



When it comes to color choices for our aluminum windows and doors, we have no limitations.

For the exterior, we have three color categories: Palette of Impressive Colors, Resembles Colors and Custom Colors. These color choices are available with every aluminum window and door we offer.

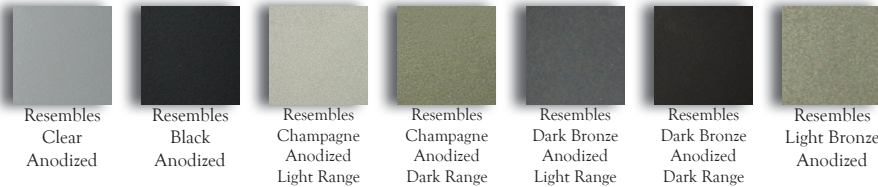
### Impressive Colors

*Impressive indeed. From light to dark, choose away.*

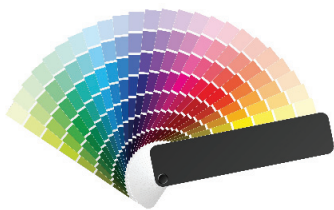


### Resembles Colors

*The look of anodized with a better warranty, better price, better lead times and better finish consistency. What's not to like?*



### Custom Colors



*Sometimes 33 colors just isn't enough. That's where we step in. Bring us the color you want for your window exterior and we will match it using our unlimited, custom color capabilities. Any color in the spectrum is right at your fingertips.*

NOTE: All colors shown here may not accurately depict actual colors. Samples are available upon request.



**QUAKER**  
COMMERCIAL WINDOWS AND DOORS

# COLORS FOR WOOD CLAD WINDOWS & DOORS (INTERIOR & EXTERIOR)

With our wood clad windows and doors, the sky's the limit.

For the exterior, we have three color categories: Palette of Impressive Colors, Resembles Colors and Custom Colors. These color choices are available on the exterior of every wood clad window and door we offer.

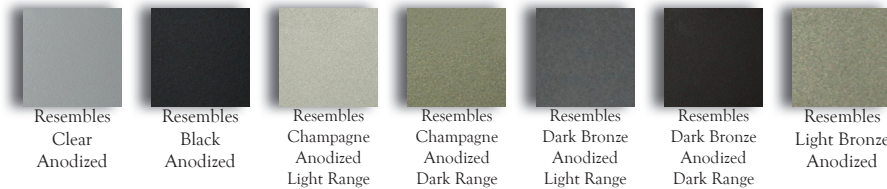
## Impressive Colors

*Impressive indeed. From light to dark, choose away.*



## Resembles Colors

*The look of anodized with a better warranty, better price, better lead times and better finish consistency. What's not to like?*



## Custom Colors



*Bring us the color you want for your window exterior and we will match it using our unlimited, custom color capabilities. Any color in the spectrum is right at your fingertips.*

## Interior

*For the interior of our wood windows, unfinished wood is standard. Primed or Pre-painted are options. White and Black are our most popular pre-painted interior colors, however any color in the rainbow is available using our unique, custom color capabilities.*



NOTE: All colors shown here may not accurately depict actual colors. Samples are available upon request.



Our vinyl windows offer many color possibilities.

### Vinyl Colors



*Our vinyl itself is available in three colors: White, Beige and Sandstone. All of our vinyl windows and doors start as one of these 3 colors.*

### Painted Exterior Colors

*These 12 painted, exterior colors give you a multitude of options when paired with our 3 vinyl colors. More than 30 possible combinations allow you to match interior decor and exterior facade.*

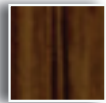


### Custom Painted Exterior Colors



*If something other than the 12 painted colors above are needed, we can customize using our unique capabilities to match what you have in mind.*

### Faux Dark Oak Interior



Faux  
Dark Oak

*A vinyl window with a wood window appearance for the interior of a home. Pair it up with a white vinyl exterior or with any painted exterior.*

### High Performance Laminate Interior & Exterior



Textured  
Black      Textured  
Dark  
Bronze

*A textured look and feel that takes vinyl windows to the next level of chic. Use our laminate interior in combination with white vinyl exterior or with any painted color.*

*\* PLEASE NOTE: Textured Black Exterior is not available with all Quaker vinyl window and door series. Textured Dark Bronze is available only as an interior color.*

NOTE: All colors shown here may not accurately depict actual colors. Samples are available upon request.



# 2604 SPECIFICATIONS FOR

- \* ALUMINUM WINDOWS & DOORS
- \* WOOD WINDOW & DOOR EXTERIOR CLADDING

Quaker's powder-coat paint finish is formulated to meet all requirements set forth by AAMA 2604 specifications.

Characteristic	ASTM #	Result
Specific Gravity	D-792	1.3 to 1.9 depending on color
Theoretical Coverage		Approximately 101 to 148 ft <sup>2</sup> /lb./mil.
Optimum Storage		<80° F, < 50%RH
Particle Distribution		+44 microns (325 mesh), Percentage varies with color
Film Thickness	D-1186	1 to 3 mils
Percent Gloss @ 60°	D-523-89	25 to 35%
Pencil Hardness	D-3363-00	H to 3H
Adhesion	D-3359-02	No lifting of 1/8" squares between scribed lines when cross-hatch adhesion is tested using the pre-scribed tape.
Flexibility	D-522-93a	A coating of 2 mils or less will withstand a bend of 180° over a 1/8" mandrel without cracking or loss of adhesion.
Impact Resistance	D-2794-93	160 inch-pounds, direct and reverse, at a film thickness of 2 mils. Impact properties will be influenced by formulation.
Salt Spray Resistance	B-117-97	Minimum rating of 7 for Procedure A and minimum of 8 for Procedure B (ASTM-D-1654-92) after 3000 hours of exposure. Aluminum substrates must be pre-treated according to AAMA 2604 specs.
Humidity Resistance	D-2247	No more than a "few" blisters (ASTM-D-714) after 3,000 hours of exposure. Aluminum substrates must be pretreated according to AAMA 2604 specs.
Chemical Resistance		Very good resistance to most chemicals and solvents. See AAMA 2604 chemical resistance requirements. Some properties may be reduced in low gloss formulations.
Overbake Stability		This series can typically withstand 100% overbake without yellowing.

Powder coat materials are supplied to Quaker by TCI Powder Coatings, one of the largest suppliers of its kind in North America.

This information is also available at [www.tcipowder.com](http://www.tcipowder.com)



**Green properties:**

- Near Zero VOC's (Volatile Organic Compounds)
- No sludge or solvent disposal
- Powder is nearly 100% recyclable so virtually no waste
- Reduced health, fire and safety hazards



# 2605 POWDER-COAT SPECIFICATIONS FOR

- \* ALUMINUM WINDOWS & DOORS
- \* WOOD WINDOW & DOOR EXTERIOR CLADDING

Quaker's high-performance powder-coat paint finish is formulated to meet all requirements set forth by AAMA 2605 specifications.

Characteristic	ASTM ##	Result
Specific Gravity	D-792	1.4 to 1.9 depending on color
Theoretical Coverage		Approximately 101 to 138 ft <sup>2</sup> /lb./mil.
Optimum Storage		<80° F, < 50%RH
Particle Distribution		+44 microns (325 mesh), Percentage varies with color
Film Thickness	D-1186	1 to 3 mils
Percent Gloss @ 60°	D-523-89	25 to 35%
Pencil Hardness	D-3363-00	H to 2H
Adhesion	D-3359-02	No lifting of 1/8" squares between scribed lines when cross-hatch adhesion is tested using the pre-scribed tape.
Flexibility	D-522-93a	A coating of 2 mils or less will withstand a bend of 180° over a 1/8" mandrel without cracking or loss of adhesion.
Impact Resistance	D-2794-93	100 inch-pounds, direct and reverse, at a film thickness of 2 mils. Impact properties will be influenced by formulation.
Salt Spray Resistance	B-117-97	Minimum rating of 7 for Procedure A and minimum of 8 for Procedure B (ASTM-D-1654-92) after 4000 hours of exposure. Aluminum substrates must be pre-treated according to AAMA 2605 specs.
Humidity Resistance	D-2247	No more than a "few" blisters (ASTM-D-714) after 4,000 hours of exposure. Aluminum substrates must be pretreated according to AAMA 2605 specs.
Chemical Resistance		Very good resistance to most chemicals and solvents. See AAMA 2605 chemical resistance requirements. Some properties may be reduced in low gloss formulations.
Overbake Stability		Excellent

Powder coat materials are supplied to Quaker by TCI Powder Coatings, one of the largest suppliers of its kind in North America.

This information is also available at [www.tcipowder.com](http://www.tcipowder.com)



### Green properties:

- \* Near zero VOC's (Volatile Organic Compounds)
- \* No sludge or solvent disposal
- \* Powder is nearly 100% recyclable so virtually no waste
- \* Reduced health, fire and safety hazards



# 615 PAINT SPECIFICATIONS FOR \* VINYL WINDOW & DOOR EXTERIORS

Quaker's vinyl window exteriors are available with an optional painted exterior. This high-performance, heat-reflective coating is a water-based liquid paint, formulated to meet all requirements set forth by AAMA 615 (Organic Coatings on Plastic Profiles) specifications.

Characteristic	Result
Specific Gravity	1.05
Vapor Density	Heavier than air
Evaporation Rate	Slower than ether
VOC	1.55 lb./gal.; 188 gm/ltr
Boiling Point	340° F (171° C)
Approx. % Solid by Weight	42±2%
Approx. % Solid by Volume	39±2%
Weight per gallon	8.74 lbs.
Flash Point	175°F CC
Solvent Resistance:	lacquer thinner, acetone, MEK, gasoline, xylene-50 double rubs with saturated cloth
Pencil Hardness	HB Minimum
Flexibility	1/8" conical mandrel
Impact Resistance	Forward 180 inch-pounds, Reverse 180-inch-pounds
Taber Abrasion	CS17 wheel, 1,000 gm load (100 mg loss/1,000 cycles)
Theoretical Coverage at 1 mil	665 ft <sup>2</sup> (1604 x 39.2% solids by volume)
Dry Time (Air Dry)	Recoat - 10 mminutes @ 50% humidity and 75° F
Dry Time (Air Dry)	Dust free - 20 minutes @ 50% humidity and 75° F
Dry Time (Air Dry)	Dry to handle - 45 minutes @ 50% humidity and 75° F

Water-based coatings used on vinyl exteriors are supplied to Quaker by Blue River Coatings, a national leader in water-based product development. This information is also available at [www.bluerivercoatings.com](http://www.bluerivercoatings.com)



### Green properties:

- \* Contains no lead or chromates
- \* Very low VOC's (Volatile Organic Compounds)
- \* Non-photochemically reactive
- \* Considered non-hazardous by EPA definitions



# PAINT SPECIFICATIONS FOR \* WOOD WINDOW & DOOR INTERIOR PRE-FINISHING

Quaker's pre-finished paint coverage on our wood window and door interiors is formulated to meet the highest standards for interior finishes.

Characteristic	Result
Specific Gravity	1.15
Recommended film thickness	Mils Wet: 3.0 - 4.0 Mils Dry: 1.0 - 1.25
Vapor Density	Heavier than air
Evaporation Rate	Slower than ether
VOC (as packaged)	1.5 lb./gal.; 180 gm/ltr
Boiling Point	212 to 419° F (100 - 231° C)
Approx. % Solid by Weight	42±1%
Approx. % Solid by Volume	31±1%
Viscosity	18-22 seconds #3 Zahn Cup
Weight per gallon	9.55 lb./gal.
Flash Point	None
Spreading Rate (no application loss)	385-515 sq. ft./gal. @ 1.0-1.25 mils DFT
pH	>2.0, <11.5
Volatile Volume	68%
Dry Time to touch (Air Dry)	15 minutes @ 50% humidity and 77° F
Dry Time to handle (Air Dry)	20 minutes @ 50% humidity and 77° F
Dry Time sand (Air Dry)	22-25 minutes @ 50% humidity and 77° F
Dry Time to recoat (Air Dry)	25 minutes @ 50% humidity and 77° F
Dry Time to pack (Air Dry)	8-12 hours @ 50% humidity and 77° F
Dry Time to force dry (Air Dry)	10-20 minutes @ 120° F

Quaker's interior paint, used on wood windows and doors, is a high-quality water reducible top-coat, providing excellent appearance and performance. It is supplied to Quaker by Sherwin Williams, a reknowned, global leader of interior paints and coatings. This information is also available at [www.sherwin-williams.com](http://www.sherwin-williams.com)



### Green properties:

- \* Sherwin Williams low-VOC (Volatile Organic Compound) paint is considered to be the industry's most comprehensive.
- \* Zinc, Nitrite and Phthalate free
- \* Contains no heavy metal hazzards





# HIGH-PERFORMANCE LAMINATE WRAP COATING SPECIFICATIONS FOR \* VINYL WINDOW & DOOR INTERIORS

Many of Quaker’s vinyl window and door series and models are available with an optional high-performance laminate interior\*, which is manufactured in accordance with RAL GZ 716/1, for lamination on to substrates.

\* - Not available on all Quaker vinyl series. Check for availability.

	Standard Test Method	Unit	Values	Tolerances
1) Thicknes-808302, 119501	DIN EN ISO 4593	µm	170	+20/-10
Thickness-116701, 116801	DIN EN ISO 4593	µm	180	+15
2) Tensile stress at break	DIN EN ISO 527 - 3	MPa	15	≥15
3) Elongation at break	DIN EN ISO 527 - 3	%	60	≥60
4) Dimensional change	DIN 53377	%	5	≤5
5) Gloss - 808302	ISO 2813	Measuring Unit	7-11	
Gloss - 116701, 116801	ISO 2813	Measuring Unit	17-23	
Gloss - 119501	ISO 2813	Measuring Unit	11-15	
6) Scratch resistance	Erichsen test 435	cN	20	≥20
7) Abrasion resistance	ISO 105 - X 12		Grade 5	
8) Embossing stability	Internal test method	No change in embossing, colour and gloss		
9) Weatherability	EN 513- method 1	Colour change ≤ grey-scale 3 after the samples have received 18 GJ/m <sup>2</sup> , according to the 1.5-fold requirements of RAL GZ 716/1		
to 1: Plunger - 10 mm Ø with flat surface, pressure 50 kPa, measuring over emboss structure to 2, 3: Measurement in machine direction to 4: 10 Min / 100°C to 5: Surface with 60° measuring head. Exceptions possible for special colours or decors to 8: 10 Min. / 80°C to 9: Greyscale according to ISO 105 - A02				

Laminate coatings are supplied to Quaker by Renolit, a global leader in the manufacturing of high performance laminate coatings specifically designed and formulated for harsh solar radiation, freezing temperatures and tropical conditions found across the United States. This information is also available at [www.renolit.com](http://www.renolit.com).