

# CERAMASTAR 950 PROPERTIES

New CERAM-A-STAR®950 color system technology is the latest achievement resulting from decades of Akzo Nobel long life coatings research.

Weathering performance of CERAM-A-STAR®950 coatings redefines long established standards for silicone protected polyester finishes used to decorate and protect metal panels for exterior wall and roof construction.

Specially tested and select ceramic/inorganic pigment combinations give highly durable color to CERAM-A-STAR®950 color systems. Properly combined with proprietary polymers, these high performance pigments provide optimum resistance to color and appearance changes typically caused by normal environmental exposure.

CERAM-A-STAR®950 colors have real time test fence resistance to chalk erosion and color fade and are construction project proven.

Coil coater and fabricator friendly CERAM-A-STAR®950 finishes are available in a wide range of design-compatible colors guaranteed to meet performance and specification requirements well into the twenty-first century.

- |                                |                                     |                               |
|--------------------------------|-------------------------------------|-------------------------------|
| 01. Hawaiian Blue SL3G23802    | 08. USDA White SW3K 25505 "950 U"   | 15. Ocean Blue SL3G 23837     |
| 02. Ash Gray SA3G23796         | 09. Dresden Blue SL3G 24499         | 16. Sahara Tan ST3G 23790     |
| 03. Emerald Green SG3G 24449   | 10. Charcoal SA3G 24157             | 17. Patina Green SG3G 24638   |
| 04. Polar White SW3G 23789     | 11. Sand Gold SD3G 23791            | 18. Egyptian White SW3G 24045 |
| 05. Burnished Slate SS3G 23804 | 12. Architectural Bronze SS3G 24431 | 19. Cocoa Brown SN3G 23803    |
| 06. Lightstone SH3G 23793      | 13. Colony Green SG3G 23794         | 20. Desert Beige ST3G 23798   |
| 07. Country Red SR3G 23792     | 14. Ebony Black SB3G 23795          |                               |





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**Film Properties  
 Test Methods & Descriptions  
 CERAM-A-STAR®950**

**SUBSTRATE** Hot Dipped Galvanized Galfan & Galvalume Aluminum

<b>Dry Film Thickness:</b> ASTM <sup>1</sup> D1400/D1005/D4138  (NCCA <sup>2</sup> 11-13,14,15)	0.20-0.25 mils primer  0.70-0.90 mils topcoat	0.20-0.25 mils primer  0.70-0.90 mils topcoat
<b>PHYSICAL PROPERTIES</b>		
<b>60° Specular Gloss:</b> ASTM D523 <sup>3</sup> ASTM D3363 (NCCA 11-12)	25-40%	25-40% <sup>3</sup>
<b>Pencil Hardness:</b> Eagle Turquoise Pencil	"F"-Minimum	"F"-Minimum
<b>Flexibility:</b> **T-Bend NCAA 11-9 ASTM D522 180° bend **Mandrel Bend arnd 1/8" mandrel	2T - No Tape-Off  No Tape Off	2T - No Tape-Off  No Tape Off
<b>Adhesion:</b> ASTM D3359 (NCCA 11-5) Reverse Impact Cross Hatch	No Adhesion Loss	No Adhesion Loss
<b>Reverse Impact:</b> ASTM D2794 (NCCA 11-6) 5/8" Ball Impact in inch-pounds = 2000 x decimal fraction of steel thickness in inches	No Adhesion Loss	No Adhesion Loss
<b>ABUSE TOLERANCE</b>		
<b>Abrasion Resistance:</b> ASTM D968, Liters to expose **Falling Sand 5/32" area of substrats Based on topside to backer **Transit contact in transit after painting	30 Liters per mil of film  Acceptable	30 Liters per mil of film  Acceptable
<b>Mortar Resistance:</b> AAMA <sup>8</sup> 605.2 (24 Hour Pat Test)	No Effect	No Effect
<b>Detergent Resistance:</b> ASTM D2248 3%@100°F, 72 Hours	No Effect	No Effect
<b>RESISTANCE TO CORROSION, CHEMICALS &amp; POLLUTION</b>		
<b>Acid Pollutants:</b> Per ASTM D1308, Proc. 7.2: **10% Muriatic Acid 15 Minutes **20% Sulfuric Acid 24 Hours **70% Nitric Acid Vapors AAMA 605.2 (30 Minutes) **Kesternich Test SO <sub>2</sub> ,CyclicTest,2 Liters	No Effect No Effect <5dE <sup>6</sup> Color Change  10 cycles <sup>5</sup>	No Effect No Effect <5dE <sup>6</sup> Color Change  10 cycles <sup>5</sup>



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**Alkali Resistance:**

	*Sodium Hydroxide ASTM D1308 10%, 25% (1 Hour)	Minimal Effect 1000 Hours <sup>4</sup>	Minimal Effect 3000 Hours <sup>4</sup>
<b>Salt Fog:</b>	ASTM B117 5% Salt Fog @ 95°F		
<b>Humidity:</b>	ASTM D2247 100% Relative Humidity @ 100°F	1500 Hours <sup>7</sup>	1500 Hours <sup>7</sup>
<b>WEATHERING PROPERTIES</b>			
<b>Accelerated Weathering:</b>	ASTM G23 Weatherometer ASTM D2244 Color ASTM D659 Chalk	2000 Hours <5 dE <sup>6</sup> Color Change Maximum #8 Superior Results	2000 Hours <5 dE <sup>6</sup> Color Change Maximum #8 Superior Results
<b>EMMAQUA Testing:</b>	Per ASTM D4141	Superior Results	Superior Results
<b>Exterior Weathering:</b>	**Florida Exposure ASTM D2244 Color **5 Years @ 45° South ASTM D659 Chalk **Film Erosion AAMA 605.2	<5 dE <sup>6</sup> Color Change Maximum #8 Less than 20% film loss	<5 dE Color Change Maximum #8 Less than 20% film loss

**(Footnotes)**

- <sup>1</sup> American Society for Testing and Materials
- <sup>2</sup> National Coil Coaters Association
- <sup>3</sup> Higher and lower glosses available upon request.
- <sup>4</sup> Less than 1/16" creep from scribe. No more than few #8 blisters.
- <sup>5</sup> No objectionable color change.
- <sup>6</sup> Hunter d (delta) E color difference units.
- <sup>7</sup> No more than few #8 blisters.
- <sup>8</sup> American Architectural Manufacturers Association

For more information contact PermaTherm.

\*CERAM-A-STAR®950 is a trademark of Akzo Nobel Coatings Inc.