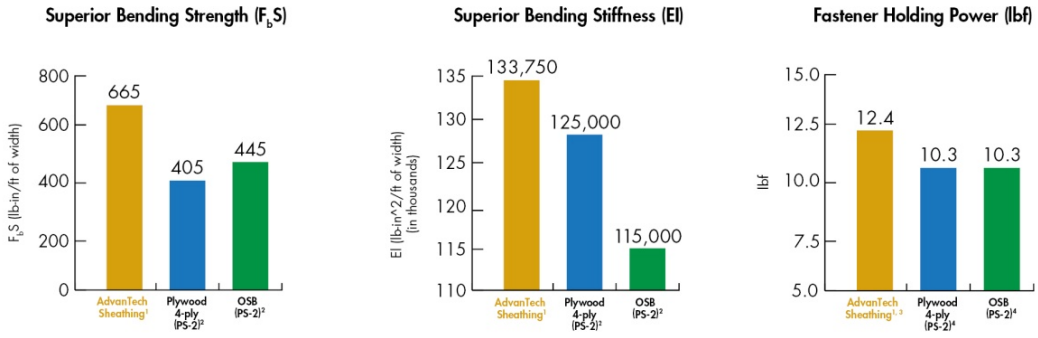
AdvanTech sheathing carries a lifetime limited warranty. Refer to the designated warranty based on application for limitations and restrictions. AdvanTech® panel warranty information found on advantechperforms.com.

AVAILABILITY

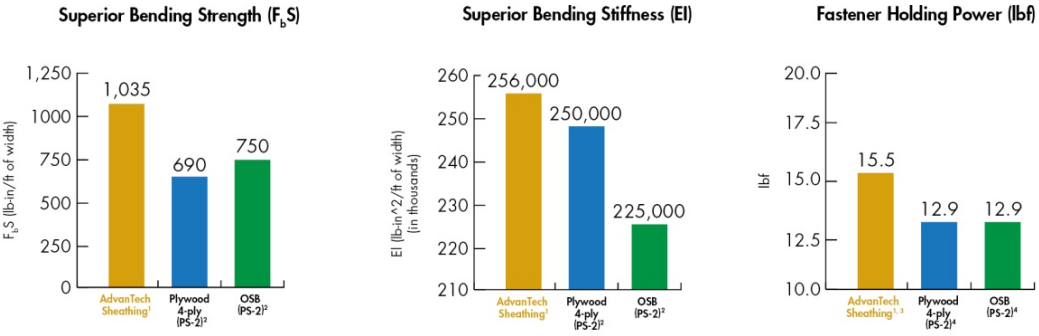
Huber Engineered Wood’s AdvanTech sheathing panels are manufactured at multiple locations in the U.S. and are available through distributors nationwide. Visit advantechperforms.com or contact Huber Engineered Woods for a retailer near you.

AdvanTech® Sheathing Physical Properties vs OSB/Plywood

1/2"



5/8"



AdvanTech® sheathing*

Performance Category	Panel Size	PS-2 Span Rating	Code Evaluation Report	Edge Profile	Panel Grade	Approx. Weight Per Panel**	Panels Per Unit
1/2	4' x 8'	32/16	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.

TECHNICAL SERVICE

Detailed information including specifications, product literature, test reports, installation instructions, and special applications are available through Huber Engineered Woods. Please visit advantechperforms.com or call 800.933.9220 Ext 2716 to speak to a technical representative.

1 ICC-ES Evaluation Services Report ESR-1785
2 2012 edition of the AF&PA American Wood Council's, Allowable Stress Design (ASD)/LFD Manual for Engineered Wood Construction, based on 4-ply plywood
3 2005 Edition National Design Specification, Nail and Spike withdrawal equation using 10d Common Nail
4 APA Technical Topic TT-039C, Recommended Design Values for Nail Withdrawal from APA Plywood and OSB