Prüfzentrum für Bauelemente
Dipl.-Ing. (FH) Rüdiger Müller

Fenster · windows
Rollläden · shutters
Türen + Tore · doors
Fassaden · curtain walling
Baubeschläge · building hardware

July 13, 2016 RM/YA

TEST REPORT NO. 16/06-A001-B3

Version 1.en

PfB-Internal-No. 16/08-A328

Sound Insulation calculation according to EN 14351-1 : 2006 + A1 : 2010 "Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics"

Order No.	16/06-A001
Applicant	Deceuninck Ege Profil Tic. ve San.A.Ş. 10003 Sokak No:5 AOSB 35620 Çiğli / İzmir Turkiye
Product type	Inward opening single sash sliding door with fixed side part, PVC , double glazing
Product name	**Legend Slide**
Conducted tests	- Sound Insulation
Test Certificate	No. 16/06-A001-Z3 of July 13, 2016 issued by **PfB**
Responsible test person	Dipl.-Ing. (FH) Rüdiger Müller

This report consists of 5 pages. The following are included as appendix:
- 3 Pages technical documentation (attachment 1 to 3 of 3)

Content

1 Introduction and Scope

The customer Deceuninck-Ege profil confirmed the order by mailing the submission form on the 14 June 2016 to **PfB** Turkey, Ataturk Oganize Sanayi Bolgesi 10045 Sokak No 7, 35620 Çiğli – Izmir, Turkey. With the delivery of drawings, the applicant requested calculation of sound insulation R_w (C;Ctr) in accordance with Annex B of EN 14351-1 : 2006 + A1 : 2010. It was performed in collaboration between **PfB** Turkey and the notified Body inspection authority Prüfzentrum für Bauelemente (**PfB**) on 21 June 2016.

The test results were classified according to below standards:

- EN 14351-1 : 2006 + A1 2010 "Windows and doors – Product standard";

2 Test Sample

2.1 Sampling and Test Sample Labelling

The test sample was delivered to **PfB** on 20 June 2016 by Ege profil. The test sample was delivered mounted in a steel sub frame (cross section 100 mm x 100 mm). The jointing between door frame and mounting frame was sealed by practical guidance.

Test sample	Labelling by customer	Labelling by **PfB**
Inward opening single sash sliding door with fixed side part, PVC , double glazing	**Legend Slide**	16/06-A001-P1

2.2 Technical Documentation

On 18 July 2016 the customer completed drawings and technical fact sheets with regard to the test sample submitted by e-mail. They have been provided with a **PfB** endorsement and attached to this test report. The applicant is responsible for the correctness and accuracy of the statements. These statements were reviewed only at random by **PfB:**

- "Legend sürme 1-A" (attachment 1)
- "Legend sürme 1-B" (attachment 2)
- "Glass performance" (attachment 3)

2.3 Technical Data of the Test Sample

Test sample no. 16/06-A001-P1

Inward opening single sash sliding door with fixed side part, PVC , double glazing:

Total outside dimension (w x h): 2200 mm x 2300 mm,

Casement dimensions (w x h): 1115 mm x 2135 mm,

Profile cross section: Frame approx. 149 mm x 65 mm,
Casement approx. 76 mm x 69 mm,

Sealing:	TPE
Closing/Locking system:	Siegenia Aubi
- right/left	2 hook pin on handle side
- fastening	2 screw per fixing plate,
Glazing/infill:	4-16-4 double glazing, air, dry sealing.

More details of the configuration of the test sample are given in 2.2 Technical Documentation.

2.4 Documentation of Test Sample

For documentation of the sample digital photos were taken, which will be archived together with the sample pieces of the gaskets for 10 years by **PfB**.

3 Calculation Bases

The calculations were performed using methods and formulas given in EN 14351-1 : 2010-03 Annex B for sound insulation. Material characteristics (values of sound insulation) as specified in EN 14351-1 : 2010-03 and according to applicant's specifications.

4 Results

4.1 Sound Insulation according to EN 14351-1

The specimen satisfies air tightness performance of class 4 according to EN 14351-1, for test result see Technical documentation (for air tightness verification see PfB report "16/06-A001-Z1").
The glazing of the specimen was referred to the technical information from the manufacturer following noise levels: structure 4 - 16 - 4 R_W (C; Ctr) = 29 (-1, -4) dB. After reaching the standard EN 14351-1 Annex B, Tables B1 to B3 with these types of glazing following weighted sound reduction measures in dB:

Size of Specimen	Double glazing	4 - (12-16) - 4
Area $\leq$ 2,7 m²	R_w (C;Ctr) dB	**32 (-1;-5)**
2,7 m² $\leq$ Area $\leq$ 3,6 m²	R_w (C;Ctr) dB	**31 (-1;-5)**
3,6 m² $\leq$ Area $\leq$ 4,6 m²	R_w (C;Ctr) dB	**30 (-1;-5)**
Area > 4,6 m²	R_w (C;Ctr) dB	**29 (-1;-5)**

5 General

This Test Report is intended for the applicant only and must not be published, wholly or in part, without prior permission of both the applicant and **PfB**.

Test Certificate No. 16/06-A001-Z3 was issued for publication purposes.

The original document will be sent to the customer. The customer also receives a copy of the document in pdf format. One copy remains with **PfB**.

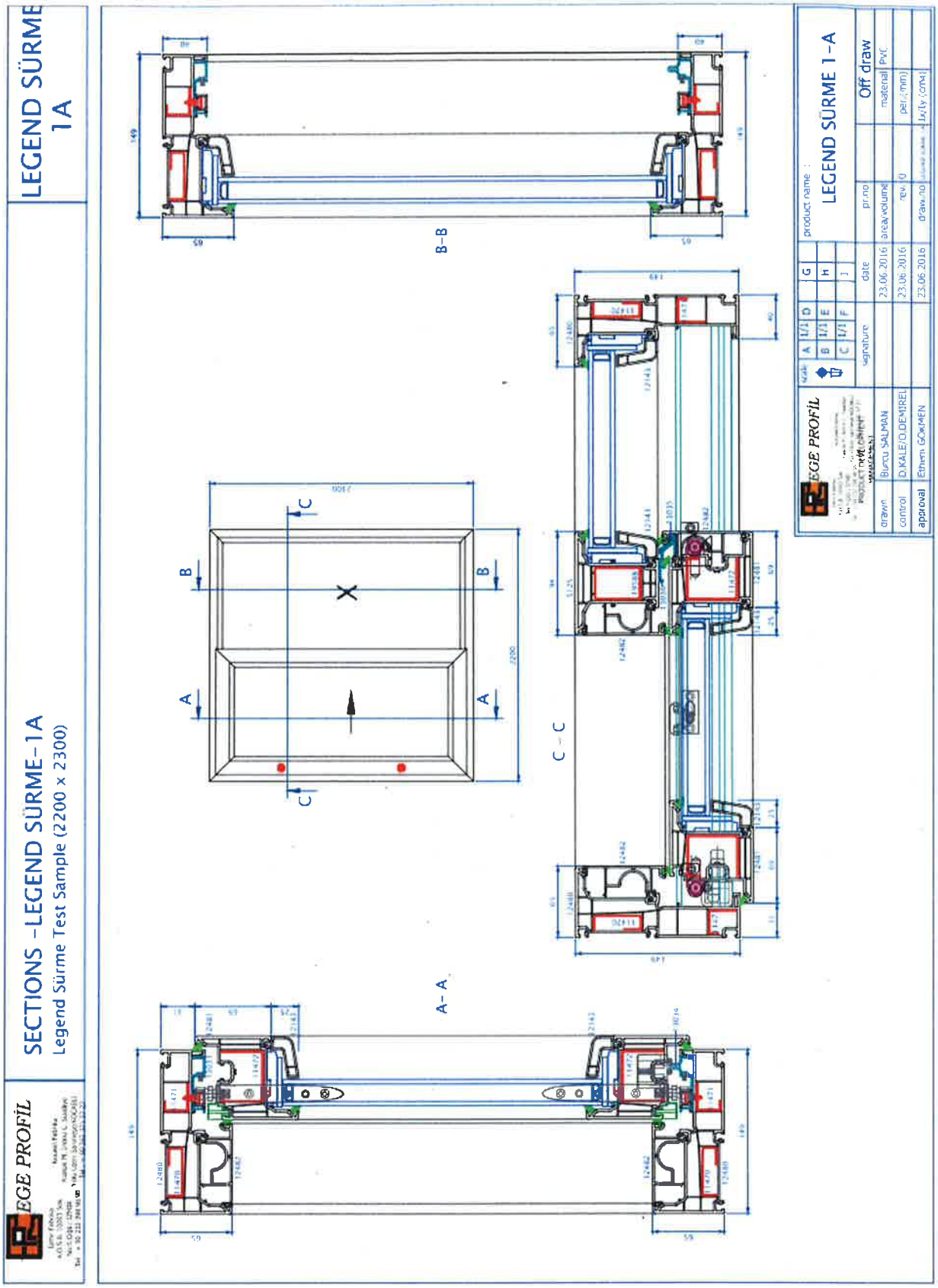
PfB declares that they can not be claimed for recourse with regard to the content of the report.

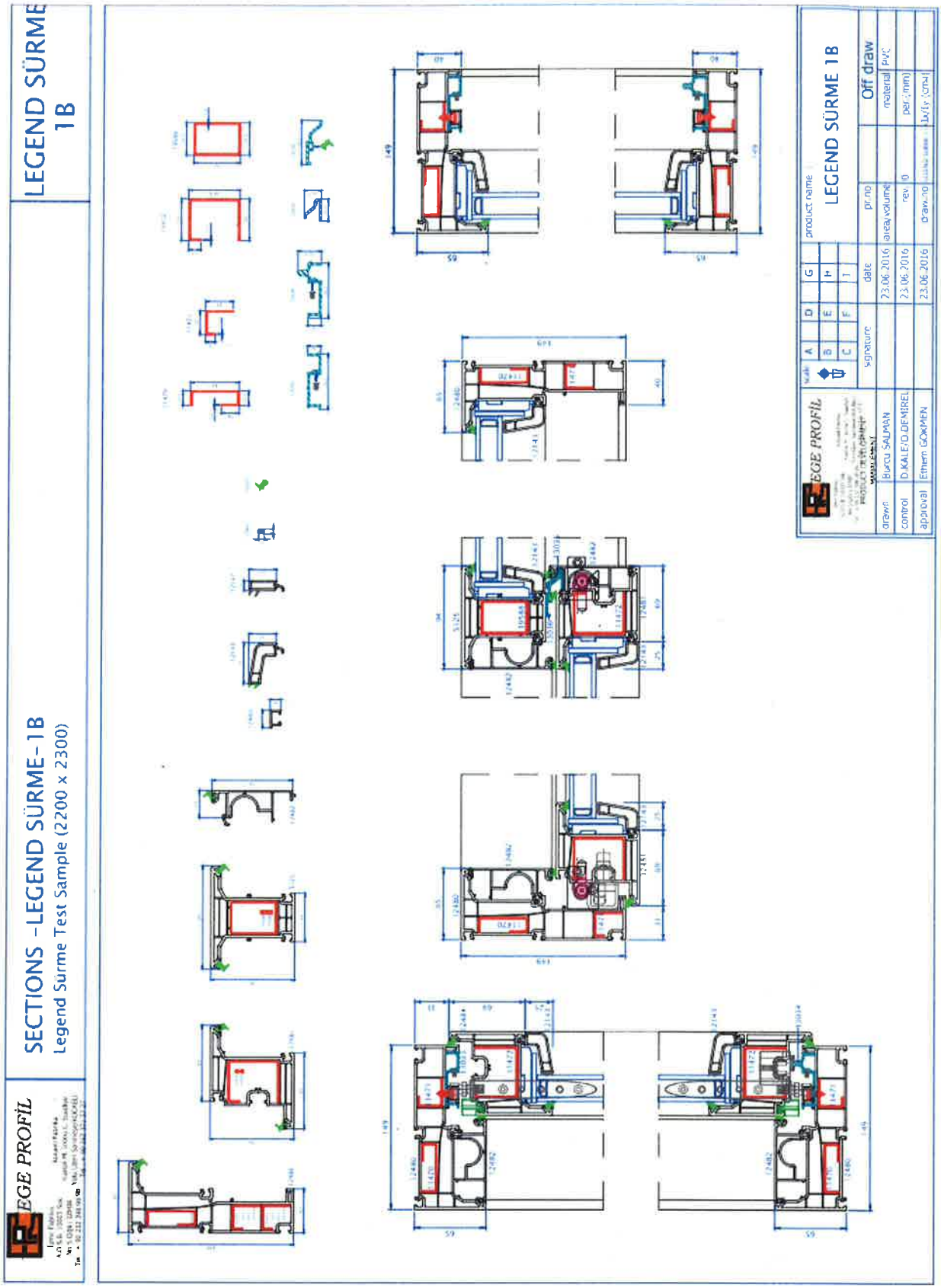
This report is valid as long as the Standard EN 14351-1: 2006 + A1 : 2010 is in force and no essential changes of the structure and/or production procedure has been taken place.

Dipl. Ing. (FH) Rüdiger Müller
Head of Institute

Stephanskirchen
July 13, 2016

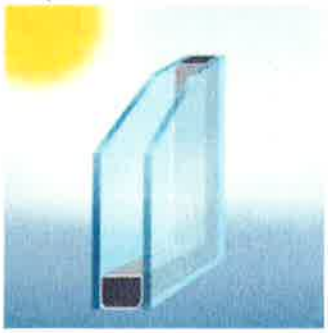
Yiğit Altuğ
Responsible Official


LEGEND SÜRME 1A
SECTIONS -LEGEND SÜRME-1A
Legend Sürme Test Sample (2200 x 2300)
EGE PROFİL
B-B
C - C
A - A
product name : LEGEND SÜRME 1-A
Off draw
pr.no
date
23.06.2016
area/volume
material PVC
per.(mm)
rev. 0
draw.no
23.06.2016
signature
drawn Burcu SALMAN
control D.KALE/O.DEMİREL
approval Ethem GÖKMEN


LEGEND SÜRME 1B
SECTIONS -LEGEND SÜRME-1B
Legend Sürme Test Sample (2200 x 2300)
EGE PROFİL
product name
LEGEND SÜRME 1B
Off draw
material PVC
drawn Burcu SALMAN
control D.KALEYO.DEMİREL
approval Ethem GÖKMEN
date
23.06.2016

ŞİŞECAM
DÜZCAM

Performans Hesaplayıcı



Isıcam® Kombinasyonu

DIŞ CAM	:	Şişecam Renksiz Düzcam 4 mm Renksiz
BOŞLUK	:	16 mm Ara Boşluk (Hava)
İÇ CAM	:	Şişecam Renksiz Düzcam 4 mm Renksiz

Gün Işığı Değerleri (EN 410)	Gün Işığı Geçirgenliği	:	%80
	Gün Işığı Dışa Yansıtma	:	%14
	Gün Işığı İçe Yansıtma	:	%14
Güneş Enerjisi Değerleri (EN 410)	Güneş Enerjisi Direkt Geçirgenliği	:	%68
	Güneş Enerjisi Dışa Yansıtma	:	%12
	Güneş Enerjisi Soğurma	:	%19
	Güneş Enerjisi Toplam Geçirgenliği (Solar Faktör / g)	:	%75
	Gölgeleme Katsayısı	:	0,86
	UV Geçirgenlik	:	%46
Isı Geçirgenlik Katsayısı (EN 673)	U Değeri W/(m²K)	:	2,7
Gürültü Yalıtım Değeri (EN 12758)	Rw (C; Ctr) dB	:	29 (-1; -4)

- Isı kontrolu

"Gün Işığı" ve "Güneş Enerjisi" değerleri, EN 410 standardlarına uygun olarak laboratuvar ortamında ölçülmüş spektral veriler kullanılarak hesaplanmıştır.

Isı geçirgenlik katsayısı olan U değeri EN 673 standardına uygun olarak hesaplanmıştır. U değeri hesabında kullanılan yayınım (emisivite) değerleri, laboratuar ortamında EN 673 (Ek A) ve EN 12898'e uygun olarak ölçülmüştür.

Potansiyel ısıl kırılma riskleri veya ilgili yapı yönetmelikleri nedeniyle ısıl işlem görmüş cam ürünlerinin kullanılması gerekebilir. Bu dokümanda ısıl kırılma riskine yönelik herhangi bir hesaplama bulunmamaktadır. Bu konu ile ilgili sorularınız için lütfen Trakya Cam Sanayii A.Ş. ile irtibat kurunuz.

Cam kombinasyonunun özellikleri, teknik ve diğer veriler, bu belgenin oluşturduğu tarih itibarı ile geçerlidir ve dokümanın içerdiği bilgiler herhangi bir uyarıya gerek olmaksızın Trakya Cam Sanayii A.Ş. tarafından değiştirilebilir.

Bu doküman bilgilendirme amaçlıdır. Dokümanda verilen değerler ile fiili değerler arasında, kullanım yerindeki koşullara bağlı olarak farklılıklar oluşabilir. Bu farklardan dolayı Trakya Cam Sanayii A.Ş. hiçbir şekilde sorumlu tutulamaz.