

TEMPERED PLYRON Industrial Panel



- High impact & wear resistance
- Grain free with superior paintability
- High strength, light weight
- High face/edge screwholding
- NAUF meets CARB requirements

Swanson Group provides the highest proven performance in panel solutions. Customers recognize our exceptional history of performance, exhibited in our panel solutions.

We have enhanced our capability to provide superior panel performance. "Swan Peel"™ Technology provides a smoother surface: less grain show through, and improved glue and overlay bond. "Swan Peel"™ Technology reduces thickness variability: resulting in an enhanced balanced construction, tighter core lines, and dimensional stability.

Swanson is manufacturing overlay panels in a new state-of-the-art facility - the most technologically advanced operation in North America.

Product Description:

Tempered Plyron[®] is an impact resistant, hardboard faced plywood with excellent paintability and printability.

Panel Construction/Moisture Resistance:

Tempered Plyron® is constructed of tempered hardboard laminated to Douglas Fir/Hemlock plywood. It is produced with a 1 step layup, has a waterproof glue bond and meets APA PS 1-19 specifications. All Swanson products are made in the USA.

Working Faces/Treatment:

Tempered Plyron® is available with 2 working faces only. Face color is natural hardboard.

Working Edges/Treatment:

- Edges are factory sawn, without edge treatment.
- Tongue and grooved edges meeting volume limits are available.
- For interior applications requiring edge banding, do not edge seal, otherwise, seal all edges with primer and at least two coats of acrylic or polyurethane top coat.

Applications:

- Wear-resistant flooring panels, stage floors
- Furniture, cabinets, displays, fixtures, casework
- Shelving & partitions

Limitations:

Do not exceed design limitations imposed by the floor or shelving span tables. Tempered Plyron* is not designed for repetitive heavy wheel loads. It must be primed and top coated for exposure in exterior applications.

Thicknesses & Sizes:

Tempered Plyron° is available in 1/2", 5/8" & 3/4" thicknesses. Standard panel sizes are 4' X 8' only. Non standard thicknesses meeting volume requirements are available.

Product Grade:

Standard product and Special Product are shipped allowing up to 10% total Good One Side (G1S) and/or Shop, identified & priced separately. Shipments of G1S and shop only may be available. Check with sales.

Technical Data Applicable Standards:

All panels are manufactured by Swanson Group per Product Standard PS1-19. This standard is available at www.apawood.org.

Meets ASNSI/AHA A135.4 Class1

- Water Absorption % 24hr 25
- Thickness Swell % 24hr 20
- Modules of Rupture PSI 6000
- Internal Bond PSI 130

PHYSICAL PROPERTIES ¹	1/2"	5/8" to 3/4"		
Modulus of Rupture2,3	6,870 psi	6.655 psi		
Modulus of Elasticity2,3	687,050 psi	683,860 psi		
Lineal Expansion2,3	0.080%	0.098%		
Thickness Swell	8.7%	9.6%		
Water Absorption (24 Hours)	6.7%	6.8%		
Internal Bond2	169 psi	134 psi		
Shelf Stiffness EI ASTM D-3043 C	97,600 lb-in2/ft6	270,460 lb-in2/ft6		
Shelf Bending FbS ASTM D-3043 C	2,720 lb-in/ft6	4,720 lb-in/ft6		
Face Screw holding2	470 lbs	440 lbs		
Edge Screw holding2	Not Applicable	398 lbs		
Moisture Content2 ASTM D-1037	6-9%	6-9%		
Specific Gravity2 ASTM D-1037	.784	.686		
Density2 ASTM D-1037	49.5 lbs/ft3	43.0 lbs/ft3		
Janka Hardness2 ASTM D-1037	1,428 lbs	950 lbs		
Flame Spread ASTM E-84	76 – 20065	76 - 20065		
Smoke Developed ASTM E-84	25 - 27065	25 - 27065		
Flame/Smoke spread rating E-84	Class C			
Formaldehyde level E-1333	0.01 parts/million			

PANEL TOLERANCES ²	1/2"	5/8" to 3/4"
Thickness Tolerance	+/- 1/32" (.031")	+/- 1/32" (.031")
Length & Width Tolerance	+0, -1/16" (.062")	+0, -1/16" (.062")
Squareness	1/16" (.062")	1/16" (.062")
Straightness	1/16" (.062")	1/16" (.062")

¹5 Panel Average. Product averages vary for individual thicknesses, consult sales or technical staff for exact properties 2 All tolerances and specifications apply at the time of manufacture.

²ANSI 208.1 test result

³Calculations based on test averages of along and across grain

⁴Shelving physical properties based on limited 5 panel average. See web site for load table

⁵Flame and Smoke spread properties based on engineering calculations ⁶Shelving stiffness/bending properties are based on a limited 5 panel average

Tempered Plyron Shelving Load SpanTable:

Table 1 - Face Grain Across Supports - Multiple Spans 1/2" 5/8" 3/4"						
Span ^l	1/ ℓ/240	/2" ℓ/180	6/240		3/ l/240	4" ℓ/180
4"		-		ℓ/180 2.240		
	1,457	1,457	2,340	2,340	2,870	2,870
8"	560	560	900	900	1,104	1,104
12" 16"	347	347	557	557	683	683
19.2"	186 109	248 145	282 170	377 227	495 365	495 405
24"	56	75	90	119	198	264
30"	28	38	46	62	105	139
32"	23	31	38	51	87	116
36"	20	22	27	36	61	82
40"	<u> </u>			26	45	60
48"	i				30	40
60"						
	Table 2	- Face Grain	Parallel to Si	upports - Mu	Itiple Spans	
0 1		2"		8"		4"
Span	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"	251	251	312	312	381	381
19.2"	182	206	256	256	312	3 2
24"	91	121	168	201	245	2 5
30"	45	60	85	113	159	194
32"	37	49	70	93	131	175
36"	26	34	48	65	92	122
40"		25	35	47	66	89
48"			23	31	44	58
60"	ļ				22	29
	Table	e 3 - Face Gra	in Across Su	pports - Sing	le Spañs	• Grain
C	1/	2"	5/	8"	3/	4"
Span	ℓ/240	ℓ/180	ℓ/240	ℓ/180	ℓ/240	ℓ/180
4"	1,822	1,822	2,926	2,926	3,588	3,583
				 	•	-
8"	701	701	1063	1125	1,380	1,330
8" 12"				1125 445	1,380 709	1,380 854
	701 215 88	701 287 117	1063 333 141	-	1,380 709 311	
12"	215	287	333	445	709	854
12" 16"	215 88	287 117	333 141	445 188	709 311	854 415 242 124
12" 16" 19.2"	215 88 50	287 117 66	333 141 81	445 188 108 54	709 311 181	854 415 242
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12" 16" 19.2" 24" 30" \$\] 32" his 36" 40" We	215 88 50 25 Vanson tory of pe	287 117 66 33 Group rformance	333 141 81 41 Provide , exhibite	445 188 108 54 S tlae hi ed in ² our r	709 311 181 93 ghest pi vane ^{§9} solu 27 vide supe	854 415 242 124 OV@N Do tion \$2 36 rior \$6 ane
12" 16" 19.2" 24" 30" \$\] 32" his 36" 40" We	215 88 50 25 Vanson tory of pe	287 117 66 33 Group rformance	333 141 81 41 Provide , exhibite	445 188 108 54 S tlae hi ed in ² our r	709 311 181 93 ghest pi vane ^{§9} solu 27 vide supe	854 415 242 124 OV@N Do tion \$2 36 rior \$6 ane
12" 16" 19.2" 24" 30" \$\] 32" his 36" 40" We	215 88 50 25 Vanson tory of pe	287 117 66 33 Group rformance	333 141 81 41 Provide , exhibite	445 188 108 54 S tlae hi ed in ² our r	709 311 181 93 ghest pi vane ^{§9} solu 27 vide supe	854 415 242 124 OV@N Do tion \$2 36 rior \$6 ane
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Maximum allowable loads are psf. Uniform loading is assumed. Loads are for dry conditions. For wet conditions, reduce loads approximately \$40.0 actions of the conditions of the same of t use per The ARPD experidned factor Pallist daviga in arbatey invitated 2n trigonrial to ass town by en Flatores: a Solon size natural center-tp-santagorts. 2 Span is out-to-out of supports. Allow for 1-1/2" supports on each end.

Standard Packaging:

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_{3/4} ројуи	rethane toഉുള്ളൂt.	90.7	44	

Average product weights may vary +/- 10%

Applications:

- · Wear-resistant flooring panels, stage floors
- · Furniture, cabinets, displays, fixtures, casework
- · Shelving & partitions

Tempered Plyron Floor Loads and Span Ratings:

Tempered Plyron Recommended Uniform Floor Live Load and Span Rati With Strength Axis 8' direction perpendicular to Supports						n Rating		
	Panel	Panel Allowable Live Loads (lbs. per Square Foot)						
	Thickness	12"	16"	20"	24"	30"	32"	36"
	5/8"	810	365	220	115	60	50	40
İ	3/4"	990	550	335	175	90	75	65

Tempered Plyron Recommended Uniform Floor Live Load and Span Rating With Strength Axis 4' direction parallel to Supports							
Panel	Allowable Live Loads (lbs. per Square Foot)						
Thickness	12"	16"	20"	24"	30"	32"	36"
5/8"	600	250	180	90	20		
3/4"	800	425	300	155	35	30	20

210 psf dead load assumed, Live Load deflection limit is I/360

Note: Complete fastener schedules for glue nailed and nailed only fasteners are available from 1 From A PA The Engineering Wood Association's Engineering Wood Construction Guide, Form E30T, 2005, Table 10:

Tempered Plyron® Finishing Instructions

General: Do not use interior grade paints, water base vinyl-acrylic, solvent based alkyd flat or alkyd solid color stains.

- 1. Prime Coat: Use a high quality Acrylic Latex primer. For good performance, 2 coats of primer should yield about 2 mil dry film thickness. Follow the mail un acture insigner agrate i acumim anuacido.
- 2. 1 op Coat Unoices: Use 2 coats of nign quality Acrylic Latex top coat from the same manufacturer as the primer to ensure compatibility. OR - Stage Top Coat-Acrylic Co-Polymer with same manufacturer primer recommended mil to ensure compatibility. Follow the manufacturer's application instructions for best results. A total for four mills coating thickness should be applied.

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
- ornapice in spanie stoleticons. With the party of the property Limit the stacking height up to five units. Separate units with
- clean, dry spacers of uniform thicknesses, aligned carefully. Use three ആഷംടെ "ഒഴുക്കും Reelong. Technology provides a smoother sur rformances forware Reelong.

bond. <u>"</u>Swan Peel"™ Technology reduces thickness

hter Swarts and uses process by produces the kiness that he swars had been some uses process by products to produce energy facility at the most technologically advanced appearation you had been accommon to the control of the contro

Warnings: This product contains 0.01 parts/million of residual formaldehyde from Taramiratuata. Applicable Leta Wilargenerate wood dust from sawing, sandifilg, paretlaping, realetractate sheet sweravail able up poval rochist weto site ed PS1www.sayaTinsosignodiandois anailabbnatequest.w.apawood.org.

Structural panels (RS $_1$ 1) are exempt from California Air, Resources Board, regulations, however, this product is below CARB limits for all uses. Modulus of Rupture2,3 6,870 psi 6.655 psi

Find outcomore attantions/sysansongroup.biz 687,050 psi 683,860 psi Lineal Expansion2,3 0.080% 0.098% Thickness Swell 8.7% 9.6% 6.7% 6.8% Water Absorption (24 H Internal Bond2 169 psi 134 psi 97,600 lb-in2/ft6 270,460 lb-in2/ft6 Shelf Stiffness EI ASTM D-3 Shelf Bending FbS ASTM D-2.720 lb-in/ft6 4.720 lb-in/ft6 470 lbs 440 lbs

Facewardson Chourd Sales Edge for to golding feet 398 lbs MSoportiong ficeledte Ott 8574/707-1037 www.swam966ngroup.biz 6-9%

Specific Gravity2 ASTM D-1037 .784 .686 Density2 ASTM D-1037 49.5 lbs/ft3 43.0 lbs/ft3 Swanson Group® and Tempered Plyron® are a registered trademark of Swanson Group.

anked are pessifications so ject to change without notice.

1,428 lbs

950 lbs

prefective:NA/20849 76 - 20065 76 - 20065 25 - 27065 25 - 27065 Smoke Developed ASTM E-84

Flame/Smoke spread rating E-84 Class C

Formaldehyde level E-1333 0.01 parts/million

PANEL TOLERANCES 1/2" to 3/4" 5/8" to 3/4" Limitations: