

SOMAPLAC BB O&ES



SOMAPLAC BB O&ES High Durability Building Plywood

TECHNICAL DESCRIPTION

Produced with a selected high quality pine veneers, this special panel is proper for concrete / shuttering end use once it is covered with a mineral/vegetal oil, SOMA (BB) O&ES is manufactured in accordance with the US PS 1 – 09 product standard, and is subjected to quality control procedures.

CHARACTERISTICS OF MATERIALS | VENEERS

Raw materials from reforestation and sustainable management.
Pinus spp logs are pre-sorted and laminated as needed.

For the manufacturing of plywood, sheets are classified according to their density, which impacts directly on their physical and mechanical resistance.

The greater density in the external part of the plywood panel gives it its strength and durability. The timber is situated in the highest density region of the oldest log, where the growth rings are closer (MA= Mature Wood).

PHENOLIC RESIN FOR SHEETS COLLAGE

The SOMAPLAC BB O&ES panel is glued with a waterproof resin, phenol-formaldehyde (WBP), especially designed for outdoor use or protected environments where the elements are subjected to humidity, drying or action of water.

The resin used for bonding meets STANDARDS:

EN 314-2 EN 636-3S EN 636 2S EN 636-1S

BS 6566 PART B: 1985 TIPO WBP

Classe 3 | Uso Exterior

All within the conventional classification **E1** in the emission of phenol.
The application of the resin is homogeneous and weigh **360 gr/m²**, which results in **55 kg** of resin per cubic meter of **SOMAPLAC BB O&ES** produced.

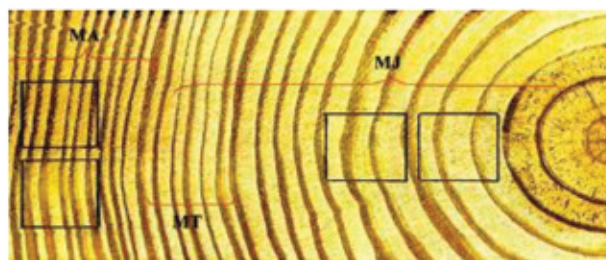


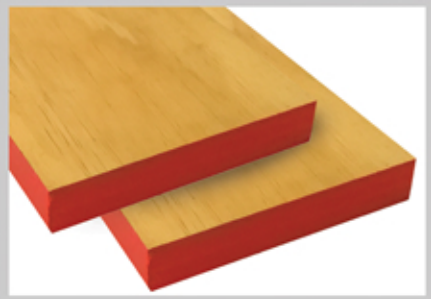
Figure 1 - Region of Mature, Transition and Youth Wood

FEATURES AND BENEFITS

- Increases the concrete placement cycles compared to traditional plywood.
- Easy to work with and install using conventional woodworking tools and fasteners.
- TECO® Certification. Structural Plywood. Strong and rigid panels.
- Light and dimensionally stable.



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CHARACTERISTICS OF THE PLYWOOD

Use	Type	Durability	Face	Back	Inner Plies	Repairs	Surface	Extras	Name PS-1	Name PS-2	Name TECO	Class
Concrete Form	BB O&ES	Exterior	B	B	C	2 sides	2 sides	Oiled, painted	B-B Concrete Form	x	Formall®	Group 2

Source: Handbook for structural Plywood - PS1 - 09

TECHNICAL DATA

Thickness	Maximum Force (Kgf)		MOR Mpa		MOE Mpa	
		⊥		⊥		⊥
15 mm	137	72,33	53,82	29,12	3916	1967
18 mm	167	99,85	54,83	32,64	5995	2387

STRESS TABLE - SOMAPLAC BB O&ES

Stress Table - Dry, Working Stress Design Capacities - 4' x 8'	Class 2	
Nominal Thickness	19/32"	23/32"
Number Of Plys	5	7
Table 1: Face Grain Parallel to Supports		
Bending Stiffness EI^* (lb-in ² /ft)	237,61	388,43
Bending Resistance M or FbS (lb-in/ft)	3,477	5,519
Planar Shear V or $Fslb/Q$ (lb/ft)	1,579	2,008
Table 2: Face Grain Perpendicular to Supports		
Bending Stiffness EI^* (lb-in ² /ft)	98,58	224,33
Bending Resistance M or FbS (lb-in/ft)	2,239	3,879
Planar Shear V or $Fslb/Q$ (lb/ft)	-	-

Source - 15-175 and 176_Somapar PS1 Group Class 19-32 and 23/32 CAT Report

LOAD SPAN TABLE - SOMAPLAC BB O&ES

Class 1 LOAD SPAN TABLES - WET CONDITIONS Recommended Maximum PSF on Class 1 Panels								
Support Spacing	Table 3: Face Grain Parallel to Supports				Table 3: Face Grain Perpendicular to Supports			
	Plywood Thickness - Allowable Pressure (PSF)							
	19/32"		23/32"		19/32"		23/32"	
(in.)	ℓ/360	ℓ/270	ℓ/360	ℓ/270	ℓ/360	ℓ/270	ℓ/360	ℓ/270
8"	788,54	1032,27	2114,73	2724,05	394,27	516,14	831,55	1082,45
12"	236,56	303,95	623,67	802,88	118,28	152,69	249,47	319,72
16"	-	129,03	262,37	335,49	-	-	101,08	135,49
19.2"	-	-	151,97	196,42	-	-	-	-
24"	-	-	-	100,79	-	-	-	-

Notes: 1 Plywood continuous across two or more spans

These are total loads (weight of panel should be considered in horizontal applications)

Experience factor of 1.30 used in load tables.

The SOMAPLAC BB O&ES panel is sealed with ink, to prevent / delay the absorption of moisture and ensure a tight seal decreasing the workability of the plywood panel. If they have to be cut during use, it is recommended that fresh edges be re-sealed to avoid localized swelling caused by rapid capillary penetration of moisture.