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FICHA TÉCNICA

TABLERO CONTRACHAPADO DE ABEDUL

DESCRIPCIÓN

Tablero Contrachapado compuesto de chapas de madera de abedul entrecruzadas que le confieren una alta estabilidad.

100% abedul, que le confiere unas altas prestaciones fisicomecanicas.

Lijado por ambas caras lo que le confiere una apariencia estética atractiva y agradable

ESPECIFICACIONES

VENTAJAS

· Caras libres de nudos.

·Gran estabilidad dimensional y alta resistencia a la flexión, tracción y compresión.

·Construcción interna y externa sin fallas de material.

·Resistencia al agua WBP : uso exterior Clase IIII.

DENSIDAD

·640 - 760 kg / m3

DIMENSIONES

Espesor mm	4	6,5	9	12	15	18	21	24	30
Nº de chapas	3	5	7	9	11	13	15	17	21
Medidas tablero	2500 x 1250 mm - 3050 x 1525 mm -								

ADHESIVO

·Adhesivo fenol formaldehído. Clase de emisión E1, que cumple la normativa de emisión EN 717, CARB II Titulo VI de la EPA TSCA

CLASIFICACION FUEGO · Clasificación para suelos Bfl-s1

CERTIFICACIONES · PEFC y FSC

GRADOS

BB Cara vista para interiores y para el revestimiento con recubrimientos y películas.

revestimiento

APLICACIONES

·Paneles para el recubrimient	Muebles	Carpinteria	Construcción

PHYSICAL AND MECHANICAL PROPERTIES OF PLYWOOD

PROPERTIES	VALUES	REMARKS	MEASURED ACCORDING TO STANDARD
Moisture content	4 - 12%		PE-EN 322
Density	550 - 800 km/m^3		PN-EN 323

Numbers of piles - according to panel thiickness

Markings:

„I" and „-"
1,5 mm piles

Nominal thickness (t) [mm]	Number of piles	Example of panel assembly
4	3	|–|
6,5	5	|–|–|
9	7	|–|–|–|
12	9	|–|–|–|–|
15	11	|–|–|–|–|–|
18	13	|–|–|–|–|–|–|
21	15	|–|–|–|–|–|–|–|
24	17	|–|–|–|–|–|–|–|–|
27	19	|–|–|–|–|–|–|–|–|–|
30	21	|–|–|–|–|–|–|–|–|–|–|
35	25	|–|–|–|–|–|–|–|–|–|–|–|
40	27	|–|–|–|–|–|–|–|–|–|–|–|–|
45	31	|–|–|–|–|–|–|–|–|–|–|–|–|–|

Standard thickness of veneer is1,5 mm

Tolerances on length and width of the panel	± 3,5 mm			PN-EN 315 PN-EN 324-1

Thickness tolerance

Nominal thickness (t) [mm]	Unsanded panels: Thickness tolerance within one panel [mm]	Unsanded panels: Tolerances on nominal thickness [mm]	Sanded panels: Thickness tolerance within one panel [mm]	Sanded panels: Tolerances on nominal thickness [mm]
≥ 3 ≤ 12	1,0	+ (0,8 + 0,03t) - (0,4 + 0,03t)	0,6	+ (0,2 + 0,03t) - (0,4 + 0,03t)
≥ 12 ≤ 25	1,5			
≥ 25 ≤ 30			,8	+ (0,0 + 0,05t) - (0,4 + 0,05t)
> 30				+ (0,0 + 0,03t) - (0,4 + 0,03t)

PN-EN 315
PN-EN 324-1

For sanded panels:

Thickness (t) [mm]	4	6,5	9	12	15	18	21	24	27	30	35
Tolerance [mm]	+ 0,3 - 0,7	+ 0,9 - 0,6	+ 0,5 - 0,7	+ 0,6 - 0,7	+ 0,7 - 0,8	+ 0,7 - 0,9	+ 0,8 - 0,9	+ 0,9 - 1,5	+ 1,4 - 1,7	+ 1,5 - 1,9	+ 1,1 - 1,5

Tolerance for straightness of edges and squareness	1 mm/m		PN-EN 315 PN-EN 324-2
Bending strength	30 - 100 MPa	Depending on type of wood used for particular plywood plate	PN-EN 310
Tensile strength	30 - 60 MPa		
Compression strength	25-50 MPa		
Modulus of elasticity in bending	3500 - 10000 MPa		

PHYSICAL AND MECHANICAL PROPERTIES OF PLYWOOD

<table>
<tr><th>PROPERTIES</th><th colspan="3">VALUES</th><th>REMARKS</th><th>MEASURED ACCORDING TO STANDARD</th></tr>
<tr><td>Dimensional changes associated with changes in relative humidity</td><td colspan="3">do 0,5%</td><td></td><td>PN-EN 318</td></tr>
<tr><td>Formaldehyde emission class</td><td colspan="3">Emission class A ≤ 3,5 mg HCHO/m^2·h;
Standard formaldehzde emission
acc. to CARB Phase 2(≤ 0,5 mg/m^2·h)</td><td>Hygienic class E1</td><td>PN-EN 717-2</td></tr>
<tr><td rowspan="2">Bonding qualitz</td><td>Mean shear strength f_v
[N/mm^2]</td><td colspan="2">Mean apparent cohesive wood failure
[%]</td><td rowspan="2"></td><td rowspan="2">PN-EN 314-2</td></tr>
<tr><td>0,2 ≤ f_v< 0,4
0,4 ≤ f_v< 0,6
0,6 ≤ f_v< 1,0
1,0 ≤ f_v</td><td colspan="2">>80
>60
>40
no requirement</td></tr>
<tr><td>Reactio to fire calss</td><td colspan="3">D-s2,d0
D - products which can resist in a long time reaction of a small flame, without significant propagation of flame. Thez can resist termal reaction of signle flaming objects with sufficient termal emmission
s2 - all quanity of smoke and increase factor of smoke emission are limited
d0 - there are not flaming drops/particles</td><td>Thickness ≥ 9 mm
Density ≥ 400 kg/m^3</td><td>PN-EN 13986
EN 13501 - 1</td></tr>
<tr><td></td><td colspan="3">F - products for which is not given reaction to fire calss</td><td>Thickness ≥ 9 mm</td><td></td></tr>
<tr><td rowspan="6">Water vapour resistance factors</td><td rowspan="2">Mean density
[kg/m^3]</td><td colspan="2">Resistance factor on water vapour penetration
μ</td><td rowspan="6"></td><td rowspan="6">PN-EN 13986
EN 12524</td></tr>
<tr><td>for high air moisture content</td><td>for low air moisture content</td></tr>
<tr><td>300</td><td>50</td><td>150</td></tr>
<tr><td>500</td><td>70</td><td>200</td></tr>
<tr><td>700</td><td>90</td><td>220</td></tr>
<tr><td>1000</td><td>110</td><td>250</td></tr>
<tr><td rowspan="2">Sound absorption coefficient</td><td colspan="2">Frequency range
250 Hz to 500 Hz</td><td>Frequencz range
1000 Hz to 2000Hz</td><td rowspan="2"></td><td rowspan="2">PN-EN 13986</td></tr>
<tr><td colspan="2">0,10</td><td>0,30</td></tr>
<tr><td>Airborne sound insulation</td><td colspan="3">The sound transmission loss R a single wood-based panel, measured in dB, is related to the mean surface mass m_A in kg/m^2 according to the following equation:
$R = 13 \times \lg(m_A) + 14$
(which is only valid for frequency range of 1 kHz to 3 kHz at a surface mass > 5 kg/m^2)</td><td></td><td>PN-EN 13986
EN ISO 140-3
EN ISO 717-1</td></tr>
<tr><td rowspan="5">Thermal conductivity</td><td colspan="2">Mean density
[kg/m^3]</td><td>Thermal conductivity λ
[W / (m °K)]</td><td rowspan="5"></td><td rowspan="5">PN-EN 13986
EN 12664</td></tr>
<tr><td colspan="2">300</td><td>0,09</td></tr>
<tr><td colspan="2">500</td><td>0,13</td></tr>
<tr><td colspan="2">700</td><td>0,17</td></tr>
<tr><td colspan="2">1000</td><td>0,24</td></tr>
</table>

PLYWOOD – CLASSIFICATION BY SURFACE APPEARANCE

HARDWOOD - EN 635-2	
Class	Permissible characteristic and defects
E	Practically without defect
I	Sound intergrown knots up to 15 mm Ø, 30 mm cumulative Ø/m²
	Filled unsound knots up to 6 mm Ø, 2/m²
	Filled splits up to 3 mm width, 1/10 panel length, 3/m
	Colour matched plugs (repairs) 3/m²
	Discoloration if low contrast
	Defects at the edges up to 2 mm
II	Sound intergrown knots up to 35 mm Ø
	Filled unsound knots and knot holes up to 10 mm Ø, 3/m²
	Filled splits up to 5 mm width, 1/5 panel length, 3/m
	Colour matched plugs (repairs) 6/m²
	Discoloration if low contrast
	Defects at the edges up to 5 mm
III	Sound intergrown knots up to 50 mm Ø
	Filled unsound knots and knot holes up to 40 mm Ø
	Filled splits up to 20 mm width, 1/3 panel length, 3/m
	Plugs (repairs)
	Discoloration
	Glue penetration up to 5% panel surface
	Sending through up to 1% panel surface
	Defects at the edges up to 5 mm
IV	Practically with many defects

SOFTWOOD - EN 635-3	
Class	Permissible characteristic and defects
E	Practically without defect
I	Sound intergrown knots up to 15 mm Ø, 30 mm cumulative Ø/m²
	Filled unsounds knots up to 6 mm Ø, 2/m²
	Filled splits up to 3 mm width, 1/10 panel length, 3/m
	Colour matched plugs (repairs) 5/m²
	Discoloration if low contrast
	Defects at the edges up to 2 mm
II	Sound intergrown knots up to 50 mm Ø
	Filled unsound knots and knot holes up to 25 mm Ø, 6/m²
	Filled splits up to 10 mm width, 1/3 panel length, 3/m
	Plugs (repairs)
	Discoloration if low contrast
	Defects at the edges up to 5 mm
III	Sound intergrown knots up to 60 mm Ø
	Filled unsounds knots and knot holes up to 40 mm Ø
	Filled splits up to 15 mm width, 1/2 panel length, 3/m
	Plugs (repairs)
	Discoloration
	Glue penetration up to 5% panel surface
	Sanding through up to 1% panel surface
	Defects at the edges up to 5 mm
IV	Practically with many defects