



PROTECT AGAINST THE INVISIBLE



AMERICAN OLEAN®



Photo Features Mythique Marble™ - Majestic Arabesque Mosaic on the wall & floor, Majestic 24 x 24 on the wall, and Majestic 12 x 24 on the floor.

WHAT IS MICROBAN® TECHNOLOGY

Antimicrobial product protection has revolutionized product cleanliness, becoming a key aid in the fight against product damaging microbes.



From walls and worktops in kitchens to flooring and sinks in bathrooms, frequently utilized tile surfaces are often subjected to moist and humid conditions. This makes them prone to the growth of degrading microbes such as bacteria, mold, and mildew.

Scrubbing with disinfectant cleaners is an essential way to temporarily reduce the presence of microbes on ceramic surfaces. However, research has shown that cleaning products have a limited residual effect, meaning bacteria begin to double in number every twenty minutes soon after a surface has been cleaned.

Unlike disinfectant sprays, built-in antimicrobial ceramic technologies will actively control microbial growth on ceramic surfaces and work to extend the effectiveness of regular cleaning routines by reducing the background bioburden.

HOW DOES IT WORK?

MICROBAN® ANTIMICROBIAL PRODUCT

PROTECTION WORKS AT A CELLULAR LEVEL TO CONTINUALLY DISRUPT THE GROWTH AND REPRODUCTION OF MICROORGANISMS THAT CONTAMINATE A TREATED SURFACE. THE TECHNOLOGY OPERATES A MULTI-MODAL ATTACK BY DAMAGING THE PROTEIN, CELL MEMBRANE, DNA, AND INTERNAL SYSTEMS OF A MICROBE, PREVENTING IT FROM BEING ABLE TO TAKE IN NUTRIENTS OR REPRODUCE.

Once infused into a product, antimicrobial technology will start to work as soon as a microorganism comes into contact with the treated surface.

- 🛡️ **Protein Damage:** antimicrobial agents attack the proteins of a microbe, causing failure of essential functions
- 🛡️ **Cell Disruption:** antimicrobial agents damage the membrane of a microbe, leading to the loss of critical nutrients
- 🛡️ **Oxidative Damage:** antimicrobial agents cause increased oxygen levels, leading to significant damage to the internal systems of a microbe
- 🛡️ **DNA Disruption:** antimicrobial agents interfere with the genetics of a microbe, ultimately preventing its growth and reproduction

By creating an inhospitable environment for microorganisms like bacteria, mold, and mildew, built-in antimicrobials protect products from staining, bad odors, and premature degradation.

FULL INTEGRATION

The technology is integrated into the ceramic glaze during the manufacturing process. It becomes part of the molecular structure of the product and will not wash off or wear away.

01

SURFACE CONTAMINATION

The treated ceramic surface becomes contaminated with microbes as a result of human contact, environmental conditions and/or cleaning lapses.

02

TECHNOLOGY AT WORK

The technology penetrates the cell wall of each microbe and inhibits their ability to grow and reproduce.

03

A CLEANER SURFACE

The treated ceramic surface is protected from microbial proliferation for its expected lifetime and remains cleaner in-between cleanings.

04

WHAT WOULD YOU DO MORE OF IF YOU COULD WORRY LESS?

We are increasingly aware of the global attention and demand for products with surface protection and enhancement opportunities. We have to make choices on a day-to-day basis, and pay special attention to those having to do with the spaces in which we live and work on. This is why American Olean® has developed a distinct product line of high-performance porcelain antimicrobial floor and wall tiles. Designed to promote cleaner spaces empowered with Microban® antimicrobial product protection for your floor, wall and mosaic tile and to provide a lifetime of cleanliness that does not wash off or wear away.



Photo Features Mythique Marble™ - Calacatta Venecia Multi-Wave Crest on the wall and Calacatta Venecia 8" Hexagon on the floor.



BACTERIA ARE EVERYWHERE.

DID YOU KNOW, THERE ARE MORE BACTERIA ON ONE HAND THAN PEOPLE ON PLANET EARTH?

KNOWING THIS, HOW CAN WE LIVE AND WORK ON OUR SURFACES WITH PEACE OF MIND? PRODUCT CLEANING SOLUTIONS ARE ONLY TEMPORARY.

The solution has arrived in **DEFEND™** product technology by American Olean®. Besides having an assortment of popular, beautiful, and trendy visuals with remarkable durability, these antimicrobial surfaces have been created in partnership with Microban® International, the world-leading antimicrobial brand in the sector: creating a powerful antimicrobial shield built into the product continuously fighting the growth of up to 99% of bacteria on the surface. The result is a surface which is consistently protected, 24 hours a day, 7 days a week.

Thanks to its global approach, Microban® technology is known and appreciated by more than 300 brands worldwide and used in more than 1000 products, not only in construction but also in commercial, consumer goods, education, healthcare, transportation and food services.

THE BENEFITS:



ACTIVE 24/7

Microban® technology is a cost-effective solution that remains active for your ceramic product's expected lifetime.*

*So long as the glaze remains intact.



EFFECTIVE AGAINST BACTERIA

Microban® Technology has been proven effective against a broad spectrum of bacteria.



ENHANCES CLEANLINESS & DURABILITY

Product cleanliness is visibly improved without affecting the appearance, functions or durability of your product.



EXTENDED PRODUCT LIFETIME

Microban® antimicrobial ceramics technologies are effective against the growth of stain and odor-causing bacteria. This helps to create inherently cleaner and more durable ceramic products.



SAFE TO USE

Microban® antimicrobial ceramic products contain non-leaching technologies that are notified with the EU Biocidal Products Regulation (BPR) and registered with the US Environmental Protection Agency (EPA).



FOOD CONTACT APPROVED

Selected Microban® antimicrobial ceramic technologies are approved for use in direct food-contact applications.

WHY CHOOSE DEFEND™?

Bacteria are invisible to the human eye, however that doesn't mean they aren't there! With surfaces featuring antimicrobial technology, the growth of bacteria is significantly reduced on floor, wall and mosaic tiles.

The presence of bacteria can also cause odors. Reducing bacteria count reduces odor.

Surfaces with **DEFEND™** are easier to keep clean. While having a product with built-in antimicrobial product protection is not a substitute for routine cleaning, it allows continuous and complete cleaning of your surfaces with an even better level of cleanliness in-between cleanings.

THE AL — BOUTIQUE

USAGE:

RESIDENTIAL:

Kitchens, Bathrooms, Nurseries, Gameroom / Playroom,
Laundry & Mudrooms



COMMERCIAL:

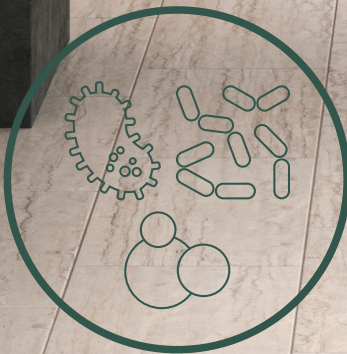
Restaurants & Bars, Healthcare Environments, Gyms &
Spas, Airports & Train Stations, Shopping Centers, Schools &
Theatres, Corporate Offices, Sports Centers



EFFECTIVENESS:

Surfaces featuring Microban® – **DEFEND™** have a
unique competitive advantage. These surfaces are a true
antimicrobial shield helping to prevent

UP TO 99% OF SURFACE BACTERIA.



UNPROTECTED
SURFACE



ANTIMICROBIAL
PROTECTED SURFACE

**WITH MICROBAN® YOU CAN WORRY LESS AND LIVE MORE WITH
TIME TO DO MORE OF WHAT YOU ENJOY IN LIFE**

Photo features Mythique Marble™ - Bottichino 12 x 24 on the floor
and Bottichino 8" Hexagon on the wall.

FINISHES: MATTE | POLISHED

USAGE	MATERIAL	PRICING	SPECIAL FEATURES
 FLOOR  WALL  COUNTERTOP  SHOWER FLOOR  EXTERIOR FLOOR	 PC  CG	 LOW HIGH	 STEPWISE™  TRUEEDGE™  MADE IN THE U.S.A.  LARGE FORMAT  MOSAIC/DECO  ENCAUSTIC  TERRAZZO  PAVER  CUSTOMIZE

NOT APPLICABLE FOR ALL PRODUCTS IN THIS SERIES. SEE CHARTS FOR FULL PRODUCT DETAILS.

MARBLE LOOK

COLORBODY™ PORCELAIN FLOOR TILE (AVAILABLE IN MATTE & POLISHED)



CALACATTA VENECIA MY11



ALTISSIMO MY10



BOTTICINO MY13

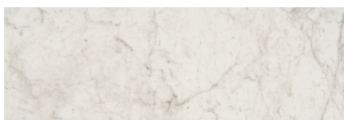


MAJESTIC MY12

GLAZED CERAMIC WALL TILE - MATTE



CALACATTA VENECIA MY11



ALTISSIMO MY10

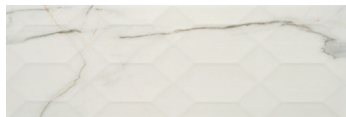


BOTTICINO MY13

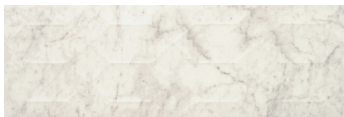


MAJESTIC MY12

GLAZED CERAMIC MULTI-WAVE CREST WALL TILE - MATTE



CALACATTA VENECIA MY11



ALTISSIMO MY10



BOTTICINO MY13



MAJESTIC MY12

GLAZED PORCELAIN 8" HEXAGON FLOOR TILE - MATTE®



CALACATTA VENECIA MY11



ALTISSIMO MY10



BOTTICINO MY13



MAJESTIC MY12

GLAZED CERAMIC ARABESQUE MOSAIC 11" X 12" SHEET - MATTE



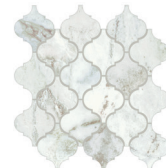
CALACATTA VENECIA MY15



ALTISSIMO MY14



BOTTICINO MY17



MAJESTIC MY16

JOLLY TRIM



CALACATTA VENECIA MY11



ALTISSIMO MY10



BOTTICINO MY13



MAJESTIC MY12



SLIP RESISTANT



WATERPROOF



STAINPROOF



DENTPROOF



SCRATCH-RESISTANT™
 Applicable to products with Matte and Textured Finishes



FIRE-RESISTANT



CLIMATEPRO™



SIMPLECLEAN™

FINISHES: MATTE | POLISHED

USAGE



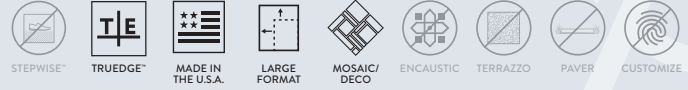
MATERIAL



PRICING



SPECIAL FEATURES



NOT APPLICABLE FOR ALL PRODUCTS IN THIS SERIES. SEE CHARTS FOR FULL PRODUCT DETAILS.

SIZES

			THICKNESS	SQ. FT./ CARTON	PIECES/ CARTON
	24 x 24 Floor Tile	23-3/8" x 23-3/8" (59.44 cm x 59.44 cm)	5/16"	15.20	4
	12 x 24 Floor Tile	11-5/8" x 23-3/8" (29.56 cm x 59.44 cm)	5/16"	16.83	9
	12 x 12 Floor Tile	11-5/8" x 11-5/8" (29.56 cm x 29.56 cm)	5/16"	12.22	13
	8" Hexagon Floor Tile*◇	7-7/8" x 9-1/8" (20.04 cm x 23.16 cm)	5/16"	9.37	25
	3 x 12 Wall Tile■	3" x 12" (7.65 cm x 30.70 cm)	5/16"	12.00	48
	8 x 24 Wall Tile■	7-3/4" x 23-3/4" (19.75 cm x 60.42 cm)	3/8"	12.80	10
	8 x 24 Multi-Wave Crest Wall Tile■	7-3/4" x 23-3/4" (19.75 cm x 60.42 cm)	3/8"	12.80	10
	Arabesque Mosaic■^	11" x 12" Sheet (27.94 cm x 30.48 cm sheet)	1/4"	7.40	10

■ Only available in Matte ^ Dot-mounted ◇ Microban not included * Hex is Glazed Porcelain

APPLICATIONS

	TARGET DCOF WET	SUITABLE
Dry & Level – Interior Floor	N/A	●†
Wet & Level – Interior Floor	≥ 0.42	●**
Shower Floors (Residential or Light Commercial)	≥ 0.42	●**
Exterior Floor Applications (including pool decking & other wet areas with minimal footwear)	≥ 0.60	
Ramps & Inclines	≥ 0.65	
Walls/Backsplashes	N/A	●
Countertops	N/A	●†
Pool Linings	N/A	●**

A DCOF value of ≥ 0.42 is the standard for tiles specified for level interior spaces expected to be walked upon when wet, as stated in ANSI A137.1-A326.3. For more information about DCOF and the DCOF AcuTest™, visit americanolean.com/DCOF.

APPLICATION NOTES:

Floor tile suitable for exterior applications in freezing and non-freezing climates, when proper installation methods are followed.

Wall tile and mosaics suitable for exterior applications in non-freezing climates, when proper installation methods are followed.

* Matte only

** Mosaic tile only

† Wall Tile not suitable for this application.

FEATURES



POST-CONSUMER
RECYCLED MATERIALS



PRE-CONSUMER
RECYCLED MATERIALS



MADE IN THE U.S.A.



REVEAL IMAGING®



CERTIFIED
PORCELAIN
TILE

ZEROTOX
Healthy Homes | Healthy Planet

PROTECTION THAT LIVES ON
MICROBAN®

All or select items within this series meet the requirements for these qualifications.
For more information visit americanolean.com.

*Hex is Glazed Porcelain

TRIM

			NUMBER	PIECES/ CARTON
	Floor Bullnose	3 x 24	P43F9	10
	Jolly*	1/2 x 12	S1/212J	6 CARDS*

*4 pieces per card

◇ Microban not included

INSTALLATION

Grout Joint Recommendation	Shade Variation
Floor: 1/8" (3/16" when multiple sizes are installed in a modular pattern, and/or when installing tile with a length 15" or greater in a staggered brick-joint pattern; overlap should not exceed 33%.) Wall: 8 x 24 1/16" (1/8" when rectangular size is installed in a staggered brick-joint pattern; overlap should not exceed 33%.) 3 x 12 1/16" (When rectangular size is installed in a staggered brick-joint pattern, overlap should not exceed 33%.) Mosaic: 1/8"	High (V3) (MY10, MY11, MY13, MY14, MY15, MY17) Random (V4) (MY12, MY16)

PERFORMANCE CHARACTERISTICS

	ASTM#	FLOOR RESULT	WALL RESULT	MOSAIC RESULT
Water Absorption	C373	< 0.5%	<20.0%	<3.0%
Breaking Strength	C648	> 275 lbs	120 - 230 lbs	>250 lbs
Scratch Hardness	MOHS	6.0(Polished) 8.0(Matte)	4.0 - 6.0	8.0
Chemical Resistance	C650	Resistant	Resistant	Resistant

For additional information on test results, visit us at: americanolean.com/information/TestResults.

DURABILITY

Floor Surface Wear Resistance

1	Residential Bathrooms	3	All Residential / Light Commercial
2	All Residential Areas	4	All Residential / Commercial

NOTES

Since there are variations in all fired ceramic and natural products, tile and trim supplied for your particular installation may not match samples. Final confirmation should be made from actual tiles and trim prior to installation. Manufactured in accordance with ANSI A137.1 standards.

Not for use on ramps. Water, oil, grease, improper drainage and certain footwear can create slippery conditions. Floor applications expected to be exposed to these conditions require extra caution in product selection.

For additional information refer to "Factors to Consider" at: americanolean.com/Factors.

Random visuals enhance the natural beauty of this product. To achieve optimal results, all tile should be selected from multiple cartons and shading and graphic arrangement planned prior to installation.

Special consideration needs to be given when installing tiles greater than 15 inches. Please refer to americanolean.com/LargeTiles for more information.

Manufacturer Advisory: All tile is measured by the DCOF AcuTest™ method. Tiles with DCOF values <0.42 are not recommended for use in areas with wet or slippery conditions. For more information, see ANSI standard A137.1 section 6.2.2.1.10, available at www.tileusa.com.

Special care should be taken when grouting with dark pigmented colors. A grout release is recommended to prevent finely powdered pigments from lodging in the pores of the surface. Use of a latex modified thin-set is recommended for installation.

888.AOT.TILE



AMERICAN OLEAN®
PROVEN IN TILE™





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LEARN MORE AT AMERICANOLEAN.COM/DEFEND.

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