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Email testing@tcnatile.com Web www.TCNAtile.com

September 12, 2020

Vidrepur Attn: Paul Medina Freeman 2301 NW 84th Ave Miami, FL 33122

Dear Mr. Freeman,

Tile Council of North America has tested the samples you submitted. Test report TCNA-0543-20 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Dr. Jyothi Rangineni Research Scientist

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Enclosures



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TEST REQUESTED BY: Vidrepur

2301 NW 84th Ave Miami, FL 33122

TEST SUBJECT MATERIAL: Identified by client as: "VIDREPUR TECHNOCLEAN"

TEST DATE: 8/17/2020 - 9/11/2020

TEST PROCEDURE:

ISO 13125: 2013 Fine ceramics (advanced ceramics, advanced technical ceramics) — Test method for antifungal activity of semiconducting photocatalytic materials

TEST CONDITIONS:

Test sample size: 1 inch x 1 inch square mosaics

Test bacteria: Asperigillus niger

Penicillium pinophillum

Adhesive film: Polyethylene (PE) film $20 \text{ mm} \times 20 \text{ mm}$ Volume of test suspension applied on test sample: 0.05 mL

Inoculum concentration: 5 x 10⁵ spores/mL UV irradiation intensity: 0.8 mW/cm²

UV irradiation time: 6 hours



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Test 1: Test performed on treated samples labelled as "VIDREPUR TECHNOCLEAN" using fungus *Asperigillus niger*

Test Piece	Percentage of reduction observed
Sample 1	100%
Sample 2	100%
Sample 3	100%

^{*}Reduction of spores calculated per the initial number of bacteria inoculated on the surface of the sample

Test 2: Test performed on treated samples labelled as "VIDREPUR TECHNOCLEAN" using fungus *Penicillium pinophilum*

Test Piece	Percentage of reduction observed
Sample 1	100%
Sample 2	90%
Sample 3	100%

^{*}Reduction of spores calculated per the initial number of bacteria inoculated on the surface of the sample



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9/12/2020

Dr. Jyothi Rangineni Research Scientist