Internationally accredited

Test report no.	**69961/05-II**
Customer:	EGE PROFIL TICARET VE SANAYI A.S. Atatürk Organize Sanayi Bölgesi 10003 Sokak Nr.: 5 35510 Cigli-Izmir TURKEY
Production plant:	35510 Cigli-Izmir TURKEY
Test:	Testing and classification of window profiles made of PVC-U according to EN 12608:2003
System:	ZENDOW
Designation of profile:	ZENDOW KANAT 60 (ZENDOW SASH 60)
Designation of formulation:	9610101
Basis of stabilisation:	lead
Manufacturer of compound:	EGE-Profil A.S., 35510 Cigli-Izmir, Turkey
Test samples received on:	2005-09-16
Test period:	2005-10-06 to 2005-10-19
Result:	The requirements according to EN 12608 were met.
Classification:	**EN 12608 - S - II - B**

This test report consists of 5 pages and 1 enclosure.

Würzburg, 2005-12-15
Br/ste

i. V.
Dr. Anton Zahn

SKZ – TeConA GmbH Internationally accredited

i. A.
Dr.-Ing. Armin Merten

SKZ – TeConA GmbH
Testing, Quality Assurance, Certification
Friedrich-Bergius-Ring 22
97076 Würzburg

Managing Director:
Dr.-Ing. Martin Bastian
HRB 7840
Amtsgericht Würzburg

Tel.: +49 931 41 04-0
Fax: +49 931 41 04-273
eMail: info@skz.de
www.skz.de

Deutscher Akkreditierungs Rat
DAP-PL-2005.00
DAP-IS-2005.00

1. Order

The company EGE PROFIL TICARET VE SANAYI A.S., Atatürk Organize Sanayi Bölgesi, 10003 Sokak No. 5, 35510 Cigli - Izmir, TURKEY, ordered the following test to be carried out at SKZ - TeconA GmbH in their E-Mail dated September 20, 2005: Testing and classification of window profiles made of PVC-U according to EN 12608:2003

2. Test material

SKZ - TeConA GmbH had the following test material at their disposal on September 16, 2005:

6 x 1 m and 3 welded corners, sash profile, made of PVC-U

Profile designation:	ZENDOW KANAT 60
Profile marking:	EGE PROFIL TS 5358 EN 12608 S I B 12611-1 090605 III

3. Execution of test

The tests described below were carried out according to EN 12608, unplasticised polyvinylchloride (PVC-U) profiles for the fabrication of windows and doors, classification, requirements and test methods, German version, 2003 edition.

Usually our reports are based on accredited standards. The list of all accredited standards is shown on the homepage at www.skz.de.

3.1 Material characteristics

The material characteristics were tested according to EN 12608, annex A. The test results were taken over from test report no. 64918/04, issued by SKZ - TeConA GmbH.

3.2 Appearance

The profile sections sent were subjected to visual inspection. The surface shall be smooth, flat and free from pitting, impurities, cavities and other surface defects. The edges of the profiles shall be clean and burr-free.

3.3 Dimensions

The dimensional test and the test in respect of deviation from straightness were carried out according to item 6.2, test method.

For the dimensional test of the profile sections, the requirements according to item 5.3 and additional features from the profile drawing were taken into consideration.

3.4 Determination of mass

The determination of the mass of the profile sections was carried out according to item 6.3, test method.

3.5 Heat reversion

The test was carried out according to EN 479 on 3 samples.

3.6 Resistance to impact by falling mass

The test was carried out according to EN 477 on 10 samples.

The samples, stored at -10 °C, were tested according to classification II (falling mass 1000 g, falling height 1500 mm).

3.7 Behaviour after heating at 150 °C

The test was carried out according to EN 478 on 3 samples.

3.8 Weldability

The weldability test was carried out according to EN 514, compression bending test. The breaking stress was determined in N/ mm².

3.9 Weathering resistance

The colour fastness and weathering resistance tests were carried out according to EN 513, method 2, simulation of severe climate, climate zone S. The test results were taken over from test report no. 50127/02, as this is a test in respect of a specific formulation.

In deviation of the specifications of EN 513, samples with a notch radius of 0.1 mm were tested.

Our experience has shown that the results achieved by samples with a notch radius of 0.1 mm can be transferred to tests with a notch radius of 0.25 mm.

4. Results

4.1 Material characteristics

The requirements according to EN 12608, annex A, were met.

The test results have been documented in test report no. 64918/04, issued by SKZ - TeConA GmbH.

With respect of the classification of Charpy impact strength, the requirement of at least 20 kJ/ m² was met.

4.2 Appearance and condition as delivered

The profiles were smooth, the edges were clean and burr-free. No lines, streaks, stains or other surface defects were found.

4.3 External dimensions and functional dimensions as well as wall thickness class B and deviation from straightness in mm:

Measuring point	Actual value	Required value	Deviation
1	59.4	59.0 ± 0.5	0.4
2	59.9	60.0 ± 0.5	-0.1
3	70.3	70.0 ± 0.3	0.3
4	2.4	2.5 ± 0.3	-0.1
5	12.4	12.2 ± 0.3	0.2
6	16.4	16.2 ± 0.3	0.2
7	2.3	2.5 ± 0.3	-0.2
8	4.6	4.5 ± 0.3	0.1
Wall thickness	2.7	≥ 2.5	---
Wall thickness	2.1	≥ 2.0	---
Wall thickness	2.1	≥ 2.0	---
Wall thickness Gasket groove	1.9 *)	≥ 2.0	-0.1

*) In deviation of the wall thickness requirements, the wall thickness in the gasket groove area is 1.9 mm. For such cases, a transition period until December 31, 2009 for adapting extrusion tools is provided in the Standard and the minimum wall thickness in the gasket groove is 1.2 mm.

Deviation from straightness in mm/m Actual value: 1.0 Required value: ≤ 1

4.4 Mass per meter in g/m — Actual value: 1340 — Required value: 1330
Deviation from required value in % — Actual value: 0.8 — Required value: ≥ -5

4.5 Heat reversion

	Heat reversion in % Required value: ≤ 2.0						**Difference between sight surfaces**		
	Sight surface 1			**Sight surface 2**			**Required value: ≤ 0.4**		
Sample	1	2	3	1	2	3	1	2	3
	1.4	1.4	1.4	1.5	1.5	1.5	0.1	0.1	0.1

4.6 Resistance to impact by falling mass (class II, falling height 1500 mm)

Breaking rate in % — Actual value: 10 — Required value: ≤ 10

4.7 Behaviour after heating: — no complaints

4.8 Weldability

mean breaking stress in N/mm² — Actual value: 44.7 — Required value: ≥ 35 N/mm²
smallest single value in N/mm² — Actual value: 38.7 — Required value: ≥ 30 N/mm²

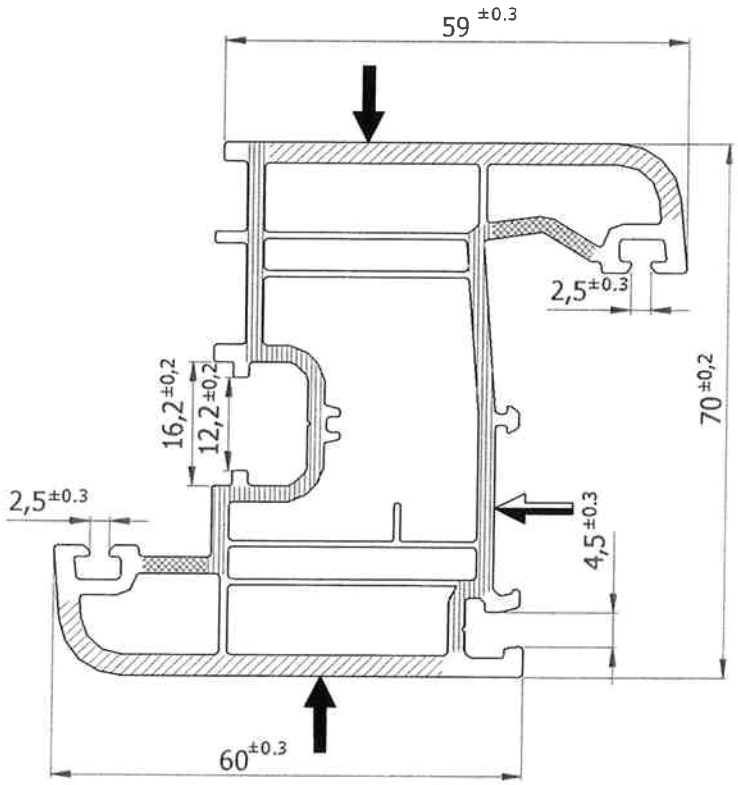
4.9 Weathering resistance

The requirement from EN 12608 in respect of weathering resistance (impact strength after artificial weathering and colour fastness) with classification S (severe climate) was met.

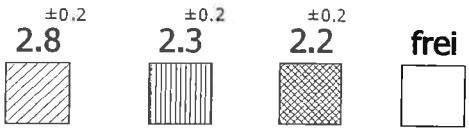
The test results have been documented in test report no. 50127/02, issued by SKZ - TeConA GmbH.

P12611

Profilhersteller : EGE PROFIL TICARET VE SANAYI A.S.
System : ZENDOW
Produkhonsstaette : IZMIR
EN 12608



Kugelfallstellen		:	←
Profilsignlerstellen		:	←
Metergewicht		:	(1.330 - 1.370 kg/m)
Schweisseignung	Fbξ	:	3851 N
Widerstandsmoment	W(mm³)	:	9437 mm³
Abstand der kritischen Faser	e (mm)	:	40.23 mm
Lange des Innenschenkels	Li (mm)	:	202.4 mm



EGE PROFİL deceuninck ENGINEERING DEPARTMENT		Scale	A 1/1 D G B E H C F I	Product Name : ZENDOW KANAT 60mm ZENDOW SASH 60mm			
			Signature	Date			
Drawer	Yücel ÖZBEY		06.10.05	Pr.No	12611	Mat.	PVC
Control	Didem KALE		06.10.05	A (mm2)	934.8283	Per.(mm)	950.3719
Control	Osman DEMIREL		06.10.05	Rev.	0	Ix (cm4)	58.6144
Approval	Ethem GÖKMEN		06.10.05	Draw.No	EP-0195	Iy (cm4)	37.9661