



	<b>METRO GLASS</b>	<b>Kawneer</b>	<b>Alumicor</b>
<b>STOREFRONT</b>	<b>A Series</b>	<b>None</b>	500 Series
	<b>F Series</b>	Trifab 450 Series	800 Series
<b>CURTAINWALL</b>	<b>HP 2020 ( 2" Curtain Wall )</b>	1620 UT Series	TW2200 Series
	<b>HP 2025 ( 2 1/2" Curtain Wall )</b>	1600 UT Series	TW2600 Series
	<b>C Series</b>	1602/1620 Series	2200 Series
	<b>B Series</b>	1600 Series	2500 Series
<b>STRIP WINDOWS</b>	<b>T Series T/B</b>	516 / 518 Series	970E Series
<b>VENTS</b>	<b>Goliath Series</b>	526 Series	1350 Series
<b>SLIDERS</b>	<b>M Series</b>	1010C Series	Whisper Glide
<b>DOORS</b>	<b>150 Series</b>	190 Series	100A Series
	<b>350 Series</b>	350 Series	400A Series
	<b>500 Series</b>	500 Series	600A Series
	<b>HPTB 350 Series</b>	360 Insulclade	T400A Thermaporte
<b>SKYLIGHTS</b>	<b>Sky View 2300 (Alumicor)</b>	2000 Series Sky Light	Sky View 2300

*All inquiries to be made via our web site [www.metroglass.ca](http://www.metroglass.ca) or [bidsandquotes@metro.ca](mailto:bidsandquotes@metro.ca)*

50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.

Calgary, Alberta T3K 2E4

Phone: 403-250-9290

Fax: 403-291-0599

Toll Free: Phone: 1-877-919-0906

Fax: 1-877-919-0905

[www.metroglass.ca](http://www.metroglass.ca)

Anodizing is the process of electrochemically controlling, accelerating and enhancing oxidation of an aluminum substrate. The anodizing process, because it is an integral part of the substrate, produces an oxide film that is uniform, hard and protects the rest of the aluminum substrate from deterioration - providing excellent wear and abrasion resistance with minimal maintenance in most environments.

The coating produced is extremely durable, and the hardness of the surface is comparable to a sapphire--the second hardest substance on earth. This characteristic makes anodize an excellent choice for use in high-traffic areas where resistance properties are important.

Anodized aluminum resists the ravages of time, temperature, corrosion, humidity and warping, adding to its long life cycle. Anodized aluminum is an inert material that is not combustible, 100% recyclable and poses no health risks.

#### Electrolytic Two-Step Anodizing Process

The typical anodizing employed in the architectural industry is called two-step electrolytic." The actual anodizing and coloring of the aluminum occur in separate steps of the process. The anodizing step takes place in a tank that contains a solution of sulfuric acid and water. The tank is charged with electrical current and aluminum oxide is formed on the surface of the aluminum.

After anodizing is complete, the parts can be immersed in an optional coloring tank, to achieve bronze or black tones instead of the standard clear or silver finish. In the coloring tank, the anodized aluminum is immersed in a bath containing an inorganic metal such as tin, cobalt or nickel, which is deposited in the anodic pores by means of electrolytic current. The amount of time the part is immersed will determine the color achieved. Darker colors are created by extending the immersion time and increasing metal deposition. The colors commonly seen on architectural products range from champagne to dark bronze and black.

#### Architectural Class I and Class II Anodize

Class I and Class II anodic coatings are designations created by the Aluminum Association for the purpose of codifying the specification of anodized aluminum.

**Class I** coating has a mil thickness of 0.7 (18 microns) or greater

**Class II** coating has a minimum mil thickness of 0.4 (10 microns)

Class I coating is a high performance anodic finish used primarily for exterior building products and other products that must withstand continuous outdoor exposure.

Class II coating is a commercial anodic finish recommended for interior applications or light exterior applications receiving regularly scheduled cleaning and maintenance such as storefronts.

Coating thickness can be measured by an "eddy current", a nondestructive test instrument, or by cutting a cross-section of the anodized aluminum, mounting it in a slide, polishing the edge, and reading the coating thickness directly with a microscope.

Class I and Class II coatings should not be confused with Type I, Type II, and Type III anodic coatings as described in the authoritative anodizing standard, MIL-A-8625. Type I anodize refers to chromic acid anodizing. Type II is normal "clear" sulfuric acid anodizing. Type III is "hardcoat" using sulfuric acid or mixed chemistry electrolytes.

**METRO GLASS CARRIES ONLY CLASS 1  
ANODIZED ALUMINUM**

## APEL - ANODIZED 6063 MATERIAL/FINISH CODE IDENTIFICATION

APEL CODE#	COLOUR	ALUMINUM ASSOCIATION SPECIFICATION	ANODIZING DESCRIPTION
APEL 0005	Satin Clear 05	AA-M12C22A21	Protective and Decorative Coating less than 10 $\mu$ (0.4mil) thick
APEL 0010	Satin Clear 10	AA-M12C22A31	Architectural Class II - Minimum 10 $\mu$ (0.4 mil) coating
APEL 0018	Satin Clear 18	AA-M12C22A41	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating
APEL 2010	Champagne 10	AA-M12C22A34	Architectural Class II - Minimum 10 $\mu$ (0.4 mil) coating
APEL 2018	Champagne 18	AA-M12C22A44	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating
APEL 2810	Dark Champagne 10	AA-M12C22A34	Architectural Class II - Minimum 10 $\mu$ (0.4 mil) coating
APEL 2818	Dark Champagne 18	AA-M12C22A44	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating
APEL 3010	City Bronze 10	AA-M12C22A34	Architectural Class II - Minimum 10 $\mu$ (0.4 mil) coating
APEL 3018	City Bronze 18	AA-M12C22A44	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating
APEL 4010	Medium Bronze 10	AA-M12C22A34	Architectural Class II - Minimum 10 $\mu$ (0.4 mil) coating
APEL 4018	Medium Bronze 18	AA-M12C22A44	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating
APEL 4610	Dark Prairie Bronze	AA-M12C22A34	Architectural Class II - Minimum 10 $\mu$ (0.4 mil) coating
APEL 4618	Dark Prairie Bronze	AA-M12C22A44	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating
APEL 4810	Coastal Bronze 10	AA-M12C22A34	Architectural Class II - Minimum 10 $\mu$ (0.4 mil) coating
APEL 4818	Coastal Bronze 18	AA-M12C22A44	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating
APEL 5018	Black 18	AA-M12C22A44	Architectural Class I - Minimum 18 $\mu$ (0.7 mil) coating

### METRO GLASS STOCKS ALL THEIR PRODUCTS IN 3 FINISHES

- Satin Clear 18 Architectual Class 1
- Medium Bronze 18 Architectual Class 1
- Black 18 Architectual Class 1

\* All other finishes upon request only \*

50 Years of Manufacturing Innovative Aluminum Doors, Frames, Curtain Walls, Windows and Vents

Bay 108 - 1626 115 Ave. N.E.      Calgary, Alberta T3K 2E4      Phone: 403-250-9290      Fax: 403-291-0599

Toll Free: Phone: 1-877-919-0906      Faxes 1-877-919-0905

[www.metroglass.ca](http://www.metroglass.ca)