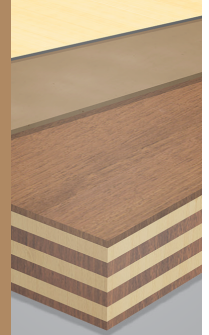


Stress Table – Wet, Working  
Stress Design Capacities

- Outperforms all competitive HDO panels using proprietary technology
- Highest flexibility in HDO applications
- Enhanced panel stability using SwanPeel®, SwanDry™ and SwanPatch™ Technologies
- Eliminates tiger striping/patch transfer
- Excellent for engineered systems



**Swanson Group® provides the highest proven performance in conform panel solutions.** Customers recognize our exceptional history of performance, exhibited in our panel solutions, including the first HDO/MDO "combi" panels in North America.

Swanson works directly with customers to establish relationships based upon market needs, panel design properties, overlay technologies, and application experience. We are now enhancing our capability to provide superior panel performance. **Swanson is manufacturing in a new state-of-the-art facility which is the most sophisticated overlay panel facility in North America.**

#### Product Description:

Classic™ is the work-horse, high-density overlaid plywood panel with excellent surface durability for semi-gloss concrete finishes. It produces a smooth finish with minimal grain transfer and a high number of uses.

#### Panel Construction/Moisture Resistance:

Classic™ is constructed of proprietary, high-density overlay on dense proprietary hardwood faced plywood with Douglas Fir inner plys using SwanPeel®, SwanDry™ and SwanPatch™ Technologies. It is produced with a one-step layup, has a waterproof glue bond and meets performance requirements of PS1. All Swanson products are made in the USA.

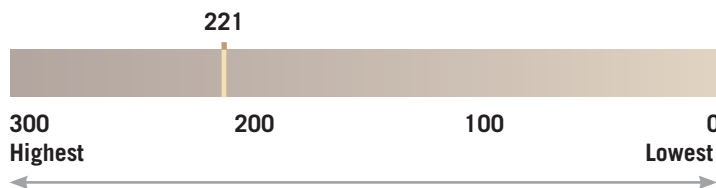
#### Working Faces/Treatment:

- Classic™ is available with one or two working faces. Panels with a single working face are provided with an HDO backer sheet.
- Gloss level of concrete surface: semi-gloss
- Wood grain transfer to concrete surface: slight
- Wood defect transfer to concrete: minimal—no football patches
- Sugaring: none
- Maintenance: limited

#### Working Edges/Treatment:

- Factory sawn and sealed with special gray, styrene acrylic sealer
- Seal all exposed wood (edges and holes) with Edge-Flex 645 by Nox-Crete, Swanson Form Seal by Willamette Valley Co. or equivalent to prevent concrete staining from the wood sugars

#### Alkalinity Resistance After Chemical Exposure



The Abrasion and Chemical Resistance Test reflects the expected panel life in the field. The higher the index number, the more resistant to alkalinity/abrasion.

#### Structural/Load Performance Summary

Classic™ is available in the equivalent of Struct 1. Allowable pressure  $\ell/270 \frac{3}{4}$ " @ 12" OC (face gain across supports): Struct 1 - 1,225 PSF

#### Typical Pour Ranges:

- Engineered systems: up to 150 pours
- Gang forms: up to 60 pours
- Job built: up to 40 pours

- Pour ranges are not guaranteed because the number of pours will vary due to jobsite handling and panel maintenance, vertical or horizontal use, form release agent, concrete mix design/strength, alkalinity, pour rate and other factors

#### Release Coating:

- Release agent: not factory treated
- Coating required: light before first and each subsequent pour
- Recommended release agent: Nox-Crete Release Agent #10 (oil based), Bio-Nox (water based and readily biodegradable) or equivalent.
- Special applications or use requirements may dictate the need for alternative release agents. Contact Swanson Group Sales, Nox-Crete or alternative manufacturer for more information.

#### Other Applications:

- Pallets, bins, totes, crates, reels
- Tanks, vats, freezer liners, storage lockers, trunks and shelving
- Animal enclosures, farm buildings & equipment

#### Limitations:

Do not exceed design limitations imposed by the load span table. Conform to concrete form design procedures based on American Concrete Institute (ACI) standard 347-04. Release agents are required. Do not employ used concrete form for structural applications. Do not coat or laminate this panel without surface preparation.

#### Thicknesses & Sizes:

Classic™ is available in 1/2", 5/8", 3/4" & 1-1/8". Standard panel sizes are 4' X 8'. Please inquire for availability and specific 10' properties. Non standard thicknesses, widths and lengths meeting volume requirements are available.

#### Technical Data Applicable Standards

All panels are manufactured by Swanson Group® per product standard PS1-19. This standard is available at [www.apawood.org](http://www.apawood.org).

Physical Properties	3/8" to 1/2"	5/8" to 1-1/8"
Check Resistance – APA test #6	2.3 mm	2.3 mm
Moisture Resistance (Cobb) 8-hour Soak	2.78 g/sq. ft.	2.78 g/sq. ft.
Alkalinity Resistance After Chemical Exposure D/T	221	221
Formaldehyde Level ASTM E-1333	< 0.01 parts/million	

Panel Tolerances	3/8" to 3/4"	1" & Greater
Thickness Tolerance	+/- 1/32" (.031")	+/- 5%
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")

Note: All tolerances and specifications apply at the time of manufacture.  
Note: Product averages vary for individual thicknesses.

## Standard Packaging:

Thickness	Classic™ 1 Side/HDO Back Average Weight* lbs./Panel	Classic™ 2 Sides, Average Weight* lbs./Panel	Pieces per Unit
1/2"	53.7	55.1	66
5/8"	73.1	74.5	50
3/4"	79.3	80.7	44
1-1/8"	111.3	112.7	30

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

**Product Grade:** Standard product is shipped on grade only. Special product is shipped allowing up to 10% total good one side (G1S) and/or Shop, identified & priced separately. Shipments of G1S and shop may be available

## Stress and Load Span Tables

These stress and load span tables simulate actual wet form conditions Dry load span values are overstated and should not be used. Canadian (COFI) design values for Douglas Fir are 25% higher than APA.

**Wet Stress Tables:** Tables 1 & 2 are based on standard APA and PS-1 criteria.

Stress Table – Wet, Working Stress Design Capacities	One-Step Struct 1 V405			
Nominal Thickness	1/2"	5/8"	3/4"	1-1/8"
Number of Plys	5	7	7	11
Table 1: Face Grain <i>Perpendicular</i> to Supports <sup>1</sup>				
Bending Stiffness <sup>1</sup>	134,444	278,707	414,790	1,399,061
Bending Resistance <sup>2</sup>	505.4	805.3	1,021.7	2,271.2
Planar Shear <sup>3</sup>	305.1	342.8	396.5	584.5
Table 2: Face Grain <i>Parallel</i> to Supports <sup>1</sup>				
Bending Stiffness <sup>1</sup>	53,585	128,525	236,960	824,812
Bending Resistance <sup>2</sup>	256.4	431.8	655.3	584.5
Planar Shear <sup>3</sup>	174.9	287.7	347.8	537.4

<sup>1</sup>Bending Stiffness = EI\* (lb-in<sup>2</sup>/ft); <sup>2</sup>Bending Resistance = M or F<sub>s</sub> (lb-in/ft); <sup>3</sup>Planar Shear Capacity: V or F<sub>v</sub>/lb/Q (lb/ft). There is no DOL (Duration of Load) or experience factor applied to EI, FbS and Fslb/Q.

**Load Span Tables:** Tables 3 through 6 are based on standard APA and PS-1 criteria.

Struct 1 LOAD SPAN TABLES – WET CONDITIONS Recommended Maximum PSF on Struct 1 Panels or Equivalent (V405)								
Table 3: Face Grain <i>Perpendicular</i> to Supports <sup>1</sup>								
Support Spacing	Plywood Thickness – Allowable Pressure (PSF)							
	1/2"		5/8"		3/4"		1-1/8"	
(in.)	ℓ/360	ℓ/270	ℓ/360	ℓ/270	ℓ/360	ℓ/270	ℓ/360	ℓ/270
8"	1,505	1,525	1,715	1,715	1,985	1,985	2,920	2,920
12"	480	640	850	1,060	1,110	1,225	1,810	1,810
16"	205	275	385	510	525	700	1,275	1,310
19.2"	120	155	225	305	315	425	830	1,075
24"			120	155	170	115	470	630
Table 4: Face Grain <i>Parallel</i> to Supports <sup>1</sup>								
Support Spacing	Plywood Thickness – Allowable Pressure (PSF)							
	1/2"		5/8"		3/4"		1-1/8"	
(in.)	ℓ/360	ℓ/270	ℓ/360	ℓ/270	ℓ/360	ℓ/270	ℓ/360	ℓ/270
8"	775	780	1,315	1,315	1,740	1,740	2,685	2,685
12"	220	295	480	585	815	885	1,665	1,665
16"		120	200	265	350	470	1,000	1,055
19.2"			140	185	250	274	585	585
24"					130	170	375	375

Notes: <sup>1</sup>Plywood continuous across two or more spans. These are total loads (weight of panel should be considered in horizontal applications). DOL (Duration of Load) 1.25 and experience factor of 1.30 used in load tables. Load duration factor of 1.25 applies to FbS and Fslb/Q. Experience factor of 1.30 applies to FbS and Fslb/Q.

**Form Panel Thickness:** For more detailed design information, refer to APA publication "Design/Construction Guide: Concrete Forming V345" and to American Concrete Institute publication "Formwork for Concrete."

**Edge Support:** In high moisture/sustained load conditions, edges may have a greater deflection than the panel center and may exceed calculated deflection.

**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. Contact the sales office for a copy of the complete Swanson Terms and Conditions of Sale.

## Warehouse Storage and Handling

- Store in a dry, clean, well-ventilated area indoors
- Avoid temperature and moisture extremes. Allow panels to equalize for 72 hours or more before use
- Pieces must not be stored in contact with the ground
- Limit the stacking height to four or five units. Separate units with clean, dry spacers of uniform thickness, aligned carefully. Use three spacers for panels 8' long, four or five spacers for longer panels

## Jobsite Care and Handling

1. **Product preparation:** Swanson Classic™ panels are not factory release coated. Lightly coat panels prior to first use and each subsequent use with Nox-Crete Release Agent #10, Bio-Nox or equivalent.
2. **Pouring and Vibrating:** Follow the rate of pour to reduce excessive pressure that can cause panel damage. Use rubber tipped vibrators and exercise care not to damage form faces.
3. **Stripping:** Prolong panel life with proper stripping and handling. Use wood wedges, rather than metal bars or pries, to separate the form from the concrete. Form panels must be lowered, not thrown or dropped, to avoid face and edge damage.
4. **Cleaning:** Storage and edge sealing—Clean panels after each use, employing burlap or flat, non-scratching tools such as plastic or wood scrapers. Reseal cut edges or exposed wood at holes or openings with two coats of a styrene acrylic sealer. Stack panels flat and remove fasteners to prevent damage and warping. Store panels in a protected area and avoid direct sunlight.
5. **Surface Repairs:** Remove form release agent, concrete & loose wood/overlay debris. Sand the damaged surface with coarse (80 grit) disc or paper. For architectural concrete, use fine (120 grit) for the damaged perimeter area. Clean all sanding debris from the repair area. Apply: W.R. Meadows - Rezi-Weld Gel Paste State, Euclid - Euco #620 Gel Epoxy System, or Sika - Sikadur AnchorFix. Use the Rezi-Weld Gel Paste State when the air temp is above 60° F, or the Euco #620 Gel or Sikadur AnchorFix-4 when the air temp is above 33° F. Scrape off the excess repair material using a putty knife. Allow repair material to cure for 24 hours (48 hours in cold weather) before sanding, then feather sand the area.

## Environmental Impact

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

## Air Quality and Safety

This product will generate wood dust from sawing, sanding, or shaping. Material Safety Data Sheets are available on the Swanson Group website at [www.swansongroup.biz](http://www.swansongroup.biz) and upon request.

Structural panels (PS-1) are exempt from CARB regulations. However, this product contains no added urea formaldehyde and its 0.01 ppm formaldehyde level is lower than 0.05 parts per million, the lowest Phase 2 (2014) CARB formaldehyde limit, based on certified tests conducted in 2007 at an IAS accredited laboratory.

**There's more than one reason Swanson Group® is #1 in the concrete forming industry. Find out more at [www.swansongroup.biz](http://www.swansongroup.biz)**



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