TRANSLATION
FROM TURKISH INTO ENGLISH

Accredited by TURKAK (Turkish Accreditation Agency)
HEADSHIP OF TSE TEST & CALIBRATION CENTER
CONSTRUCTION MATERIALS LABORATORY (GEBZE)
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Test
TS-EN-ISO-IEC-17025
AB-0001-T
397794
03-18

TEST REPORT

Customer (Name, Address, City, etc.)	: GAZIANTEP CERTIFICATION INSTITUTION (Certification Specialist HASAN ALPDOGAN) (PETEK PLYWOOD INDUSTRY & TRADE INC.) (TURGUT OZAL KUCUK SANAYI SITESI EBULFEYZ ELCIBEY BULVARI NO: 12/A SAHINBEY-GAZIANTEP)
Inspection No.	: 1724953
Order Date/No.	: 15.01.2018 / 201122
Sample Description (No., Type, Mark, Model, etc.)	: 384614 - BIRCH PLYWOOD FOR USE IN EXTERIOR CONDITIONS - POWERPLYWOOD
Test Item Receipt Date	: 15.01.2018
Date of Test	: 29.01.2018 - 27.03.2018
Applied Standard/Method	: TS EN 636:2012+A1:2015-08:2015-08 Plywood - Specifications
Number of Pages of The Report	: 4
Remarks	: Results of inspection and tests are POSITIVE.

The Turkish Accreditation Agency (TURKAK) is signatory to the multilateral agreements of The European Co-Operation for The Accreditation (EA) and of The International Laboratory Accreditation (ILAC) for the mutual recognition of test reports.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.

Seal	Date	Person in Charge of Tests	Reviewer	Approved By
(official seal)	27.03.2018	Ibrahim ILKHAN Technician (signature)	Ahmet Onder ELIRI Technical Cheif (By Proxy) (signature)	Feyyaz ASKIN Laboratory Director (signature)

This test report represents only tested sample(s), amd shall not be used as Product Certificate.

YEMİNLİ TERCÜMAN
İLYAS ÇEKET
Turkish <-> English
Certified Public Translator

3.3. PLYWOOD FOR USE IN EXTERIOR CONDITIONS (EN 636-3)

This plywood will be used at a moisture content higher than Service Class 2 in climate conditions. These conditions are suitable for ENV 1995-1-1, Service Class 3.

This type of panels specified on EN 335-3 are suitable to use in Biological Attack Class 1, Biological Attack Class 2, Biological Attack Class 3.

Note: This plywood is suitable and have the capacity to show resistance on ventilable places in exterior conditions, liquid water or water hole steam in accordance with Article 9.2.

6.General Properties

6.1. Dimentional tolerances will be specified in accordance with EN 315.

Declaration of The Company: Panel Dimensions=18*1250*2500 mm

Specification	Test Method	Tolerances in Standard (TS EN 315)	Available						Result
			L_1	L_2	L_3	L_4	L_5	L_6	
Panel Thickness	*EN 324-1	Specified in Table 1	0,06	0,05	0,06	0,08	0,07	0,05	U
Nominal Thickness	*EN 324-1	Calculated in accordance with Table 1	-0,05	-0,07	0,05	-0,06	-0,06	-0,06	U
Length	*EN 324-1	±3,5 mm	2,0	1,0	2,0	2,0	1,0	2,0	U
Width	*EN 324-1	±3,5 mm	2,0	2,0	1,0	1,0	1,0	0,0	U
Edge Smoothness	EN 324-2	1 mm/m	0,40	0,40	0,40	0,40	0,48	0,40	U
Deviation from Perpendicularity (Squareness)	EN 322	1 mm/m	0,60	0,50	0,50	0,50	0,60	0,50	U

Table 1- Thickness Tolerances (TS EN 315)

Nominal Thickness	Unsanded Panels		Sanded Panels	
	Thickness Tolerances in Panel mm	Nominal Thickness Tolerances mm	Thickness Tolerances in Panel mm	Nominal Thickness Tolerances mm
≥3	1,0	+ (0,8 + 0,03 t)	0,6	+ (0,2 + 0,03 t)
≤12		- (0,4 + 0,03 t)		- (0,4 + 0,03 t)
>12	1,5	+ (0,8 + 0,03 t)	0,6	+ (0,2 + 0,03 t)
≤25		- (0,4 + 0,03 t)		- (0,4 + 0,03 t)
>25	1,5	+ (0,8 + 0,03 t)	0,8	+ (0,0 + 0,05 t)
≤30		- (0,4 + 0,03 t)		- (0,4 + 0,05 t)
>30	1,5	+ (0,8 + 0,03 t)	0,8	+ (0,0 + 0,03 t)
		- (0,4 + 0,03 t)		- (0,4 + 0,03 t)

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TSE	**HEADSHIP OF TSE TEST & CALIBRATION CENTER** **CONSTRUCTION MATERIALS LABORATORY (GEBZE)** **TEST RESULTS**	AB-0001-T 397794 03-18

6.2. Mechanical Properties

6.2.1. General

Table 1- Flexural Strength Classes for Plywood

Flexural Strength		
Class		Lower Limit Value (N/mm^2)
$f_{m,0}$ $f_{m,90}$	F3	5
	F5	8
	F10	15
	F15	23
	F20	30
	F25	38
	F30	45
	F35	52
	F40	60
	F50	75
	F60	90
	F70	105
	F80	120

Table 2- Flexural Modulus Classes for Plywood

Flexural Modulus		
Class		Lower Limit Value (N/mm^2)
$e_{m,0}$ $e_{m,90}$	E5	450
	E10	900
	E15	1350
	E20	1800
	E25	2250
	E30	2700
	E35	3150
	E40	3600
	E50	4500
	E60	5400
	E70	6300
	E80	7200
	E90	8100
	E100	9000
	E120	10800
	E140	12600

Declaration of The Company: F5/10, E10/20

Mechanical Properties of General Purpose Plywood for Use in Exterior Conditions

Properties	Flexural Strength Longitudinal Axis	Flexural Strength Transverse Axis	Flexural Elastic Modulus Longitudinal Axis	Flexural Elastic Modulus Transverse Axis
Unit	N/mm^2		N/mm2	
Test Method	*TS EN 310		*TS EN 310	
Lq 5% (Lower Limit)	59,2	63,9	7454	6752
Required Values (In accordance with Declaration of The Company: Lower Limit Values in Table 1 and Table 2	8	15	900	1800
L_1	71,6	81,8	8664	8074
L_2	63,1	71,0	8053	8043
L_3	69,0	78,4	7842	7843
L_4	65,0	78,7	8367	8241
L_5	76,2	68,7	9201	7134
L_6	75,6	70,6	8959	7129
Average	70,1	74,9	8514	7744
Panel' s Average Standard Deviation Value	6,379	4,562	112,480	254,118
Standard Deviation betwwen Panel Average	5,403	5,410	525,0	491,0
Result	U	U	U	U

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TSE	HEADSHIP OF TSE TEST & CALIBRATION CENTER CONSTRUCTION MATERIALS LABORATORY (GEBZE) TEST RESULTS	AB-0001-T 397794 03-18

9. Properties of Plywood for Use in Exterior Conditions (EN 636-3)

9.1. Bonding Quality

Bonding quality will be suitable for conditions specified on EN 314-2, Bonding Class 3.

Provide two criterions in each bonding line for the whole three bonding classes. Average shear strength and wood defect average value for bonding will be suitable for conditions specified on Table 2. (TS EN 314-2)

Table 2-Properties

Average Shear Strength f_v Newton/mm^2	Wood Defect Average Value for Bonding %
$0,2 \leq f_v < 0,4$	≥80
$0,4 \leq f_v < 0,6$	≥60
$0,6 \leq f_v < 1,0$	≥40
$1,0 \leq f_v$	N/A

Assignment of Bonding Quality of General Purpose Plywood for Use in Exterior Conditions

Panel No.	Average Shear Strength f_v N/mm^2	Wood Defect Average Value for Bonding %	Result
1	4,61	---	U
2	4,96	---	
3	4,61	---	
4	4,27	---	
5	1,48	---	
6	1,41	---	

12. MARKING

Directly affix marking or extra information on the product or affix label on the package or deliver with commercial documents.

If there are no marking rules regarding panels abd packages, marking will include the below-mentioned information.	Result
Manufacturer' s Business Title (logo) or Code,	U (In accordance with Analysis Report & Test Request Form on 05.01.2018)
This standard is TS EN 636 and terms of use (1 for dry conditions, 2 for humid conditions, or 3 for exterior conditions,	
Application class letter: "S" for Structural Application or "G" for General Application,	
Formaldehyde oscillation class or "only use for exterior conditions" (use plywood for exterior conditions in unassigned class)	

Note: Methods marked by (*) take place in the scope of accreditation.

U: Applicable under specified conditions.

UD: Not applicable under specified conditions.

NU: Not applicable for this test.

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