TÜRK STANDARDLARI ENSTİTÜSÜ
DENEY ve KALİBRASYON
MERKEZİ BAŞKANLIĞI
KAYSERİ LABORATUVAR MÜDÜRLÜĞÜ

TURKISH STANDARDS INSTITUTION
HEADSHIP OF TSE TEST and CALIBRATION CENTER
KAYSERİ LABORATORY MANAGEMENT

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

AB-0001-T
307780
10-23

MUAYENE VE DENEY RAPORU
TEST REPORT

Deneyi Talep Eden/Firma : ***(Adı, Adresi, Şehir vb.)*** *Requesting/Customer (Name, Adress, City etc.)*	KOMPEN PVC YAPI VE İNŞAAT MALZEMELERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ LADİK MAH. YENİ İSTANBUL CAD. KOMPEN PVC FAB. NO:1075 /Z1 SARAYÖNÜ
Deney Talep Tarih / No : *Order Date/No.*	18.08.2023 / 2023-198093
Numunenin Tanımı : ***(Cins, Marka, Sınıf, Tip, Tür, Model vb.)*** *Sample Description (Type,Mark,Class,Model etc.)*	2023-248967, 800 sash window serial, "Kompen,Bauplast,Fensterbau,Komline,Noble,advance" branded, Double leaf sliding U-PVC, PVC, 1.00, adet
Numune Kabul Tarihi : *Sample Receipt Date*	12.09.2023
Deneylerin Yapıldığı Tarih : *Date of Test*	12.10.2023 / 12.10.2023
Uygulanan Standart Metot : *Applied Standard/Method*	TS EN 14351-1: 2006+A2 Pencereler ve yaya geçişine uygun hazır dış kapılar
Raporun Sayfa Sayısı : *Number of pages of the report*	12
Deney Sonucu : *Test Result*	-
Açıklamalar : *Remarks*	"This report is the translation of the the test report with 14.08.2023 date and 243276 report number and the results in this report based on the results in the previous report in question. New test has not been conducted."

Yukarıda tanımlanan numune için laboratuvarımızda yapılan muayene ve deneylerden elde edilen sonuçlar müteakip sayfalarda verilmiştir.
The testing and /or measurement results are given on the following pages which are part of this report.

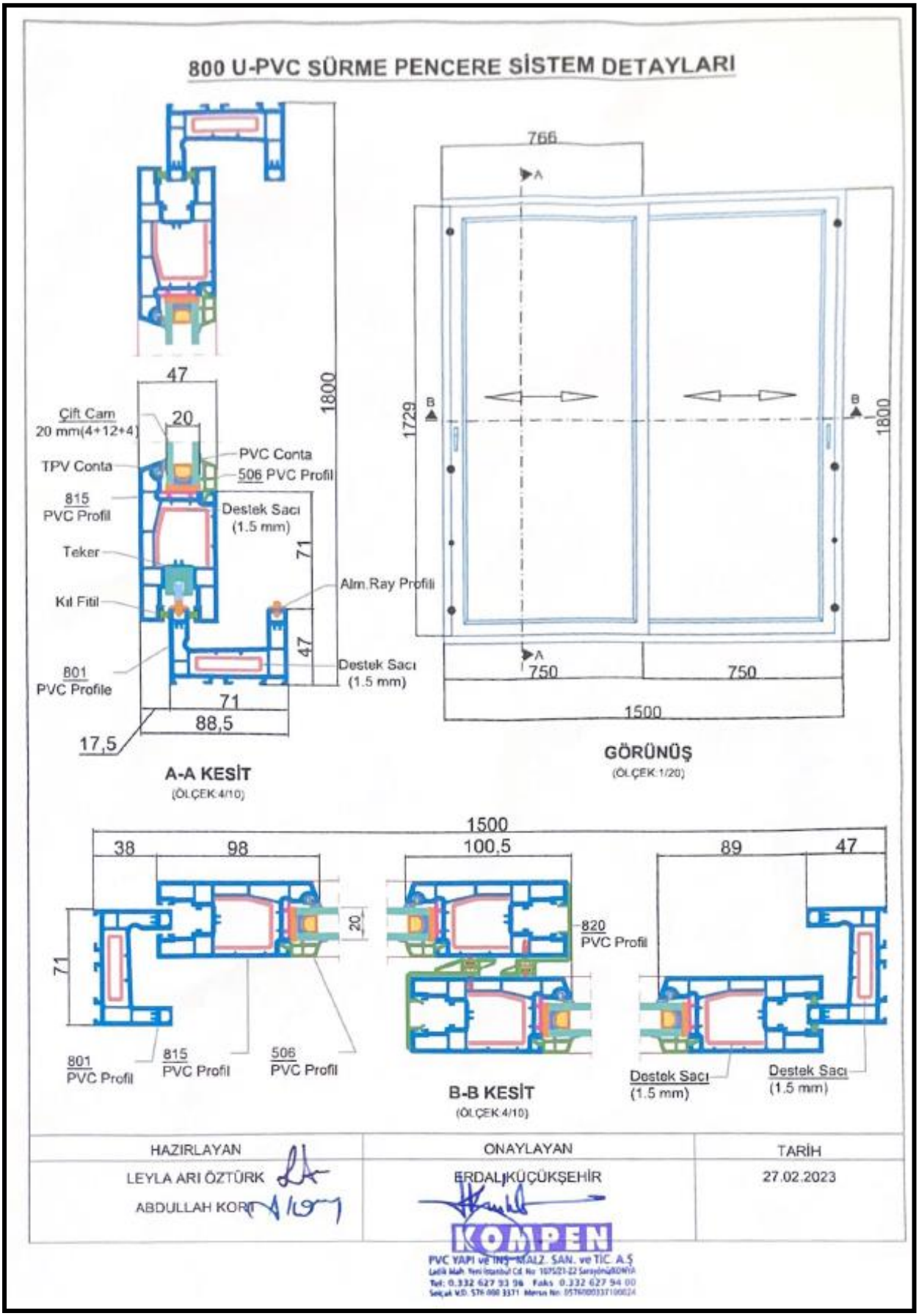
Deney laboratuvarları olarak faaliyet gösteren TSE Deney ve Kalibrasyon Merkezi Başkanlığı Deney Laboratuvarları TÜRKAK'tan AB-0001-T ile TS EN ISO/IEC 17025:2017 standardına göre akredite edilmiştir.
TSE Headship of Test and Calibration Center Testing Laboratories accredited by TÜRKAK under registration number AB-0001-T for TS EN ISO/IEC 17025:2017 as test laboratory.
TÜRKAK deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır.
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.
Deney ve/veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metodları bu raporun tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.
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.

Karekod *QR Code*	**Tarih** *Date*	**Deney Sorumlusu** *Person in charge of test*	**Kontrol Eden** *Reviewer*	**Onaylayan** *Head of Laboratory*
	12.10.2023	HAKAN DEMİRHAN	YUSUF GÖKŞEN	HAKAN CANPOLAT

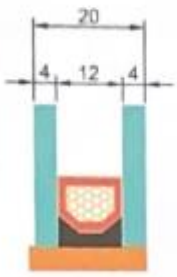
1. SAMPLE DESCRIPTIONS

Date Of Sample Entering To The Test Store	30.05.2023	
Conditioning Date	09.08.2023 – 10.08.2023	
Start-End Date of the Test Sample	10.08.2023 – 11.08.2023	
Recieving Way of Test Sample	Special Inspection (Delivered by the company)	
Production place	Konya	
Sample Type	PVC Window System	
Brand	"Kompen, Bauplast, Fensterbau, Komline, Noble, advance" declared by the company.	
Model/Series	Declared by the company as ”800 sash window”	
Opening Type / Opening Way	Double leaf casement slide window	
Acoustic Test Sample;		
Frame Size (width x height x depth)(mm)	1500 mm x 1800 mm x 70 mm	
Leaf Size (width x height x depth)(mm)	765 mm x 1725 mm x 47 mm	
Glass Properties	4mm (float glass) +12 (air filled)+ 4mm (float glass)	
Frame support sheet	1,5 mm	
Middle fit support sheet	-	
Leaf support sheet	1,5 mm	
Connection fixings	Declared by the company as T&T slide espagnolettes	
Connection fixings	-	
Connection fixings	3 points of locking on window’s hand side	
Gasket	There is no case gasket, Leaf TPV gasket slat PVC gasket and corner welded	
Handle	Declared by the company as aluminum T&T coated	

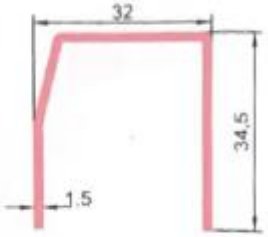
1.1. Technical Drawinngs Of The Test Sample



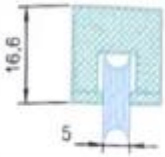
800 U-PVC SÜRME PENCERE SİSTEM DETAYLARI



Çift Cam
20 mm (4+12+4)
U:2.9 W/m²K

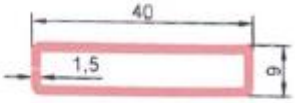


Destek Sacı (Metal)
S:1.5 mm

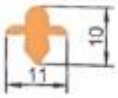


Teker

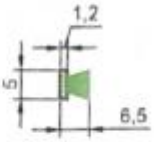
TPV Conta PVC Conta



Destek Sacı (Metal)
S:1.5 mm



Alüminyum Ray Profili



Kıl Fitil

ÖLÇEK: 1/1

KOMPEN PVC KAPI PENCERE SİSTEMLERİ komline PVC Window and Door Systems
Bauplast FENSTERBAU Kunststoff - Fenster - Systeme
NOBLE by KOMPEN advance by KOMPEN

HAZIRLAYAN	ONAYLAYAN	TARİH
LEYLA ARI ÖZTÜRK ABDULLAH KORT	ERDAL KÜÇÜKŞEHİR	27.02.2023

KOMPEN
PVC YAPI ve İNŞ. MAL. SAN. ve TİC. A.Ş

2. Sample Views and Connection Figures to the Experiment

Air, Water and Wind

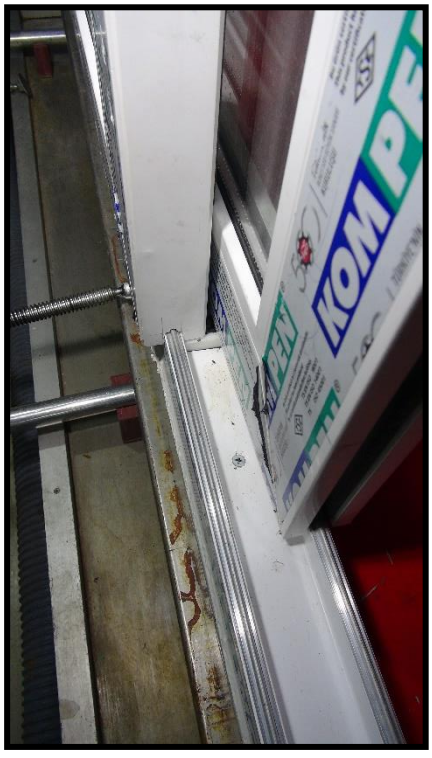
Air, Water and Wind

Watertightness Test

Details

Details

Details



Details

3. TEST AND INSPECTION RESULTS

3.2.Air Permeability (TS EN 1026)		
Temperature: 22,5°C	**Humidity (%rH) : % 55**	

Test Method: Results are calculated with proportion of positive and negative test pressure to the window surface area and the seam length.

Seam Length: 4,980 (m) Window Surface Area: 2,700 (m^2)

Air Loss Pressure

Pressure measure	Pa Nominal		50	100	150	200	250	300	450	600	General Class
	Pa Actual		50	100	150	200	249	302	450	601	
	Air Permeabilty Qc	m³/h	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
	Air Permeability		**8,58**	**14,65**	**20,12**	**24,84**	**29,26**	**36,15**	**50,82**	**63,06**	
	Seam Length	m³/(h.m)	1,72	2,94	4,04	4,99	5,87	7,26	10,21	12,66	
	Class		2	2	2	2	2	2	0	0	2
	Window Surface	m³/(h.m²)	3,18	5,42	7,45	9,20	10,84	13,39	18,82	23,36	
	Class		3	3	3	3	3	3	3	3	3
							General Class Pressure				**3**

Air Loss Suction

Suction measure	Pa Nominal		-50	-100	-150	-200	-250	-300	-450	-600	General Class
	Pa Actual		-50	-100	-151	-200	-251	-302	-452	-600	
	Air Permeabilty Qc	m³/h	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
	Air Permeability		**7,78**	**13,49**	**18,69**	**23,24**	**26,84**	**31,27**	**42,02**	**51,87**	
	Seam Length	m³/(h.m)	1,56	2,71	3,75	4,67	5,39	6,28	8,44	10,42	1,56
	Class		2	2	2	2	2	2	0	0	2
	Window Surface	m³/(h.m²)	2,88	5,00	6,92	8,61	9,94	11,58	15,56	19,21	
	Class		3	3	3	3	3	3	3	3	3
							General Class Suction				**3**

Air Loss Average Value

Average value	Absulate in Pa Nominal		50	100	150	200	250	300	450	600	General Class
	Absulate in Pa Actual		50	100	151	200	250	302	451	601	
	Air Permeabilty Qc		8,18	14,07	19,40	24,04	28,05	33,71	46,42	57,47	
	Air Permeability		1,64	2,82	3,90	4,83	5,63	6,77	9,32	11,54	
	Seam Length		2	2	2	2	2	2	0	0	2
	Class		3,03	5,21	7,19	8,90	10,39	12,48	17,19	21,28	
	Window Surface		3	3	3	3	3	3	3	3	3
							General Class Average				**3**

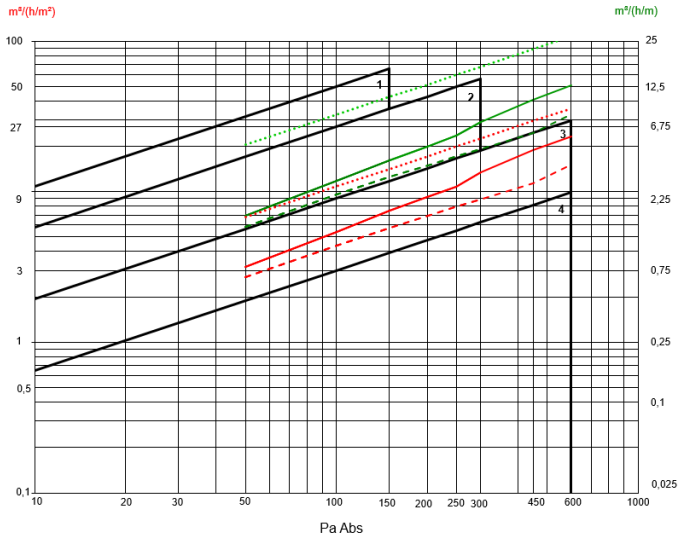
General Class Pressure	**3**
General Class Suction	**3**
General Class Pressure and Suction	**3**

Average Value	**3**

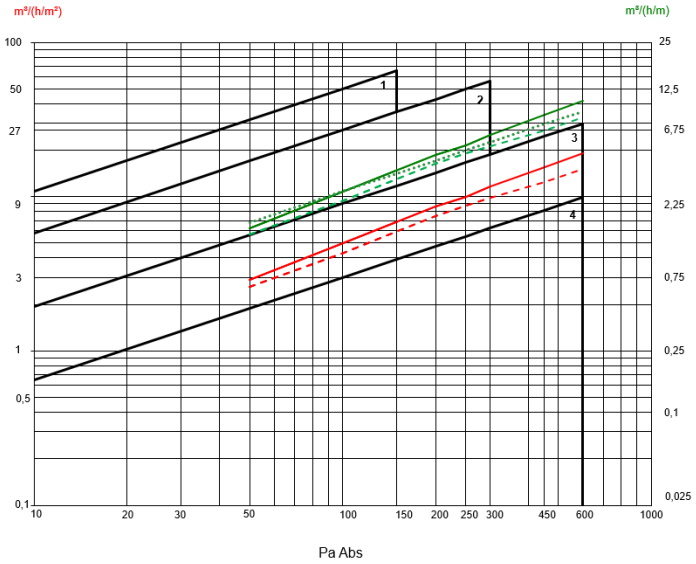
ND: Test no carried out

Classification Graph

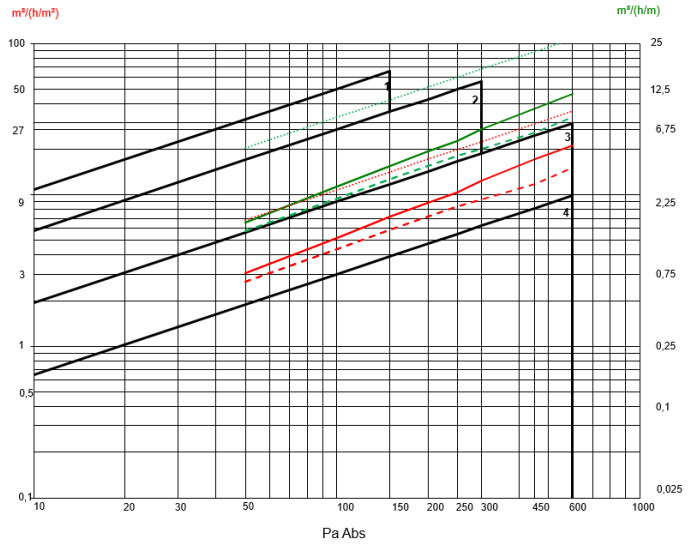
Classification according to Window Surface
Classification according to Seam Length



Air Loss Pressure



Air Loss Suction



Air Loss Average Value

Air permeabilty, watertightness, resistance to wind load test equipment	
Air permeabilty, watertightness, resistance to wind load test equipment	**K.Schulten branded, KS 3030/650 Model, P1943 Serial Number**

3.3.Watertightness (TS EN 1027)		
Temperature : 22 ,5°C	**Humidity (% rh) : % 55**	

Test Method: The test is performed with positive test pressures and with the test bench mentioned in the standard.

Class	Pressure (Pa)		Time	Water Enterance		Observation
	Nominal:	Actual:		Dripping	Flowing	
A1	0	0	00:15:00	00:00:00	00:00:00	**OK**
A2	50	50	00:05:00	**00:04:54**	**00:04:56**	**NOT OK**
A3	100	100	00:05:00	00:00:00	00:00:00	**NOT OK**
A4	150	151	00:05:00	00:00:00	00:00:00	**NOT OK**
A5	200	200	00:05:00	00:00:00	00:00:00	**NOT OK**
A6	250	251	00:05:00	00:00:00	00:00:00	**NOT OK**
A7	300	301	00:05:00	00:00:00	00:00:00	**NOT OK**
A8	450	451	00:05:00	00:00:00	00:00:00	**NOT OK**
A9	600	602	00:05:00	00:00:00	00:00:00	**NOT OK**

The last pressure that no water entry 0 Pa

Classification according to EN 12208	Class	**A1**

ND: Test not carried out

3.4.Resistance to wind load (TS EN 12211)

Temperature: 22,5°C	Humidity (% rH): %55	

Class	P1 (Deflection test)	P2 (Pressure cycle test)	P3 (Safety test)
0	Test not carried out.		
1	400	200	600
2	800	400	1200
3	1200	600	1800
4	1600	800	2400
5	2000	1000	3000
Exxx	AExxxx	BExxxx	CExxxx
Resistance to wind load test is performed according to class 3 pressure group			

Deflection Test (± 1200 Pa)

Measurements done at the sash					
Test Pressure (Pa)	Deflection at P1 Pressure (Upper Part)(mm)	Deflection at P1 Pressure (Middle Part)(mm)	Deflection at P1 Pressure (Lower Part)(mm)	Deflection at P1 Pressure (calculation)(mm)	Deflection after 60s removing the P1 pressure (mm)
	Measurement Points	Measurement Points	Measurement Points	Measurement Points	Measurement Points
	Mp	Mo	Mp	f	f
1200	-3,86	-9,22	-2,84	5,87	0,05
-1200	3,91	2,32	2,91	1,09	

Classification based on relative deflection

Class	Relative Deflection
A	< 1/150
B	< 1/200
C	< 1/300

1200 Pa Results of Deflection Test

Test Pressure (Pa)	1200
Deflection perpendicular to surface (mm)	9,22
Relative Deflection Perpendicular to surface (mm/mm)	9,22/1779
Surface Deflection Classification	C3
Declared Class	**C3**

Pressure Cycle Test (50 Cycles)

Positive and Negative P2 Test Pressure (Pa)	Cycle Count	Result
± 600	50	No Damage

Safety Test (± 1800 Pa)

Positive and Negative P3 Test Pressure (Pa)	RESULT
± 1800	No Damage

3.5. Air Permeabilty (TS EN 1026) (Results do not exceed the first results by 20%)

Test Method: Results are calculated with proportion of positive and negative test pressure to the window surface are and seam length.

Air Loss Pressure

Air Loss Pressure	Pa Nominal		50	100	150	200	250	300	450	600	General Class
	Pa Actual		50	100	151	201	251	300	450	603	
	Air Permeabilty Qc	m³/h	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
	Air Permeabilty		**7,28**	**11,84**	**15,57**	**18,56**	**21,45**	**23,86**	**30,63**	**40,73**	
	Seam Length	m³/(h.m)	1,46	2,38	3,13	3,73	4,31	4,79	6,15	8,18	
	Class		2	2	2	2	2	2	0	0	2
	Deviation from first measurement < 20%		OK	OK	OK	OK	OK	OK	OK	OK	OK
	Window surface	m³/(h.m²)	2,70	4,39	5,77	6,87	7,94	8,84	11,34	15,09	
	Class		3	3	3	3	3	3	3	3	3
	Deviation from first measurement < 20%		OK	OK	OK	OK	OK	OK	OK	OK	OK
							General Air Loss Pressure Class				**3**

Air Loss Suction

Air Loss Suction	Pa Nominal		-50	-100	-150	-200	-250	-300	-450	-600	General Class
	Pa Actual		-50	-101	-151	-200	-251	-301	-451	-603	
	Air Permeabilty Qc	m³/h	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
	Air Permeabilty		**7,06**	**11,73**	**16,25**	**20,30**	**23,68**	**26,41**	**33,43**	**40,54**	
	Seam Length	m³/(h.m)	1,42	2,35	3,26	4,08	4,76	5,30	6,71	8,14	
	Class		2	2	2	2	2	2	0	0	2
	Deviation from first measurement < 20%		OK	OK	OK	OK	OK	OK	OK	OK	OK
	Window surface	m³/(h.m²)	2,62	4,34	6,02	7,52	8,77	9,78	12,38	15,01	
	Class		3	3	3	3	3	3	3	3	3
	Deviation from first measurement < 20%		OK	OK	OK	OK	OK	OK	OK	OK	OK
							General Suction Class				**3**

Air Loss Average Value

Average Value	Absolute in Pa Nominal		50	100	150	200	250	300	450	600	General Class
	Absolute in Pa Actual		50	101	151	201	251	301	451	603	
	Air Permeability	m³/h	7,17	11,78	15,91	19,43	22,56	25,14	32,03	40,64	
	Seam Length	m³/(h.m)	1,44	2,37	3,20	3,90	4,53	5,05	6,43	8,16	
	Class		2	2	2	2	2	2	0	0	2
	Deviation from first measurement < 20%		OK	OK	OK	OK	OK	OK	OK	OK	OK
	Window Surface	m³/(h.m²)	2,66	4,36	5,89	7,20	8,36	9,31	11,86	15,05	
	Class		3	3	3	3	3	3	3	3	3
	Deviation from first measurement < 20%		OK	OK	OK	OK	OK	OK	OK	OK	OK
							General Average Class				**3**

Classification after second measurment according to EN 12207

	Class	20% Condition
General Air Loss Pressure Class	3	OK
General Air Loss Suction Class	3	OK
General Average Class	3	
Meeting the Condition		OK

	Class	20% Condition
Average Class	**3**	OK
Meeting the Condition		OK

ND: Test not carried out.

(*): This test is within the scope of accreditation
(s) (C): This result complies with the stated condition
(s) (NC): This result does not comply with the stated condition
(X): This test could not be done with the capability of the laboratory
(NA): This test is not applicable for this sample
(NR): This test is not requested
(ND): This test is not evaluated since declariton/conditions are not stated

4. Results and Assessments

The tests are performed according to **(TS EN 1026)** air permeability**, (TS EN 1027)** watertightness, **(TS EN 12211)** resistance to wind load which mentioned in **(TS EN 14351-1:2006+A2)**. Test were carried out on the PVC window samples branded ”Kompen, Bauplast, Fensterbau, Komline, Noble, advance” with double leaf casement slide window special test request form numbered 2023-43981 28.02.2023 dated, delivered to the laboratory by **KOMPEN PVC YAPI VE İNŞAAT MALZEMELERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ** company. Test results are stated in the relevant articles.

Note: This report has prepared as 12 pages and 1 copies at 14.08.2023
Note: This report is translated as 12 pages at 12.10.2023.

*This report is only valid for the tested samples.