TECHNICAL DATA
Wilsonart® Decorative Metals
(Types 408, 414, 415, 418 and 419)



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## 1. <u>Distributor and/or Manufacturer</u>

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### 2. Product Description

#### **Recommended Uses**

Wilsonart Decorative Metals are designed for vertical interior or ceiling applications where a special accent is required or a special mood is desired. The surface of Decorative Metals is that of fine finished metal. The genuine metal material is appropriate for **vertical areas** in retail facilities, hotel and office lobbies, theaters and restaurants, where its special eye-catching properties add a definite prestigious appeal. Decorative Metals add a visual sense of lightness when used as inserted accent banding in massive casework. These materials also can add a bright touch when used as cladding or accent trim in custom furniture, especially in combination with high gloss solid color laminates, Wilsonart® Decorative Edges or Wilsonart® Solid Surfacing.

### **Product Composition**

- Type 408: Metal Laminates. Wilsonart® Metal Laminates are composed of a natural and colored metallic decorative layer pressed over kraft paper core sheets, impregnated with phenolic resin. Anodizing is defined as an electro-chemical process that thickens aluminum's natural oxide coating. The coating is clear and colorless and makes the surface resistant to corrosive conditions, wear and scratching. The aluminum can also be dyed a variety of colors during anodizing that cannot wash or rub off, such as gold, black, bronze, copper and grey. Finished sheets are trimmed, and the backs sanded, to facilitate bonding. Note: All Wilsonart® Metal Laminates are supplied with a protective peel coat to prevent surface damage during shipping and fabrication.
- Type 414: Galvalume® Steel. A 26-gauge steel sheet featuring a Galvalume® finish. The steel is coated with an aluminum-zinc alloy, and then protected with a clear acrylic, coating both sides. The metal features a decorative faceted finish on both sides usable 2 sides (protective film applied one side only). Pattern variation can occur within sheet and from sheet to sheet. Steel fabrication tools, saw blades and router bits are required.
- Type 415: Metro Collection. A solid sheet of aluminum is produced with a decorative, anodized finish and color on one side in an overall matte finish. Slight tone and color variations, created with alloy combinations, are deliberate yet show overall balance on each sheet. Pattern variation can occur within the sheet and from sheet to sheet.
- Type 418: Decorative aluminum (Types 415 and Type 419) bonded to a phenolic backer for fabrication following HPDL techniques for flat surfaces only. Do NOT use as an edge trim or for strips. When radius bending is required, Type 415 or 419 is recommended.
- Type 419: A solid sheet of aluminum is produced with a decorative, anodized finish and color on
  one side. Anodizing is defined as an electro-chemical process that thickens aluminum's natural
  oxide coating. The coating is clear and colorless and makes the surface resistant to corrosive
  conditions, wear and scratching. The aluminum can also be dyed a variety of colors during
  anodizing that cannot wash or rub off, such as gold, black, bronze, copper and grey. The back
  side is prepared to facilitate bonding to a suitable substrate. (Keep this surface free of grease, oil
  or other contaminants.)

## **Basic Limitations**

Decorative metals are designed for interior vertical applications. Reflective value and metal color may vary depending on type of lighting used. Fluorescent, incandescent and daylight produce slight color variations. The American Architectural Manufacturer's Association (AAMA) has issued the "Voluntary Specification for Anodized Architectural Aluminum" AAMA611-98. The maximum allowable color variation is established as Delta E CMC 5.0 or less for anodized aluminum produced from one coil.

# Pattern, Size & Finish Availability

See all patterns and colors at <a href="www.wilsonart.com">www.wilsonart.com</a>. Please see actual sample before specifying.

Note: All decorative metals are supplied with a protective peel coat to prevent surface damage.

**Product Type 408, Metal Laminates** 

Pattern	Name	Surface Finish	Thickness	Stock Sizes
L6441	Brite Brushed Sterling	Anodized	0.032"	4x8', 4x10'
L6442	Satin Brushed Palladium	Anodized	0.032"	4x8',4x10'
L6443	Satin Brushed Penny	Anodized	0.032"	4x8',4x10'
L6444	Ribboned Brite Brushed Sterling	Anodized	0.032"	4x8',4x10'
L6445	Ribboned Brite Brushed Palladium	Anodized	0.032"	4x8',4x10'
L6446	Ribboned Brite Brushed Penny	Anodized	0.032"	4x8',4x10'
L6447	Ribboned Brite Brushed Aged Gold	Anodized	0.032"	4x8',4x10'
L6448	Ribboned Matte Sliver	Anodized	0.032"	4x8'
L6449	Sequin Brite Brushed Sterling	Anodized	0.035"	4x8'
L6451	Sequin Satin Brushed Palladium	Anodized	0.035"	4x8'
L6452	Vinyl Records	Anodized	0.032"	4x8'
L6453	Rough Cut	Anodized	0.047"	4x8'
L6454	Bronze Age	Anodized	0.039"	4x8'
L6455	Hot Tin Roof	Anodized	0.059"	4x8'

Product Type 414, Galvalume® Steel

Pattern	Name	Surface Finish	Thickness	Stock Sizes
S6501	Crystal Steel	Acrylic	0.019"	4x8' & 4x10'

**Product Type 415, Metro Collection** 

Pattern	Name	Surface Finish	Thickness	Stock Sizes
6100	Matte Pewter	Anodized	.025"	4x8' & 4x10
6101	Matte Grey Bronze	Anodized	.025"	4x8' & 4x10'
6102	Matte Gunmetal Grey	Anodized	.025"	4x8' & 4x10'

## **Product Type 418**

Available using Types 415 & 419

Product Type 419, Anodized Aluminum

Pattern	Name	Surface Finish	Thickness	Stock Sizes
6200	Oiled Bronze	Anodized	0.025"	4x8' & 4x10'
6201	Satin White Bronze	Anodized	0.025"	4x8' & 4x10'
6202	Satin Brushed Nickel	Anodized	0.025"	4x8' & 4x10'
6251	Polished Natural Aluminum	Anodized	0.025"	4x8' & 4x10'
6252	Matte Natural Aluminum	Anodized	0.025"	4x8' & 4x10'
6255	Polished Gold Aluminum	Anodized	0.025"	4x8' & 4x10'

6256	Brite Brushed Natural Aluminum	Anodized	0.025"	4x8' & 4x10'
6257	Satin Brushed Natural Aluminum	Anodized	0.025"	4x8' & 4x10'
6258	Satin Brushed Gold Aluminum	Anodized	0.025"	4x8' & 4x10'
6261	Satin Brushed Light Bronze Aluminum	Anodized	0.025"	4x8' & 4x10'
6262	Satin Brushed Med Bronze Aluminum	Anodized	0.025"	4x8' & 4x10'
6277	AlumaSteel <sup>TM</sup>	Anodized	0.025"	4x8' & 4x10'
6281	Satin Brushed Smoke Aluminum	Anodized	0.025"	4x8' & 4x10'
6284	Satin Brushed Copper Aluminum	Anodized	0.025"	4x8' & 4x10'
6296	Satin Brushed Black Aluminum	Anodized	0.025"	4x8' & 4x10'

Note: Sample Chain includes #6255P (418) Polished Gold Aluminum with phenolic backer

# **Sheet Dimensions**

Type 408. Metal Laminate

ype 400, Metal Lanimate				
Sheet Width	48"(-0 + ½")	1219.2 mm (-0 +12.7 mm)		
Chaot Lauatha	96" (-0 + 1/2")	2438.4 mm (-0 + 12.7 mm)		
Sheet Lengths	120" (-0 + ½")	3048 mm (-0 + 12.7 mm)		
Sheet Thickness	Please refer to chart above for	sheet thicknesses		
Weight PSF varies				

Type 414, Galvalume® Steel

Sheet Width	48"(-0 + 1/2")	1219.2 mm (-0 +12.7 mm)
Chart Lauratha	96" (-0 + ½")	2438.4 mm (-0 + 12.7 mm)
Sheet Lengths	120" (-0 + ½")	3048 mm (-0 + 12.7 mm)
Sheet Thickness	0.019" (0.5 mm)	
Weight PSF	0.90625 # psf	

Type 415, Metro Collection

Sheet Widths	48" (-0 + 1/2")	1219.2 mm (-0 + 12.7 mm)	
Chaot Longtha	96" (-0 + 1/2")	2438.4 mm (-0 + 12.7 mm)	
Sheet Lengths	120" (-0 + 1/2")	3048 mm (-0 + 12.7 mm)	
Sheet Thickness	et Thickness 0.025" ± 0.002" (0.64 mm ± 0.05 mm)		
Weight PSF	0.353# psf		

Type 418, Decorative Metals (with phenolic back) Made with Types 415 416 & 419

Sheet Widths	48" (-0 + 1/2")	1219.2 mm (-0 +12.7 mm)	
Chart Lauretha	96" (-0 + 1/2")	2438.4 mm (-0 + 12.7 mm)	
Sheet Lengths	120" (-0 + 1/2")	3048 mm (-0 + 12.7 mm)	
Sheet Thickness	0.040"± 0.004" (1 mm ± 0.1 mm)		
Weight PSF	eight PSF 0.484# psf		

Type 419, Anodized Aluminum (without phenolic back)

Sheet Widths	48" (-0 + 1/2")	1219.2 mm (-0 + 12.7 mm)	
Chart Langtha	96" (-0 + 1/2")	2438.4 mm (-0 + 12.7 mm)	
Sheet Lengths	120" (-0 + 1/2")	3048 mm (-0 + 12.7 mm)	
Sheet Thickness	0.025" ± 0.002" (0.64 mm ± 0.05 mm)		
Weight PSF	0.353# psf		

# 3. Technical Data

## **Codes and Certifications**

The GREENGUARD Environmental Institute<sup>™</sup> has awarded its **GREENGUARD**<sup>®</sup> **Indoor Air Quality Certification** to Wilsonart Laminate. All Wilsonart Laminate product types were tested under the stringent GREENGUARD Standards for low-emitting products. All GREENGUARD Indoor Air Quality Certified<sup>®</sup> products ensure minimal impact on the indoor environment. For a copy of the certificate, visit <a href="https://www.greenguard.org">www.greenguard.org</a>.

# **Typical Fire Test Data**

Wilsonart Decorative Metals (**Type 408, 414, 415, 418 & 419**) have been tested in accordance with ASTM-E84, Tunnel Test, and **achieved Class 1/2 or A/B as follows**:

**Type 408** 

Class 1 or A Rating			
Pattern	Flame Spread Index	Smoke Development Index	
L6441 - Brite Brushed Sterling			
L6442 - Satin Brushed Palladium			
L6443 - Satin Brushed Penny			
L6444 - Ribboned Brite Brushed Sterling			
L6445 - Ribboned Satin Brushed Palladium	15	5	
L6446 - Ribboned Satin Brushed Penny			
L6448 - Ribboned Matte Silver			
L6447 - Ribboned Satin Brushed Aged Gold			
L6452 - Vinyl Records			
L6454 - Bronze Age	20	5	
L6449 - Sequin Brite Brushed Sterling	0	E	
L6451 - Sequin Satin Brushed Palladium	0	5	

Class 2 or B Rating				
Pattern	Flame Spread Index	Smoke Development Index		
L6455 - Hot Tin Roof	55	40		
L6453 - Rough Cut	65	25		

Туре	Thickness	Smoke Developed	Flame Spread
414, Galvalume® Steel	0.019"	0	0
415, Metro Collection	0.025"	0	0
418, Phenolic Backed with type 419	0.040"	0	25
419, Anodized Aluminum	0.025"	0	0

Model Code Designations used to determine flame spread classification

model obac Book nations accase accommission name opious classification				
Flame Spread Classification	International	Life Safety		
(Maximum Rating)	(IBC)	(NFPA 101)		
25	Α	А		
75	В	В		
200	С	С		

(Reference: Architectural Woodwork Quality Standard, 8<sup>th</sup> Edition, Version 1.0 - 2003)

All Model Codes regulate the generation of smoke by interior finish material. In all cases they specify a maximum smoke development rating of 450.

#### **NSF Certification**

Type 419 Anodized Aluminum
NSF International Standard 51 approval for splash zone

### **FDA Certification**

Types 415 & 419 Anodized Aluminum
Food & Drug Administration approval for food contact

#### **FMVSS 302**

Types 419 Anodized Aluminum
U.S. Federal Motor Vehicle Safety Standard, "Flammability of Interior Materials", compliant

# 4. <u>Installation: Fabrication and Assembly Recommendations</u>

For comprehensive fabrication instructions for Metal types 408,414, 415, 418 and 419, consult the <u>Decorative Metals Fabrication Manual</u>.

## 5. Warranty

Supplier or Industry Standards for Decorative Metals for visual surface defects are as follows:

- 1. Visual Surface Defects means spots, indents, stains, scratches, orange peel and/or sheet flatness. These defects must not be easily detected when inspected using established viewing conditions.
- 2. Established viewing conditions shall be from a distance of 6.6 feet with an indirect illumination intensity of 400 lux. The viewing area is 4 square feet.
- 3. Visual surface defects are measured according to T.A.P.P.I. T564 sp-96, Transparent Chart for the Estimation of Defect Size. A visual defect means spots, indents, etc. that are 0.8mm (2) or more within 4 square feet, or 2 defects each having an area of 0.4mm (2) or more within 4 square feet. Further the visual defect should be at least 12" apart.

### 6. Maintenance

### **Type 414**

For Galvalume® Steel use only glass cleaners that are free of ammonia and petroleum products. 409® Glass & Surface Cleaner and warm water with a mild dish soap solution is also recommended for cleaning. Do NOT use cleaners that contain abrasives, acids or alkalis as they will mar the surface. Do NOT clean metal face with solvents, paint thinner or adhesive remover. After washing, always wipe the surface completely dry with a soft, clean cloth.

# Types 408, 415, 418 & 419:

It is recommended that anodized aluminum surfaces be cleaned with 409<sup>®</sup> Glass & Surface Cleaner and warm water with a mild soap such as those used for hands or dishes. Household cleaners, non-ammoniated detergents, or glass cleaners may be used. Stubborn stains may be removed with a thin clean oil and a dry cloth. After cleaning, always wipe the surface completely dry with a soft, clean cloth. **Do NOT use cleaners that contain abrasives, acids or alkalis, as they will mar the surface.** 

Ammoniated detergents or petroleum-based cleaners should not be used to clean anodized aluminum surfaces.

**Do NOT clean metal face with solvents, paint thinner or adhesive remover.** Refer to BRO406, Decorative Metals Fabrication Manual, for adhesive removal recommendations.

# 7. <u>Technical Services</u>

For samples, literature, questions or technical assistance, please contact our toll-free Hotline at (800) 433-3222, Monday through Friday, 8 am - 5 pm, CST, or <u>www.wilsonart.com</u>.

Specification Form Surface shall be Wilsonart Decorative Metals, produced by Wilsonart LLC, Temple, Texas 76503-6110.				
Type: Specify 408, 414, 415, 418 or 419				
Surface Metal Number:		Metal Name:		
Adhesive Name: Manufacturer:	Wilsonart® Adhesives	Grade/Type:		
Fabrication shall comply with Architectural Woodwork Quality Standards Guide				

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