

# Colors

&

# Finishes



## Tier 1 Finishes

### AAMA 2604/2605 Powder Coat Finishes

No Minimum Volume Requirement applies to Tier 1 finishes. (Hardware and vinyl colors are subject to manufacturer specifications)



#### **Performance**

Powder coatings by Thermal Windows, Inc. are based on thermosetting super durable polyester technology that meets the AAMA 2604-20/2605-20 High-Performance Specification.

The coatings possess excellent weatherability and resistance to chemicals and corrosion.

#### **Environmentally Friendly**

Thermal Windows, Inc. uses dry powder coatings applied electrostatically in our state-of-the-art clean room, without releasing volatile organic compounds (VOC's) into the atmosphere.

The products represented in this brochure have been prepared as replications of actual powder coatings. Samples shown above may vary in color and gloss from actual coatings due to the effects of heat, light and manufacturing processes. It cannot be assumed that the final finish will exactly match these samples.



## Tier 2 Finishes

### AAMA 2604/2605 Powder Coat Finishes

Minimum Volume Requirements Apply to Tier 2 finishes.
3,000 sq.ft. or more at standard pricing. Smaller quantities are available at an additional cost.
(Hardware and vinyl colors are subject to manufacturer specifications)



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## Performance Requirements for AAMA 2604-20 / 2605-20 for Pigmented Organic Coatings on Aluminum Extrusions

Requirement	AAMA 2604-20	AAMA 2605-20
<b>Color Uniformity</b> – Color uniformity shall be consistent with the color range or numerical value as established between the approval source and the applicator.	✓	✓
<b>Specular Gloss</b> – Gloss values shall be within $\pm$ 5 units of the manufacturer's specification.	1	1
Dry Film Hardness – No rupture of film per ASTM D 3363	1	1
Film Adhesion – No removal of film under the tape within or outside of the cross-hatched area or blistering anywhere on the test specimen. Report loss of adhesion as a percentage of squares affected.	1	1
Impact Resistance – No removal of film from substrate.	1	1
Abrasion Resistance – The Abrasion Coefficient Value of the coating shall be 20 minimum.	1	1
Chemical Resistance – Muriatic Acid (15-Minute Spot Test) No blistering and no visual change in appearance when examined by the unaided eye.	1	1
Chemical Resistance – Mortar (24-hour Pat Test) Mortar shall dislodge easily from the painted surface, and any residue shall be removable with a damp cloth. Any lime residue should be easily removed with the 10% muriatic acid solution described in Section 8.7.1.2 (AAMA 2604, AAMA 2605). There shall be no loss of film adhesion or visual change in appearance when examined by the unaided eye.	1	1
Chemical Resistance – Nitric Acid No more than 5 Δ E Units (Hunter) of color change, per Section 5.7 (AAMA 2604, AAMA 2605), when comparing measurements on the acid-exposed painted surface and the unexposed surface.	1	1
Chemical Resistance – Detergent No loss of adhesion of the film to the metal. No blistering and no significant visual change in appearance when examined by the unaided eye.	1	1
Chemical Resistance – Window Cleaner There shall be no blistering or noticeable change in appearance when examined by the unaided eye and/or removal of film under the tape within or outside of the cross-hatched area.	1	1
Corrosion Resistance – Humidity No formation of blisters to extent greater than "Few" blisters Size No. 8 as shown in ASTM D 714.	1	1
Corrosion Resistance – Salt Spray Resistance Minimum rating of 7 on scribe or cut edges, and a minimum blister rating of 8 within the test specimen field, in accordance with ASTM D 1654.	1	1
Weathering – South Florida Exposure Maximum of 5 $\Delta$ E Units (Hunter) color change after the minimum 5-year exposure test per Section 8.9.2.1 (AAMA 2604).	1	
Weathering – South Florida Exposure Maximum of 5 $\Delta$ E Units (Hunter) color change after the minimum 10-year exposure test per Section 8.9.2.1 (AAMA 2605).		1
Weathering – 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 8.9.2.1) for 5 years (AAMA 2604) / 10 years (AAMA 2605). Chalking shall be measured on an exposed, unwashed painted surface.	✓	1
<b>Weathering – Gloss Retention</b> Gloss retention shall be a minimum of 30% after the 5-year exposure test per Section 8.9.2.1 (AAMA 2604) expressed as % Retention = 60° gloss exposed ÷ 60° gloss unexposed X 100%.	1	
<b>Weathering – Gloss Retention</b> Gloss retention shall be a minimum of 50% after the 10-year exposure test per Section 8.9.2.1 (AAMA 2605) expressed as % Retention = 60° gloss exposed ÷ 60° gloss unexposed X 100%.		1
<b>Resistance to Erosion</b> Less than 10 percent film loss after the exposure test per Section 8.9.2.1 (AAMA 2604/2605) expressed as a percent loss of total film: 100% - Dry film thickness exposed ÷ Dry film thickness unexposed X 100%.	<b>✓</b>	1



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