

## 17.5 mm Struct 1 MDO Plyform

Produced at our Rogue River, OR facility, Murphy's 17.5 mm Struct 1 MDO plyform is for concrete forming applications. Struct 1 MDO is perfect for projects requiring exposed concrete with a consistent, smooth surface.

High manufacturing standards and leading concrete panel technology create a panel with high performance characteristics. When properly used and maintained, our MDO panels will increase the number of pours per panel over standard plywood, thus reducing per pour costs.

Murphy 17.5 mm Struct 1 MDO is manufactured with durable, quality Douglas fir veneers. An industry standard, 35% resin content MDO (medium density overlay) layer is applied to one side. The panels have a facility-applied Nox-Crete™ release agent and the edges are sealed with top-of-the-line Willamette Valley Form Seal to prevent moisture contamination.

### STRUCT 1 MDO FEATURES

A resin-impregnated fiber overlay (MDO) is bonded to the face veneer of the panel. This particular overlay results in a superior matte finish, when a glossy finish is undesirable and a final finish of paint or acoustic texture might be specified.

Struct 1 MDO's matte surface also helps hold release agents uniformly to reduce blotchiness from uneven hydration. Additionally, it has improved chemical resistance and better form oil retention for easier cleanup.

Murphy applies a release agent as part of the panel manufacturing process. Additionally, the panel edges are sealed with a specially formulated sealer to resist water, alkali and sunlight exposure. The overall result is a more durable and cost effective panel than traditional BB concrete form.

### GREEN AND CERTIFIED

The glue used to manufacture Murphy's 17.5 mm Struct 1 MDO panels is APA certified and safe for both suppliers and builders.

Panels manufactured in accordance with the Engineered Wood Association PS 1 standard use phenol formaldehyde, a waterproof adhesive that is highly durable and stable resulting in low formaldehyde emissions.

APA rated panels use moisture resistant adhesives that are exempt from U.S. HUD and California formaldehyde regulations due to these very low emissions.



*Please ask us about our engineered concrete form products including scaffold plank and concrete form beams.*

## SPECIFICATIONS

**Description:** One side MDO BCX Structural 1 Concrete Form

**Size:** 48" X 96" + 0, - 1/16"

**Thickness:** 17.5 mm

**Construction:** 5 ply Douglas fir

**Overlay:** 35% resin content MDO

**Edge Seal:** Willamette Valley Form Seal (Gray #15)

**Release Agent:** Nox-Crete™ Form Coating E

\* Panels meet APA PS1-09 specifications

*Specifications subject to change without notice*

17.5 mm Struct 1 Allowable Stress Design Load Capacities (lbs/ft <sup>2</sup> )				
Support Spacing (in.)	Face Grain Across Supports		Face Grain Parallel Supports	
Size	17.5 mm		17.5 mm	
Deflection	<u>L/270</u>	<u>L/360</u>	<u>L/270</u>	<u>L/360</u>
4.0	5515	5515	3060	3060
8.0	2065	2065	1180	1180
12.0	920	920	610	460
16.0	515	440	265	195
19.2	350	265	185	140
24.0	185	140	-	-
30.0	-	-	-	-
Source: APA Engineer Calculations				
* Cells with dashes have pressures less than 100 psf.				

## CARE AND HANDLING

### Preparation:

MDO panels are edge sealed at the mill with a high quality, water based coating. During form work construction, plywood edges are often exposed by sawing and drilling. These edges should be sealed. This slows down the penetration of water which can cause panel swelling, edge failure, and staining.

### Stripping:

Metal bars or pry bars should not be used on plywood because they will damage the panel surface and edge. Use wood wedges, tapping gradually when necessary.

### Cleaning and Release Agent Application:

Soon after removal, plywood forms should be inspected for wear, cleaned, repaired, refinished and lightly treated with a form release agent before reusing. Use a hardwood wedge and a stiff fiber brush for cleaning (a metal brush may cause wood fibers to "wool"). Light tapping on the backside with a hammer will generally remove hard scale concrete. Tie holes may be patched with metal plates, plugs or plastic materials. Nails should be removed and holes filled with patching plaster, plastic wood, or other patching material.

### Handling and Storage:

Care should be exercised to prevent panel chipping, denting and corner damage during handling. Panels should never be dropped. The forms should be carefully piled flat, face to face and back to back, for hauling. Forms should be cleaned immediately after stripping and can be solid-stacked or stacked in small packages, with faces together. Panels should be stored on a dry level surface away from direct sunlight.



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