



Building tomorrow's future today!

Super-Matte® G4

Concrete Form

- Enhanced panel stability in deck applications using SwanPeel®, SwanDry™ and SwanPatch™ Technologies
- Increased # of pours & reduced cost/pour
- Highest quality Semi-Gloss Matte finish for coated concrete
- No risk of blushing concrete
- Leaves concrete a light color gray



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:

Super-Matte® G4 is the highest performing MDO overlaid plywood concrete form for semi-gloss matte finishes. New Melamine Resin technology provides the highest performance and a unique concrete finish.

Panel Construction/Moisture Resistance:

Super-Matte® G4 is a unique overlay technology on proprietary hardwood faced plywood with Douglas Fir construction using our SwanPeel®, SwanDry™ and SwanPatch™ Technologies. It is manufactured with a one-step layup, has a waterproof glue bond and meets performance requirements of PS1. All Swanson products are made in the USA.

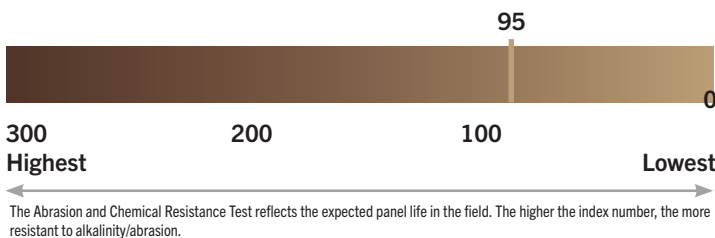
Working Faces/Treatment:

- Super-Matte® G4 is available with one (standard) or two (optional) working faces. Standard panels with a single working face and raw hardwood back.
- Gloss level of concrete surface: semi-gloss matte
- Wood Grain transfer to concrete surface: limited
- 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



Structural/load Performance Summary

Super-Matte® G4 is available with custom load tables (V405). Allowable pressure $\frac{1}{270} \frac{3}{4}'' @ 12''$ OC (face gain across supports): 1225 PSF

Typical Pour Ranges:

- Engineered systems: not recommended
- Gang forms: up to 30 pours
- Job built: up to 20 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: Recommended Manufactured application rate between each pour – light coating required.
- Recommend Release Agent: G4 has a non-absorptive surface and requires a different release than a phenolic MDO. Oil based form oil - RA 250 or RA 450 by Nox-crete or equivalent.
- Special Note: Failure to use a non-absorptive release will cause heavy fines build up and reduce the life of the panel.
- Special applications or use requirements may dictate the need for alternative release agents. Contact Swanson Group Sales, Nox-Crete or alternative release manufacture for more information.

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. For coating or laminating information, ask Swanson for technical assistance.

Thicknesses & Sizes:

Swanson Super-Matte® G4 is available in 11/16" and 3/4". Standard panel sizes are 4' X 8' (1220 X 2440mm). Non-standard thicknesses and widths 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.

Physical Properties	3/8" to 1/2"	5/8" to 1-1/8"
Check Resistance – APA Test #6	1.0mm	1.0mm
Moisture Resistance (cobb) 8-hour Soak	4.5 g/sq. ft.	4.5 g/sq. ft.
Alkalinity Resistance After Chemical Exposure D/T	85	85
Formaldehyde Level ASTM E-1333	0.03 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. Consult sales or technical offices for exact properties.

Standard Packaging:

Thickness	B-Matte® 1 Side/Raw Back Average Weight* lbs./Panel	B-Matte® 2 Sides Average Weight* lbs./Panel	Pieces per Unit
1/2"	48.0	50.4	66
5/8"	67.4	69.8	50
3/4"	73.6	76.0	44
1-1/8"	105.6	108.0	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			
	1/2"	5/8"	3/4"	1-1/8"
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 ¹				
Bending Stiffness ¹	134,444	278,707	414,790	1,399,061
Bending Resistance ²	505.4	805.3	1,021.7	2,271.2
Planar Shear ³	305.1	342.8	396.5	584.5
Table 2: Face Grain <i>Parallel</i> to Supports ¹				
Bending Stiffness ¹	53,585	128,525	236,960	824,812
Bending Resistance ²	256.4	431.8	655.3	584.5
Planar Shear ³	174.9	287.7	347.8	537.4

¹Bending Stiffness = EI* (lb-in²/ft); ²Bending Resistance = M or F_sS (lb-in/ft); ³Planar Shear Capacity: V or F_vlb/Q (lb/ft). There is no DOL (Duration of Load) or experience factor applied to EI, F_sS and F_vlb/Q.

Load Span Tables: Tables 3 & 4 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 ¹								
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 ¹								
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: ¹Plywood 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 F_sS and F_vlb/Q. Experience factor of 1.30 applies to F_sS and F_vlb/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.

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.

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

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.

Jobsite Care and Handling

- Product preparation:** Swanson's Super-Matte® Two-Step® G4 panels are not factory release coated. Lightly coat panels prior to first use and each subsequent use with Nox-Crete RA 450 or equivalent agent.
- 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.
- 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.
- 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.
- 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

Warnings

This product contains < 0.01 parts/million of residual formaldehyde from manufacturing. This product will generate wood dust from sawing, sanding, or shaping. Material safety data sheets are available on Swanson's website at 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.

There's more than one reason Swanson Group® is #1 in the concrete forming industry. Find out more at www.swansongroup.biz



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