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 www.wilsonart.com. 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 TM | 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, metar Earlinate | | | | |
|--------------------------|---|--------------------------|--|--|
| Sheet Width | 48"(-0 + ½") | 1219.2 mm (-0 +12.7 mm) | | |
| Chaot 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 | Please refer to chart above for sheet thicknesses | 6 | | |
| 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 Louetha | 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 | | |

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 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[™] has awarded its **GREENGUARD**[®] **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[®] products ensure minimal impact on the indoor environment. For a copy of the certificate, visit www.greenguard.org.

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 | | | |
| 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

| Flame Spread Classification | International | Life Safety |
|-----------------------------|---------------|-------------|
| (Maximum Rating) | (IBC) | (NFPA 101) |
| 25 | Α | Α |
| 75 | В | В |
| 200 | С | С |

(Reference: Architectural Woodwork Quality Standard, 8th 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[®] 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 | | Matal Name | | | |
| Metal Number: | | Metal Name: | | | |
| Adhesive Name: | | Grade/Type: | | | |
| Manufacturer: | Wilsonart® Adhesives | Grade/Type: | | | |
| Fabrication shall comply with Architectural Woodwork Quality Standards Guide | | | | | |

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