



# Prüfzentrum für Bauelemente

Dipl.-Ing. (FH) Rüdiger Müller

Fenster · windows  
Rollläden · shutters  
Türen + Tore · doors  
Fassaden · curtain walling  
Baubeschläge · building hardware  
June 03, 2019 RM/YA

## TEST REPORT NO. 18/10-A007-B3

PfB-Internal-No. 2019-27-0755

Version 1.en

Performance testing accordance with EN 1191:2012 “Windows and doors – Resistance to repeated opening and closing – Test method”. The test (vertical motion) was performed for 10,000 cycles

<b>Order No.</b>	18/10-A007
<b>Applicant</b>	Eliz Cam Sistemleri. Sarıçam Sokak No:62 Siteler - Ankara Türkiye
<b>Product type</b>	Vertical-Travel guillotine window, with one fixed and two sliding panels parts vertically controlled by electric drive, Aluminum, single glazing
<b>Product name</b>	<b>Giotech 300</b>
<b>Conducted tests</b>	- Resistance to repeated opening and closing
<b>Responsible test person</b>	Dipl.-Ing. (FH) Rüdiger Müller

This report consists of 5 pages. The following are included as appendix:

- 6 Images of test sample (attachment 1 to 3 of 7)
- 4 Pages technical documentation (attachment 4 to 7 of 7)

Test report No. 18/10-A007-B3 of June 03, 2019, Version 1.en  
PfB-Internal-No.: 2019-27-0755  
Eliz Cam Sistemleri, Türkiye

## Content

1	Introduction and Scope	3
2	Test Sample	3
2.1	Sampling and Test Sample Labelling	3
2.2	Technical Documentation	3
2.3	Technical Data of the Test Sample	3
2.4	Documentation of Test Sample	4
3	Used Test Equipment and Gauges	4
4	Test	4
4.1	Person in Charge and Date of the Test	4
4.2	Description of the Test and Test Results	4
4.2.1	Mechanical durability test according to DIN EN 1191	5
4.2.2	Test Result	5
5	General	5

Attachment

Test report No. 18/10-A007-B3 of June 03, 2019, Version 1.en  
 PfB-Internal-No.: 2019-27-0755  
 Eliz Cam Sistemleri, Türkiye

## 1 Introduction and Scope

The customer Eliz Cam confirmed the order by mailing the submission form on the 19 July 2017 to **PfB** Turkey, Ataturk Oganize Sanayi Bolgesi 10045 Sokak No 7, 35620 Çiğli – Izmir, Turkey. The order includes cycle test for the performance according EN 1191:2012. The former test was performed in collaboration between **PfB** Turkey and the notified Body inspection authority Prüfzentrum für Bauelemente (**PfB**) on 04 February 2019.

The tests were conducted according below standards:

- EN 1191:2012 “Windows and doors – Resistance to repeated opening and closing – Test method”

## 2 Test Sample

### 2.1 Sampling and Test Sample Labelling

The test sample was delivered to **PfB** on 21 January 2019 by Eliz Cam. The test sample was delivered mounted in a steel sub frame (cross section 100 mm x 150 mm). The jointing between door frame and mounting frame was sealed by practical guidance.

Test sample	Labelling by customer	Labelling by <b>PfB</b>
Vertical-Travel guillotine window, with one fixed and two sliding panels parts vertically controlled by electric drive, Aluminum, single glazing	<b>Giotech 300</b>	18/10-A007-P2

### 2.2 Technical Documentation

On 02 August 2017 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**:

- “Front view ” (attachment 4)
- “Section view (Motor kutusu detayı)” (attachment 5)
- “Section view (Kenet detayı)” (attachment 6)
- “Section view (Dikey ray detayı)” (attachment 7)

### 2.3 Technical Data of the Test Sample

Test sample no. 18/10-A007-P2

Vertical-Travel guillotine window, with one fixed and two sliding panels parts vertically controlled by electric drive, Aluminum, single glazing:

Total outside dimension (w x h): 3000 mm x 2600 mm,

Each sash dimensions (w x h) : 2820 mm x 800 mm,

Test report No. 18/10-A007-B3 of June 03, 2019, Version 1.en

PfB-Internal-No.: 2019-27-0755

Eliz Cam Sistemleri, Türkiye

Profile cross section:	Frame approx. 108 mm x 90 mm, Casement approx. 42 mm x 35 mm,
Sealing:	Brush and rubber sealing
Operating mechanism	Steel sprocket and chain
Closing/Locking system:	Somfy IO 120nm/12rpm
Glazing/infill:	8mm tempered glass.

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 Used Test Equipment and Gauges

Following equipments are used for the mentioned tests:

- Test wall with Inventory number	35300,
- 1 length measurement digital calipper.	35215,

The measurement tolerance of the test-wall is in the limits of the requirements of the standard. The latest calibrations were done on 14<sup>th</sup> May 2018.

## 4 Test

### 4.1 Person in Charge and Date of the Test

Person in charge	Nedret Sürmeli
Test person	Yigit Altug
Start Date	04.02.2018
Person present from the customer	Onur Sağlam

### 4.2 Description of the Test and Test Results

In order to prevent overheating in the electric motor, the sample is tested with the back cover of upper box open.

In order to prevent the electric motor from going into protection mode due to overheating, the test was performed for 12 minutes rest after each 1 turn.

Test report No. 18/10-A007-B3 of June 03, 2019, Version 1.en  
Pfb-Internal-No.: 2019-27-0755  
Eliz Cam Sistemleri, Türkiye

#### 4.2.1 Mechanical durability test according to DIN EN 1191

The mechanical durability test was performed on the casement of the sample No. 18/10-A007-P3 in accordance with the requirements of EN 1191. The moving parts of the test sample were checked prior to testing.

The test (vertical motion) was performed for 10,000 cycles.

#### 4.2.2 Test Result

End of 10.000 cycle mechanical durability test, hardware intact, window fully operational

### 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**.

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**.

The results may only be applied exclusively on the tested test sample. Test results may be used for similar doors only if structure, material, components and production procedure are the same as the tested door.

**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 EN 1191:2012 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  
June 03, 2019



Yiğit Altuğ  
Responsible Official

Image 1:  
Test sample No.18/10-A007-P3,  
on the test rig.



Image 2:  
Test sample No.18/10-A007-P3,  
on the test rig.



Test report No. 18/10-A007-B3 of June 03, 2019, Version 1.en

PFB-Internal-No.: 2019-27-0755

Eliz Cam Sistemleri, Türkiye

Image 3:

Test sample No.18/10-A007-P3,  
electric drive.



Image 4:

Test sample No.18/10-A007-P3,  
cycle counter.



Test report No. 18/10-A007-B3 of June 03, 2019, Version 1.en

PfB-Internal-No.: 2019-27-0755

Eliz Cam Sistemleri, Türkiye

Image 5:

Test sample No.18/10-A007-P3,  
operating mechanism part.



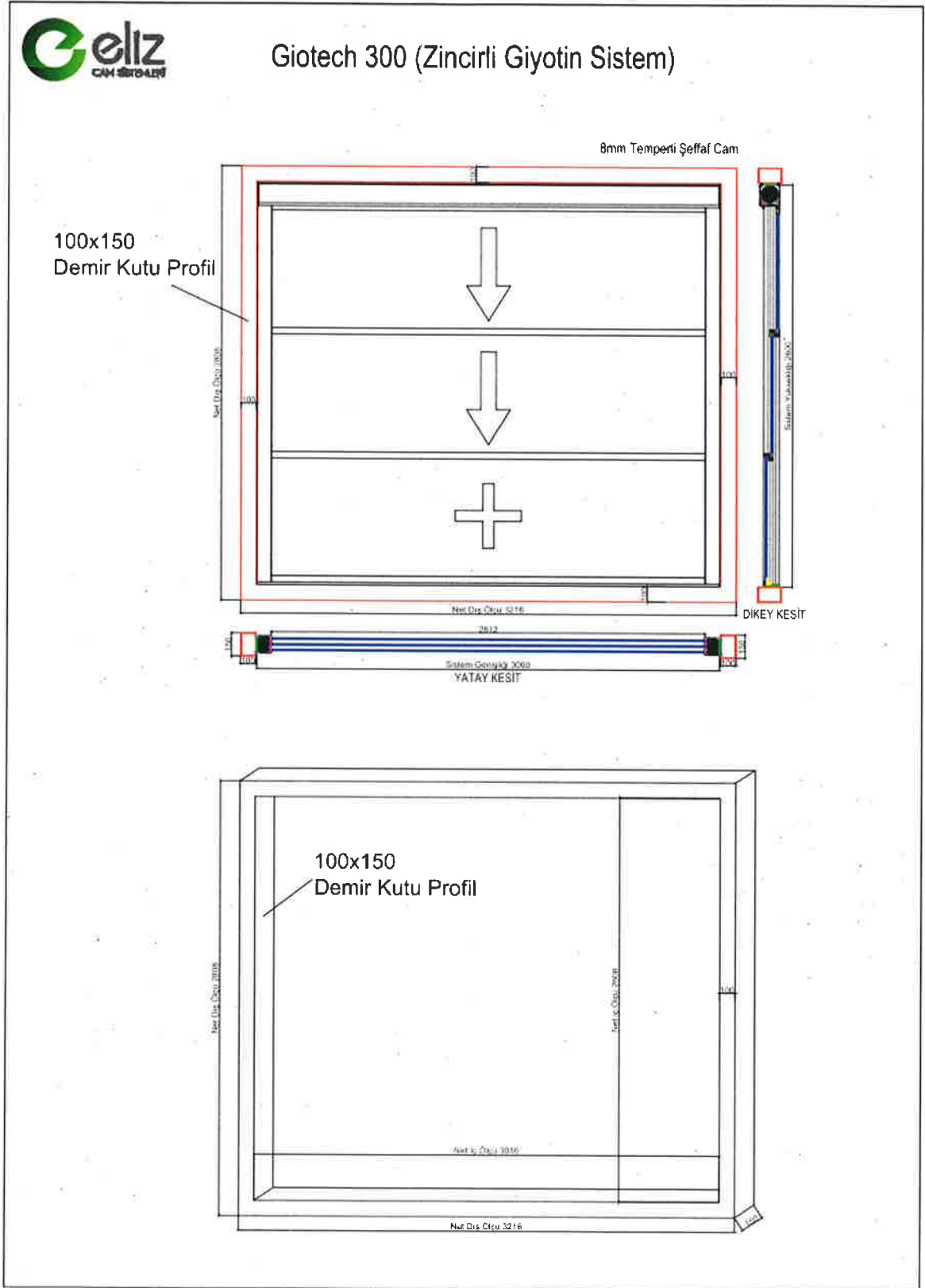
Image 6:

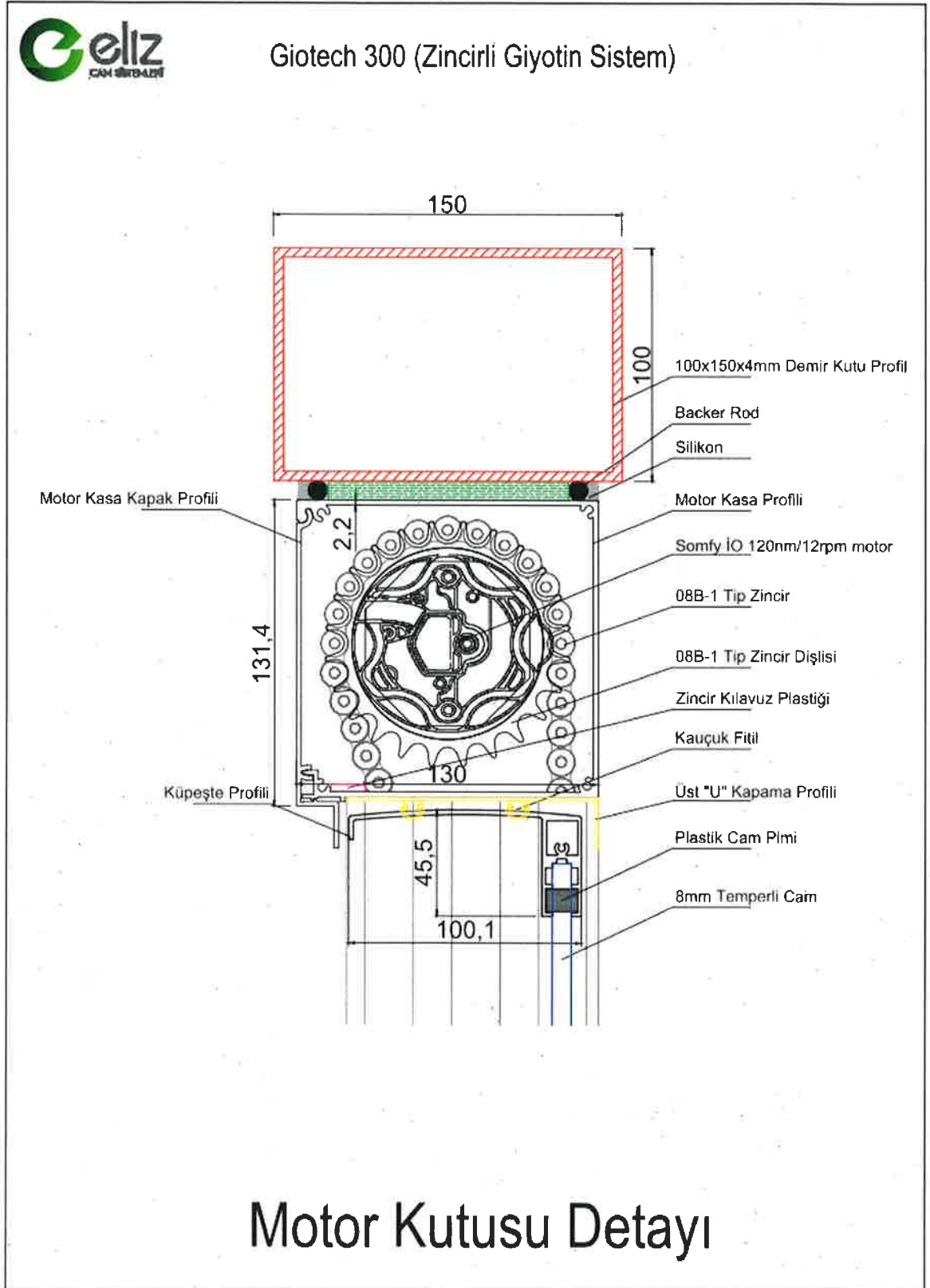
Test sample No.18/10-A007-P3,  
operating mechanism part with  
chain.

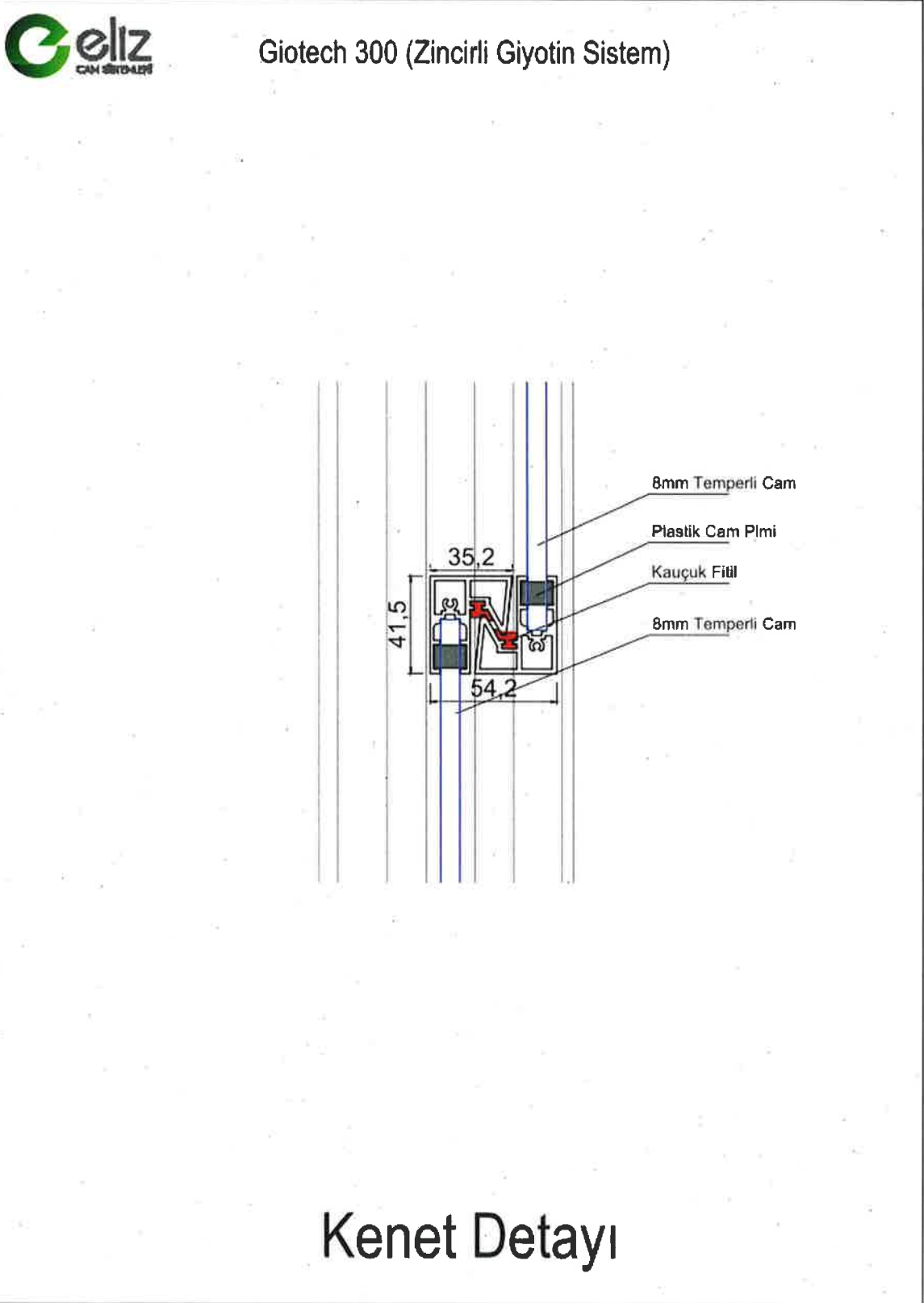




Test report No. 18/10-A007-B3 of June 03, 2019, Version 1.en  
PfB-Internal-No.: 2019-27-0755  
Eliz Cam Sistemleri, Türkiye

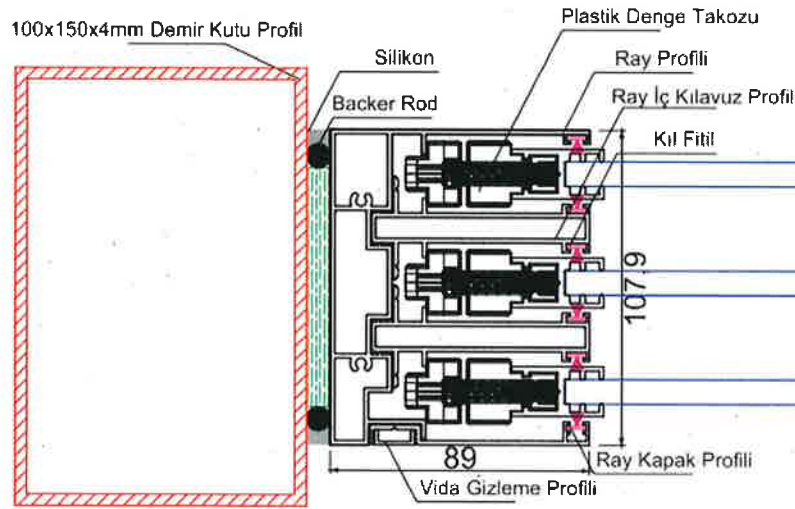








## Giotech 300 (Zincirli Giyotin Sistem)



## Dikey Ray Detayı Sol