CONTINUOUS ANODIZED ALUMINUM COIL

// TECHNICAL DATA SHEET

ANODIZED ALUMINUM COIL

Engineered at industrial scale. Controlled oxide thickness. Stable color consistency. Reliable supply for global projects.

01 / OVERVIEW

PRODUCT SPECIFICATIONS

THICKNESS RANGE	MAX WIDTH	ANODIZATION LAYER
0.02–4.0 mm	1800 mm	1–25+ μm

ALLOY SERIES	ANODIZING TYPE	ANNUAL CAPACITY
1 / 3 / 5 / 6 15 grades available	Type II Sulfuric Acid	150K metric tons

In-stock widths: 1200mm / 1220mm / 1250mm / 1500mm — Custom widths available up to 1800mm on request

02 / MATERIAL

CHEMICAL COMPOSITION (%)

ALLOY	SI	FE	CU	MN	MG	ZN	CR	AL (MIN)	SERIES
1050	0.25	0.40	0.05	0.05	0.05	0.05	—	99.50	1xxx
1060	0.25	0.35	0.05	0.03	0.03	0.05	—	99.60	1xxx
1070	0.20	0.25	0.04	0.03	0.03	0.04	—	99.70	1xxx
1085	0.10	0.12	0.03	0.02	0.02	0.03	—	99.85	1xxx
1090	0.07	0.09	0.02	0.02	0.02	0.02	—	99.90	1xxx
1100	0.55	0.50	0.05-0.20	0.05	—	0.10	—	99.00	1xxx
1200	0.50	0.50	0.05	0.05	—	0.10	—	99.00	1xxx
3003	0.60	0.70	0.05-0.20	1.0-1.5	—	0.10	—	Rem.	3xxx
3004	0.30	0.70	0.25	1.0-1.5	0.8-1.3	0.25	—	Rem.	3xxx
5005	0.30	0.70	0.20	0.20	0.5-1.1	0.25	0.10	Rem.	5xxx
5052	0.25	0.40	0.10	0.10	2.2-2.8	0.10	0.15-0.35	Rem.	5xxx
5754	0.40	0.40	0.10	0.50	2.6-3.6	0.20	0.30	Rem.	5xxx
5083	0.40	0.40	0.10	0.40-1.0	4.0-4.9	0.25	0.05-0.25	Rem.	5xxx
6061	0.40-0.8	0.70	0.15-0.40	0.15	0.8-1.2	0.25	0.04-0.35	Rem.	6xxx
6063	0.20-0.6	0.35	0.10	0.10	0.45-0.9	0.10	0.10	Rem.	6xxx

Reference: ASTM B209 / EN 573-3. Values are maximums unless a range is specified. 1100 / 1200: Si + Fe combined limit (≤ 0.95 / ≤ 1.00) per ASTM B209. Custom alloys available on request.

MECHANICAL PROPERTIES (TYPICAL)

ALLOY	TEMPER	TENSILE (MPA)	YIELD (MPA)	ELONG. A50 (%)	HARDNESS (HV)	PRIMARY APPLICATION
1050	H14/H24	95-135	≥75	2-6	32-38	General forming, signage
1060	H14/H24	90-130	≥70	3-6	30-36	Electrical, chemical
1070	H14	85-125	≥65	3-6	28-34	Lithography, reflectors
1085	H14/H24	80-115	≥60	4-8	25-32	Nameplates, decorative trim
1090	H14	75-110	≥55	5-10	23-30	High-purity applications
1100	H14/H24	110-150	≥85	3-7	32-40	Sheet metal, general purpose
1200	H14/H24	100-140	≥80	3-7	30-38	General purpose, packaging
3003	H14/H24	140-180	≥115	2-5	40-48	Roofing, gutters, HVAC
3004	H34/H36	190-230	≥160	3-6	48-55	Packaging, housing panels
5005	H14/H34	150-195	≥120	3-6	40-48	Architectural cladding
5052	H32/H34	230-290	≥180	4-8	55-68	Marine, appliances
5754	H22/H24	220-280	≥170	5-10	52-65	Vehicle body, flooring
5083	H111/ H116	275-350	≥200	8-16	70-90	Marine, shipbuilding
6061	T4/T6	260-310	≥240	8-12	70-95	Structural, profiles
6063	T5/T6	215-250	≥180	8-12	60-80	Extrusions, window frames

Typical values for guidance only. Actual properties depend on temper, thickness, and production batch. Certified MTC provided with each shipment.

04 / ANODIZING

ANODIZING SPECIFICATIONS

PARAMETER	SPECIFICATION	STANDARD
Anodizing Type	Type II — Sulfuric Acid Anodizing	MIL-A-8625 Type II
Coating Thickness	1 – 25+ µm (custom on request)	ISO 7599 / MIL-A-8625
Sealing Method	Hot water / Nickel acetate / Fluorozirconate	ISO 2931 (admittance test)
Coating Hardness	Mohs 9 / 300–500 HV (anodic layer)	ASTM B580
Color Consistency	Controlled bath temperature + current density	Internal QA
Color Range	Clear, bronze (light-dark), black, gold, champagne, copper, custom	Any color on request
UV Resistance	Excellent — anodic oxide does not fade or chalk	Outdoor rated
Corrosion Resistance	Excellent — aluminum oxide is chemically inert	ASTM B117 salt spray

05 / SURFACE

AVAILABLE FINISHES

MILL FINISH
As-rolled, untreated

BRUSHED / HAIRLINE
Satin directional pattern

MIRROR / POLISHED
High-gloss reflective

SANDBLASTED
Matte non-directional

EMBOSSED
Stucco, diamond, custom

PVDF COATED
Fluorocarbon topcoat

POWDER COATED
Electrostatic spray

SUBLIMATION
Wood grain thermal transfer

06 / COLOR

ANODIZED COLOR RANGE

Clear / Natural · Light Bronze · Medium Bronze · Dark Bronze · Black · Gold · Champagne · Copper · + Custom Colors

Anodic colors are integral to the oxide layer — not a surface coating. They will not peel, chip, or fade. Color matching available for large-volume orders.

07 / DIMENSIONAL

DIMENSIONAL TOLERANCES

PARAMETER	RANGE	TOLERANCE	STANDARD
Thickness	0.02 – 0.50mm	±0.005mm	ASTM B209
Thickness	0.50 – 1.00mm	±0.01mm	ASTM B209
Thickness	1.00 – 4.00mm	±0.02mm	ASTM B209
Width	Up to 1800mm	+3 / -0mm	ASTM B209
Flatness	All widths	≤ 6mm / 1000mm	Internal QA
Coil ID	Standard	508mm / 610mm	Custom on request
Coil Weight	Standard	2 – 8 tons	Custom on request
Edge	Standard	Trimmed / mill edge	Slit edge available

08 / PACKAGING

PACKAGING & DELIVERY

PARAMETER	SPECIFICATION
Packing Method	Standard export — wooden pallet + steel strapping + moisture barrier
Eye Orientation	Eye-to-sky or eye-to-wall (per customer request)
Surface Protection	PE film lamination or interleaving paper (optional)
Custom Packaging	Neutral or branded with customer logo (with signed authorization)
Labeling	Heat No., alloy, temper, dimensions, net/gross weight, batch ID
Container Loading	20ft / 40ft — approx. 18-26 tons per 20ft
Lead Time	Ready stock: ships on confirmation · Standard specs: ~7 days · Custom: 15–50 days
Incoterms	EXW, FOB, CIF, DDP — all Chinese ports
MOQ	3 tons per alloy/temper for custom orders — no MOQ for ready-stock items
Samples	Available within 1-7 days depending on complexity

09 / CERTIFIED

CERTIFICATIONS & COMPLIANCE

ISO 9001
Quality Management System

ISO 14001
Environmental Management

SGS AUDITED
Third-Party Facility Audit

IAF MLA
International Accreditation

REACH SVHC
EU Chemical Compliance

ROHS
Hazardous Substance Restriction

GB/T 23443-2024
Chinese National Standard

JAPAN FOOD SANITATION
Food Contact Safety Passed

10 / CAPABILITIES

GROUP MANUFACTURING CAPABILITIES

ALUMINUM VENEER & PANEL FACTORY

- Single-skin aluminum panel (2.0-4.0mm)
- Wood-grain sublimation transfer
- Honeycomb composite panels
- PVDF fluorocarbon coating
- Perforated panels (custom patterns)
- Custom shaping, bending, welding

ALUMINUM PROFILE PROCESSING

- Electrolysis surface treatment
- Wood-texture thermal transfer
- Powder coating (electrostatic)
- PVDF coating on profiles
- Anodizing (profiles & extrusions)
- Custom extrusion shapes

COIL SURFACE TREATMENTS

- Continuous anodizing (primary product)
- Lamination (protective PE film)
- Slitting & cut-to-length service
- Color coating (PE / PVDF on coil)
- Embossing (stucco, diamond, ribbed)
- Brushing, polishing, sandblasting

11 / APPLICATIONS

TYPICAL INDUSTRIES

INDUSTRY	APPLICATION	ALLOYS
Architecture	Facade cladding, curtain walls, roofing	5005, 3003, 1100
Interior Design	Ceiling panels, wall panels, trim	1050, 1060, 5005
Appliances	Housings, panels, heat exchangers	3003, 5052
Marine / Coastal	Boat fittings, dock structures, humid env.	5052, 5754, 5083
Electronics	EMI shielding, enclosures, heat sinks	1060, 6061
Signage & Display	Nameplates, directional signs, displays	1050, 1060, 1085
Transportation	Vehicle body, luggage, rail interiors	5754, 5052, 5083
Medical / Food	Equipment housings, food contact	1060, 1090, 5052
Battery / Energy	Battery casings, busbars	1060, 3003, 1070

12 / RESOURCES

RELATED TECHNICAL RESOURCES

- Aluminum Coil Anodizing — Complete Guide
- Type II Sulfuric Acid Anodizing (MIL-A-8625)
- Coil vs. Batch Anodizing — Comparison
- Continuous Coil Anodizing — Line & Process

Full technical library: www.albei.cc/technical/ · Free samples: sales@albei.cc

---

Disclaimer: Values are typical reference values. Actual properties vary by alloy, temper, thickness, and production parameters. Certified mill test certificates accompany each shipment. Subject to revision without notice.

ALBEI
ALBEI Park, Shuangdong E.P. Industrial Park
Luoding City, Guangdong, China

sales@albei.cc
+86 13927295519
albei.cc

TDS-001 · Rev. 2026-09