

MEGANITE®

TECHNICAL
BULLETINS

MEGANITE® COLOR RESISTANCE TO UV LIGHTING

DOCUMENT PURPOSE

This document offers an overview of potential color performance of MEGANITE® Acrylic Solid Surface based on accelerated Weather-Ometer® testing performance in accordance with ASTM G155. This test method is widely used in solid surface and other surfacing materials for outdoor colorfastness behaviors.

Color stability is often a primary concern when evaluating a material exposed in outdoor environments. UV rays are the primary cause of discoloration along with moisture. ASTM G155 simulates light, moisture and temperature in a controlled environment over a period. From this test, some of MEGANITE colors exhibit good color stability and some do not weather well. In our tests, we chose the most popular and in trend colors and not all Meganite's 1000+ colors are tested. The findings in this technical bulletin are intended to provide general information for certain color groups.

Color changes under outdoor lighting generally depending on the base color of the material. Comparing to vivid, dark and saturated colors, the change is less obvious on light or subdued colors. Our findings can provide educational information about color performance affected by UV in an accelerator testing environment. But the results may not equally or adequately reflect the final install environments or structural designs. Ultimately, it is the end users' determination if these color characteristics are acceptable.

MEGANITE® has been a specified supplier of color pastes to building materials and resin industries for outdoor and marine applications for over 40 years and we have been making solid surface for over 20 years. Our team of colorists know color well and only use high quality and stable color pigments.

DISCLAIMER:

DUE TO THE COLOR CHANGING PROPERTIES UNDER EXPOSURE TO SUNLIGHT, THE FOLLOWING PAGES SHOWS THE POTENTIAL COLOR PERFORMANCE FOR YOUR REVIEW. PERFORMANCE HERE IS FOR REFERENCE ONLY, NOT REFLECT THE FINAL INSTAL ENVIROMENTS. IT'S END USERS' DETERMINATON IF COLOR CHARACTERISTICS ARE ACCEPTABLE.

MEGANITE®

TECHNICAL BULLETINS

MEGANITE® COLOR RESISTANCE TO UV LIGHTING

BELOW ARE SOME OF THE MOST POPULAR COLOR TONES USED BY DESIGNERS AND HOMEOWNERS GLOBALLY. NOT ALL MEGANITE COLORS ARE LISTED HERE. COLOR CHANGE UNDER UV CAN BE SIMILAR FOR DIFFERENT DESIGNS WITH SIMILAR COLORS TONES.

Solid Color

Solid colors can be measured by a color spectrometer. By comparing the figures before and after performing the UV resistance test in a computer, the difference is defined as ΔE .

ΔE less than 2 display exceptional colorfastness properties.
 ΔE more than 5 are with obvious color changes.

Non-Solid Color

Non-solid color is not possible to be measured by a color spectrometer. Color spectrometer can only detect one color at a time. Non-solid colors have a combination of several colors and color chips. Therefore, color changes are measured by eye inspection using grey scales and observed in a controlled light box with even lighting while comparing to non-UV exposed samples (control samples). Below comments are from trained professional color experts' feedbacks.

NO.	NAME	Slight color change barely seen by naked eyes ($\Delta E < 5$)	Slight color change possibly seen by naked eyes ($\Delta E < 15$)	Color change seen by naked eyes ($\Delta E > 15$)
001A	Bright White	x		
003A	Bone	x		
005A	Soft White	x		
019A	Jet Black		x	
019X	Dark Jet Black		x	
033A	Snow White	x		
040A	Slate		x	
053A	Lemon Glow			x
056A	Grey		x	
060A	Lime			x
062A	Aqua Glow			x
063A	Summer Glow			x
072A	Ivory			x
077A	Tangerine			x
079A	Sunshine			x
081A	Alaska White		x	

MEGANITE®

TECHNICAL
BULLETINS

MEGANITE® COLOR RESISTANCE TO UV LIGHTING

NO.	NAME	Slight color change barely seen by naked eyes ($\Delta E < 5$)	Slight color change possibly seen by naked eyes ($\Delta E < 15$)	Color change seen by naked eyes ($\Delta E > 15$)
088A	Fire		x	
091A	Chocolate		x	
091X	Dark Chocolate		x	
093A	Pewter		x	
093X	Dar Pewter		x	
094A	White Glow			x
219AR	Silver Mist		x	
246A	Sandy Shore			x
265A	Midnight Sky Mist		x	
266AR	Wheat Mist		x	
290A	Polar Mist		x	
311A	Galaxy Mist		x	
311X	Dark Galaxy Mist			
312AR	Canvas Mist		x	
319A	Madeira Mist		x	
349A	Papyrus Mist		x	
373AR	Morocco Mist		x	
424A	Makena Beach		x	
426A	Summer Beach		x	
428A	Kauai Beach		x	
429A	Lanikai Beach		x	
430SA	Shine On Me			x
501A	San Rafael Stone	x		
502A	Staten Island Stone	x		
503A	Rio Grande Stone		x	
503SA	Brown Eyed Girl		x	
504AR	Canela Stone	x		
505A	Volterra Stone		x	
505SA	Under the Boardwalk		x	
508SA	Starry Starry Night		x	
508XS	Dark Starry Starry Night			
510A	Blue Bayou	x		
519SA	Rain Cloud		x	
520A	Smokey Mountain	x		

MEGANITE®

TECHNICAL BULLETINS

MEGANITE® COLOR RESISTANCE TO UV LIGHTING

NO.	NAME	Slight color change barely seen by naked eyes ($\Delta E < 5$)	Slight color change possibly seen by naked eyes ($\Delta E < 15$)	Color change seen by naked eyes ($\Delta E > 15$)
615A	Platinum Granite		x	
625AR	Desert Stone Granite	x		
626A	Oatmeal Granite	x		
627AR	Rye Granite	x		
630A	Antique White Granite			x
652A	Kaleidoscope Granite		x	
657A	Lava Granite			
660AR	Sonora Granite	x		
661A	Delta Granite	x		
671A	Parchment Granite		x	
674A	Moonstone Granite		x	
679AR	Cinder Granite	x		
681AR	Aztec Granite	x		
683AR	Rushmore Granite	x		
685AR	Allspice Granite	x		
691A	Sanibel Granite		x	
698SA	Red Diamond Sparkle		x	
701A	Blanca Granite		x	
703SA	Snow Owl			x
704SA	Urban Habitat			x
706A	Sedona Granite	x		
719A	Mocha Granite	x		
729AR	Rocky Road Granite	x		
734A	Golden Meadow Granite	x		
736A	Indigo Granite		x	
744A	Portland Rain		x	
751A	Moscada Granite		x	
757A	Yorkshire Tan Granite	x		
759A	Denali Granite		x	
760A	Yellowstone Granite	x		
775A	White Mosaic Granite		x	
780A	Aspen Granite		x	
800A	Winter Boulder		x	
802A	Shangri-La Boulder		x	
805AR	Ultimate Boulder	x		

MEGANITE®

TECHNICAL BULLETINS

MEGANITE® COLOR RESISTANCE TO UV LIGHTING

NO.	NAME	Slight color change barely seen by naked eyes ($\Delta E < 5$)	Slight color change possibly seen by naked eyes ($\Delta E < 15$)	Color change seen by naked eyes ($\Delta E > 15$)
809A	Euphoria Boulder	x		
810AR	Raven Boulder	x		
810X	Dark Raven Boulder			
811A	South Beach Boulder		x	
813A	White Crystal Boulder			x
819SAR	Goldrush Gemstone		x	
820SA	Botanic Gemstone		x	
821SAR	Tiger Eye Gemstone		x	
833A	Olive Branch	x		
846A	Cotton Boulder		x	
881A	Borgata Boulder	x		
903A	Barney's Rubble		x	
904A	Just Beachy		x	
905A	Rice Pudding			x
912B	Translucent Green Ice			x
913B	Translucent Blue Ice			x
923SA	Silver Lining			x
930SA	Silver Shards		x	
931SA	Bird Bath			x
932SA	Mottled Gray			x
933SA	Solar Eclipse		x	
957A	Speckled Hen			x
9745B	Frosted Ice			x
9926SB	Midnight Gemstone			x
9927B	Shell Mosaic			x
M002	Mt. Vancouver		x	
M005	Mt. Jade			x
M007	Mt. Carrara		x	

IF YOU HAVE QUESTIONS, PLEASE CONTACT MEGANITE SOLID SURFACE REPRESENTATIVES, AUTHORIZED FABRICATORS, DISTRIBUTORS OR EMAIL US AT INFO@MEGANITE.COM. ALL TECHNICAL BULLETINS CAN BE FOUND @ WWW.MEGANITE.COM