

## Cool Chemistry® - Coil Coating System

The next generation silicone-polyester Cool Chemistry® system is here! These coatings are not only engineered to give a 40-year film integrity warranty, but also offer high reflectivity in medium and dark colors that helps dramatically reduce the energy (and the associated costs) for cooling, especially in hot, sunny climates.

This premium silicone-polyester system provides the next best exterior durability to 70% PVDF coatings based on real world exposure testing in South Florida. It also provides energy savings in a full spectrum of colors. The use of proprietary resin technology and inorganic and ceramic pigments provides a coating system that outperforms other silicone-polyester coatings for chalking and fade resistance, with a 30-year performance warranty.

In addition to their remarkable "cool" technology, these coatings clean easily, have excellent stain resistance, scratch resistance, and are recoatable. Coupled with a high performance primer, this system affords salt spray and moisture resistance unmatched in the industry.

Silicone-polyester coatings are ideal for all metal building applications requiring a high performance coating system for metal roofing and walls, including commercial, industrial, agricultural and residential markets.

To learn more about the full range of color and gloss options available from Mill Steel – or to order samples of any color featured on this card – visit www.millsteel.com or call (877) 262-8333.

\*TSR = Total Solar Reflectance

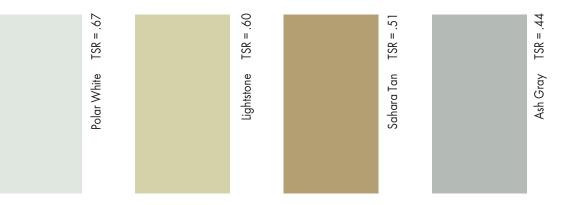
\*Actual colors may vary from samples shown. Actual color chips available upon request.



## MILL STEEL COMPANY BUILDING PRODUCTS

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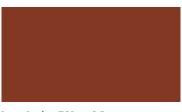


Forest Green TSR = .31

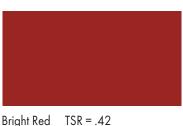
Emerald Green TSR = .33

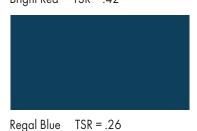


Burgundy TSR = .26



Barn Red TSR = .35







Film Properties		Test Methods & Descriptions	CERAM-A-STAR®1050	
<u>SUBSTRATE</u>			Hot Dipped Galvanized Galfan & Galvalume®	Aluminum
Dry Film Thickness:		ASTM <sup>1</sup> D1400, D1005, D4138	0.20 - 0.25 Mils Primer	0.20 - 0.25 Mils Primer
<i>D</i> 1y 11111 111(KIIC55,		(NCCA <sup>2</sup> II-13,14,15)	0.70 - 0.90 Mils Topcoat	0.70 - 0.90 Mils Topcoa
PHYSICAL PI		ASTM D523	35%	35%
60° Specular	Gloss:		00,0	00,0
Pencil Hardn	ess:	ASTM D3363 (NCCA II - 12) Eagle Turquoise Pencil	"F" - Minimum	"F" - Minimum
Flexibility:	T-Bend	NCCA II - 9	2T - No Tape-Off	2T - No Tape-Off
	Mandrel Bend	ASTM D522 180° bend	No Tape-Off	No Tape-Off
	Manufer Denu	around 1/8" mandrel	No tape Off	No Tape Off
		ASTM D3359 (NCCA II - 5)		
Adhesion:		Reverse Impact Cross Hatch	No Adhesion Loss	No Adhesion Loss
		ASTM D2794 (NCCA II - 6)	Ho Adhesion 2033	No Adhesion 2033
Reverse Impact:		80 inch-pound impact with a 5/8" stee	No Adhesion Loss	No Adhesion Loss
		ball or = $2000 \times \text{decimal steel}$		
		thickness in inches		
ABUSE TOLE	RANCE			
Abrasion Resistance:		ASTM D968, Liters to expose	30 Liters Per	30 Liters Per
Falling Sand		5/32" area of substrate	Mil of Film	Mil of Film
Transit		Based on topside to backer contact in	Acceptable	Acceptable
ITalls	h	transit after painting	Receptuble	receptuble
Mortar Resistance:		AAMA <sup>8</sup> 605.2 (24 Hour Pat Test)	No Effect	No Effect
Detergent Resistance:		ASTM D2248 3% @ 100°F, 72 Hours	No Effect	No Effect
<u> </u>		CHEMICALS & POLLUTION		
Acid Pollutar		Per ASTM D1308, Proc.6.2:		
10% Muriatic Acid		24 Hours	No Effect	No Effect
20% Sulfuric Acid		24 Hours	No Effect	No Effect
				<5 dE Color Change <sup>6</sup>
70% Nitric Acid Vapors		AAMA 605.2, ASTM G87 (30 Minutes)	10 cycles <sup>5</sup>	42 Color Change 10 cycles <sup>5</sup>
	ernich Test	SO <sub>2</sub> Cyclic Test, 2 Liters	TO Cycles	TO Cycles
Alkali Resista				
Sodium Hydroxide		ASTM D1308 10%, 25% (1 Hour)	Minimal Effect	Minimal Effect
Salt Fog:		ASTM B117 5% Salt Fog @ 95°F	1000 Hours <sup>4</sup>	3000 Hours <sup>4</sup>
Humidity:		ASTM D2247 100% Relative		
		Humidity @ 100°F	1500 Hours <sup>7</sup>	1500 Hours <sup>7</sup>
WEATHERIN	<u>G PROPERTIES</u>			
Accelerated \	Weathering:	ASTM D822, G152, G153 Weatheromet	er 2000 Hours	2000 Hours
	0	ASTM D2244 Color	<5 dE Color Change <sup>6</sup>	<5 dE Color Change <sup>6</sup>
		ASTM D4214 Chalk	Maximum #8	Maximum #8
EMMAQUA Testing:		Per ASTM D4141	Superior Results	Superior Results
Exterior Weathering:			Superior: Maximum	Superior: Maximum
	ē			
	da Exposure	ASTM D2244 Color	<5 dE Color Change <sup>6</sup>	<5 dE Color Change <sup>6</sup>
10 Vo	ears @ 45° South	ASTM D659 Chalk	Maximum #8	Maximum #8
	Erosion	AAMA 605.2	Less than 20% film loss	Less than 20% film loss

American Society Testing and Materials.
 National Coil Coaters Association.
 Higher and lower glosses available upon request.
 Less than 1/8" creep from scribe. No more than few #8 blisters.
 No objectionable color change.
 Hunter d (delta) E color difference units.
 No more than few #8 blisters.
 American Architectural Manufacturers Association.

A American Architectural Manufacturers Association.
CERAM-A-STAR<sup>®</sup> 1050 is a trademark of Akzo Nobel Coatings, Inc.

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