

### Declaration of Performance DoP N° GRP/PP/13/CE2+



Page 1 / 2

Product identification	PINE PLYWOOD EN 636-2 S									
Product Types	9mm	12mm4	12mm	12,5mm	15mm	18mm	21mm	24mm	27mm	30mm
Intended uses	(See page 2)									

Name and contact address of the manufacturer	INDUSTRIA DE COMPENSADOS GUARARAPES Rua Alcina Santos Araújo, 411, São Francisco Palmas, PR, 85555-000, BRAZIL									
Mill identification	GUARARAPES - PALMAS									
Harmonized standard	EN 13986:2004									
AVCP System	2+									
Notified Body	1034 - HFB Engineering GMBH, Leipzig, Germany									
Certificate	1034-CPD-12981/2/10 dated 21 <sup>st</sup> June 2010									

Essential characteristics	Declared performance	Technical Specification
Release of formaldehyde	E1 (phenolic resin bonded)	EN 13986 Annex B Note 2
Bond quality	Class 3	EN 314-1/2 Type testing
Density	560 Kg/m <sup>3</sup>	EN 323 Type testing
Reaction to fire	D-s2, d0 / Flooring - DFL-s1	EN 13986 Table 8
Water vapour permeability	Wet - 70 μ / Dry - 200 μ      Dry - 200 μ	EN 13986 Table 9
Airborne sound insulation	R = 13 x lg (m <sub>A</sub> ) + 14	EN 13986 part 5.10
Sound absorption coefficient	0,10 / 0,30	EN 13986 Table 10
Thermal conductivity	0,13 W/(m.K)	EN 13986 Table 11
Content of pentachlorophenol	< 5 ppm	EN 13986 part 5.18
Biological durability	Class 2	EN 335 / EN 1099

Dimensional tolerances	Declared performance	Technical Specification									
Length and width	+0 / -3.0mm	EN 324-2									
Squareness	+/- 1.0 mm/m										
Straightness	+/- 1.0 mm/m										
Thickness	See below per Type										EN 324-1 / EN 315 / EN 12871
	Product Type	9mm	12mm4	12mm	12,5mm	15mm	18mm	21mm	24mm	27mm	30mm
	Maximum (mm)	9,8	12,8	12,8	13,1	15,8	18,8	21,8	24,8	27,8	30,8
	Minimum (mm)	8,2	11,2	11,2	11,6	14,2	17,2	19,2	22,8	26,8	28,2

Essential characteristics	Declared performance	Technical Specification									
Bending properties	See below per Type										EN 310 Type testing
	Type	9mm	12mm4	12mm	12,5mm	15mm	18mm	21mm	24mm	27mm	30mm
Bending strength (N/mm <sup>2</sup> )	Fk, 0	51,7	38,4	40,0	41,3	42,4	39,3	40,1	39,3	39,6	39,2
	Fk, 90	8,0	15,7	18,5	17,4	19,0	23,2	25,0	24,8	22,6	22,7
Bending stiffness (N/mm <sup>2</sup> ) MOE	Ek, 0	7.308	4.055	5.094	5.815	5.737	5.743	6.147	5.118	5.795	5.529
	Ek, 90	607	1.131	1.829	1.318	2.284	2.032	2.688	3.665	2.753	3.586

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Page 2 / 2

Intended use (1)		Internal use as structural components in humid conditions.											
Essential characteristics		Declared performance								Technical Specification			
Strength and stiffness for structural use (N/mm <sup>2</sup> )		See below per Type								EN 12369-2 / EN 636			
	Product Type	9mm	12mm <sup>4</sup>	12mm	12,5mm	15mm	18mm	21mm	24mm	27mm	30mm		
	Para. Fk, 0	30,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0		
	Perp. Fk, 90	5,0	10,0	10,0	10,0	10,0	15,0	15,0	15,0	15,0	15,0		
	Para. Em, 0	7.000	4.000	5.000	5.000	5.000	5.000	6.000	5.000	5.000	5.000		
Perp. Em, 90	500	1.000	1.000	1.000	2.000	2.000	2.500	3.000	2.500	3.000			

Intended use (2)		Structural wall sheathing on studs.											
Essential characteristics		Declared performance								Technical Specification			
Soft body impact resistance		Fulfilled for Type 12,5mm								EN 12781 / EN 596 Type testing			

Intended use (3)		Structural roof decking on joists.											
Essential characteristics		Declared performance								Technical Specification			
Strength and Stiffness under point load		See below per Type								EN 12781 / EN 1195 Type testing			
	Product Type	12,5mm / 15mm			12,5mm	15mm	18mm	21mm / 24mm / 27mm					
	Edge type	Square			T&G	T&G	T&G	T&G					
	Spacing (mm)	400	450	600	600	815	1220	1220					
Strength (N)	Fser	Middle	2.087	2.203	1.711	3.022	3.662	3.844	3.838				
		Joint	x	x	x	2.801	2.598	3.763	4.717				
	Fmax	Middle	3.536	3.548	3.800	3.484	4.348	4.132	5.443				
		Joint	x	x	x	3.014	3.145	4.348	4.753				
Stiffness (N/mm)	Rmean	Middle	546	482	274	202	201	170	196				
		Joint	x	x	x	181	148	107	139				
Impact resistance		Fulfilled	Fulfilled	Fulfilled	Fulfilled	Fulfilled	Fulfilled	Fulfilled					

Intended use (4)		Structural floor decking on joists.											
Essential characteristics		Declared performance								Technical Specification			
Strength and Stiffness under point load		See below per Type								EN 12781 / EN 1195 Type testing			
	Product Type	18mm / 21mm / 24mm / 27mm											
	Edge type	Square								T&G			
	Spacing (mm)	400	480	600				400	480	600			
Strength (N)	Fser	Middle	3.634	4.112	3.485			3.077	3.802	3.405			
		Joint	x	x	x			2.795	2.696	2.464			
	Fmax	Middle	6.003	5.779	4.915			4.993	5.297	5.270			
		Joint	x	x	x			3.551	3.721	4.059			
Stiffness (N/mm)	Rmean	Middle	1.025	858	605			952	804	586			
		Joint	x	x	x			774	649	466			
Impact resistance		Fulfilled	Fulfilled	Fulfilled			Fulfilled	Fulfilled	Fulfilled				

Place and date of issue	Issued by	Signature
Palmas, 1st July 2013.	Gerson Aldo de Souza Technical Manager	


CE Marking  
DoP N° GRP/PP/13/CE2+



Product identification	PINE PLYWOOD EN 636-2 S
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Standard panel markings
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Product Types	9mm	12mm4	12mm	12,5mm	15mm	18mm	21mm	24mm	27mm	30mm
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1034
GUARAPLY PALMAS 08 GRP/PP/13/CE2+
EN 13986:2004 Bond Class 3 E1
PINE PLYWOOD EN 636-2 S XXmm
<b>Structural Components</b>

CE symbol

Notified Body number

Guararapes Trade Mark

Manufacturing mill

Year of first CE Marking

Declaration of Performance

Harmonized standard

Bond quality

Release of formaldehyde

Product identification

Product type

Intended use as structural components in humid conditions

or

CE 1034 GUARAPLY PALMAS 08 DoP GRP/PP/13/CE2+ EN 13986:2004 BondClass3 E1  
PINE PLYWOOD EN 636-2 S XXmm Structural Components

Special panel markings (attached to the standard markings, when applicable)
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Product Types	12,5mm
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<b>Wall Sheathing</b> <b>Roof Decking</b>
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Intended use as structural wall sheathing on studs


Intended use as structural roof decking on joists

Product Types	15mm	18mm	21mm	24mm	27mm	30mm
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<b>Roof Decking</b> <b>Floor Decking</b>
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Intended use as structural roof decking on joists

Intended use as structural floor decking on joists

Place and date of issue	Issued by	Signature
Palmas, 1 <sup>st</sup> July 2013.	Gerson Aldo de Souza Technical Manager	

**REACH Statement**  
**DoP N° GRP/PP/13/CE2+**



<b>Product identification</b>	<b>PINE PLYWOOD EN 636-2 S</b>									
<b>Product Types</b>	9mm	12mm4	12mm	12,5mm	15mm	18mm	21mm	24mm	27mm	30mm

<b>Name and contact address of the manufacturer</b>	<b>INDUSTRIA DE COMPENSADOS GUARARAPES</b> Rua Alcina Santos Araújo, 411, São Francisco Palmas, PR, 85555-000, BRAZIL
<b>Mill identification</b>	<b>GUARARAPES - PALMAS</b>

<b>In compliance to</b>	<b>REGULATION (EC) No 1907/2006</b> <b>OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL</b> of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
	<b>Article 33</b> Duty to communicate information on substances in articles
<b>And acknowledging the</b>	Candidate List of Substances of Very High Concern for Authorisation (published in accordance with Article 59(10) of the REACH Regulation) Last updated: 20 June 2013 to contain 144 substances.

<b>We hereby state that</b>	<b>We are the ARTICLE producer of the above mentioned product.</b>
	The above mentioned product is softwood plywood made solely of softwood veneers and bonded with phenol-formaldehyde resin, and is not treated with any chemicals.
	The above mentioned product is an ARTICLE which do not contain more than 0.1% of any of the SUBSTANCES of the SVHC list.
	<b>NOTIFICATION is thus not required for this ARTICLE.</b>

<b>Place and date of issue</b>	<b>Issued by</b>	<b>Signature</b>
Palmas, 1st July 2013.	Gerson Aldo de Souza Technical Manager	