

DECLARATION OF PERFORMANCE no: 002DoP2024-07-03

1.- Unique Identification code of the product type

Radiata pine softwood plywood

Thickness ≥ 8.1 mm and density $\geq 450\text{kg/m}^3$

2.- Intended use or uses of the construction product

Internal uses 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

3.- Manufacturer

Maderas Arauco S.A

Ruta del Itata Km 21

Nueva Aldea

Ranquil- Chile

4.- Authorized Representative

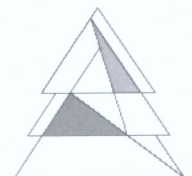
Not Relevant

5.- System of assessment and verification of constancy of performance

System 2+

6.- Tasks for the notified body(s)

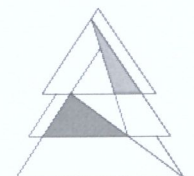
Dancert A/S - 1073 has performed initial inspection of the manufacturing plant and factory production control and continuous surveillance, assessment and evaluation of factory production control under system 2+ and issued a certificate of conformity of the factory production control (1073-CPR-809). Danish Institute of Fire and Security Technology-0845 has performed initial type testing of Reaction to fire performance on 8 mm plywood and issued a Classification report, documented in file: PC10139 dated 2007-06-12.



7.- Essential Characteristic Harmonized technical specification EN 13986 +A1:2015

Essential Characteristics	Harmonized Standard	Performance -Arauco Ply
Bonding Quality	EN 314-2	Class 3
Release of Formaldehyde	EN 717-1	E1
Reaction to fire	EN 13986, table 8	Thickness $\geq 8,1$ mm Declared- table 8 -D-s2,d0/Dfl-s1 Thickness $< 8,1$ mm : E D-s2,d0 Declared by testing PC10139 dated 2007-06-12
Water vapour permeability	EN 13986, table 9	Wet cup μ 60 Dry cup μ 180
Sound Absorption coefficient	EN 13986, table 10	0,10 (250 to 500 Hz) 0,30 (1000 to 2000 Hz)
Airborne sound insulation	EN 13986	NPD
Thermal Conductivity	EN 13986, table 11	$0.11 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$
Impact Resistance for structural use at Floor and Roof decking	EN 1195/EN 12871	See section 9 of this DoP
Strength and stiffness under point of load	EN 1195/EN 12871	See section 9 of this DoP
Strength and stiffness for structural use	EN 789	EN 1058/EN 789 Characteristic Strength, Stiffness and Density Values for Structural Design
Mechanical Durability	EN 1995-1-1	K_{mod} and K_{def} 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 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 3.



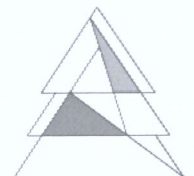
8.- Essential Characteristic Harmonized technical specification EN 13986 +A1:2015

ESSENTIAL CHARACTERISTIC		PERFORMANCE							
		Radiata Pine Plywood							
		Nominal thickness (mm)							
Strength and Stiffness for Structural use:		9	12	15	18	21	25	30	
		Number of Plies							
		3	5	5	7	7	9	11	
Characteristic bending strength	(N/mm ²)		16,4	22,1	23	17,5	11,3	11	8,7
		⊥	1,3	4,4	5	5,4	4,6	4,1	5,2
Mean modulus of elasticity in bending	(N/mm ²)		5393	5452	5576	3940	3984	3991	3268
		⊥	192	1604	1548	2576	1501	1494	2165
Characteristic compression strength	(N/mm ²)		8,7	11,2	10,4	9	7,4	7,9	6,4
		⊥	2,9	3,5	3,5	4,5	3,8	3,4	4,5
Characteristic tension strength	(N/mm ²)		8,7	11,2	10,4	9	7,4	7,9	6,4
		⊥	2,9	3,5	3,5	4,5	3,8	3,4	4,5
Mean modulus of elasticity in Comp./Tension	(N/mm ²)		3696	3648	3945	3039	3168	3370	2727
		⊥	1716	2533	2521	3000	2206	2019	2616
Characteristic panel shear strength	(N/mm ²)		7,2						
		⊥	7,2						
Mean modulus of rigidity in panel shear	(N/mm ²)		700						
		⊥	700						
Characteristic planar shear strength	(N/mm ²)		1,8						
		⊥	1,8						
Mean modulus of rigidity in planar shear	(N/mm ²)		140						
		⊥	140						

|| = Along the face veneer grain direction

⊥ = Across the face veneer grain direction

the material values in this DoP are to be used for structural calculations with EN 1995 (Eurocode 5)



9.- Essential Characteristic for Roof/Floor

EN 12871 : Characteristic Values for structural performance as floor/roof decking on joists.

Thickness (nominal) mm	Veneers/ Layers	Maximun Span mm Note 2	Concentrated point load			Impact Resistance	Asesment	
			Characteristic Strength		Mean Stiffness		Service Class	Load Category
			Serviceability N	Ultimate Load N	R _m N/mm			
FLOOR								
15	5/5	400	4450	4921	584	Fulfilled	1	A
18	7/7	600	4671	4910	408	Fulfilled	1	A
21	7/7	600	4775	5470	499	Fulfilled	1	H
ROOF								
12	5/5	600	3785	4749	203	Fulfilled	2	H
15	5/5	800	3672	3931	195	Fulfilled	2	H
18	7/7	1200	4674	4724	133	Fulfilled	2	H
21	7/7	1200	4793	5784	144	Fulfilled	2	H

EN 12871 : Characteristic Values for structural performance as floor/roof decking on joist. Installed with flying joints.

Thickness (nominal) mm	Veneers/ Layers	Maximun Span mm	Concentrated point load			Impact Resistance	Asesment	
			Characteristic Strength		Mean Stiffness		Service Class	Load Category
			Serviceability N	Ultimate Load N	R _m N/mm			
FLOOR								
18	7/7	600	4250	4838	436	Fulfilled	1	A
ROOF								
18	7/7	800	1646	2588	159	Fulfilled	2	H

Note 1: Load category A. Areas for domestic and residential activities. Load Category H. Roofs that are not accessible except for maintenance, repair, and cleaning. Normal maintenance repair and cleaning painting and minor repairs.

Note 2: See separate accompanying commercial documents with regard to the guidance of installation.

Signed for and on behalf of the manufacturer by:

Victor Huerta Guerra
Ply Manager
(name and function)

Nva Aldea Ply Mill
July 19, 2024
(Place and date of issue)

(Signature)

July, 2024

