

## DECLARED OF PERFORMANCE ARAUCO

<b>1. Unique identification code of the product-type</b>	Radiata pine softwood plywood Thickness $\geq 8.1$ mm and density $\geq 450$ kg/m <sup>3</sup>
<b>2. Intended use or uses of the construction product</b>	Internal use as: - Structural components in dry or humid conditions - Structural floor decking on joists in dry conditions - Structural roof decking on joists in dry or humid conditions
<b>3. Manufacturer</b>	Maderas Arauco S.A Los Horcones s/no P.O Box 167 Arauco - Chile
<b>4. Authorised representative</b>	Not relevant
<b>5. System of assessment and verification of constancy of performance</b>	System 2+
<b>6. Harmonized Standard EN 13986: 2004 + A1: 2015</b> Dancert A/S - 1073 has performed <i>initial inspection of the manufacturing plant and factory production control and continuous surveillance, assessment and evaluation of factory production control</i> under system 2+ and issued a <i>certificate of conformity of the factory production control (1073-CPR-801)</i> . Danish Institute of Fire and Security Technology - 0845 has performed <i>initial type testing of Reaction to fire performance</i> on 8 mm plywood and issued a <i>Classification report, documented in file: PC10139 dated 2007-06-12</i> .	

## 7. DECLARED OF PERFORMANCE

ESSENTIAL CHARACTERISTICS	DECLARED OF PERFORMANCE - ARAUCOPLY	
Bonding quality EN 314-2	Class 3	
Release of formaldehyde EN 717-2	E1	
Reaction to fire - table 8	D-s2,d0, D <sub>fl</sub> -s1	
Thermal conductivity - table 11	0,11 W/mK	
Water vapour permeability - table 9	Wet cup $\mu$	Dry cup $\mu$
	60	180
Airborne sound insulation	npd	
Sound absorption coefficient - table 10	0,10 (250 to 500 Hz)	
	0,30 (1000 to 2000 Hz)	
Impact resistance - EN 1195 / EN 12871	SEE: Guidance for Installation Flooring and Roofing 2T&G	
Strength and stiffness under point load - EN 1195 / EN 12871	SEE: Guidance for Installation Flooring and Roofing 4T&G	
Strength and stiffness for structural use - EN 789	EN 1058/EN789 Characteristic Strength, Stiffness and Density Values for Structural Design	
Mechanical durability - EN 1995-1-1	K <sub>mod</sub> and k <sub>def</sub> is to be taken from EN 1995-1-1	
Content of pentachlorophenol	< 5 ppm	
Biological durability - EN 335, CEN/TS 1099:2007	Uncoated or overlaid	Use class 1 and 2
	Overlaid and edges protected	Use class 1 and 2
The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 3.		

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above. Signed for and on behalf of the manufacturer by:

Mr. Cristian Chacana, Mill Manager  
 .....  
*(name and function)*

Chile, March 20 -2017  
 .....  
*(place and date of issue)* *(signature)*

EN 1058/EN789 Characteristic Strength, Stiffness and Density Values for Structural Design

Thickness (Nominal) mm	Characteristic density (kg/m <sup>3</sup> ) and strength (N/mm <sup>2</sup> ) values <b>Note 4</b>									
	Number of Veneers / layers	Density <b>Note 2</b>	Bending <b>Note 1</b>		Tension <b>Note 1</b>		Compression <b>Note 1</b>		Shear	
		$\rho$	$f_m$		$f_t$		$f_c (=f_t)$		Panel	Planar
$t_{nom}$			0	90	0	90	0	90	$f_p$	$f_r$
9	3/3 I-I	450	16.4	1.3	8.7	2.9	8.7	2.9	7.2	1.8
10	5/5 I-I-I	450	13.4	4	7.8	3.5	7.8	3.5	7.2	1.8
11	3/3 I-I	450	15.7	2.1	7.5	3.7	7.5	3.7	7.2	1.8
12	5/5 I-I-I	450	22.1	4.4	11.2	3.5	11.2	3.5	7.2	1.8
14	5/5 I-I-I	450	14	3.5	8.4	3.1	8.4	3.1	7.2	1.8
15	5/5 I-I-I	450	23	5	10.4	3.5	10.4	3.5	7.2	1.8
18	7/7 I-I-I-I	450	17.5	5.4	9	4.5	9	4.5	7.2	1.8
19	9/9 I-I-I-I-I	450	11	4.1	7.9	3.4	7.9	3.4	7.2	1.8
21	7/7 I-I-I-I	450	11.3	4.6	7.4	3.8	7.4	3.8	7.2	1.8
22	9/9 I-I-I-I-I	450	10.3	4.7	7.2	3.9	7.2	3.9	7.2	1.8
24	9/9 I-I-I-I-I	450	9.5	5.2	6.5	4.4	6.5	4.4	7.2	1.8
25	9/9 I-I-I-I-I	450	11	4.1	7.9	3.4	7.9	3.4	7.2	1.8
28	9/9 I-I-I-I-I	450	10.3	4.7	7.2	3.9	7.2	3.9	7.2	1.8
30	11/11 I-I-I-I-I-I	450	8.7	5.2	6.4	4.5	6.4	4.5	7.2	1.8

Thickness (Nominal) mm	Mean stiffness values. N/mm <sup>2</sup> <b>Note 3 and Note 4</b>							
	Bending		Tension		Compression		Shear	
	$E_m$		$E_t$		$E_c (=E_t)$		Panel	Planar
$t_{nom}$	0	90	0	90	0	90	$G_p$	$G_r$
9	5393	192	3696	1716	3696	1716	700	140
10	4435	1082	3326	2059	3326	2059	700	140
11	5179	391	3204	2173	3204	2173	700	140
12	5452	1604	3648	2533	3648	2533	700	140
14	4640	892	3606	1800	3606	1800	700	140
15	5576	1548	3945	2521	3945	2521	700	140
18	3940	2576	3039	3000	3039	3000	700	140
19	3989	1496	3369	2020	3369	2020	700	140
21	3984	1501	3168	2206	3168	2206	700	140
22	3726	1740	3080	2288	3080	2288	700	140
24	3441	2005	2783	2564	2783	2564	700	140
25	3991	1494	3370	2019	3370	2019	700	140
28	3726	1740	3080	2288	3080	2288	700	140
30	3268	2165	2727	2616	2727	2616	700	140

**Note 1.** For panels of EN 635-3 grade I or II the bending, tension and compression strength values may be multiplied by 1,2.

**Note 2.** The mean values for density should be taken as 1.15 times the characteristic values given in the table.

**Note 3.** The 5% characteristic values for stiffness should be taken as 0.85 times the mean values given in the table.

**Note 4.** When used structurally under service class 1(dry) or 2 (humid) conditions, the characteristic strength and stiffness values of the mechanical properties given in the tables shall be modified with regard to duration of load ( $k_{mod}$ ,  $k_{def}$ ) according to national codes.