TEST REPORT
REACTION TO FIRE TEST

Test Sponsor:

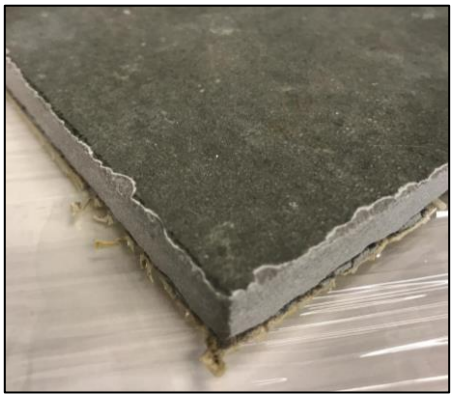
Nexion International Pvt.Ltd.
1104, Shapath V, S.G. Road
Ahmedabad 380015,
Gujarat, India
T: +91 79 66 168422
Website: www.nexiontiles.com

Test Material:

10mm thick Nexion “Endless Nero” Glazed Porcelain Tile with Fiberglass mesh

Test Standard

ASTM D1929-20; Standard Test Method for Determining Ignition Temperature of Plastics.



THOMAS BELL-WRIGHT
INTERNATIONAL CONSULTANTS

Test Date: 27-Apr-21
Issue Date: 8-Jun-21
Test Reference No: VD058

PO BOX 26385, DUBAI UAE T +971 (0)4 821 5777 fire@bell-wright.com www.bell-wright.com

DUBAI ABU DHABI DOHA RIYADH

Accreditation

Testing

ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories with:

United Kingdom Accreditation Service (UKAS) - Testing Laboratory: **4439**
www.ukas.com

Memberships

Members of European Group of Organization for Fire Testing, Inspection and Certification

www.egolf.org.uk

Member of Association for Specialist Fire Protection

www.asfp.org.uk

Member of Centre for Window and Cladding Technology

www.cwct.co.uk

The work which is the subject of this report falls under the accreditations of **ISO 17025 UKAS.**

Table of Contents

1. INTRODUCTION

Determination of the flash ignition temperature and spontaneous ignition temperature of 10mm thick Glazed Porcelain tile with fiberglass mesh applied using adhesive using hot-air ignition furnace as per ASTM D 1929-20; Standard Test Method for Determining Ignition Temperature of Plastics.

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2. TESTING LABORATORY

Name: Thomas Bell-Wright International Consultants (TBWIC)
Address: Corner of 46th and 47th streets, Jebel Ali Industrial Area 1
P.O. Box 26385, Dubai, U.A.E.
T: +971 (0) 4 821 5777
www.bell-wright.com

3. DATE OF TEST

Sample received: 19-Apr-21
Test date: 27-Apr-21

The test was not witnessed by the sponsor.

4. SPECIMEN DESCRIPTION

Note: The testing laboratory does not hold any responsibility for the information that has been provided by the test sponsor which could not be verified by the testing laboratory, as this could affect the validity of the test result. All information that could not be verified will be indicated by an asterisk (*) mark.

Product Description		Glazed Porcelain Slab with fiberglass mesh applied using adhesive*	
Product Reference		Nexion "Endless Nero" with fiberglass mesh fabric*	
Manufacturer		Nexion International* (stated)	
Thickness		10mm* (stated) 9.8mm (Measured by TBWIC)	
Product Area Weight		22.0kg/m^2* (stated) 21.3 kg/m^2 (Measured by TBWIC)	
Color Tested		Grey (observed)	
Form Tested		Tile form (Verified by TBWIC)	
Product Details	**Layer 1**	Product Description	Porcelain tile
		Product Reference	Endless Nero*(stated)
		Manufacturer	Nexion International* (stated)
		Thickness	9mm*(stated)
		Density	2400 kg/m^3*(stated)

	Layer 2	Product Description	Adhesive
		Product Reference	Mapei Adesilex G19 FR* (stated)
		Manufacturer	Mapei* (stated)
		Thickness	0.5mm* (stated)
		Area Weight	0.240 kg/m^2* (stated)
		Dry Density	1.59 g/cm^3* (stated)
	Layer 3	Product Description	Fiberglass Mesh
		Product Reference	145GSM Fiberglass Mesh* (stated)
		Manufacturer	Rudra*(stated)
		Thickness	1mm*(stated)
		Area Weight	0.145 kg/m^2*(stated)

5. SPECIMEN VERIFICATION

TBWIC Testing Laboratory has not been involved in the selection or design of the specimen. However, the tiles were selected, marked, and signed by a representative from TBWIC Certification Division (Certification Body) on 6-Apr-21 as shown below. The results apply to the sample as received.

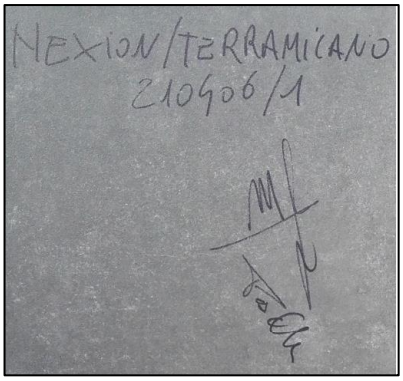

Photo of signature on the sample

Note: There are contexts where information has been provided by the sponsor and verification of information has been done through either technical datasheet or other document submission, or as indicated directly by the sponsor. For this reason, materials have been tested in an as-received condition and TBWIC bears no liability for the legitimacy of the submitted information.

6. SPECIMEN PREPARATION PROCEDURE

In accordance with section 7.2 of ASTM D1929-20, the tile provided by the sponsor were cut into a mass of 3.0 ± 0.2 g, as it had a density greater than 100 kg/m^3. Each sample was conditioned as per sections 7.4 of ASTM D1929-20.

7. METHOD OF TEST

7.1. Test Procedure

The test specimens were evaluated in accordance with ASTM D1929-20, *Standard Test Method for Determining Ignition Temperature of Plastics.*

Flash Ignition Temperature (FIT) and Spontaneous Ignition Temperature (SIT) was then determined.

7.2. Conditioning

After delivery on 19-Apr-21, the specimen was stored in room temperature for a minimum of 40 hours prior to the test ranging from 21 to 25°C and 45 to 55% relative humidity.

Note: There were deviations observed in the temperature and relative humidity in 4 separate probes of thermo-hygrometer in our conditioning room, however the average values were within the limit.

8. TEST OBSERVATIONS

Observations	Results
1. Flash Ignition:	
Specimen weight, g	2.9
Air flow rate, Q_v	2.1
Flash Ignition at nozzle, min:sec	Not observed
Flaming combustion of the specimen, min:sec	0:14
Glowing combustion of the specimen, min:sec	Not observed
Explosion, min:sec	Not observed
Rapid rise in temperature T_1 above that of T_2	Not observed
Lowest Air Temperature, T_2, at which flash observed, °C	**642**
2. Spontaneous Ignition:	
Specimen weight, g	3.0
Air flow rate, Q_v	2.1
Flaming combustion of the specimen, min:sec	0:11
Glowing combustion of the specimen, min:sec	Not observed
Rapid rise in temperature T_1 above that of T_2	Not observed
Lowest Air Temperature, T_2, at which the specimen burns, °C	**649**

9. SUMMARY OF RESULTS

The test specimen has been evaluated in accordance with ASTM D 1929-20: Standard Test Method for Determining Ignition Temperature of Plastics.

The test results are:

Flash Ignition Temperature (FIT), °C	**642**
Spontaneous Ignition Temperature (SIT), °C	**649**

Test results relate only to the specimen tested and there is no pass or fail criteria for ASTM D1929-20 standard.

10. LIMITATION

"These test results relate only to the behavior of test specimens under the particular conditions of the test. They are not intended to be used, and shall not be used, to assess the potential fire hazards of a material in use." - Clause 9.1.10 of ASTM D1929-20.

This report and all records of the test to which it relates may be not be retained by TBWIC further than 5 years from the date of testing.

This test report is respectfully submitted by: Thomas Bell-Wright International Consultants

Prepared by:	Reviewed and approved by:
Vibin Mohanan	Suketa Tyagi
Technical Laboratory Assistant	Reaction to Fire - Manager

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Thomas Bell-Wright Int'l Consultants (Dubai Br.)

---- End of Test Report ----