

100 Clemson Research Blvd., Anderson, SC 29625
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April 25, 2019

Technistone, A.S. Attn: Mrs. Petra Dušková Bratří Štefanů 1070 500 03 Hradec Králové, CZECH REPUBLIC

Dear Mrs. Petra Dušková,

Tile Council of North America has tested the samples you submitted. Test report TCNA-0305-19 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Damon L. McDowell Laboratory Team Leader

J. J. M. Donell

Enclosures



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TCNA TEST REPORT NUMBER:

TCNA-0305-19

PAGE: 1 **OF** 3

TEST REQUESTED BY:

Technistone, A.S.

TEST METHOD: ASTM C1378-04 (2014): "Determination of Resistance to Staining"

Informal Test Method Description: This test method is intended to determine the resistance to staining of ceramic tile surfaces. The resistance to staining is determined by maintaining test solutions in contact with ceramic tile surfaces for a specified period of time. After exposure, the surface is cleaned in a defined manner, and the test specimens are inspected visually for change.

This summary is provided for the reader's convenience and is not a complete description of the method. See ASTM C1378 for all method details and information.

TEST SUBJECT MATERIAL:

Identified by client as: "ELEGANCE ECO NEV"

Approximate Size as Received: 2"x2" & 4"x4"

TEST DATE:

4/15/19 - 4/23/19

TEST PROCEDURE NOTES:

- Sample prep: None
- One (1) test sample per staining agent were tested
- All test samples were dried in an oven at a temperature of $110^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and cooled to room temperature.
- Test samples were left in contact with the staining agents for 24 hrs at room temperature.
- Test samples were then subjected to the following cleaning procedures in succession until the stain is successfully removed. Test samples were dried $110^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and visually evaluated after each cleaning procedure.
- Cleaning Procedures: A: running hot water 5 min, B: hand cleaning w/ weak cleaner, C: mechanical cleaning w/ strong cleaner, D: 24hr. Immersion in suitable solvent (3% HCl, 20%KOH, Acetone)

TEST RESULTS:

Staining Agent	Visual Test (Affected?)	Cleaning Procedure
Contrasting Grout	No	A
Carbon Lamp Black	No	С
Waterproof Ink (Black)	No	A
Washable Ink	No	C
Potassium Permanganate Solution, 1%	No	D
Methylene Blue Solution, 1%	No	D

COMMENTS: None





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PAGE: 2 OF 3

TEST REQUESTED BY:

Technistone, A.S.

TEST SUBJECT MATERIAL:

Identified by client as: "ELEGANCE ECO NEV"

TEST METHOD:

ASTM C1378-04 (2014): "Determination of Resistance to Staining"

ANSI SPECIFICATIONS*:

ANSI standard Class		Maximum number of samples that retain a stain	
ANSI A137.1/A137.2	Class A	0	
ANSI A137.1/A137.2	Class B	1	
ANSI A137.1/A137.2	Class C	2	
ANSI A137.1/A137.2	Class D	3	
ANSI A137.1/A137.2	Class E	4 or more	

^{*}For more detailed information, refer to ANSI A137.1 Specifications for Ceramic Tile or ANSI A137.2 Specifications for Glass Tile

IMAGE OF PRODUCT TESTED:







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Katelyn Simpson Laboratory Manager

Damon L. McDowell Laboratory Team Leader

Q f. M. Boull

4/25/2019

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Dear Mrs. Petra Dušková,

Tile Council of North America has tested the samples you submitted. Test report TCNA-0304-19 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Damon L. McDowell Laboratory Team Leader Enclosures

J. J. N. Would



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PAGE: 1 OF 3

TEST REQUESTED BY:

Technistone, A.S.

TEST METHOD:

ASTM C1378-04 (2014): "Determination of Resistance to Staining"

Informal Test Method Description: This test method is intended to determine the resistance to staining of ceramic tile surfaces. The resistance to staining is determined by maintaining test solutions in contact with ceramic tile surfaces for a specified period of time. After exposure, the surface is cleaned in a defined manner, and the test specimens are inspected visually for change.

This summary is provided for the reader's convenience and is not a complete description of the method. See ASTM C1378 for all method details and information.

TEST SUBJECT MATERIAL:

Identified by client as: "NOBLE SUPREME WHITE"

Approximate Size as Received: 2"x2" & 4"x4"

TEST DATE:

4/15/19 - 4/22/19

TEST PROCEDURE NOTES:

- Sample prep: None
- One (1) test sample per staining agent were tested
- All test samples were dried in an oven at a temperature of $110^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and cooled to room temperature.
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TEST RESULTS:

Staining Agent	Visual Test (Affected?)	Cleaning Procedure
Contrasting Grout	No	A
Carbon Lamp Black	No	С
Waterproof Ink (Black)	No	С
Washable Ink	No	С
Potassium Permanganate Solution, 1%	No	D
Methylene Blue Solution, 1%	No	D

COMMENTS: None





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PAGE: 2 OF 3

TEST REQUESTED BY:

Technistone, A.S.

TEST SUBJECT MATERIAL:

Identified by client as: "NOBLE SUPREME WHITE"

TEST METHOD:

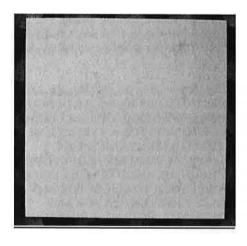
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ANSI SPECIFICATIONS*:

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ANSI A137.1/A137.2	Class E	4 or more	

^{*}For more detailed information, refer to ANSI A137.1 Specifications for Ceramic Tile or ANSI A137.2 Specifications for Glass Tile

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Katelyn Simpson Laboratory Manager GI L. N. World

4/25/2019

Damon L. McDowell Laboratory Team Leader