



# TECHNICAL SPECIFICATIONS

## Architectural Metal Coil and Flats

### PRODUCT DESCRIPTION

Steel, aluminum and copper coil and flats for use in building applications including metal roofing and wall panels, fascia panels, soffits, gravel stops, copings, gutters and other products.

BASE METAL
<b>GALVALUME® AZ55 (Acrylic-coated)</b> Al-Zn coated carbon steel
<b>GALVALUME® AZ50 (Painted)</b> Al-Zn coated carbon steel
<b>MAGNAGAARD™ ZM150</b> Al-Zn-Mg coated carbon steel
<b>PRIME GRADE ALUMINUM</b> Al-Al alloy
<b>COPPER</b> 99% copper sheet

PROTECTIVE METAL COATINGS	
<b>FLUROPON® with KYNAR500®</b> Premium 70% polyvinylidene difluoride (PVDF) finish in over 30 colors.	
<b>WEATHER XL™</b> Specially formulated silicone-modified polyester (SMP) coating in nearly 20 colors.	
<b>ILLUMIPON™</b> Best-in-class FEVE coating available in our most requested colors.	
<b>TEDLAR® PVF FILM</b> Premium 100% polyvinyl fluoride (PVF) finish available in our most popular colors.	
<b>Protective Film</b> Upon request, a removable protective film to protect finished surface during shipping, handling and fabrication is available. Should be removed after installation.	

### PHYSICAL PROPERTIES

METALS	Galvalume 55% Al-Zn Alloy Coated Steel			Aluminum Al/Al Alloy Sheet		Copper 99% Copper Sheet		MagnaGuard 55% Zn-Al-Mg Alloy Coated Steel
ASTM Standard	A792			B209		B370		A1046
Thickness	24ga <sup>1</sup>	26ga <sup>1</sup>		.032"	.040"		16oz.	20oz.
Grade	50	50	80	3105 or 3003		H00		50 80, CS-B
Minimum Yield	50 ksi	50 ksi	80 ksi	H24 Temper	H14 Temper		32-40 ksi	
Dimension (Coil) <sup>4</sup>	20", 24", 27-1/2", 48"	20", 24", 27-1/2", 41-9/16", 43", 48"		16", 20", 24"		20", 24"		20", 24"
Dimension (Flat)	4'x10'			4'x10'		3'x10'		4'x10'
Coatings Available	Acrylic-Coated, Fluropon, Illumipon, WeatherXL			Fluropon, Illumipon, Tedlar		N/A		Fluropon

<sup>1</sup>22ga and 29ga also available. <sup>4</sup>39-9/16" also available for special order.

COATINGS	Fluropon 70% PVDF with Kynar 500			Illumipon FEVE	WeatherXL SMP	Tedlar 100% PVF Film			
Coating System	2-Layer			2-Layer			1-Layer		
	Primer	Topcoat	Backer	Total DFT		Primer	Topcoat	Backer	Total DFT
	0.2-0.3 mils	0.7-0.8 mils	0.3-0.4 mils	1.2 - 1.5 mils		0.2-0.3 mils	0.7-0.8 mils	0.2-0.3 mils	1.1-1.4 mils
Specular Gloss 60°	20 - 35			5 - 80		20 - 80		5 - 8 <sup>1</sup>	
Colors	37 Colors, Custom Available			Select Colors		17 Colors, Custom Available		8 Colors Add'l Available	
Available On	Aluminum, Galvalume, MagnaGuard			Aluminum, Galvalume		Galvalume		Aluminum <sup>2</sup>	

<sup>1</sup>Specular Gloss 85°: 15-30. <sup>2</sup>Tedlar also available on steel and other substrates for specialty applications.

## APPLICABLE STANDARDS

	Description	Standard
Substrates	Galvalume® AZ50/AZ55	ASTM A792
	MagnaGuard™ ZM150	ASTM A1046
	Aluminum	ASTM B209
	Copper	ASTM B370
Coatings	Chemical Resistance	ASTM D1308
	Falling Sand Abrasion	ASTM D968
	Film Adhesion	ASTM D3359
	Graffiti Resistance	ASTM D6578/D6578M
	Humidity Resistance	ASTM D2247
	Impact Resistance	ASTM D274
	Pencil Hardness	ASTM D3363
	Salt Spray	ASTM B117
	Surface Burning	ASTM E84
	Sustainability	ASTM E1980-11
	T-Bends	ASTM D4145
Coatings - South Florida Erosion	Chalk Resistance	ASTM D4214
	Color Change	ASTM D2244
	Erosion Resistance	ASTM D662
	Film Integrity	ASTM G7



## SUSTAINABILITY

### Our metal products are:

- ✓ 100% recyclable and energy efficient
- ✓ Can reduce greenhouse emissions
- ✓ Eligible for up to two LEED credits<sup>†</sup> for Heat Island Reduction based on color SRI



## INSTALLATION

- ▶ Install in accordance with Metal Alliance recommended details, recognized standard building practices and applicable building codes.
- ▶ Metal Alliance products can be cut, formed and fastened using conventional hand tools, sheet metal tools and power tools. For best results cutting tools should be kept sharp, clean and in good working condition.
- ▶ If strippable film is applied to product, all film should be removed, including from areas of concealed or joined pieces.
- ▶ A radius of 11/64" is recommended when fabricating hemmed components. Stay cognizant of radius tightness.

## MATERIAL WARRANTIES



### Metals

#### ▶ AZ55 GALVALUME® (Acrylic-Coated)

Up to 25 years limited warranty<sup>†</sup> against rupture, structural failure or perforation as a result of corrosion caused by exposure to normal atmospheric conditions.

#### ▶ AZ50 GALVALUME (Painted)

Up to 25 years limited warranty<sup>†</sup> against rupture, structural failure or perforation from corrosion caused by exposure to normal atmospheric conditions.

#### ▶ ZM150 MAGNAGUARD™ (Painted)

Up to 25 years limited warranty<sup>†</sup> against rupture, structural failure or perforation from corrosion caused by exposure to normal atmospheric conditions.

#### ▶ ALUMINUM (Painted)

Up to 25 years limited warranty<sup>†</sup> against rupture, structural failure or perforation as a result of corrosion caused by exposure to normal atmospheric conditions.

#### ▶ COPPER

Up to 50 years limited warranty<sup>†</sup> against leaking due to defective base metal.

### Finishes

#### ▶ FLUROPON®, WEATHER XL™, & ILLUMIPON™

Up to 40 years limited warranty<sup>†</sup> against chipping, cracking, peeling, flaking or checking and up to 30 years limited warranty against chalking and fading.

#### ▶ TEDLAR®

Up to 50 years limited warranty<sup>†</sup> against chipping, cracking, peeling, flaking or checking and up to 40 years limited warranty against chalking and fading.

## WEATHERTIGHT WARRANTIES

Up to 25 years limited warranty<sup>†</sup> against water leaks. Available on commercial, industrial and government projects to certified installers including No Dollar Limit, Limited Dollar Value, and Limited to Installed Contract Value coverages.