DECLARATION OF PERFORMANCE

Nº 001

Elliotis Pine Plywood

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1	**Identification code:**	EN 636-2 S
2	**Batch/Serial number:**	Dop ref: 001 Elliotis Pine
3	**Intended use:**	Internal use as structural components in humid conditions.
4	**Harmonized technical specification:**	EN 13986:2004
5	**Manufacturer:**	2094
6	**System of Assessment and verification of constancy of performance (AVCP)**	2+
7	**Notified body:** **Certificate nº**	HFB Engineering GmbH 1034-CPD-2094 /1/2013

8 Declared Performance

ESSENTIAL CHARACTERISTICS		PERFORMANCE									HARMONIZED TECHNICAL SPECIFICATION
Bending Strength											
Thickness/Plies	**(mm/plies)**	**09mm 05 Plies**	**12mm 05 Plies**	**15mm 05 Plies**	**15mm 07 Plies**	**18mm 05 Plies**	**18mm 07 Plies**	**20mm 05 Plies**	**20mm 07 Plies**	**21mm 07 Plies**	**30mm 11 Plies**	
Parallel	**(N/mm2)**	50,40	28,08	28,62	43,70	44,00	27,07	44,10	35,70	25,56	33,40	**ITT according to EN 310**
Perpendiculare	**(N/mm2)**	37,90	15,44	16,33	33,10	24,90	20,92	27,10	31,60	16,84	30,50	
Bending Stiffness												
Parallel	**(N/mm2)**	6330	7674	6855	5444	6473	5954	5430	4743	7953	4860	
Perpendiculare	**(N/mm2)**	3301	2624	3006	3549	2042	3725	2596	3609	3375	3609	
Classification According to EN 636		F30/F20 E60/E30	F15/F10 E70/E25	F15/F15 E60/E30	F25/F20 E50/E30	F25/F15 E60/E20	F15/F10 E50/E30	F25/F15 E50/E20	F20/F20 E40/E30	F15/F10 E70/E30	F20/F20 E40/E30	**EN 636**
Bonding Quality:		Class 2										**ITT(EN 314-1/2)**
Density	**Kg/m3**	540	540	535	545	525	530	525	530	530	540	
Release of Formaldehyde		E1										**EN 13986 Annex B,Note 2 (Use of Phenolic-Glue)**
Reaction to Fire		D-s2,d0										**EN 13986,table 8**
Water Vapour Permeability		Wet 15/Dry 50										
Airborne Sound Isolation		NPD										
Sound Absorption		0,10/0,25										
Thermal Conductivity		0,13 W(m-k)										
		Characteristics Strength for Use in Structural Design (N/mm2)										**EN 12369-2**
Thickness/Plies	**(mm/plies)**	**09mm 05 Plies**	**12mm 05 Plies**	**15mm 05 Plies**	**15mm 07 Plies**	**18mm 05 Plies**	**18mm 07 Plies**	**20mm 05 Plies**	**20mm 07 Plies**	**21mm 07 Plies**	**30mm 11 Plies**	
Bending	fm 0º	31,80	17,57	17,50	25,80	28,60	26,73	30,90	25,10	26,23	22,30	
	fm 90º	20,80	13,01	12,71	20,90	16,70	17,85	17,70	19,60	18,17	18,50	
Tension	ft, 0º	6,139	7,941	8,153	6,455	5,322	7,621	5,874	7,452	8,598	6,102	
	ft, 90º	4,256	5,871	5,740	5,551	4,333	6,277	4,661	6,187	7,456	5,003	
Compression	fc, 0º	15,152	17,803	17,535	18,811	12,221	9,811	14,404	18,800	16,241	15,334	
	fc, 90º	13,122	14,000	14,374	16,662	10,123	9,020	11,021	13,556	14,458	13,228	
Shearing	fv	3	3	3	3	3	3	3	3	3	3	
	fr	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	
		Characteristics Stiffness (N/mm2)										
Bending	Em 0º	3.708	3.430	3.513	3.233	3.918	3.567	3.765	2.881	4.267	2.564	
	Em 90º	1.657	1.555	1.681	2.342	1.215	1.881	1.434	2.042	1.373	1.973	
Tension	Et, 0º	3.688,81	3.142,19	2.676,94	3.222,10	2.991,11	3.008,39	2.602,02	3.330,06	3.436,32	3.226,57	
	Et,90º	2.772,32	2.379,87	2.318,70	2.441,84	2.555,07	2.225,71	2.504,04	1.444,08	1.392,91	2.222,24	
Compression	Ec, 0º	3.777,10	3.619,21	3.782,19	3.505,01	2.441,11	3.282,58	2.331,17	3.335,24	3.264,10	3.200,06	
	Ec, 90º	2.396,51	2.287,44	2.035,11	2.008,81	2.111,03	3.286,06	2.007,77	3.114,22	2.151,04	2.441,41	
Shearing	Gv	300										
	Gr	20										

Characteristic strength under point load				**Wall**	**Roof**	**Floor**	
Elliotis Pine Plywood 18mm - 07 Plies Tongue And Groove	**Ultimate**	**Fmax**	**Middle**	Fulfilled	3.680	5.117	**EN 12871**
			Joint		2.832	4.211	
	Serviceability	**Fser**	**Middle**		2.235	3.493	
			Joint		2.473	2.632	
	Characteristic stiffness under point load	**R**	**Middle**		230	593	
			Joint		163	451	
	Impact resistance				Fulfilled	Fulfilled	
Biological durability	**Class 2**						**EN 335/EN 1099**

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

Rio Azul/PR, July 1, 2013

Roberto Cezar Wronski
General Director