

AAMA 2604 FIVE YEAR LIMITED WARRANTY

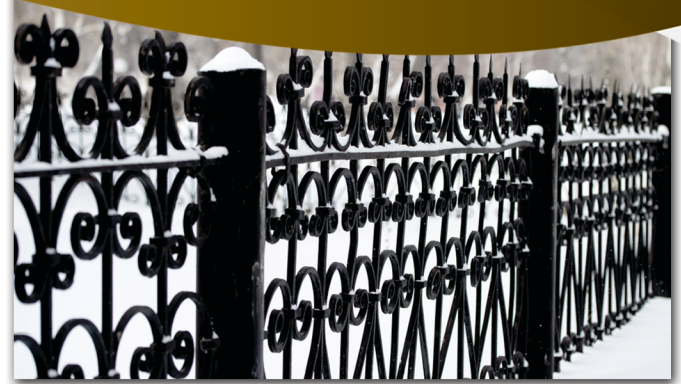
TCI Powder Coatings ("TCI") hereby warrants, subject to the conditions, qualifications and limitations set forth herein, that the TCI products covered by this warranty which have been properly applied to approved aluminum substrates will perform during the warranty period within the performance property ranges set forth below for the coating properties of color retention, gloss retention, chalk resistance and erosion resistance. Such coating properties are the only coating properties covered by this warranty. Properties not covered by this warranty, for example, include film adhesion. This warranty is strictly conditional upon the TCI product being:

- ✓ Specified by TCI for the intended application on aluminum substrates.
- ✓ Purchased directly from TCI or an authorized TCI distributor, and invoice(s) for such TCI product have been paid in full.
- ✓ Stored and handled using storage conditions and good handling practices recommended by TCI from the time of receipt to the time of application.
- ✓ Used by the Applicator within six (6) months of the purchase date.
- ✓ Applied by Applicators approved by TCI using application procedures and conditions specified for the TCI products by TCI.
- ✓ Applied to pretreated aluminum substrates from specifically designated sources that have been tested and qualified by TCI.
- ✓ Maintained after application in accordance with maintenance procedures recommended by TCI, which are found in the Users Guide. Minimum required maintenance cleaning is once a year (twice a year in high exposure environments) with documentation of dates, cleaning agents used and method of application.
- ✓ Traceably documented by the Applicator with required retained batch panels and otherwise in compliance with the terms of the TCI Approved Applicator Program.
- ✓ Any change in the approved applicators process including but not limited to changes in the pretreatment system and/or chemicals the application system, the cure process or any component that may impact their ability to meet the necessary performance requirements will void the warranty unless recertification testing has been completed and approved by TCI.

Provided that the above listed conditions are met, the warranty period is five (5) years from the date the TCI product was applied by the Applicator.

The coating property performance ranges for this warranty are set forth below. The coating property measurement procedures specified for this warranty are described in the document "Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels, AAMA 2604-13, American Architectural Manufacturers Association" (July 2013 revision).

- [1] **Film Integrity** The coating shall maintain film integrity after the minimum 5-year exposure test per Section 8.9.1.
- [2] **Color Retention** Color change shall be less than or equal to 5 CIE Lab DE units of color change as calculated in accordance with ASTM D 2244, Section 6.3 after the exposure test done per Section 8.9.1.2.1 in AAMA 2604-13. Color change shall be measured on the exposed painted surface which has been cleaned of oil, grease, chalk, oxidized film or other contaminants, and the corresponding values shall be measured on the original retained batch panel (unexposed).
- [3] **Gloss Retention** Gloss retention shall be a minimum of 30% after the exposure test done per Section 8.9.1.4.1 in AAMA 2604-13, expressed as: % Retention = [(60 degree gloss exposed and cleaned/60 degree gloss unexposed on a panel with the surface cleaned using a 1% solution of a wetting agent with a soft sponge under light pressure) x 100%].
- [4] **Chalk Resistance** Chalking shall be no more than that represented by a No. 8 rating based on ASTM D 4214, Test Method A (Method D 659) after test site



(weathering) exposure per Section 8.9.1.3.1 in AAMA 2604-13. Chalking shall be measured on an exposed, unwashed painted surface.

- [5] **Erosion Resistance** Erosion shall be less than 10% film loss after the exposure test done per Section 8.9.1.5.2 in AAMA 2604-13, expressed as: Loss = 100% - [(dry film thickness exposed/dry film thickness unexposed) x 100%].

These coating performance property ranges have the following additional qualifications and limitations under this warranty. It is noted that color change, gloss, chalk and other coating properties may not be uniform if the surfaces are not equally exposed to the sun and the elements. Such variations in and of themselves do not constitute a warranty failure. For a claim to be valid a specific area comprising at least 5% of the total application area must be found to be outside of the performance ranges set forth above.

Furthermore, this warranty does not apply when unusual or unexpected exposures (e.g., coastal applications, acid, salt water, spillage, pollution) or other harmful events that compromise the coating (e.g., damage due to impact and other mechanical or structural causes, fire, malicious activity, terrorism, abnormal weather conditions) are in evidence.

A claim made under this warranty must be submitted by the Applicator claimant no later than 30 days before the end of the warranty period. The claim must be submitted in writing to TCI at its corporate headquarters in Ellaville, Georgia. A claim made under this warranty must include a clear description of the alleged product failure under the terms of the warranty, proof the problem arose during the warranty period, and records demonstrating that the warranty conditions listed herein were fully satisfied for the product application where the problem occurred. Claimant must permit TCI to conduct its own claim inquiry to validate the claim, which may include site observation and sampling of coating and other relevant materials for testing and evaluation.

In the event of a valid claim, TCI will in its sole discretion determine what is reasonably necessary to repair the affected area and based on the schedule given below will provide the portion of replacement coating material (or of an alternative coating material of a suitable kind and quality) and will pay the portion of the proper cost of labor associated expenses needed for the repairs.

Defect Occurred:	Schedule of Material and Labor	TCI Material/Labor Portion
Up to One year after application		100%
Up to Two years after application		80%
Up to Three years after application		60%
Up to Four years after application		40%
Up to Five years after application		20%

In no event shall TCI be liable under this warranty for any claim, whether arising in contract, tort (including negligence), or otherwise for any consequential, economic, or other direct or indirect damage, loss or expense including loss of profits, income, contracts, business, production or goodwill or for any claims made against the Applicator by any third parties.

This warranty sets out TCI's entire liability for any fault or claim arising out of or in conjunction with the quality or condition of the TCI products supplied to the Applicator.

ALL WARRANTIES, REPRESENTATIONS, CONDITIONS AND TERMS, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL AS TO ANY SUCH MATTERS, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY EXCLUDED TO THE FULLEST EXTENT PERMITTED BY LAW.

AAMA 2605 TEN YEAR LIMITED WARRANTY

TCI Powder Coatings ("TCI") hereby warrants, subject to the conditions, qualifications and limitations set forth herein, that the TCI products covered by this warranty which have been properly applied to approved aluminum substrates will perform during the warranty period within the performance property ranges set forth below for the coating properties of color retention, gloss retention, chalk resistance and erosion resistance. Such coating properties are the only coating properties covered by this warranty. Properties not covered by this warranty, for example, include film adhesion. This warranty is strictly conditional upon the TCI product being:

- ✓ Specified by TCI for the intended application on aluminum substrates.
- ✓ Purchased directly from TCI or an authorized TCI distributor, and invoice(s) for such TCI product have been paid in full.
- ✓ Stored and handled using storage conditions and good handling practices recommended by TCI from the time of receipt to the time of application.
- ✓ Used by the Applicator within six (6) months of the purchase date.
- ✓ Applied by Applicators approved by TCI using application procedures and conditions specified for the TCI products by TCI.
- ✓ Applied to pretreated aluminum substrates from specifically designated sources that have been tested and qualified by TCI.
- ✓ Maintained after application in accordance with maintenance procedures recommended by TCI, which are found in the Users Guide. Minimum required maintenance cleaning is once a year (twice a year in high exposure environments) with documentation of dates, cleaning agents used and method of application.
- ✓ Traceably documented by the Applicator with required retained batch panels and otherwise in compliance with the terms of the TCI Approved Applicator Program.
- ✓ Any change in the approved applicators process including but not limited to changes in the pretreatment system and/or chemicals the application system, the cure process or any component that may impact their ability to meet the necessary performance requirements will void the warranty unless recertification testing has been completed and approved by TCI.

Provided that the above listed conditions are met, the warranty period is ten (10) years from the date the TCI product was applied by the Applicator.

The coating property performance ranges for this warranty are set forth below. The coating property measurement procedures specified for this warranty are described in the document "Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels, AAMA 2605-13, American Architectural Manufacturers Association" (July 2013 revision).

- [1] **Film Integrity** The coating shall maintain film integrity after the minimum 10-year exposure test per Section 8.9.1.1.
- [2] **Color Retention** Color change shall be less than or equal to 5 DE units (Hunter) of color change as calculated in accordance with ASTM D 2244, Section 6.3 after the exposure test done per Section 8.9.1.2.1 in AAMA 2605-13. Color change shall be measured on the exposed painted surface which has been cleaned of oil, grease, chalk, oxidized film or other contaminants, and the corresponding values shall be measured on the original retained batch panel (unexposed).
- [3] **Gloss Retention** Gloss retention shall be a minimum of 50% after the exposure test done per Section 8.9.1.4.1 in AAMA 2605-05, expressed as: % Retention = [(60 degree gloss exposed and cleaned/60 degree gloss unexposed) x 100%].
- [4] **Chalk Resistance** Chalking shall be no more than that represented by a No. 8 rating for colors, No. 6 for whites, based on ASTM D 4214, Test Method A (Method D 659) after test site (weathering) exposure per Section 8.9.1.1 in AAMA 2605-13. Chalking shall be measured on an exposed, unwashed painted surface.



- [5] **Erosion Resistance** Erosion shall be less than 10% film loss after the exposure test done per Section 8.9.1.5.2 in AAMA 2605-13, expressed as: Loss = 100% - [(dry film thickness exposed/dry film thickness unexposed on a panel with the surface cleaned using a 1% solution of a wetting agent with a soft sponge under light pressure) x 100%].

These coating performance property ranges have the following additional qualifications and limitations under this warranty. It is noted that color change, gloss, chalk and other coating properties may not be uniform if the surfaces are not equally exposed to the sun and the elements. Such variations in and of themselves do not constitute a warranty failure. For a claim to be valid a specific area comprising at least 5% of the total application area must be found to be outside of the performance ranges set forth above.

Furthermore, this warranty does not apply when unusual or unexpected exposures (e.g., coastal applications, acid, salt water, spillage, pollution) or other harmful events that compromise the coating (e.g., damage due to impact and other mechanical or structural causes, fire, malicious activity, terrorism, abnormal weather conditions) are in evidence.

A claim made under this warranty must be submitted by the Applicator claimant no later than 30 days before the end of the warranty period. The claim must be submitted in writing to TCI at its corporate headquarters in Ellaville, Georgia. A claim made under this warranty must include a clear description of the alleged product failure under the terms of the warranty, proof the problem arose during the warranty period, and records demonstrating that the warranty conditions listed herein were fully satisfied for the product application where the problem occurred. Claimant must permit TCI to conduct its own claim inquiry to validate the claim, which may include site observation and sampling of coating and other relevant materials for testing and evaluation.

In the event of a valid claim, TCI will in its sole discretion determine what is reasonably necessary to repair the affected area and based on the schedule given below will provide the portion of replacement coating material (or of an alternative coating material of a suitable kind and quality) and will pay the portion of the proper cost of labor associated expenses needed for the repairs.

Schedule of Material and Labor

Defect Occurred:	TCI Material/Labor Portion
Up to One year after application	100%
Up to Two years after application	90%
Up to Three years after application	80%
Up to Four years after application	70%
Up to Five years after application	60%
Up to Six years after application	50%
Up to Seven years after application	40%
Up to Eight years after application	30%
Up to Nine years after application	20%
Up to Ten years after application	10%

In no event shall TCI be liable under this warranty for any claim, whether arising in contract, tort (including negligence), or otherwise for any consequential, economic, or other direct or indirect damage, loss or expense including loss of profits, income, contracts, business, production or goodwill or for any claims made against the Applicator by any third parties.

This warranty sets out TCI's entire liability for any fault or claim arising out of or in conjunction with the quality or condition of the TCI products supplied to the Applicator.

ALL WARRANTIES, REPRESENTATIONS, CONDITIONS AND TERMS, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL AS TO ANY SUCH MATTERS, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY EXCLUDED TO THE FULLEST EXTENT PERMITTED BY LAW.