



# SANDED DOUG FIR

- Uniform surface for high quality paints
- Provides good strength and stiffness
- Waterproof bond
- High face/edge screwholding
- NAUF - meets CARB requirements

### Product Description:

Swanson Sanded Doug Fir provides a beautiful finish-quality surface for all kinds of applications, from cabinets and built-ins to soffits and paneling.

### Panel Construction/Moisture Resistance:

Swanson Sanded Doug Fir with Doug Fir/Hemlock construction. It is manufactured with a waterproof glue bond and is manufactured to APA PS 1. See APA Sanded Product Guide K435F for different grades and types that are available.

### Applications:

- Material Handling
- RV – Transportation
- Furniture, Doors, Benches
- Soffits, Stairs, risers, shelving
- Paneling, Accent Walls
- Backing for high-end decorative panels

### Limitations:

Swanson Sanded Doug Fir is not a finished product. It requires priming, two coats and two edge coats for prolonged exposure in exterior applications.

### Thicknesses & Sizes:

Swanson Sanded Doug Fir is available in 1/4" to 1" thickness. Standard panel sizes are 4'x8', 4'x9', 4'x10'.

### Standard Packaging:

Thickness	Sanded Doug Fir Average Weight* lbs./Panel	Pieces per Unit
3/8"	35.0	88
1/2"	50.0	66
5/8"	64.0	50
3/4"	67.0	44

\*Average product weights may vary +/- 10%

### Technical Data Applicable Standards

All panels are manufactured by Swanson Group® per product standard PS1.

Physical Properties	3/8" to 1/2"	5/8" to 3/4"
Modulus of Rupture <sup>2,3</sup>	6,670 psi	6,860 psi
Modulus of Elasticity <sup>2,3</sup>	795,050 psi	853,565 psi
Lineal Expansion <sup>2,3</sup>	0.056%	0.050%
Thickness Swell	3.8%	3.8%
Water Absorption (24-Hours)	6.0%	6.0%
Internal Bond <sup>2</sup>	180 psi	134 psi
Shelf Stiffness EI ASTM D-3043 C	74,770 lb-in <sup>2</sup> /ft <sup>6</sup>	606,720 lb-in <sup>2</sup> /ft <sup>6</sup>
Shelf Bending FbS ASTM D-3043 C	1,615 lb-in/ft <sup>6</sup>	6,460 lb-in/ft <sup>6</sup>
Face Screw Holding <sup>2</sup>	430 lbs.	449 lbs.
Edge Screw Holding <sup>2</sup>	Not Applicable	408 lbs.
Moisture Content <sup>2</sup> ASTM D-1037	6-9%	6-9%
Specific Gravity <sup>2</sup> ASTM D-1037	.592	.527
Density <sup>2</sup> ASTM D-1037	36.9 lbs./ft. <sup>3</sup>	32.9 lbs./ft. <sup>3</sup>
Flame Spread ASTM E-84	76 - 200 <sup>5</sup>	76 - 200 <sup>5</sup>
Smoke Developed ASTM E-84	25 - 270 <sup>5</sup>	25 - 270 <sup>5</sup>
Flame/Smoke Spread Rating E-84	Class C	
Formaldehyde Level E-1333	<0.01 parts/million	

Panel Tolerances <sup>2</sup>	3/8" to 3/4"
Thickness Tolerance	+/- 1/32" (.031")
Length & Width Tolerance	+0, -1/16" (.062")
Squareness	1/16" (.062")
Straightness	1/16" (.062")

<sup>1</sup>5-panel average. Product averages vary for individual thicknesses, consult sales or technical staff for exact properties.<sup>2</sup>

All tolerances and specifications apply at the time of manufacture.

<sup>3</sup>ANSI 208.1 test result.

<sup>4</sup>Calculations based on test averages of along and across grain.

<sup>5</sup>Shelving physical properties based on engineering calculations.

<sup>6</sup>Flame and smoke spread properties based on engineering calculations.

<sup>7</sup>Shelving stiffness/bending properties are based on a limited 5-panel average.

Note: All tolerances and specifications apply at the time of manufacture.

Note: Product averages vary for individual thicknesses. Consult sales or technical offices for exact properties.

### Product Grade

Standard product is shipped on grade only.

## Finishing Instructions

**General:** Select companion products that are designed to be used together and preferably from the same manufacturer. Two topcoats will provide significant improvement in the life and performance of the finish.

Always use finishes formulated for wood and follow the manufacturer's recommendations for best results.

- House paints require at least two coats, a primer and topcoat. Primers are formulated specifically for controlled penetration, optimum bonding to the substrate, and minimal extractive staining.
- Some acrylic latex systems use oil or oil-alkyd primer followed by the acrylic latex topcoat.
- Other systems use one or two coats of a stain-blocking acrylic latex primer and generally offer superior performance.

**Semitransparent Stains:** Highly recommended where both color and show-through of the grain and natural wood characteristics are desired. When light colors are used, only oil-based semitransparent stains are recommended. These help prevent discoloration of the finish caused by natural water-soluble compounds (called extractives) in the wood.

- Lighter colored latex stains usually require a stain-resistant undercoat to prevent discoloration of the finish by extractives.

**Edge Treatment:** All edges of plywood panels used for exterior applications should receive edge protection to minimize the effects of moisture absorption. Use the same exterior paint primer for the edges that will be used on the face.

**Suitability for Use and Warranty:** Nothing herein constitutes a warranty express or implied, including any warranty of merchantability or fitness for use, nor is protection from any law or patent to be inferred. The exclusive remedy for all claims is replacement of materials.

## Warehouse Storage and Handling

- Store in a dry, clean, well-ventilated area indoors
- Avoid temperatures and moisture extremes. Allow panels to equalize for 72 hours or more before use
- Pieces must not be stored in contact with the ground
- Separate units with clean, dry spacers of uniform thickness, aligned carefully. Use three spacers for panels 8' long, five spacers for 10' panels. Use 5 spacers on 1/2" thickness or less.

## Environmental Impact

- Swanson Group® uses process by-products to produce energy
- Swanson products are renewable, biodegradable and recyclable

**Warnings:** This product will generate wood dust from sawing, sanding, or shaping. Safety data sheets are available on Swanson's website at [www.swansongroup.biz](http://www.swansongroup.biz) and upon request.

Structural panels (PS-1) are exempt from California Air Resources Board regulations, however, this product is below CARB limits for all uses.

Find out more at [www.swansongroup.biz](http://www.swansongroup.biz)

## Shelving Load Span Table:

Table 1 - Face Grain Across Supports - Multiple Spans <sup>1</sup>						
Span <sup>1</sup>	1/2"		5/8"		3/4"	
	ℓ/240	ℓ/180	ℓ/240	ℓ/180	ℓ/240	ℓ/180
4"	1,899	1,899	2,340	2,340	2,870	2,870
8"	730	730	900	900	1,104	1,104
12"	452	452	557	557	683	683
16"	301	323	404	404	495	495
19.2"	176	225	331	331	405	405
24"	90	121	175	230	227	303
30"	46	61	91	121	120	160
32"	38	50	75	100	99	133
36"	26	35	53	70	70	94
40"		26	38	51	52	69
48"			25	34	34	46
					24	32

  

Table 2 - Face Grain Parallel to Supports - Multiple Spans <sup>1</sup>						
Span <sup>1</sup>	1/2"		5/8"		3/4"	
	ℓ/240	ℓ/180	ℓ/240	ℓ/180	ℓ/240	ℓ/180
4"	1,457	1,457	1,811	1,811	2,208	2,208
8"	560	560	696	696	849	849
12"	347	347	431	431	526	526
16"	229	251	280	280	381	381
19.2"	130	173	195	195	312	312
24"	65	86	125	125	230	230
30"	32	43	76	80	145	147
32"	27	35	63	70	119	129
36"		25	44	55	83	102
40"			32	42	61	81
48"			21	28	40	53

  

Table 3 - Face Grain Across Supports - Single Spans <sup>2</sup>						
Span <sup>2</sup>	1/2"		5/8"		3/4"	
	ℓ/240	ℓ/180	ℓ/240	ℓ/180	ℓ/240	ℓ/180
4"	2,374	2,374	2,926	2,926	3,588	3,588
8"	913	913	1,125	1,125	1,380	1,380
12"	349	465	652	697	814	854
16"	142	189	275	367	357	476
19.2"	80	107	158	211	208	278
24"	40	53	80	106	106	142
30"	20	26	40	53	54	72
32"		22	33	44	44	59
36"			23	30	31	41
40"				22	22	30
48"						20

  

Table 4 - Face Grain Parallel to Supports - Single Spans <sup>2</sup>						
Span <sup>2</sup>	1/2"		5/8"		3/4"	
	ℓ/240	ℓ/180	ℓ/240	ℓ/180	ℓ/240	ℓ/180
4"	1,822	1,822	2,263	2,263	2,760	2,760
8"	701	701	870	870	1,062	1,062
12"	259	345	498	498	657	657
16"	102	136	237	280	446	476
19.2"	57	75	133	177	253	337
24"	28	37	66	88	126	168
30"			33	44	63	84
32"			27	36	51	69
36"				25	36	48
40"					26	34

Maximum allowable loads are psf. Uniform loading is assumed. Loads are for dry conditions. For wet conditions, reduce loads approximately 25%. Inquire for precise data. Basic allowable stresses (bending F<sub>b</sub> and shear F<sub>s</sub>) increase 15% for shelving use per the APA experience factor. Pallet design normally is based on higher allowable loads than given. NOTES: <sup>1</sup>Spans are center-to-center of supports. <sup>2</sup>Span is out-to-out of supports. Allow for 1-1/2" supports on each end.



Swanson Group Sales  
2635 Old Hwy. 99 South  
Roseburg, OR 97471

Email: [SGISales@swansongroup.biz](mailto:SGISales@swansongroup.biz)

Toll Free: 800-331-0831

Local: 541-832-1121

Fax: 541-832-1139

[www.swansongroup.biz](http://www.swansongroup.biz)



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