

DECLARATION OF PERFORMANCE

EC-DoP-1948-SQ-PINE-02-01

Manufacturer Identification

Manufacturer	Representative in the EU	Manufacturing Facility			
Uruply S.A. Ruta 5, Km 400,5	Lumin Forest Products Ltd Sweetman's Ave, BLACKROCK	Uruply S.A. Ruta 5, Km 400,5			
Tacuarembó, 45000 – Uruguay <i>Tel.: +598 (0)63 222 00</i>	Co. Dublin – A94 F9N7 – Ireland europe-sales@lumin.com	Tacuarembó, 45000 – Uruguay			

Product Identification

Product Type	Technical Class	Intended Use	AVCP (*)
Lumin® Plywood Pine and/or Eucalyptus Plywood for Structural Use in Internal Humid Conditions (EN 636 – 2 S)	EN 636 – 2 – S (structural)	Load-bearing structural panels in dry covered service conditions ^(***) (EN 1995-1-1 - Service Class 1 or 2)	2+

(*) Assessment and Verification of Constancy of Performance system according to Annex V of regulation (EU) No 305/2011

(**) Batch identification: 7-digit number on bundle

(***) The conditions of Service Class 3 may correspond to the biological Hazard Class 3 to EN 335, for which this product cannot be used without further treatment and/or appropriate design.

Notified Body Reference

Notified Body	Certificate or Assessment	Tasks performed for AVCP
Element Materials Technology Rotterdam B.V. Zekeringstraat 33 - 1014 BV Amsterdam - Netherlands	2812 – CPR – 0122 EC Certificate of factory Production Control from 24/11/2020	Initial inspection of factory Continuous Surveillance Certification of Factory Production Control

Declared Performance

The declared properties of the product are given in the table overleaf, based on the following Harmonised Technical Specifications:

EN 13986:2004+A1:2015 – Wood-based panels for use in construction – Characteristics, evaluation of conformity and marking

EN 636:2012+A1:2015 - Plywood - Specifications

Installation instructions and safety data sheets can be found on www.lumin.com.

The performance of the product identified is in conformity with the declared performance. This declaration of performance is issued under the sole responsibility of the manufacturer identified above.

For and on behalf of the manufacturer by:

05/11/2022 in Tacuarembó, Uruguay

Alvaró Molinari Industrial Manager - Uruply S.A.

Essential Characteristics		Performance for indicated Panel Thickness (mm)						
		9	12	15	18	20	21 - 22	
Panel Layup ¹⁾				PPPP PEEP	PPPPP PEPEP PEEEP	PPPPP PPEPP PEPEP PEEEP	PPPPP PPEPP PEPEP PEEEP	
Characteristic Strength ^{2) 3)}								
Bending – parallel	f m,0,k	(N/mm²)		20.0	15.0	15.0	15.0	
Bending – perpendicular	$f_{m,90,k}$	(N/mm²)		3.0	5.0	5.0	5.0	
Compression	f c,0,k	(N/mm²)		NPD	NPD	NPD	NPD	
Tension	f t,0,k	(N/mm²)		NPD	NPD	NPD	NPD	
Panel Shear	$f_{v,k}$	(N/mm²)		3.0	3.0	3.0	3.0	
Planar Shear	fr,k	(N/mm²)		0.5	0.5	0.5	0.5	
Mean Stiffness (MOE) ⁴⁾								
Bending – parallel	Em,0	(N/mm²)		4 000	4 000	3 500	3 500	
Bending – perpendicular	E _{m,90}	(N/mm²)		500	1 000	1 000	1 000	
Compression	<i>E</i> _{c,0}	(N/mm²)		NPD	NPD	NPD	NPD	
Tension	E _{t,0}	(N/mm²)		NPD	NPD	NPD	NPD	
Panel Shear	Gv	(N/mm²)		300	300	300	300	
Planar Shear	Gr	(N/mm²)		20	20	20	20	
Density								
Characteristic Density ²⁾	ρ_k	(kg/m³)		410	410	410	410	
Mean Density ⁵⁾	$ ho_{mean}$	(kg/m³)		450	450	450	450	
Bonding quality / durability			Bonding Class 3					
Biological Durability			Hazard Class 2					
Reaction to fire class			D-s2, d0					
Release of formaldehyde class			E1					
Water vapour permeability	μ							
Wet cup				70	70	70	70	
Dry cup				200	200	200	200	
Airborne sound insulation	R			23.80	25.10	26.10	26.70	
Sound absorption	α							
Frequency range 250Hz to 500 Hz				0.10	0.10	0.10	0.10	
Frequency range 1000Hz to 2000 Hz			0.30	0.30	0.30	0.30		
Thermal Conductivity	λ	(W/m.K)		0.13	0.13	0.13	0.13	
Release (Content) of Pentachloroph	nenol (PCP)		< 5 ppm	< 5 ppm	< 5 ppm	< 5 ppm	

1) P = Pine ; E = Eucalyptus

2) "Characteristic" = lower 5th percentile calculated as defined in EN 636:2012+A1:2015

3) The characteristic values are as specified in EN 12369-2:2004 and shall be modified for the given Service Class as described in EN 1995-1-1 using the relevant k_{mod} and k_{def} modification factors

4) The characteristic value for Stiffness should be taken as 0.8 times the mean value

5) The mean density for design should be taken as 1.1 times the characteristic value

Performance for Use in FLOORING or ROOFING Applications are declared in the table Overleaf

Essential Characteristics		Performance for indicated Panel Thickness (mm)						
		9	12	15	18	20	21 - 22	
Panel Layup ¹⁾			PPPP PEEP	PPPPP PEPEP PEEEP	PPPPP PPEPP PEPEP PEEEP	PPPPP PPEPP PEPEP PEEEP		
Reaction to fire class for Flooring								
Roofing – Cat. of Use H – spacing :				610mm	815mm	1220mm	1220mm	
Characteristic Point Load	Fmax,k	(kN)		2.59	3.36	4.58	4.58	
Mean Stiffness	R _{mean}	(kN)		107	109	77	77	
Serviceability Point Load	Fser,k	(kN)		1.81	2.35	3.20	3.20	
Soft Body Impact Resistance Class				П	П	П	н	
Flooring – Cat. of Use A – spacing :						500mm	500mm	
Characteristic Point Load	Fmax,k	(kN)		NPD	NPD	4.32	4.32	
Mean Stiffness	R _{mean}	(kN)		NPD	NPD	328	328	
Serviceability Point Load	Fser,k	(kN)		NPD	NPD	3.02	3.02	
Soft Body Impact Resistance Class				NPD	NPD	I	I	
Racking Resistance for Walls				NPD	NPD	NPD	NPD	
Soft Body Impact Resistance Class								
for Walls				NPD	NPD	NPD	NPD	

1) P = Pine ; E = Eucalyptus

NOTE: Panels used for Flooring or Roofing application shall have their short edge supported by the joists and their long edge either tongued & grooved or entirely supported by and fixed to a nogging or batten.