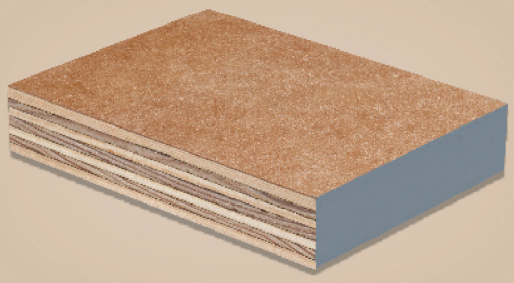
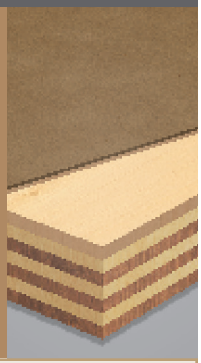
BASIC MDO™–3/4” Concrete Form



- Increased # of pours & reduced cost/pour vs. BBOES
- Reduced alkalinity resistance (vs. performance based MDO panels) - not intended for aggresive mixes
- Matte finish for coated concrete
- Factory applied Nox-Crete FormCoat



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:
Basic MDO™ is an economy grade Medium Density Overlaid plywood for matte finishes with release coating factory applied.

Panel Construction/Moisture Resistance:
Basic MDO™ is a Medium Density overlay on an all Douglas Fir plywood. It is manufactured with a 1 Step layup, has a waterproof glue bond and meets APA PS 1-19. All Swanson products are made in the USA.

Working Faces/Treatment:
- Basic MDO™ is available with 1 working face only.
- Gloss level of Concrete Surface: Matte
- Wood Grain Transfer to Concrete Surface: Moderate to heavy
- Wood Defect Transfer to Concrete: Moderate to heavy
- Sugaring: None
- Maintenance: Occasional

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 45

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
Basic MDO™ allowable pressure ℓ/270 ¾” @ 12” OC (face gain across supports): 1,195 psf

Typical Pour Ranges:
- Engineered systems: Not Recommended
- Gang forms: Not recommended
- Job built: Up to 5 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: Nox-Crete FormCoat E
- Coating required: light, before first and each subsequent pour.
- Do not use release agents containing a petroleum-based derivative.

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 Con-crete 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 Olympic for technical assistance.

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	5/8" to 1-1/8"
Check Resistance – APA Test #6	3.0mm
Moisture Resistance (cobb) 8-hour Soak	6.88 g/sq. ft.
Alkalinity Resistance After Chemical Exposure D/T	45
Formaldehyde Level ASTM E-1333	0.01 parts/million

Panel Tolerances	3/4"
Thickness Tolerance	+/- 1/32" (.031")
Length & Width Tolerance	+0, -1/16" (.062")
Squareness	1/16" (.062")
Straightness	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	Basic MDO™ 1 Side/Raw Back Average Weight* lbs./Panel	Pieces per Unit
3/4"	73.6	44

*Average product weights may vary +/- 10%

Product Grade

Standard product is shipped on grade only.

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.

Stress Tables: Tables 1 & 2 herein are based on APA and commercial standards PS-1 criteria.

Stress Table – Wet, Working Stress Design Capacities	One–Step Struct 1 V284
Nominal Thickness	3/4"
Number of Plys	7
Table 1: Face Grain *Perpendicular* to Supports[1]	
Bending Stiffness[1]	460,439
Bending Resistance[2]	1,314.8
Planar Shear[3]	385.4
Table 2: Face Grain *Parallel* to Supports[1]	
Bending Stiffness[1]	207,987
Bending Resistance[2]	904.8
Planar Shear[3]	343.1

[1]Bending Stiffness = EI* (lb-in^2/ft); [2]Bending Resistance = M or F_bS (lb-in/ft); [3]Planar Shear Capacity: V or F_vIb/Q (lb/ft). There is no DOL (Duration of Load) or experience factor applied to EI. FbS and FsIb/Q.

Load Span Tables: Tables 3 and 4 are based on APA and PS-1 criteria.

Struct 1 LOAD SPAN TABLES – WET CONDITIONS Recommended Maximum PSF on Struct 1 One-Step Panels V284		
Table 3: Face Grain *Perpendicular* to Supports[1]		
Support Spacing	Plywood Thickness - Allowable Pressure (PSF)	
	3/4"	
(in.)	ℓ/360	ℓ/270
8"	1,925	1,925
12"	1,195	1,195
16"	585	780
19.2"	335	470
24"	185	250
Table 4: Face Grain *Parallel* to Supports[1]		
Support Spacing	Plywood Thickness - Allowable Pressure (PSF)	
	3/4"	
(in.)	ℓ/360	ℓ/270
8"	1,715	1,715
12"	715	955
16"	310	415
19.2"	220	295
24"	115	150

Notes: [1]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 Fs(Ib/Q).
Experience factor of 1.30 applies to FbS and Fs(Ib/Q)

Form Panel Thickness: For more detailed design information, refer to APA publication "Design/Construction Guide: Concrete Forming V345" table 5 & 6 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 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
- 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 Basic MDO™ panels are factory release coated. Lightly coat panels prior to first use and each subsequent use with Nox-Crete Form Coating 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, degradable and recyclable

Warnings: This product contains 0.03 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

Swanson Group

Swanson Group Sales
1651 S F. Street
Springfield, OR 97477
Email: greg.bess@swansongroup.biz

Office: 541-492-7516
Cell: 541-415-2768
Fax: 541-832-1486
www.swansongroup.biz

Effective: 11/30/2022