

3105 5052 5182 H19 H48 Aluminum Foils for Shutters

Aluminum blind strips are expertly manufactured by GNEE. It manufactures superior 3104 3105 5052 5182 H19 H48 aluminum foils for Shutters. It is among the world's biggest and most comprehensive plants for aluminum foils and blinds.

3105 5052 5182 H19 H48 Aluminum Foils for Shutters Description

The most popular alloy in the 5000 family is 5052 aluminum. The alloying degree is lower than that of 8011 alloy but greater than that of 3003 aluminum when magnesium is used as an auxiliary alloying element.

Known as high-strength aluminum foil, 5052 aluminum foil is stronger than 1 and 8 series aluminum foil, has superior corrosion resistance, and can be used for a variety of applications, including electrical devices, honeycomb materials, and packaging materials.

Why choose aluminum strips and foil for shutters?

Superior materials that satisfy industry standards including ASTM B221 and ANSI WCMA A100.1-2018, as well as safety and performance criteria; superior surface treatment and coating; adaptable alternatives to fit particular design demands; a dependable supply chain; and outstanding service.

GNEE Blinds Aluminum Strip and Foil Specifications

Item		Specification			
Alloy Grade		3000 series, 5000 series			
Specific Alloys		3104, 3105, 5052, 5182			
Alloy Temper		H19, H48			
Surface Treatment Process		Color coating, Anodizing, Thermal transfer printing			
Temper	Thickness /mm	Width /mm	Inner diameter /mm	Length /m	Film thickness /um
H19	0.120-0.150	12.5-100.0	300 400	≥4000	-
	>0.150-0.200			≥3500	-
	>0.200-0.250			≥3000	-
	>0.250-0.500			≥2000	-
	0.120-0.150	>100.0-1250.0	400 500	≥8500	-
	>0.150-0.200			≥7500	-
	>0.200-0.250			≥6500	-
	>0.250-0.500			≥5000	-
H48	0.120-0.150	12.5-100.0	30-50	≥200-1000	10.0-16.0
	>0.150-0.200				
	>0.200-0.250				
	>0.250-0.500				

Chemical composition of aluminum strips and foil for GNEE shutters

Element	Chemical composition /%			
	3104	3105	5052	5182
Si	0.6	0.6	0.25	0.2
Fe	0.8	0.7	0.4	0.35

Cu	0.05-0.25	0.3	0.1	0.15
Mn	0.8-1.4	0.30-0.8	0.1	0.20-0.50
Mg	0.8-1.3	0.20-0.8	2.2-2.8	4.0-5.0
Cr	-	0.2	0.15-0.35	0.1
Zn	0.25	0.4	0.1	0.25
Ti	0.1	0.1	-	0.1
Li	0.05	-	-	-
Zr	0.05	-	-	-
Al	remaining amount	remaining amount	remaining amount	remaining amount

Mechanical properties of aluminum strip and foil for GNEE shutters

Alloy grade	Temper	Thickness/mm	Tensile test at room temperature	
			Tensile strength/MPa	Elongation after break /%
3104 3105 5052 5182	H19	0.120-0.180	300-370	≥1
		>0.180-0.500	290-350	≥1
		>0.120-0.500	360-440	≥1
3104 3105 5052 5182	H48	0.120-0.180	240-340	≥2
		>0.180-0.500	240-340	≥2
		>0.120-0.500	300-400	≥2

tolerances of aluminum strips and foils for shutters

Width/mm	Width tolerance/mm	Thickness/mm	Thickness tolerance/mm
12.50-50.00	±0.05	0.120-0.180	±0.003
>50.00-100.00	±0.10	>0.180-0.250	±0.005
>100.00-1250.00	±1.00	>0.250-0.500	±0.007

Surface roughness of aluminum strips and foils for shutters

Width /mm	Wave height/mm	Wave per meter length
12.5-100.0	≤0.5	≤3
>100.0-1250.0	≤3.0	≤3

Side curvature of aluminum strip and foil for GNEE shutters

Width/mm	Any 2000mm length upper side curvature / mm
12.5-50.0	≤2.0
>50.0-100.0	≤0.5
>100.0-1250.0	-

Film properties of aluminum strip and foil for GNEE blinds

Film performance items	Film properties
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Film thickness deviation		±1.5um
pencil hardness	acrylic coating	≥2H
	polyester coating	≥3H
dry adhesion		0
Solvent resistance		MEK≥10 times
Chromatic aberration		no significant difference

GNEE aluminum blinds features

Lightweight:

Aluminum shutters are becoming more and more lightweight. Aluminum shutters made by GNEE are made from premium 3000-series and 5000-series aluminum alloys, which guarantee the products' excellent bending strength and low weight.

Strong weather resistance:

GNEE aluminum shutters are subjected to surface treatment procedures like anodizing or powder coating to improve their look and aesthetics, make them more resilient to harsh weather conditions, and prevent tarnish.

Good fire performance:

In general, GNEE aluminum shutters function well in fire situations. Aluminum resists fire and lowers the chance of a fire spreading since it is non-flammable.

Beautiful appearance:

Aluminum shutters often offer a sleek, contemporary look that complements a variety of interior design and architectural types. It is even more appealing due to its extensive color selection and treatment choices, which include powder coating and anodizing.

Points to pay attention to when purchasing aluminum strips and foils for shutters

Surface quality: The surface cannot have any flaws like cracks, corrosion, bumps, peeling, perforation, air bubbles, folds, scratches, metal and non-metal indentations, imprints, pine dendrites, straightening roll marks, etc.

Cutting surface: It must be cut cleanly; waves that interfere with painting, ruffles, burrs, and damaged edges are not permitted.

The surface of the coated tape should be free of air bubbles, cracks, yellowing, orange peel, fat edges, shrinkage cavities, bottom leaks, color differences, black bars, various points (particles), flow markings, and knife backs. problems, including prints and scratches.