

DECLARATION OF PERFORMANCE

DOP NR-001-17

Last Update: November 1st, 2017

MADEIREIRA RIO CLARO LTDA
 Antonio Ribeiro, St. No Number
 Phone: (42) 3463-1144 - P.O. Box 05
 84.560-000 Rio Azul - PR
 www.mrclaro.com.br
 contato@mrclaro.com.br

PINE PLYWOOD EN 636-2 S

PRODUCT	PINE PLYWOOD EN 636-2 S									
PRODUCT - THICKNESS AND PLYES	9 mm (05 Plies)	12 mm (05 Plies)	15 mm (05 Plies)	15 mm (07 PLYES)	18 mm (05 Plies)	18 mm (07 Plies)	20 mm (05 Plies)	20 mm (07 Plies)	21 mm (07 Plies)	30 mm (11 Plies)

INTENDED USES Internal use as structural components in humid conditions - (See page 3 and 4)

MANUFACTURER **MADEIREIRA RIO CLARO LTDA**
 Antonio Ribeiro Street, Without Number.
 Rio Azul -Pr,84560-000 Brazil

HARMONIZED TECHNICAL SPECIFICATION EN 13986:2004 + A1:2015

AVCP SYSTEM **2 +**

NOTIFIED BODY 1034- HFB Engineering GMBH,Leipzig -Germany
 CERTIFICATE NUMBER 1034-CPR-2094/1/2017

ESSENTIAL CHARACTERISTICS	DECLARED PERFORMANCE	TECHNICAL SPECIFICATION
Bond Quality	Class 3	EN 314-1/2 Type testing
Density	510 Kg/m ³	EN 323 Type testing
Release of formaldehyde	E1	EN 13986 Annex B Note 2
Reaction fire	D-s2, d O / Flooring -DFL -s1	EN 13986 table 8
Water vapor permeability	Wet-70 µ/ Dry -200 µ	EN 13986 table 9
Airborne sound insulation	R = 13 x lg + (m _A)	EN 13986 table 5.10
Sound absorption coefficient	0,10 / 025	EN 13986 table 10
Thermal conductivity	0,13 W/(m.K)	EN 13986 table 11
Biological durability	Class 2	EN 335 / EN 1099



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DIMENSIONAL TOLERANCES		DECLARED PERFORMANCE				TECHNICAL SPECIFICATION			
Length and width		+ 0 / -3,0 mm				EN 324-2			
Squareness		+/- 1,0 mm/m							
Straightness		+/- 1,0 mm/m							

THICKNESS TOLERANCE	Product/Piles	9 mm	12 mm	15 mm	15 mm	18 mm	18 mm	20 mm	20 mm	21 mm	30 mm
		(05 Piles)	(05 Piles)	(05 Piles)	(07 PILES)	(05 Piles)	(07 Piles)	(05 Piles)	(07 Piles)	(07 Piles)	(11 Piles)
Maximum (mm)	9,30	12,20	15,20	15,20	18,10	18,10	20,10	20,10	21,10	30,10	
Minimum (mm)	8,40	11,30	14,30	14,30	17,30	17,40	19,30	19,40	20,40	30,40	

ESSENTIAL CHARACTERISTICS

Bending Properties	Product	DECLARED PERFORMANCE										TECHNICAL SPECIFICATION			
		9 mm (05 Piles)	12 mm (05 Piles)	15 mm (05 Piles)	15 mm (07 PILES)	18 mm (05 Piles)	18 mm (07 Piles)	20 mm (05 Piles)	20 mm (07 Piles)	21 mm (07 Piles)	30 mm (11 Piles)	EN 310 Type testing			
Bending Strength (N/mm ²)	Fk,0	31,80	18,50	18,30	25,80	28,60	18,40	30,90	25,10	14,00	22,30				
	Fk,90	20,80	8,60	8,20	20,90	16,70	12,40	17,70	19,60	8,70	18,50				
Bending Stiffness (N/mm ²)	Fk,0	3.708	3.526	3.648	3.233	3.918	3.800	3.765	2.881	4.573	2.564				
	Fk,90	1.657	1.672	1.872	2.342	1.215	1.949	1.434	2.042	1.497	1.973				
Classification According to EN 636		F20/ F10 E40/ E15	F10/ F05 E35/ E15	F10/ F05 E40/ E20	F15/ F10 E35/ E25	F15/ F10 E40/ E10	F15/ F10 E40/ E10	F20/ F10 E40/ E15	F15/ F10 E30/ E20	F05/ F05 E50/ E15	F10/ F10 E25/ E20				

Mechanical durability (medium duration of load)

Modification c.k mod	0,80		EN 1995-1-1
	service class 1	service class 2	
Deformation cc k def	0,80		1,00
	service class 1	service class 2	

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Intended use (1)

Internal use structural components in humid conditions.

ESSENTIAL CHARACTERISTICS

DECLARED PERFORMANCE

TECHNICAL SPECIFICATION

EN 12369-2/EN 636

Strength and Stiffness for Structural use (N/mm ²)	Product	DECLARED PERFORMANCE										
		9 mm (05 Piles)	12 mm (05 Piles)	15 mm (05 Piles)	15 mm (07 PILES)	18 mm (05 Piles)	18 mm (07 Piles)	20 mm (05 Piles)	20 mm (07 Piles)	21 mm (07 Piles)	30 mm (11 Piles)	
Para.	Fk,0	20	10	10	15	15	15	20	15	5	10	
Perp.	Fk,90	10	5	5	10	10	10	10	10	5	10	
Para.	Fk,0	4.000	3.500	4.000	3.500	4.000	4.000	4.000	4.000	5.000	2.500	
Perp.	Fk,90	1.500	1.500	2.000	2.500	1.000	1.000	1.500	2.000	1.500	2.000	

Intended use (2)

Structural wall sheathing on studs.

ESSENTIAL CHARACTERISTICS

DECLARED PERFORMANCE

TECHNICAL SPECIFICATION

EN 12871

Fulfilled for Type: 12mm - 05 piles and 18 mm - 07 piles

fk,k=0,11 pk d ^{-0,3}	Density	Diameter					TECHNICAL SPECIFICATION
		2mm	3mm	4mm	5mm		
Embedment Strength (N/mm ²)	450	40,2	35,6	32,7	30,5		EN 1995-1-1 Item 8.3.1.3
— Nail	500	44,7	39,6	36,3	33,9		

fk,k=0,11 (1-0,01d)pk	Density	Diameter			TECHNICAL SPECIFICATION
		8mm	10mm		
Embedment Strength (N/mm ²)	450	45,5	44,6		EN 1995-1-1 Item 8.5
— Bolt	500	50,6	49,5		

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Intended use (3)

Structural roof decking on joists.

ESSENTIAL CHARACTERISTICS		DECLARED PERFORMANCE				DECLARED PERFORMANCE				TECHNICAL SPECIFICATION
Strength and Stiffness under point of load	Product and Edge Type	18 mm (05 plies)		18 mm (07 plies)		18 mm (05 plies)		18 mm (07 plies)		
		Square	T&G	Square	T&G	Square	T&G	Square	T&G	
Strength (N)	Fser	Middle	NPD	3615	NPD	NPD	NPD	NPD	NPD	EN 12871 EN1195 Type Testing
		Joint	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
	Fmax	Middle	NPD	5800	NPD	NPD	NPD	NPD	NPD	
		Joint	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Stiffness (N)	Rmean	Middle	NPD	310	NPD	NPD	NPD	NPD	NPD	
		Joint	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Impact resistance		Fulfilled		Fulfilled		Fulfilled		Fulfilled		

Intended use (4)

Structural floor decking on joists.

ESSENTIAL CHARACTERISTICS		DECLARED PERFORMANCE				DECLARED PERFORMANCE				TECHNICAL SPECIFICATION
Strength and Stiffness under point of load	Product and Edge Type	18 mm (05 plies)		18 mm (07 plies)		18 mm (05 plies)		18 mm (07 plies)		
		Square	T&G	Square	T&G	Square	T&G	Square	T&G	
Strength (N)	Fser	Middle	NPD	4120	NPD	NPD	NPD	NPD	NPD	EN 12871 EN1195 Type Testing
		Joint	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
	Fmax	Middle	NPD	6340	NPD	NPD	NPD	NPD	NPD	
		Joint	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Stiffness (N)	Rmean	Middle	NPD	465	NPD	NPD	NPD	NPD	NPD	
		Joint	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
Impact resistance		Fulfilled		Fulfilled		Fulfilled		Fulfilled		

Place and date of issue

Rio Azul/PR, November 1st, 2017

Issued by

Roberto Cezar Wronski
General Director

Signature

CE MARKING

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Product Identification

PINE PLYWOOD EN 636-2 S

STANDARD PANEL MARKINGS

Product Types	9 mm (05 Piles)	12 mm (05 Piles)	15 mm (05 Piles)	15 mm (07 PILES)	18 mm (05 Piles)	18 mm (07 Piles)	20 mm (05 Piles)	20 mm (07 Piles)	21 mm (07 Piles)	30 mm (11 Piles)
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CE	1034
	MADEIREIRA RIO CLARO LTDA RIO AZUL-PR BRAZIL
	Dop ref: 01 / CE2+ 14
	EN 13986: 2004 + A1:2015 BOND CLASS 3 E1
	PINE PLYWOOD EN 636-2 S XXmm
Structural Components	

CE symbol

Notified Body number

Madeira Rio Claro Trade Mark

Manufacturing Mill

Year of the first CE Marking

Declaration of performance

Harmonized standard

Bond Class

Release of formaldehyde

Product Identification

Product type

Intended use as structural components in humid conditions

or

CE 1034 MADEIREIRA RIO CLARO LTDA RIO AZUL-PR-BRAZIL 14 Dop ref:01 EN 13986 BOND CLASS3 E1

PINE PLYWOOD EN 636-2 XX mm Structural Components.