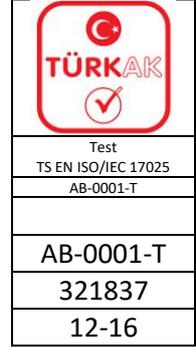




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HEADSHIP OF TSE TEST and CALIBRATION CENTER
CONSTRUCTION MATERIALS FIRE AND ACOUSTICS LABORATORY
DIRECTORATE

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TEST REPORT

Requesting/Customer: (Name, Address, City etc.)	HASOĞLU KOMPOZİT YAPI MALZ. VE MAK. SAN. TIC. LTI. ŞTİ.: YAYLA MAH. FEVZİ ÇAKMAK CAD. İHSN EKMEKÇİ SOK. NO: 17/B-TUZLA-İSTANBUL)
Order Date / No:	18.10.2016 / 165029
Sample Description: (No, Type, Mark, Model etc.)	WOOD COMPOSITE DECK RAISED FLOORING, KANENZO ...4.00 items
Test Item Receipt Date:	18.10.2016
Date of Test:	18.10.2016 – 01.12.2016
Applied Standard/Method:	TS EN ISO 9239-1:2011-01 Reaction of flooring to fire tests – Part 1: Determination of burning behaviour using radiant heat source (ISO 9239-1:2010)
Number of pages of the report:	5
Remarks:	

The Turkish Accreditation Agency (TÜRKAK) 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.

This test report was prepared upon customer's request, can not be used as certificate of conformity to standards, does not represent a batch and can not be used as conformity document for advertisements and procurements.

Seal and Date
[Seal] 01/12/2016

Person in charge of tests
[Signature]
Ceran Kezban GÜL
Ass. Expert

Reviewer
[Signature]
Sencer GÜVEN
Technical Chief

Approved by
[Signature]
Metehan ÇALIŞ
Laboratory Manager

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

LAB-D-FR-36/01.09.2016-1



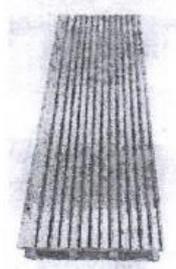
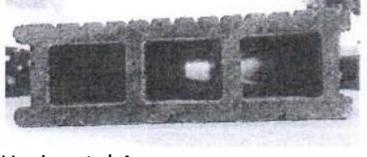
TEST RESULTS

TS EN ISO 9239-1 Reaction of flooring to fire tests

Part 1: Determination of burning behaviour using radiant heat source

Sponsor (Name and Address)	HASOĞLU KOMPOZIT YAPI MALZ. VE MAK. SAN. TIC. LTI. ŞTI. YAYLA MAH. FEVZI ÇAKMAK CAD. İHSN EKMEKÇİ SOK. NO: 17/B-TUZLA-İSTANBUL)
Requested by (Name and Address)	HASOĞLU KOMPOZIT YAPI MALZ. VE MAK. SAN. TIC. LTI. ŞTI. YAYLA MAH. FEVZI ÇAKMAK CAD. İHSN EKMEKÇİ SOK. NO: 17/B-TUZLA-İSTANBUL)
Producer (Name and Address)	HASOĞLU KOMPOZIT YAPI MALZ. VE MAK. SAN. TIC. LTI. ŞTI. YAYLA MAH. FEVZI ÇAKMAK CAD. İHSN EKMEKÇİ SOK. NO: 17/B-TUZLA-İSTANBUL)
Date of Test	18.10.2016

Sample Details

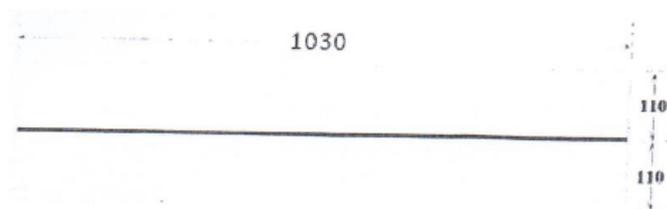
Sample Receiving Date	24.11.2016	
Name of Sample	"Kanenzo" Trademark Wood Composite Deck Flooring	
Description of Sample	Composite flooring material with (140 mm x 3 m) and (140 mm x 6 m) dimensions, produced from HDPE, with no fitting slots to attach each other, with lengthwise empty grooves inside, providing raising from floor level when installed and composed of flooring parts, with lengthwise groove line patterns and brown wood appearance.	
	 Vertical Appearance	 Horizontal Appearance
Thickness	Composite board with patterns	25.0 mm
	Grooves inside board	15.0 mm
Weight per unit area	15.8 kg/m ² (average value measured at laboratory)	

Sample Taking and Preparation

Samples are taken and dimensioned by the producer and sent to laboratory. Samples are located on sample holder with base board but without fixing to base board. Calcium silicate board with dimensions of 1030 mm x 220 mm with specifications given in TS EN 13238:2010 standard is used for base board.



TEST RESULTS



Conditioning

Samples are conditioned for 4 weeks at 23 C and 50% moisture environment before test according to Article 4.3.c of TS EN 13238.

Deviation from Test Method

There is no deviation from test method.

Heat Flow Profile

Distance (mm)	Heat Flow	Graphic
110	10,52	
210	9,01	
310	6,88	
410	4,93	
510	3,40	
610	2,34	
710	1,69	
810	1,23	
910	0,92	

Results

General

	Sample 1	Sample 2	Sample 3	Sample 4
Period until starting of burning on sample (s)	129	135	141	135
Maximum flame spread (mm)	560	550	540	570
Critical heat flor, CHF (kW/m ²)	2,81	2,95	3,06	2,73
Time until maximum flame spread (s)	1800*	1800*	1800*	1800*
Time until dying of flame (s)	1800*	1800*	1800*	1800*

* Flame was died by the operator at the end of test period.



TEST RESULTS

Flame Propagation				
Distance to "0" point	Time for flame to reach related distance (s)			
	Sample 1	Sample 2	Sample 3	Sample 4
50	153	153	156	147
100	249	222	228	252
150	321	315	300	309
200	393	390	360	387
250	462	465	420	441
300	543	576	504	531
350	657	711	612	654
400	831	957	822	822
450	1101	1257	1050	1110
500	1410	1554	1482	1475
550	1728	1800	0	1692
600	0	0	0	0
650	0	0	0	0
700	0	0	0	0
750	0	0	0	0
800	0	0	0	0
850	0	0	0	0
900	0	0	0	0

Heat Flow and Smoke Formation				
	Sample 1	Sample 2	Sample 3	Sample 4
HF-10 (kW/m ²)	6,46	6,79	6,35	6,57
HF-20 (kW/m ²)	3,96	4,41	3,82	4,10
HF-30 (kW/m ²)	2,81	2,95	3,06	2,73
CHF (kW/m ²)	2,81	2,95	3,06	2,73
LA _{max} (%)	290,91	201,61	173,92	168,05
TLA _{total} (%.min)	312,07	207,77	180,07	176,46

Critical heat flow average (CHF) : 2,9

Total light attenuation (TLA) : 222

Graphics

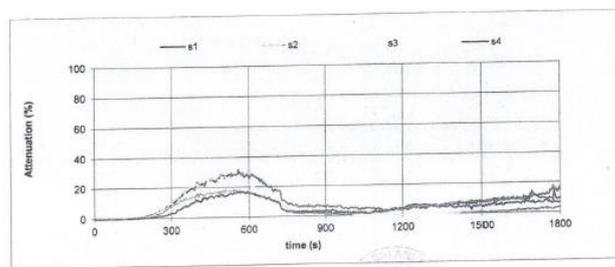


Figure 1 Light attenuation vs time graphic



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TEST RESULTS

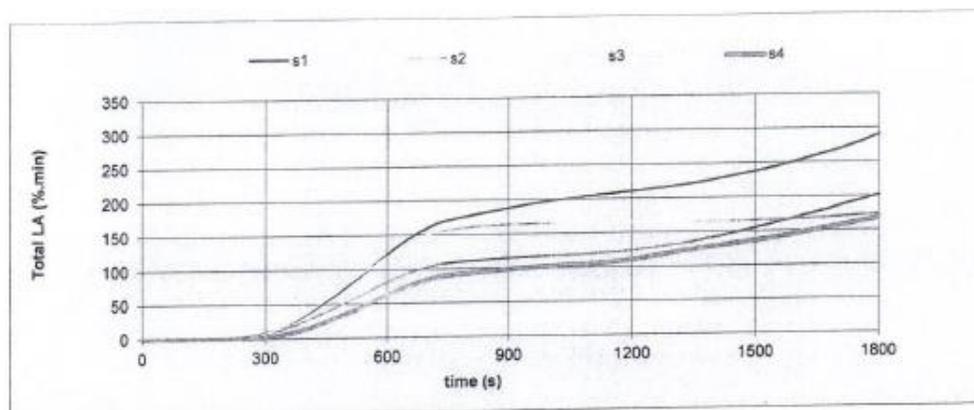


Figure 2 Time vs Light Attenuation Graphic

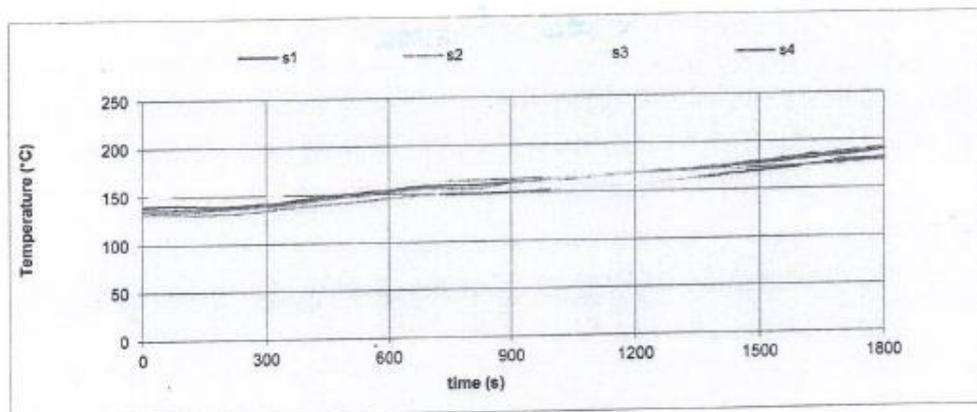


Figure 3 Time vs Temperature Measured inside Cabin Graphic

This test result is related with behaviour of test sample of a product under special conditions of test and is not sufficient as criteria for evaluation of potential fire danger of a product under real usage conditions.

End of test report.