

Fixings and Adhesives

All fasteners used must be corrosion resistant to the appropriate specification level depending on the end use; a life expectancy of 15 to 50 years should be considered.

When fixing ARAUCOPLY in flooring applications it's important that you use glue and screws are used squeaking. Mechanical fixings must be either annular grooved stainless steel nails 50mm long or stainless steel screws at least 50mm in length. Fixings should be at 150mm centers at all points of contact with the framing.

Always allow an expansion gap when installing ARAUCOPLY Flooring. This gap will depend on the size of the floor but at least a 3mm gap is suitable for most applications.

Ideal applications include: Residential or commercial flooring; flooring in wet areas, such as bathrooms, toilets or kitchens; for use under rubber membranes to provide the best substrate; decks, roofing, wall linings, general industrial applications, and flooring for mezzanine floors.

Product must be sealed to avoid any damage caused by humidity when used in wet areas.

Storage and Handling

ARAUCOPLY should be handled and stored with care. To achieve the finish and end result of your choice, consider the following:

- The product should be stored in a dry area protected from the sun, rain, wind or snow, until used.
- In case of high humidity conditions, do not expose the panels directly to the environment immediately after opening the bundles. Remove plastic wrap without cutting metal straps in order to allow the panel balance humidity conditions for a minimum of 48 hours in order to minimize warping in normal humidity conditions let the panel balance humidity for at least 24 hours inside if used in interior applications.
- The product should not be placed directly on the ground unless inside and should be supported on at least three supporting points, preferably four once the package has been opened.
- ARAUCOPLY products should always be stored flat, not standing on edge. This is dangerous and could result in injury if the panels were to fall.
- Careful handling and proper storage will prolong the panel's usability. Dropping panels is one of the most common ways to considerably damage an otherwise good panel.

Technical Information

Fiber Species

All ARAUCOPLY products are produced with 100% Radiata Pine veneers sourced from our own sustainably managed forest plantations in Chile, with an average density of 540kg/m³

Moisture Content

ARAUCOPLY has an average moisture content ranging between 8 and 9%, when manufactured. It should be protected from moisture throughout delivery, storage on site, and in construction applications such as roofs, walls and floors.

For more information refer to *Storage and Handling* on page 16.

Adhesive

ARAUCOPLY products are certified to Type A bond. They use an Exterior Phenol-Formaldehyde resin that meets the European EN 314 Standard, emission class E0 in accordance with Standard AS/NZS 2098.11 - "Determination of Formaldehyde Emissions" and also complies with other international Low Formaldehyde Emission (LFE) requirements such as the Japanese Standard JAS Super-E0 or F**** below 0,02mg/L.

Dimensional Properties

TOLERANCES	
Length	+0mm/-2mm on the specified nominal value.
Width	+0mm/-2mm on the specified nominal value.
Thickness	±0,4mm on the specified nominal value for sanded grades.
Squareness	Within 1mm per meter.
Straightness	Within 1mm per meter.
Diagonals	+0mm / -2mm on the specified nominal value.

LAY-UP PROPERTIES AND WEIGHT						
Nominal Thickness (mm)	Number of plies	Ply thickness (mm)	Average weight (Kg/board)*			Pieces per Bundle
			2440 x 610	2440 x 1220	2500 x 1250	
6,5	3	2,54	5	11	11	140
9	3	3,15	7	14	15	108
12	5	2,54	10	19	20	80
15	5	3,15	12	24	25	65
18	7	2,54	14	29	30	54
21	7	3,15	17	33	35	46
25	9	3,15	20	40	42	39
30	11	2,54	24	48	59	32

* Mass has been calculated considering 9% moisture content and sheet size of 2440x1220 and a density of 540 kg/m³.

Structural Properties

STRUCTURAL PROPERTIES				
Nominal Thickness (mm)	MOR (N/mm ²)		MOE (N/mm ²)	
	//	⊥	//	⊥
6,5	84	17	7846	717
9	81	15	7913	745
12	70	30	7297	2381
15	68	29	6921	2353
18	62	34	6461	3102
21	69	34	7695	3626
25	54	33	6318	3396
30	48	30	5904	4316

Thickness (mm)	Planar Shear Strength F (lb/Q) (kN/m)	Bending Strength (kNm/m) Parallel	Bending Strength (kNm/m) Perpendicular	Bending Stiffness (kNm/m ²) Parallel	Bending Stiffness (kNm/m ²) Perpendicular
6,5	10,20	0,48	0,59	0,25	0,27
9	11,24	0,91	0,18	0,45	0,04
12	16,81	1,49	0,61	0,96	0,29
15	20,24	2,16	0,90	1,93	0,55
18	24,42	2,74	1,69	3,01	1,59

Obtained based on average values. Only for reference use

Gaps and Knotholes Allowed

Gaps

A Gap is an open veneer joint extending through, or partially through a Plywood panel.

GAPS			
Location	Grades: AC / BCDeco / CD/ BC / CpC	Form	MU
Adjacent to face	Depth: 210mm	Depth: 100mm	Depth: 210mm
	Length: 25mm	Length: 10mm	Length: 60mm
Adjacent to back face	Depth: 210mm	Depth: 100mm	Depth: 210mm
	Length: 25mm	Length: 10mm	Length: 60mm
Interior (non central)	Depth: 210mm	Depth: 100mm	Depth: 210mm
	Length: 25mm	Length: 10mm	Length: 60mm
Interior (central)	Depth: 210mm	Depth: 100mm	Depth: 210mm
	Length: 25mm	Length: 10mm	Length: 60mm
On the long edge	Depth: 210mm	Depth: 100mm	N/A
	Length: 25mm	Length: 10mm	N/A
On the short edge	Depth: 210mm	Depth: 100mm	N/A
	Length: 25mm	Length: 10mm	N/A

Knotholes

Void produced when a knot drops out of veneer.

KNOTHOLES	
Location	Grades (AC / BC Deco / BC / CpC)
Knotholes in interior knots	Length: 40mm

Thermal Conductivity

ARAUCOPLY has an average thermal conductivity of 0.13 W/mK. The following table shows the specific conductivity for each thickness.

THICKNESS vs THERMAL CONDUCTIVITY	
Thickness	Conductivity
mm	W/mK
9	0.112
12	0.138
15	0.134
18	0.158

Fire Tests on Building Materials

ARAUCOPLY has been tested for ignitability, flame propagation, heat release and smoke release with an ignition temperature of 200-260°C classified as Class C (According to US standard NFPA). Tests were conducted on a clean faced ARAUCOPLY panel by AWTA Product Testing, Australia, during February 2011.

ARAUCOPLY 12 MM EARLY FIRE HAZARD PROPERTIES		
Regulatory Indexes	Result	Range
Ignitability Index	14	0 - 20
Spread of Flame Index	7	0 - 10
Heat Evolved Index	5	0 - 10
Smoke Developed Index	2	0 - 10

Certifications

ARAUCOPLY has been manufactured and tested to meet the most demanding certification standards of prestigious agencies around the world:

CE 2+ EN 13986:2004

European Union Standard. ARAUCOPLY complies with CE 2+ EN 13986:2004 for structural use, which is the European certification for wood-based panels under the European CPD (Construction Products Directive). The certification was originally obtained in 2003. Our plywood is certified by the Danish Technological Institute, under numbers 1073-CPD-801 and 1073-CPD-809.



BBA

British Board of Agreement certification, for structural uses.



P30

Swedish Standard SBN 1975.5, for structural uses.



DIN 68705

Certified to the German Industrial Norm for use of adhesives.

BFU 100

German requirements for structural applications.



PSI-09

USA. All grade stamped ARAUCOPLY panels are manufactured to meet the US PS I-09 standard. ARAUCOPLY qualifies for TECO and PTL grade stamping under voluntary product standard PS I-09 for grades AA through CD, including structural applications.

PSI-09 UL

AS-NZS2269

ARAUCOPLY is certified to the AS/NZS2269 Structural Plywood Standard via stringent third party verification process which is accredited by the Joint Accreditation System of Australia and NZ (JAS-ANZ).



JAS

Japan Plywood Inspection Corporation approved ARAUCOPLY products for use in JAS certified load-bearing construction applications.

JAS

PEFC

Programme for the endorsement of forest certification, promotes the sustainable management of the forest seeking, a social, economic and medioambiental equilibrium.



ISO 14001

Is a globally accepted environmental management system certification.



OHSAS 18001

The occupational health and safety assessment series of standards (OHSAS) sets out the necessary requirements for and occupational health and safety (OH & S) management system.

CARB

ARAUCOPLY Plywood products are exempt from CARB formaldehyde regulations.

Certificates are available for download at www.araucopy.com

Product Identification

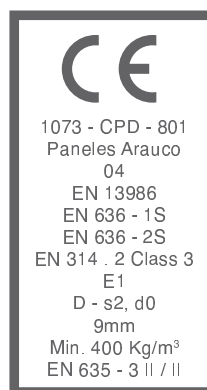
In accordance with the DIN standard, each sheet of ARAUCOPLY contains the following information on its back stamp:

- Company Name: Paneles Arauco S.A.
- Panel Mill: e.g. PLANTA TERCIADO NUEVA ALDEA
- Country: Chile
- BFU 100, DIN 68705
- Certification agency: e.g. Dancert
- Thickness: e.g. 18mm



In accordance with CE standard, each sheet of ARAUCOPLY contains the following information on its back stamp:

- Certification Standard: e.g. CE
- Certification Agency Number: e.g. 1073 means Dancert TP
- Face grade, back grade: e.g. CD.
- Mill code number: 801 for Arauco Mill and 802 for Nueva Aldea Mill
- Company Name: PANELES ARAUCO S.A.
- Present Year: e.g. 04 stands for 2004
- Certification Standards: e.g. EN 13986 / EN 636 – 1S
- Formaldehyde emission: E1
- Fire reaction according to EN 13501-I.
- Thickness: e.g. 9 mm
- Minimum density: e.g. 400 Kg/m³
- Norm for external appearance: e.g. EN 365 and its degree, e.g. II/II



In accordance with Swedish Standard SBN 1975.5, P30 certification, each sheet of AraucoPLY contains the following information on its back stamp:

- Company Name: Paneles Arauco S.A.
- Panel Mill: e.g. PLANTA TERCIADO NUEVA ALDEA
- P30*, face and backface veneer grade
- Thickness: e.g. 18 mm

