



TURKISH STANDARDS INSTITUTION
HEADSHIP OF TSE TEST and CALIBRATION CENTRE
CONSTRUCTION MATERIALS LABORATORY
GEBZE DIRECTORATE



TURKISH STANDARDS INSTITUTION
HEADSHIP OF TSE TEST and CALIBRATION CENTRE
CONSTRUCTION MATERIALS LABORATORY GEBZE DIRECTORATE

QUALITY CAMPUS GEBZE/KOCAELI

Tel: 02627231454

Fax:

e-mail: GebzeYapiMalz.LabMud@tse.org.tr

www.tse.org.tr

Test
TS EN ISO/IEC 17025
AB-0001-T

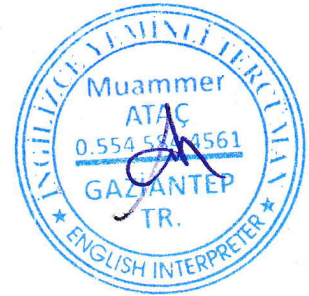
AB-0001-T

401102

12-22

INSPECTION AND TEST REPORT
TEST REPORT

Requestor/Company : (Name, Address, City, etc.) Requesting/Customer (Name, Address, City etc.)	PETEK PLYWOOD INDUSTRY AND TRADE ANONİM ŞİRKETİ A.Ş.
Review No Inspection No	2483363
Test Request Date / No: Order Date/No.	25.11.2022 / 2022-221534
Description of Sample : (Type, Brand, Class, Type, Type, Type, Model etc.) Sample Description (Type, Mark, Class, Model etc.)	2022-377580, SANDED 'TWIN' PLYWOOD WITH BIRCH COVER USED IN EXTERNAL CONDITIONS, HERCULES, 2500*1250*18 MM, 6.00, pcs
Sample Acceptance Date : Sample Receipt Date	21.11.2022
Date of Experiments : Date of Test	01.12.2022 / 13.12.2022
Standard Method Applied : Applied Standard/Method	TS EN 636: 2012 + A1 / Plywood - Specifications
Number of pages of the report : Number of pages of the report	4
Experiment Result : Test Result	It is suitable in terms of experiments performed
Remarks : Remarks	



The results obtained from the inspection and tests carried out in our laboratory for the sample described above are given on the following pages. The testing and / or measurement results are given on the following pages which are part of this report.

For the test results for which a Declaration of Conformity is given in this report, the rules specified in the LAB-D-PR-18 Decision Rule Procedure published on the TSE website have been applied. Rules described in "LAB-D-PR-18 Decision Rule Procedure", which is published on TSE Web site have been applied to the test result for which Conformity Declaration is given in this test report.

TSE Test and Calibration Centre Directorate Test Laboratories, which operate as test laboratories, are accredited by TÜRKAK with AB-0001-T according to TS EN ISO/IEC 17025:2017 standard. TSE Headship of Test and Calibration Centre Testing Laboratories accredited by TÜRKAK under registration number AB-0001-T for TS EN ISO/IEC 17025:2017 as test laboratory.

TURKAK has signed a Multilateral Agreement with the European Accreditation Association (EA) and a mutual recognition agreement with the International Laboratory Accreditation Cooperation (ILAC) for the recognition of test reports. TURKAK is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports.

Test and/or measurement results, expanded measurement uncertainties (where applicable) and test methods are given on the following pages, which are an integral part of this report.

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.

QR Code QR Code	Date Date	Experimenter/Controller Person in charge of test	Reviewer	Approved by Head of Laboratory
	13.12.2022	ILKKAY AKPINAR	AHMET ÖNDER ELİRİ	ARZU KOŞAR

This report may not be partially copied or reproduced without the written permission of the laboratory that prepared it. Reports without signature and QR code are invalid. This report is valid only for the sample tested and does not replace the "Product Certificate". This test report shall not be reproduced other than in full except with the written permission of the laboratory. Test reports without signature and seal are not valid. This test report represents only tested sample(s), and shall not be used as Product Certificate.

This document has been signed electronically.

Verification address: <https://basvuru.tse.org.tr/uye/QRKodDogrulama?code=DCDFDC>



3.3-PLYWOOD USED IN EXTERNAL CONDITIONS (EN 636-3)

Plywood used in climatic conditions where the moisture content is higher than Service Class 2. NOTE1

These requirements correspond to Service class 3 in ENV 1995-1-1.

NOTE 2 This type of sheet is suitable for use in biological Hazard class 1, Hazard class 2 and Hazard class 3 in EN 335-3.

Note 3 : This plywood is capable of withstanding outdoor weather conditions, flowing water or puddle vapour in ventilated environments, provided that Article 9.2 is taken into account.

6 General Specifications

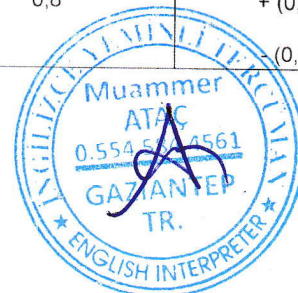
Dimensional tolerances are determined according to EN 315.

Company Declaration Sheet dimensions= 2500*1250*18MM

Feature	Experiment Method	Tolerances in the standard (TS EN 315)	Found in						CONCLUSION
			L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	
Thickness in one plate	*EN 324-1	As seen in Table 1	0,09	0,08	0,09	0,09	0,07	0,07	U
Nominal thickness	*EN 324-1	Calculated according to Table 1	0,10	0,09	0,10	0,07	0,07	0,07	U
Length	*EN 324-1	± 3.5 mm	2,0	2,0	0,0	1,0	0,0	2,0	U
Width	*EN 324-1	± 3.5 mm	2,0	1,0	0,0	1,0	1,0	1,0	U
Smoothness of Edges	EN 324-2	1 mm/m	0,80	0,88	0,72	0,88	0,72	0,72	U
Steepness Deviation (from miter)	EN 324-2	1 mm/m	0,9	0,9	1	1	0,9	0,9	U

Table 1 Thickness tolerances (TS EN 315)

Nominal Thickness (t)	Not sanded sheets		Sanded sheets	
	Thickness tolerance on one sheet mm	Nominal thickness tolerances mm	Thickness tolerance on one sheet 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)





5 Classification System

Table 1 Bending for Plywood Strength Classes

Bending Strength		
Classroom	Lower Limit Value (N/mm) ²	
f _{m,0} /f _{m,90}	F 3	5
	F 5	8
	F 10	15
	F 15	23
	F 20	30
	F 25	38
	F 30	45
	F 35	52
	F 40	60
	F 50	75
	F 60	90
	F 70	105
	F 80	120

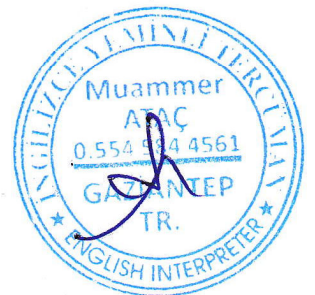
Table 2 Bending for Plywood Module Classes

Bending Modulus		
Classroom	Lower Limit Value (N/mm) ²	
E _{m,0} /E _{m,90}	E 5	450
	E 10	900
	E 15	1350
	E 20	1800
	E 25	2250
	E 30	2700
	E 35	3150
	E 40	3600
	E 50	4500
	E 60	5400
	E 70	6300
	E 80	7200
	E 90	8100
	E 100	9000
	E 120	10800
	E 140	12600

Company Declaration: F20/10, E30/15

Mechanical properties for General Purpose Plywood used in external conditions

Feature	Unit	Experiment Method	L _q %5 (Lower Limit)	VALUES SOUGHT (Company declaration lower limit values taken from Table 1 and Table 2)	Found in						General Average	Mean Standard Deviation Value of Plates	Standard Deviation between the Means of the Plates	CONCLUSION
					L ₁	L ₂	L ₃	L ₄	L ₅	L ₆				
Flexural Strength Longitudinal (f) _{m,90}	N/mm ²	*TS EN 310	43,1	30,0	78,4	66,6	56,1	53,2	56,7	73,6	64,1	6,833	10,397	U
Flexural Strength Transverse (f) _{m,0}			24,4	15,0	34,8	44,3	34,2	34,2	37,8	27,5	35,4	2,819	5,485	U
Flexural Modulus of Elasticity Longitudinal (E) _{m,90}	N/mm ²	*TS EN 310	5461	2700	8500	8291	6627	6512	6492	8105	7421	139,234	970,4	U
Flexural Modulus of Elasticity Transverse (E) _{m,0}			2750	1350	3959	4242	3949	4161	4391	2790	3915	241,789	576,9	U





9 Specifications for plywood used in outdoor conditions (EN 636-3)

9.1 Adhesion Quality

The adhesion quality must comply with the properties given in adhesion class 3 in EN 314-2.

For all three adhesion classes, two criteria must be met at each bond line. The average shear strength and the average values of wood defects visible at the bond line must comply with the values shown in Table 2.(TS EN 314-2)

CHART 2- Specifications

Average Shear Strength f_v Newton/mm ²	Average value of wood defects visible at the bond line %
$0.2 \leq f_v < 0.4$	≥ 80
$0.4 \leq f_v < 0.6$	≥ 60
$0.6 \leq f_v < 1.0$	≥ 40
$1.0 \leq f_v$	Not required

Determination of adhesion quality for General Purpose Plywood used in outdoor conditions

Lehva No	Average Shear Strength f_v N/mm ²	Average value of wood defects visible at the bond line %	CONCLUSION
1	3,64	-	U
2	3,63	-	
3	3,43	-	
4	3,79	-	
5	3,37	-	
6	2,97	-	

12 MARKING

The following information should be applied directly on the product or on the package by means of indelible direct printing in accordance with the sequence.	CONCLUSION
Manufacturer's name (logo) or code,	U
The number of this standard, TS EN 636 and conditions of use (1 for dry conditions, 2 for humid conditions, or 3 for outdoor conditions),	
Commercial or botanical name of the wood used in plywood production	
Letter indicating the application class: "S" for structural application or "NS" for non-structural application,	
Formaldehyde release class or "for outdoor use only" (for plywood to be used outdoors, if no class is assigned)	

Note : Methods marked with * are within the scope of accreditation.

EXPLANATION:

- Complies with the specified conditions (U)
- Not requested. (TE)
- This test is not applicable to the specimen (NU)

LAB-D-FR-36 /11.06.2020-6

'4/4

I, Muammer ATAÇ, hereby certify that I am competent to translate from the Turkish Language into English Language and that the attached document is a true and accurate translation of the original document.

Muammer Ataç
Gaziantep Certified Translation & Consulting Service.
Add: Gazimuhatarpaşa Blv. Doktorlar Sitesi Asma Kat No: 85 Şehitkamil Gaziantep Turkey

