BRAGAPAN SRL
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BRAGAPAN
PANNELLI IN LEGNO

DATA SHEET

POPLAR PLYWOOD PANEL / MDF COVER

QUALITY CLASSIFICATION according to the faces aspect

Poplar plywood panel can be divided in class I, II, III, IV according to the UNI EN 635-2:1996.

BONDING

Poplar plywood can be supplied as follow:

- Bonding class 1 to use in dry location
- Bonding class 2 to use in humid location.

The bonding classification is according to the UNI EN 314:2005 part 1 and UNI EN 314:1994 part 2 :.

USE DESTINATION

Panels with first class bonding can be used in temperature and humid conditions described by class service 1 of UNI ENV 1995-1-1.
Panels with second class bonding can be used in temperature and humid conditions described by class service 2 of UNI ENV 1995-1-

DIMENSIONAL TOLLERANCES

PPROPERTY	TEST METHOD	REQUIREMENTS (ref. UNI EN 315:2002) Nominal thickness " t "			
		≥ 3 / ≤ 12	> 12 / ≤ 25	> 25 / ≤ 30	> 30
Nominal thickness tolerance (polished) MM.	UNI EN 324-1	+(0,2+0,03 t) - (0,4+0,03 t)	+(0,2+0,03 t) - (0,4+0,03 t)	+ (0,0+0,05 t) - (0,4+0,05 t)	+ (0,0+0,03 t) - (0,4+0,03 t)
Maximum difference between 2 points of the same panel (polished) MM	UNI EN 324-1	0,6	0,6	0,8	0,8
Nominal thickness tolerance (not polished) MM.	UNI EN 324-1	+(0,8+0,03 t) - (0,4+0,03 t)	+(0,8+0,03 t) - (0,4+0,03 t)	+(0,8+0,03 t) - (0,4+0,03 t)	+(0,8+0,03 t) - (0,4+0,03 t)
Maximum difference between 2 points of the same panel (not polished) MM	UNI EN 324-1	1	1,5	1,5	1,5
Orthogonality	UNI EN 324-2	1mm each m	1mm per m	1mm each m	1mm each m
Lenght and width	UNI EN 324-1	± 3,5 mm	± 3,5 mm	± 3,5 mm	± 3,5 mm

STANDARD THICKNESSES

Nominal thicknesses (mm)	3-4-5-6	5-6-8-9-10	12-14-15-16	16-18-20	22-25	25-28-30
No. of layers	3	5	7	9	11	13

STANDARD DIMENSIONS

Width (cm)	125	125	122	172	122
	312	172	125	187	130

Length (cm)	212	222	244	252	305

PHYSICAL-MECHANICAL CHARACTERISTICS VALUES OF SOME THICKNESSES

	Property	*Resistance to longitudinal bending*	*Resistance to transversal bending*	*Elasticy module to longitudinal bending*	*Elasticy module to transversal bending*	*Density*	*Humidity*	*Formaldehyde emission*
Thickness (mm) /n. of layers	*Test method*	UNI EN 310	UNI EN 310	UNI EN 310	UNI EN 310	UNI EN 323	UNI EN 322	UNI EN 717/2
	Measurement unit	N/mm ^{2}	N/mm ^{2}	N/mm ^{2}	N/mm ^{2}	Kg/m ^{3}	%	$HCHO^2$ (mg/mqh)
	min	41	17	4700	950			
4/3	av	47	21	5500	1250			
	min	36	24	3650	2100			
6/5	av	41	28	4100	2550			
	min	30	28	2900	2600			
8/5	av	36	35	3600	3300			
	min	24	27	2100	2500			
9/5	av	32	35	3000	3500			
	min	27	31	2800	3200			
10/5	av	31	37	3200	3600			
	min	28	24	3100	2900			≤ 3,5 (CLASS E1)
12/7	av	33	31	3400	3400	400 ÷ 470	6 ÷ 12	
	min	25	32	2400	3500			
15/7	av	29	37	3100	4200			
	min	28	30	3000	3500			
18/9	av	32	36	3600	4100			
	min	26	35	3000	3800			
20/9	av	29	41	3300	4500			
	min	25	20	3300	2400			
25/11	av	32	31	3800	3800			
	min	20	25	2300	3400			
30/13	av	23	30	2700	4000			

BIOLOGICAL STRENGTH

All service classes

Poplar wood doesn't resist to the attack of xylophages like Anobium, Hesperophanes S and Termites.
The final use of poplar plywood must consider the specificity of places and local conditions in order to prevent, with a particular composition of the panel or with preservative treatments, the attack of xylophages.

Second class service

The durability of poplar wood is generally sufficient for exposure to places provided by second class service. However, if the poplar plywood is used in particularly severe exposure conditions, it will be necessary a preservative treatment.

STORAGE PROCESS

The panel preserve stability and flatness over time if it is correctly stored and stacked in an horizontal position and not subjected to changes in temperature and humidity.
The exposure to sunlight could determine the yellowing of exposed side and a reduction of performance properties.

