

TEST REPORT

| | | | | | |
|-----------------|---|---------|---|-----------------|---|
| Document n. | n° 158/2025-B | Copy n. | 1 | Number of pages | 6 |
| Test item | Single-leaf door | | | | |
| Product name | MULTIFRAME SECURITY | | | | |
| Serial number | - | | | | |
| Manufacturer | TEHNI S.A. - PANTELOS 2nd Km KIMMERIA – 67100 PIGADIA XANTHI - GREECE | | | | |
| Customer | TEHNI S.A. - PANTELOS 2nd Km KIMMERIA – 67100 PIGADIA XANTHI - GREECE | | | | |
| Test date | from 04/04/2025 to 04/04/2025 | | | | |
| Test lab | ISMES S.p.A. Via Lago dei Tartari, 3D-3E 00012 Guidonia Montecelio (RM) | | | | |
| Tests performed | Thermal performance of windows, doors and shutters – Calculation of thermal transmittance | | | | |

The object under test, built in accordance with the data and characteristics provided by the customer, was subjected to a series of experimental tests in accordance with the following normative documents:

UNI EN ISO 10077-1:2018 General

UNI EN ISO 10077-2:2018 Numerical method for frames

The test results in this document refer to the sample(s) tested only. The results of the tests are documented by the records reported in this document. The geometrical and structural characteristics of the sample(s) are shown in the attached description, provided by the Customer, which forms an integral part of this test report. The responsibility for the conformity of each sample having the same denomination as the one tested rests with the manufacturer.

08/05/2025

Date


Danilo Massi
Test Operator


Via Lago dei Tartari 3D-3E
00012 Guidonia Montecelio (RM)
Ing. Camillo Orsi
Director

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LAB N° 1923 L

The laboratory meets the requirements of the ISO/IEC 17025:2017 standard "General requirements for the competence of testing and calibration laboratories". The validity of the accreditation and the list of accredited tests can be verified on the WEB site: www.istedil.it

ISMES S.p.A.

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P.I. IT00887271005-C.F. 00422780585

Società soggetta ad attività di Direzione
e coordinamento di CESI S.p.A.

Customer's personnel present at the tests

n.a.

Recognition of the sample under test

The manufacturer/customer guarantees that the tested sample is manufactured according to the presented technical data sheet. ISMES has verified that the data reported in this form adequately represent the essential details and parts of the sample tested in terms of shape and size. The technical file, identified by ISMES and numbered 158/2025-A n. 01 to 02, attached to this report, was also delivered to the Customer.

Test results

| Standard | Test | Result |
|---|--|------------------------------------|
| UNI EN ISO 10077-1:2018 | Calculation of thermal transmittance of door | $U_d = 1,06 \text{ W/m}^2\text{k}$ |
| The decision rule in the conformity assessment is based on the simple acceptance method according to ILAC-G8:09/2019, without taking into account the measurement uncertainties | | |

Measurement uncertainties

The indicated measurement uncertainties are determined in accordance with JCGM Publication 100 "Evaluation of measurement data - Guide to the expression of uncertainty in measurement" and are based on the standard uncertainty multiplied by a coverage factor of 2, which for a normal distribution corresponds at a confidence level of approximately 95%.

TEST REPORT

| | | | | | |
|-----------------|---|---------|---|-----------------|---|
| Document n. | n° 158/2025-A | Copy n. | 1 | Number of pages | 8 |
| Test item | Single-leaf door | | | | |
| Product name | MULTIFRAME SECURITY | | | | |
| Serial number | - | | | | |
| Manufacturer | TEHNI S.A. - PANTELOS 2nd Km KIMMERIA – 67100 PIGADIA XANTHI - GREECE | | | | |
| Customer | TEHNI S.A. - PANTELOS 2nd Km KIMMERIA – 67100 PIGADIA XANTHI - GREECE | | | | |
| Test date | from 04/04/2025 to 04/04/2025 | | | | |
| Test lab | ISMES S.p.A. Via Lago dei Tartari, 3D-3E 00012 Guidonia Montecelio (RM) | | | | |
| Tests performed | Resistance to manual burglary attempt | | | | |

The object under test, built in accordance with the data and characteristics provided by the customer, was subjected to a series of experimental tests in accordance with the following normative documents:
Resistance to manual burglary attempt (EN 1630:2016) - Classification (EN 1627:2021)

The test results in this document refer to the sample(s) tested only. The results of the tests are documented by the records reported in this document. The geometrical and structural characteristics of the sample(s) are shown in the attached description, provided by the Customer, which forms an integral part of this test report. The responsibility for the conformity of each sample having the same denomination as the one tested rests with the manufacturer.

08/04/2025

Date


Geom. Danilo Maggi
Test Operator


Dott. ing. Camillo Orsi
Director

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Società soggetta ad attività di Direzione
e coordinamento di CESI S.p.A.

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TEST REPORT

158/2025-A

Customer's personnel present at the tests

n.a.

Recognition of the sample under test

The manufacturer/customer guarantees that the tested sample is manufactured according to the presented technical data sheet. ISMES has verified that the data reported in this form adequately represent the essential details and parts of the sample tested in terms of shape and size. The technical file, identified by ISMES and numbered 158/2025-A n. 01 to 02, attached to this report, was also delivered to the Customer.

Test results

| Standard | Test | Result |
|---|---------------------------------------|----------|
| UNI EN 1630:2021 | Resistance to manual burglary attempt | Positive |
| The decision rule in the conformity assessment is based on the simple acceptance method according to ILAC-G8:09/2019, without taking into account the measurement uncertainties | | |

Classification according to the applicable standard

| Standard | Test | Classification |
|------------------|---|----------------|
| UNI EN 1627:2021 | Resistance to manual burglary attempt - Requirements and classification | RC 3 |

Measurement uncertainties

The indicated measurement uncertainties are determined in accordance with JCGM Publication 100 "Evaluation of measurement data - Guide to the expression of uncertainty in measurement" and are based on the standard uncertainty multiplied by a coverage factor of 2, which for a normal distribution corresponds at a confidence level of approximately 95%.

| | | |
|----------------------------------|----------------------------------|------------------------------|
| Atmospheric pressure | | ± 1 kPa |
| Temperature | | ± 3 °C |
| Relative humidity (25% ÷ 75% RH) | | $\pm 5\%$ |
| Air flow | flows > 1 m ³ /h | $\pm 5\%$ |
| Pressure (test chamber) | | $\pm 5\%$ |
| Time | | $\pm 5\%$ |
| Linear deformation | | $\pm 5\%$ |
| Length (distance) | line of nozzles | 0 - 10 mm |
| | space between the nozzles | ± 10 mm |
| Angular size | method 1A and 2A | 0 - 2° |
| | method 1A and 2A – first row | $\pm 0,2$ l/min (per nozzle) |
| Water flow | | $\pm 0,1$ l/min (per nozzle) |
| | method 1A e 2A – additional rows | |
| Air permeability | value ≥ 3 m ³ /h | $\pm 10\%$ |
| | value < 3 m ³ /h | $\pm 0,30$ m ³ /h |

TEST REPORT

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|-----------------|---|---------|---|-----------------|---|
| Document n. | n° 158/2025 | Copy n. | 1 | Number of pages | 9 |
| Test item | Single-leaf door | | | | |
| Product name | MULTIFRAME SECURITY | | | | |
| Serial number | - | | | | |
| Manufacturer | TEHNI S.A. - PANTELOS 2nd Km KIMMERIA – 67100 PIGADIA XANTHI - GREECE | | | | |
| Customer | TEHNI S.A. - PANTELOS 2nd Km KIMMERIA – 67100 PIGADIA XANTHI - GREECE | | | | |
| Test date | from 04/04/2025 to 04/04/2025 | | | | |
| Test lab | ISMES S.p.A. Via Lago dei Tartari, 3D-3E 00012 Guidonia Montecelio (RM) | | | | |
| Tests performed | Air permeability; Water tightness; Wind load resistance. | | | | |

The object under test, built in accordance with the data and characteristics provided by the customer, was subjected to a series of experimental tests in accordance with the following normative documents:

Air permeability (EN 1026:2016) - Classification (EN 12207:2017);
Water tightness (EN 1027:2016) - Classification (EN 12208:2000);
Wind load resistance (EN 12211:2016) - Classification (EN 12210:2016).

The test results in this document refer to the sample(s) tested only. The results of the tests are documented by the records reported in this document. The geometrical and structural characteristics of the sample(s) are shown in the attached description, provided by the Customer, which forms an integral part of this test report. The responsibility for the conformity of each sample having the same denomination as the one tested rests with the manufacturer.

05/04/2025

Date


Geom. Danilo Nanni
Test Operator


Dott. ing. Camillo Orsi
Director

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Società soggetta ad attività di Direzione
e coordinamento di CESI S.p.A.

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TEST REPORT

158/2025

Customer's personnel present at the tests

n.a.

Recognition of the sample under test

The manufacturer/customer guarantees that the tested sample is manufactured according to the presented technical data sheet. ISMES has verified that the data reported in this form adequately represent the essential details and parts of the sample tested in terms of shape and size. The technical file, identified by ISMES and numbered 158/2025 n. 01 to 02, attached to this report, was also delivered to the Customer.

Test results

| Standard | Test | Result |
|---|------|--------|
| | | |
| The decision rule in the conformity assessment is based on the simple acceptance method according to ILAC-G8:09/2019, without taking into account the measurement uncertainties | | |

Classification according to the applicable standard

| Standard | Test | Classification |
|-------------------|----------------------|------------------|
| UNI EN 12207:2017 | Air permeability | Classe 1 |
| UNI EN 12208:2000 | Water tightness | Classe 2A |
| UNI EN 12210:2016 | Wind load resistance | Classe C3 |

Measurement uncertainties

The indicated measurement uncertainties are determined in accordance with JCGM Publication 100 "Evaluation of measurement data - Guide to the expression of uncertainty in measurement" and are based on the standard uncertainty multiplied by a coverage factor of 2, which for a normal distribution corresponds at a confidence level of approximately 95%.

| | | |
|----------------------------------|----------------------------------|--------------------------|
| Atmospheric pressure | | ± 1 kPa |
| Temperature | | ± 3 °C |
| Relative humidity (25% ÷ 75% RH) | | ± 5% |
| Air flow | flows > 1 m ³ /h | ± 5% |
| Pressure (test chamber) | | ± 5% |
| Time | | ± 5% |
| Linear deformation | | ± 5% |
| Length (distance) | line of nozzles | 0 - 10 mm |
| | space between the nozzles | ± 10 mm |
| Angular size | method 1A and 2A | 0 - 2° |
| | method 1A and 2A – first row | ± 0,2 l/min (per nozzle) |
| Water flow | method 1A e 2A – additional rows | ± 0,1 l/min (per nozzle) |
| | | |
| Air permeability | value ≥ 3 m ³ /h | ± 10% |
| | value < 3 m ³ /h | ± 0,30 m ³ /h |

TEST REPORT No. 410097/16615/CPR

issued by Istituto Giordano in the capacity of notified test laboratory (No. 0407)
pursuant to Regulation 305/2011/EU of the European Parliament
and of the Council of 9 March 2011

Customer

TEHNI PANTELOS S.A.

2nd km Kimerion - 67100 PIGADION XANTHI - Greece

Item[#]**door named****“Multiframe Aluminium Security Door”**

Activity

**laboratory measurements of the airborne sound
insulation in accordance with standard
UNI EN ISO 10140-2:2021
with reference to harmonised standard
UNI EN 14351-1:2016**

Results

 $R_w (C, C_{tr}) = 35 (-2, -4) \text{ dB}$

Order:

97993

Item origin:

sampled and supplied by the customer

Identification of item received:

2025/2760 dated 17 March 2025

Activity date:

17 March 2025

Activity site:

Istituto Giordano S.p.A. - Strada Erbosa Uno, 78 -
47043 Gatteo (FC) - Italy

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(#) according to that stated by the customer.

Bellaria-Igea Marina - Italy, 26 March 2025

Chief Executive Officer

(Dott. Arch. Sara Lorenza Giordano)


Firmato digitalmente da SARA LORENZA GIORDANO

This document is made up of 8 pages and shall not be reproduced except in full without extrapolating parts of interest at the discretion of the customer, with the risk of favoring an incorrect interpretation of the results, except as defined at contractual level.

The results relate only to the item examined, as received, and are valid only in the conditions in which the activity was carried out.

The original of this document consists of an electronic document digitally signed pursuant to the applicable Italian Legislation.

Chief Test Technician:

Geom. Omar Nanni

Head of Acoustics and Vibrations Laboratory:

Dott. Andrea Cucchi

Technical Director:

Dott. Ing. Giuseppe Persano Adorno

Compiler: Agostino Vasini

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