



3003 Coated Aluminum Coil



3003 color coated aluminum coil is a high-quality material that has been specifically designed for various applications.

With its excellent strength and durability, this coil is ideal for use in industries such as construction, signage, and automotive. It comes in a wide range of colors and finishes, making it a versatile choice for any project.

Specification of 3003 Coated Aluminum Coil:

Alloy	1050, 1060, 1070, 1100, 3003, 3004, 3105, 5005, 5006, 5052, 5754, 5182
Thickness	0.2-1.5mm
Width	600-1500mm
Coating Surface	PVDF/ PE/HDPE/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.

Warranty:

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:



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

Key Properties of 3003 Color Coated Aluminum Coil:

Chemical Composition

Element	Aluminum (Al)	Manganese(Mn)	Silicon (Si)	Iron (Fe)	Cooper(Cu)	Zinc(Zn)	Other Elements	Total Impurities
Content (%)	97.0-98.5	1.0-1.5	≤ 0.6	≤ 0.05	≤ 0.05	≤ 0.1	≤ 0.05	≤ 0.35

Mechanical Properties

Property	Typical Value (Temper: O)	Typical Value (Temper: H12)	Typical Value (Temper: H14)	Typical Value (Temper: H16)	Typical Value (Temper: H18)
Tensile Strength	90-140 MPa	140-185 Mpa	165-205Mpa	185-225Mpa	$\geq 215\text{Mpa}$
Yield Strength (0.2% offset)	$\leq 55 \text{ MPa}$	110-145 MPa	135-170 MPa	160-195 MPa	$\geq 185\text{Mpa}$
Elongation at Break	20-25%	8-12%	6-10%	4-8%	3-6%
Hardness (Rockwell B)	35-45HB	35-45HB	45-65HB	55-75HB	65-85HB

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 3003 Prepainted Aluminum Coil:

- Corrosion Resistance:

The aluminum alloy 3003 is known for its excellent corrosion resistance, making it suitable for outdoor applications and environments with high humidity.

- Lightweight:

Aluminum is significantly lighter than other metals like steel, which can reduce transportation costs and make handling easier during installation.

- Aesthetic Appeal:

The color coating provides a wide range of color options and finishes, allowing for customization and enhancing the visual appeal of buildings, vehicles, and other products.

- Durability:

The color coating adds an extra layer of protection to the aluminum, increasing its durability and lifespan. It can withstand harsh weather conditions without fading or chipping.

- Formability:

3003 aluminum is known for its good workability, allowing it to be easily formed into various shapes and sizes for different applications.

- Environmental Friendliness:

100% recyclable with minimal energy loss, aligning with sustainability goals.

Applications of 3003 Painted Aluminum Coil:

Due to its favorable properties and versatile application potentials, 3003 prepainted aluminum coil finds favor across various industries:

- Architectural Facades:

Many modern buildings incorporate 3003 aluminum coils for decorative and functional facade cladding due to their durability and design flexibility.

- Interior Design Elements:

From ceiling tiles to wall panels, the attractive finishes complement many interior styles, offering aesthetic advantages.

- Transportation:

In elements of road vehicles, from bodywork to trailers, the lightweight characteristics contribute to fuel efficiency without sacrificing structural integrity.

- Consumer Products:

Items like signboards, appliances, and furniture often utilize 3003 coated aluminum coil for its combination of form, function and finish.

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)