

## MULTILAYERED POPLAR PLYWOOD PANEL

### QUALITY CLASSIFICATION referred to the aspect of the faces

Regarding the aspect of the faces the multi-layered poplar plywood can be classified into class I, II, III, IV according to UNI EN 635-2:1996 standard.

### BONDING

The poplar plywood can be supplied in:

- Class of bonding 1 for use in dry conditions
- Class of bonding 2 for use in humid conditions

The bonding classification has been defined in compliance with UNI EN 314: 1994 standard part 1 and 2.

### USE

The panel with the class of bonding 1 can be used in the hygrothermal conditions provided for the class of service 1 of UNI ENV 1995-1-1 standard.

The panel with the class of bonding 2 can be used in the hygrothermal conditions provided for the class of service 2 of UNI ENV 1995-1-1 standard.

### DIMENSIONAL TOLERANCES

Specifications	Test	Requirements (rif. UNI EN 315:2002)			
		Nominal thickness «t»			
		≥ 3 / ≤ 12	> 12 / ≤ 25	> 25 / ≤ 30	> 30
Nominal thickness tolerance (smoothed)	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)
The greatest difference between two points of the same panel (smoothed) mm	UNI EN 324-1	0,6	0,6	0,8	0,8
Nominal thickness tolerance (not-smoothed) 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)
The greatest difference between two points of the same panel (not-smoothed) mm	UNI EN 324-1	1	1,5	1,5	1,5
Squareness	UNI EN 324-2	1 mm per m			
Length and width	UNI EN 324-1	± 3,5 mm			

### STANDARD THICKNESS

Nominal thickness (mm)	3-4-5-6	5-6-8-10	12-14-15-16	16-18-20	25-28	25-28-30
minimum number of plies	3	5	7	9	11	13

### STANDARD DIMENSIONS

Length (cm)	212	222	244	252	305
Width (cm)	125	125	122	172	122
	312	172	125	187	130

Other dimensions and thickness are available for orders to agree upon.

### MULTILAYERED POPLAR PLYWOOD PANEL

#### VALUES OF PHYSICAL AND MECHANICAL FEATURES OF SOME THICKNESS

Specification	Test	Unit	Thickness (mm)/number of plies																																					
			3/3			4/3			6/5			8/5			10/5			12/7			15/7			18/9			20/9													
			min	med		min	med		min	med		min	med		min	med		min	med		min	med		min	med		min	med												
Bending strength parallel to grain <sup>1</sup>	UNI EN 310	N/mm <sup>2</sup>	45	55		38	45		30	42		30	38		23	30		23	34		23	23		23	27		23	30		23	30		23	23		23	30		23	29
Bending strength cross to grain <sup>1</sup>	UNI EN 310	N/mm <sup>2</sup>		14		15	20		15	25		23	31		23	44		23	33		23	30		23	39		23	33		23	33		23	38		23	45			
Modulus of elasticity in bending parallel to grain <sup>1</sup>	UNI EN 310	N/mm <sup>2</sup>	5000	6000		4000	5000		3000	4000		3000	4000		3000	3100		3000	4000		3000	2500		3000	3100		3000	3600		3000	3600		3000	2500		3000	3000			
Modulus of elasticity in bending cross to grain <sup>1</sup>	UNI EN 310	N/mm <sup>2</sup>	500	700		500	1200		2500	2400		2500	3400		2500	4200		3000	3800		3000	3000		3000	4400		3000	4000		3000	4000		3000	4000		3000	4800			
Density	UNI EN 323	Kg/m <sup>3</sup>	400 ÷ 470																																					
Moisture	UNI EN 322	%	6 ÷ 12																																					
Formaldehyde release <sup>2</sup>	UNI EN 717/2	HCHO (mq/h m <sup>2</sup> )	<=3,5 (CLASS E1)																																					



<sup>1</sup> The minimum values indicate the minimum performance requirements (they correspond to the values of classes as per EN 636 standard) and the medium values correspond to the average of data surveyed during the production control.

<sup>2</sup> The formaldehyde values define formaldehyde release determined with the gas analysis method (EN 717-2 standard) referred to 1 m<sup>2</sup> of panel per 1 h.

## MULTILAYERED POPLAR PLYWOOD PANEL

### BIOLOGICAL DURABILITY

*For all classes of service*

Poplar wood doesn't withstand the attacks of xilophagous insects, Anobium, Hesperophanes S and Termites.

The final use of the poplar plywood must consider the specific environments and the local conditions, in order to prevent, with particular panel settings and even special preventing treatments, such insects attacks in particularly infested areas.

*For only class of service 2*

The poplar wood natural durability is generally sufficient for exposures in the environments provided for the class of service 2, with reference to xilophagous fungus attacks.

Nevertheless, when it's necessary to use the poplar plywood in particularly severe conditions, a special preventing treatment must be considered.

### MARK CE

Within the limits of the European Directive 89/106/CE (building products) panels can be supplied for:

- Internal use as structural components in dry conditions
- Internal use as structural components in humid conditions
- Internal use as non-structural components in dry conditions
- Internal use as non-structural components in humid conditions

Specification	Thickness (mm) / number of plies											
	3/3	4/3	5/3	6/5	8/5	10/5	12/7	15/7	18/9	20/9	25/11	30/13
Internal use as structural components in dry conditions								CE	CE	CE		
Internal use as structural components in humid conditions								CE	CE	CE		
Internal use as non-structural components in dry conditions	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE
Internal use as non-structural components in humid conditions	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE

### PEFC

The poplar panels can be supplied with PEFC mark according to the Chain of Custody and the percentage method (Volume credit)

### STOCKING ADVICES

The panel keeps in time stability and flatness if correctly stocked and horizontally piled up, if not subjected to sudden changes of temperature and humidity.

The exposure to the sunbeams can cause alterations in colour and reduction of performance characteristics.