

SPECIFICATION SHEET

Aluminum Products For Heat Exchange Industry

Aluminum has light weight, anti-oxidation properties, leading it is widely used in LED light industry.

No	Alloy	Thickness	Width	Length
1	6060, 6061, 6063,6082	0.2-100.0mm	10 –1500 mm	100-12000 mm As per customer request.

CHEMICAL COMPOSITION (%) Standard: GB/T 3190-2008

Grade	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al
6060	0.3-0.6	0.1-0.3	0.10	0.10	0.35-0.6	0.05	-	0.15	0.10	remain
6061	0.4-0.8	0.70	0.15-0.4	0.15	0.8-1.2	0.04-0.35	-	0.25	0.15	remain
6063	0.2-0.6	0.35	0.10	0.10	0.45-0.9	0.10	-	0.10	0.10	remain
6082	0.7-1.3	0.50	0.10	0.4-1.0	0.6-1.2	0.25	-	0.20	0.10	remain

MECHANICAL PROPERTIES Standard: GB/T 3880.2-2006; GB/T 4437.1-2015

Alloy	Alclad classify	Temper	Sample Temper	Thickness /mm	Tensile strength R _m /MPa	Yield strength R _{p0.2} /MPa	Elongation/%		Bending Radius* ¹
							A _{50mm}	A _{5.65}	
6061	-	T4	T4	ALL	180	110	16	14	-
		T51	T51	≤16.0	240	205	8	7	-
		T6	T6	>0.40-1.20	290	240	6	-	2.5t
6063	-	T4	T4	≤12.5	130	70	14	12	-
				>12.5-25.0	125	60	-	12	-
		T5	T5	≤25.0	175	130	6	8	-
		T6	T6	>0.50-1.20	205	170	8	-	-
6082	-	T4	T4	≤25.0	205	110	12	14	-
				≤5.0	290	250	6	8	-
		T6	T6	>50-25.0	310	260	8	10	-

*1 Coil samples bending 90°, t – thickness of coil

PHYSICAL PROPERTIES

Property	Value	Unit
Density(20°C)	2.65-2.73	g/cm ³
Melting Point	575-660	°C
Thermal Expansion	23.4-23.8	(10-6K-1)(20/100°C)
Specific heat capacity	890-910	J/(Kg.K)(0/100°C)
Modulus of Elasticity	69-71	GPa
Thermal Conductivity	172-225	W/(m. K) 20°C
Resistivity	29.1-38.22	nΩ .m

Formability
Very Good

Weldability
Good

Machinability
Very Good

Corrosion Resistance
Very Good

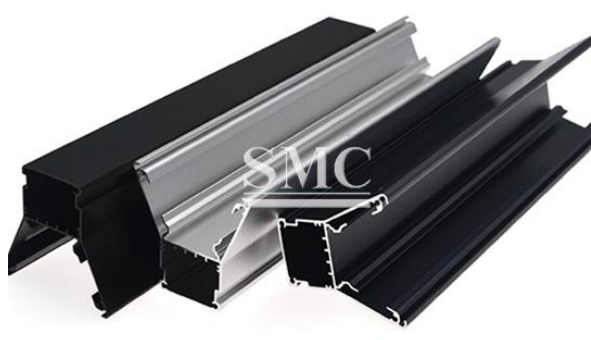
APPLICATIONS

It is mainly used as LED light parts frame, such as light box frame, etc.

SURFACE TREATMENT

70%-98% Transparent (flexible, rigid, perfectly flat) , Anodized, Electrophoresis, Sand blasting, Powder coating, Silver matt, wooden grain, etc. The color can be customized as per customer request.

PRODUCTS



PACKING

Shanghai Metal Products are packed and labeled according to the regulations and customer's requests. Great care is taken to avoid any damage which might be caused during storage or transportation. In addition, clear labels are tagged on the outside of the packages for easy identification of the product I. D. and quality information.

