# BUILDING RESEARCH INSTITUTE (N I S I) Ltd.

**NOTIFIED TEST LABORATORY** 

Identification number NB 2032 of the Register of EC
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## **TEST REPORT**

### INITIAL TYPE TESTING ITT-15.29 D / 22.02.2016

(Addition to protocol № ITT-15.29 / 15.01.2016 г.)

The tests are carried out in compliance with the Chapter Two of the Bulgarian Regulation for the Essential Requirements to Constructions and Conformity Assessment of Construction Products (RERCCACP).

**Product:** 

Window aluminum profiles "VIVA ALUMINIUM SYSTEMS"

opening system 038

**Producer:** 

Factory of VIAS Ltd,

Bulgaria, Shumen, 68A "Rishki prohod" Blvd.

**Applicant:** 

VIAS Ltd,

Bulgaria, Shumen, 68A "Rishki prohod" Blvd.

**Document for assignment:** 

Contract No 40/2015

Test samples:

One window with dimensions 1750/2550 mm. Details of the window are supplied in Annex 1.

Test period:

From 15.02.2016 to 19.02.2016

Assessment of the performance:

The submitted Window aluminum profiles "VIVA ALUMINIUM SYSTEMS" opening system 038 meets thermal transmittance

SYSTEMS" opening system 038 meets thermal transmittance  $U_w = 1,57 \text{ W/(m}^2.\text{K)}$  with glass I<sup>st</sup> type and  $U_w = 1,48 \text{ W/(m}^2.\text{K)}$  with

glased II<sup>nd</sup> type.

**Head of Test Laboratory:** 

Res. Ass. Eng. Tsvetana Gyurova

General Manager of NISI:

Prof. Dr. Eng. Rumen Gugle

СОФИЯ

The Test Report consists of 2 pages.
Copies of separate parts of the Test Report can be made with written consent of the NISI Ltd.

## Testing data:

No	Characteristic	Unit of measu-rement	Test method	Test result	Requirement according
1	2	3	4	5	6
1	Thermal transmittance coefficient:  - the profile wing  - the profile fund  - the profile transon  - the glass unit I-st type  - the glass unit II-nd type  - the window with glass unit I-st type  - the window with glass unit II-nd type	W/(m <sup>2</sup> .K)	EN ISO 10077-1	3,14 3,15 3,68 1,10 0,98 1,57 1,48	- - - - - -

Note: The test is performed with two glass:

- glass I-st type: 24 mm - 4 mm glass white, 16 mm air gap filled with 90% Argon, 4 mm glass sanerdzhi);

- glass II-nd type: 24 mm - 4 mm glass white, 16 mm air gap filled 90% of Argon, 4 mm glass premium.

#### Technical documentation:

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;

EN ISO 12567-1:2010

Thermal performance of windows and doors - Determination of thermal transmittance by the hot-box method - Part 1: Complete windows and doors

Tests are carried out by:

1. Eng. O. Savov

2. Res. Ass. Eng. K. Glushkova

Head of Test Laboratory Respectana Gyan

Res. Ass. Eng.