



3105 Painted Aluminum Sheet



3105 painted aluminum sheets are designed to provide a rugged, abrasive resistant coating and enhanced flexibility for extensive forming and fabricating. High-quality pre-painted aluminum sheet is often used in various applications, including construction, automotive, and manufacturing, due to its excellent corrosion resistance, good formability and welding performance, lightweight properties, and aesthetic appeal.

Specification of 3105 Painted Aluminum Sheet:

Alloy	1050, 1060, 1070, 1100, 3003, 3105, 3105, 5005, 5006, 5052, 5754, 5182
Thickness	0.2-1.5mm
Width	600-1500mm
Coating Surface	PVDF/ PE/HDPE/FEVE/EOXY/ PU
Coating Thickness	Single Coating (4-20 Um)
	Double Coating (25-28 Um)
	Triple Coating (35-38 Um)
Temper	O,H12,H22,H14,H24,H16,H26,H18,H26,etc.
Color	All Ral Color or As Request
Type	Coil, sheet, strips, plate
Coil Weight	3-8 MT
Coil ID	508mm and 405mm
Certifications	ISO9001
Applications	Roofing System and Ceiling Decoration for Airport, Railway Stations, Exhibition Halls, Factory and Stadium
Supply Ability	200000 tons per year
MOQ	2 tons per size

Coating Options:

- Polyester Coating: A common choice for outdoor applications due to its durability and resistance to fading.
- PVDF (Polyvinylidene Fluoride) Coating: Offers superior weathering, UV resistance, and a long lifespan, often used for architectural applications.

Warrantly:

Regular PE: 3-5 years;

High Performance PE: 6-9 years;

PVDF: 15 years;



FEVE: Two coats: between 10-15 years;

FEVE: Three coats: 15-20 years.

Technical Data:

Coating	POLYESTER	PVDF
Item	Technical requirements	Technical requirements
Thickness of coating film	$\geq 18 \mu\text{m}$	$\geq 25 \mu\text{m}$
Gloss deviation	gloss<70, tolerance $\leq 10\%$	gloss<70, tolerance $\leq 10\%$
	gloss ≥ 70 , tolerance $\leq 5\%$	gloss ≥ 70 , tolerance $\leq 5\%$
Hardness of pencil	$\geq 3\text{H}$	$\geq 3\text{H}$
Adhesion	no lower than class 1	no lower than class 1
Flexibility	$\leq 2\text{T}$	$\leq 2\text{T}$
Boiling water resistance	no change (2h)	no change (2h)
Color difference	$\Delta E \leq 2.0$	$\Delta E \leq 2.0$
MEK	≥ 100 times	≥ 150 times

Properties of 3105 Prepainted Aluminum Coil:

Chemical Composition

Element	Aluminum (Al)	Manganese(Mn)	Silicon (Si)	Iron (Fe)	Cooper(Cu)	Zinc(Zn)	Other Elements	Total Impurities
Content (%)	97.5	0.6-1.0	≤ 0.6	≤ 0.7	0.-0.4	≤ 0.25	≤ 0.05	≤ 0.15

Mechanical Properties

Property	(Temper: O)	(H12)	(H14)	(H16)	(H18)	(H22)	(H24)	(H26)
Tensile Strength	95-130 MPa	130-165 Mpa	145-185Mpa	170-210Mpa	195-230Mpa	130-165 Mpa	145-185Mpa	170-210Mpa
Yield Strength (0.2% offset)	35-60 MPa	110-145 MPa	125-165 MPa	150-190 MPa	175-210 MPa	100-135 MPa	115-155 MPa	140-180 MPa
Elongation at Break	18-22%	8-12%	6-10%	4-8%	3-6%	8-12%	6-10%	4-8%
Hardness (Rockwell B)	30-40HB	40-50HB	45-55HB	55-75HB	60-70HB	40-50HB	45-55HB	55-75HB

Physical Properties

Property	Density	Melting Point	Thermal Conductivity	Electrical Conductivity	Thermal Expansion Coefficient
Value	2.7 g/cm ³	643-657°C	209 W/m·K	61% IACS	23.1×10 ⁻⁶ /°C (20-100°C)

Standards and Specifications



ASTM	B209
ISO	ISO 26204 (alloy designations), ISO 6892 (mechanical testing), ISO 9001, ISO 14001.
UNS	A91050 (United States Numbering System)

Advantages of 3105 Painted Aluminum Coil:

- High Durability: Our prepainted aluminum coils are corrosion-resistant, ensuring a longer lifespan.
- Aesthetic Appeal: The wide range of colors and finishes enhances the visual appeal of your products.
- Environmental Friendly: Our products are eco-friendly and can be recycled.
- Easy Maintenance: Minimal maintenance is required to keep the coils in top condition.
- Customization: We offer customized solutions to meet specific project requirements.

Applications of 3105 Coated Aluminum Coil:

- Building and Construction:

Used for siding, roofing, and other architectural applications due to its aesthetic appeal and durability.

- Mobile Homes:

Commonly used in the construction of mobile homes and recreational vehicles (RVs) for its lightweight and corrosion-resistant properties.

- Household Appliances:

Often used in the manufacture of appliances like refrigerators and air conditioning units, where a painted finish is desirable.

- Signage:

The painted finish allows for vibrant colors and designs, making it suitable for signage and display applications.

- Automotive:

Used in various automotive components and trim due to its lightweight properties and resistance to corrosion.

Packaging:

- 1) LCL by wooden pallet package, fumigation wooden pallet is available
- 2) FCL by wooden pallet package loaded in the container
- 3) FCL in bulk loaded in the container
- 4) Customized package according to your demands

Shipping:

7-15 days after receipt of payment(depend on order quantity)

