

10000 Series Superior Exterior Performance TGIC Polyester Coating Systems for Architecture

10000 Series Superior Exterior Performance TGIC Polyester Systems are formulated to meet and exceed the requirements of the American Architectural Manufacturing Association (AAMA) Specification 2604-05. They are designed to have excellent weatherability, durability, and toughness in service. 10000 Series products exhibit superior gloss and color retention and resistance to fading and chalking—some loss of gloss and some color variation is expected during periods of exterior service as stipulated by the AAMA 2604 standard. See the inside product information page for product properties and performance characteristics.

Products in this series can have a 60° gloss range as low as 30%. Lighter colors will have a higher minimum gloss. Colors are available in a wide selection and are formulated with pigments that will meet the AAMA 2604 Specification.

Proper chrome or non-chrome pretreatment is critical for product performance. A chrome conversion coating must be applied at 30 mg/ft² minimum; non-chrome conversion coating weights should be maintained according to the supplier's recommendation. A TCI technical representative must audit each application system to insure products will meet the AAMA 2604 specification in service.

TCI 10000 Series products can be warranted for a period of up to five (5) years when applied by approved applicators in conformance with AAMA specifications. Refer to the *TCI Powder Coatings 5 Year Limited Warranty* for details.

The 10000 Series products are offered in the standard color selection shown in this color card. TCI will, however, accept orders for other colors that can be specially made in accordance with AAMA material requirements.



10000 Series Coatings

AAMA 2604
**Architectural
Coatings**



Post Office Box 13
Ellaville, Georgia 31806
800•533•9067
www.tcipowder.com

An **RPM** Company



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|-------------------------------|-------------------------------|------------------------------------|------------------------------------|
| I0500-91553 (RAL 9003) | I0500-91547 (RAL 9016) | I0500-11712 (RAL 1013) | I0500-91556 (RAL 9001) |
| I0300-91554 (RAL 9018) | I0300-71758 (RAL 7044) | I0300-71747 (RAL 7038) | I0300-11711 (RAL 1019) |
| I0300-71751 (RAL 7045) | I0300-30122 (RAL 3012) | I0300-61075 (RAL 6021) | I0300-61077 (RAL 6000) |
| I0300-61078 (RAL 6028) | I0300-61079 (RAL 6012) | I0300-61074 (RAL 6005) | I0300-61084 (RAL 180 20 15) |
| I0300-50795 (RAL 5021) | I0300-50794 (RAL 5024) | I0300-50796 (RAL 5019) | I0300-50797 (RAL 5009) |
| I0300-71748 (RAL 7006) | I0300-30124 (RAL 3009) | I0300-80789 (RAL 8015) | I0300-80790 (RAL 8017) |
| I0300-80791 (RAL 8014) | I0300-71757 (RAL 7013) | I0300-71765 (RAL 220 30 05) | I0300-80795 (RAL 060 20 05) |
| I0300-71756 (RAL 7021) | I0300-91555 (RAL 9011) | | |

I0000 SERIES PRODUCT CHARACTERISTICS

| TEST PARAMETER | PROCEDURE | RESULT | TEST PARAMETER | PROCEDURE | RESULT |
|----------------|---------------|----------------|-----------------------------------|-----------|-------------------|
| Hardness | ASTM D3363-00 | H-2H | Cure Schedule (Metal Temperature) | | 12 minutes @ 400° |
| Gloss | ASTM D523-89 | ≥30%, 60° | Film Thickness | | 2-4 mils |
| Direct Impact | ASTM D2794-93 | 100-160 in/lbs | Specific Gravity | | 1.2-1.7 |
| Reverse Impact | ASTM D2794-93 | 100-160 in/lbs | | | |

AAMA 2604-05 PERFORMANCE REQUIREMENTS AND TEST PROCEDURES

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|---------|--|---------|---------------------------|---|
| 4.5 | Minor scratches and blemishes shall be repairable with the coating manufacturers recommended product or system. | 7.7.2 | Mortar Resistance | No adhesion loss, no appearance change. |
| 4.6 | Sealant used in contact with an organic coating shall be compatible with the organic coating and meet the performance requirements of the AAMA 800 sealant specification. | 7.7.3 | Nitric Acid Resistance | Less than 5 DE (Hunter) color change. |
| 6.0 | Metal Preparation and Pretreatment Chrome containing conversion coatings weights should be a minimum of 30 mg/ft ² . Non-chrome conversion coating weights should be maintained according to the supplier's recommendation. | 7.7.4 | Detergent Resistance | No adhesion loss, no visual change. |
| 7.2 | Specular Gloss Gloss values shall be within +/- 5 units of the manufacturer's specification. | 7.7.5 | Window Cleaner Resistance | No blistering, adhesion loss or visual change. |
| 7.3 | Film Hardness Pass grade F pencil, Berol Eagle Turquoise pencil or equivalent. | 7.8 | Corrosion Resistance | |
| 7.4 | Film Adhesion | 7.8.1 | Humidity Resistance | 3000 hours, ASTM D 2247 or ASTM D 4585 No formation of blisters to extent greater than "few" blister size No. 8, as shown in figure No. 4, ASTM D 714. |
| 7.4.1.1 | Dry Adhesion | 7.8.2 | Salt Spray Resistance | 3000 hours, ASTM B 117-97 Minimum rating of seven on scribe or cut edges, and a minimum blister rating of eight within the test specimen field, in accordance with table 1 and table 2 of ASTM 1654. |
| 7.4.1.2 | Wet Adhesion | 7.9 | Weathering | |
| 7.4.1.3 | Boiling Water | 7.9.1 | South Florida Exposure | Five years exposure, 45° angle, facing south. |
| 7.5 | Impact Resistance | 7.9.1.2 | Color Retention | Maximum five DE units (Hunter) of color change. Heavy scrubbing or any polishing to remove chalk formation or restore the surface is not permitted where color measurements are made. |
| 7.6 | Abrasion Resistance The abrasion Coefficient Value of the coating shall be 20 minimum. | 7.9.1.3 | Chalk Resistance | Not greater than No. 8, ASTM D 4214, Method A. |
| 7.7 | Chemical Resistance | 7.9.1.4 | Gloss Retention | 30% minimum. Heavy scrubbing or any polishing is not permitted where gloss measurements are made. |
| 7.7.1 | Muriatic Acid Resistance | 7.9.1.5 | Resistance to Erosion | Less than 10% film loss. |

NOTES:

- 1) Color matching from the RAL-K7 and the RAL-D2 decks.
- 2) Due to printing process slight variations between colors shown here and actual product will exist. Contact TCI for actual samples.