



Georgia-Pacific



Specifications

Nautilus™ wall sheathing is a performance rated structural panel made of compressed wood strands arranged in opposing oriented layers, bonded with phenolic resin under heat and pressure, and laminated with a water-resistive building wrap. Each panel is certified to Department of Commerce Industry Consensus Standard PS 2-2004 by APA-The Engineered Wood Association for use as wall sheathing. Panels are rated for Exposure 1 bond durability¹ for protected applications and limited exposure during normal construction delays. Nautilus panels are blue edge coated to limit absorption and pick-up of moisture.

Manufacturing Locations

Fordyce, AR and Hosford, FL

Use

APA Rated® Sheathing

Nautilus panels are an excellent selection for wall sheathing applications. These APA-The Engineered Wood Association certified panels offer strength, stiffness, dimensional stability, racking and impact resistance, uniformity and excellent fastener holding capacity. Because they are pre-laminated with a water-resistive building wrap, they also offer resistance to moisture intrusion during the construction cycle. When seams are taped with code-compliant Nautilus™ seam tape, the structure is also protected from air infiltration that could reduce energy efficiency. (Exposure 1 panels are not recommended for permanent full exposure or conditions of high moisture and humidity such as exterior siding applications, poultry house linings, signs, etc.)

Product Availability

	Fordyce, AR		Hosford, FL	
	Pcs. per Unit	Weight (lbs. per msf)	Pcs. per Unit	Weight (lbs. per msf)
7/16 cat. Rated Sheathing	80	1547	80	1553

OSB Dimensional Product Specifications

Thickness Tolerance	$\pm 1/32"$ ($\pm 0.8\text{mm}$)
Length and Width Tolerance	$+0, -1/8"$ ($+0, -3.2\text{mm}$)
Straightness Tolerance	$\pm 1/16"$ ($\pm 1.6\text{mm}$) from straight line corner to corner
Squareness Tolerance	$\pm 1/8"$ ($\pm 3.2\text{mm}$) (variation of measured diagonals of 4' x 8' panel)

OSB Physical & Mechanical Properties (Typical Range)

Panels are span rated as full panels to performance criteria for wall construction applications. The physical and mechanical small specimen properties given below are typical ranges, not minimums, and are not certified.

Density	40 to 42 lb/ft ³ (640.74 to 672.78 Kg/m ³)
Thickness Swell (24-hour soak test)	$15/32"$ (12mm): less than 18% $19/32"$ (15mm): less than 15%
Traverse Tension (Internal Bond)	30 to 70 psi (0.207 to 0.483 MPa)
Modulus of Elasticity (Longitudinal Axis)	620,000 to 720,000 psi (4,274.75 to 4,964.23 MPa)
Modulus of Rupture (Longitudinal Axis)	3,185 to 3,955 psi (21.96 to 27.27 MPa)
Minimum Dry Direct Nail Withdrawal	20 lbs. (9.07 Kg)
Minimum Dry Lateral Nail Withdrawal	120 lbs. (54.43 Kg)
Flame Spread Classification	Class 3 (or C), FS Rating: 76-200, Smoke Developed: <450
Testing Agency	APA-The Engineered Wood Association
Building Code Acceptance	DOC PS 2-2004
FHA/HUD Use of Materials Bulletin	HUD UM-40

Nautilus wall sheathing is manufactured using phenol-formaldehyde resin, also known as phenolic thermoset resin. The same basic resin is used in both the core and face layers, although the formulation may vary slightly to allow differences in cure dynamics. The formaldehyde emissions of newly manufactured panels, when tested to ASTM E 1333 Large Scale Chamber method, typically will fall within a range of 0.03 ppm to 0.07 ppm. These emission levels for PS 1 and PS 2 certified phenolic bonded structural panels are exempt for testing or monitoring by HUD in the Manufactured Home Construction and Safety Standards and by the California Air Resources Board (CARB) in the Composite Wood Air Toxic Control Measure (ATCM). Phenolic resins are considered highly water resistant; however, Nautilus panels are considered Exposure 1 durability, which is for protected applications with limited full exposure during normal construction cycles only.

continued on reverse

Building Wrap Properties

Description: Unperforated cross-woven scrim made from polyolefin tape yarns coated with a polyolefin plastic coating.

Property	Units	Specification	Test Method
Water Vapor Permeance	Perms	0.6 maximum	ASTM E-96 Dissicant Method 75° F, 75% Relative Humidity
Water Vapor Transmission Rate	g/m ² /24 hrs	4 maximum	ASTM E-96 Procedure A
Water Resistance	Hours	24	ASTM D-779
Water Resistance	(15 min. @ 27Pa/15 mph)	Pass	ASTM E 331
Tensile Strength MD/TD	lbs./inch	20/20 minimum 30/45 typical	ASTM -882
Trapezoid Tear Strength	lbs.	20/20 minimum 30/40 typical	ASTM D-1117
Surface Burn Rating Flame spread Smoke developed	NA	Class A 0 25	ASTM E-84
UV Exposure	Months	12	NA

¹ The Exposure 1 rating on a panel means that the panel is intended for protected construction applications where ability to resist moisture during normal construction delays or where exposure to conditions of similar severity is required. Exposure 1 panels are comparable to panels designated under PS1 as interior type with exterior glue, such as CD interior with exterior glue (CDX).



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